

AR0095 – Social Inequality in the City, Diversity and Design
Msc Architecture, Delft University of Technology

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Introduction

Cities should not be mere collections of buildings and streets, but lively, breathing and social systems, shaped by the people who inhabit them. Public spaces play a crucial role in fostering interaction, well-being and a sense of belonging within neighbourhoods. However, as urban environments continue to grow, many communities face challenges in maintaining social and physical liveliness in their neighbourhoods due to increasing anonymity and individualisation (Bauman, 2013).

This report is looking into these issues within a specific street in The Hague South West; the Marterrade. The neighborhood in which the street is situated is diverse and evolving, and thus also struggling with the challenges regarding green spaces, cleanliness, safety and social cohesion. In response to these challenges, several co-creation sessions with the community have taken place to explore how design of the public space can serve as a tool to tackle these challenges in a meaningful, community driven way. During these co-creation sessions we worked closely together with local residents and Haag Wonen to develop and implement strategies that promote greening, social engagement and a sense of place at the Marterrade.

The central hub for these co-creation sessions was the Kamerrade, a community centre within Marterrade. At the Kamerrade residents can partake in various activities, relax and meet each other in an informal way. The Kamerrade serves as a living room for the neighbourhood in a sense. It plays a crucial role in fostering community bonds. Within this environment, we engaged with the residents, listened to their concerns and co-designed solutions aimed at greening and socialising the Marterrade. The purpose of this report is to bring together our collective insights and findings from these co-creation sessions, to offer a comprehensive reflection of these challenges and solutions.

The report is guided by the following key questions:

In what ways can placemaking strategies, that result from community co-creation efforts, improve social cohesion, safety, neighbourhood cleanliness and sustainability in the Marterrade?

To answer this research question, several sub questions were established:

- * *How can social cohesion be promoted in the Marterrade community and which placemaking strategies could support this?*
- * *Which place making strategies can be implemented to improve the sense of safety in the Marterrade?*
- * *Which placemaking strategies can contribute to a more green and sustainable Marterrade?*

Each step of the project reinforced the importance of participatory and inclusive design in fostering positive, supported and long-term change. Through direct engagement with residents, we witnessed how urban spaces are not just shaped by top-down design choices, but need the residents and local support to actually come to life.

This report is structured to provide a clear narrative of the project and design assignments we constructed in the process. It begins with an overview of the approach we used, concerning our engagement and implementation strategies, their outcomes and how they link to academic literature. Then, we discuss the result from the three co-creation sessions. Next our final design proposal(s) and associated Theory of Change will be presented, highlighting the positive sides and the challenges associated with the design. Lastly, we conclude with a reflective discussion on the co-creation approach, drawing upon our experiences and providing recommendations for future urban design projects.

Approach

The co-creation sessions were made with a placemaking process, which is a process and a philosophy. It is focussed on observing, listening and asking questions to the residents and actors who are involved in that particular space. This is done to understand the needs and possibilities, to create not only a shared neighborhood, but to create a space that is for the whole community (Project for Public Spaces, 2018). In order to find out the perspectives of the residents and Haag Wonen, multiple engagement strategies were implemented.. The idea is to work towards a process of co-creation, one that has experimental aspects, providing the chance to make improvements over time (Project for Public Spaces, 2018). The steps of a place led, community based process were used in a slightly different order but nevertheless is key to the ongoing process in Marterrade. This approach will be incorporated in the engagement strategies.

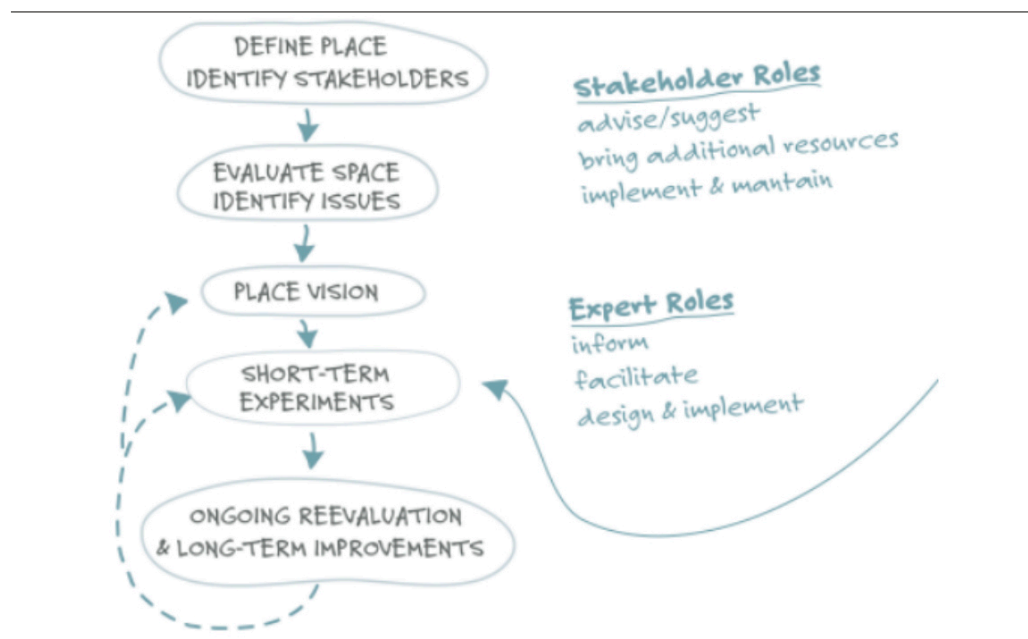


Fig. 1
Place Led, Community-Based Process (Project for Public Spaces, 2018)

Co-creation session 1: Define space, identify issues

During the first co-creation session the goal was to get to know the residents better and try to understand their perceived views on what was good, bad or needed to change in their neighbourhood. The 5 participants who were present were over the age of 60 and

all lived in the same building which gave a one-sided view of the two engagement strategies that were implemented. This first step was part of a place led, community-based process of the place making strategy. It was essential to evaluate the space where the residents lived and identify the issues they faced (Project for Public Spaces, 2018).

Engagement strategy 1.1

A qualitative interactive mind-map survey was done, investigating the Marterrade residents’ personal perception within the neighbourhood. The mind-map was presented on a large A2 page with the following questions involved: ‘What do you like about your neighbourhood?’, ‘What do you dislike about your neighbourhood?’, and ‘What would you change about your neighbourhood?’

Colour-coded post-it notes were provided to answer the questions and get a structural overview of their answers. The residents’ answers were recorded, and their answers were ultimately digitised and translated into English for legibility reasons. This strategy was an important step in finding out which barriers were experienced in terms of safety, community building, greening and sustainability. While the questions did not specifically mention this, the aim was to filter out these answers for our own analysis. The answers matched well with our intentions are elaborated on in the results section (Fig. 1). Accompanying this was a collaging activity where residents were asked to collage images which represented their ideas of the changes that could be made to the neighbourhood. This additional activity was used for residents that had a hard time putting their thoughts or opinions into words. The collaging exercise was only done by one resident (Figure 2) but helped with an envisionment of how he wanted the neighbourhood to look like. This contributed to an overall place vision, an important step in the placemaking strategy (Project for Public Spaces, 2018).

Engagement strategy 1.2

The second strategy took form as a quantitative survey on personal perception within the neighbourhood which allowed to form data on demographics, whilst also allowing residents to indicate their level of agreement or disagreement in relation to a series of statements about greening (See Appendix 1.1, 1.2 and 1.3). This was done by usage of a Likert scale, in order to measure the opinion or attitude of the resident to a certain matter (Robinson, 2014). The statements that were asked were based on the HHS report which highlighted certain issues the residents had mentioned before. The HHS report indicated that the residents had wished for more use of the square, interaction with each other, more lights for safety and a greener environment. The HHS report showed plans on how to make the courtyard greener by adding a garden full of flowers, and enhancing the community aspect by adding a seating area. Taking into account resid-

There is enough green.
There are too many cars.
There are enough spaces to sit outside.
There is enough shadow in the summer.
There are enough places to play.
More green is the most important point of interest.
I like the idea of a community vegetable garden.
It seems fun to me to garden myself.
I like living in this neighbourhood.
I feel safe in this neighbourhood.
I would like to have more social contacts in the neighbourhood
I would like to invest time in greening the square.
The neighbourhood is clean.
I feel at home in the neighbourhood.
I know how and where I can separate my waste.

Fig. 2
Statements for the engagement strategy 1.2

ent's need for more green spaces as well as their desire to participate in more communal activities in the Marterrade, the HHS Report proposed the creation of a vegetable garden in the Marterrade. This garden was targeted at providing a shared space where residents can grow their own fruits, vegetables, and herbs, fostering a sense of community and environmental responsibility. The garden will help create a thriving ecosystem. By planting a variety of herbs, fruits, and vegetables, the space will attract bees, butterflies, and other pollinators, which are essential for plant growth (Enssle & Kabisch, 2020). This natural pollination will not only support the garden itself but also contribute to further greening of the area, improving biodiversity and the air quality of this urban space.

With the knowledge of the HSS report, the questions for the quantitative survey built on the aspects they had mentioned; greening and sustainability, safety and community building. Lastly, there was a strong emphasis on the importance of anonymity in collective surveys to ensure judgement isn't passed between residents in a group setting and to ensure authenticity in response. While the plan was to achieve this through a Menti-meter poll or by forming engaging visual handouts to be filled out independently, the survey shifted to a conversation-based activity and was written out by the students.

Co-creation session 2: Evaluate space, identify issues & stakeholders and place vision

For the second co-creation session the goal was to broaden the scope of perspectives by engaging more with other residents of other ages (youth) and who have different lifestyles (artists). Additionally, it was important to build on the results from the previous co-creation session and focus more on the location of the identified issues. The last important goal was to identify the stakeholders (Project for Public Spaces, 2018) and gain a better understanding of the challenges and limitations of Marterrade. To gain insights of this, an engagement strategy with the staff members, who have been working on this project for longer, was implemented. By gathering their insights, the feasibility of proposed ideas and understanding any potential challenges or limitations was put into context which helped with the evaluation of the answers and final design proposal.

Engagement strategy 2.1

A door-to-door method was used to enlarge the group of residents that were being consulted. The targeted group for this strategy were the artists and youth by means of light conversations to gain more insight in their perspectives of the neighbourhood. This method was implemented to ensure that the residents who are more difficult to reach out to, also feel part of the progress and the co-creation. It is essential that as many residents as possible get the feeling the change is something initiated by their own terms and wishes. Artists were targeted for an additional reason: to explore what residents could contribute independently to the placemaking process, without external support (Russell, 2024). Through conversations with artists, the goal was also to learn what they could achieve with some assistance, and how other actors could support their initiatives (Russell, 2024). While the main focus of the door-to-door conversations aligned with this vision, the questions from the first co-creation session (1.1) were also discussed. This method proved to be effective. Artists expressed their interest in collaborating and contributing their talents to create more art. Moreover, both the children and artists en-

riched the understanding of co-creation session 1.1 by providing new and valuable insights through these short, goal-oriented conversations.

Engagement strategy 2.2

Building on the engagement strategy from the first co-creation session (1.1), it was necessary to follow up on questions to not only know what issues they faced, but also where and how they could be changed. The walk-shop method was implemented, creating a close-up perspective on residents' analysis of the environment (Johansson & Alves Ferreira, 2024). Designing a space can promote social change, however it must be supported by a co-creative process (Newton, 2025). Therefore it was critical to ensure that there were also residents who were able to show the location of the issues they faced. This engagement strategy was specifically implemented in order to build on the community co-creation efforts and pinpoint exactly where the sense of safety was lacking and where the neighbourhood needed more greenery or art.

Engagement strategy 2.3

Interviews were conducted with three staff members in the Marterrade project to analyse the status of the development of Marterrade. This was done to gain a broader understanding of their plans and to act accordingly with the possibilities or restrictions based off of the interviews. A set of nine open-ended questions were designed to explore the approach of Haag Wonen. Through these nine questions, insights were gained into their strategies for engaging residents, handling maintenance concerns, and supporting initiatives such as greenery, waste management, and public spaces. By gathering these insights, the feasibility of proposed ideas and understanding any potential challenges or limitations was accessible.

The questions and detailed answers are found in appendix 2.3. However, the most important aspects which align with the previous engagement strategies will be further elaborated on and linked to residents' perspectives in the results section.

Concluding

Each engagement strategy was designed to contribute to answering the sub questions and eventually the main research question. The mind-map survey and collaging exercise (Engagement Strategy 1.1) and the quantitative survey (1.2) provided valuable input on residents' wishes, challenges and desire for change related to social cohesion, safety, greening and sustainability. The door-to-door method (2.1) supplemented this, by including new residents such as the artists and youth, which aimed to identify common goals and shared concerns. The walk-shop (2.2) particularly focused on the location of where the first placemaking strategies (subquestion 2 and 3) can be used for the first test drive. The interviews with Haag Wonen (2.3) provided much more insights into the institutional and governmental perspectives on the feasibility of any ideas for the placemaking strategies. These were again tied to all aspects of the subquestions. Together, these strategies ensured a holistic and inclusive understanding of how placemaking strategies could be implemented to contribute to social cohesion, a sense of safety and to a more green and sustainable Marterrade.

Results of the Co-Creation Sessions

This chapter presents a chronological overview of the findings from the three co-creation sessions. It begins by highlighting the key insights and outcomes from the first session. Next, it outlines the adjustments made to the engagement strategy for the second session, along with the resulting developments. Finally, it delves into the third and final co-creation session, which involved physical interventions within the neighbourhood, and presents its outcomes.

First Co-creation session

The two engagement strategies implemented during the first co-creation session aimed at gaining a deeper understanding of both the neighbourhood and its residents. For this objective, two engagement strategies were employed: a qualitative interactive mind map and a collage as well as a quantitative survey. These strategies were essential in laying the groundwork for designing interventions that genuinely reflect the needs, priorities, and aspirations of the community they are implemented in.

Strategy 1.1: The Qualitative Interactive Mind Map and Collage

The first strategy involved the creation of a qualitative interactive mind map aimed at exploring how Marterrade residents perceive their neighbourhood (Fig. 3). This tool allowed for creative expression of participants and helped visualise community insights in an accessible and intriguing way. In parallel, a quantitative survey was conducted to gather data on residents’ personal experiences and perceptions within the neighbourhood. This survey provided valuable demographic information, as well as measurable levels of agreement or disagreement with a series of pre-formulated statements related to greening. Together, these strategies laid a strong foundation for designing context-sensitive and community-driven interventions.

<p>Marterrade square and inner gardens</p> <p>In this first assignment we want to get to know who you are, so that we can better understand your wishes for the neighbourhood.</p> <p>Answer the following questions, either in words or with a drawing.</p>	
<p>What are your wishes for the square and the inner gardens?</p> <ul style="list-style-type: none">• terrace at kamerrade• trees• close bags properly	<p>What problems do you experience in the square and the inner gardens?</p> <ul style="list-style-type: none">• not enough trash cans -> dirty• nothing for cigarette butts• dog poop mess

Fig. 3
Marterade Survey
Results - Wishes for
the Neighbourhood

The results of the qualitative mind map indicate as positive features the quietness of the neighbourhood, the presence of art, green space and trees. Continuously, the residents identify as problematic the presence of drug users, homeless people, the lack of cleanliness, the “yappingbench”, the presence of dog faeces, as well as the presence of art and greenery in some spaces. As for what they would like to see change in the neighbourhood, respondents mentioned the need for more flowers and associated biodiversity, waste management for dog faeces, and suggested the introduction of a bee hotel, planter boxes to hamper the speed of fatbikes, and a playground for young children (Fig. 4).

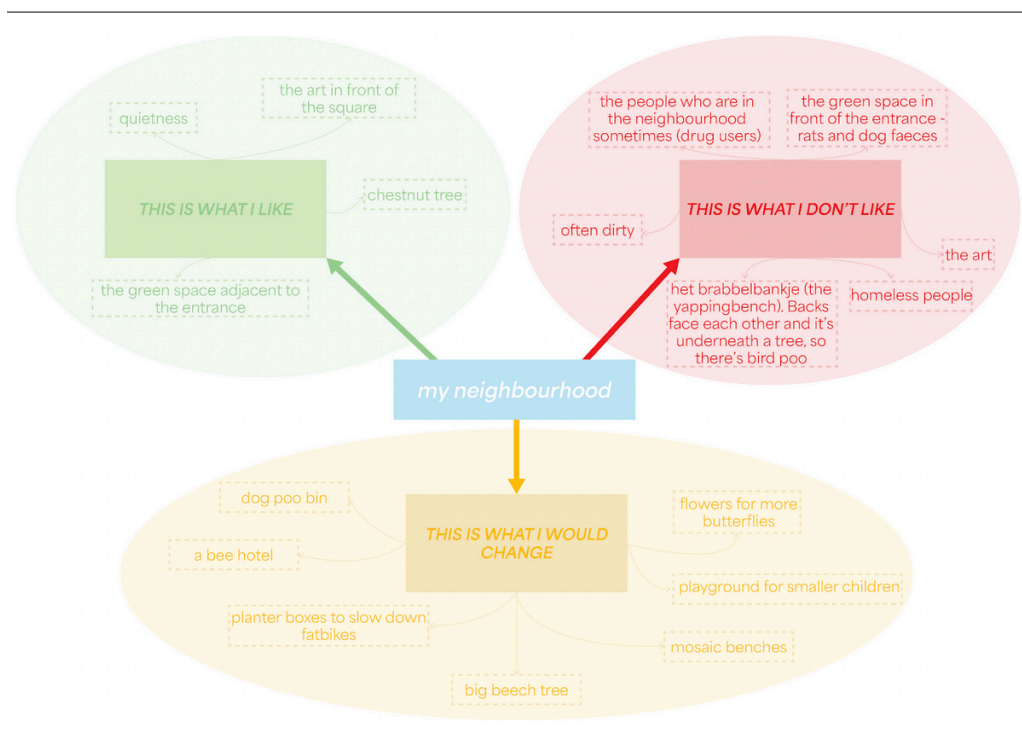


Fig. 4
A qualitative inter-active mind-map survey (digitised and translated into English) investigating the Marterrade residents' personal perception within the neighbourhood.

In the collage that accompanied the qualitative mind map engagement strategy, one resident participated. In the collage he created, he mainly chose black-and-white images that reminded him of the past, perhaps incorporating a more nostalgic representation of the neighbourhood (Figure 2). Moreover, he added images of bees and flowers, indicators of wishes for more flowers and plants and increased biodiversity in the neighbourhood. As research has shown, exposure to urban nature likely leads to psychological benefits, increasing the well-being of city dwellers (Whitburn et al., 2018). As spaces should have aspects that make residents feel comfortable and promote feelings of pride (Project for Public Spaces, 2018), these results can be especially useful in promoting these feelings.

Reflecting on the collaging exercise as an engagement strategy, it fell short in terms of participation, with only one resident taking part. However, despite the limited turnout, the activity still offered valuable insights by providing a more subjective and personal perspective on how the participant perceives the neighbourhood and what changes they believe are needed. This input, though limited in scope, contributed to a more nuanced understanding of individual experiences within the area.

Strategy 1.2: The Quantitative Survey

In the quantitative survey aimed at exploring residents' wishes and opinions on the greening of the neighbourhood, five residents of the Marterrade



Fig. 5
Elderly male resident's collage representing his perception of the neighbourhood and changes needed to be made.

participated. In the results we gathered that all residents were over the age of 60, highlighting the older demographic at the Marterrade, Den Haag (See Appendix). In addition, 3/6 of the residents surveyed have been living in the neighbourhood for over 5 years. Furthermore, most of the participants indicated that they are still highly mobile, able to navigate the city by walking or bicycle, however two residents use a mobility scooter as well.

Marterrade square and inner gardens

In this first assignment we would like to learn more about you, so that we can better understand your wishes.

Place a sticker in the location that applies to you.

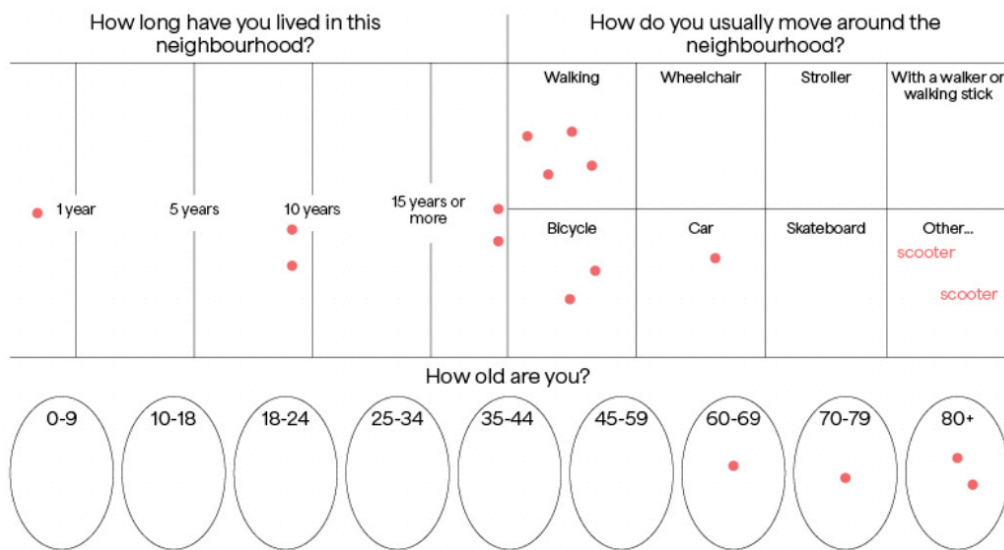


Fig. 6
Marterrade Survey
Results - Demo-
graphics

With regards to greening of the neighbourhood (see Fig. 7), 3/6 of residents were neutral in regards to greening being the point of interest in terms of desired change within the neighbourhood. Moreover, 3/6 of respondents strongly disagreed that they would invest time in greening the square. Furthermore, the same percentage of residents strongly disagreed that the neighbourhood is clean, highlighting their preference in creating a cleaner neighbourhood as opposed to a greener neighbourhood. In terms of waste management, it is clear residents can sort their waste correctly as all residents strongly agree with being able to do so.

Reflecting on the utility of the first two engagements strategies, we realised that whilst there was an initial reluctance to complete the survey amongst residents, ultimately it proved to be the most successful due to engagement with all attending residents. Despite the low number of participants during the first sessions, this allowed long conversations which provided a subjective understanding of the participant's perception of the neighbourhood and changes needed to be made. The initial co-creation session certainly didn't meet our expectations in terms of engagement, allowing us to re-align our engagement strategies to more low-effort and natural conversation between students and residents.

Marterrade square and inner gardens

Please indicate whether you agree with the sentences: the scale ranges from 1 (= completely disagree) to 10 (= completely agree). Most sentences are about the square and the inner gardens of the Marterrade.



Fig. 7
Marterrade Survey
Results - Opinions
on Greening

Second Co-creation Session

Strategy 2.1 The Door-to-Door Method

The door-to-door method which was implemented by students who deliberately knocked on Marterrade resident's doors in order to consult them regarding their opinions about the neighbourhood and invite them to join the activities in the Kamer Rade provided great insights while allowing more voices to be heard and taken into account in the design of this project. The most important wishes shared by the residents we spoke to were the need for more trash bins, additional swings in the park, additional play areas, and creating an "oasis feeling" in the neighbourhood. One resident also expressed a strong desire for more activities, especially those involving art and music. Lastly, more and different greenery was mentioned, both to provide shade and to make the area look more attractive. These points have been cooperated into Figure 8 that can be found in the Appendix.

Strategy 2.2 The Walk-Shop Method

Five elderly women and one elderly man accompanied the team on the walk-shop, both in the garden of the elderly home and along the route to the playground. This engagement strategy allowed the residents to pinpoint their concerns directly. Interestingly, the residents found it easier to express what they disliked rather than where they would like the butterfly garden to be. They did not seem particularly concerned about its exact location, as long as it was visible: "In the courtyard and outside, it doesn't really matter where; I think you can decide that best." This made it difficult, because while designing a space can promote social change, it must be supported by a co-creative process. It must also have critical thoughts and stimulate imaginative thinking (Newton, 2025). After emphasising it was not about what the students thought but about the residents, a few

places were pointed out where they would like more butterflies, art and lights. In the end, it did turn into a co-creative process, and the residents really did think about how and where to change their experienced issues.

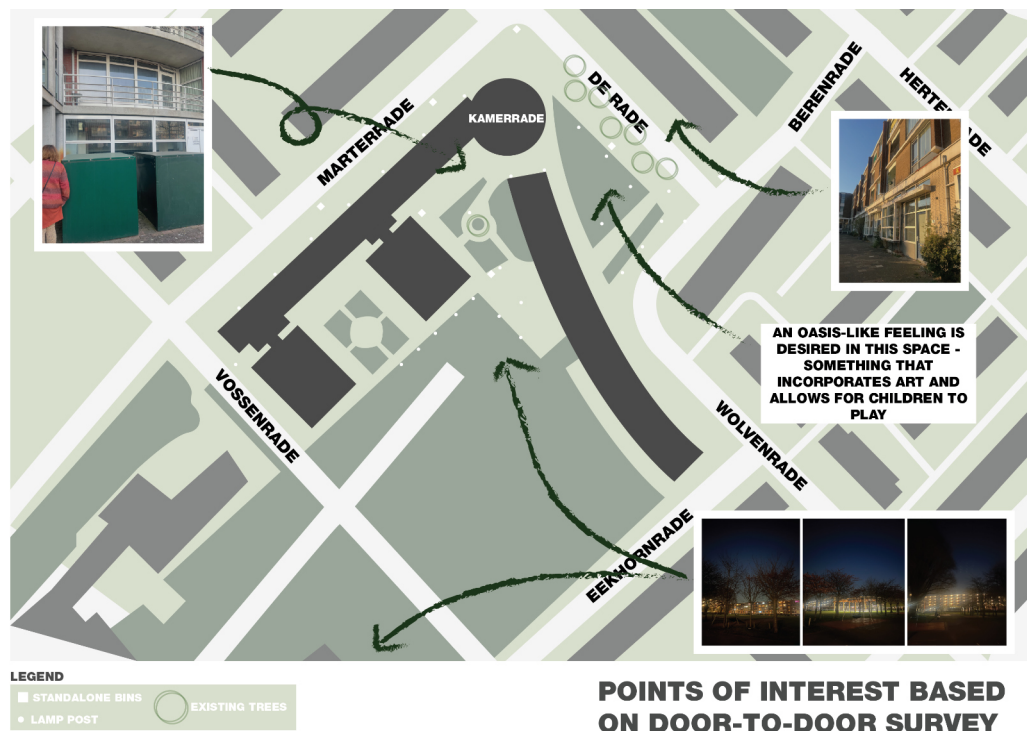


Fig. 8
Door to door and walk-shop results: lack of lanterns causing an unsafe feeling (dark park), lack of art, lack of bins, and an oasis feeling with an area for a butterfly garden, palm trees and a place for children to play

Another key takeaway, not directly related to the implementation of material changes, is the importance of addressing structural and social dynamics within the neighbourhood. Residents frequently mentioned the lack of interaction among themselves, indicating a low level of social cohesion. This was expressed in different ways and highlights the need for more opportunities for social engagement through community activities. This resonates with what was said by the staff of Haag Wonen in the engagement strategy 2.3. An elderly woman mentioned the language barrier and expressed frustration that neighbours do not greet each other or engage in small talk. Meanwhile, one resident (an artist) shared that he misses the liveliness of the neighbourhood. Two other residents (both artists) reinforced this by expressing a desire for more music, which they believe would bring more vibrancy to the area. While no one explicitly stated that they want more social cohesion, their longing for liveliness and music could be interpreted as an indirect desire for stronger community connections. Additionally, the elderly woman's complaint about neighbours not speaking Dutch could be seen as a wish for more communication among residents. When asked about this further, she agreed that it is unfortunate how individualistic society has become and expressed a desire to live in a more community-oriented environment.

Strategy 2.3 Interviews with professionals

The results of the interviews show that the development of Marterrade is part of a long-term urban development process in The Hague Southwest that is geared towards the needs of residents. A clear management plan with fixed phases is not evident, rather a flexible strategy seems to be pursued that focuses on community participation. This



Fig. 9
Elderly woman
pointing out pos-
sibilities for art

strategy aligns with the ABCD strategy and the importance of citizen-led action, collective agency and community building which will accelerate authentic co-production of a space (Russell, 2022).

Reflecting on the second co-creation session, it becomes clear that it marked a crucial step forward in deepening engagement with Marterrade residents and uncovering more nuanced layers of community needs, preferences, and challenges. Through a combination of bottom-up methods (including door-to-door visits, a walk-shop with elderly residents, and interviews with local professionals) this session succeeded in expanding both the diversity and depth of community input.

Third Co-creation Session

The third co-creation session introduced two key interventions in the Marterrade: the establishment of a façade garden in front of the Kamar Rade community center, and the construction of the Marterrade Maquette, a multifunctional table designed to be placed within the neighbourhood to foster citizen engagement.

Strategy 3.1: The façade garden of the Kamar Rade

In the third co-creation session, a greening initiative took place at the Marterrade. Ten tiles from the façade of the Kamar Rade community centre were replaced with biodegradable duckweed tiles. The newly placed duckweed tiles contain seeds from thirty-one plants and flowers, carefully selected to thrive in the city and to attract a variety of bees, butterflies and birds (Flip the City, n.d.). The benefits of this initiative, however, do not stop there; the advantages of this initiative can be seen both in the short term and the long term. Regarding the short-term results of the greening intervention, it needs to be noted that within a timeframe of two to six weeks, the duckweed tiles start to sprout and within three months, the first flowers start to appear (Flip the City, n.d.). As the plants

grow, they reach up to eighty centimetres high and attract up to 996 unique pollinators, directly facilitating the greening of the neighbourhood, enhancing its aesthetic appeal and biodiversity.

Regarding the long-term results of the façade garden, it is important to highlight the wide range of lasting benefits this greening intervention provides. To name a few, the façade garden enhances urban biodiversity, reduces heat stress, and improves water drainage, in this way making cities more resilient, liveable and sustainable. But how can something as simple as a duckweed tile contribute to such transformative change? Once the plants and flowers have matured, they drop their seeds, initiating a new cycle of growth that continues for two to three years. This natural regeneration process supports ongoing environmental resilience and sustainability.

A key strength of this initiative lies in its low-maintenance design. The duckweed tiles are naturally sustained by sunlight and rainfall, significantly reducing the need for ongoing care, labour, or additional resources. Considering the local climate, the physical location of the façade, its limited exposure to sunlight and rainfall, and the fact that maintenance would rely primarily on volunteers, a specific type of tile was selected for the Kamer Rade community center. The ‘shadow tile’ was chosen precisely for its suitability under these conditions, making it a practical and sustainable solution for this setting. This self-sustaining feature makes the project both practical and scalable, ensuring long-term viability with little intervention. Therefore, this initiative makes for an ideal starting point for neighbourhood greening, helping in fostering a vibrant, colourful, and biodiverse space.

Reflecting on the utility of the engagement strategy behind the greening initiative in the Marterrade, involving residents directly in the process of replacing pavement tiles with biodegradable duckweed ones proved highly effective. The activity was thoughtfully designed to include a range of tasks, from physically demanding work like removing and transporting old tiles, to lighter, more accessible actions such as placing duckweed tiles, spreading seeds, and watering. This inclusive approach encouraged participation across all age groups and abilities, making the project highly accessible and fostering a strong sense of community involvement. As research shows, citizen involvement in managing

Fig. 10-12
Replacement of
Kamerrade's façade
pavement tiles with
duckweed biode-
gradable tiles.



urban green spaces contributes to the continuity of these spaces (Mattijssen et al., 2017). In this context, the engagement strategy not only fostered community building but also increased the likelihood of sustained care for the new green space by creating a sense of ownership and responsibility among participants.

Strategy 3.2: The Construction of the Marterrade Maquette

The third co-creation session yielded significant results, one of the most notable being the successful construction of the Marterrade Maquette, which provided a space to spark conversation, enhance community bonding, and greening of the neighbourhood. Designed by Sven, an official partner of Haag Wonen, the maquette was built based on the group's proposed measurements. Its primary function is to act as an engagement tool, inviting residents to gather, draw inspiration, spark conversations, and discuss potential changes or improvements for Marterrade. Additionally, the maquette serves a secondary purpose as a gardening table, designed to encourage further interaction and involvement, as well as to contribute to the greening of the neighbourhood through the organisation of planting events around it.

Involving residents in the maquette's construction allowed for creative expression, as they could choose to participate in the design of the maquette, its assembly, or in the construction of the wooden table that supported it. After assembling all the pieces, everyone was invited to take part in painting it. While some residents were initially hesitant to join, they gradually became more involved and enjoyed the process.

The final maquette featured thoughtfully placed key reference points, such as the community center, to help residents orient themselves when navigating the model. At the same time, ample open space was left for creative freedom, inviting residents to envision new possibilities for greening and transforming Marterrade. As a result, residents, volunteers, and students interacted and communicated throughout the project's execution, reinforcing its collaborative nature and fostering community empowerment. The session concluded with a sense of accomplishment, as the maquette became a tangible symbol of community involvement and a shared vision for the future of Marterrade.

Overall, the results gathered from the three co-creation sessions at the Marterrade indicated the need for interventions that embrace the following characteristics: are low cost and quick, build social cohesion in the neighbourhood and focus on waste manage-

Fig. 13-15
Different stages of
the Marterrade
Maquette construc-
tion.



ment.

Low-cost and quick interventions

Smaller measures such as green spaces or communal areas can be implemented more quickly. Specifically, our options for intervention amount to losing freestanding objects in the square in front of the Marterrade and the replacement of around 20 floor tiles with green tiles. Additionally, at least one bench is desired. It is important to demonstrate that a process is in motion and that tangible changes are taking place, rather than merely being discussed. This was something a few residents pointed out, saying there was too much talk and too little done. Therefore, the engagement strategies point to the need of short-term experiments in the placemaking process (Project for Public Spaces, 2018).

Building on social cohesion

Communication with residents is an essential part of the development process. The fact that Haag Wonen is represented directly on-site means that residents can express their concerns in person. There is open communication about which measures are feasible and where there are financial or organisational restrictions. The communication with residents supports co-creation sessions which improve social cohesion between residents. The placemaking strategies that are implemented also add to social engagement and new connections between residents. This connects to the results from the engagement strategy 2.2 where residents voiced out their concerns about the lack of connection between each other. It is something that is shared between the residents, Kamer Rade and Haag Wonen, which presents a strong opportunity for co-creating a neighbourhood into a space for all.

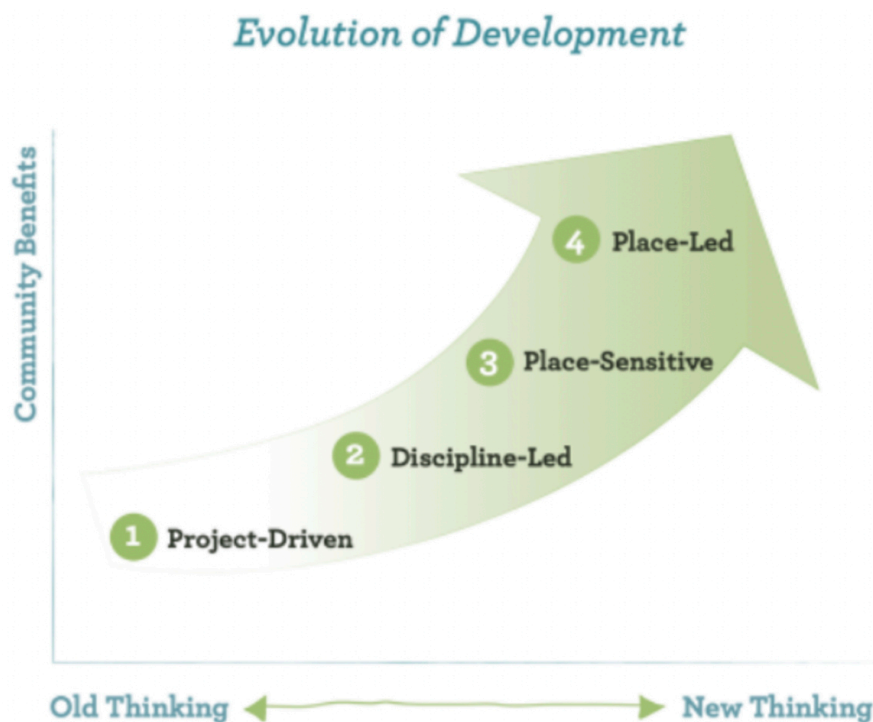


Fig. 16
Evolution of Development through place-making strategy

The active involvement of local residents is essential for the further improvement and active involvement of the residents of the Marterrade. Direct engagement with Haag Wonen, and participation in workshops and community events are crucial for progress. The development of Marterrade is a long-term process based on cooperation. It is now in the first phase and is more project driven, but the idea is that after the strong collective approach and co-ownership between residents that it will turn into a place-led space (Project for Public Spaces, 2018).

Waste management

A highly important issue in the neighbourhood is waste disposal and maintenance. Complaints from residents are dealt with by Haag Wonen wherever possible. If a solution cannot be found immediately, the matter is passed on to the city council. Haag Wonen is pursuing a strategy of gradual change - small interventions that can develop into larger projects in the long term. This aligns with what other residents pointed out to where they would like to see change, specifically in the wish for more colourful bins.

Concluding

Overall, the main issues the residents faced seemed to be connecting with what Haag Wonen had already signalled and were willing and able to change. The engagement strategies resulted in many new insights and helped to understand the perspectives of the residents. They are allowed to define and evaluate the place together with the residents and stakeholders, specifically addressing the issues they face. This was done by different strategies, which also made it possible to view the issues from different perspectives.

While there were a lot of residents involved during the engagement strategies, residents seemed to not have full co-ownership of the project. A lot of residents seemed to not understand how long these processes can take and did not seem as informed. That is at least what several elderly and artist residents said about it. While the process of place-making is still in its project-driven phase, it is essential to keep the residents informed and co-creators of the project. Several artists have shared that they were asked about their ideas but never heard back, resulting in feelings of frustration and disinterest. From an ABCD perspective, this highlights a lack of grassroots engagement. As Lent and Studdert (2019) emphasize, the role of supporting organizations should be to increase citizen-led, co-decision making. Zooming into a specific case, where clashing ideas emerge between artists, as mentioned by Haag Wonen representatives, it may be a better approach to let artists work together on a shared outcome. This encourages interdependence and strengthens the community from within. Even if the answers are undesired, it's essential in a co-creation process to keep everyone informed, so that trust and collaboration can grow from the bottom up.

Due to time constraints, it was not possible to incorporate many short-term experiments. However, the green tiles were one of the experiments. Another experiment chosen by Haag Wonen was the use of a maquette. Both experiments are part of the bigger place-making progress and will be in a constant loop of feedback, together with the residents. These will be further elaborated on in the next chapter.

Design Proposal and ToC Evaluation

Description

Following the ongoing feedback from residents, reflection amongst the students, engagement with the Haag Wonen staff and critical analysis of weekly design proposals, we decided to form a **holistic** approach to the interventions intended to be implemented in the Marterrade by creating thematic investigations linked to potential proposals. These involve:

1. Security
2. Community
3. Neighbourhood Cleanliness
4. Sustainability

Additionally, through consistent engagement with the Marterrade residents, it was certainly evident that there was a lack of trust in Haag Wonen in managing their concerns with regards to the Marterrade. Effectively, these concerns are comprised of systemic, historical and experiential factors which can only evolve progressively through an **accumulative approach** and **sequential progression** in development of our proposed interventions. As a result, each of the thematic approaches will ultimately coincide with each other to form a “staged-implementation’ approach to achieve interrelated goals for the betterment of the Marterrade neighbourhood.

Through the development of each assignment, we have established four main interventions to be cumulatively developed through our proposal “Ground-Up @ the Marterrade”

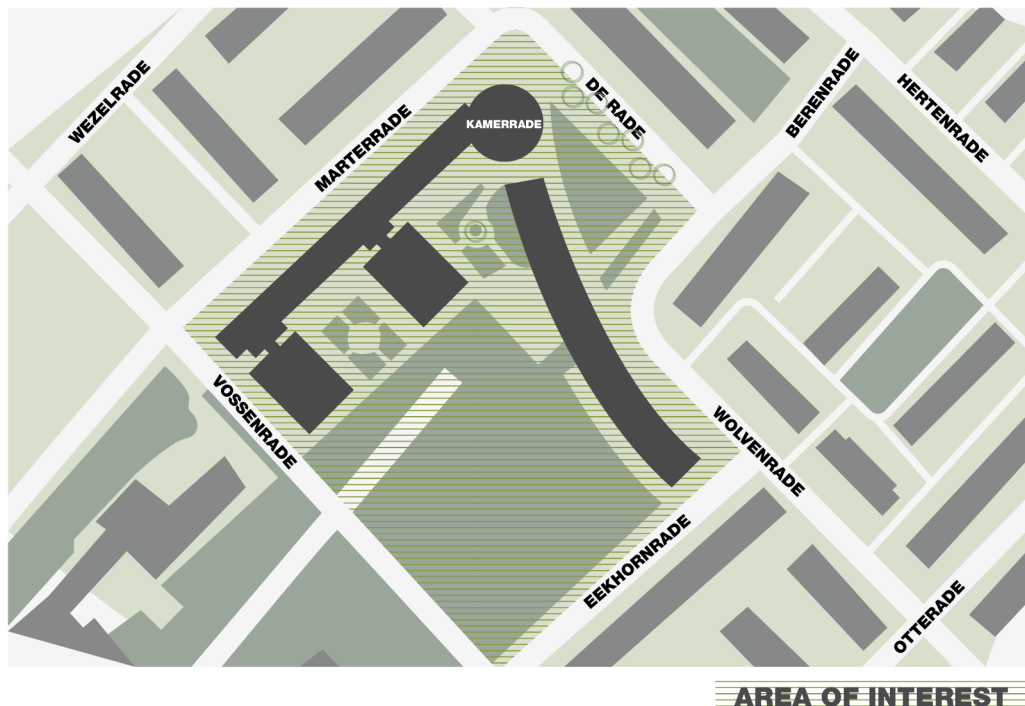


Fig. 17
Area of Interest for
the Implementation
of the Holistic Set
of Design Proposals

rade”, each addressing the themes of security, community, neighbourhood cleanliness or sustainability. These involve:

1. Duckweed tile gardens
2. Implementation of compost bins & increased opportunity for waste disposal through standalone bins
3. Increased lighting through lamp posts & string lights
4. Increased presence of community-produced public art

Fig. 18
Visualisation of the holistic design proposal “Ground-Up @ the Marterrade” from the Adjacent Garden along De Rade.



Description of Individual Interventions

Duckweed Tile Gardens

The duckweed tile intervention is a low-maintenance greening initiative that replaces traditional pavement with tiles embedded with duckweed. Introduced through the final co-creation session at the Marterrade on the 30th of March, it engages residents of all ages in a hands-on, inclusive process. Participants help to remove old tiles, place new duckweed ones and spread seeds, ultimately fostering a shared sense of responsibility in the garden. The tiles require minimal upkeep, sustained naturally by sunlight and rain-

water, making the design both practical and modular for scalable implementation. By involving the community directly, the project cultivates local pride and ownership, aiming to transform the neighborhood into a more vibrant, biodiverse and environmentally-connected space.

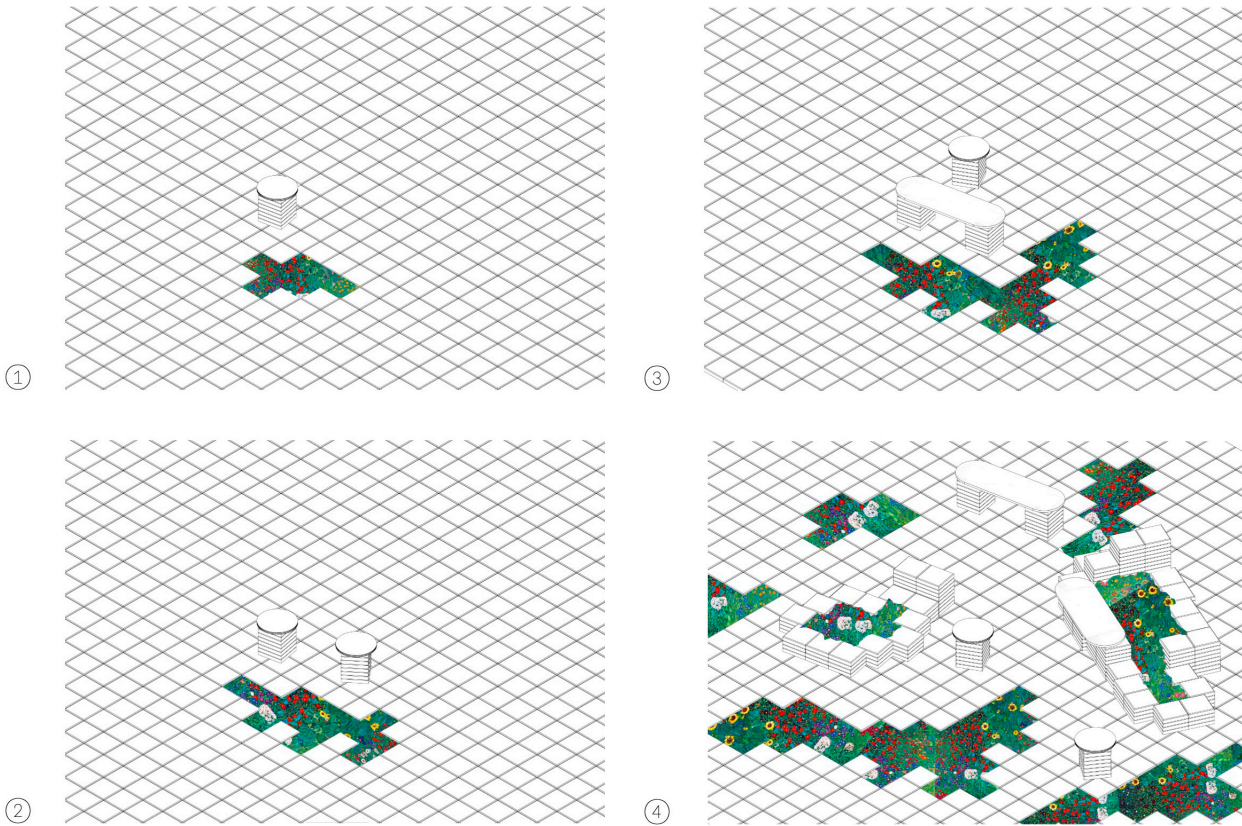
Compost Bins & Standalone Bins

Compost bins are envisioned as part of the broader greening initiative to support improved waste management and proper waste disposal by encouraging organic recycling amongst Marterrade residents. Positioned within the inner courtyard near duckweed tile gardens and communal gathering spaces like the maquette table, these composting bins allow occupants to dispose of food scraps and garden waste responsibly, turning the soil into nutrient-rich compost for maintaining the gardens. Standalone bins serve as accessible waste disposal units for non-compostable litter, supporting neighbourhood cleanliness and reinforcing community stewardship and pride. Together, they promote environmental awareness and long-term care, complementing the low-maintenance, self-sustaining design of the scattered duckweed tile gardens.

Lamp Posts & String Lights

The lamp posts are to be strategically positioned in areas associated with a reduced sense of safety to enhance visibility along pedestrian pathways and provide ample lighting for residents and passersby. String lights will be suspended between lamp posts, spanning across communal spaces and key pathways, adding a whimsical and welcoming atmosphere to the outdoor area. Increased lighting in these outdoor areas will encour-

Fig. 19
Development of the rearrangement of the remaining concrete tiles from simple outdoor furniture to a newly created landscape



age residents to spend time outdoors during evenings, encouraging social interaction and a stronger sense of community. Increased lighting would overall enhance the security and accessibility of the Marterrade complex by reducing dark spots and promoting a positive, engaging nighttime environment, balancing functionality with playfulness.

Community-Produced Public Art

Butterfly sculptures, designed and crafted by the Marterrade community, would bring a sense of ownership and pride to the outdoor space, whilst also celebrating the creativity and resourcefulness of the residents. Butterflies themselves act as a symbol of transformation and renewal, thus acting as a symbolic addition to the ongoing evolution of the Marterrade. The sculptures would be installed within the existing gardens, contributing to the emotional and social well-being of the residents. In addition, the butterflies could be made with recycled materials, further reinforcing the revitalised sustainability of the Marterrade gardens and its surroundings.

Phase Breakdown

Phase 1: Generation

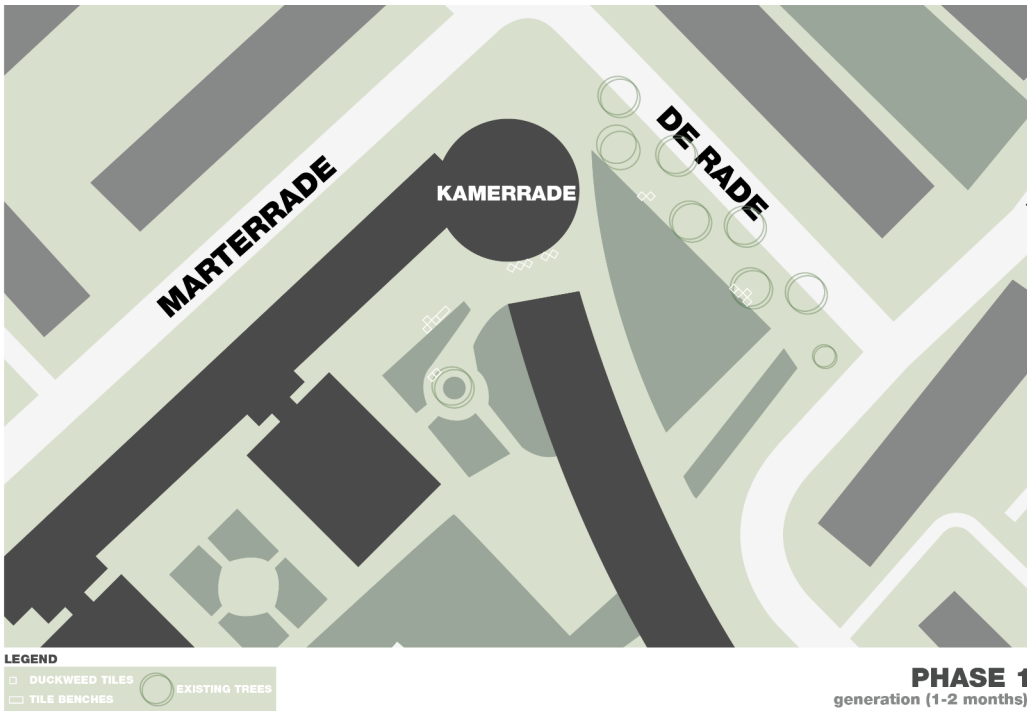


Fig. 20
Site Plan Showing
the Implementation
of Duckweed Tiles
within the Inner
Courtyard and Ad-
jacent Garden at De
Rade.

Key Actions: The key actions involved in the first phase of our design proposal are establishing initial duckweed tile gardens by replacing existing tiles, whilst also laying foundations for biodiversity, waste management and further aesthetic improvements.

Justification of Time Frame: The shortened time frame of 1-2 months is suitable for exhibiting quick, tangible change which enables community interest and early support. In

addition, the short duration is ideal for demonstrating immediate ecological gains through plant growth from the duckweed tiles.

Justification of Elements Involved: The modularity and scalable nature of the duckweed tile gardens utilise existing infrastructure and require minimal effort in comparison to the construction of planter boxes. The associated aesthetic improvements through increased greenery of the Marterrade will form an initial sense of pride in the scheme, signaling the beginnings of a visual shift in the Marterrade community.

Phase 2: Place-Making

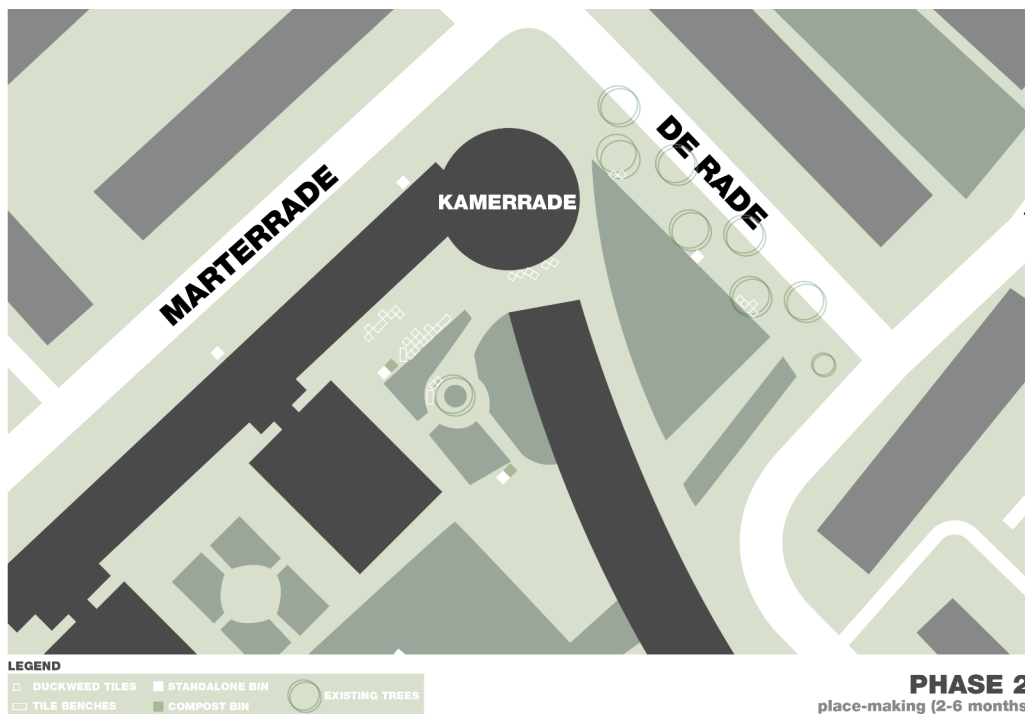


Fig. 21
Site Plan Showing
the Implementation
of Duckweed Tiles
& Improved Waste
Management
within the Inner
Courtyard and Ad-
jacent Garden at De
Rade & Marterrade.

Key Actions: The second phase requires expansion of the existing duckweed tile garden formed in phase 1 by using existing tiles to form repurposed tile seating. The installation of new standalone general waste bins will be scattered around the perimeter of the housing complex and the internal courtyard. In addition, compost bins will accompany standalone bins within the courtyard, allowing residents to dispose of their green waste while providing natural fertilizer for the flowers in the duckweed gardens.

Justification of Time Frame: This phase requires more time for the fabrication and installation of seating and waste disposal infrastructure, in addition to the time required for the scheme to be approved by the Den Haag municipality. The community aspect of engagement also requires a longer time frame to establish maintenance routines and local ownership as residents need time to become familiar with composting systems and integrate them into their respective routines.

Justification of Elements Involved: The implementation of tile seating provides for the initial invitation of lingering and place-making, which will become important in transforming the public spaces into social spaces. Furthermore, repurposed materials are cost-effective and their implementation alongside the compost bins will promote circularity and resonate with sustainability values.

Phase 3: Oasis

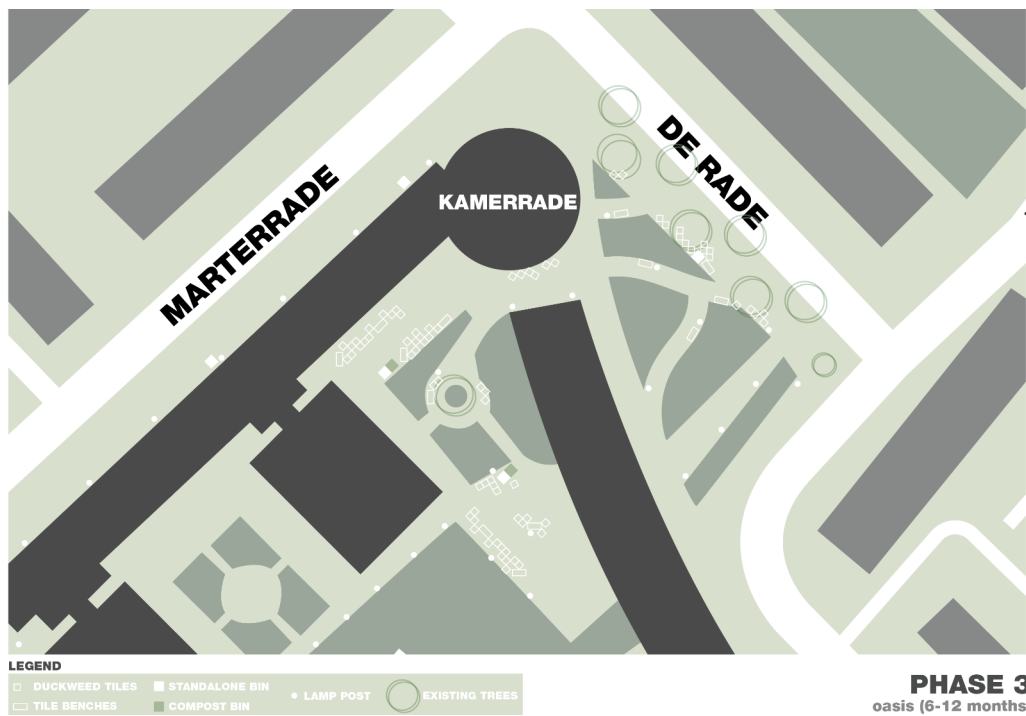


Fig. 22
Site Plan Showing
the Implementation
of Duckweed Tiles,
Improved Waste
Management,
Lighting & In-
creased Accessibil-
ity within the Inner
Courtyard and Ad-
jacent Garden at De
Rade & Marterrade.

Key Actions: The key actions involved in the third phase include further development of the duckweed tile gardens, installation of lamp posts and division of the adjacent garden along De Rade to form circulatory paths. The circulatory paths formed will increase accessibility and engagement with the existing garden, whilst also forming the desired ‘oasis’-like garden for residents through increased seating.

Justification of Duration: The duckweed tile garden will continue to require further development due to the time requirements imposed through the fabrication of seating elements. In addition, more extensive periods of time are required to gain municipal approval of the implementation of more pedestrian paths in the outer garden and the installation of lamp posts. Furthermore, the duckweed tile gardens will require several months to establish plants that can thrive in local climates and adjust to seasonal change.

Justification of Elements: The implementation of lighting along the Marterrade and perimeter of the adjacent park will increase occupant safety, particularly in winter months and in low-visibility areas, contributing to equitable accessibility for all residents.

Phase 4: Buffer Zones

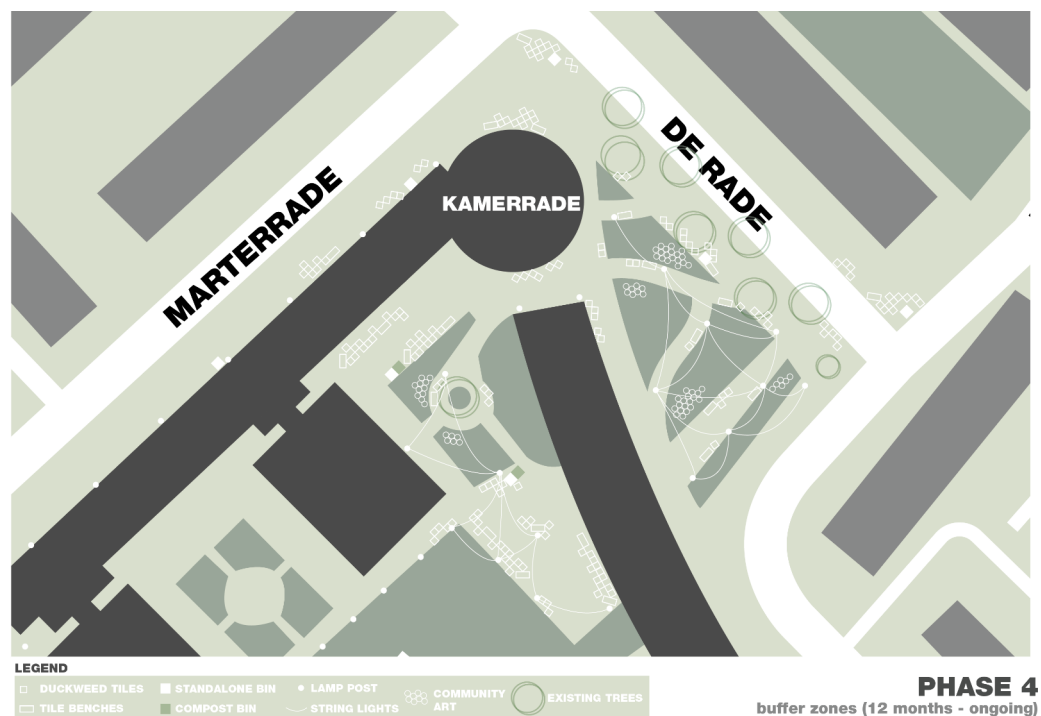


Fig. 23
Site Plan Showing
the Implementation
of Duckweed Tiles,
Improved Waste
Management,
Lighting, Increased
Accessibility & Art
within the Inner
Courtyard and Ad-
jacent Garden at De
Rade & Marterrade.

Key Actions: This stage involves forming path-buffer zones to slow fat-bike usage in courtyard and sidewalk spaces through the refinement of garden placement and further implementation of duckweed tile gardens. Furthermore, sculptural butterfly elements of varying scale made by the residents will be installed within the duckweed tile gardens, existing outer gardens and inner courtyard. String lights will be installed with the lamp posts acting as foundations, enhancing the playful essence of the space and contributing to further lighting.

Justification of Duration: The final phase is the longest as it requires long-term behavioural shifts, infrastructural adjustments and evolving collaborative dynamics. Establishing maintenance routines and redesigning the outer garden and producing sculpture design involve negotiation, budgeting and staged construction.

Justification of Elements: Safety was an underlying concern for the elderly residents of the Marterrade, therefore buffer zones to reduce speed of the e-bikes are essential in establishing a sense of ongoing safety and deeper engagement with the space. Further refinement of duckweed tile placement ensures the garden adapts to usage patterns and any unforeseen environmental and pedestrian behaviours. Ongoing collaboration builds the sense of local belonging and pride in the community, ensuring the project is not top-down by continually responsive and inclusive, which is reflected in the community-driven sculptural garden which provides visual anchors for the Marterrade community.

Theory of Change (Design Proposal)

Current Situation	Lack of appeal and liveliness, also due to large proportion of sealed surfaces	Feeling of insecurity for older people due to bicycle and e-bike riders	Lack of a sense of belonging	Lack of biodiversity and visual diversity in greenery
Inputs	Human resources Residents, students, and Haag Wonen staff / volunteers for design, production, and ongoing maintenance		Tools and materials Duckweed tiles, flowers, and herbs, shovel, screwdriver, gloves etc.	
Activities and Outputs	<p>① Phase 1: Generation. Replacing concrete tiles with tiles embedded with duckweed and flowers</p> <p>② Phase 2: Place-Making. Making furniture with left over tiles and support improved waste management and proper waste disposal. Encouraging organic recycling through education and placing of Compost Bins and Standalone Bins.</p> <p>③ Phase 3: Oasis. Further development of the place by plaacing Lamp posts in areas with reduced safety to improve lighting, and string lights between them which will create a welcoming atmosphere.</p> <p>④ Phase 4: Buffer Zones. Forming path-buffer zones to slow fat-bike usage in courtyard. Public Art designed and crafted by the Marterrade community to celebrating the creativity and resourcefulness of the residents.</p>			
Outcomes	Increased community pride and ownership	Enhanced courtyard aesthetics with flowers and colors and Less sealed surfaces	More distinguishable and welcoming entrance to the Marterrade	Deceleration of the forecourt, especially for bicycles and e-bikes riders
Impacts	Greater community engagement and responsibility Improved well-being and connection to the environment Cleaner and greener neighborhood with better waste management Stronger sense of security and safety in the neighborhood Increased overall quality of life for residents			

Fig. 24
ToC of our Collective Design Proposal (A2.3, A3.2 & A4.2)

Theory of Change (HHS Report)

Current Situation	Residents express the need for more green spaces and communal gathering areas.	The courtyard is underused, lacks greenery, seating, and a welcoming atmosphere.	Residents desire a greener, more social environment.	Reduced sense of safety
Inputs	Human resources Residents, students, and Haag Wonen staff / volunteers for design, production, and ongoing maintenance		Funding for Tools and materials Shovel, screwdriver, gloves and duckweed tiles, flowers, and herbs, etc.	
Activities and Outputs	① Community workshop held on a Saturday morning where families, elderly residents, and neighbors plant together. ② Three facilitators guide the planting process and offer gardening tips and support. The event includes music, light refreshments, and a welcoming atmosphere. ③ Residents build flower beds with bricks in the courtyard and plant flowers. ④ Installation of benches and a roof for shaded seating areas.			
Outcomes	deceleration of the forecourt, especially for bicycles and e-bikes riders	Increased community pride and ownership	Enhanced courtyard aesthetics with flowers and colors and Less sealed surfaces	more distinguishable and welcoming entrance to the Kamerade
Impacts	Strengthened social bonds Promotion of healthy lifestyles Inspiration for future environmental initiatives Thriving ecosystem attracting bees, butterflies, and other pollinators Improvement of biodiversity and air quality in the urban space			
Critique	Although safety is identified as a need, no specific greening or design ideas are proposed in the project descriptions to directly address safety. The activities describe the initial creation of the vegetable garden and flower courtyard but do not mention ongoing maintenance or responsibilities after planting.			

Fig. 25
ToC of the HHS
Report Design Proposal (A1.1)

Reflection

Reflecting back on the project, we can say that beyond the design interventions and creative solutions, the interactions with residents, listening to their stories, concerns and ideas, shaped the core of our learning.

However, the process had its shortcomings. One of the main challenges we identified was the limited diversity of active participation. Despite our efforts to include different groups, mostly the elderly residents showed up to the organised co-creation sessions. To address this we took a more proactive approach, by going into the neighbourhood, ringing doorbells, speaking to artists and walking up to kids. These spontaneous and informal conversations often gave us more authentic insights than the organised sessions did. This showed us that it might be a better approach to try to directly involve people to co-create in a communicative way, so the effort to participate stays as low as possible. We also noticed, especially during the first session, that some residents were uncertain about the purpose or the outcomes of the project. We felt a sense of detachment and skepticism, mostly among the older residents, who expressed doubt that any changes would actually happen within their lifetimes. This distrust in the system highlights the importance of building transparent, long term relationships to manage expectations carefully.

Among the younger residents, particularly those on fatbikes, had concerns about the police and being targeted unfairly. These experiences showed us the complexity of perspectives and the underlying tensions within the neighbourhood. It became clear to us that inclusive design has to go beyond engagement at the surface level. To create meaningful and long-term change everyone has to feel heard and valued, so they are motivated to stay engaged in the design where everyone feels represented. This will also support a sense of ownership.

In terms of learned lessons, we discovered the importance of simplicity. Initially, we came in with some ideas and assumptions about what residents might want and need. However, the more we listened, the clearer it became that there is a desire for small, tangible improvements. These kinds of ideas (like a butterfly garden), resonated far more than complex or abstract proposals. Furthermore, we learned that communication is very important. The way you approach people, explain your intentions, and follow up on their input plays a crucial role in building trust. This is not only important to gain input, but also to build lasting relationships.

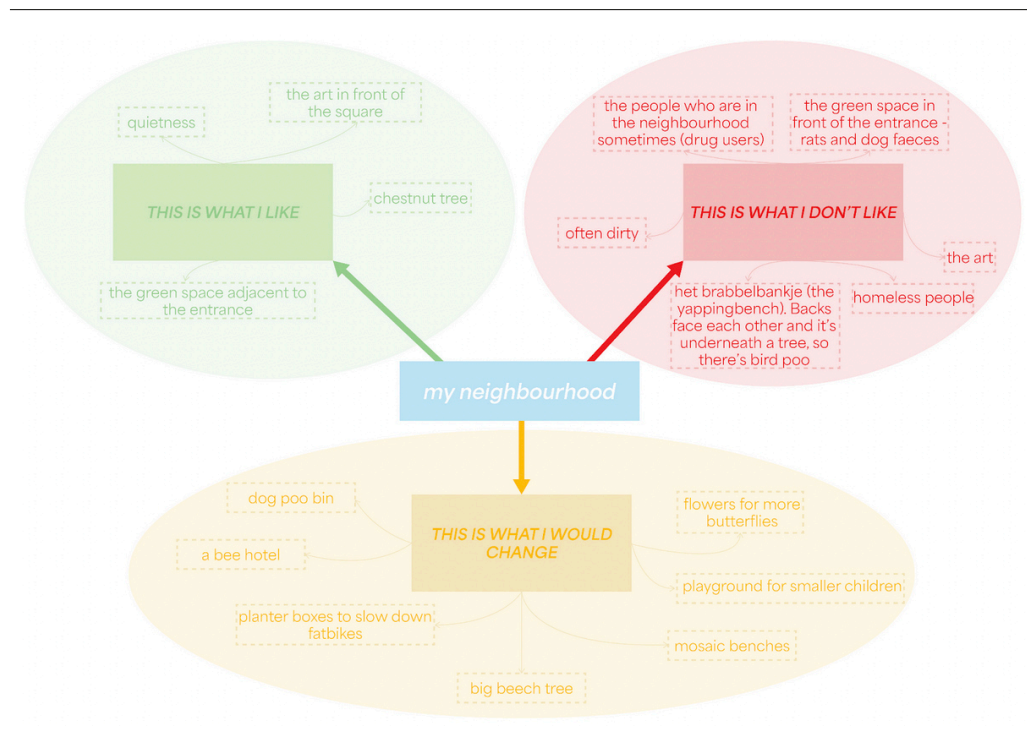
If we were to do this project again, we would approach the process with less preconceived ideas and more openness to what emerges spontaneously. We would put the focus on communicative approaches to involve the residents, so trust can build. What could be an interesting approach is to strengthen the bonds with local organisations and community leaders who already have the trust of the residents.

This project showed us that design is not just a creative discipline, it is mainly a social one. Impact derives from inclusion, empathy and actual, tangible interventions that will ultimately lead to positive change.

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Appendix



A. Fig. 1
Qualitative inter-active mind-map survey investigating the Marterrade residents' perception within the neighbourhood.

Marterrade square and inner gardens

In this first assignment we would like to learn more about you, so that we can better understand your wishes.

Place a sticker in the location that applies to you.

How long have you lived in this neighbourhood?				How do you usually move around the neighbourhood?			
1 year	5 years	10 years	15 years or more	Walking	Wheelchair	Stroller	With a walker or walking stick
				Bicycle	Car	Skateboard	Other... scooter scooter

How old are you?

0-9	10-18	18-24	25-34	35-44	45-59	60-69	70-79	80+
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A. Fig. 2
Marterade Survey
Results - Opinions
on Greening

Marterrade square and inner gardens

Please indicate whether you agree with the sentences: the scale ranges from 1 (= completely disagree) to 10 (= completely agree). Most sentences are about the square and the inner gardens of the Marterrade.

	1	5	10
There is enough green.			
There are too many cars.			
There are enough spaces to sit outside.			
There is enough shadow in the summer.			
There are enough places to play.			
More green is the most important point of interest.			
I like the idea of a community vegetable garden.			
It seems fun to me to garden myself.			
I like living in this neighbourhood.			
I feel safe in this neighbourhood.			
I would like to have more social contacts in the neighbourhood.			
I would like to invest time in greening the square.			
The neighbourhood is clean.			
I feel at home in the neighbourhood.			
I know how and where I can separate my waste.			

A. Tab. 1
Marterade Survey
Results - Wishes for
the Neighbourhood

Marterrade square and inner gardens

In this first assignment we want to get to know who you are, so that we can better understand your wishes for the neighbourhood.

Answer the following questions, either in words or with a drawing.

What are your wishes for the square and the inner gardens?	What problems do you experience in the square and the inner gardens?
<ul style="list-style-type: none"> • terrace at kamerrade • trees • close bags properly 	<ul style="list-style-type: none"> • not enough trash cans -> dirty • nothing for cigarette butts • dog poop mess

A. Tab. 2
Marterade Survey
Results - Wishes for
the Neighbourhood

Resident group	What I like about the neighbourhood	What I don't like	What could be different
Man, 42 years old	Overall, a fine neighbourhood	Too hot, too much sun (picture 1); Not enough bars in the neighbourhood	A grapevine near the window for shade, and possibly for more homes;
Woman, 56 years old	Interested in designing art for the neighborhood	Lack of trash bins (and when they are there, they are not seagull-proof and they are ugly)	More music in the neighbourhood, especially for children; wants to create art for the neighbourhood, if there is a budget (has already shared her plan with Haagwonen)
Man, 59 years old	Lots of greenery	But the greenery is ugly; doesn't want to attract junkies	More palm trees, a kind of "oasis feeling"; more music in the neighbourhood
Girls, 15 years old (2x)	-	Lack of play and sports facilities (like a callisthenics park)	More swings, including a nest swing; a small sports park; a paved square for football instead of a grass field
Boys, 14 years old (3x)	-	Annoying that the police always stop them because of their fat bikes	More playgrounds

A. Tab. 3
Results of the En-
gagement Strategy
2.1: Door-to-door
method

A. Tab. 4
Results of the En-
gagement Strategy
2.1: Walk-shop

Resident group	What I like about the neighbourhood	What I don't like	What could be different
Older women, 67-75 years old (4x)	-	Doubt that anything will really change; distance between neighbours; language barrier with some residents	More social connections and contact with others; better communication about neighbourhood activities (such as WhatsApp groups)
Group of older women	Private garden	Neighbours of one complex can get into their complex with the same key but not the other way around; homeless people get into the complex and sleep in the garden which gives an unsafe feeling;	
Older woman		Not enough space to park the bikes inside; Ugly green boxes in the garden (see picture 2)	Make them more colourful by painting nice art on them
Older woman	I like that the kids can play outside	It is too dark at night because there are not enough lanterns which creates an unsafe feeling for residents	Put more lanterns on the pathways, especially in the park

Interview with Haag Wonen Staff

1. Is there a detailed management plan for Marterrade 10? If so, can you define the stages/timeframe?

The results of the interviews show that the development of Marterrade 10 is part of a long-term urban development process in The Hague Southwest that is geared towards the needs of local residents. A clear management plan with fixed phases is not evident, rather a flexible strategy seems to be pursued that focuses on community participation. The overall planning for the neighbourhood has already been extended by several years and is supported by national and local government agencies. While major structural changes often take several years and must first be approved by the city council, smaller measures such as green spaces or communal areas can be implemented more quickly. Specifically, our options for intervention amount to loose freestanding objects in the square in front of the Marterrade and the replacement of around 20 floor tiles with green tiles. Additionally, at least one bench is desired.

2. Have the goals and possible program timeframe been communicated to the participants?

Communication with local residents is an essential part of the development process. The fact that Haag Wonen is represented directly on-site means that residents can express their concerns in person. There is open communication about which measures are feasible and where there are financial or organisational restrictions. Progress to date will be presented at the beginning of April and the next steps will be explained. The conversion of office space into studios and a common room is planned within a year, while the outdoor area is to be redesigned in early summer. Initial designs have already been drawn up by the city council, and a reorganisation of the wastewater system is also planned for the long term.

3. Are there any limitations or restrictions when it comes to adding greenery or community spaces?

There are no strict limitations, but smaller interventions such as green spaces or communal areas can be implemented more quickly. The flexibility exists for smaller-scale interventions, such as replacing floor tiles with green tiles and adding benches, which are quicker to implement compared to larger structural changes.

4. How does Haag Wonen currently handle complaints about waste and maintenance?

Complaints from residents are dealt with by Haag Wonen wherever possible. If a solution cannot be found immediately, the matter is passed on to the city council. Haag Wonen is pursuing a strategy of gradual change—small interventions that can develop into larger projects in the long term.

5. How much flexibility do we have in implementing ideas like waste bins, composting solutions, or seating areas?

The flexibility for implementing these kinds of ideas is quite high. While larger changes require more time and approval from the city council, smaller interventions such as adding seating areas or composting solutions can be introduced more quickly and are part of the flexible approach in the development.

6. Has Haag Wonen considered strategies to better engage residents in decision-making?

A central component of the project is the active involvement of residents. The aim is to further develop existing buildings and social structures together with local residents instead of demolishing large areas and building new ones. In collaboration with universities, concepts are developed that serve as inspiration for neighbourhood development. One example of a successful, participatory project is the redesign of a women's community centre in Haag South-West. The residents developed various concepts, which were then put to a vote. Some of these ideas were actually integrated into the redesign. For example, students suggested placing the centre's founders at the centre and reminding people of the project's origins.

7. Are there any examples of successful resident-led projects in other Haag Wonen neighbourhoods?

Yes, one example of a successful, participatory project is the redesign of a women's com-

munity centre in Haag South-West. The residents developed various concepts, which were then put to a vote. Some of these ideas were integrated into the redesign, such as placing the centre's founders at the centre of the project.

8. What would Haag Wonen need from residents in order to move forward with potential improvements?

The active involvement of local residents is essential for the further improvement of Marterrade. Direct dialogue with Haag Wonen, and participation in workshops and community events, are crucial for progress. The development of Marterrade 10 is a long-term process based on cooperation between residents, the municipality, universities, and other stakeholders.

9. What has been specifically done at Marterrade 10 to implement the Haag Wonen sustainability plan?

While the specific sustainability measures for Marterrade 10 are not detailed in the interview, smaller interventions related to greenery and community spaces, such as adding green tiles, can be seen as part of the sustainability goals. The long-term vision for the neighbourhood includes changes that contribute to sustainability, such as the redesign of the outdoor area and the reorganisation of the wastewater system.

A. Fig. 3
TOC Butterfly
Garden

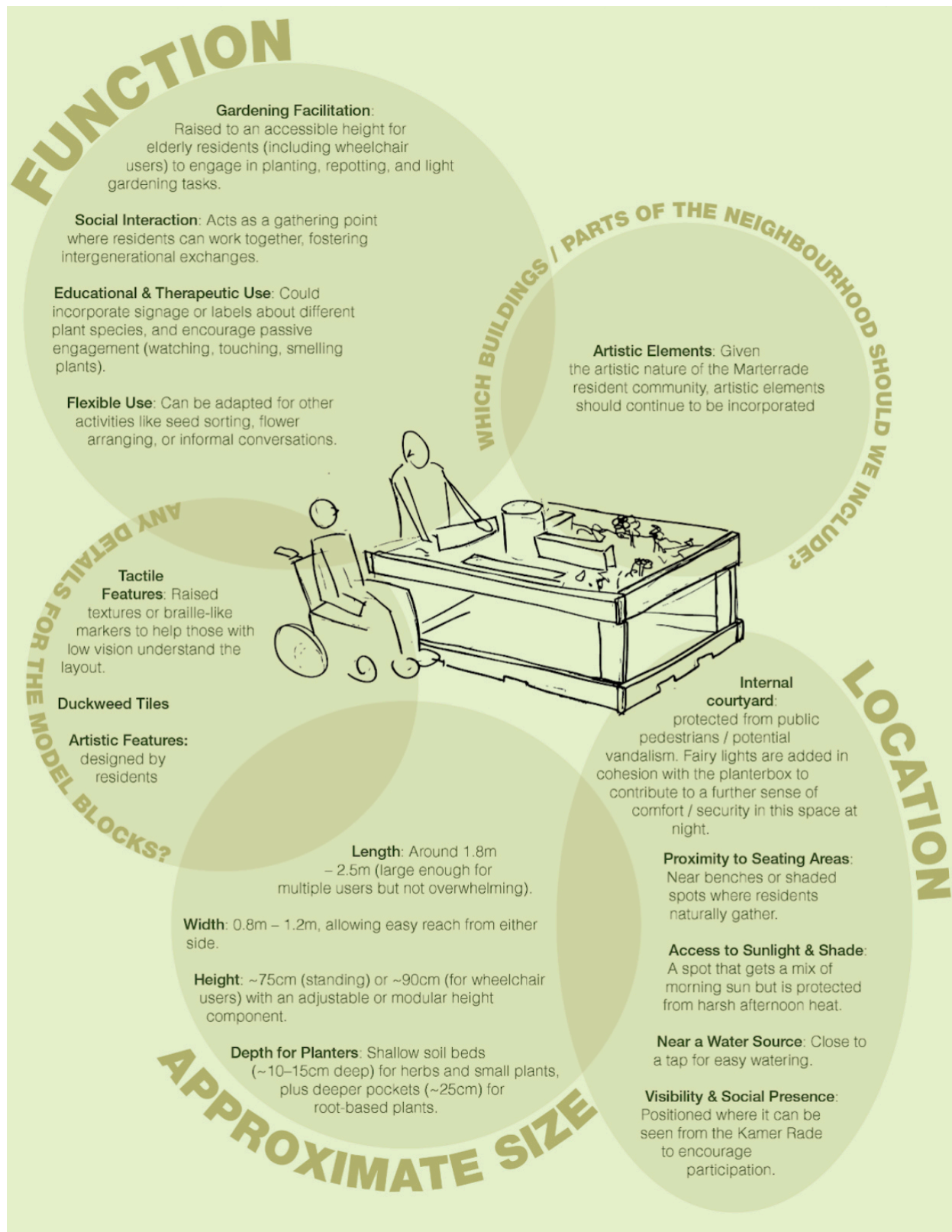
Current Situation	Lack of appeal and liveliness	Poor waste management	Lack of a sense of belonging	Lack of biodiversity	Reduced sense of safety
Inputs	Human resources Residents, students, and Haag Wonen staff/ volunteers for design, production, and ongoing maintenance			Funding Materials, tools (timber prefabs, compost bins) from Haag Wonen and Municipality	
Activities and Outputs	① Designing promotional flyers to attract residents				
	② Designing and building the planter boxes				
	③ Painting and decorating the planter boxes with residents				
	④ Creating butterfly sculptures for decoration				
	⑤ Planting native flower bulbs/plants that attract butterflies				
	⑥ Maintaining plants through watering and weeding				
	⑦ Installing a compost bin for organic waste to create fertilizer for the planted flowers				
	⑧ Adding fairy lights for a welcoming atmosphere				
Outcomes	Cleaner and greener neighborhood with better waste management	Increased community pride and ownership through artistic planter boxes	Enhanced courtyard aesthetics with flowers and colors	Better nighttime lighting for improved comfort and visibility	
	Greater community engagement and responsibility Improved well-being and connection to the environment Increased overall quality of life for residents Stronger sense of security and safety in the neighborhood				
	The project's long-term sustainability raises some concerns, as it depends heavily on ongoing community involvement in maintenance tasks. Without clear systems to ensure regular upkeep, there's a real risk the space could fall into neglect. Similarly, while the composting feature is certainly beneficial, its effect on neighborhood waste problems might be limited unless paired with educational programs to change disposal habits.				

A. Fig. 4
TOC Sven's Mar-
terrade Maquette

Current Situation	Need for a new engagement strategy, as some residents have already been surveyed multiple times	Need to give back through tangible, interactive, and low-cost community interventions	Need for accessible engagement strategies for people with disabilities who cannot join certain activities
Inputs	Human resources Residents, students, and Haag Wonen staff/ volunteers for design, production, and ongoing maintenance	Tools and materials Timber, hand saw, electric sander, nails, glue, rule, protective masks, pencils, gloves, painting brushes, varnish	
Activities and Outputs	<div>① Cut wooden pieces to the correct size and sand them in order to make the base</div> <div>② Assemble the wooden pieces of the base with glue and nails</div> <div>③ Create the maquette on MDF to be placed on top of the wooden base</div> <div>④ Decide on the wooden structures placed in the maquette and ensure they accurately resemble real-life proportions</div> <div>⑤ Assemble the maquette and attach it to the base</div> <div>⑥ Paint the maquette/gardening table and lay down a protective film to safeguard the surface. This film will serve as a barrier, holding the soil that will be added later for planting flowers</div>		
Outcomes	Increased engagement of residents with the project	Generation of new ideas in regards to the development of the neighbourhood	
Impacts	Greater community engagement and responsibility Improved well-being and connection to the environment Increased overall quality of life for residents Stronger sense of security and safety in the neighborhood		
Critique	The sustainability of the maquette depends on its placement—outdoors, it would rely on rainfall, while indoors, it would require suitable plants and regular watering. Additionally, accessibility concerns have been raised, as the wooden base limits wheelchair access, and adjusting the height could make it more inclusive for both wheelchair users and children.		

Current Situation	Lack of appeal and liveliness, also due to large proportion of sealed surfaces	Feeling of insecurity for older people due to bicycle and e-bike riders	Lack of a sense of belonging	Lack of biodiversity and visual diversity in greenery
Inputs	Human resources Residents, students, and Haag Wonen staff/ volunteers for design, production, and ongoing maintenance		Tools and materials Shovel, screwdriver, gloves and duckweed tiles, flowers, and herbs, etc.	
Activities and Outputs	① Designing promotional flyers to attract residents			
	② Removing tiles from the place in front of the Marterrade			
	③ Replacing them with diverse greenery			
	④ Collecting and rearrangement of the tiles as furniture, raised beds and landscape			
Outcomes	deceleration of the forecourt, especially for bicycles and e-bikes riders	Increased community pride and ownership	Enhanced courtyard aesthetics with flowers and colors and Less sealed surfaces	more distinguishable and welcoming entrance to the Kamerade
Impacts	Greater community engagement and responsibility Improved well-being and connection to the environment Cleaner and greener neighborhood with better waste management Stronger sense of security and safety in the neighborhood Increased overall quality of life for residents			
Critique	The activity has a moderate cost. However, there is always a risk of vandalism from curious pedestrians unfamiliar with the initiative. This likelihood will significantly decrease once the plants begin to bloom and their purpose becomes clear to passersby.			

A. Fig. 5
TOC Loose Tiles –
Guerilla Open
Space Design



A. Fig. 6
Poster for Sven's
Marterrade
Maquette

marterrade

ground-up @ marterrade

een tuinsysteem dat stap voor stap groeit, door onder andere gebruik te maken van duckweed (waterdoorlatende) tegels, die in de loop der tijd biodiversiteit, verlichting, waterbeheer, kunst en contact tussen de buurtbewoners zal bevorderen.

scan deze QR-code om het volledige rapport te lezen

waarom?

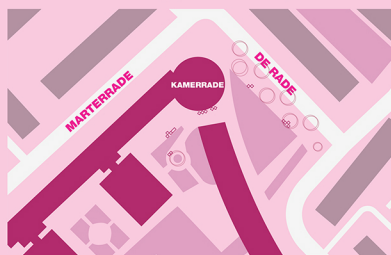


onze visie



wat?

fase 1: ontwikkeling (1-2 maanden)



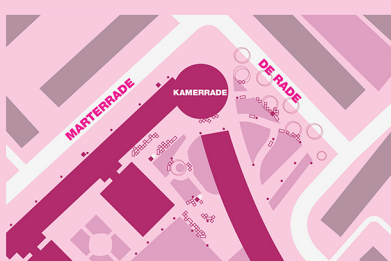
1. een start maken met de eerste duckweed-tegeltuinten, om de basis te leggen voor biodiversiteit, afval beheer en uiterlijke, esthetische verbetering van de buurt

fase 2: placemaking (2-6 maanden)



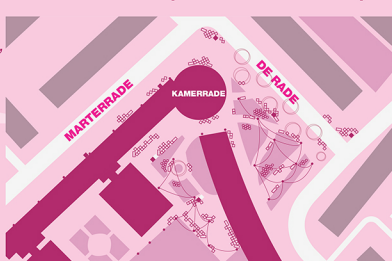
2. uitbereiden van de tuin, integreren van zitplekken van hergebruikte tegels, en planten van compost bakken en losstaande afvalbakken om de buurt schoner te maken

fase 3: oasis (6-12 maanden)



3. ontwikkelen van duckweed-tegeltuinten, installatie van lantaarnpalen en splitsen van de aangrenzende tuin om circulerende paden te creëren die de veiligheid, toegankelijkheid en betrokkenheid vergroten

fase 4: bufferzones (12 maanden en daarna)



4. implementatie van bufferzones om fat bikes af te remmen, installatie van lichtslingers en de creatie van de vlinder sculpturen voor meer gemeenschaps gevoel en trots.

hoe?

LEGENDA

DUCKWEED TEGELS	LOSSTAANDE VUILNISBAK	LANTAARNPAAL	KUNST VANUIT DE GEMEENSCHAP	BESTAANDE BOMEN
TEGELBANKES	COMPOST BAK	LICHTSLINGER		