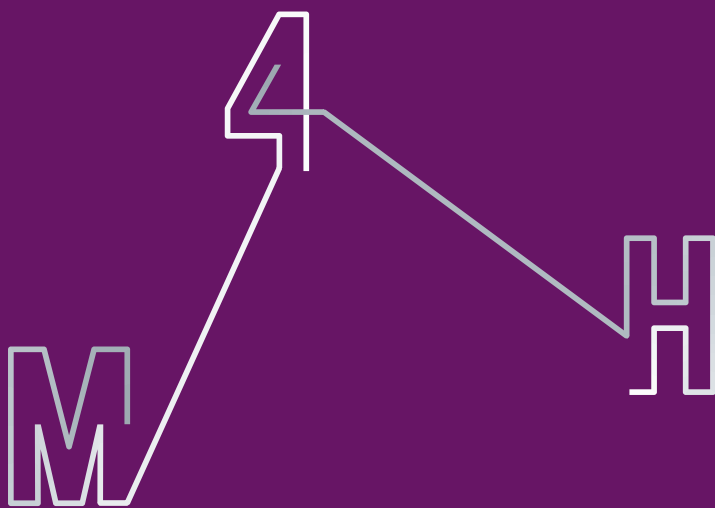


SPATIAL FRAMEWORK  
MERWE-VIERHAVENS  
ROTTERDAM

# FUTURE IN THE MAKING

SUMMARY



**ROTTERDAM**

PART OF | ROTTERDAM **MAKERS DISTRICT**





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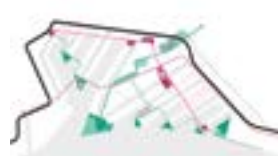
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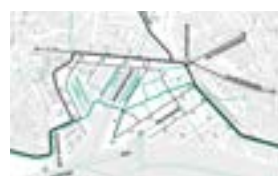
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# INTRODUCTION

Merwe-Vierhavens (or simply M4H) together with RDM Rotterdam forms the Makers District. The municipality of Rotterdam and the Rotterdam Port Authority want to develop M4H into an innovative living-work environment, optimally equipped for innovative manufacturing industry and with a mix of working, residential, culture, catering, sports and education. An energetic district with an impact on both the city and the port. The 'spatial framework' provides an outline of what M4H will look like in the future.

With the availability of this framework, developers, businesses and other interested parties in the area know where they stand - what opportunities there are and what level of quality they can expect. For the municipality and the Port Authority itself it forms the basis for a new zoning plan and a foundation for future investments.



M4H AND RDM TOGETHER FORM THE ROTTERDAM MAKERS DISTRICT

The spatial framework is the result of an intensive collaboration process. In two inspiration sessions, entrepreneurs and developers talked about their expectations for the area. Partly on the basis of the previously formulated vision and strategy (2017), experts from the municipality, the Port Authority, the DCMR environmental department and the neighbouring municipality of Schiedam then set to work. This led, in June 2018, to a first version of the spatial framework.

In the same month, the International Architecture Biennial Rotterdam (IABR) took place in M4H, in the HAKA building. This provided the opportunity to present and discuss this first version. In parallel, the process of the Test Site M4H+, organised in collaboration with the IABR, led to a set of eight guiding principles for sustainable area development. Furthermore, a series of in-depth investigations and reviews were performed regarding subjects such as the environment, mobility, resilience, subsoil and cost. The result is the spatial framework that the municipality and the Port Authority have established in 2019.



THE HISTORY OF M4H AS ENERGY AND TRANSSHIPMENT PORT. BOTTOM PHOTO: THE SCHIEDAMSEWEG SEEN FROM THE MARCONIPLEIN (1935).



THE SPATIAL FRAMEWORK IS THE RESULT OF AN INTENSIVE COLLABORATION PROCESS.



# ROTTERDAM MAKERS DISTRICT



ON THE BOUNDARY BETWEEN CITY AND PORT, OUTDATED PORT AREAS OFFER THE PERFECT CONDITIONS FOR AN INNOVATION ENVIRONMENT.

In the Rotterdam Makers District, entrepreneurs and knowledge institutions are putting the transition to the new economy into practice. Young companies grow into large, established enterprises. Young people are introduced to technology. New technologies are not only conceived, they are also tested and applied. This makes the district a testing ground and showcase for the circular economy of the city and port.

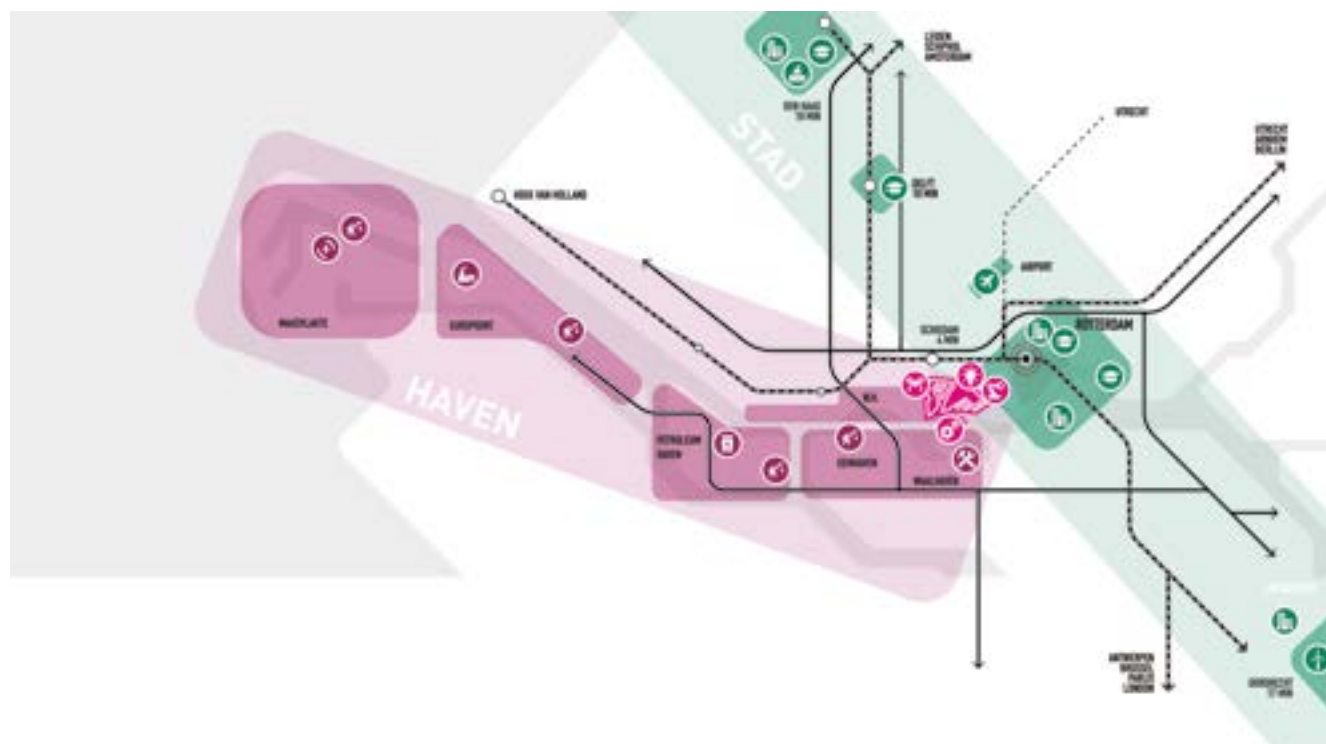
M4H is the part of the Makers District on the north bank of the Meuse. While RDM Rotterdam on the south bank has already been fully developed, M4H is now just starting.

It is the entrepreneurs, residents and users who ultimately bring colour to the area. The municipality and the Port Authority are responsible for a good infrastructure and attractive public space. They also provide for sufficient variation between the various location environments within M4H, an area which is as large as the centre of Rotterdam. Thus a spatial and programmatic image has been created for the development of M4H, the 'spatial framework'.



RDM AS A HOTSPOT FOR TECHNOLOGY EDUCATION AND INNOVATIVE TECHNICAL BUSINESSES. THE DEVELOPMENT OF M4H IS STILL AT THE BEGINNING, BUT EVEN HERE MORE AND MORE MAKERS ARE FINDING THEIR PLACE.





THE MAKERS DISTRICT IS LOCATED WHERE CITY AND PORT MEET  
AND IT BENEFITS FROM THE BEST OF BOTH WORLDS.

## VISION AND STRATEGY

With M4H, the Port Authority and the municipality have entered into a unique collaboration. In 2017, they presented their vision and strategy for the redevelopment. This takes advantage of the proximity of the port and the city. New manufacturing industry brings the economy of the city and port together and contributes to the expansion and sustainability of both. It boosts the region's innovative capacity and creates new jobs.

This manufacturing industry is flexible and specialised. It creates new opportunities made possible by digitisation and robotisation. It uses materials that are not harmful to people and the environment. The decisive factor for success is the proximity of creative talent, markets and knowledge centres. Furthermore, this industry needs flexibly deployable space.

M4H lends itself perfectly to this. There is plenty of room. The universities and the city centre are just around the corner. And there is a promising prospect of further synergy with RDM, directly across the river. The Port Authority's innovation programme, Port XL, is already established in M4H. This demonstrates that the pioneers and new companies which have a link with the port can find the right locating conditions here.

Innovative manufacturing industry flourishes in a vibrant urban environment, rich in catering, educational and cultural facilities. Such an environment is only created if people also live there. That is why housing is an integral part of the programme. The dynamic living environment created here also has another advantage. Talents who shape the city and port of the future will find an inspiring residential environment here that binds them to Rotterdam. Furthermore, the district will account for a substantial part of the Rotterdam housing programme. This is important for the city, because space for new housing must be found as much as possible within the city boundaries.



## OBJECTIVES

In 2017, the municipality and the Port Authority formulated five objectives for M4H:

- Attracting and facilitating innovative activity (with the accent on manufacturing industry) and the associated supporting businesses, from start-up to corporate.
- Creating employment for the full spectrum of the population of the Rotterdam region.
- Creating an open innovation environment with a varied mix of businesses and educational and knowledge institutions.
- Realising an urban living environment on and around the Merwe piers.
- Developing the area as a testing ground and showcase for the circular future of the city and port.

M4H HAS THE CONDITIONS AND ENVIRONMENT FOR INNOVATION. AT THE SAME TIME THERE STILL IS A LOT OF WORK BE DONE TO DEVELOP THIS AREA TO A FULLY-FLEDGES MAKERS DISTRICT.





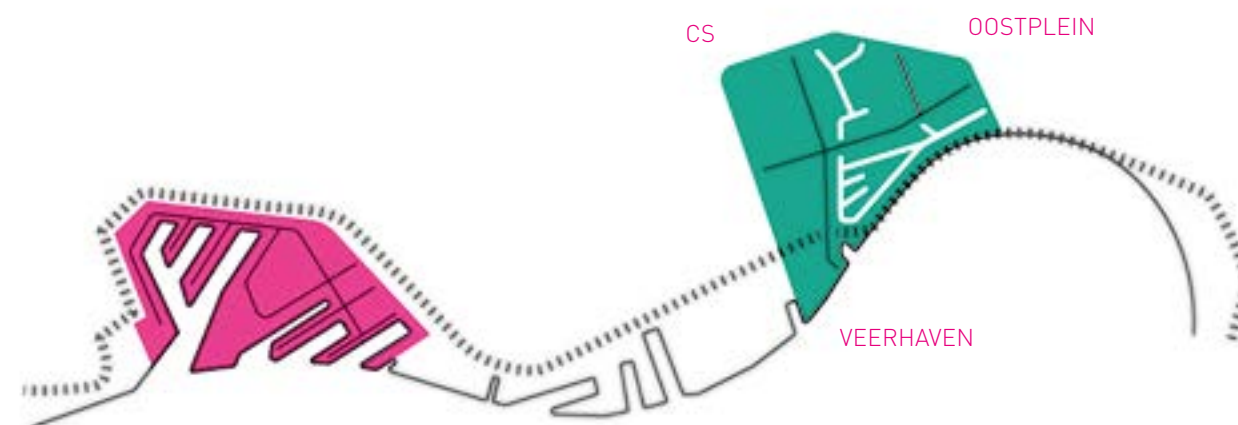


## PURPOSE OF THE SPATIAL FRAMEWORK

A successful development of M4H requires varied business environments, greening, well-organised traffic flows, focal points for meeting, sufficient critical mass and a good connection with the environment. The spatial framework provides for this.

The spatial framework has to last and is therefore flexible. It is global where it can be and exact where it needs to be. This fits in with the dynamic and complex character of the area development.

That is why a distinction has been made between starting points and ambitions. The starting points concern the variation in business environments (the 'programmatic main structure') and the public space and infrastructure, including the connection with the environment (the 'spatial main structure'). They form the basis for subsequent plan phases. Ambitions are less rigid, but give direction to subsequent plan phases.



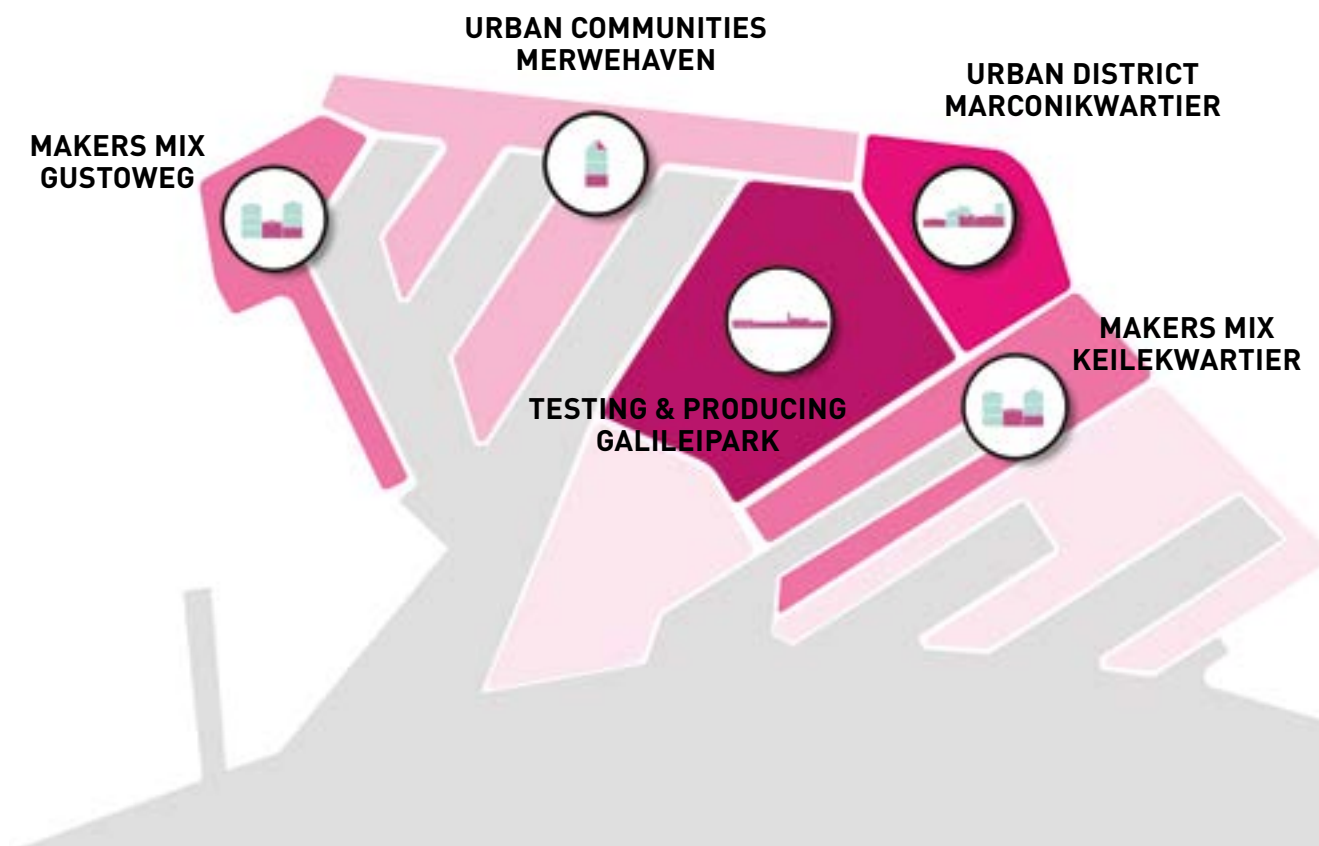
M4H IS AS BIG AS THE ROTTERDAM CITY CENTRE.



# VARIATION IN BUSINESS ENVIRONMENTS

The business environments in M4H reinforce each other and are complementary to other innovation environments in the region and in the surrounding neighbourhoods. In the programmatic main structure, four have been discerned, divided into five sub-areas. The following starting points apply per sub-area type:

- **Galileipark:** larger manufacturing companies that need environmental space. Here there is also room for catering, culture, education, events and other forms of space usage that contribute to an energetic business climate for innovative companies. Living here is out of the question.
- **Marconikwartier:** Marconikwartier: the most urban mix of living, working and provisions, with the highest building density, connecting to the Marconiplein intersection.
- **Keilekwartier and Gustoweg:** residential-work environments with space for craft enterprises and creative manufacturing businesses, on the transition to the work areas on both sides of M4H.
- **Merwehaven:** urban residential-work environment where the emphasis is on housing and supporting facilities such as schools, shops and catering establishments.



# PUBLIC SPACE AND INFRASTRUCTURE

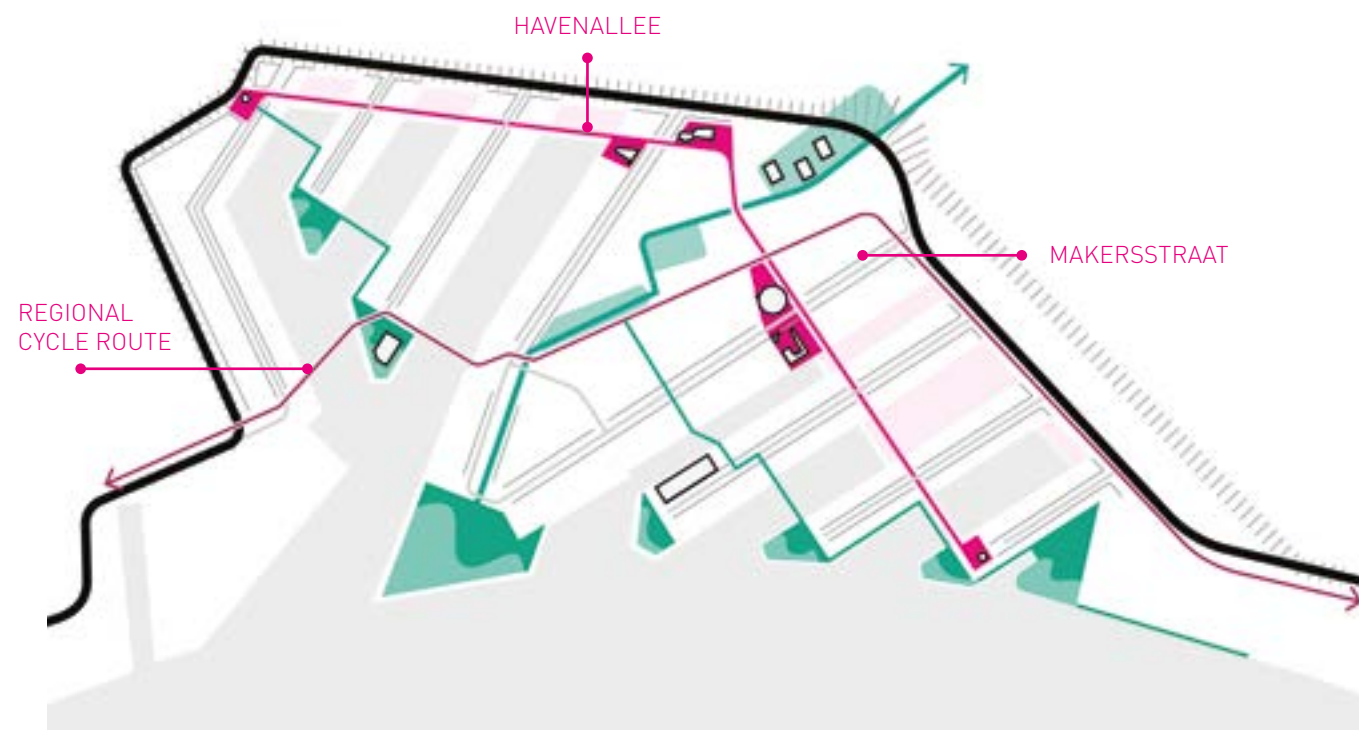
The second set of starting points concerns the spatial main structure: public space and infrastructure. It lays the connections between the five sub-areas and with the surrounding neighbourhoods. A number of significant improvements are being made to the existing main structure:

1. New connections to the Vierhavensstraat and the Schiedamseweg improve M4H's links with the environment.
2. Where possible, freight and slow traffic (cyclists and pedestrians) are separated. Both will have their own main routes. The 'Makersstraat' (consisting of Keileweg and Galileistraat) opens up Galileipark for heavy traffic. Cyclists and pedestrians cross M4H via the 'Havenallee' (Marconistraat and Benjamin Franklinstraat).
3. The main routes cross each other at two places. These are prominent places in the main structure of M4H. Both are marked with a listed building: the Citrusveiling and the FERRO gas holder. These two buildings will have a function that is as public as possible.

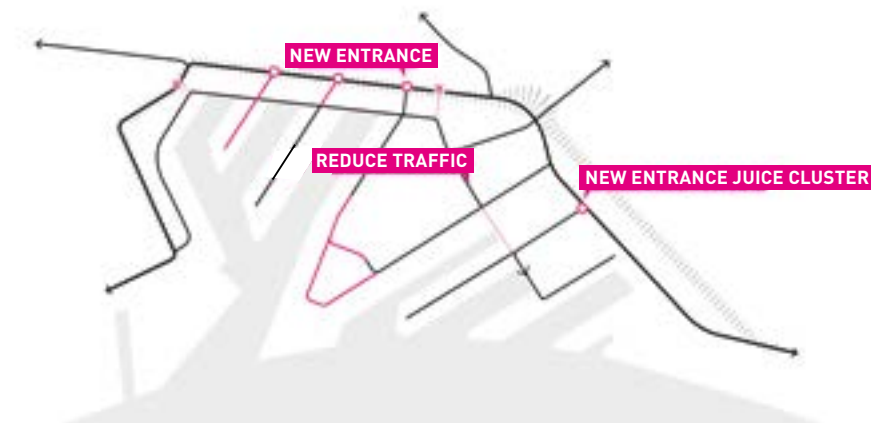
4. The infrastructure encourages people to use bicycles or public transport instead of their own cars. Important for this are well designed and organised routes from the Marconiplein (the 'last mile' from the main junction for metro, tram and bus). M4H will have an intricate network for cyclists and pedestrians and good connections for water transport. Parking takes place at a number of dedicated 'mobility hubs', where shared cars and other forms of transport for shared use can also be found. Street parking is no longer possible.
5. A green structure of fields and parks provide the optimal links between the waterfront and those neighbourhoods further away.

## Structure picture 2035

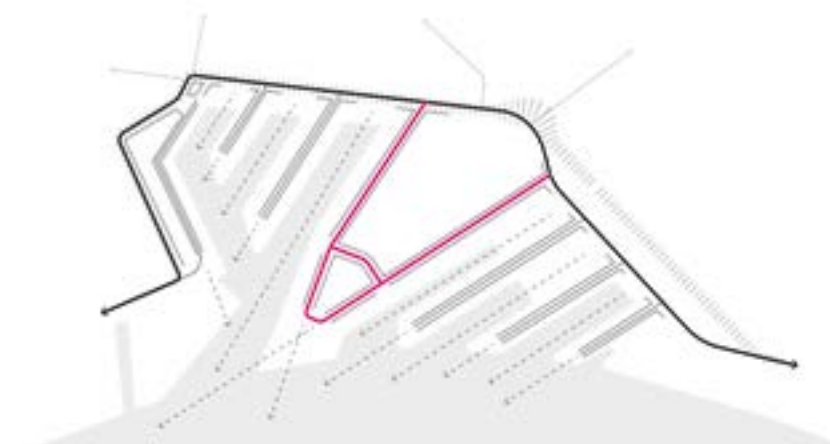
All the starting points taken together add up to this structure picture. It also includes the listed buildings and other high profile buildings such as those identified in the cultural-historical reconnaissance made for M4H in 2018.



SPATIAL MAIN STRUCTURE



CHANGES TO THE TRAFFIC STRUCTURE



MAKERSSTRAAT



HAVENALLEE WITH THE TWO LARGE FOCAL POINTS: CITRUSVEILING AND FERRO GAS HOLDER.







## GUIDING AMBITIONS

The starting points restrict themselves to the programmatic and spatial main structure. Many choices still need to be made with regard to the interpretation and elaboration. However, for some points, detailed examples have already been developed or a guiding ambition has been set in other ways.

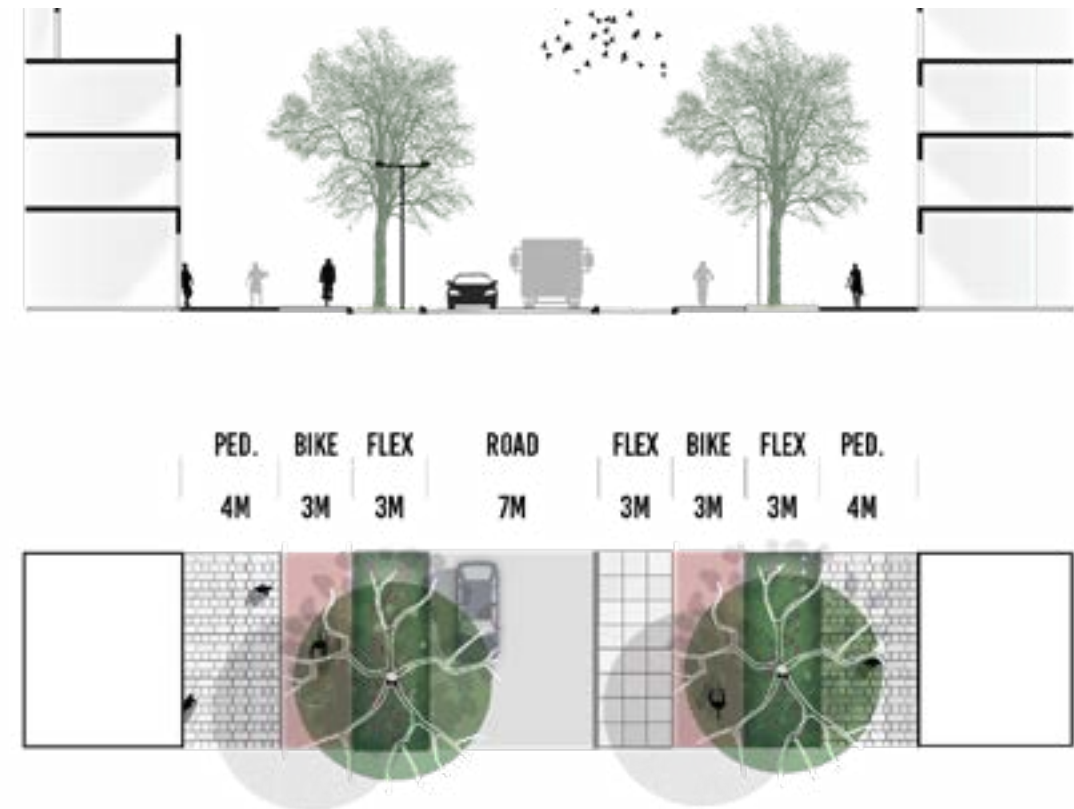
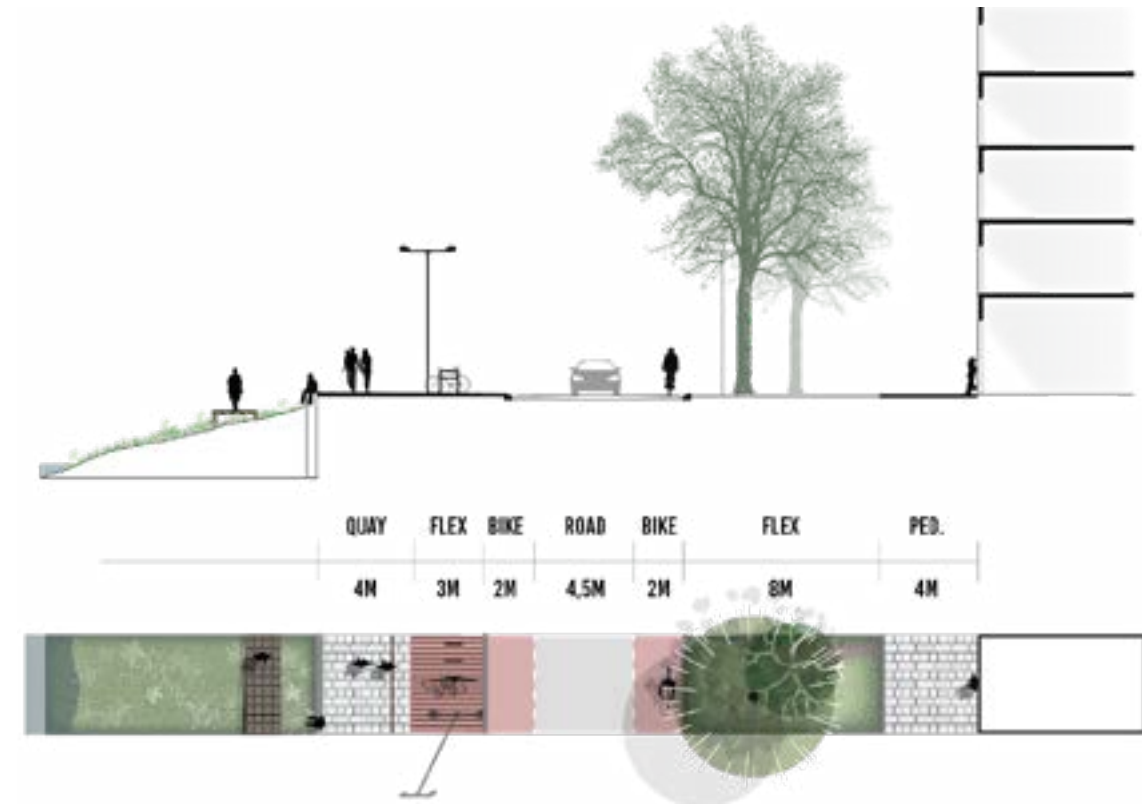
### It is about the elaboration of tasks at three levels of scale:

- Tasks that exceed the scale of M4H, but are important for this area. These concern the reorganisation and redevelopment of the Marconiplein and the construction of a regional cycle route that connects the waterfronts of Schiedam and Rotterdam via two bridges over the Merwehaven.

- Tasks that concern all of M4H. These include the programming of provisions, water safety (M4H is located outside the dykes), the materialisation of the spatial main structure, the concept of the mobility hubs in relation to a new parking regime and 'last mile' solutions and, finally, the basic profiles of the Makersstraat and the Havenallee.
- Tasks that have a place in sub-areas. These include the elaboration of the build-up area structure, the function mix per sub-area and the elaboration of the basins.

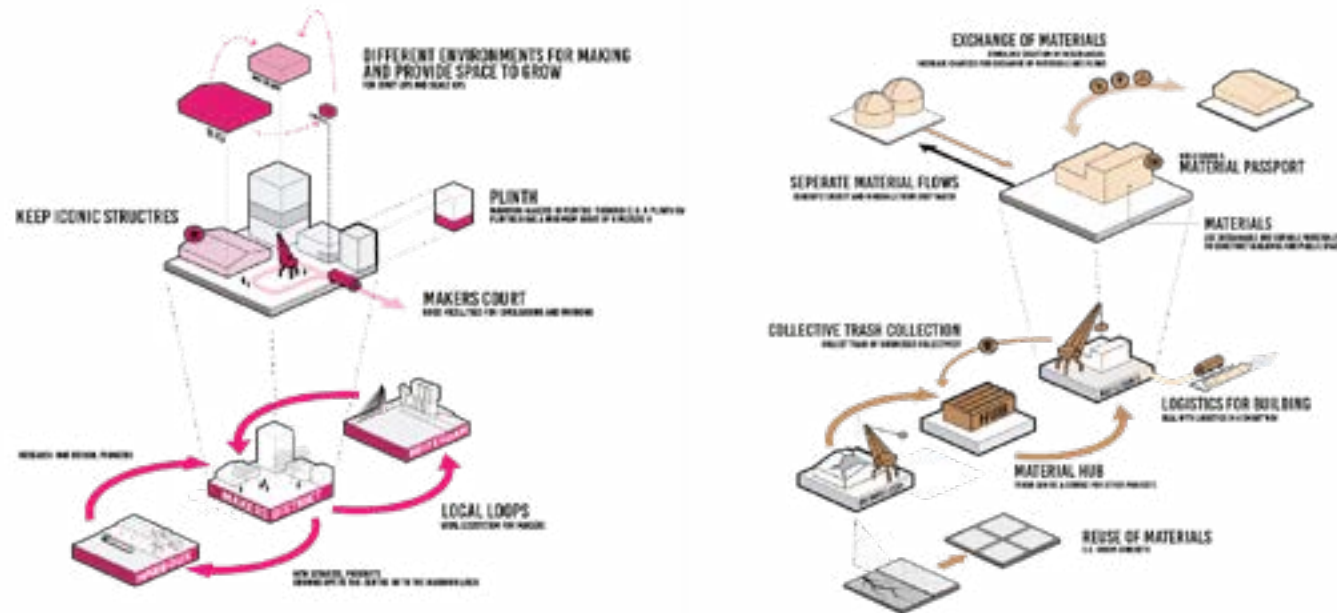


M4H CONNECTED WITH THE ENVIRONMENT - MOBILITY AND GREEN STRUCTURE.



AN EXAMPLE OF AN ELABORATION TASK AT THE SCALE OF M4H: PROFILES AND MATERIALISATION OF HAVENALLEE (ABOVE) AND MAKERSSTRAAT (BELOW).





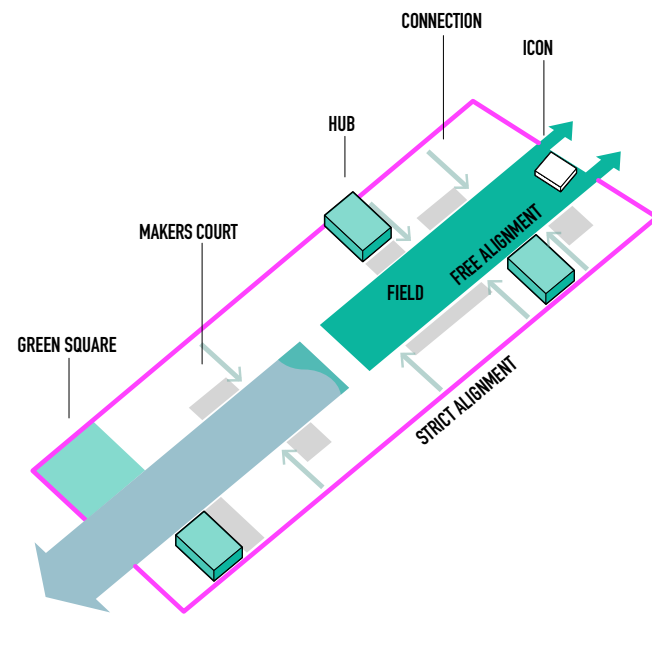
The eight guiding principles for sustainable area development have a special position among the ambitions. Each of the principles expresses the wish of the municipality and the Port Authority to develop M4H into a future-proof area where a new economy is being worked on. 'Future-proof' means vital, inclusive and circular, with an impact on both city and port. The eight principles all fit within the overarching motto 'collectivity as the basis for circularity'.

## EIGHT PRINCIPLES FOR SUSTAINABLE AREA DEVELOPMENT

1. M4H offers permanent space to different types of makers.
2. M4H prefers the sharing of provisions to individual ownership.
3. M4H provides room for experimentation and learning.
4. M4H produces and uses renewable energy.
5. M4H values waste flows.
6. M4H makes it possible to opt for sustainable mobility.
7. M4H works as one resilient climate adaptive system.
8. M4H builds on the industrial capacity and quality of the area.

The municipality and the Port Authority put this set of principles forward in their contacts with entrepreneurs, developers and other initiators. The principles form the departure point for projects, for both issues and tenders as well as own construction projects. On the basis of specific investigation and consultation, tailor-made solutions can then be found.

## TWO EXAMPLES OF THE EIGHT GUIDING PRINCIPLES FOR SUSTAINABLE AREA DEVELOPMENT: THE NUMBERS 1 AND 5.



EXAMPLE OF A TASK AT THE SCALE OF SUB-AREAS: ELABORATION OF THE BUILD-UP AREA STRUCTURE.

# A PREVIEW TO 2050

The structure picture is based on the expected development up until 2035. The development of M4H by then is still not complete. Two locations will only come into the picture for redevelopment at a later stage because they are subject to long-term leasehold contracts. This concerns the juice cluster in the Vierhavens and the fruit terminal between Vierhavens and Merwehaven.

Different future visions are conceivable for both areas. It is still too early to make choices concerning them. The 'structure picture for 2050' is nothing more than a possible interpretation. The map shows that, on the basis of the structure picture 2035, good further development into the future is possible.







IABR-TEST-SITE M4H+, IABR EDITION 2018.  
PHOTOGRAPHER: FRANK HANSWIJK

## COLOFON

The Rotterdam Makers District is a collaboration between the municipality of Rotterdam and Havenbedrijf Rotterdam N.V.

### FUTURE IN THE MAKING SPATIAL FRAMEWORK FOR M4H

#### Contractor

Programmabureau  
Rotterdam Makers District

#### Client

DELVA Landscape Architects / Urbanism  
Site Urban Development  
Skonk  
Goudappel Coffeng

The guiding principles for sustainable area development (chapter 5) were established within the Test Site M4H+ of the IABR. It is a co-production of the programme bureau Makers District, DELVA, Team1010 and Architecture Workroom.



## ABOUT M4H ROTTERDAM

Welcome to M4H: an area in transformation, of port and city. Where the maritime and industrial history makes way for tomorrow's crossovers. Between start-up and multinational, between creativity, entrepreneurship and technology.

Where the manufacturing industry already flourishes and makes an impact. A place where experiment, creation and growth are given full scope. Various living and working environments blend effortlessly. Here you live, work and learn. A testing ground of the next economy.

## THE ROTTERDAM MAKERS DISTRICT IS THE BEST SPOT IN THE REGION FOR THE MANUFACTURING INDUSTRY.

The Makers District, comprising the areas of RDM Rotterdam and Merwe-Vierhavens (M4H), is the ideal location for new businesses to develop into established enterprises. It also gives large companies the opportunity to experiment with new products and processes. Here, they can invent, test and implement new technologies. New technologies based on digitisation, robotisation, additive manufacturing and the application of new, sustainable energy and materials. Consequently, the Makers District is a testing ground and showcase for the new economy. Visible to everyone.

The added value that the Makers District has to offer is not just the result of the physical space, but especially that of a business climate that encourages and boosts collaboration and entrepreneurship. Cooperation with knowledge and educational institutions in the region is crucial, as this is where young people are introduced to the techniques of the future.

The Makers District is working hard on achieving an even closer link with M4H and RDM. The objective is to create a community of successful and innovative entrepreneurs, integrated with the broader, regional innovation ecosystem of businesses, knowledge institutions and sources of funding. The Makers District is rapidly turning into a vibrant area with housing, a wide range of facilities, culture and events.



WWW.M4HROTTERDAM.NL  
+3110 283 38 00

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**M4H**

ROTTERDAM

**RDM**

ROTTERDAM

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**MAKE IT HAPPEN.**

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