MAMLETS

JAVIER IGNACIO NAVARRO PUIG

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A SUSTAINABLE PARKLET NETWORK IN MALMÖ, SWEDEN

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ACKNOWLEDGEMENTS

After an arduous and disenchanting start, Malmö has become my home. Accordingly, I want this endeared place to develop and grow.

"Mamlets, a sustainable network of parklets in Malmö, Sweden" takes place in one of the routes I cycle daily. Connecting my home with the café where I work - which I consider my home too. Thus, a well-known route that I have been thinking about how to improve for a long time.

This Thesis Project would not have been possible without the guidance and support of the different networks that warm my day-to-day life. I kind-heartedly thank my family, colleagues, and friends for their emotional support and positivity. Especially my family at Kaffebaren på Möllan and Farina, as well as Felix Ramirez for lending his GoPro, and Hanna Dierks for her help in proofreading and edition.

Furthermore, the SUDes family, my supervisors, Andreas Olsson and Jonathan Foote, my examiner Mattias Kärrholm, and the different consultants that helped me address my inquiries and guide me to achieve my goals Cord Siegel, Felix Stoisser, Miriam Lind, Nicolas Arriagada, Cecilia Fredriksson, and Anna Modin.

This Thesis Project tributes Louise Lövenstierne for her work, passion, and dedication to SUDes. I will never forget how empowering she made me feel when she told me: *"You seem to have found your artistic language, which is very personal and expressive. Continue doing that, some people look for it all their life and they never find it".*

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A SUSTAINABLE PARKLET NETWORK IN MALMÖ, SWEDEN

MASTER THESIS PROJECT

Sustainable Urban Design
School of Architecture, Lunds Tekniska Högskola
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Author

Javier Ignacio Navarro Puig

Examiner

Mattis Kärrholm

Supervisors

Andreas Olsson
Jonathan Foote

Jury

Camilla Hedegaard Møller
Daniel Wasden

LUND UNIVERSITY

SUDes
Sustainable Urban Design

ABSTRACT

Today cities are the result of centuries of history and human development, accelerated during the past 100 years. Post-industrialization, modernism's top-down city planning approach, and the prioritisation of motor vehicle design over humans resulted in more people moving to cities, more space needed to allocate new vehicles, expansion over rural areas, and exponential pollution growth. Thus, humans were drawn apart, losing the feeling of community and proximity.

In 2005 in San Francisco - USA - the Rebar design team presented a new approach to mitigate the alienation experienced in cities. They rented a metered car parking space, equipping it with seating and vegetation, creating a community space to empower art, activism and cultural expression. Since then, this idea has flourished and has been tested in many cities around the world, leading to the Parklet concept.

This Thesis Project examines this concept, plus territoriality, sustainability, and mobility. Furthermore, it analyses Malmö Stad's Comprehensive Plan and SUMP.

Additionally, two surveys were held to comprehend malmöit's stance, trace a comparison to the aforementioned and propose a democratic design to make a better city for people with people.

Inspired by Parklets, Mamlets aim to encourage citizen responsible action while recovering precious urban space in Malmö. Mamlets consist of separate versatile human-size modules - 1 m x 1.25 m - that can be stacked, exchanged and combined in multiple ways. Granting a myriad of possible outcomes as a response to the site-specific needs. Moreover, Mamlets will upcycle old construction material, be smart-packed and delivered by cargo bicycles around the city, promoting a circular economy while producing a small CO_2 footprint.

Combining multiple Mamlets will create new green and urban amenities while aiding Malmö's mobility network. This approach will not only repurpose urban space for citizens, democratically and inclusively, but have a sustainable impact aligned with Malmö Stad's, LFM30, and the SDGs plans for 2030.

Content

BACKGROUND

Cities are exhilarating, albeit terrifying. As a consequence of the 20th-century modernist top-down approach, the design for automobiles, the internet, and immersive technologies, cities have developed but lost focus on quality spaces for humans to meet and socialise (physically).

Humans are fascinating, yet often unconsidered by architects, designers and planners. As Jan Gehl sensibly addresses in the critique made by psychologists that lead into his research journey: ***"Why are architects not interested in people?"***. Yet, being a sociable person, I would add to Gehl's revelation ***Why do architects and planners not speak with people?***

The consequences of these came into light during COVID-19. Lockdowns illustrated and amplified the problems cities have when cars are prioritised over people: neighbours started to take over street car parking spaces and transform them into gardens, small parks, outdoor areas for restaurants, and much more.

These problematics led me to question:

How can I combine my empiric experiences and theoretical knowledge in a project that can develop over time?

How can I work with the different actors involved in the city-making (Academia + Municipality + Architecture Firms + Mobility Companies + Citizens)?

How can I make better cities for people with people?

AIM

This Thesis Project aims to explore if and how street car parking spots can be transformed into more valuable urban spaces. If a temporal solution can be used as a tool for data gathering. If this temporal solution can develop into urban transformation. And, if this solution can be used for education and citizen engagement.

Additionally, to work with and link the stakeholders participating in the urban arena: neighbours, developers, professionals, academics and the state.

Furthermore, if this Masters's Thesis can develop into further academic research, or has the potential to become a business that provides sustainable solutions for cities.

RESEARCH QUESTIONS

How can we

Make more ***attractive urban spaces***

Foster ***community building*** & ***citizen responsible action***

Aid the ***green mobility network***

Do this in a ***playful*** and ***educative*** way

Not damage the planet & have the ***lowest possible carbon footprint***

RESEARCH METHOD

This thesis is a result of a mixed methods approach, marrying empirical and theoretical knowledge.

This combination of quantitative and qualitative methods has led to a profound understanding of the questions undertaken on this project.

Data analysis and collection sources:

- Literature
- Thesis Projects
- Municipal reports
- Websites
- In-route observation
- Maps
- Videos
- Images
- Interviews
- Surveys

RESEARCH

Territoriality

During our first meeting, Mattias Kärrholm (Thesis Project Examiner) introduced the concept of Territoriality and supplied relevant architecture papers to read.

Urban space, materials and everyday life go together hand in hand. Territoriality not only defines a space and its boundaries but how people appropriate and use certain spaces. These can vary depending on the time of the day, the season and the users [1].

In *"The temporality of territorial production – the case of Stortorget"* [2], the diverse uses and users that intervene in Stortorget in Malmö are explored. The studies held in 2013 focus on the events rather than the place and aim to understand territorial changes over time. In order to do this the studies are based on an earlier sudy from1978, collecting data in the same way and in the same places as the previous studies. Concluding the differences between both studies due to the changes in culture and places surrounding said place.

In *"The Territorialisation of a Pedestrian Precinct in Malmö: Materialities in the Commercialisation of Public Space"* [3], the case of Malmö's decision to pedestrianise certain streets in the historical city centre to develop better commercial and public space in contraposition to the centralisation of commercial activities in shopping centres tendency in Sweden (and the world) is laid-out.

This paper explores how policy, architecture and urban planning together with materials and urban amenities can be used to accomplish certain objectives and human behaviour.

Particularly in Malmö, pedestrian streets emerged in 1978 and have been expanding continuously. The bettering of the urban realm (benches, litter boxes, billboards, kiosks, bus stops, etc.) and public spaces has resulted in attracting many different people and economic growth.

These aspects are important, yet it is also important to note that these changes promote more activities than shopping and strolling which consequently make more inclusive and democratic spaces.

Fortuitously, the territoriality concept startled curiosity and helped frame empirical experiences under a theoretical umbrella. Providing profound questions to explore:

- **Where, how long and by whom can a certain time space be claimed?**

- **How are meanings, groups and usages territorialized?**

- **Who can access what spaces, for what use, at what times and at what cost?**

Malmö Territoriality - 1.10000

Sustainability

INTRODUCTION

Sustainability is *"the quality to be able to continue over a period of time causing little or no damage to the environment"* [4].

For several decades the United Nations have been working on a global agenda for sustainable development. 2015 was a milestone year, in which after several major agreements, all the State members adopted the *"2030 Agenda for Sustainable Development"* [5].

Thus, in recent years sustainability has become a widely used word. However, this word needs to be taken seriously. Otherwise, something that started being a driver into taking care of our world for future generations can lose substance and become a victim of green-washing.

To avoid these quagmires and be able to trace the sustainability of this Thesis Project, certain **Sustainable Development Goals** [5] have been selected. Also, **LFM30** [6] strategies, **Malmö Stad's Comprehensive Plan** [7] and **Malmö Stad's Sustainable Urban Mobility Plan** [8] have been studied.

Moreover, inspiration has been drawn from Jan Gehl's visionary and well-documented humanistic approach [9], as well as Carlo Moreno's novel 15-minute city [10] concept.

SUSTAINABLE DEVELOPMENT GOALS

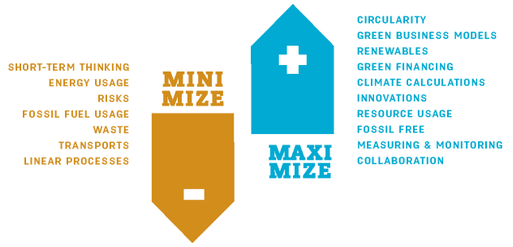
The **SDGs** are part of the **United Nations Agenda for 2030**. There are **17 goals** [5] in total, which provide a clear blueprint for developing a better life for humans and the planet, today and in the future.

All 17 goals are important. However, to avoid green-washing and be able to measure impact, eight goals have been short-listed as key drivers of this project.

From these eight goals, the most pertinent to this Thesis Project is goal **11, *"Sustainable Cities and Communities"*** [11]. Making cities more attractive, democratic and inclusive will result in safer, sustainable and resilient human settlements.

LFM30

LFM30 [6] is a local initiative to create a geographic game plan to accelerate the construction sector's climate transition and implementation of Agenda 2030, consisting of 215 members. LFM30 focuses on developing a climate-neutral building and construction sector in Malmö [12].



STRATEGIES

1. Business models, incentives & cooperation
2. Circular economy & resource efficiency
3. Design, process & climate calculation
4. Climate-Neutral building materials
5. Climate-Neutral management, operation & maintenance
6. Climate-Neutral construction sites & transport

HUMANIST APPROACH & 15-MINUTE CITY

Industrialization and the modern movement changed human behaviour and the shapes of cities drastically. The introduction of rapid transportation and *"design from the sky"* resulted in top-down approaches which completely forgot the interaction between humans at the street level.

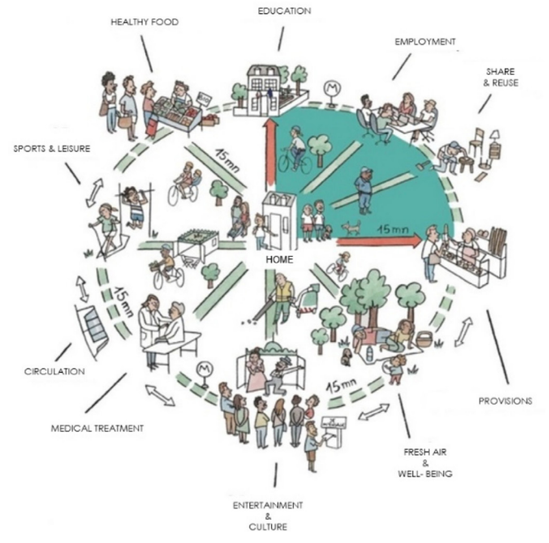
Portrait of Jan Gehl by Sandra Henningsson. © Gehl Architects

For decades **Jan Gehl** [13] has been advocating the importance of life between buildings and putting people first in city design and planning. His observations and research have been followed and applied in many cities around the globe, resulting in more lively, sustainable and healthier cities.

According to him *"given good invitations, people will come and join"*, subsequently it is important to create cities where children can play and move safely at the same time as a place which is good to be old in.

However, Jan is not alone in his endeavour, many architects, designers and planners have been working with similar philosophies and ideas. In recent years the concept of **15-minute city** [10] has risen in popularity.

In a 15-minute city periodical activities and necessities such as education, leisure, healthcare, work, shopping, etc should be easily reached within a 15-minute walking or cycling radius. Hence, promoting a healthier and livable city while reducing car dependency.



15 - Minute City Illustration

Mobility

INTRODUCTION

According to the Cambridge Dictionary mobility is *"the ability to move freely or be easily moved"* [14].

When speaking about mobility in the urban context we refer to how and by which means people move from one place to another. Whether it is walking, cycling, public transport or private-owned vehicles, cities need space to house these transport fluxes, resulting in the dimensions and shapes of streets.

The invention of the wheel brought humans easiness and freedom of movement, allowing them to cover longer distances in shorter times with less effort. However, this equation equals more space for transport and less territory for people, dehumanising urban space and reducing neighbour interactions.

As with the introduction of smartphones more than 20 years ago, the integration of the automobile in our everyday life in the past 100 years has changed human behaviours and interactions. Nevertheless, the difference in the time span between technologies allows us to make different assessments.

In the case of cars, we can now understand how they have reshaped cities and daily human interactions, and polluted our environment.

Today we have the opportunity to shift how we move and behave in pursuance of life and environment continuity in the future. Choosing environment-friendly transportation will have less environmental impact and allows us to have more and better human interactions.

FUTURE SCENARIOS

The future is always promising, technology develops and we can find better solutions for existing problems.

In the past years, the car industry has been moving towards electrified vehicles (EV) and autonomous vehicles (AV). Public transport has improved and electric bicycles have conquered part of the cycling market.

Moreover, there is a tendency to use shared-ownership systems instead of classic private ownership. Nonetheless, it is still not clear if going full electric is the more sustainable path and if the shared-ownership trend is going to continue or not.

In the systematic literature review (SLR) paper *"Urban mobility scenarios until the 2030s"* [15], four scenarios are laid: *'Grumpy old transport', 'At an easy pace', 'Mine is yours',* and *'Tech-eager mobility'.* This SLR focuses on global trends and meta mobility describing different scenarios based on this data, yet lacks to specify more about soft and local mobility.

Cycling, compared to other means of transport, might seem obsolete for some people. Yet, it is a sustainable and carbon-neutral transportation which remains current and can lead the path to better mobility in the future.

This thesis aims to explore what are the mobility trends in cycling-forward cities, particularly in the city of Malmö and how policy-making can move us towards more car-independent and sustainable cities.

REFERENCES

Cycling is present in many cities around the world. However, there can be tremendous differences between one city and another.

In this regard, the ***"Copenhagenize Index"*** [16] ranks cities around the world according to how bicycle-friendly they are, analysing data and giving points to three different categories: **streetscape parameters, culture parameters** and **ambition parameters** [17].

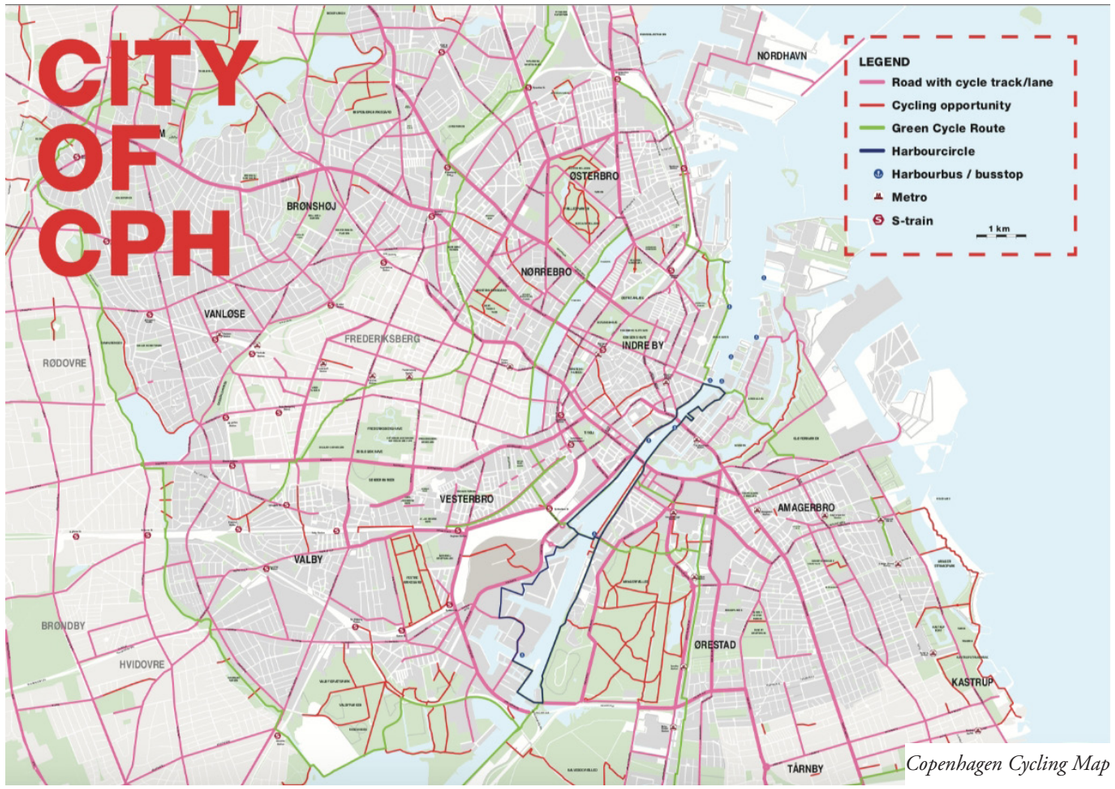
To have a better understanding and reference points regarding cycling-oriented cities, three cities that are considered lighthouses and references regarding this topic have been selected for analysis and data recollection: **Copenhagen, Utrecht** and **Bordeaux**.

COPENHAGEN

Ranked **1st** in the Copenhagenize index in 2015, 2017 and 2019, Copenhagen is considered the cycling Mecca by many [18].

Jan Gehl's test playground has proven to work and develop over decades, changing people's behaviour on how they move. Making cycling accessible and inclusive for everyone, even despite the weather!

Rush hour in Copenhagen - Dronning Louises Bro

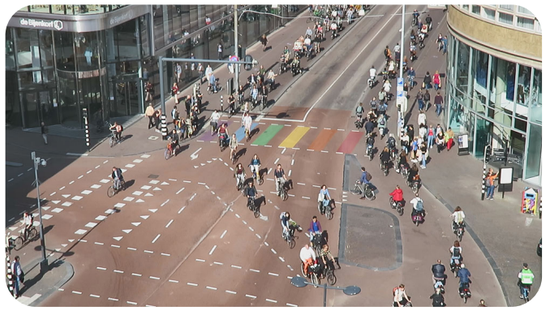


Copenhagen Cycling Map

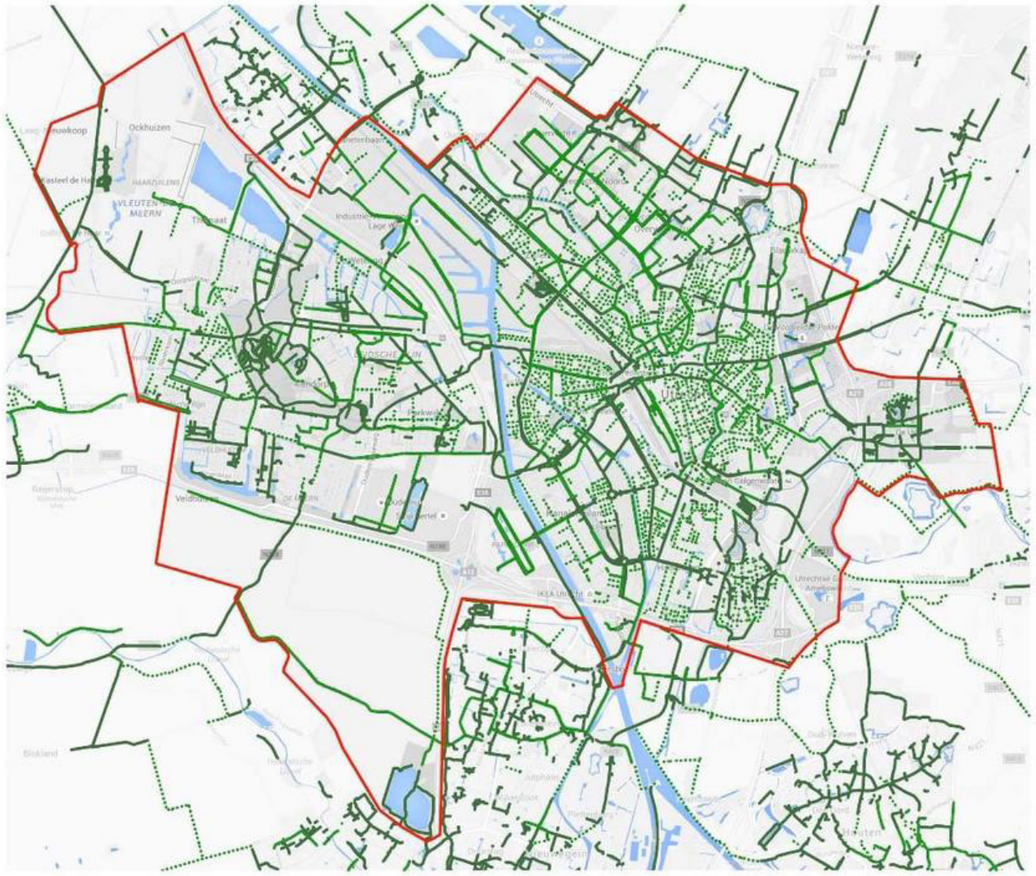
UTRECHT

Ranked 2nd in 2017 and **3rd** in 2015 and 2019 in the Copenhagenize index, Utrecht is the second most bicycle-friendly city in the Netherlands after Amsterdam [19].

The city of Utrecht has prioritised cycling, growing the number of bicycle commuters to and across the city. With 420 km of bicycle paths and the largest bicycle parking facility in the world (12.500 spaces) there are no doubts why 94% of Utrecht residents own one or more bicycles [20].



The intersection of Vredenburg (bottom and right), Lange Viestraat (top) and Sint Jacobsstraat (left) from above.



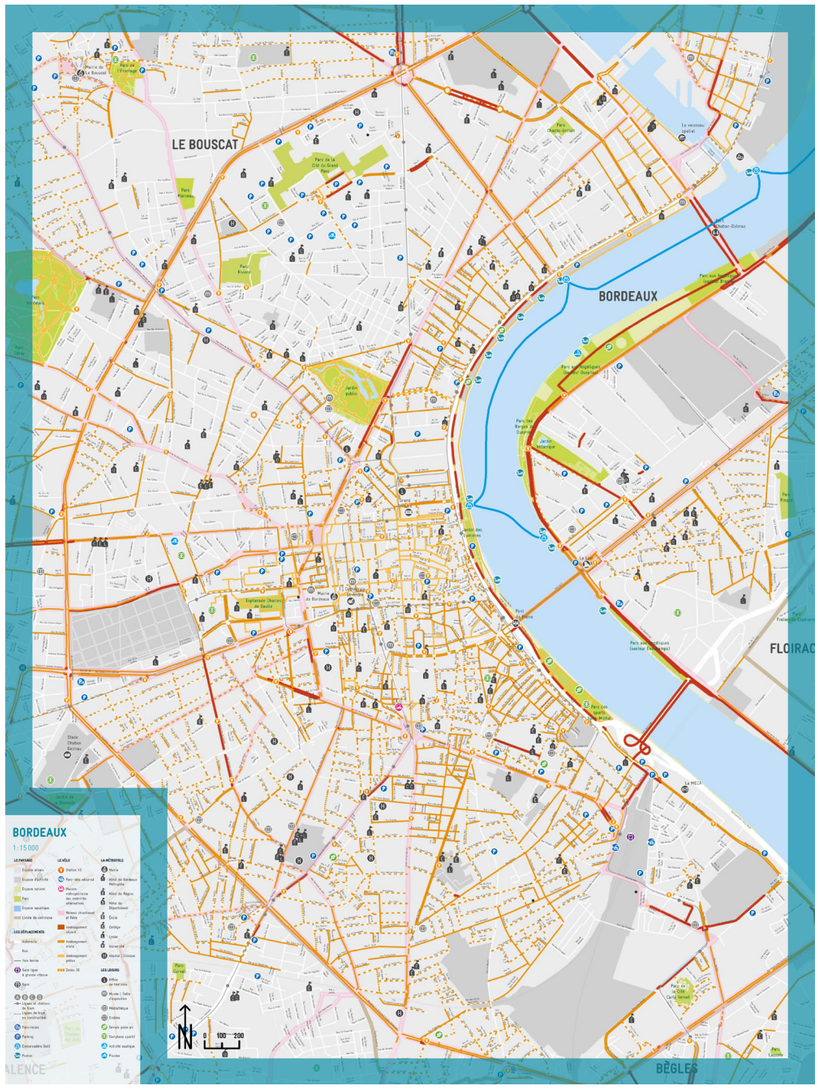
Utrecht Cycling Map

BORDEAUX

Ranked 7th in 2015 and **6th** in 2017 and 2019 in the Copenhagenize index, Bordeaux is the second most bicycle-friendly city in France after Strasbourg [21].

This beautiful city by the river Garonne continues to prioritise vélos over cars to enjoy its outstanding landscape and vibrancy. The banning of cars in the historical *"pont de pierre"* (stone bridge) increased 20% cycling connections to the city and improved active mobility overall. Furthermore, a 3rd metropolitan cycling plan was approved by the city in November 2021, paving the path for more improvements to come in the future [22].

Quai des Salinières - Rive Gauche, outside Pont de Pierre



Bordeaux Cycling Map

Mobility in Malmö

COMPREHENSIVE PLAN

Malmö's Comprehensive Plan was adopted by the City Council in May 2018 and lays the long-term strategies for the future. These strategies are based on social, economical and environmental sustainability [7].

Understanding the shift of Malmö from an Industrial City to a University City which is part of a global context, the comprehensive plan addresses local issues. From improving the links between neighbourhoods and bridging barriers of different kinds to global issues such as climate change and migration.

In the future Malmö, walking, cycling and public transport will form the basis of the transport system. Positively affecting social and economical aspects and developing a more attractive city. With the potential of creating a denser city, new jobs and less environmental impact [7, 23].

Main objectives

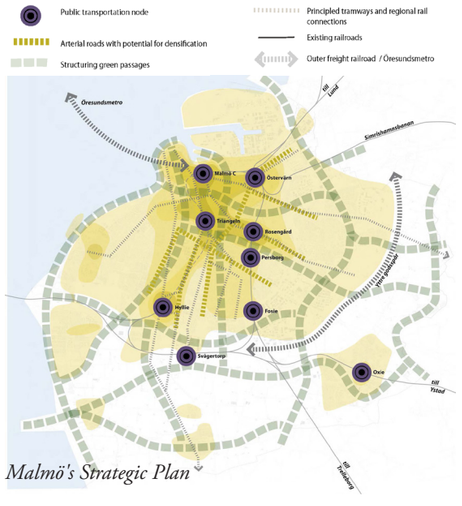
- Close, dense, green, mixed-function city
- A regional driver of green growth and employment
- The city as a venue for culture and democracy

Strategies

- Regional cooperation
- A denser city with more mixed-function
- An equal, safe and health-promoting city
- A greener city
- Business and tourism
- Traffic and transportation
- Sustainable waste management, energy and construction
- Nature, biodiversity, ecosystem services and rural areas
- Sea, coast and water
- Climate adaptation

Adapting the 17 United Nations SDGs at a local level will help the city evaluate the Comprehensive Plan and the success of the goals planned for 2030.

Öresund Regional Cooperation

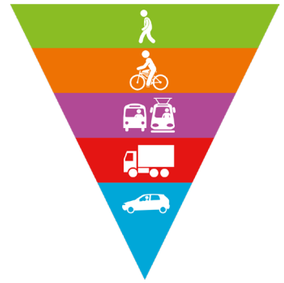


Malmö's Strategic Plan

SUSTAINABLE URBAN MOBILITY PLAN

VISION

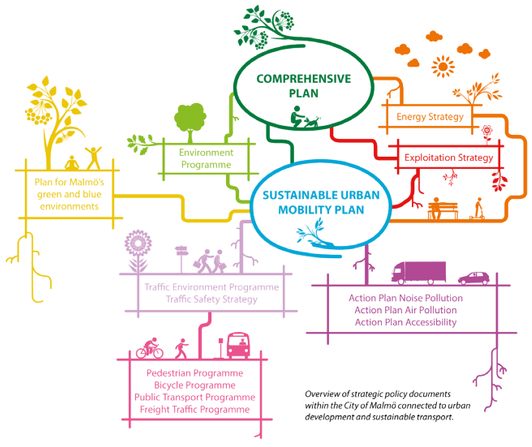
"Walking, cycling and public transport are the first choice for all who work, live or visit in Malmö. These travel choices, together with efficient and environmentally friendly freight and car traffic, are the basis of the transport system in our dense and sustainable city - a transport system designed for the city, and for its people" [8].



Priority model for transport and mobility in Malmö

In September 2020 Malmö Stad published its updated policy and standards regarding sustainable mobility and parking, stating the vision and aim for Malmö's future [24].

Parking has a significant impact on how a city is used and developed. Taking into consideration Malmö's rapid development and population growth, the city has determined that streets must be used more efficiently.

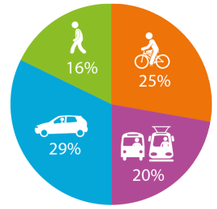


Extract from Malmö's SUMP - Overview of policy documents

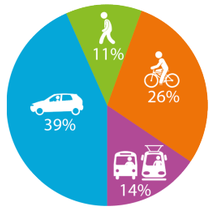
AIM

- Contribute to organising traffic in public space
- Contribute to a change in means of transport share
- Lower construction costs
- Better conditions for business development
- More efficient land use in the city

According to mobility surveys held by the state, women tend to walk and use public transport more than men and cycle to the same extent yet use a car up to 10% less.



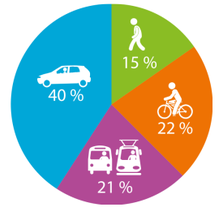
Women 2018



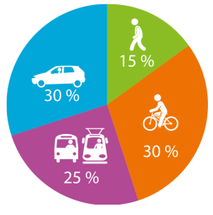
Men 2018

In order to discourage commuters to use a car and give residents active incentives and opportunities to travel in other ways than using their own car, streets need to accommodate more functions and provide the greatest possible benefits to residents, visitors and businesses.

Hence, the main goals of this policy are to decrease Malmö resident's trips by 10% in car share while increasing cycling by 8% and public transport use by 4%, at the same time as decreasing commuter trips to Malmö by car by 12% while increasing cycling 2% and public transport use 12% by 2030 [8].

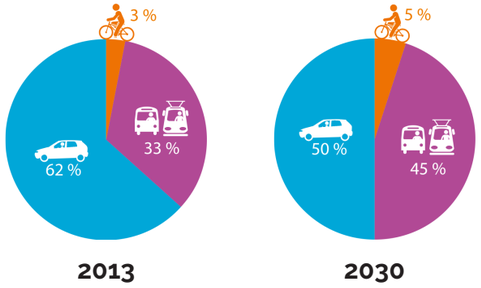


2013



2030

Future Malmö inhabitant trips goal - 2030

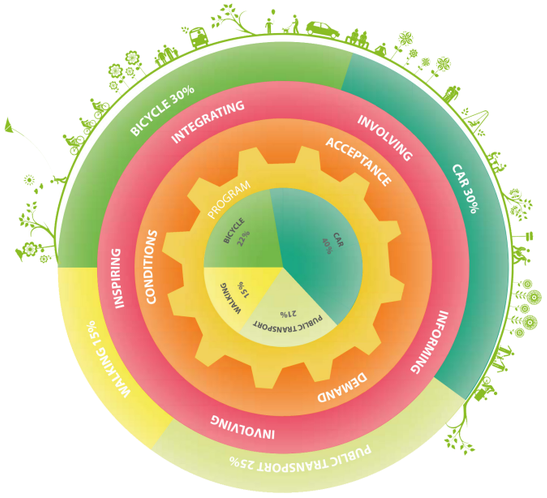


Future commuters to Malmö trips goal - 2030

Furthermore, Malmö Stad's initiative *"Responsible Parking Malmö"* aims to develop sustainable mobility centres which serve as local meeting points for residents and businesses, are flexible, help the city be greener and have better stormwater management, and aid in the energy transition.

The consequences of these decisions are that Malmö's ambition is to be a growing, denser, integrated, compact and greener city. Moreover, Malmö prioritises the urban domain, health, equality and the environment before car parking. Consequently, ***"any street car parking must be carefully weighed against other claims in the street space"*** [8, 24, 25].

*The SUMP should be updated every four years. Since the available version online is from 2016, Malmö Stad has been asked for an updated version. Nevertheless, the new SUMP is not released yet, for it is still under work.



Model for mobility management within the City of Malmö

HUMAN BEINGS

Human beings are a fundamental part of the traffic system and Malmö Stad should work with actions that are favourable to everyone, regardless of age, gender and income.

Nurturing a more sustainable and healthier future can be achieved by high standard public transport, cycle lanes and pedestrian streets.

Thus, Malmö's plans for its residents is a more equal city, involving people and planning traffic for improved public health, slowing the pace and increasing traffic safety [8].

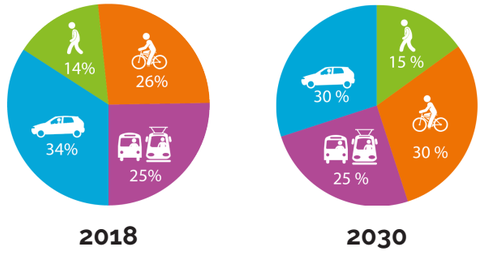
TRAVEL HABITS SURVEY 2018

The Skåne region holds a survey to acknowledge how people travel throughout the region every five years [26, 27].

In 2018 the survey shows that cycling is on the rise, holding 26% of the travel share, 4% more than the results from 2013. At the same time, car travel has decreased to 34% compared to the staggering 40% from 2013 [26, 27].

The data showcase that bicycles are the most preferred type of transportation in short trips, accounting for 42% in 1-3 km journeys and 39% between 3 and 5 km [26, 27].

On the other hand, there is a difference between genders, women tend to walk and use public transport more than men and cycle to the same extent yet use a car up to 10% less [8].



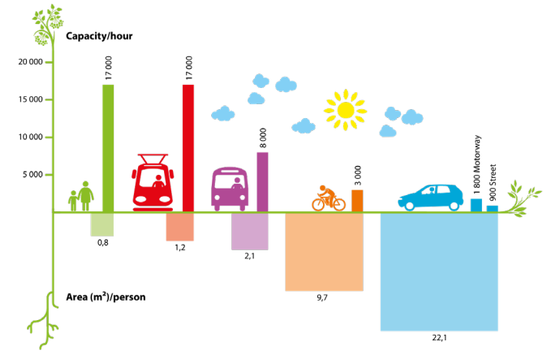
Transport share in 2018 and future inhabitant trips goal - 2030

ZONING

Conditions for living in the city without owning or using a car and travelling to work or places of interest by means of transport other than a car are different depending on the place of analysis.

The zones within 1km from the train stations Malmö C and Triangeln are considered particularly good with respect to commuting to work by public transport or bicycle [7].

Malmö's 15 SUMP sub-areas



General Flow Capacity per hour
Source: TØI, Norwegian Centre for Transport Research

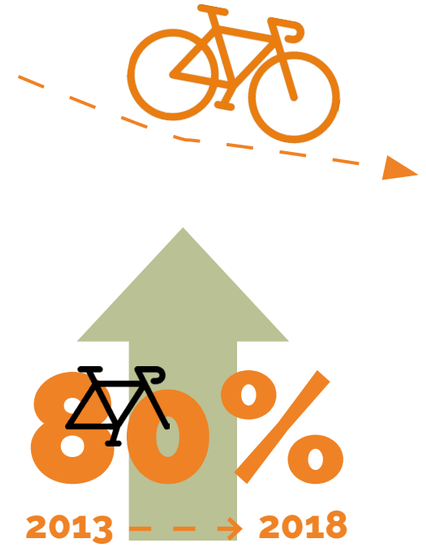
Sub area				
1 Centrum	15% (25%)	25% (23%)	35% (25%)	25% (25%)
2 Slottsstaden	25% (33%)	20% (16%)	40% (34%)	15% (14%)
3 Västra hamnen	20% (30%)	30% (25%)	30% (25%)	20% (17%)
4 Norra hamnen	25%	30%	30%	15%
5 Kirseberg	25% (34%)	30% (24%)	30% (24%)	15% (16%)
6 Rosengård/Sorgenfri	20% (31%)	30% (25%)	35% (28%)	15% (15%)
7 Fosie	30% (49%)	35% (24%)	25% (18%)	10% (6%)
8 Holma/Kroksbäck	30% (40%)	20% (17%)	30% (22%)	20% (18%)
9 Limhamn	35% (54%)	20% (14%)	30% (20%)	15% (10%)
10 Bunkeflostrand	45% (62%)	25% (18%)	20% (9%)	10% (8%)
11 Hyllie	30% (56%)	30% (14%)	20% (12%)	20% (18%)
12 Jägersro	50% (59%)	15% (12%)	20% (15%)	15% (15%)
13 Husie	50% (63%)	20% (15%)	20% (14%)	10% (8%)
14 Oxie	50% (64%)	25% (20%)	15% (6%)	10% (8%)
15 Tygelsjö	55% (72%)	20% (12%)	15% (4%)	10% (9%)
Total	30% (40%)	25% (21%)	30% (22%)	15% (15%)

2030 objective for modal split for each SUMP area.
Travel survey, RVU2013, results within brackets.

CYCLING

Malmö is a cycling city and aims to be internationally recognised as such. The city's vision is ***"All Malmö residents have the right to cycle. You should feel safe, both when you are cycling and when you have parked your bike"*** [26].

Cycling in central Malmö has increased 80% from 2003 to 2018, There are four main areas that form part of cycling in Malmö and that have helped achieve this number: the cycle path network (cycle paths, cycle crossings, cycle streets, winter road maintenance, regulation, etc), services (bike parking, rental bike system, Bike & Ride, bike pumps, etc), communication (campaigns for increased and safe cycling, malmo.se/cykla, facebook.com/cykligamalmo, etc) and mobility management (cycling promotion offers such as cycling without age, cycling schools, lending of electric bikes, etc) [26].



At the end of 2018, Malmö had a total of 521 km of cycle infrastructure, consisting of separated cycle lanes, combined pedestrian and cycle lanes, cycle paths, pedestrian streets and cycle lanes. Just over half of the infrastructure is separated cycle paths, and the absolute majority of the remaining half consists of combined pedestrian and cycle paths [26].

521 km

TOTAL CYCLE INFRASTRUCTURE

It is also important to equip the cycle network with services that provide value to cyclists and encourage using bicycles over cars. The most basic of these facilities is the convenience of bicycle parking. In 2018, 450 new cycle parking options were added in the public realm. Furthermore, five new cycle barometers were added in strategic points to compute the number of cyclists and gather data, as well as, five new railings to wait at traffic lights [8, 26].

450

NEW PARKING

Additionally, Malmö has been working on its communication, campaigns and study concepts.

CYKEL 1934 FRÄMJANDET

Cykelfrämjandet

Cykelfrämjandet is a non-profit association that works for a better, safer and more attractive cycling environment in Sweden. Each year they carry out surveys and reports regarding cycling policies, infrastructure investment and cyclist satisfaction of Sweden's municipalities [26].

Cyklistvelometer

The cycling speedometer [28] is a recurring survey where Cykelfrämjandet examines and compares the country's municipalities based on what the cyclists think. The fist survey was held in 2018 and Malmö was voted as the best city in Sweden to cycle [26]. However, in 2020 Malmö fell to the second position after Örebro. The latest results from 2022 place Malmö again in second place, this time Linköping was voted as the best municipality in Sweden [28].

Malmö stad **2nd BEST CYCLING CITY IN 2022**

Betyg	Intervall	Färgkodning
A	3,75 – 5,00	
B	3,25 – 3,74	
C	2,75 – 3,24	
D	2,25 – 2,74	
E	1,75 – 2,24	
F	1,00 – 1,74	

MALMÖ STAD RANKAS SOM NUMMER 2 AV 16 BLAND STORA KOMMUNER (>100 000)

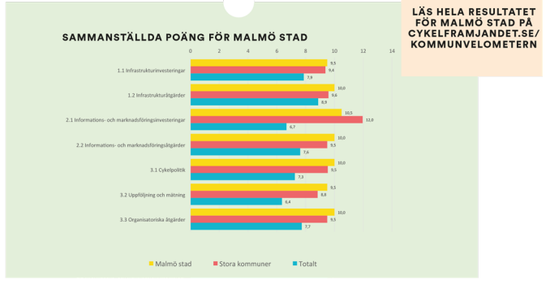
SAMMANSTÄLLNING KATEGORIER OCH TOTALBETYG

	Malmö stad		Stora kommuner		Nationellt	
Generell nöjdhet	4,13	Betyg: A	3,52	Betyg: B	3,29	Betyg: B
Trygghet	3,22	Betyg: C	2,86	Betyg: C	2,77	Betyg: C
Tillgång till cykelinfrastruktur	3,26	Betyg: B	3,04	Betyg: C	2,92	Betyg: C
Framkomlighet i cykelvägnätet	3,21	Betyg: C	2,87	Betyg: C	2,86	Betyg: C
Cykelklimat	2,57	Betyg: D	2,37	Betyg: D	2,45	Betyg: D
Cykelns prioritet i kommunen	3,27	Betyg: B	2,93	Betyg: C	2,78	Betyg: C
Totalpoäng	3,27	Betyg: B	2,93	Betyg: C	2,84	Betyg: C

Kommunvelometern

The municipal speedometer [29] is an index which compares municipalitie's work and investment in cycling, backed on information supplied by municipality employees. In 2015 Malmö ranked first on the ranking, a position which has since never been seen again. The 2022 ranking placed Malmö in the 10th position [26, 29].

Malmö stad **10Th in SWEDEN 2022**



Copenhagenize Index

Malmö appeared in the index for the first time in 2013, occupying the 9th position. In 2015 it rose to the 5th position, a place it held again in 2017. However, in 2019 Malmö was not featured in the ranking [16].

(*2019 was the last year the ranking was published)

Malmö stad **5th BEST CYCLING CITY IN 2017**

*** NOT ON THE INDEX IN 2019**

CYCLING SURVEY 2018

According to the survey held in 2018 by Ipsos for Malmö Stad [27], eight out of ten cyclists are satisfied with Malmö being a cycling city and seven out of ten think cycling culture has a positive impact in the city.

The reasons for choosing the bicycle are that it is the fastest, it is the easiest, for the sake of exercise and because it is environmentally friendly [27].

When asked about facilities, surveyees answered favourably about the Malmö by bike and fixed pump services [27].

It is important to note that more people mention being environmentally friendly as a reason why they cycle, 5 out of 10 compared to 3 out 10 in 2016 [27].

Engelbrektsgatan, Gamla Staden, Malmö

Bicycle Parking in Möllevången

Bicycle Services in Västra Hamnen

Malmö by Bike Station in Gamla Staden

Mobility Survey

BACKGROUND

The "Mobility in Malmö Survey" was designed to gather information regarding how people move in Malmö in 2023. The questions were drafted to be similar to the ones in "Cykelundersökning 2018" (Cycle Survey 2018) from Malmö Stad, to compare the gathered data and the existing data, revise and draw new conclusions.

The first draft of the survey was designed after 10 different interviews on the 27th of January 2023. The initial idea was to gather information respecting mobility and neighbourhood perception in Malmö City. However, realising the complexity of the later endeavour, the survey was directed exclusively to mobility.

Miriam Lind, a statistician from Uppsala Universitet, helped rewrite the questions to make them neutral and avoid errors and measurement uncertainties.

METHOD

The anonymous Google Forms survey was held between the 4th and the 10th of February 2023. 121 responses were registered.

The survey was published in different groups on Facebook, and a QR code was displayed on the espresso machine of Kaffebaren på Möllan for volunteers to scan.

The target group was Malmö residents 16 years old or older, and the survey was modelled under the sequences NEVER = 0, RARELY = 1, SOMETIMES = 2, and OFTEN = 3.

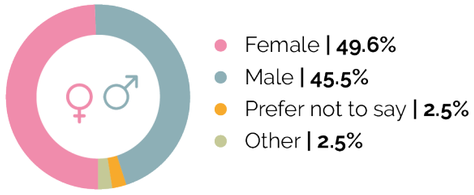
REPORT

121 people answered the survey. The report focuses on overall results. Data has also been analysed by gender.

SURVEY

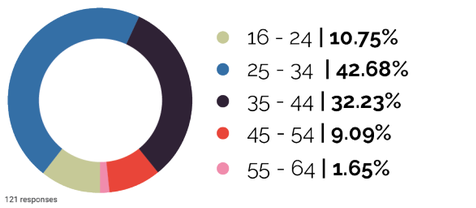
1. What is your gender?

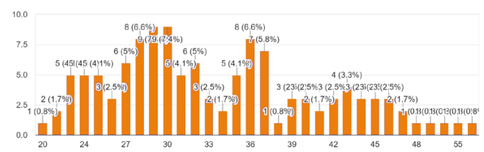
49.6% of the respondents are female, 45.5% male, 2.5% preferred not to say, and the equivalent share stated "other".



2. What is your age?

The group between 25 and 34 years old was the largest faction to answer the survey - 46.28% -, followed by people aged 35 to 44 - 32.23% -, 16 to 24 - 10.75% -, 45 to 54 - 9.09% - and 55 to 64 - 1.65% -. Finally, there were no answers registered from the group 65+.

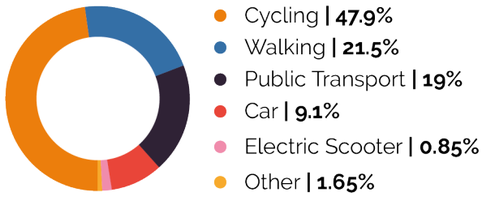




Amount of responders per age

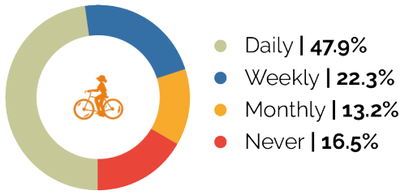
3. What is your main means of transportation?

The principal means of transportation of the surveyees is "cycling" with 47.9% of the share. "Walking" is second with a 21.5% share. Third is "public transport" with a 19% share. Next are "cars" with a 9.1% share. Only one person reported using an "electric scooter" as their main means of transport. Two stated "other".



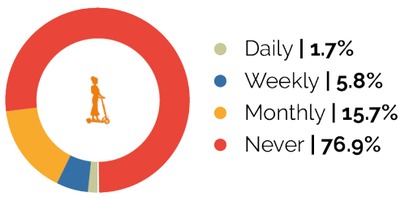
4. How often do you cycle?

47.9% of the respondents stated cycling on a "daily" basis, 22.3% "weekly" and 13.2% "monthly". On the other hand, 16.5% declared to "never" cycle.



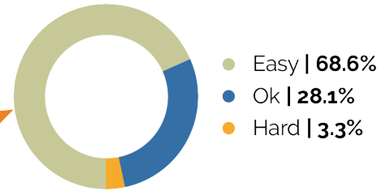
5. How often do you use an electric scooter?

On the one hand, 15.7% reported "monthly" using an electric scooter, 5.8% "weekly" and 1.7% "daily". On the other hand, 76.9% replied "never" using an electric scooter.



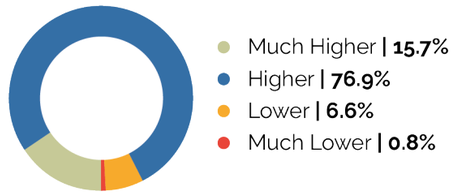
6. Do you think active mobility (walking, cycling, using scooters, rollerblading, etc.) in Malmö is:

68.6% of the respondents claim active mobility in Malmö is "easy", 28.1% "ok" and 3.3% "hard". No one answered active mobility being "very hard" in Malmö.



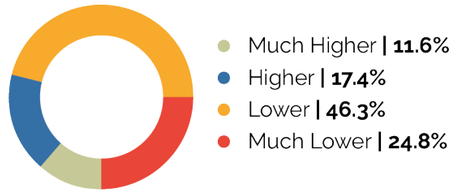
7. I would like the level of active mobility in Malmö to be:

The majority of the persons - 76.9% - responded they would like the level of active mobility in Malmö to be "higher", while 15.7% said "much higher". Au contraire, 6.6% claimed they would like the level of active mobility in Malmö to be "lower", and just one person said "much lower" - 0.8% -.



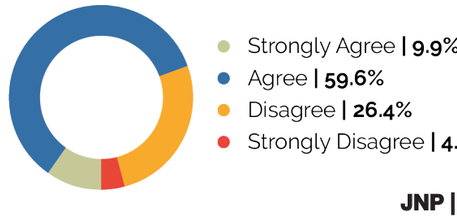
8. I would like street car parking spaces in Malmö City to be:

When asked about street car parking spaces in Malmö, 46.3% of the surveyees said "lower" and 24.8% "much lower". In opposition, 17.4% said "higher" and 11.6% "much higher".



9. "I am satisfied with bicycle parking facilities in Malmö City"

59.6% of the respondents "agree" to be satisfied with bicycle parking facilities in Malmö City, and at the same time 9.9% "strongly agree". On the contrary, 26.4% "disagree" with the statement and 4.1% "strongly disagree".

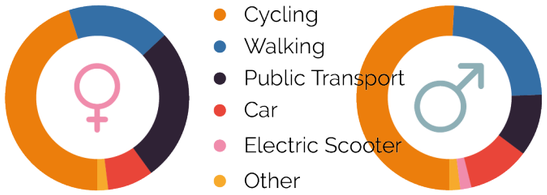


MALE vs FEMALE

A higher number of women - 60 - answered the survey than men - 55 -.

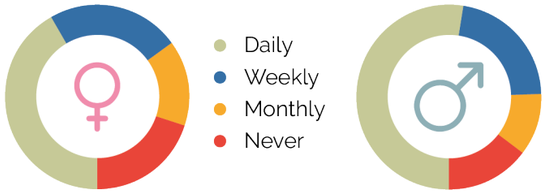
MEANS OF TRANSPORT

On the one hand, 28 men declared “cycling”, 13 “walking”, 6 “public transport”, 6 “car”, 1 “electric scooter”, and 1 “other” as their main means of transport. On the other hand, 27 women stated “cycling”, 16 “public transport”, 11 “walking”, 5 “car”, and 1 “other” as their main means of transport.



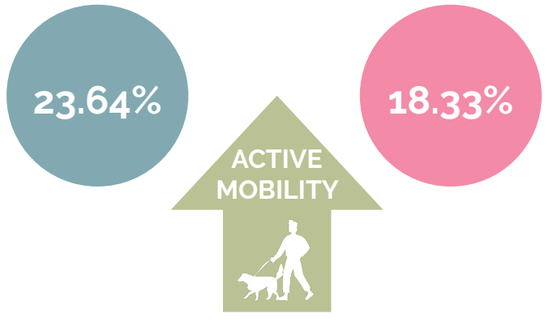
CYCLING

More men cycle - 50.92% - in comparison to women - 45% -. Moreover, 89.29% of men who stated cycling as their main means of transport do it daily, while 10.71 declared cycling weekly. Respecting women, 81.48% stated cycling daily, while 18.52% declared cycling weekly.



WALKING

Men walk to a greater extent than women, 23.64% vs 18.33%. Both women and men would like the active mobility in Malmö to be “higher”.

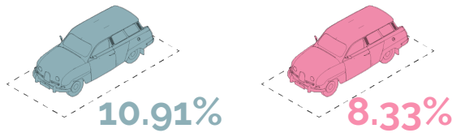


PUBLIC TRANSPORT

Women use public transport over 100% more than men, 26.67% instead of 10.91%. 18.75% of women whose public transport is their principal way of moving, cycle daily. 33.33% of men in the same position cycle every day.

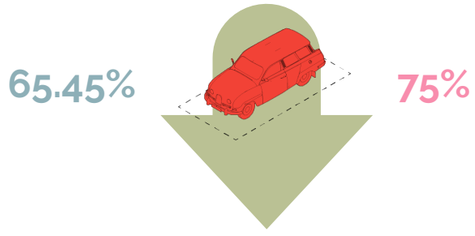
CARS

As for cars, men drive more than women, 10.91% versus 8.33%.



STREET CAR PARKING SPACES

The whopping majority of women - 75% - and men - 65.45% - want less street car parking space in Malmö. Furthermore, a 26.67% of women and 21.82% of men would like street car parking space to be “much lower”.

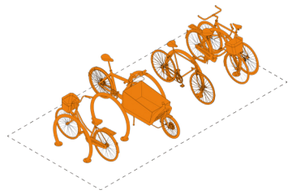


ACTIVE MOBILITY

66.67% of women and 69.09% of men consider active mobility in Malmö “easy”, respectively 28.33% and 29.09% consider it to be “ok”. However, almost every woman - 96.67% - and man - 89.09% - would like active mobility to be “higher” in Malmö.

CYCLING PARKING FACILITIES

More than three-quarters of men - 76.36% - are satisfied with bicycle parking facilities in Malmö. On the same hand, 63.33% of women agree with this statement. However, more women are dissatisfied - 36.67% - with bicycle parking facilities than men - 23.64% -.



76.36% SATISFIED 63.33%

CONCLUSION

Cycling - 47.9% - is the leading means of transport of the people surveyed. Walking - 21.5% - is second and public transport - 19% - is third. Almost half of the surveyees - 47.9% - cycle daily while less than a quarter - 16.5% - never pedal.

A great part of the respondents - 76.9% - never use an electric scooter. Nevertheless, two people out of 121 - 1.7% - use one daily.

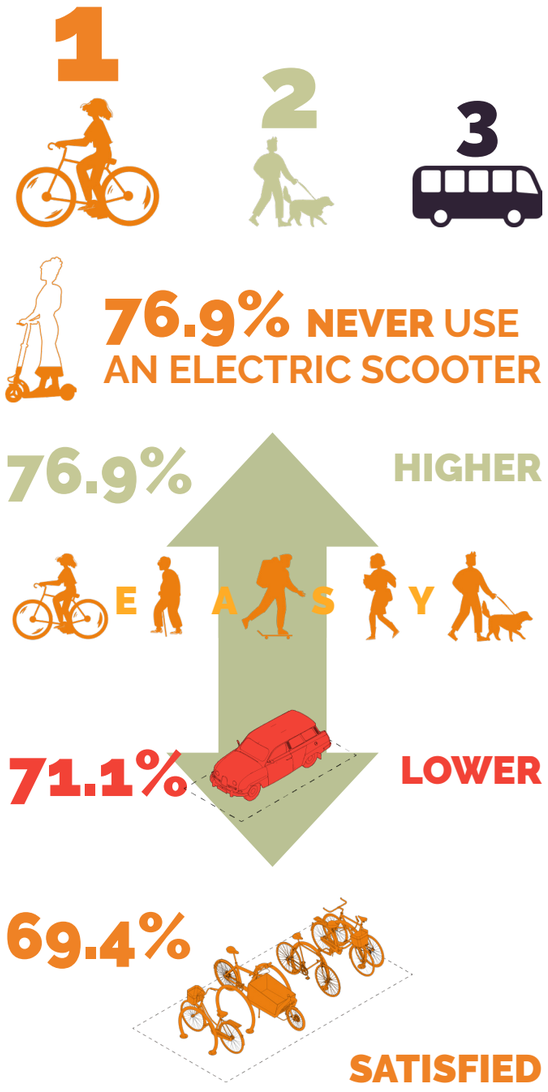
More than half of the survey takers - 68.6% - think active mobility is “easy” in Malmö, yet 76.9% would like it to be higher.

Almost a quarter of the participants - 24.8% - stated they would like “much lower” street car parking spaces in Malmö city. At the same time, 46.3% chose “lower”, concluding that 71.1% of the surveyees would like fewer parking spots on the streets.

Most of the respondents - 69.4% - are satisfied with bicycle parking facilities in Malmö.

Regarding gender differences, more men cycle and walk in comparison to women. However, women use public transport more than twice as much as men. As for cars, men drive more than women.

QR - Code displayed on the Espresso Machine at Kaffebaren på Möllan



Parklets

BACKGROUND

What is a Parklet you may ask? According to the Cambridge Dictionary, a Parklet is *"a small area, usually with seats and often grass and plants, next to a pavement"* [30]. Still, to be able to properly understand what a Parklet is we need to go back to its origins and how this idea took place.

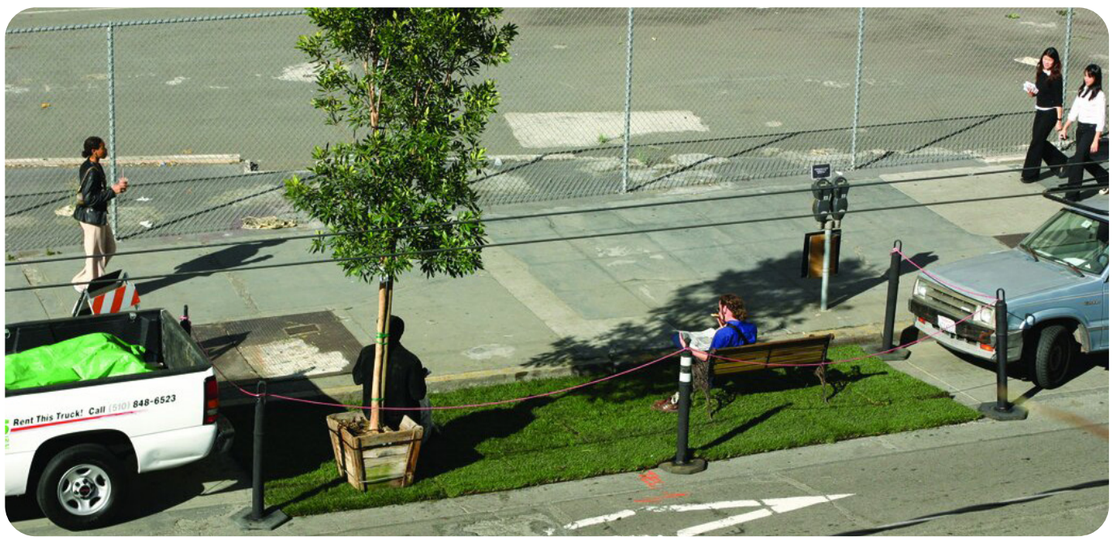
It all started on an autumn day of 2005 when the idea to temporarily replace a street car parking space with *"park amenities"* took place by the design studio Rebar, in the city of San Francisco [31].

Next, an image of the intervention went viral on the internet leading to Park(ing) day, *"a global, public, participatory project where people across the world temporarily repurpose curbside parking spaces and convert them into public parks and social spaces to advocate for safer, greener, and more equitable streets for people"* [32] which takes place every September.

This initiative inspired different cities around the world, which wanted to transform into more human-driven active cities. Examples are San Francisco, Los Angeles, São Paulo, Lima, Scotland, Vienna, Berlin, Munich, etc. [33]

Furthermore, the COVID-19 era impulsed Parklets exponentially. Letting cities under lockdown have new green spaces that people could use in a healthy and safe way.

Fortunately, these spaces have proven to be valuable assets to cities and their dwellers. Leading to new policy-making and further development of this urban tool after the pandemic lockdown was over.

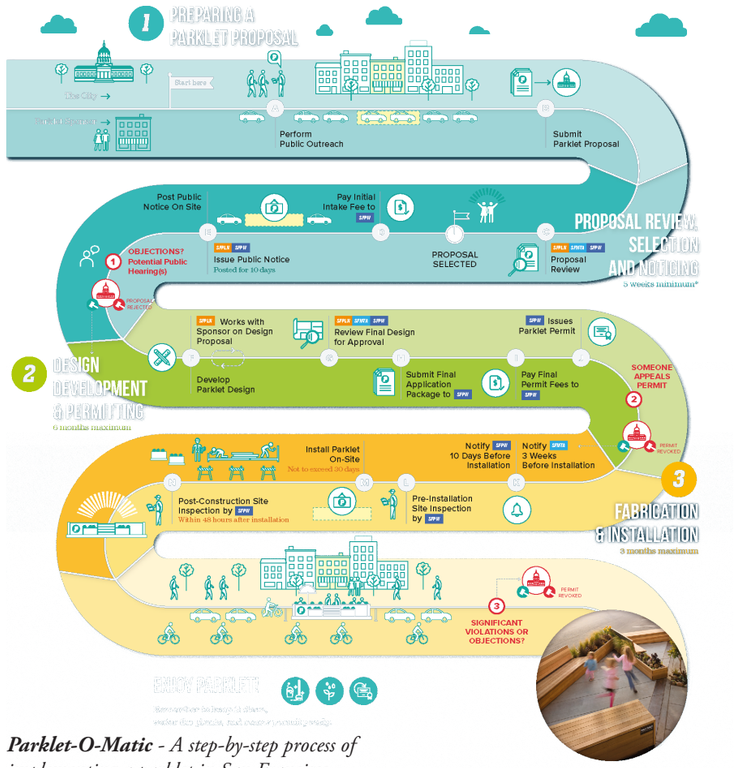


1st Park(ing) day Installation - Rebar Studio

SAN FRANCISCO

The initial parklet birthplace has pioneered the development and construction of parklets for over a decade now. The former Parklet Program has evolved and been renamed *"Ground Play"* and its overall strategy is *"creating safe, complete streets and new open space for the public"* [34].

Ground Play together with the City of San Francisco has developed a comprehensive Parklet Manual which thoroughly describes the different steps one has to go through, from parklet proposal to permitting ending in the implementation of the parklet.

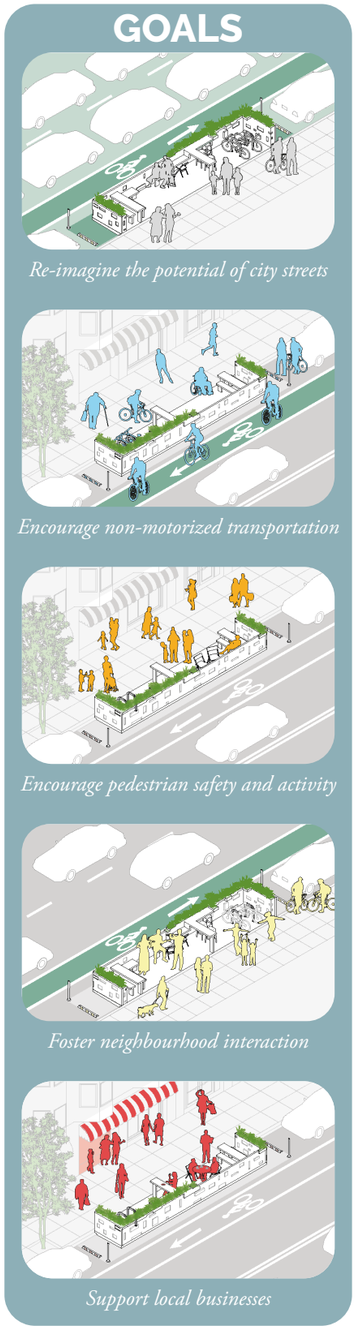


Parklet-O-Matic *- A step-by-step process of implementing a parklet in San Francisco*

Rebar's "walket" a prototype parklet system

Meraki Market Parklet

Blue Fig Parklet



SÃO PAULO

In 2014 the city of São Paulo regulated the implementation of parklets in its public streets to expand the number of public spaces in the city [35].

32 public parklets have been constructed by the city, one per subprefecture of the Municipality. The original projects take place in two parallel parking spaces (10 x 2 m) [36].

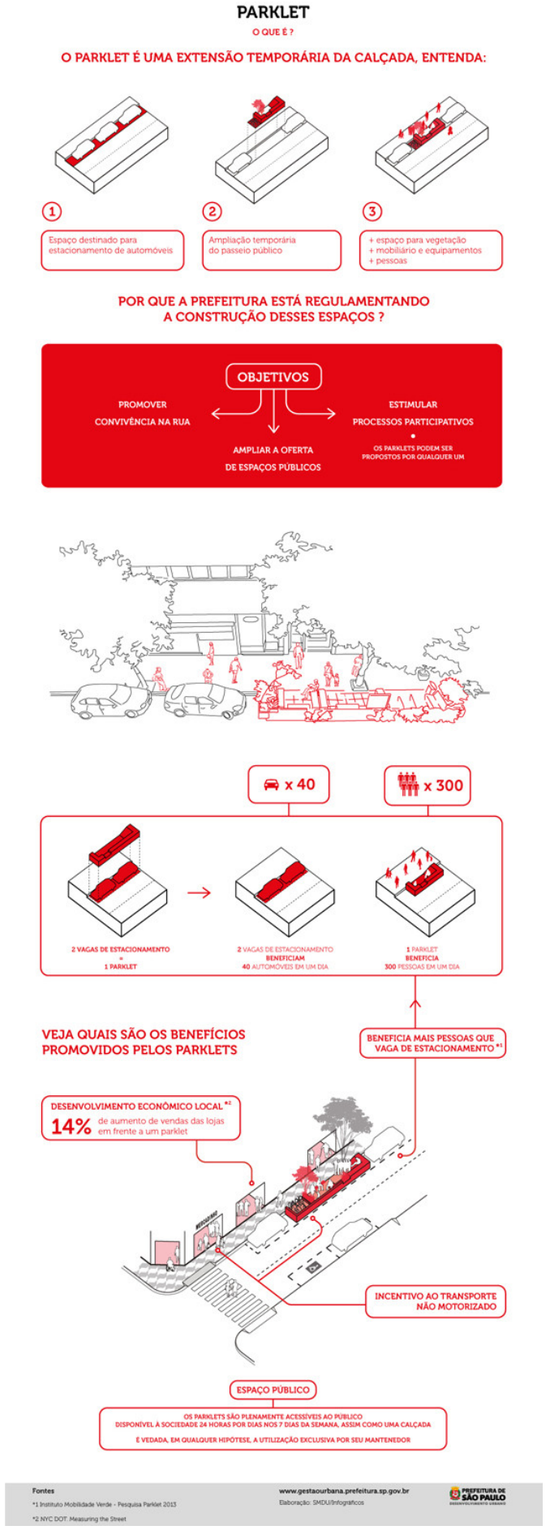
City Goals

- Expand the offer of public spaces
- Promote street coexistence
- Stimulate participative processes
- Encourage non-motorised transport
- Create a new São Paulo street scenario

Location technical selection criteria

- Busy Sidewalks
- Commercial centralities
- In front of municipal equipment
- Ability to eat outdoors
- Interesting views
- Shade
- Bike lanes

Parklet in Padre João Manuel



Why a Parklet? - Explanatory Guide of São Paulo City

VIENNA

The city of Vienna encourages citizen participation through different plans and strategies capped under the initiative **Grätzl Oase** [37]. Grätzl is a Viennesse word to describe a small community within a larger town (neighbourhood) and oase means oasis.

One of these initiatives is the green parklets in the parking lane area, promoting new green spaces that help with heat-island effects in the city as well as serving as meeting spots for neighbours.

Everyone is welcome to participate in this action and the steps to build a parklet are simple. Starting by submitting an idea and then when the submission is approved (by a jury) the implementation of the parklet can start.

Furthermore, the city of Vienna provides economical (up to 4.000 €), professional and technical support. On the other hand, Vienneses are responsible for planning, organising, promoting and implementing the parklet [37].

Parklet in Vienna

Benefits of these interventions

- Encourage people to participate and change the city where they live in
- Be responsible for your own surrounding
- Place appropriation
- Community building and engagement
- Variety (design, democratic, attractive)

Challenges that parklets pose

- A short lifespan (depending on materials)
- Dedication
- A place to build the parklet
- Tool use and construction knowledge

Conversation with
FELIX STOISSER

Felix Stoisser is a landscape architect and carpenter who wrote his bachelor's thesis *"Do-it-yourself urbanism"* [38] based on the project Grätzl Oase in Vienna [37].

He has been working on planning, building, and supporting more than six parklets, along with different local initiatives and stakeholders.

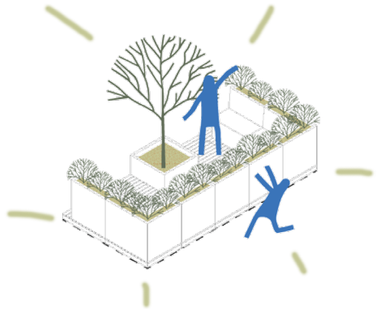
During our conversation, Felix gave an overview of the idea of *"parklet"*, its origins in California (USA) and how Lokale Agenda 21 (Vienna) [39] encourages people to change their city.

Moreover, he introduced the idea of *"gaining city responsibility"* and his personal experience during his tenure as a parklet planner and builder.

As our conversation went on I asked Felix if he thought having a *"parklet catalogue"* and connecting parklets through mobility would be a good idea. He answered positively, explaining that standardised parts of a parklet would encourage more people to build one while solving some of the challenges he has experienced. However, a *"catalogue"* would discourage creativity and uniqueness. Regarding mobility, he said that it is a good thing and that can help with the cycling infrastructure (ex. Bicycle pumps, tools, etc), yet the real impact is seen in pedestrians.

Finally, he described the users of parklets more as spontaneous rather than active users. People who make a pit stop, a pause, a phone call or look at the plants. However, parklets increase neighbour participation and engagement, providing affordability for kids and adults. In some cases creating the feeling of *"an extension of your own home"*.

Parklet Survey



BACKGROUND

The "Parklets in Malmö Survey" purpose is to acknowledge if Malmö citizens know what a Parklet is, if they would like to have Parklets in Malmö city and how they would like the Parklet to be.

The survey is a follow-up to the "Mobility in Malmö Survey'' held in February. The survey was anonymous, consisted of 10 impartial questions and could be completed in under 2 minutes. The aim was to acknowledge if there is a need for Parklets in Malmö.

Miriam Lind, a statistician from Uppsala Universitet, helped overview the questions, making them impartial and avoiding errors and measurement uncertainties.

METHOD

The anonymous Google Forms survey was held between the 25th of March and the 2nd of April of 2023 and 133 responses were registered.

The survey was published in different groups on Facebook and a QR code was displayed on the espresso machine at Kaffebaren på Möllan for volunteers to scan.

The target group was residents of Malmö 16 years old or older and the survey was modelled under the sequences NEVER = 0, RARELY = 1, SOMETIMES = 2, and OFTEN = 3.

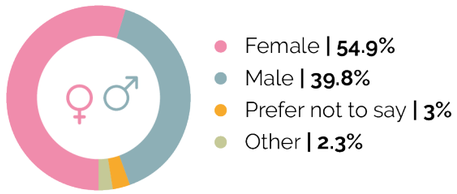
REPORT

133 people answered the survey, 12 more than the survey "Mobility in Malmö". The report focuses on overall results. Data has also been analysed by gender.

SURVEY

1. What is your gender?

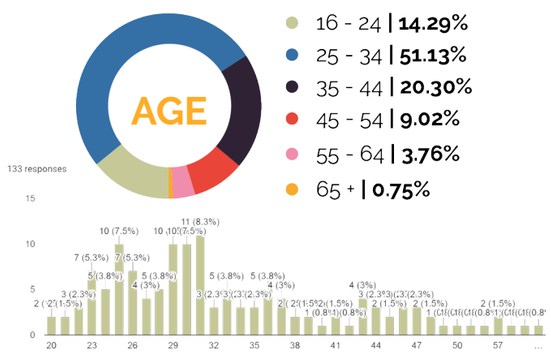
54.9% of the respondents were women, 39.8% men, 3% "prefer not to say", and 2.3% answered "other".



2. What is your age?

The age group between 25 and 34 years old represents more than half - 51.13% - of the people that answered the survey. It is followed by the group between 35 and 44 - 20.3% -, then the group between 16 to 24 years old - 14.29% -. Not reaching two digits, come first the group between 45 and 54 - 9.02% -, seconded by the group between 55 and 64 - 3,76% -. Only one person from the group above 65 answered the survey, representing 0.75% of the surveyees.

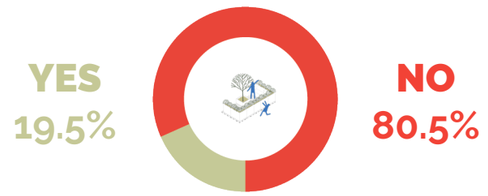
*One person filled in "over 21", reproducing a measuring error of 0.75%.



Amount of respondents per age

3. Do you know what a Parklet is?

Concerning knowledge of what is a Parklet, a surprising bulk of 80.5% of the surveyees answered "no". On the other hand, only 19.5% answered "yes".

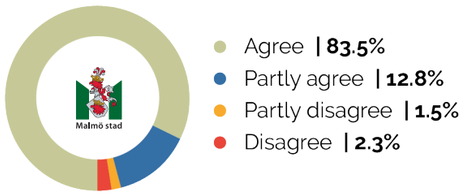


4. Would you use a Parklet?

When asked about the use of a parklet, a cheering 91% answered affirmatively "yes", whereas an isolated 9% replied "no".

5. "I would like Malmö to have Parklets"

The trend seen on the former question spills into surveyees "agreeing" - 84.5% - and "partly agreeing" - 12.8% - when asked if they "would like Parklets in Malmö". Au contraire, barely 2.3% of the respondents "disagree" and 1.5% "partly disagree".

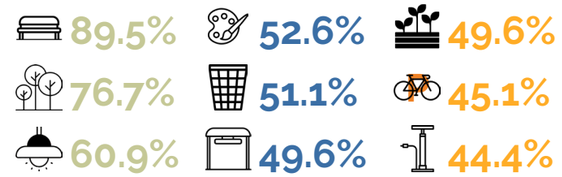


6. What amenities would you like a Parklet to have?

Regarding amenities, most of the participants - 89.5% - chose the option "seating". "Vegetation" polled as the second favourite option - 76.7% -. Coming up, "lighting" was the third favourite option - 60.9% -.

More than fifty per cent of the surveyees favoured "art" - 52.6% - and "garbage bins" - 51.1% - . On the same hand, more than forty per cent of the participants opted for "rain shelter" - 49.6% -, "urban farming" - 49.6% -, "bicycle parking" - 45.1% -, and "bicycle services" - 44.4% -. Subsequently. "WC" - 25.6% -, "wayfinding" - 23.3% -, "playground" - 22.6% -, and "wi-fi" - 19.5% -.

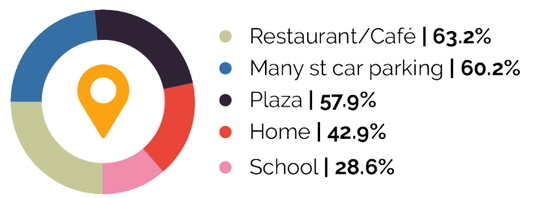
Finally, under the option "other" catered so participants could give their suggestions, the proposals "water fountain" - 1.5% -, "maybe a small café?" - 0.8% -,"Boule-bana" - 0.8% -,"Music, book/ trading shelves?" - 0.8% -, "Grill?" - 0.8% -, "A parking spot" - 0.8% -, and "Not needed as Sweden has vast amount of green areas" - 0.8% - were recommended.



7. What would be a good location for a Parklet?

When asked "What would be a good location for a Parklet?" 63.2% said "Near restaurants / cafés", 54.8% "Where there are many street car parking spaces", 57.9% "Near plazas", 42.9% "Near my home", and 28.6% "Near schools".

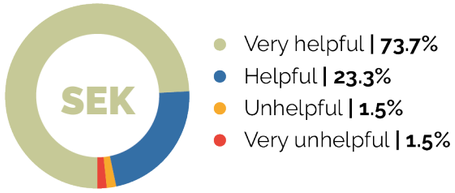
As same as with the question above, when allowed to make suggestions, participants recommended "On busy streets without seating that atm is just passages" - 0.8% -, "Where there is too much parking space for cars already. Also where it should be discouraged to take the car" - 0.8% -, "Parks, by the water, randomly spread out in some neighbourhoods" - 0.8% -, and "Not needed as Sweden has vast amount of green areas" - 0.8% -.



8."I would consider Malmö Stad providing funding for Parklets"

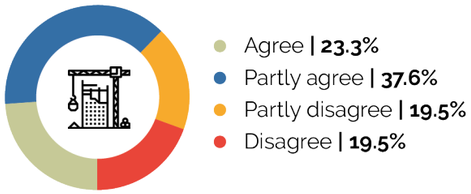
Almost everyone - 97% - considered it advantageous if Malmö Stad would provide funding for Parklets, being 73.7% "very helpful" and 23.3% "helpful". Contrarily, 1.5% regarded this as "unhelpful" and the

same number as “very unhelpful”.



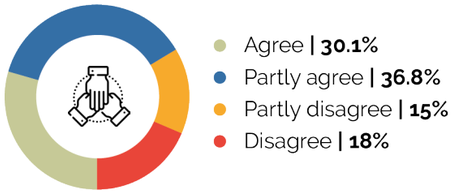
9. “I would participate in the construction of a Parklet”

On the one hand, 37.6% “partly agree” and 23.3% “agree” on participating in the construction of a Parklet. On the other hand, 19.5% “partly disagree” and 19.5% “disagree” with the same statement.



10. “I would participate in the care of a Parklet”

30.1% “agree” and 36.8% “partly agree” on participating in the care of a Parklet. However, 15% “partly disagree” and 18% “disagree” with this asseveration.



MALE vs FEMALE

A higher number of women - 73 - answered the survey than men - 53 -.

PARKLET KNOWLEDGE

More men - 22.64% - know what a Parklet is in comparison to women -16.44% -.

PARKLET USE

The majority of men - 94.34% - and women - 89.04% - would use a Parklet.

MALMÖ HAVING PARKLETS

A large part of women - 87.67% - and men - 83.02% - would like Malmö to have Parklets.

MALMÖ STAD PROVIDING FUNDING FOR PARKLETS

Both men and women find Malmö Stad providing funding for Parklets “very helpful”. However, more men - 84.91% - than women - 68.49% - selected this option.

CONSTRUCTION PARTICIPATION

Men - 33.96% - “agree” to participate in the construction of a Parklet to a greater extent than women - 17.81% -.

CARE PARTICIPATION

On the same note, more men - 35.85% - would participate in taking care of a Parklet than women - 28.77% -.

CONCLUSION

More than 80% - 80.5% - of the surveyees do not know what a Parklet is. However, after a brief description - for education purposes embedded in the survey -, a whopping majority - 91% - would use one. Following this tendency, 83.5% of the respondents would like Malmö to have Parklets.

Regarding amenities, the most popular amongst participants are seating, vegetation and lighting, in that order. In a second echelon came art, garbage bins, rain shelter and urban farming (tied).

As to location, the most popular choice was “near restaurants / cafés”, yet “Where there are many street car parking spaces” was very favoured too. Next, “near plazas” and “near home”.

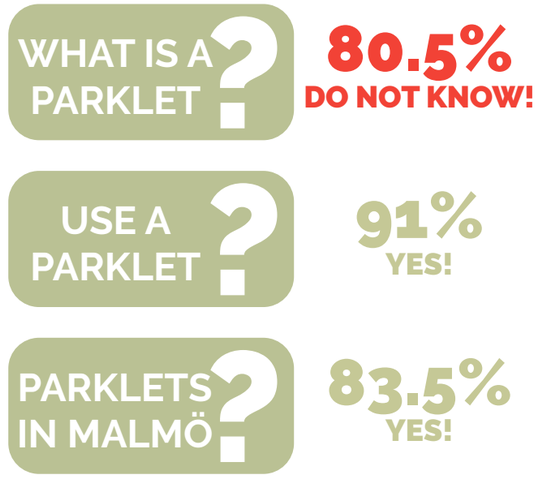
A promising 73.7% answered they would consider it “very helpful” if Malmö Stad would provide funding for Parklets. In the same direction, 23.3% consider this “helpful”.

Talking about participation in the construction of a Parklet, almost a quarter - 23.3% - of the surveyees “agree” to the statement, whereas 37.6% “partly agree”.

Finally, when asked about the caring of a Parklet, 30.1% “agree” and 36.8% “partly agree” on doing so.

Concerning gender differences, more men know what a Parklet is and would use one, yet more women would like Malmö to have Parklets. However, 16.42% more men consider Malmö Stad providing funding for Parklets “very helpful”. Furthermore, more men would participate in the construction and caring of Parklets.

QR - Code displayed on the Espresso Machine at Kaffebaren på Möllan



SITE

Öresund

The Öresund Region
in the world

The Öresund Region (Øresund - Danish) is the larger metropolitan extent that comprises the area surrounding the Öresund strait, connecting Denmark and Sweden. The main cities in the region are Copenhagen, Helsingör and Roskilde on the Danish side, and Malmö, Helsingborg and Lund on the Swedish side [1, 2].

The Öresund Region is a fluvial and economic hub in Scandinavia which houses more than 4.100.000 people [3]. Despite its rich industrial and maritime history, this area is also a knowledge centre which accommodates world-renowned universities such as Lund University, Malmö University, the University of Copenhagen, and the Technical University of Denmark, amongst others.

Since the Öresund bridge [4] opened in the year 2000 the population in the region has increased exponentially, becoming a magnet for people around the world who are looking to have a better life or further their education. According to statistics, the third largest immigrant population group in Malmö is Danish (7,564) [5] while Swedes are the 13th immigrant group in Copenhagen (15,053) [6, 7]. Moreover, in the third quarter of 2017 around 7400 people commuted from Malmö to Copenhagen to work [8].

Copenhagen, Malmö and Lund have been in the front of sustainable development for decades, and are seen as the proving ground for innovation implementation under this umbrella around the globe. This reason and having in mind the concrete data before mentioned makes this an ideal place to test this project.

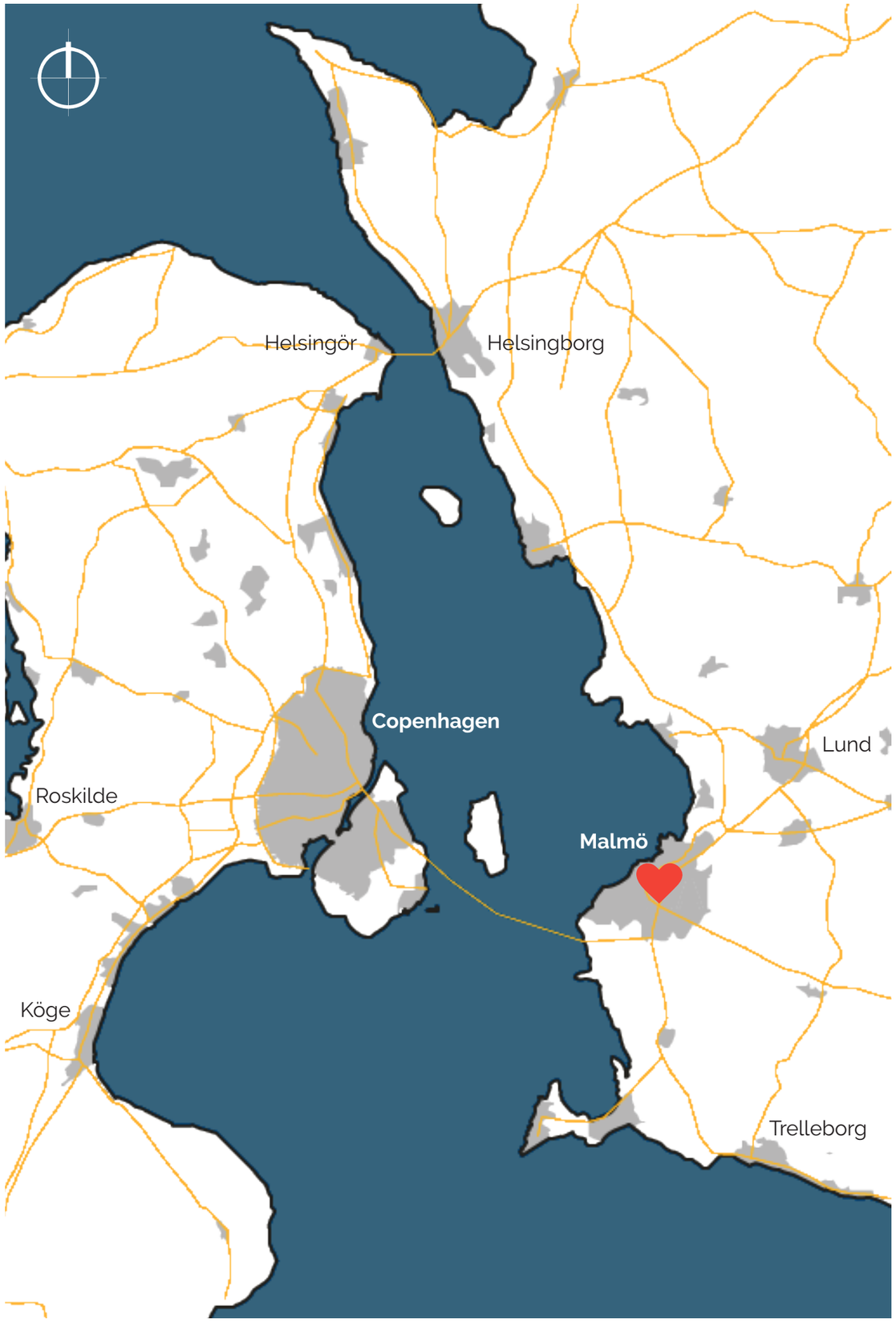
+4.100.000
2021

BRIDGE
since 2000

LEADER
SUSTAINABILITY

+ 7400
COMMUTERS

CYCLING
NETWORK



Malmö

55° 36' 21" N
13° 02' 09" E

Malmö, Sweden's third largest city is located in the county of Skåne in the southern part of the country. Its vicinity to Copenhagen, Denmark's capital and Lund, Sweden's historic academic city, give Malmö a privileged expansive network [9, 10].

In the past 30 years, Malmö has shifted from an industrial and blue-collar working city into a cosmopolitan, educational and innovative city that has been attracting newcomers and steadily growing its population [5].

As part of this transformation, Malmö has also grown into a green and sustainable city, promoting and welcoming ideas that bring social and economical benefits to its population [11].

Mobility has been a key element of this transformation. Promoting sustainable means of transport such as public transport and cycling as an alternative to cars. Improving society and the environment's health.

351.749
2022

1.1%
GROWTH

398.749
2032

183
NATIONALITIES

12.6%
UNEMPLOYED

CYCLING
CITY

Malmö stad

**Data taken from Malmö Stad website* [5, 8]

Route Alternatives

INTRODUCTION

The site chosen to test the feasibility of this project is the route which connects two public spaces in inner-city Malmö: **Möllevångstorget** and **Stapelbäddsparken**.

On one hand, a multi-functional plaza in the vibrant and multicultural Möllevången. On the other hand, a skatepark and recreational open space in the modern and developing Västra Hamnen.

The distance between these public spaces can vary between 3.5 and 4 kilometres depending on the chosen route. On average, it would take 45 minutes to walk, 32 minutes by public transport, or 15 minutes by bicycle, to cover this distance.

In order to limit the scope and multiple alternatives to connect these public spaces, the three most direct routes have been chosen for study. These three routes traverse between five and seven different neighbourhoods in inner-city Malmö.

A - The Park-lane

The Park-lane is the route that connects through Kungsparken, Malmö Opera and Triangeln. This route spans over Västra Hamnen, Varvsstaden, Gamla Staden, Hästhagen - Davidshall, Rådmansvången and Möllevången. It is a fast and scenic route, which contains primary arteries full of heavy traffic.

B - The City-lane

The City-lane is the route that connects through Malmö University, Gamla Väster, Davidshall and Triangeln. This route spans over Västra Hamnen, Gamla Staden, Davidshall, Rådmansvången and Möllevången. It is the most direct and interesting route, yet provides a lot of potential for improvement.

C - The Safe-lane

The Safe-lane is the route that connects through Malmö C, Hansa, and Malmö Stadshus. This route spans over Västra Hamnen, Gamla Staden, Lugnet, Rådmansvången and Möllevången. It is the safest and most bicycle-friendly route. However, besides the area in Rådmansvången there are few street car parking spaces along this route.

Route Selection

The three alternative routes share multiple things in common, albeit quite distinguishable differences from each other.

Initially, the City-lane seemed to be the most direct and natural route to take, the Park-lane the fastest and steadiest and the Safe-lane the safest and most bicycle-friendly way. However, the City-lane stands out from the other alternatives being the most direct route between Möllevångstorget and Stapelbäddsparken.

After a deeper and thorough analysis, this original supposition was confirmed. To draw this conclusion, each route was cycled and walked through on multiple occasions and at different times of the day.

Along this course, there is more variety, important nodes, landmarks and street car parking spaces than in the alternative routes. In addition, there is a more clear and more distinctive separation between neighbourhoods, which can aid to develop identity and territoriality. Furthermore, there is the possibility to connect Malmö's busiest squares as well as the opportunity to extend Malmö's inner-city pedestrian and cycling network.

For all the above reasons plus being in the middle of the other paths, hence the proximity to other important landmarks, the **City-lane** has been chosen as the route on which this project will be developed and tested.

Legend

1. Möllevångstorget
2. Triangeln
3. Malmö Opera
4. Malmö Stadshus
5. Davidshallstorget
6. Hansa
7. Gustav Adolfs Torg
8. Kungsparken
9. Lilla Torg
10. Stortorget
11. Malmö C
12. Malmö University - Niagara
13. MalmöUniversity - Orkanen
14. Gängtappen
15. Stapelbäddsparken

The City-Lane - 1.10000

ANALYSIS

Urban Toolbox

INTRODUCTION

The urban toolbox is a set of guidelines and tools to help potential Mamlet builders. Firstly, to map and analyse a determined area. Secondly, to assess the mapped categories. Thirdly, to draft a proposal from these conclusions. Fourthly, to execute the proposal. Finally, after a pilot period to evaluate the Mamlet and shoot decision making.

1. MAPPING

What is in the area analysed?

In order to create a map, an analytical and an observing term is needed. The following questions aim to help with this process:

Location

Where is it located?

Urban Landscape

Are there landmarks, public buildings, plazas, parks, and markets in the area?

Character

How big is the area?
What is its Population?
What is the density?
Is it mainly private (residential), public, or a mix?

Urban Mobility

Is it close to public transport? Which? Where are the stops?
Is it easy to cycle? Are there cycling amenities?
Is it easy to walk?

Urban Furniture

Is it well equipped? (Bicycle services, dustbins, lighting, planters, seating, shelter, wayfinding, WC, etc)

2. ASSESSMENT

Once the area has been mapped, an evaluation of the categories should take place. How are the mapped categories? - Excellent, Good, Ok, Bad -.

3. PROPOSAL

After the assessment, a proposal addressing the specific needs of a determined area can be drafted.

What would make the urban space better?

4. EXECUTION

Construction of the proposal

5. EVALUATION

After a certain pilot period it is time to evaluate if the proposal works and make decisions.

"Does the Mamlet works?"

If **YES**, there are two possible outcomes: continue the Mamlet over a longer period of time, or make permanent changes to the urban arena following the feedback from the Mamlet.

If the answer is **NO**, the follow-up question "Why?" should be placed. The viable outcomes of this appraisal are to make the needed adjustments or to find a new better location.

ASSESSMENT FRAMEWORK

Excellent = 5 minutes

Urban Landscape

• There are landmarks, restaurants, cafés, plazas, markets, shops and public buildings of interest within a 500 m radius.

Character

• Density = + 150 persons per hectare
• Character = Mixed

Urban Mobility

• Public transport is abundant and one can make short, medium and long trips easily.
• There are exclusive cycling lanes and cycle amenities.
• There are pedestrian-exclusive sidewalks with no obstacles

Urban Furniture

• There is bicycle parking, bicycle services, dustbins, lighting, planters, seating, shelter, wayfinding, and WC within a 500 m radius.

Conclusion

Accessibility to varied Urban Landscapes, Urban Public Transport and Urban Furniture within a five-minute trip, equal to a 500 m walking radius (5-minute walk) or 1 km cycling radius (5-minute cycle trip).

Good = 10 minutes

Urban Landscape

• There are landmarks, restaurants, cafés, plazas, markets, shops and public buildings of interest within a 1 km radius.

Character

• Density = + 100 persons per hectare
• Character = Mixed

Urban Mobility

• Public transport is abundant and one can make short, medium and long trips easily.
• There are exclusive cycling lanes and cycle amenities.
• There are pedestrian-exclusive sidewalks with no obstacles

Urban Furniture

• There is bicycle parking, bicycle services, dustbins, lighting, planters, seating, shelter, wayfinding, and WC within a 1 km radius.

Conclusion

Accessibility to varied Urban Landscapes, Urban Public Transport and Urban Furniture within a ten-minute trip, equal to a 1 km walking radius (10-minute walk) or 2 km cycling radius (10-minute cycle trip).

Ok = 15 minutes

Urban Landscape

• There are landmarks, restaurants, cafés, plazas, markets, shops and public buildings of interest within a 1.5 km radius.

Character

• Density = + 50 persons per hectare
• Character = Mixed

Urban Mobility

• Public transport that connects to medium and long trips can be reached through a local bus.
• There are cycling lanes and cycle amenities.
• There are pedestrian-exclusive sidewalks with no obstacles

Urban Furniture

• There is bicycle parking, bicycle services, dustbins, lighting, planters, seating, shelter, wayfinding, and WC within a 1.5 km radius.

Conclusion

Accessibility to varied Urban Landscapes, Urban Public Transport and Urban Furniture within a 15-minute trip, equal to a 1.5 km walking radius (15-minute walk) or 3 km cycling radius (15-minute cycle trip).

Bad = + 15 minutes

Urban Landscape

• There are landmarks, restaurants, cafés, plazas, markets, shops and public buildings of interest within a 2 km radius.

Character

• Density = + 25 persons per hectare
• Character = Not Mixed

Urban Mobility

• Public transport is not frequent or does not exist.
• There are no cycling lanes or cycle amenities.
• There are no pedestrian-exclusive sidewalks.

Urban Furniture

There is no bicycle parking, bicycle services, dustbins, lighting, planters, seating, shelter, wayfinding, or WC
within a 1.5 km radius.

Conclusion

Accessibility to varied Urban Landscapes, Urban Public Transport and Urban Furniture within more than a 15-minute trip, equal to a 2 km walking radius (+ 15-minute walk) or 5 km cycling radius (+ 15-minute cycle trip).

Möllevången

LOCATION

Malmö's most multicultural neighbourhood, Möllevången, is synonymous with food, drinks, art and culture. Möllevångstorget, is one of the most popular meeting points in the city, either to buy groceries at the square's market, enjoy the myriad of cuisine in the vicinity, manifest injustices or celebrate a victory, such as FIFA's world cup, at Arbetets Ära statue.

This attractiveness is also combined with excellent public transport, being both Triangeln's train station and Södervärn, only 5 minutes away from the square.

CHARACTER

53 Ha

11.125

Mix

210 / Ha

[1]

URBAN LANDSCAPE

URBAN MOBILITY

URBAN FURNITURE

PHOTOGRAPHIC ANALYSIS

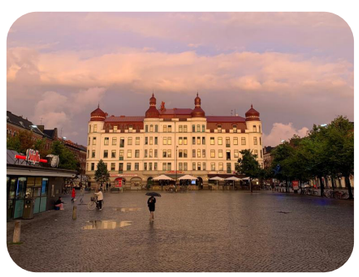
1 - Möllevångstorget 1

2 - Bergsgatan crossing

3 - Bicycle facilities

4 - Arbetets Ära

5 - Square's Market



6 - Möllevångstorget

Möllevången - 1.2000

Rådmansvången

LOCATION

Malmö's most eclectic neighbourhood, Rådmansvången, is synonymous with a vast array of architectural examples, as well as, shopping, gastronomy, culture and transportation.

The Triangeln area might be the best example of this, being not only a shopping centre which contains offices and residences but one of the most important transportation nodes in the city, located next to Sankt Johannes Kyrka and Malmö Konsthall.

CHARACTER

50 Ha — **7.344**

Mix — **147/** Ha

[2]

URBAN LANDSCAPE

URBAN MOBILITY

URBAN FURNITURE

PHOTOGRAPHIC ANALYSIS

1 - Rådmansgatan 3

2 - Rådmansgatan 11

3 - Rådmansgatan 15

4 - Rådmansgatan 23

5 - Bo Widerbergs Plats

6 - Smedjegatan 5

Rådmansvången - 1.2000

Davidshall

LOCATION

Davidshall might be Malmö's boutique neighbourhood, characterised by private residences, haute cuisine and shopping condensed in a small hip central area.

Here, Södra Förstadsgatan aka Gågata, Malmö's main pedestrian street, connecting Stortorget with Triangeln, is a perfect spot for shopping and strolling.

CHARACTER

14 Ha

2.680

Mix

191 / Ha

[3]

URBAN LANDSCAPE

URBAN MOBILITY

URBAN FURNITURE

PHOTOGRAPHIC ANALYSIS

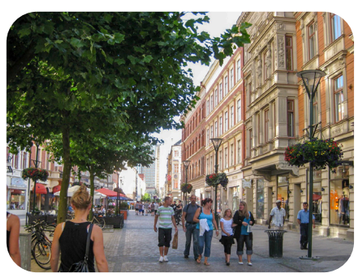
1 - Davidshallsgatan 1

2 - Davidshallsgatan 15

3 - Davidshallsgatan 25

4 - Fersens väg

5 - Davidshallstorg



6 - Södra Förstadsgatan

Davidshall - 1.2000

Gamla Staden

LOCATION

Malmö's historical centre combines a beautifully preserved area, including idyllic houses and small streets - mainly in Väster - and a newer developed area after the 1960s, made up of modernist buildings - Öster -, within water canals, in a mediaeval fashion.

Thus, private residences co-exist with offices, historical buildings, public plazas, parks and shopping centres within five minutes reach to Malmö's central train station. Beloved by locals and tourists this neighbourhood is often the proving ground for policy-making and idea development.

CHARACTER

87 Ha

9.674

Mix

111 / Ha

[4]

URBAN LANDSCAPE

URBAN MOBILITY

URBAN FURNITURE

PHOTOGRAPHIC ANALYSIS

1 - Nordenskiöldsgatan 2

2 - Gråbrödersgatan 1

3 - Engelbrektsgatan 1

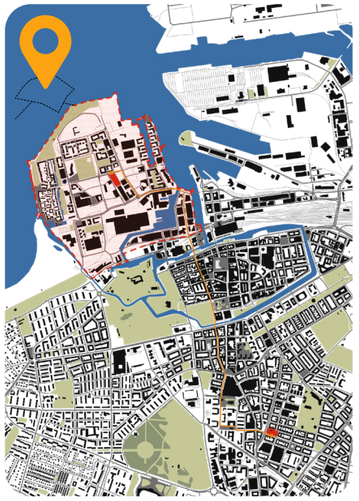
4 - Engelbrektsgatan 11

5 - Engelbrektsgatan 17

6 - Gustav Adolfs Torg

Gamla Staden - 1.2000

Västra Hamnen



Västra Hamnen is Malmö's former industrial shipyard land now converted into a sustainable and modern neighbourhood, situated in a privileged position by the sea.

Despite its innovation and addressing of the current sustainability goals agenda, Västra Hamnen is seen with cynical and critical eyes by malmöits. These strong opinions might be based on the distressful history of Kockums, and present neglect and erasure of the buildings and the overall image of the shipyard industry in the area.

CHARACTER

217 Ha

9.067

Residential

42 / Ha

URBAN LANDSCAPE

URBAN MOBILITY

URBAN FURNITURE

[5]

PHOTOGRAPHIC ANALYSIS

1 - Lilla Varvsgatan 37

2 - Östra Varvsgatan 2

3 - Stora Varvsgatan 12

4 - Stora Varvsgatan 6

5 - Nordenskiöldsgatan 17

6 - Nordenskiöldsgatan 1

Västra Hamnen - 1.5000

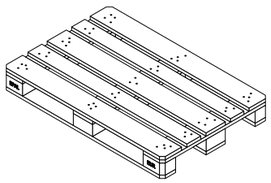
DESIGN

Inspiration

PARK(ING) DAY

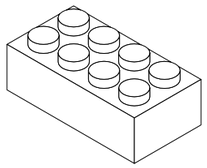
- Recovering Urban Space
- Reducing Street Car Parking Spaces
- Improve the look and feel of the city

PALLETS



- Standardisation
- Resistance
- Availability

LEGOS



- Modularity
- Stackability
- Play

IKEA

- Design
- Assemblage
- Smart Packaging

CARGO BICYCLE

- Logistics
- Community
- Green mobility

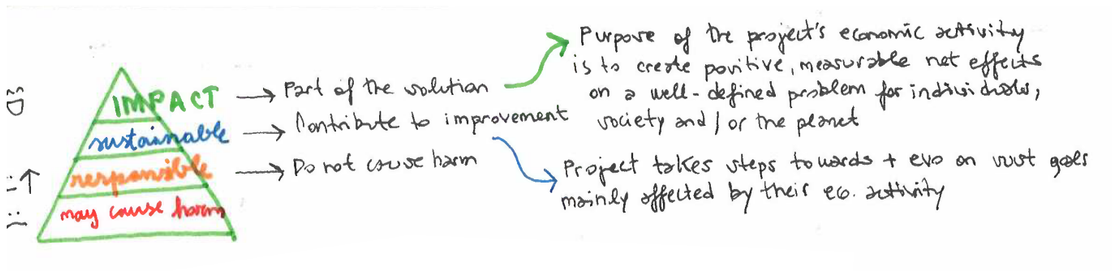
Sustainability

This project's focus is to make **better cities for people with people in a sustainable way**.

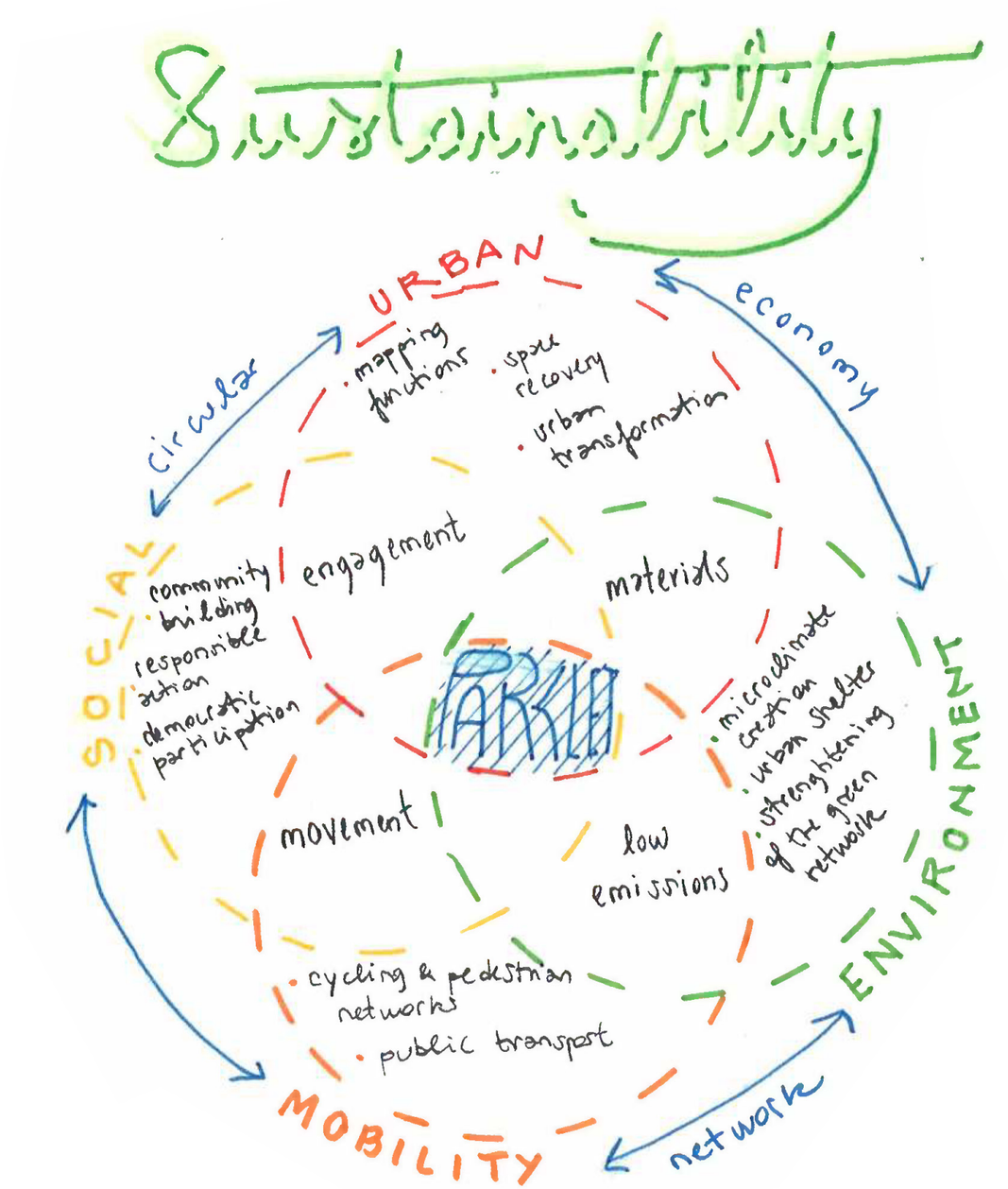
Being the centre of overlapping types of sustainability: Social, Urban, Environment, and Mobility. Generating a network which promotes a circular economy.

Resulting in a measurable positive network effect that tackles urban recovery and transformation for citizens of all ages. Strengthening the city's mobility and green networks.

Moreover, the design will have an impact of significant scale, depth and duration. Inspired by SDG 11 and the local initiative LFM 30 [1,2].



Sustainability Analysis Pyramid



Sustainability Mind Map

Materials

The physical substance by which a project is built determines its quality and longevity. Moreover, the global greenhouse gas emissions impact it will have [3]. Therefore, It is crucial to consider these factors when choosing the materials for a Parklet.

Thus, recycling and upcycling are prioritised over new materials. Here, Malmö Återbyggdepå [4] plays an important role in achieving these goals.

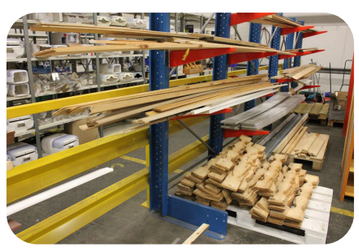
Malmö Återbyggdepå is a company which receives and sells used materials. The company is a joint effort between Malmö Stad and Vasyd (Waste collecting municipal association).

In their depot, one can find a copious array of recycled construction materials ready to be used. However, this material varies depending on disponibility and newly received material. The aforementioned presents a considerable challenge regarding modularity and standardisation yet provides opportunities for variety, originality and the creation of new jobs.

Malmö Återbyggdepå

Metal channels

Hardware



Wood

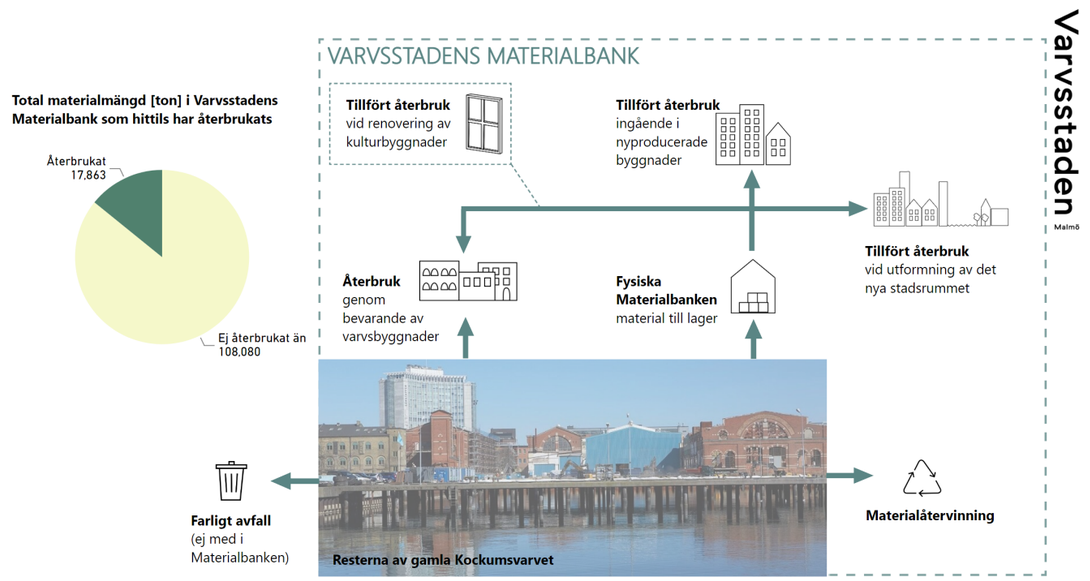
Warehouse with catalogued materials which can be upcycled

VARVSSTADEN

Varvsstaden or *"Shipyard City"*, one of Malmö's future neighbourhood development projects, is located between Vastra Hämnen and Gamla Staden.

The former shipyard warehouses are currently being dismantled, clearing the area for new upcoming constructions. PEAB, the developing company in charge of the project, has a detailed *"Materials Bank"* web page [5], containing information on the saved materials and their CO_2 impact.

Here lies an advantageous opportunity, not only to upcycle the saved materials of the warehouses and use them in the Parklets but to create a historic link between Malmö's former industry and Malmö's sustainable future.



Varvsstaden Materialbanken - Upcycled Material database

Logistics

CARGO BIKES

There are different alternatives in the market when it comes to cargo bikes. From the famous Christiania Bike to the cutting-edge Velove Armadillo [6], freighting in a sustainable way has never been as easy before!

Among these alternatives, the XYZ Four Wheeler [7] offers a maximum payload of 300 kg and a maximum loading volume of 1,6 m³. On the other hand, the Velove Armadillo offers a maximum payload of 200 kg and a maximum loading volume of 2 m³. Furthermore, this cargo bike provides the opportunity to attach a semi-trailer.

XYZ Cargo Fourwheeler

Christiania bike

Bullit Cargo Bike

GREEN LOGISTICS

In Sweden, *"Green Logistics"* have been established in the past decade.

Move by Bike [8], a company founded in Malmö in 2012, operates today in 4 different cities and has accomplished more than 2.500.000 deliveries since 2020.

Airmee [9], founded in 2018, is another last-mile delivery company with the vision to *"change how the world moves through sustainable last-mile delivery to your doorstep or closest locker"*.

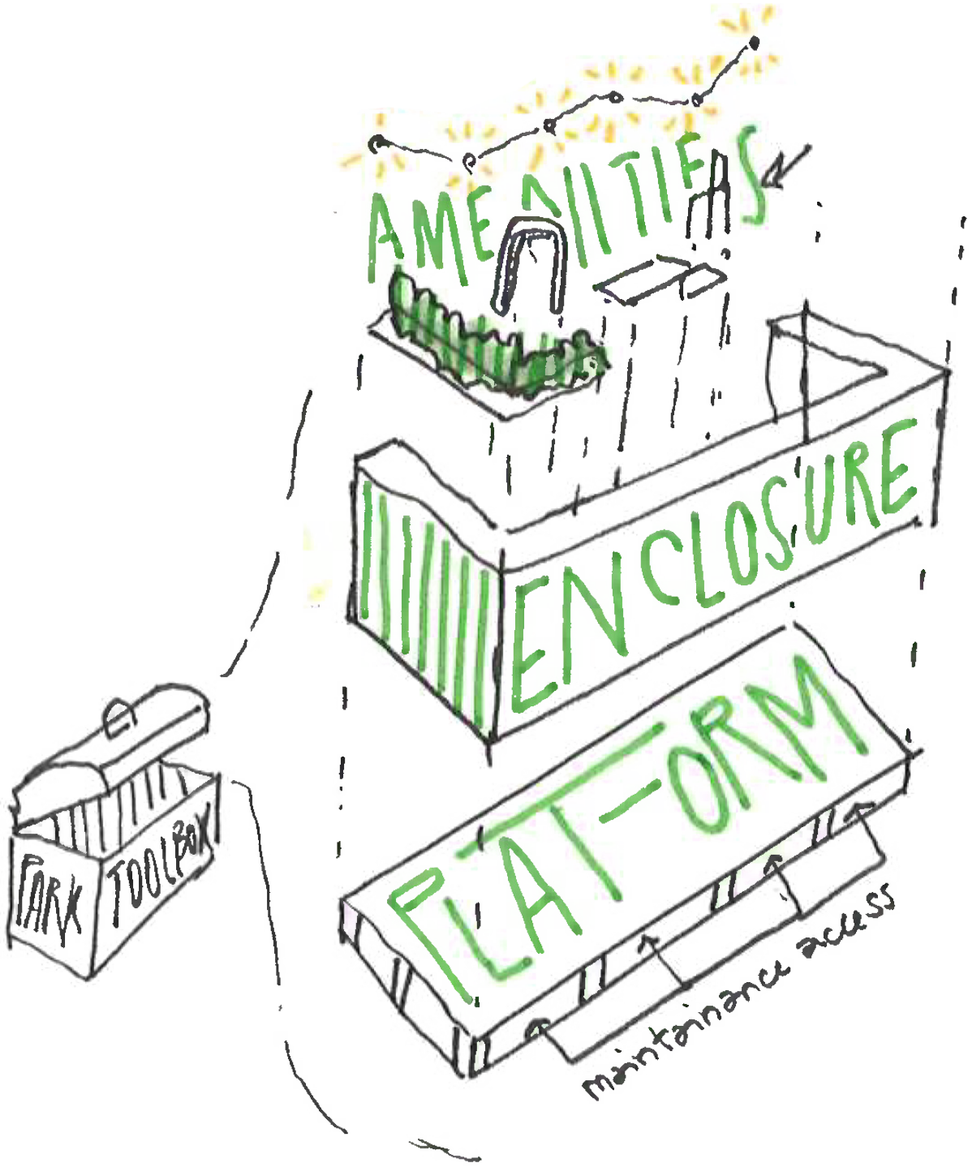
The future looks bright when thinking about sustainable alternatives to conventional delivery services!

Airmee - Velove Armadillo

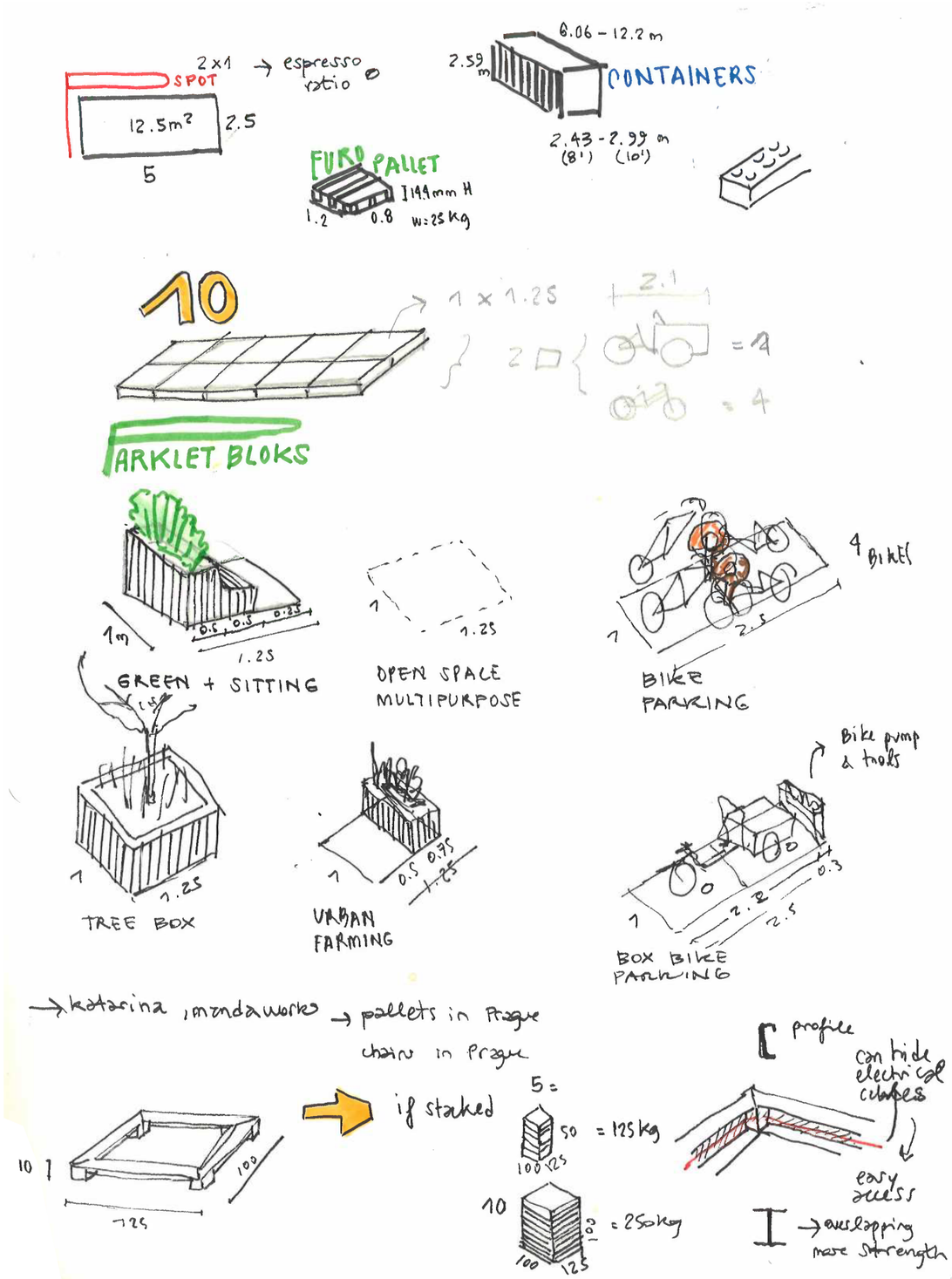
Move by Bike - Velove Armadillo with semi-trailer

Move by Bike - Specially manufactured electric transport bike

First Sketches



Parklet Composition Elements



Initial Design Ideas

Base Module

Description

The base module is a system composed of legs, structure, flooring and connecting hardware, circumscribed in a 1000 mm x 1250 mm rectangle.

The legs are height-adjustable, easily allowing the modules to meet the sidewalk elevation or any variations in the parklet site.

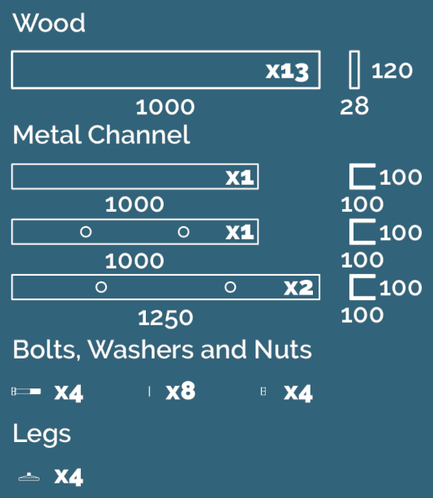
The structure is made of steel C channels, providing resistance and duration over time.

The floor is made of wood planks, giving a warm aesthetic which welcomes humans and animals.

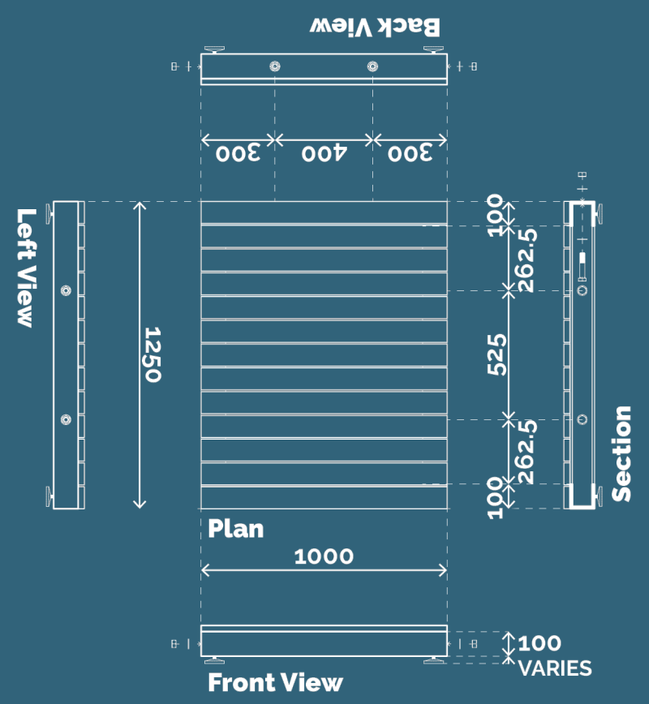
One unit can be connected and fastened to others by bolts, nuts and washers quickly and easily.

10 units combined make a standard parklet (2.5 m x 5 m). However, the units can vary depending on the site and particular needs.

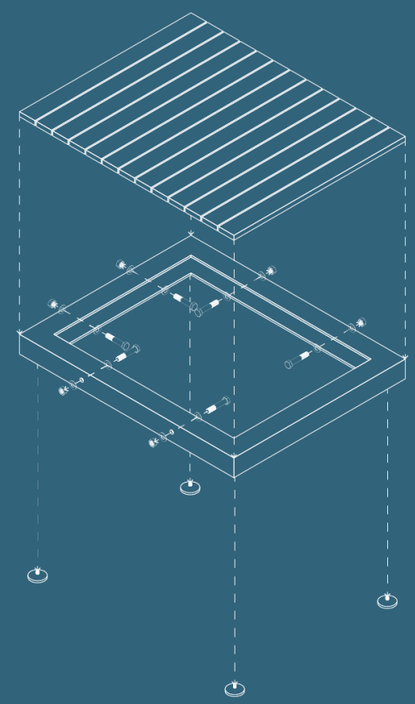
Materials



Blueprint



Axonometric



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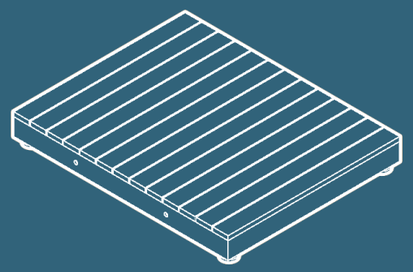
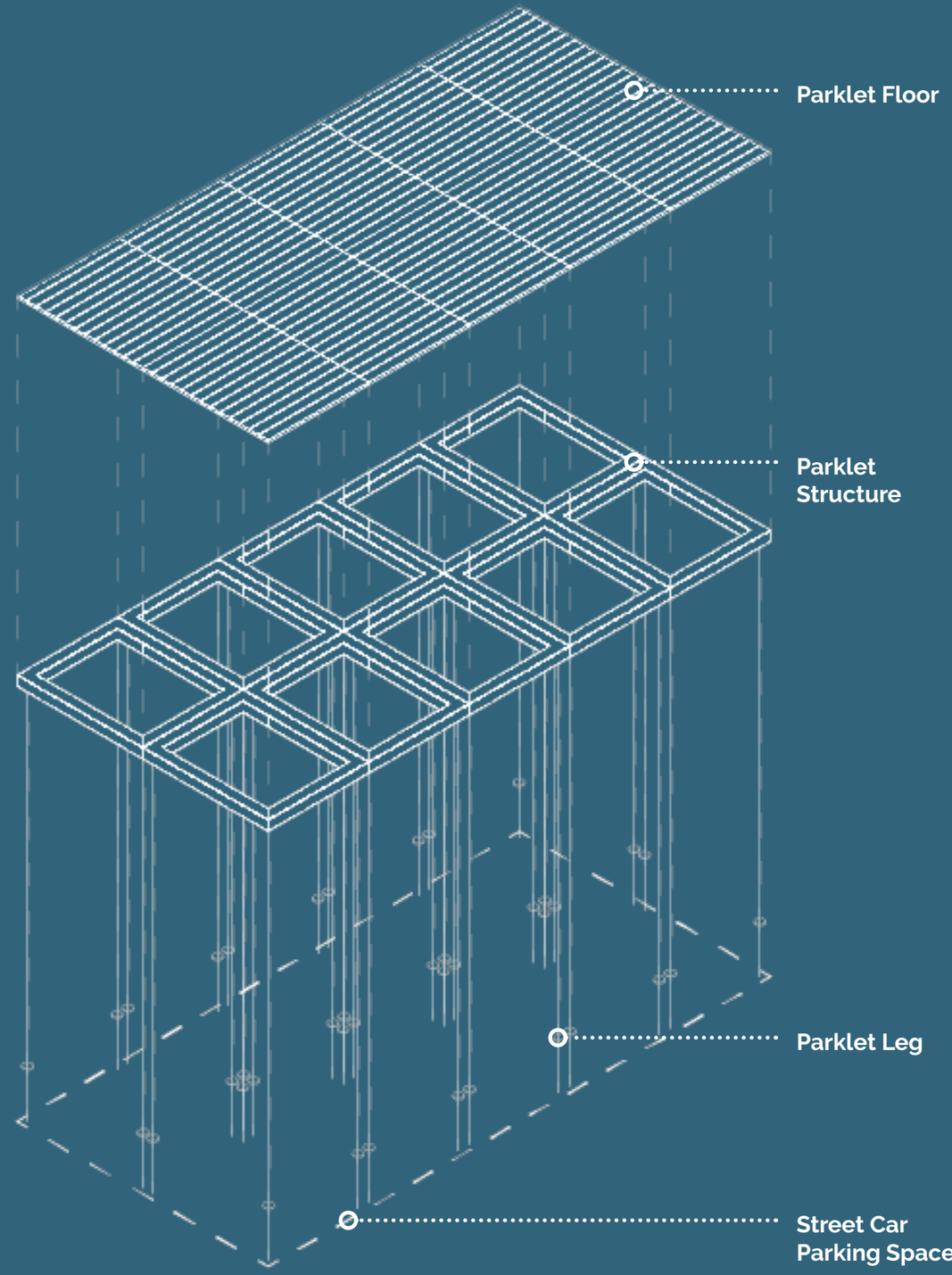


x 10 =

Mamlet Base Axonometric



Bench Module

Description

The modular bench is a system composed of a skeleton, cladding and a planting box, within a 1000 mm x 883 mm footprint.

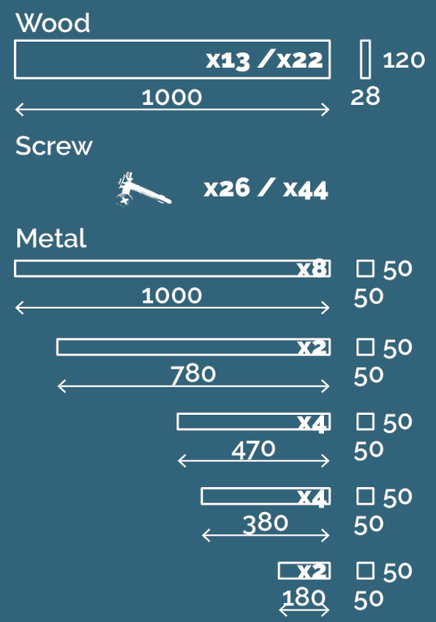
The central purpose of the bench is to provide seating in a pleasant setting with vegetation. Furthermore, the unit can be used in different configurations: alone, side to side or back to back.

The skeleton is made of square metal tubing, for lightweight and longer resistance.

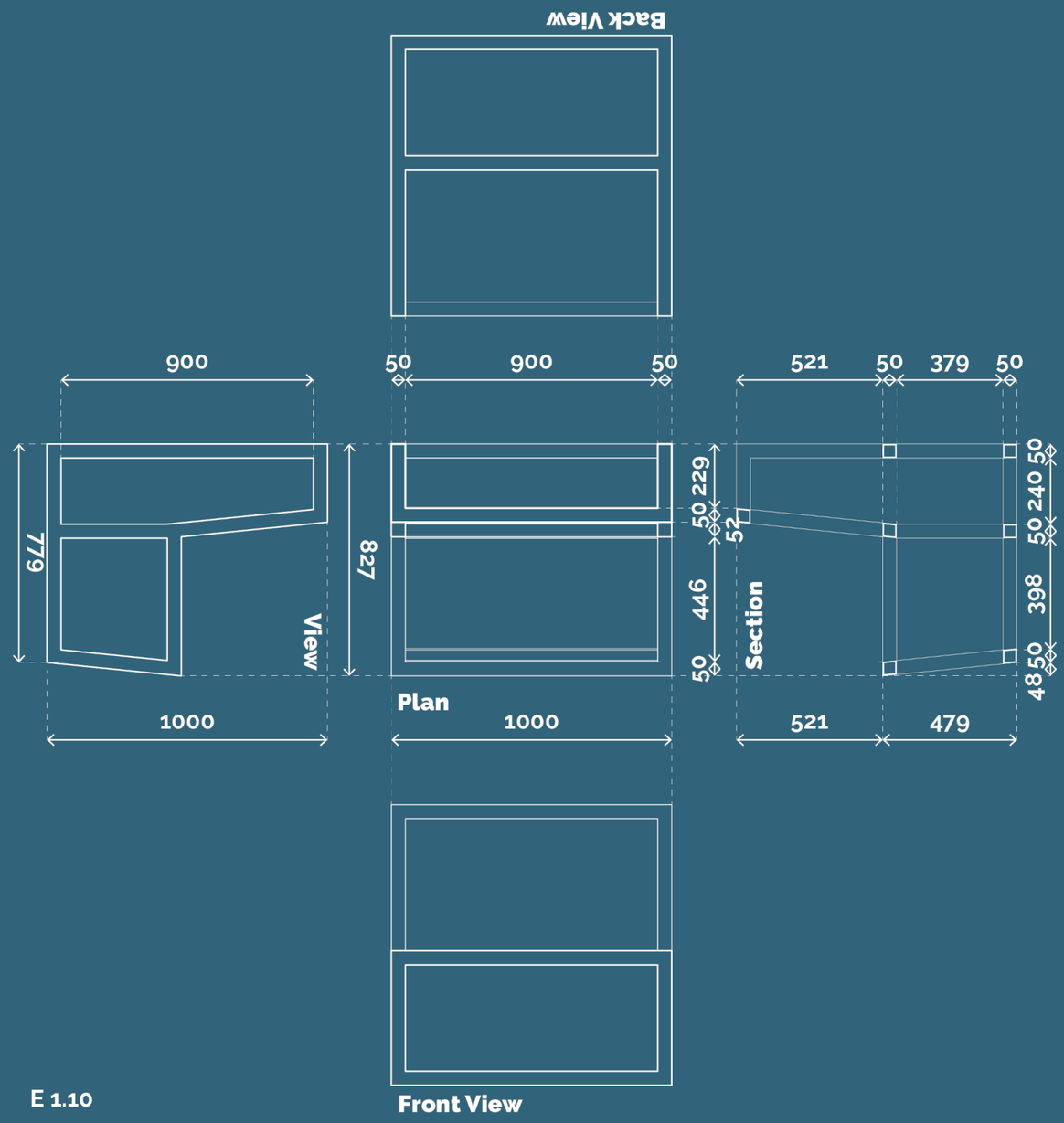
The cladding is made out of upcycled wood, for warmth and a more welcoming aesthetic.

The top part can house two different types of planters for vegetation. A small one, when the module is used as a barrier and has back cladding. And a big one, when two modules are combined back to back.

Materials



Blueprint Skeleton



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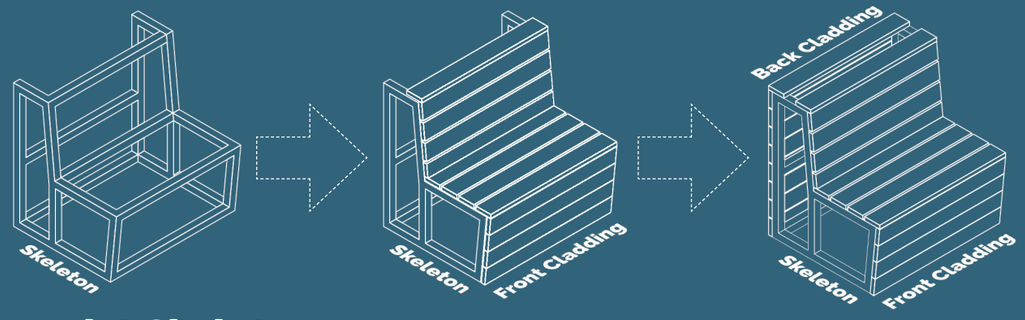
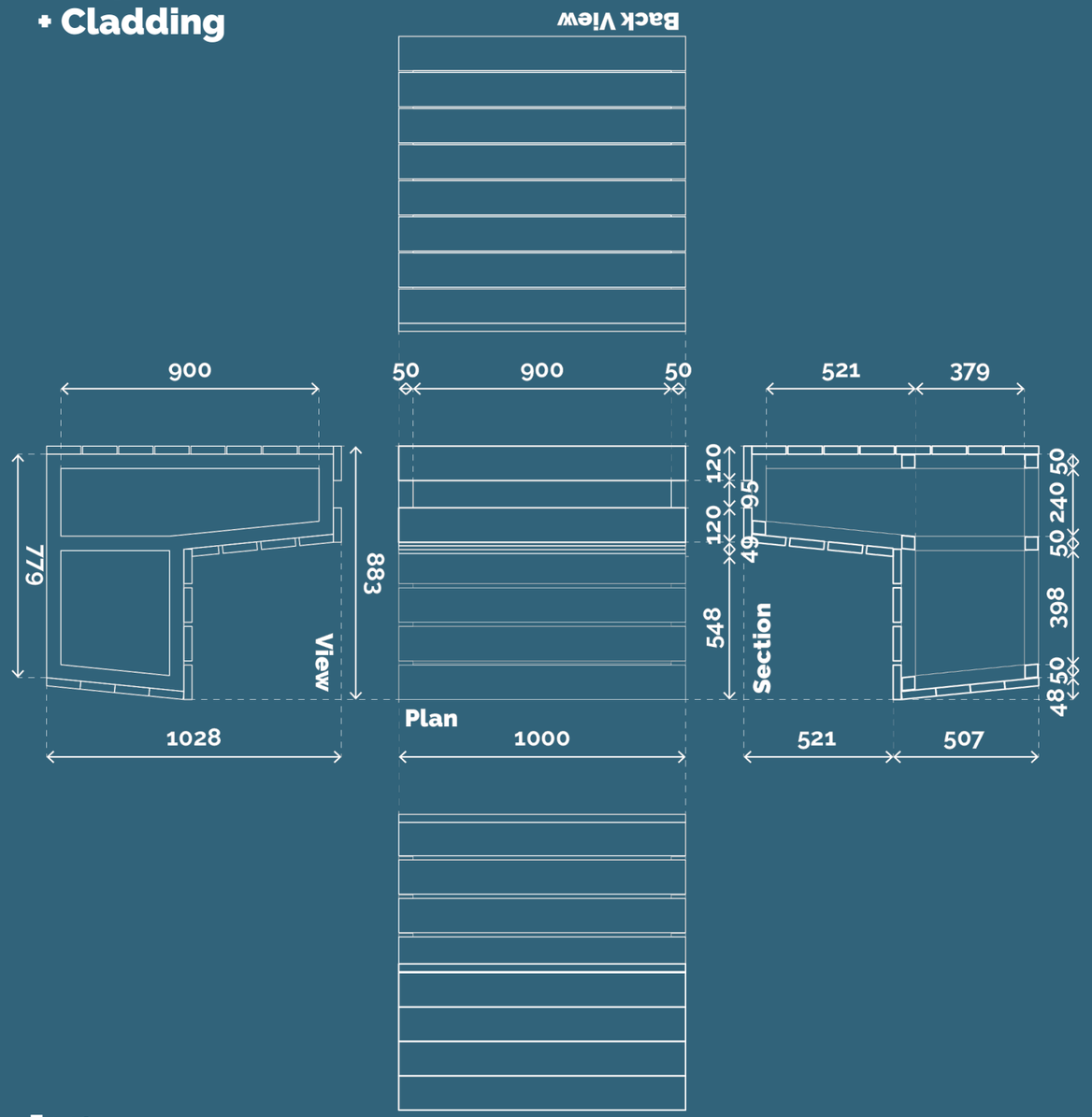
Bench Module - Composition



Blueprint Skeleton + Cladding



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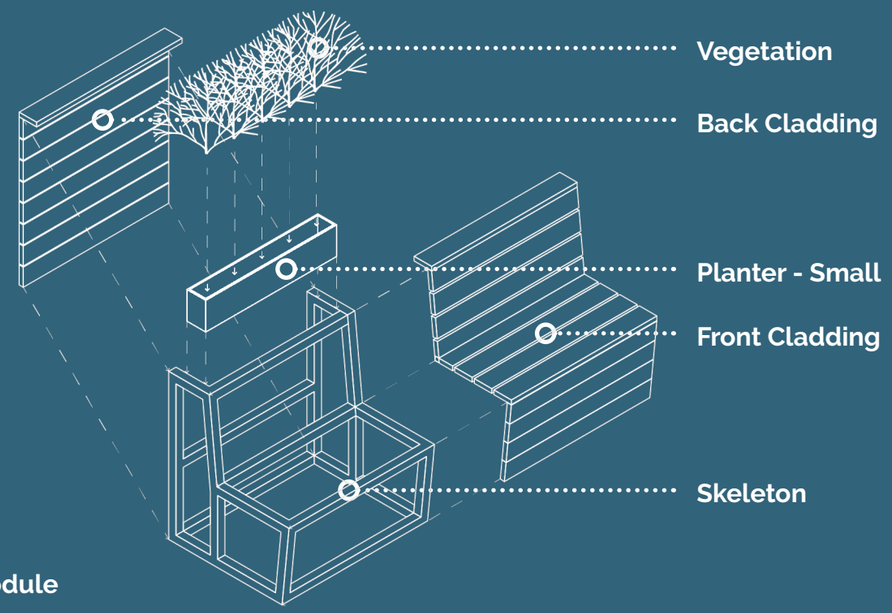
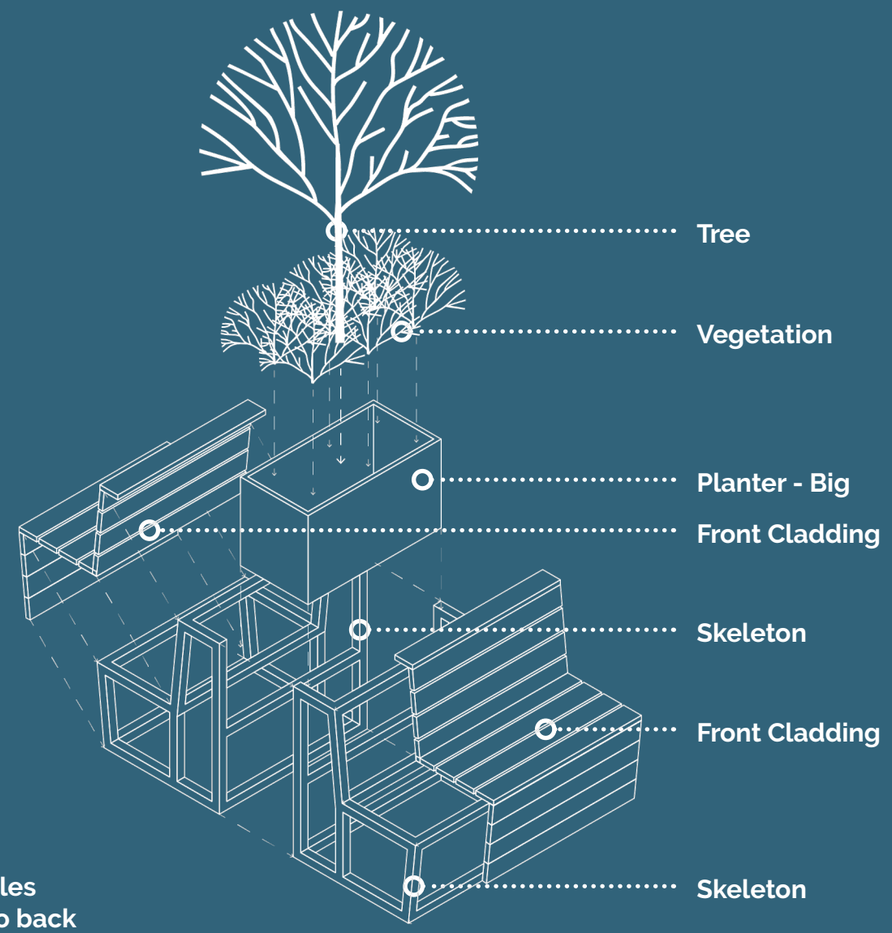
Axonometric



Barrier Bench module



Two Bench Modules
combined back to back

Planter Module

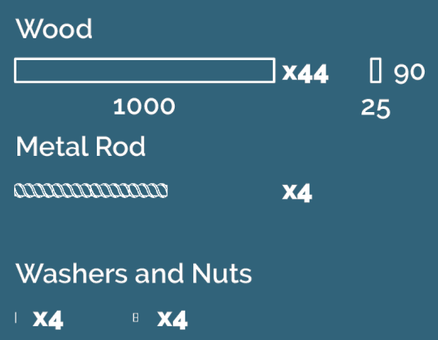
Description

The planter module is a system composed of 44 wooden planks, joined by four steel rods, which form a 1000 mm x 550 mm box planter.

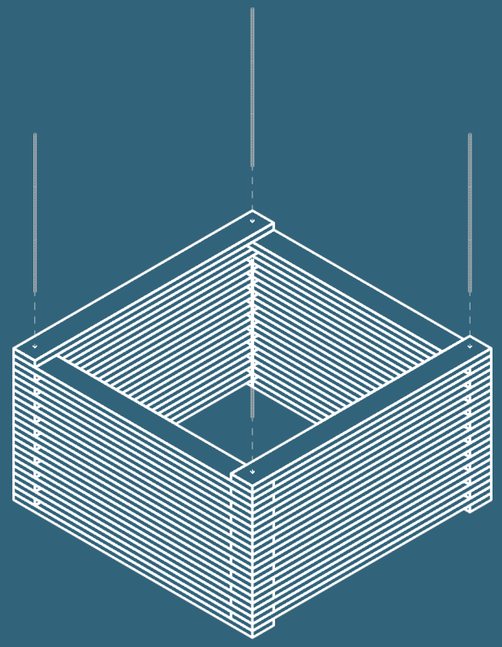
The central purpose of the planter is to provide space for vegetation in a quick and easy way.

The planter can be made out of upcycled wood, and allows for different aesthetics.

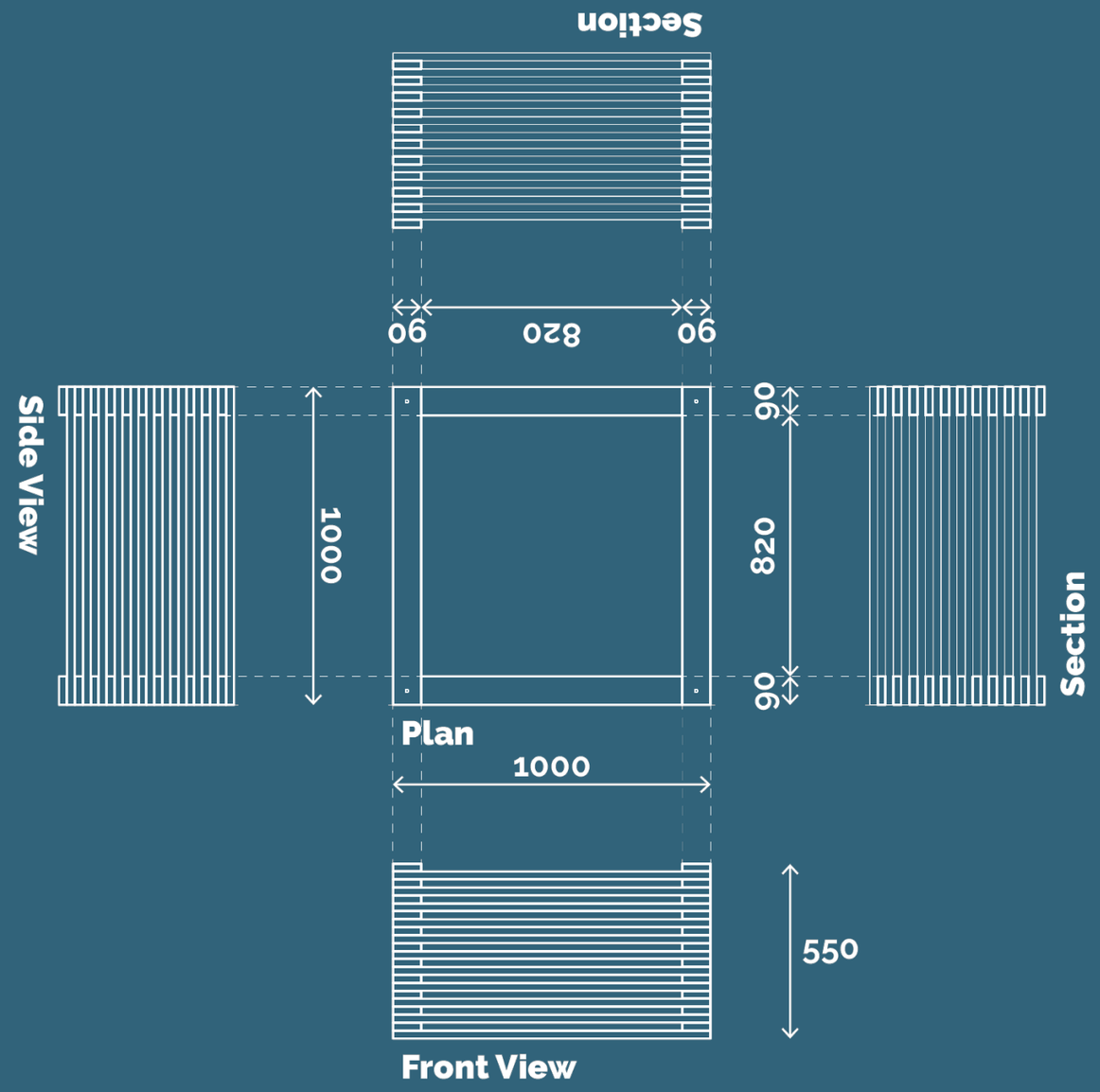
Materials



Axonometric



Blueprint



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Delivery

Transport and shipping account for 16,2% of global greenhouse gas emissions [3]. Hence, whenever proposing a project and before construction, it is crucial to think about how materials will be delivered. However, logistics not only means transit but packaging too.

Smart-packaging implies puzzling components together cleverly, thus saving space and transportation trips. Inspired by modularity and IKEA's packaging savvy, the components of the Mamlet's platform have been carefully designed in a manner that can fit in a volumetric package smaller than 1,6 m³, or 1250 x 1000 x 1250 mm.

This package includes all the ingredients to build a Mamlet's platform: 40 adjustable legs, 10 modular pre-holed base structures, 28 nuts, washers and bolts and 10 wooden floor modules. Moreover, a toolbox can be included in the parcel. These elements will not weigh more than 200 kg.

How are these packets delivered? The simple answer is by bicycle! How? **Cargo bikes!** There are different cargo bike alternatives and companies which could take over the task, two great alternatives that are already working in Malmö are Airmee and MoveByBike.

Pursuing a CO_2 and Greenhouse Gas Emissions reduction is mandatory for our future, and promoting green and active mobility is a great plus!

SMART PACKAGING

+

SMART DELIVERY

=

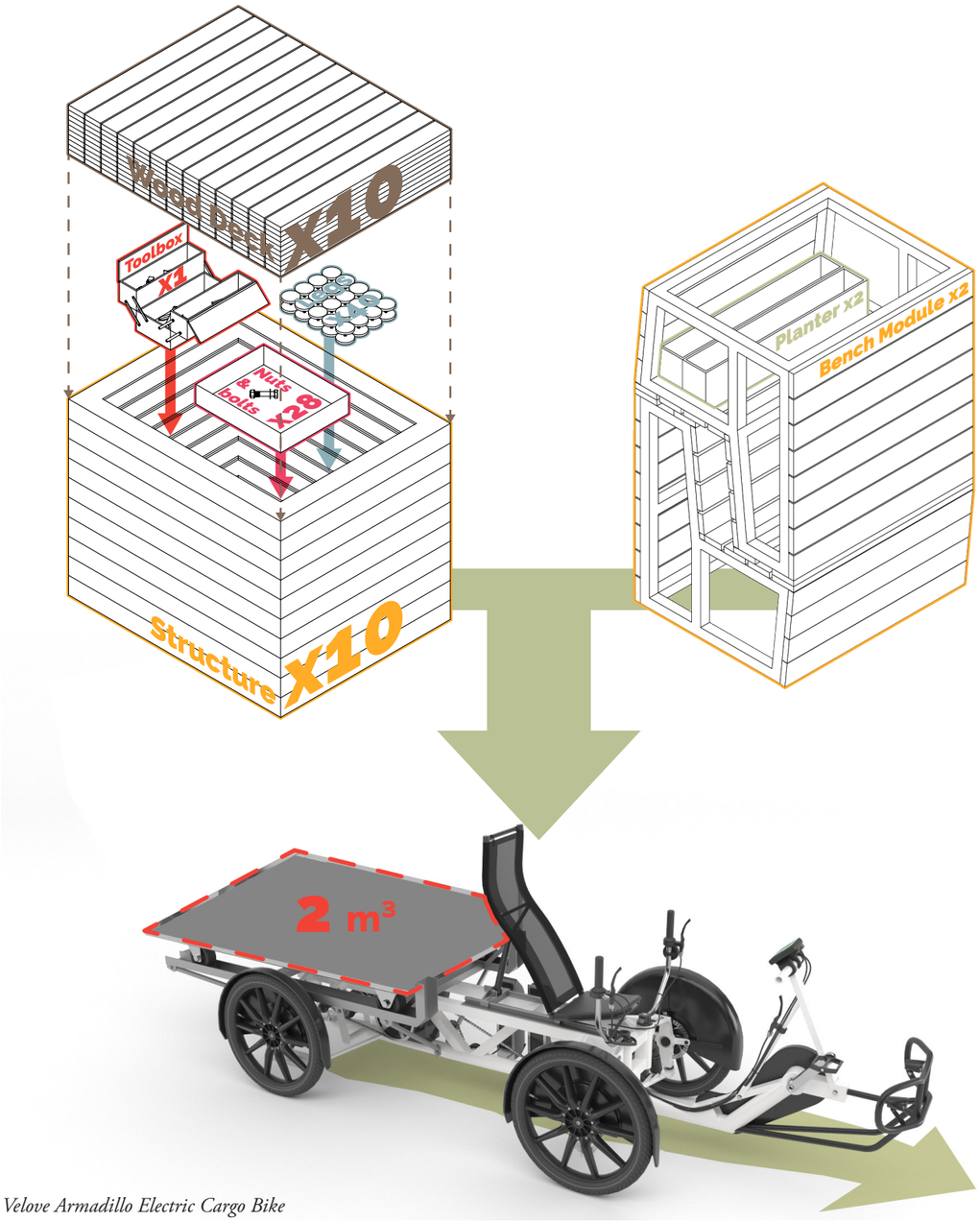
LESS CO_2 & GREENHOUSE GAS EMISSIONS

BASE MODULE

1.56 m³

BENCH MODULE

1.36 m³

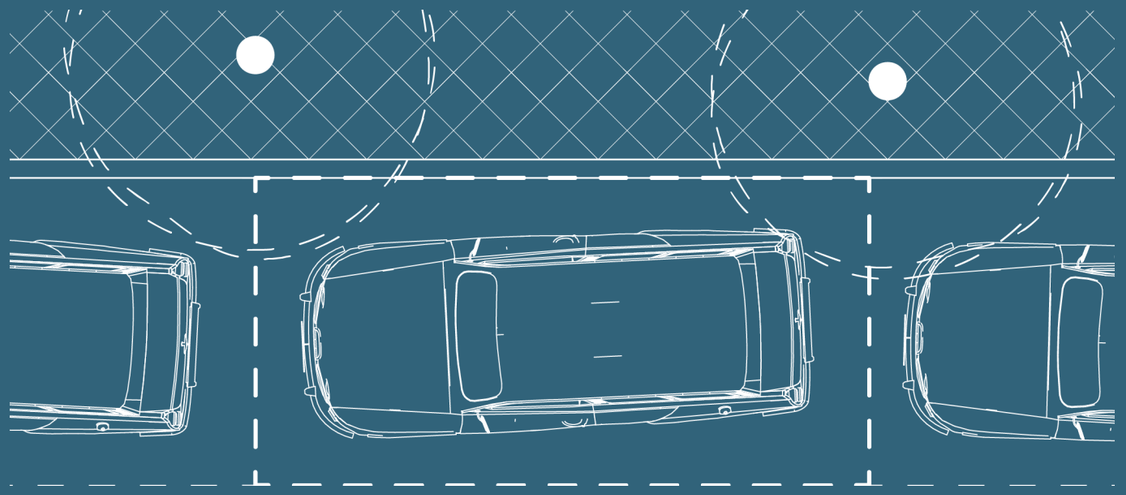


Velove Armadillo Electric Cargo Bike

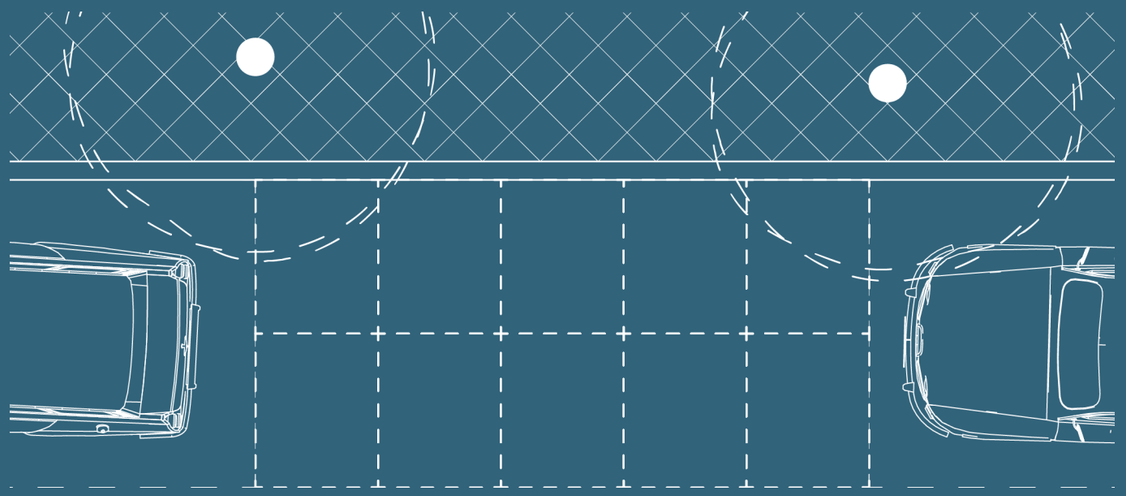
Execution

Descriptive process of the execution of a Mamlet on site

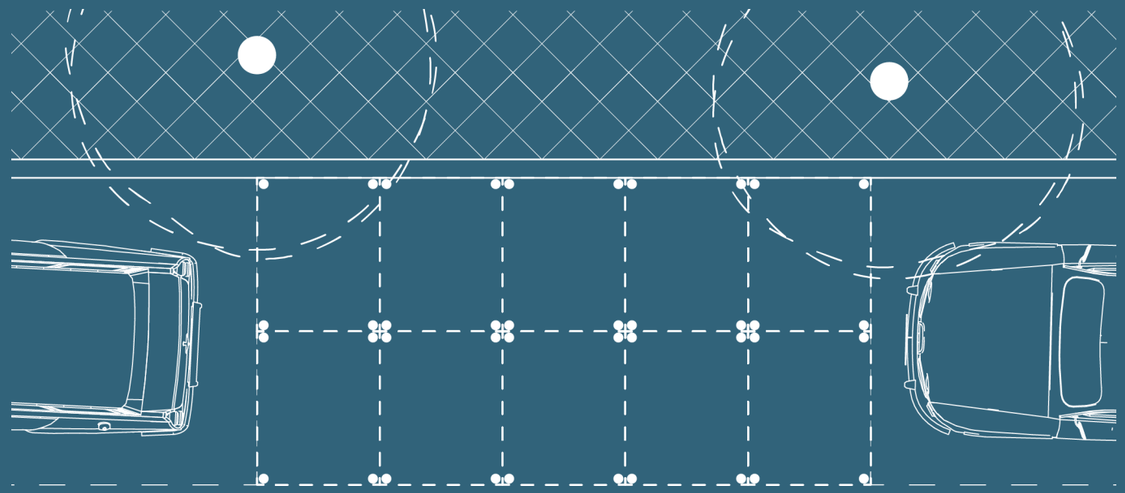
1. Select Street Car Parking Space



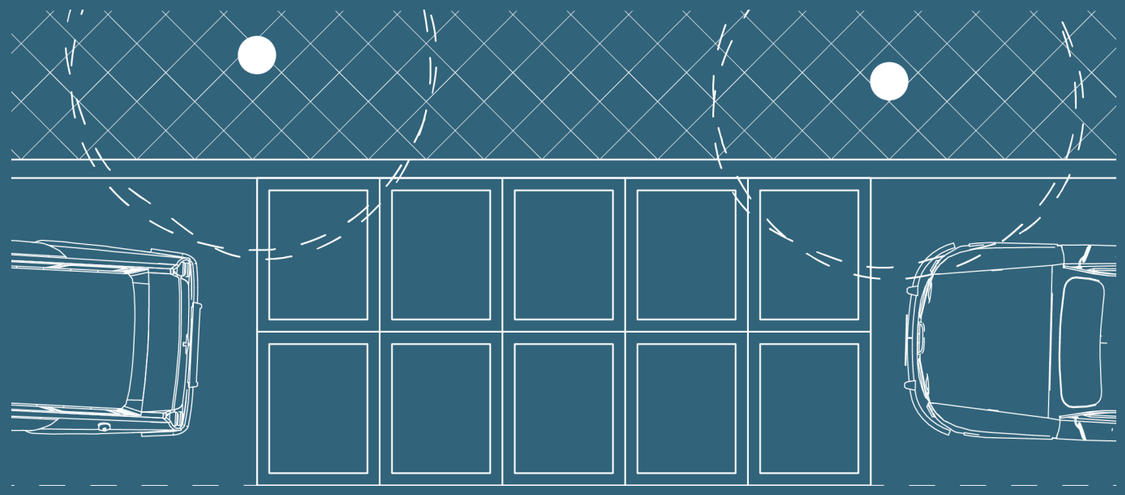
2. Divide Space in Modules



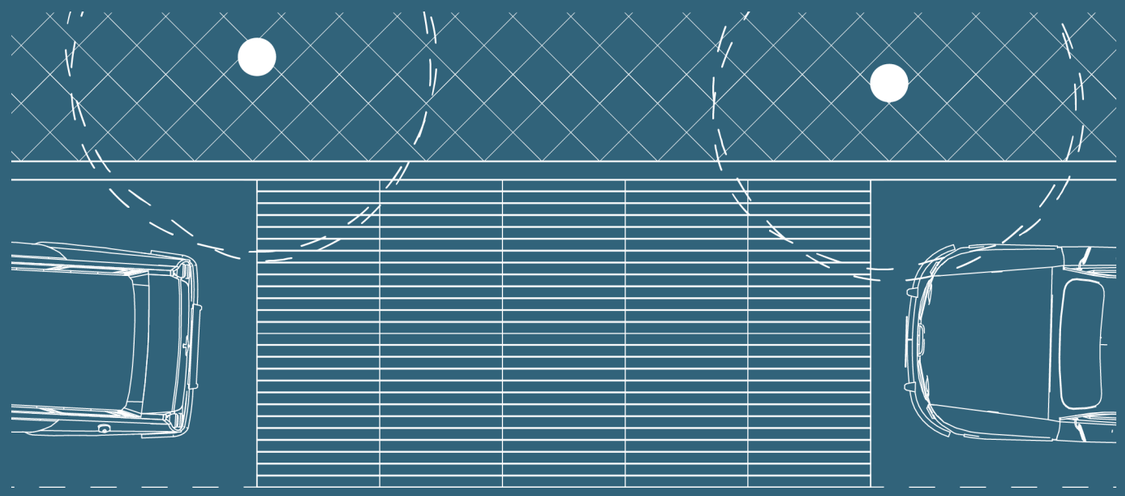
3. Place legs



4. Add structure and adjust leg level to sidewalk

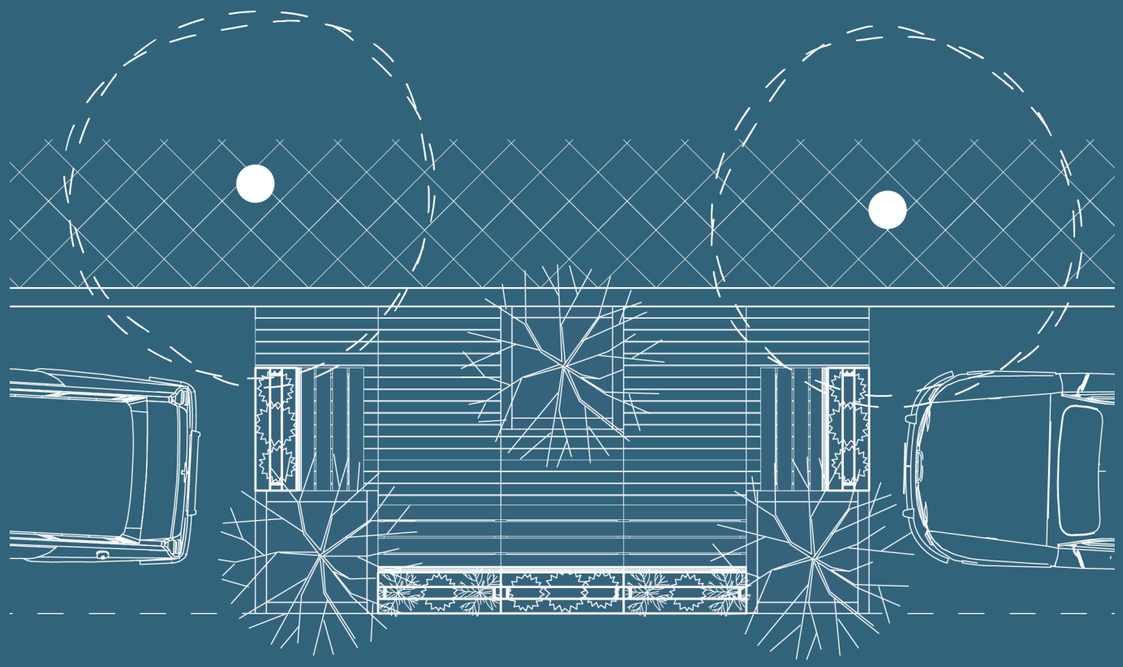


5. Lay-down Mamlet's floor

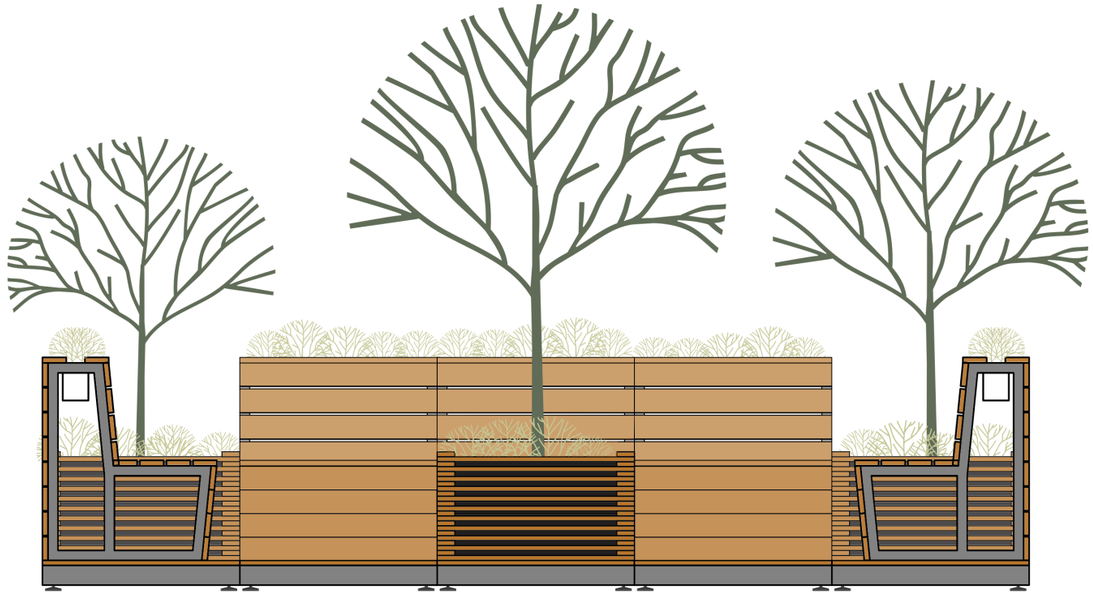


Mamlet A

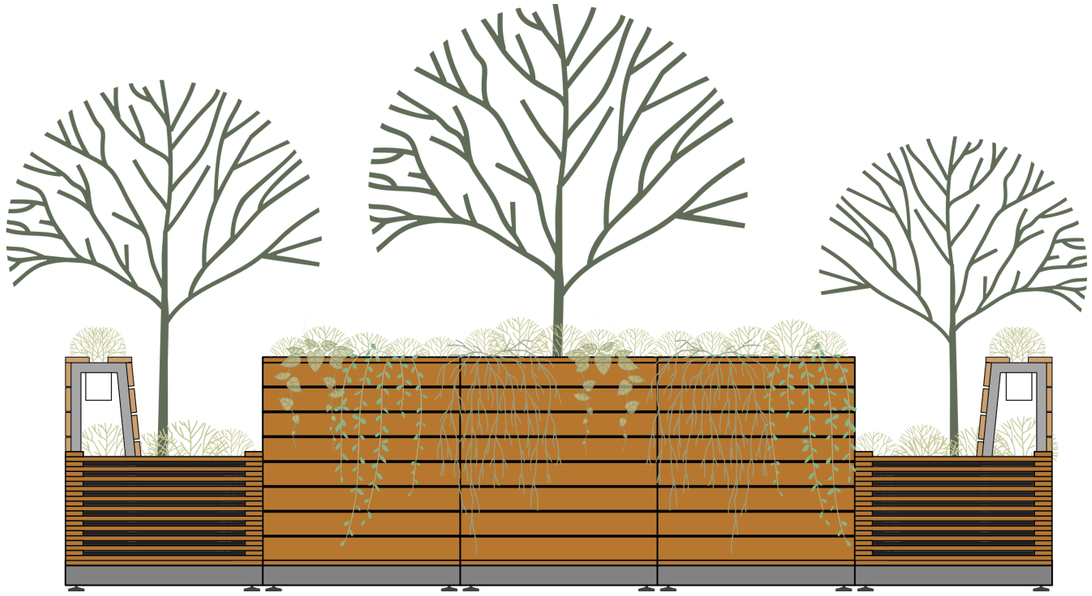
Mamlet with seating and vegetation, enclosed from the street



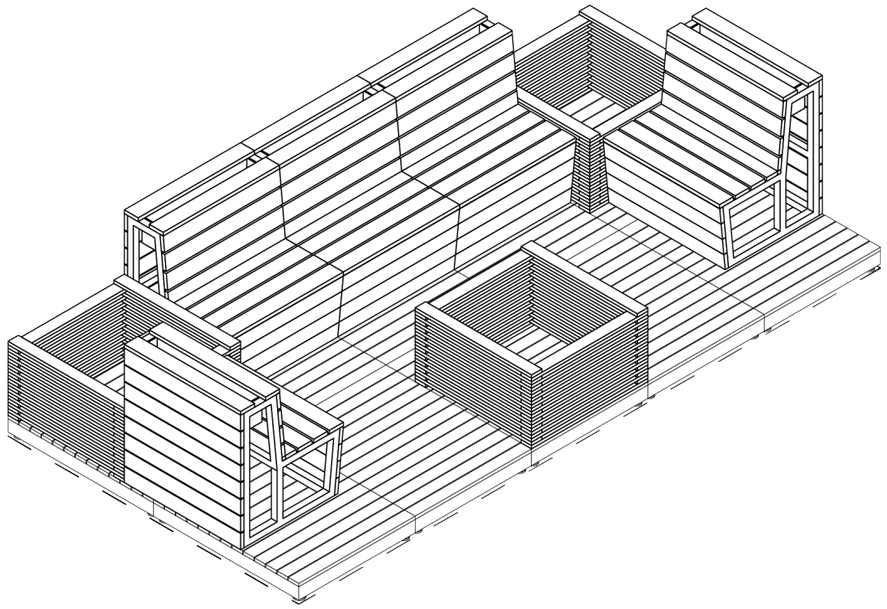
Plan



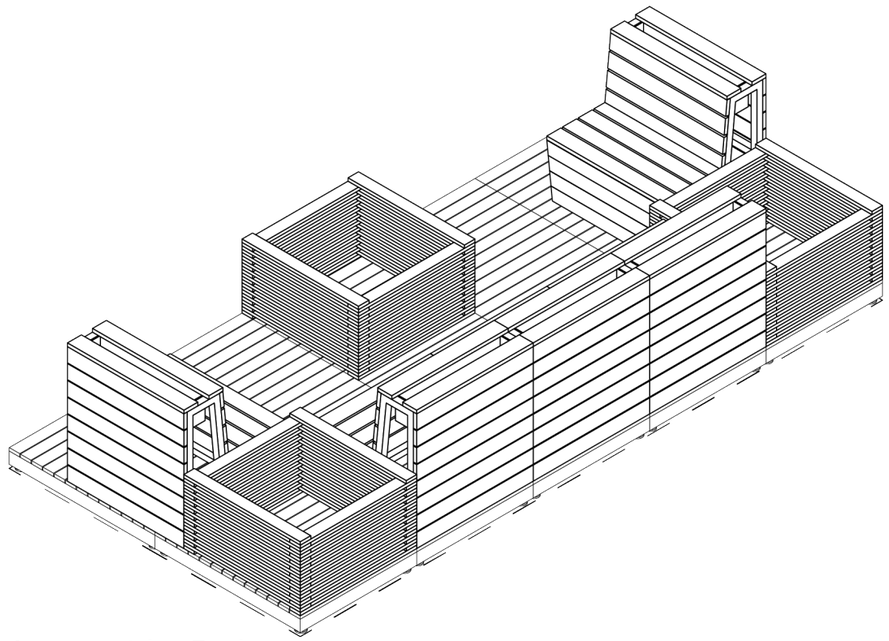
Front View



Back View



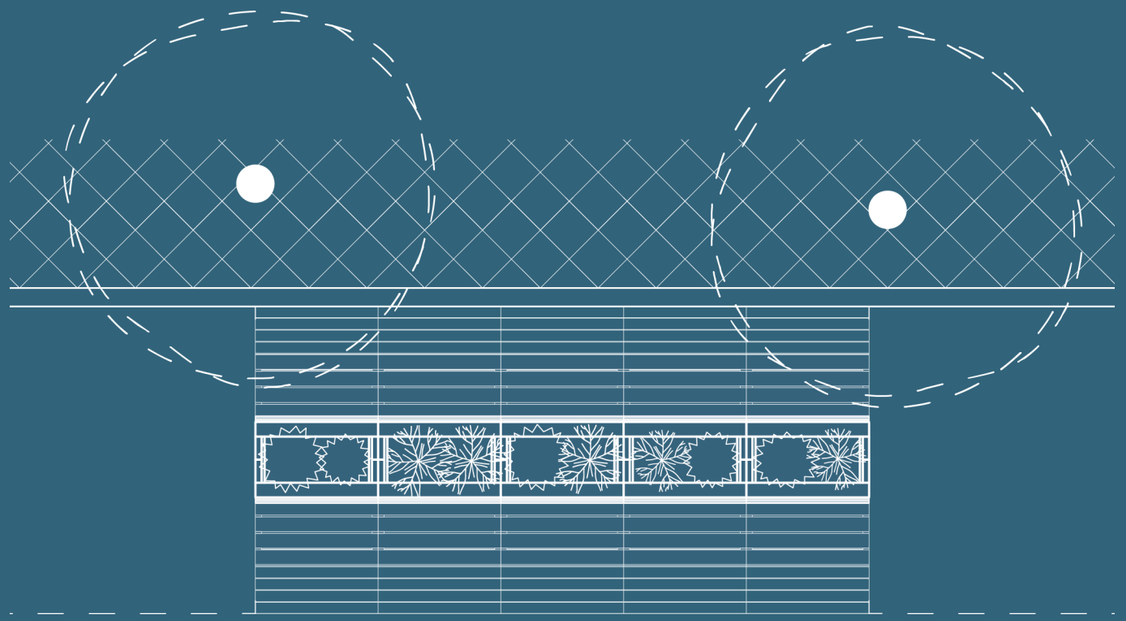
Axonometric - Front



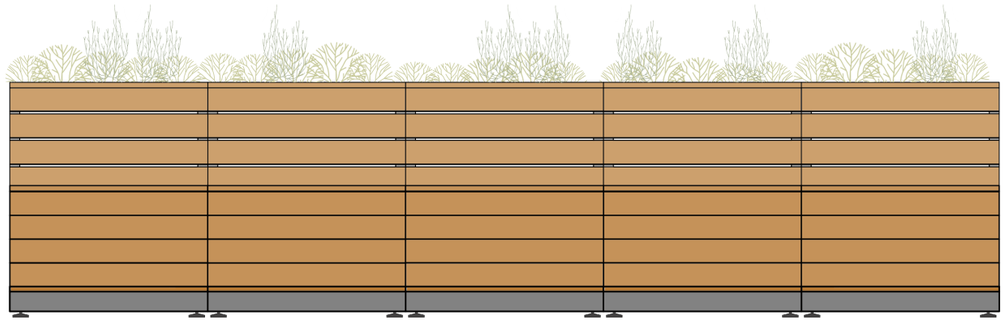
Axonometric - Back

Mamlet B

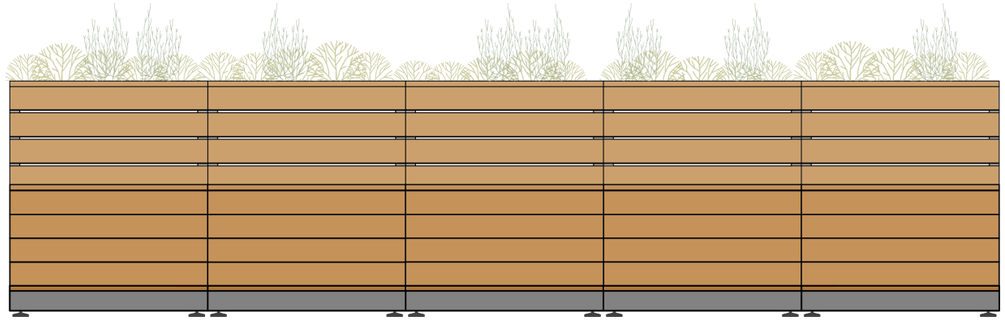
Mamlet with seating and vegetation, opened to the sidewalk and street



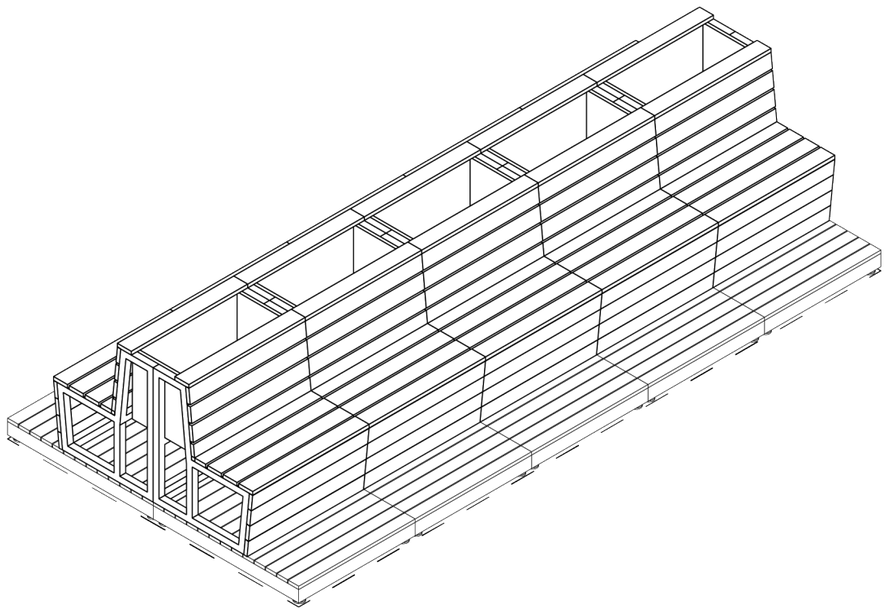
Plan



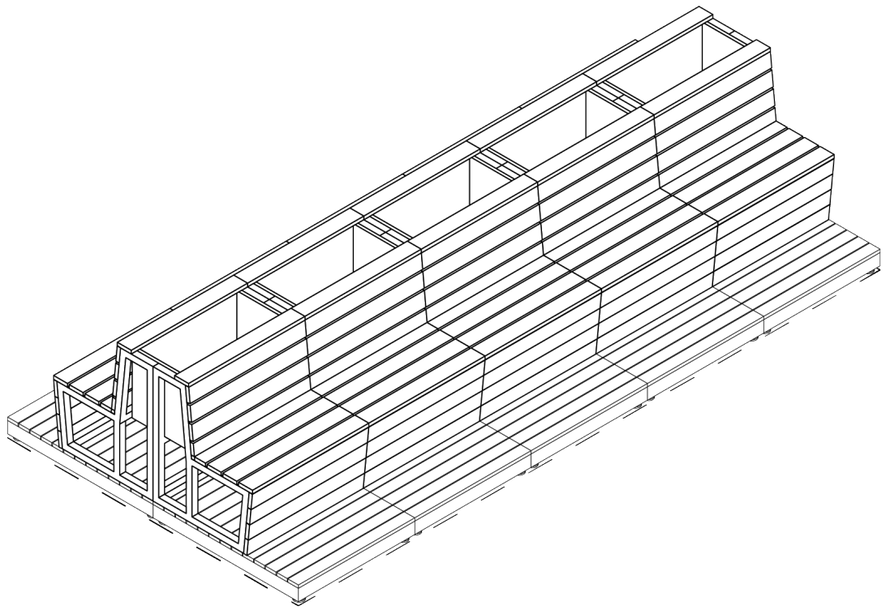
Front View



Back View



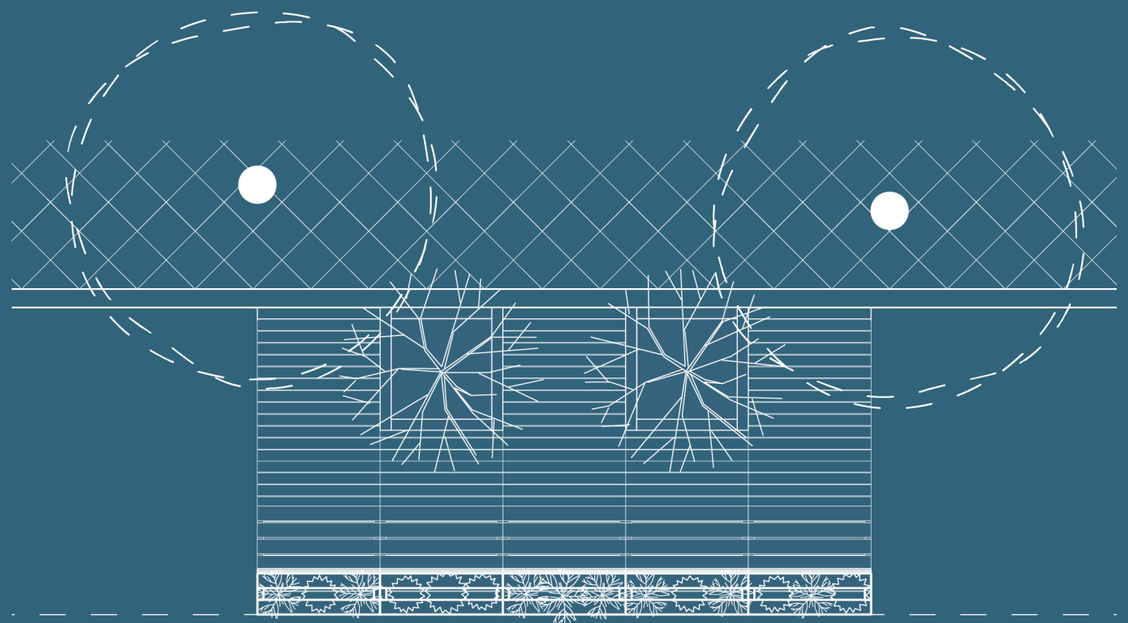
Axonometric - Front



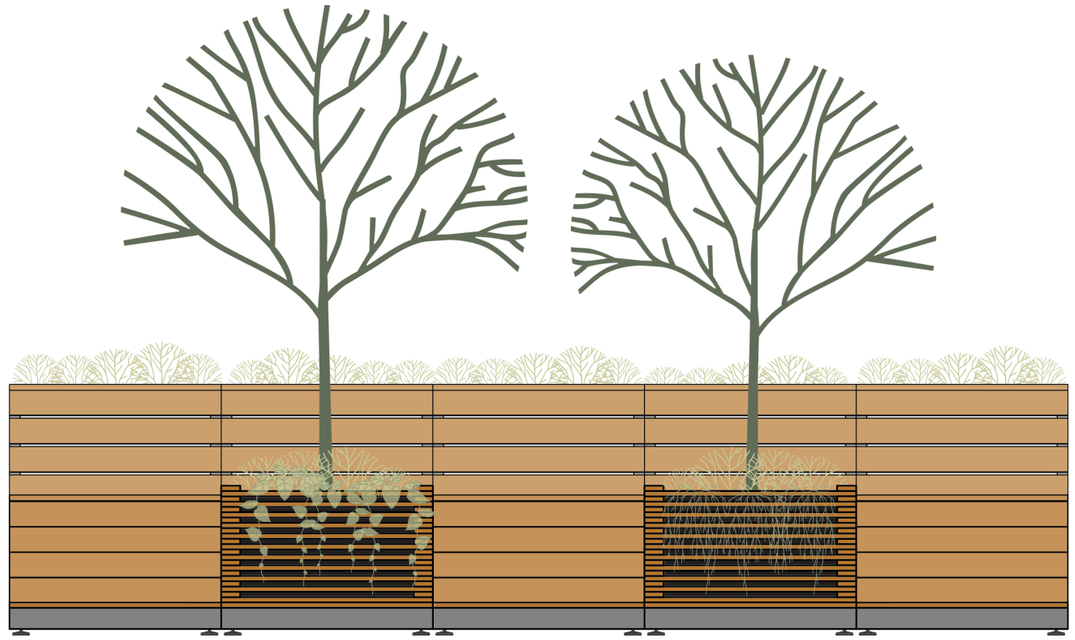
Axonometric - Back

Mamlet C

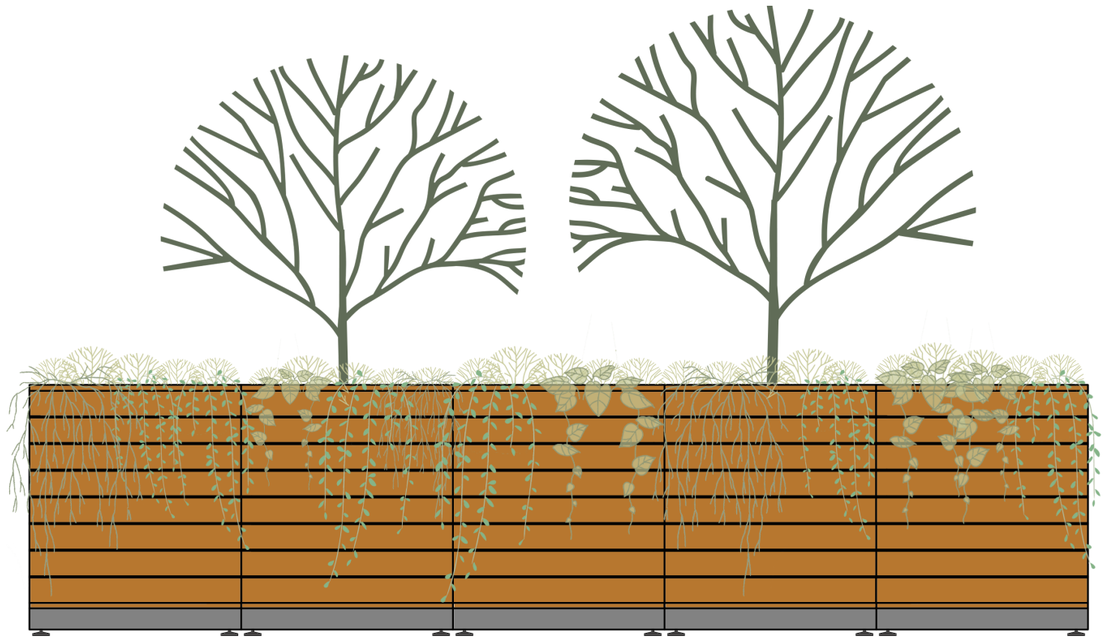
Mamlet with seating and vegetation, opened to the sides and enclosed from the street



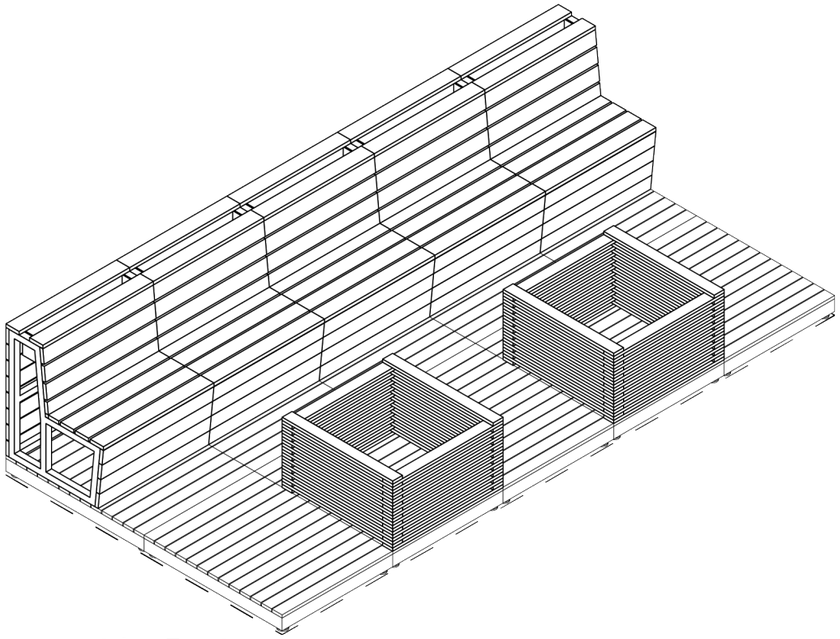
Plan



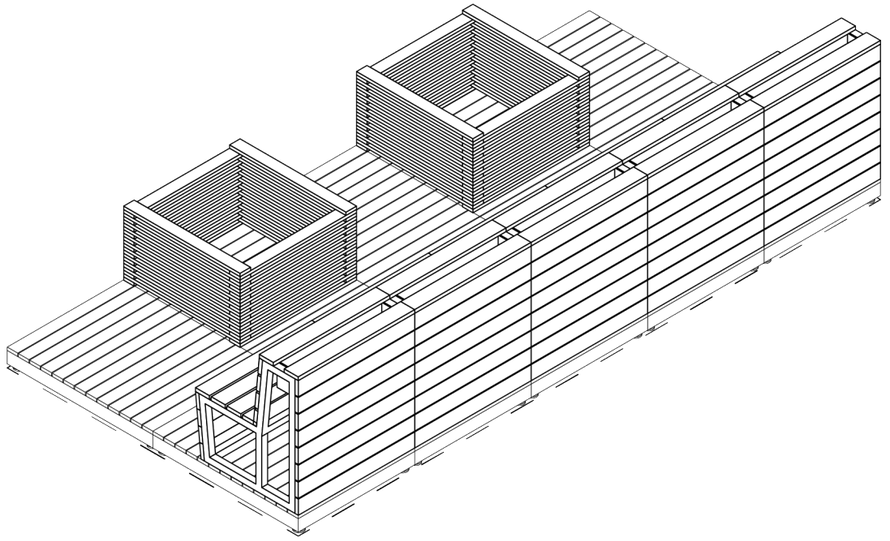
Front View



Back View



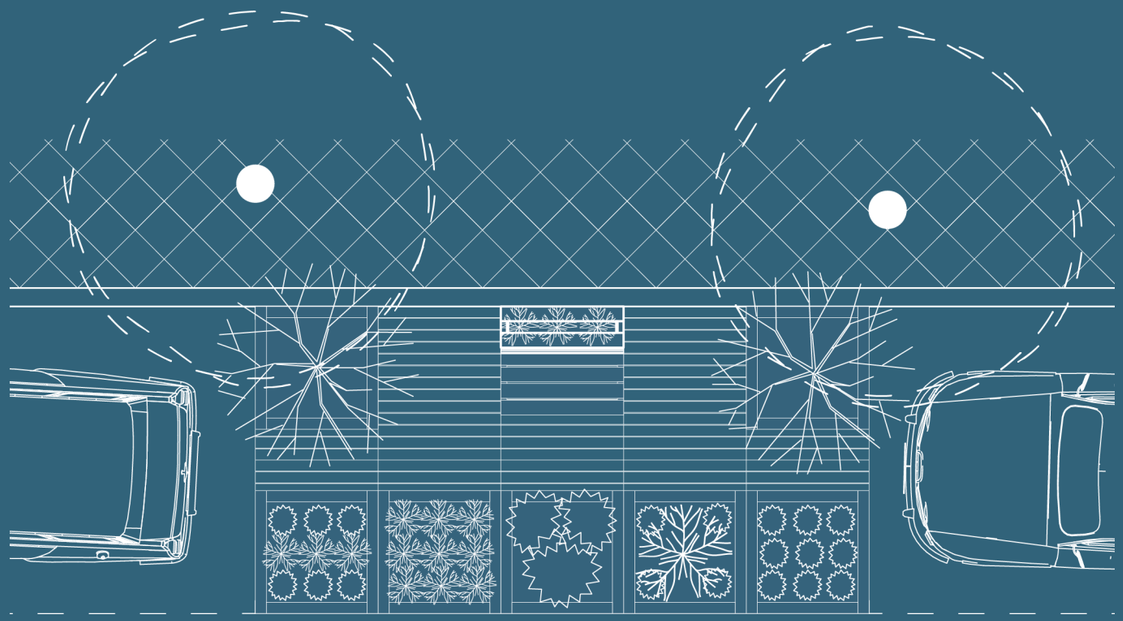
Axonometric - Front



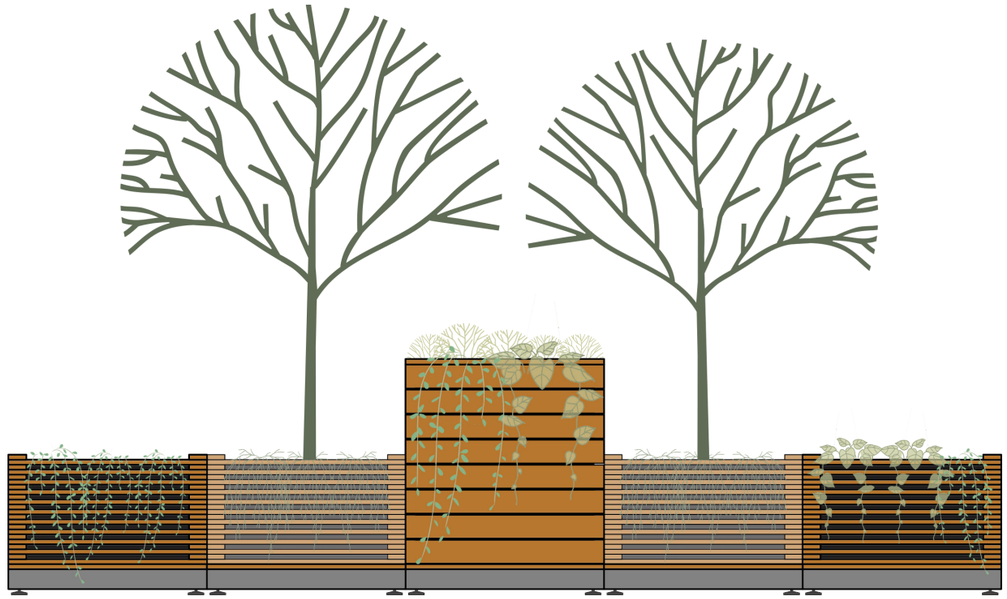
Axonometric - Back

Mamlet D

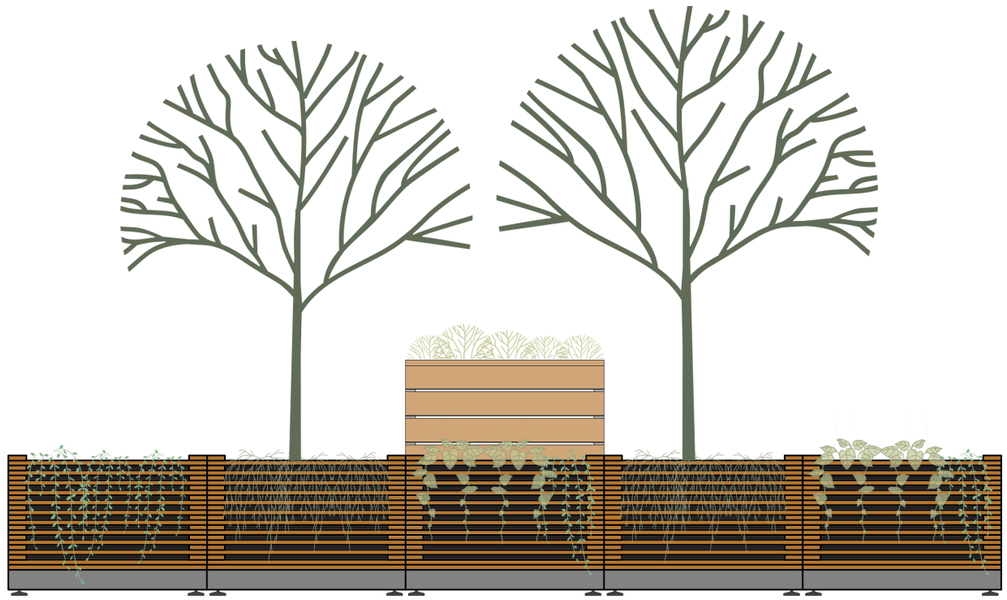
Mamlet for urban farming



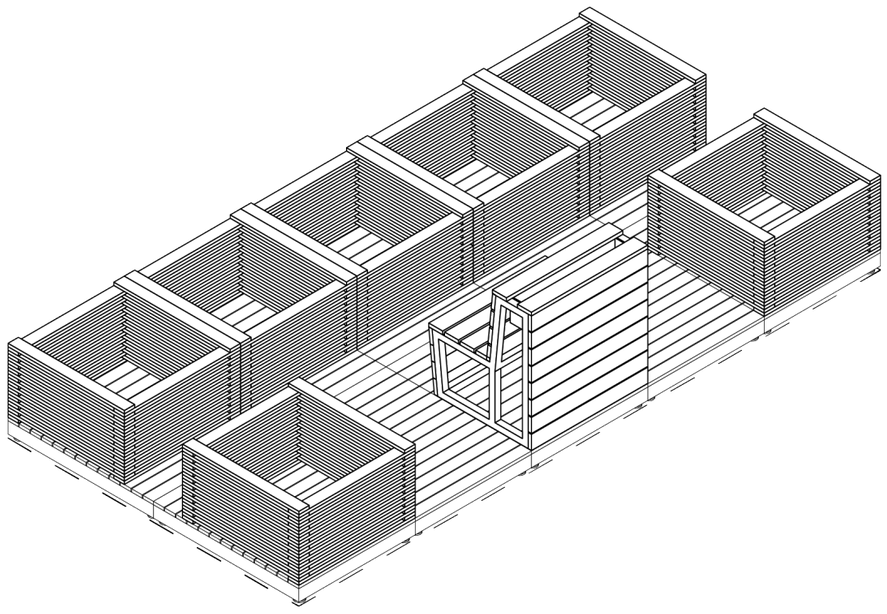
Plan



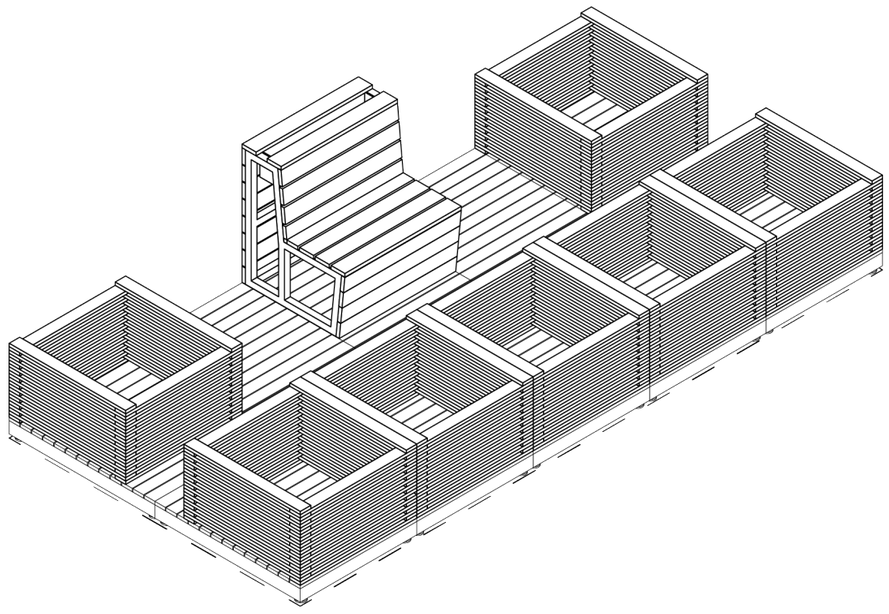
Front View



Back View



Axonometric - Front



Axonometric - Back

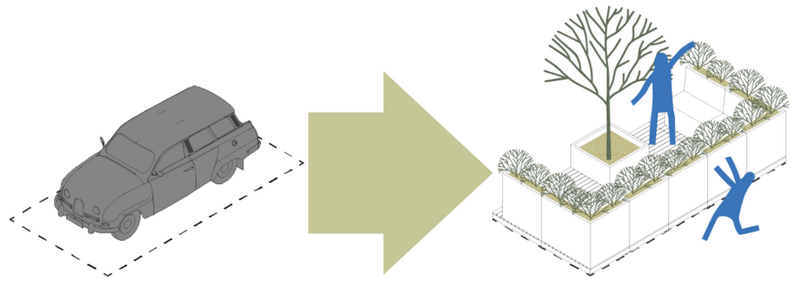
Timeline

The Mamlet timeline explains the process taking place during a Mamlet's lifetime. Starting with analysis, proceeding with construction, pausing to reflect under the evaluation period, and finalising in decision making, wishing for behavioural change and better cities.

A Mamlet also intends to compile data regarding city life and urban space usage through a democratic and inclusive approach. Aiming to promote community building and encourage sustainable innovation. Therefore, a Mamlet should be evaluated after a certain period to understand its benefits and societal change.

As with the project Sommargator in Malmö, a pilot testing period is suggested for a Mamlet implementation. This should last at least 12 months to measure the usage during the different seasons of the year.

In conclusion, a Mamlet can be both a long-term or a temporary solution which after a pilot period can draw information to help cities do better democratic-decision-making and urban transformation. Hence, parklets are conceived as a set of tools rather than a "quick fix", resulting in more healthy, democratic and inclusive cities.



1. ANALYSIS

The time that takes to map, assess and draft a Mamlet proposal. Thanks to the *"Urban Toolbox"* and *"Mamlet module catalogue"*, this procedure should be nimble.

2. EXECUTION

This entails the time needed to order the components, logistics and final on-site assemblage of a Mamlet. This process should be swift and allow a Mamlet to be operable within a week.

3. UPKEEP

During its existence, a Mamlet should be maintained and cleaned. Every six months, with the change of season, a quick check-up should be carried out. After a year it would be necessary to do an entire inspection and make repairs if needed.

4. EVALUATION

After the first 12 months, an evaluation should take place. The collected data should be analysed and help determine if the Mamlet has served its purpose or not.

5. DECISION MAKING

Once the evaluation has been reported, decision-making starts.

The possible outcomes are:

- Prolonging the Mamlet in time
- Make a Mamlet a permanent change in the urban fabric
- Make adjustments to the Mamlet from the evaluating feedback
- Find a new location for the Mamlet

PROPOSAL

Möllevångengen

LOCATION

SELECTED SITE

Location

Möllevångstorget between Bergsgatan and Claesgatan

Nº of Parking Spaces

South Side 75 m = 15
North Side 20 m = 4

Key Elements

Restaurants / Cafés
Many Street Car Parking Spaces
Plaza

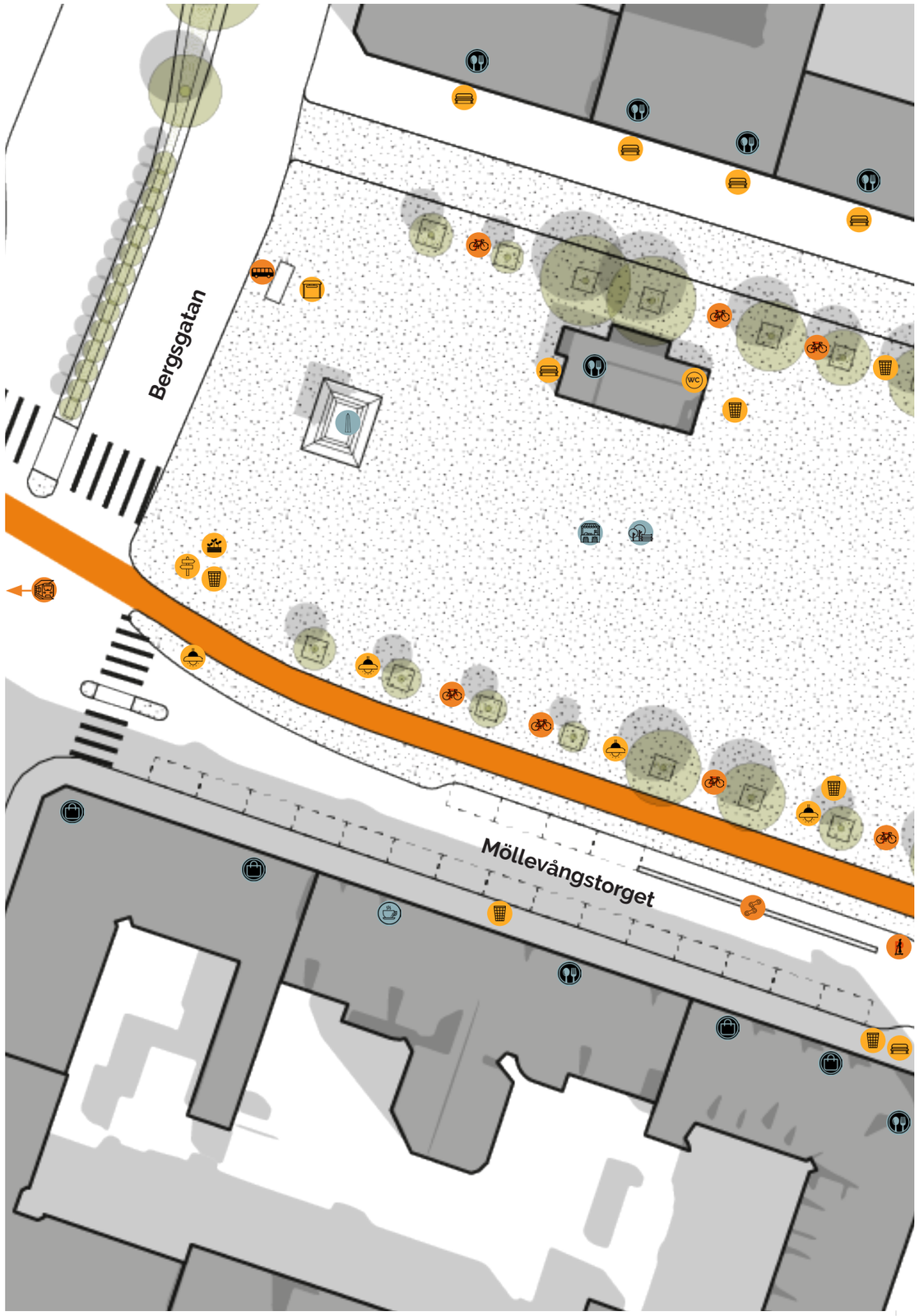
URBAN LANDSCAPE

URBAN MOBILITY

URBAN FURNITURE

WHAT DOES THE URBAN SPACE LOOK LIKE?

Möllevångstorget, between Bergsgatan and Claesgatan, is a busy vehicular street. Despite the copious amount of restaurants, cafés, and shops, there is a lack of public benches and vegetation in a 100 m radius around the square.



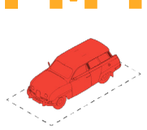
Möllevångstorget - 1.500

3 PROPOSAL

WHAT WOULD MAKE THE URBAN SPACE BETTER?

Adding Mamlets would reduce vehicular speed and parking, helping to transform this area into a more human-driven space. Moreover, these changes could aid in developing a bicycle street in the future, expanding Möllevångstorget and reducing noise levels and CO_2.

IMPACT



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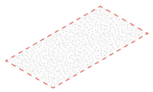


+ 237.5 m²

8

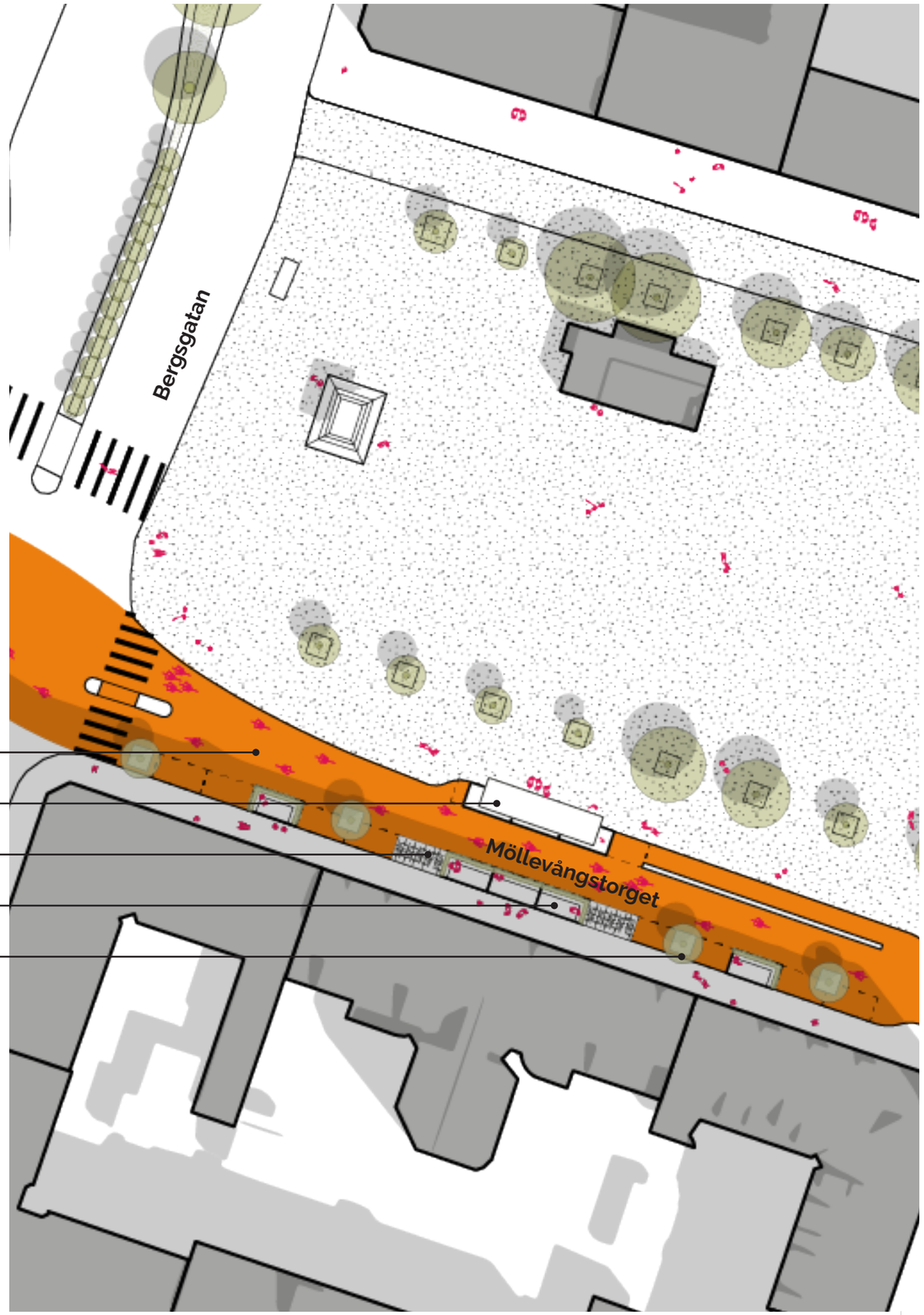
New cycling St

Petanque Court

Bicycle Parking

Mamlets

New Trees



Möllevångstorget - 1.500

MÖLLEVÅNGSTORGET

MÖLLEVÅNGSTORGET 3

MÖLLEVÅNGSTORGET 1

Rådmansvången

LOCATION

SELECTED SITE

Location

Smedjegatan between Nikolaigatan and Södra Förstadsgatan

Nº of Parking Spaces

South Side 70 m = 14
North Side 0 m = 0

Key Elements

Restaurants / Cafés
Many Street Car Parking Spaces
Plaza

URBAN LANDSCAPE

URBAN MOBILITY

URBAN FURNITURE

WHAT DOES THE URBAN SPACE LOOK LIKE?

Smedjegatan between Nikolaigatan and Södra Förstadsgatan, is an in-between vehicular street characterised by ICA Söder (Supermarket) and Polonus (Polish deli). This street is located between South Triangeln Station and Möllevångstorget.

Smedjegatan - 1.500

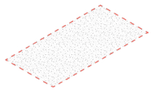
3 PROPOSAL

WHAT WOULD MAKE THE URBAN SPACE BETTER?

Adding Mamlets and cycling parking would reduce street car parking and give this area a refreshed look reflecting the north side of the street. These changes could spread in developing a bicycle street in the future that connects South Triangeln Station and Möllevångstorget, helping make a lively street for neighbours and commuters. Moreover, reducing noise levels and CO_2.

IMPACT

- 7



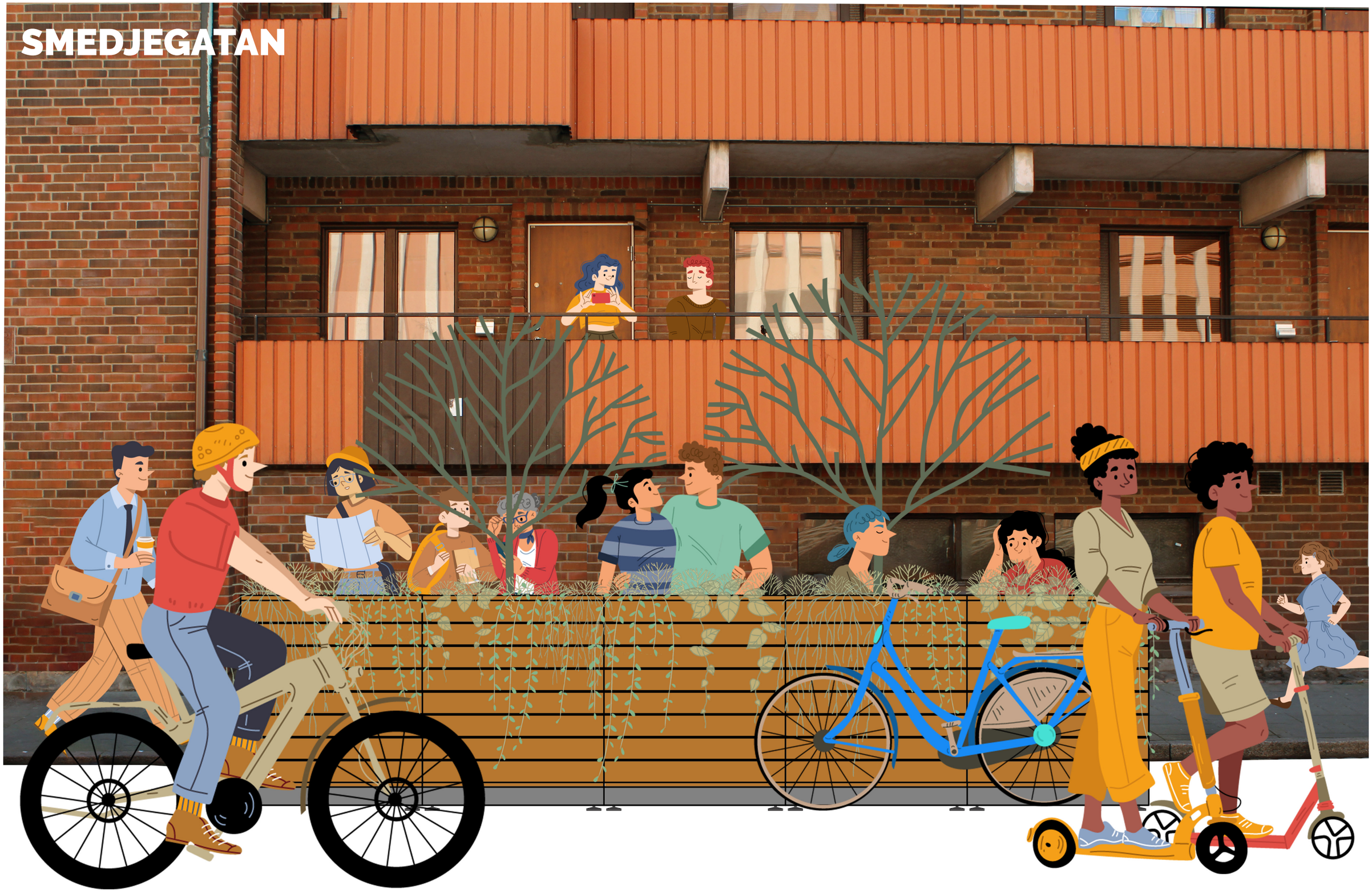
+ 87.5 m²

3

Smedjegatan - 1.500

SMEDJEGATAN 6

SMEDJEGATAN



SMEDJEGATAN 10

RÅDMANSGATAN 15

Davidshall

LOCATION

SELECTED SITE

Location

Davidshallsgatan between Östra Rönneholmsvägen and Holmgatan

Nº of Parking Spaces

West Side 100 m = 20
East Side 0 m = 0

Key Elements

Restaurants / Cafés
Many Street Car Parking Spaces
Plaza

URBAN LANDSCAPE

URBAN MOBILITY

URBAN FURNITURE

WHAT DOES THE URBAN SPACE LOOK LIKE?

Davidshallsgatan is a public transport-oriented street which connects Gustav Adolfs Torg and Triangeln. This street was recently refurbished in 2022, adding new one-way bicycle lanes, bus stops, and urban furniture. However, no vegetation has been added to the street, the west side is full of street car parking space, and the bicycle lane on this side is confusing and dangerous.

Davidshallsgatan - 1.500

3 PROPOSAL

WHAT WOULD MAKE THE URBAN SPACE BETTER?

Closing Davidshallgatan to private vehicular transit would make this street an active mobility-oriented backbone connection between the north and south of Malmö's inner city. Adding Mamlets on the west side would provide restaurants and pedestrians with valuable outdoor seating privileged by direct sun. Furthermore, Mamlets would bring new green to this otherwise grey street.

IMPACT

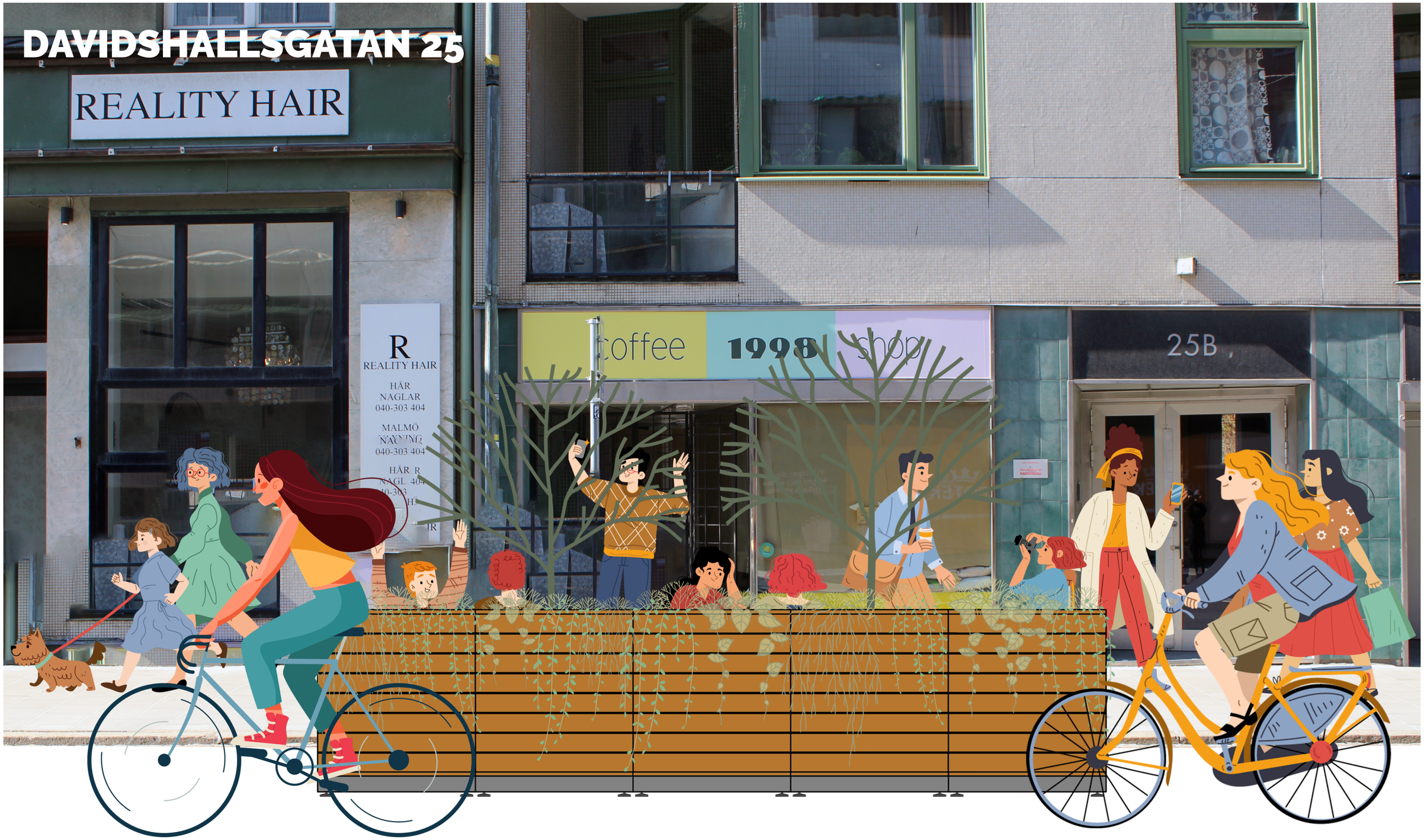
- 8

+ 100 m²

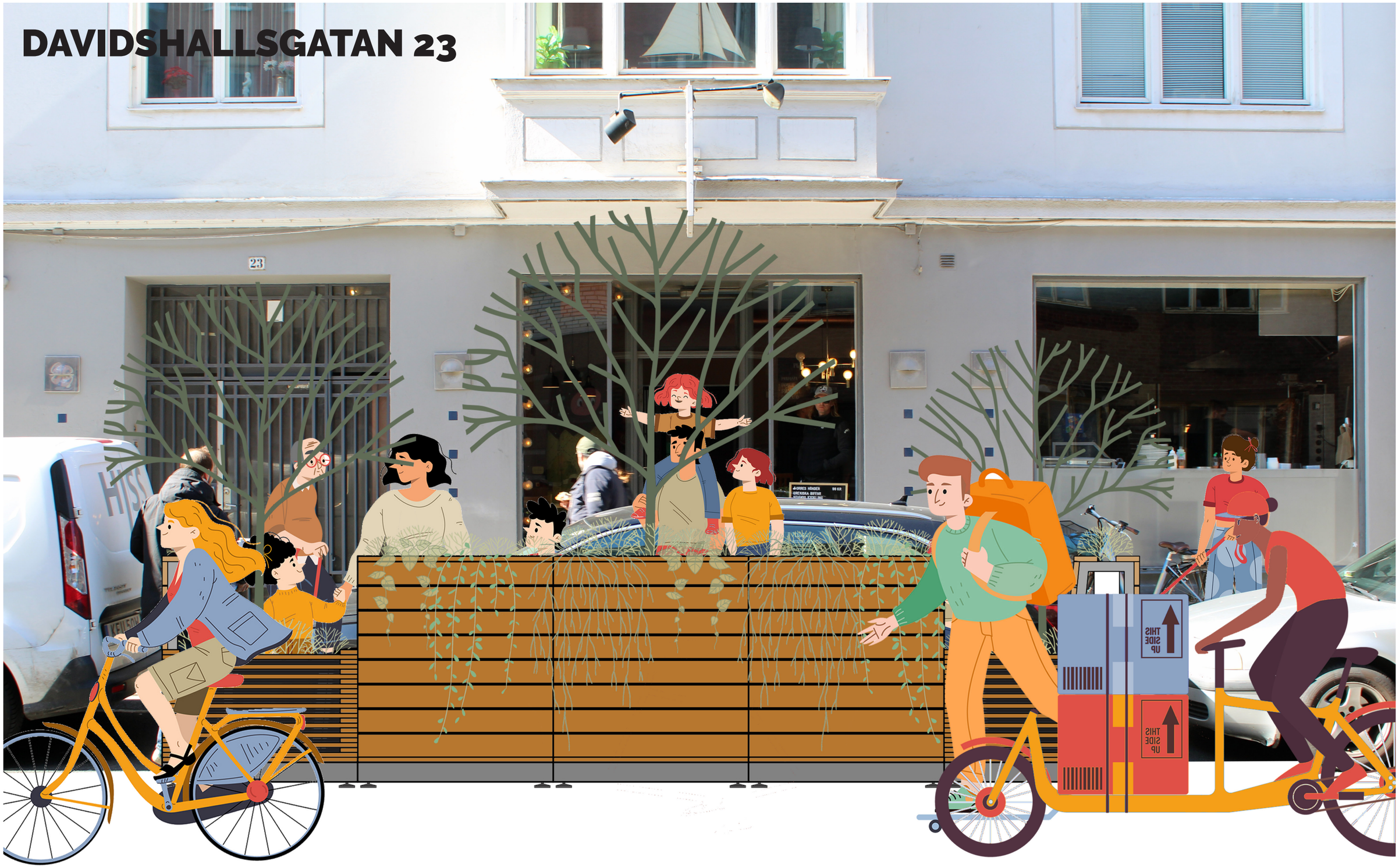
6

Davidshallsgatan - 1.500

DAVIDSHALLSGATAN 25



DAVIDSHALLSGATAN 23



DAVIDSHALLSGATAN 21

DAVIDSHALLSGATAN 7

Gamla Staden

LOCATION

SELECTED SITE

Location

Engelbrektsgatan between Stora Nygatan and Grynbodgatan

Nº of Parking Spaces

West Side 45 m = 9
East Side 0 m = 0

Key Elements

Restaurants / Cafés
Many Street Car Parking Spaces
Plaza

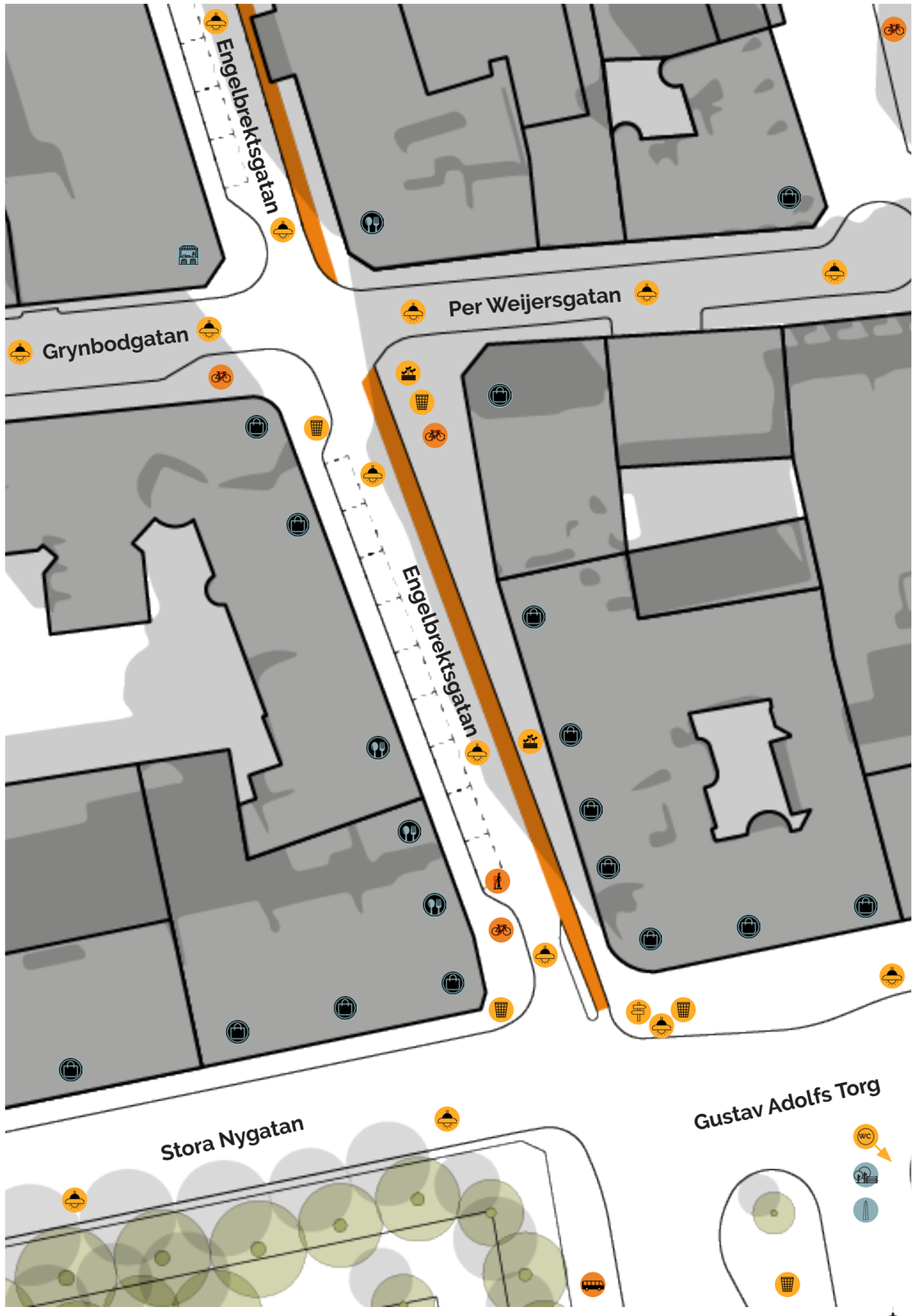
URBAN LANDSCAPE

URBAN MOBILITY

URBAN FURNITURE

WHAT DOES THE URBAN SPACE LOOK LIKE?

Engelbrektsgatan to the south and Gråbrödersgatan to the north is Gamla Väster's main pedestrian and cycle connection north to south. Full of shops, restaurants, and art galleries, this is one of Malmö's most picturesque and lively streets. Primarily narrow and historic, pedestrians are prioritised in this street. Yet in certain areas, cars are allowed resulting in a confusing urban space where there is not enough room for cars, bicycles, and pedestrians.



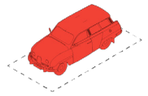
Engelbrektsgatan - 1.500

3 PROPOSAL

WHAT WOULD MAKE THE URBAN SPACE BETTER?

Defining this street as pedestrian and bicycle only would aid in solving the confusion that users have on this road. Making the centre of the street a multidirectional dedicated bicycle lane and replacing existing car parking spaces with Mamlets would not only extend the walkable area for pedestrians but result in a better and more democratic urban space.

IMPACT



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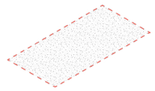
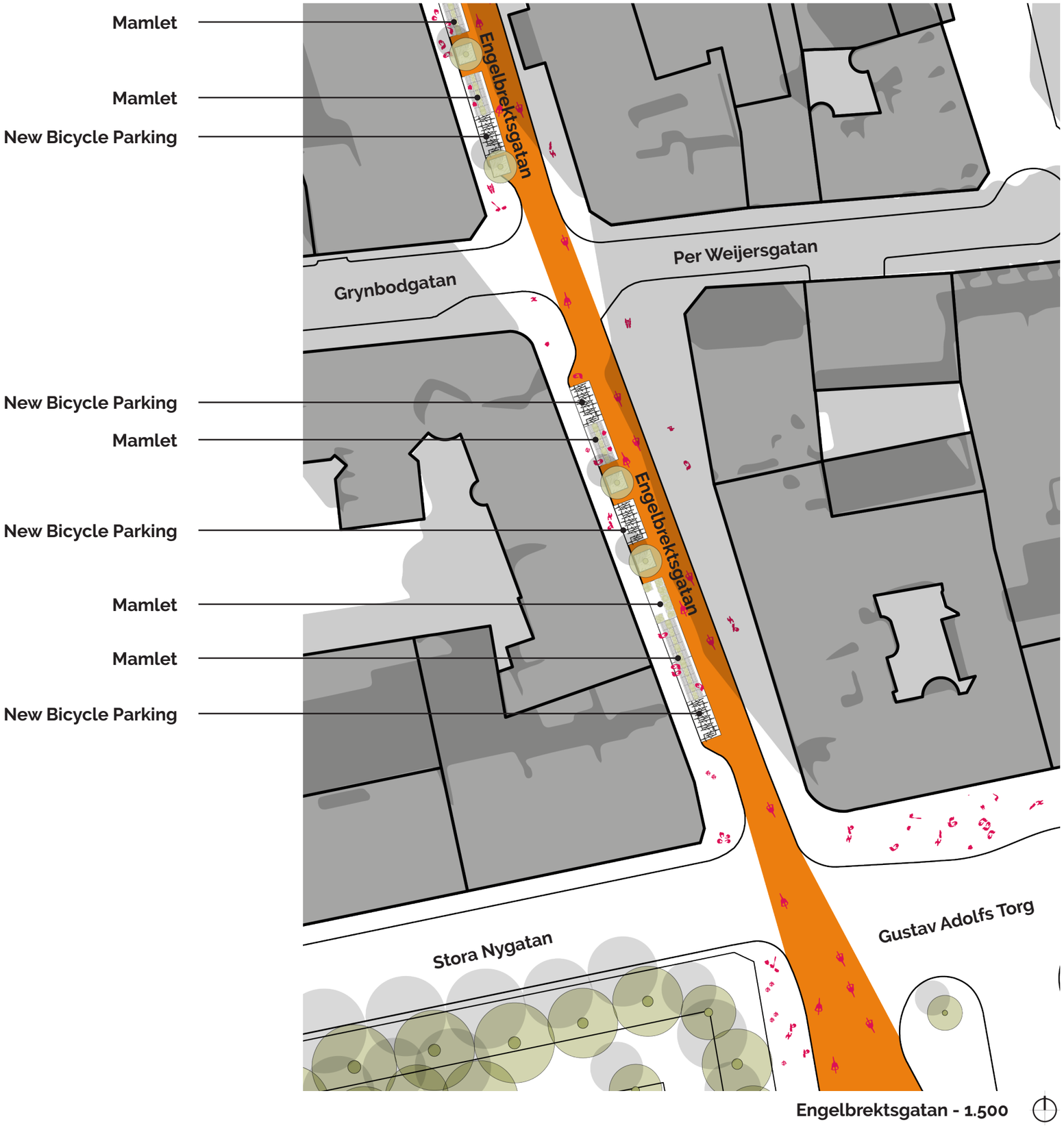


+ 112.5 m²

4



Engelbrektsgatan - 1.500

ENGELBREKTSGATAN 19

GRÅBRÖDERSGATAN 1

FISKEHAMNSGATAN 3

Västra Hamnen

SELECTED SITE

Location

Stapelbäddsparken

Nº of Parking Spaces

South Side = 0
North Side = 0

Key Elements

Restaurants / Cafés
Plaza

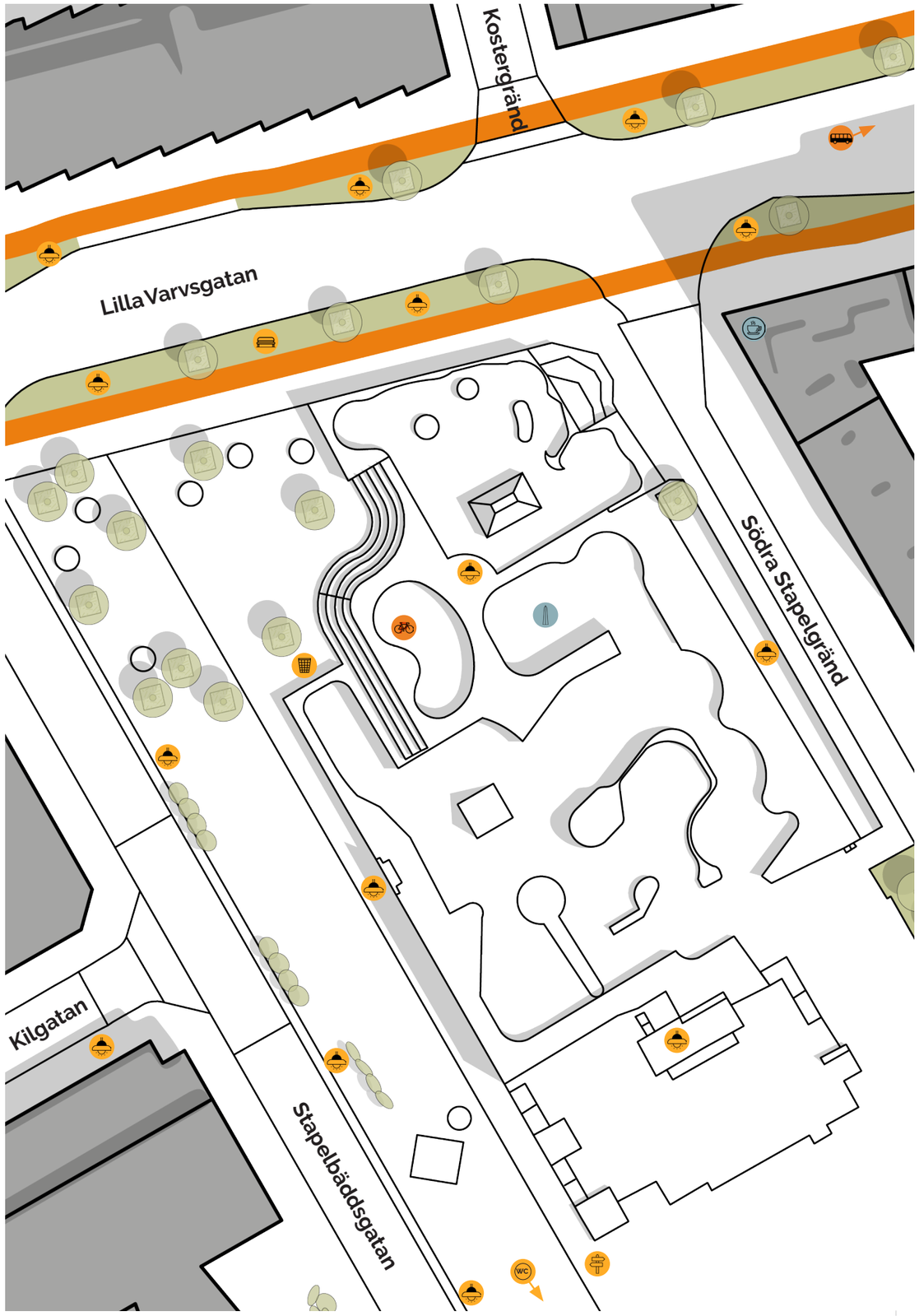
URBAN LANDSCAPE

URBAN MOBILITY

URBAN FURNITURE

WHAT DOES THE URBAN SPACE LOOK LIKE?

Stapelbäddsparken is a wonderful public skatepark that attracts people of different ages, social classes and neighbourhoods. Its surroundings are composed of new apartment buildings, offices and schools. On the other hand, streets are hefty and oversized, making this neighbourhood lack a sense of belonging and community.



Stapelbäddsparken - 1.500

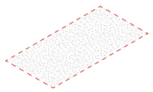
3 PROPOSAL

WHAT WOULD MAKE THE URBAN SPACE BETTER?

Mamlets in Stapelbäddsparken do not aim to change the urban space but aid with seating and provide areas for urban farming. This location is strategic as it is the perfect space for exposition and dialogue with a myriad of different people.

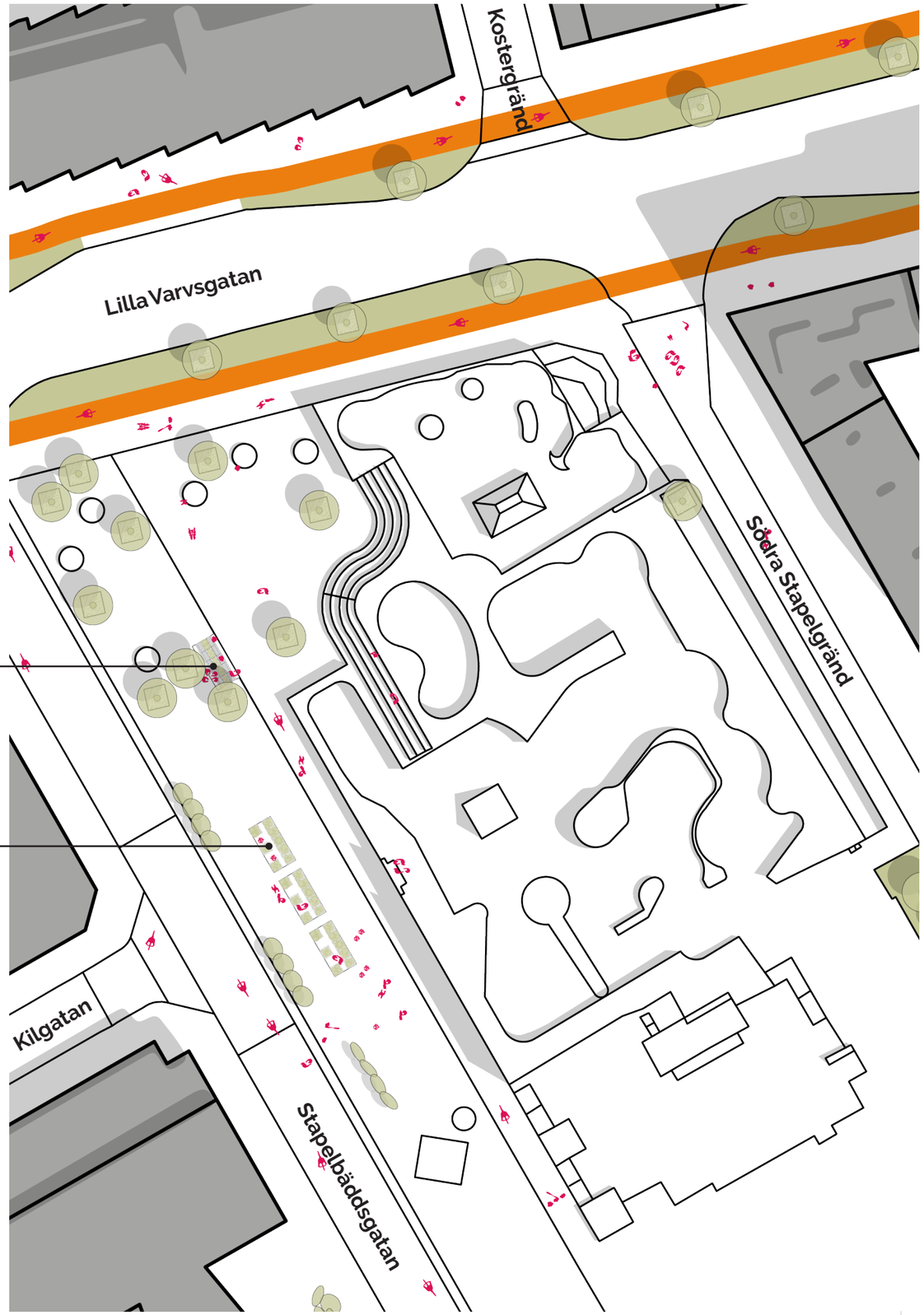
IMPACT

- 0



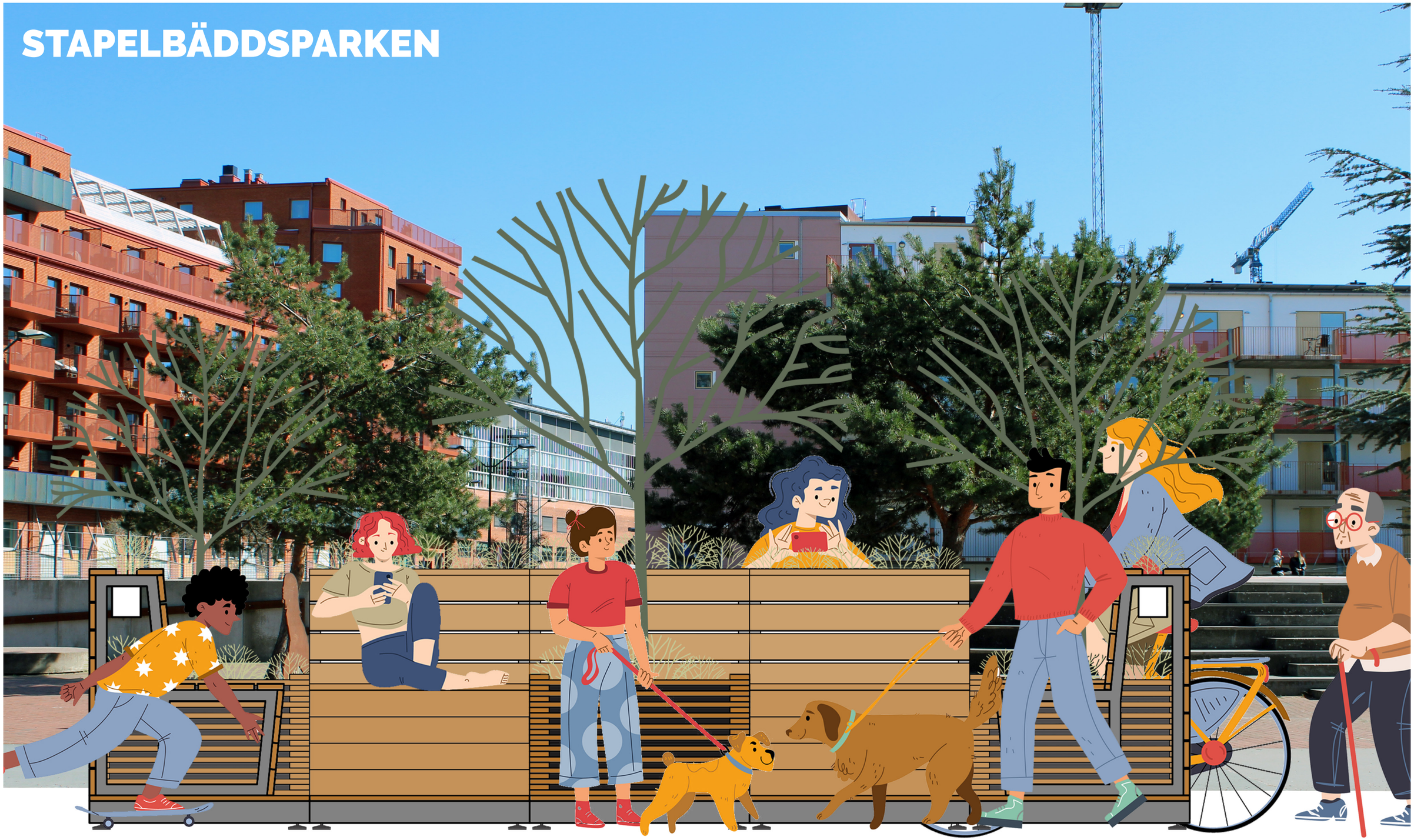
+ 0 m²

4



Stapelbäddsparken - 1.500

STAPELBÄDDSPARKEN



STORA VARVSGATAN 12

STORA VARVSGATAN 2

FEASIBILITY

Venture Lab

INTRODUCTION

During studies, students spend a lot of time researching and exploring ideas, albeit often infeasible.

Due to focus and human behaviour, we see the world through our lenses, occasionally assuming that everyone thinks the same way we do, unfortunately realising at times, we are alone in our thoughts.

What would happen if we inquired others about what they think about our idea?

We could thus have confirmation -or not- of our concept and understand the clear needs people have.

This new perspective would not only ignite **participatory design** but **democracy and innovation**.

These ideas are not new and are normally applied when evaluating suitability for a business model or startup.

In consequence, as another layer to this thesis project, business analysis has been carried on to evaluate the feasibility of Mamlets.

VENTURE LAB

"VentureLab is an entrepreneurial nest for students at Lund University. Our mission is to inspire, inform, and incubate" [1]**.**

Among many courses and help to be found at VentureLab there is Startup Staples: Tuesday Talks [2], a series of lectures and workshops catered to curious entrepreneurs at the beginning of their journey.

In order to further knowledge and test the feasibility of this thesis, I engaged in ***Startup Staples: Tuesday Talks.***

Talks attended

- Business Model Workshop - 21/02/2023
- Sunfeeds Experience - 28/02/2023
- Branding Workshop - 07/03/2023
- Sales Workshop - 21/03/2023
- Pitch Workshop - 28/03/2023
- Budgeting Workshop - 04/04/2023
- Guest Talk - 11/04/2023

SUSTAINABLE ANALYSIS DEVELOPMENT

When a project aims to create a positive change on a societal problem and has the potential to become an impactful company, the project should be designed with sustainability as a focus.

The three main aspects to be considered as a sustainable and lasting solution for the future are social, environmental, and economic factors.

A sustainable analysis development [3] helps measure the impact that the project can have. A positive sustainable analysis impact can be achieved by measuring the significant effects the project can have and comparing them to the current situation, existing solutions and systems. Also, identifying possible negative impacts and working to transform these into sustainable solutions.

Finally, linking the effects and impacts to the SDGs [4], communicating how this concept contributes to one or more of the goals towards the 2030 agenda. It is better to be concise and thorough with fewer goals to be able to prove the real impact of the project.

PERSONAL COACHING

During ***"Startup Staples: Tuesday Talks"***, as my knowledge increased, I started thinking about how I could translate these new concepts into my project.

Therefore, I enlisted in another of the services VentureLab offers: ***Personal Coaching***.

My personal coach, Nicolas Arriagada listened to my idea and helped me add additional value to this project.

During these sessions, Nicolas helped me revise my ***NABC*** [5] and understand how to properly clarify the ***NEED, APPROACH, BENEFIT,*** and ***COMPETITION*** of my idea.

Furthermore, we discussed potential grants I could apply for, to physically test the idea and think and work on milestones to drive my project to success.

NEED

Malmö Stad has ambitious plans for 2030, aligned with the SDGs and aiming to make a more sustainable and attractive city for everyone. Moreover, the plans for mobility in 2030 are to reduce 10% the share of cars while increasing the cycling share by 8% and the public transport share by 4% compared to 2013. Aiming to make a more active and sustainable city.

Quality data was gathered by running two different surveys among Malmö residents to test if Malmö Stad's plans align with people's needs and if there is a need for Parklets in Malmö.

From the 1st survey - answered by 121 persons - we can conclude that cycling is malmöits main means of transport, that 76.9% would like higher levels of active mobility, and 71.1% would like fewer street car parking spaces.

From the 2nd survey - answered by 132 persons - we can conclude that 90.9% of the surveyees would use a Parklet, 83.3% would like Malmö to have Parklets, and that seating, vegetation and lighting are the top three amenities preferred by people.

APPROACH

A Parklet is a small (temporal) public park with seating, greenery and other amenities usually placed on a street car parking space. A Parklet can be state or privately funded.

The idea of Parklets has been well-developed and tested in many cities around the world. However, Mamlets bring a new innovative system funded on sustainability and circular economy.

Inspired by pallets and legos, Mamlets are designed in human-size modules, 1 m x 1.25 m, which can be stacked, exchanged and combined in multiple ways.

The versatility of these human dimensions implies that Mamlets can also be smart-packed and delivered by cargo bicycles around the city. Furthermore, Mamlets will also aid the cycling infrastructure, providing bicycle services such as air pumps and new places for bicycle parking, making them a crucial ally to active mobility.

Moreover, in order to produce the smallest carbon footprint possible, the idea is to work with materials from Malmö Återbyggdepå and Varvsstaden Material Bank, upcycling recycled material from old constructions.

BENEFIT

Mamlets will enable Malmö to make better democratic urban spaces, promote community building, encourage sustainable innovation, and test future permanent city changes cheaply and quickly,

Mamlets will also aid the active mobility network, inviting more people to the urban realm and translating into economic growth for local small businesses.

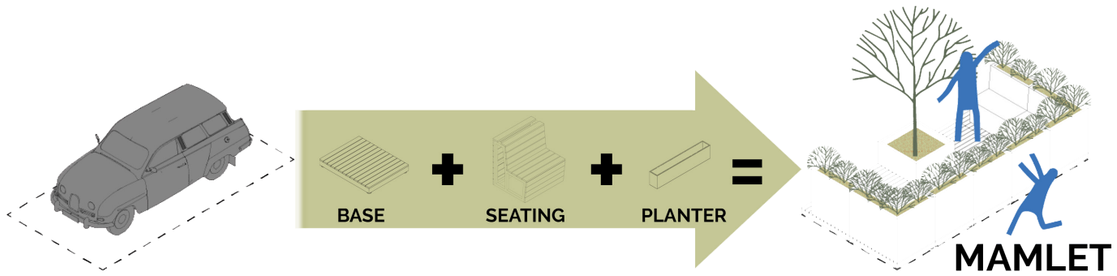
The prefabricated module system will allow the components to be smartly packed and delivered by cargo bicycles, reducing Co2 emissions.

Furthermore, these modules will permit people without prior construction skills to assemble the Mamlet parklet efficiently, rapidly, and without requiring any complex tools.

COMPETITION

In Malmö, the initiative "sommargata" has been well welcomed by malmöits since 2017. Yet, this action only takes place during the summer months while the Parklets are meant to be in place all year round. Furthermore, this new network does not aim to compete with "sommargatorna" but to collaborate with it.

On the other hand, Nola Design has a Parklet proposal which was tested during Southern Sweden Design days in 2022. However, their Parklets are constructed with new materials, and their modularity is based on big modules which require big machinery and trucks for transportation, hence bigger production of Co2.



REFLECTIONS

Research

TERRITORIALITY

Territoriality helps explore boundaries, materials and consequent uses of a place/space.

Understanding how these have come to be can guide the development of an analysing toolbox.

Territoriality can also aid in developing important questions for design purposes as who, where and when would/can use a place/space.

SUSTAINABILITY

Caring and planning for our future and future generations is a must, yet we have to work in a feasible and steady way rather than in an apocalyptic and utopic manner.

Sustainability can be a broad term, meaning many different things, resulting in “green-washing” and no content. The UN SDGs become handy in this regard, helping to be specific and establishing future goals.

LFM 30 is an ambitious initiative in the Malmö - Lund area fostering actions towards low carbon emissions, circular economy and local networking.

Doing a sustainable analysis can allow us to see the real impact of our ideas and measures.

MOBILITY

There are alternative means of going from one place to another, walking, cycling, public transport, private vehicles, etc.

Since the introduction of private vehicles, there has been a shift in city planning and design evolving around cars in place of humans.

Possible futures of urban mobility involve electric and autonomous vehicles. However, these alternatives seem to bring new problems and there is uncertainty if cities in Europe want to go in that direction.

Green, zero-emissions and shared mobility suggest a better sustainable mobility alternative in the future, backing cycling and public transport as the main shares in transportation.

Some cities, such as Copenhagen, Utrecht and Bordeaux, have been working on these transport modalities for decades and can be taken as proof and examples to head in this direction.

MOBILITY IN MALMÖ

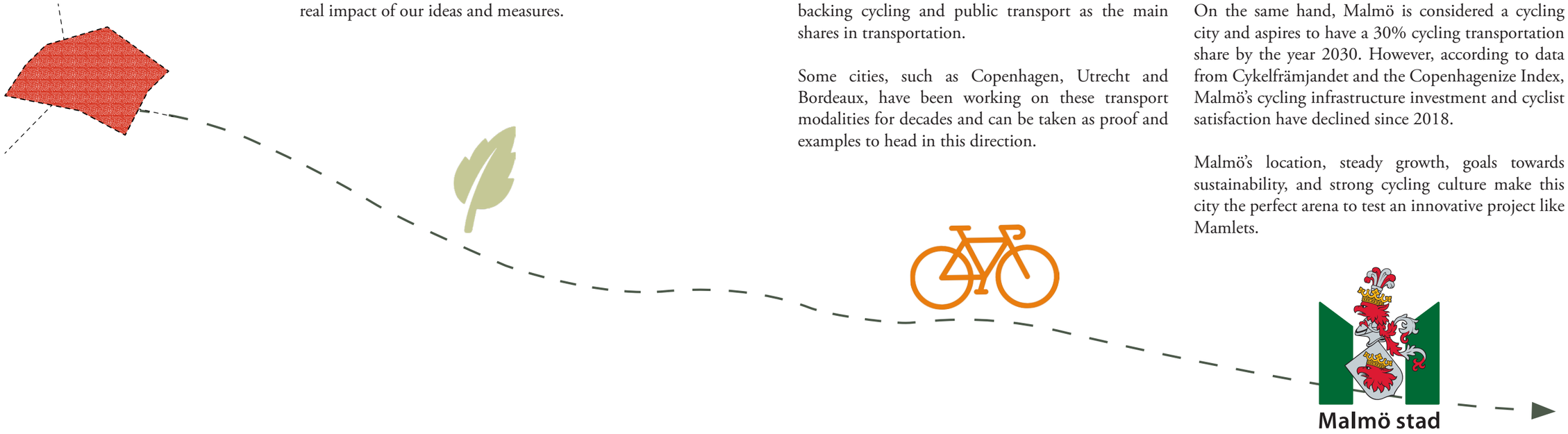
Malmö has shifted from being an industrial city to a university and innovative city. Resulting in the population growing steadily, attracting both internal and international migration.

The city has ambitious plans for the future, envisioning a close, dense, green, mixed-function city, a regional driver of green growth and employment, and a venue for culture and democracy.

In this vision, active mobility and public transport are prioritised over personal vehicles. Hence, “any street car parking must be carefully weighed against other claims in the street space”.

On the same hand, Malmö is considered a cycling city and aspires to have a 30% cycling transportation share by the year 2030. However, according to data from Cykelfrämjandet and the Copenhagenize Index, Malmö’s cycling infrastructure investment and cyclist satisfaction have declined since 2018.

Malmö’s location, steady growth, goals towards sustainability, and strong cycling culture make this city the perfect arena to test an innovative project like Mamlets.



PARKLETS

Parklets started as a clever alternative to street car parking which has proven to flourish over time, on different continents and under different circumstances.

Parklets not only recover public space in a democratic form but bring social, environmental, mobility and economic sustainability to the cities where they are built.

There are different alternatives to developing a parklet network when speaking about funding, whether public, private or a combination of both. Nevertheless, despite the origin of the funding, it is important that parklets are public, open and accessible.

Thinking of how parklets can develop into permanent changes in the urban realm can be an interesting area to develop and analyse.

Parklet in Torino, Italy

Parklet in Vienna, Austria

MOBILITY SURVEY & PARKLET SURVEY

Designing, editing and running surveys to gather data was surprising and laborious. A milestone which helped lay down and synthesise ideas into a hypothesis.

The number of surveyees that helped with their time and answers surpassed my expectations, providing valuable information and feedback. These were used to improve my initial ideas. Nevertheless, as pinpointed by Anna Modin - and discussed after my Thesis presentation - I must clarify that the information gathered does not represent the thoughts of all Malmö.

Yet, I carefully analysed the collected data. This has helped me narrow my design and location selection for Mamlets. On the same note, confirming my initial hypothesis that there is a need for Mamlets in Malmö.

As discussed during my Thesis Project presentation, these data can be interpreted as a refusal of my hypothesis and as solid data for greater permanent change.

However, this option does not offer room for a bottom-up democratic approach that can lead to citizen involvement and education, as I intend with Mamlets.

QR - Code for the "Mobility Survey" displayed on the Espresso Machine at Kaffebaren på Möllan

QR - Code for the "Parklet Survey" displayed on the Espresso Machine at Kaffebaren på Möllan

Mamlets

Parklets have proven to be a tool for changing the urban landscape and developing citizen engagement in different cities worldwide. However, they are perceived by many as temporal and quick fixes without a further purpose.

Au contraire, **Mamlets** are a sustainable modular system that helps cities gather data regarding street use by citizens. This information can guide substantial democratic transformations. Furthermore, Mamlets can also be part of these permanent transformations.

Mamlets raise both philosophical and theoretical questions regarding city transformation and democratic decision-making. At the same time, it is a practical tool that can transform an area.

Mamlets are non-destructive structures that can be "parked on" streets. Moreover, these structures can be easily disassembled and moved, saving time and effort for municipalities.

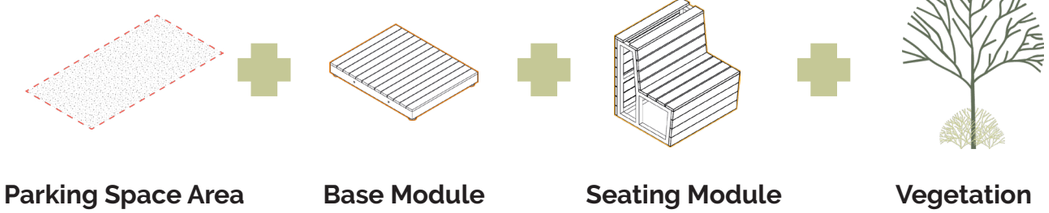
Mamlets can aid the cycling network and provide better urban spaces for citizens to interact. Substituting one to multiple street car parking spaces, providing bicycle parking spaces, areas for seating, areas for urban farming, or areas for playing games like Pétanque in the street.

Accordingly, as seen in the proposal section, Mamlets can lead to major street transformations (see Möllevången / Rådmansvången / Gamla Staden) or serve as urban furniture (see Västra Hamnen).

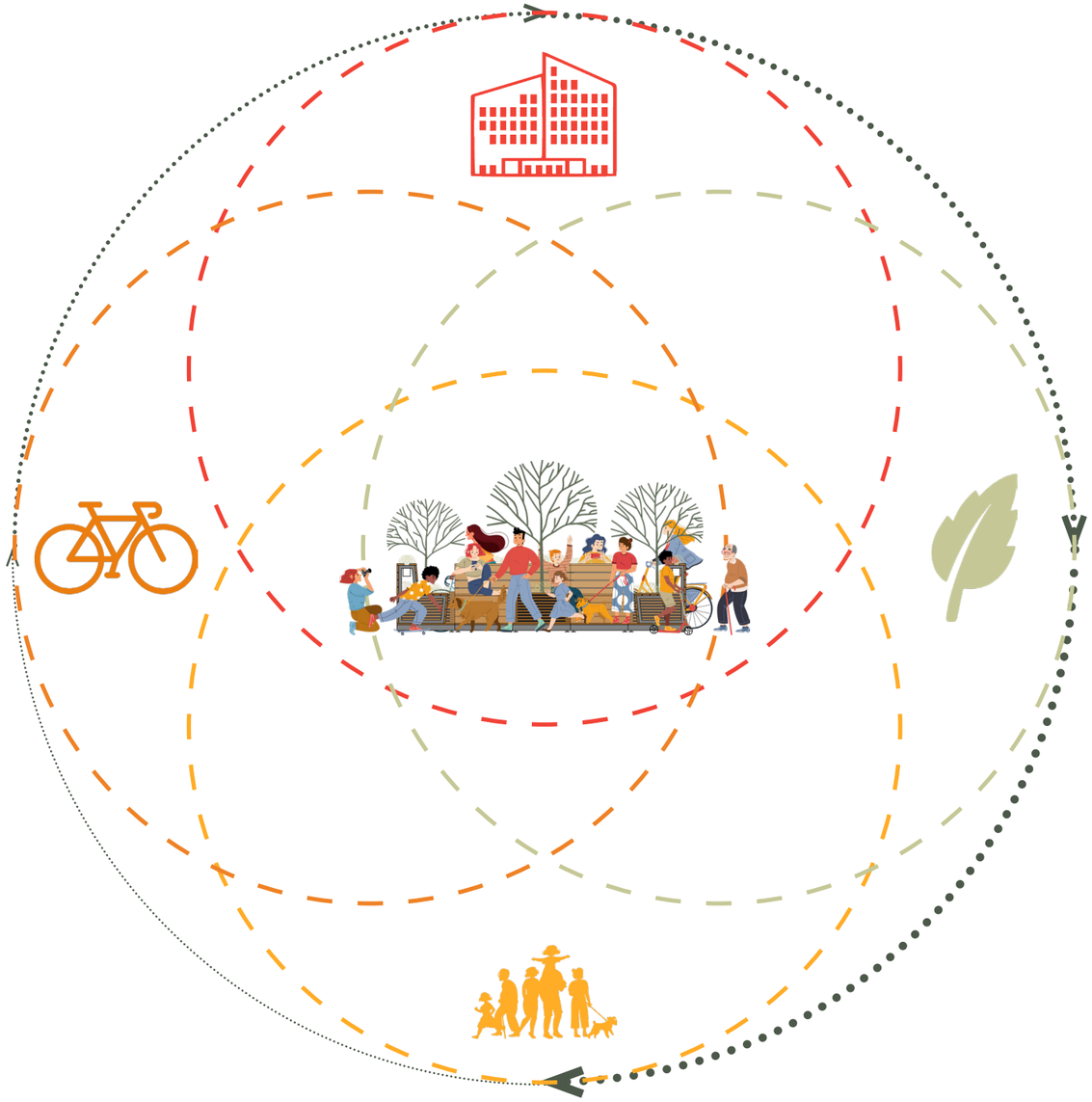
In conclusion, the answer to the questions:

- *How can we make more attractive urban spaces?*
- *How can we foster community building & citizen responsible action?*
- *How can we aid the green mobility network?*
- *How can we do this in a playful and educative way?*
- *How can we not damage the planet & have the lowest possible carbon footprint?*

Is **Mamlets!**



Parking Space Area | Base Module | Seating Module | Vegetation



Mamlet Mind Map

Venture Lab

Joining **Venturelab** has helped me learn about developing an idea into a business. I have learned from professionals and entrepreneurs who have undergone this road before. Furthermore, it has helped me explore the business potential and feasibility of **Mamlets** as a sustainable idea.

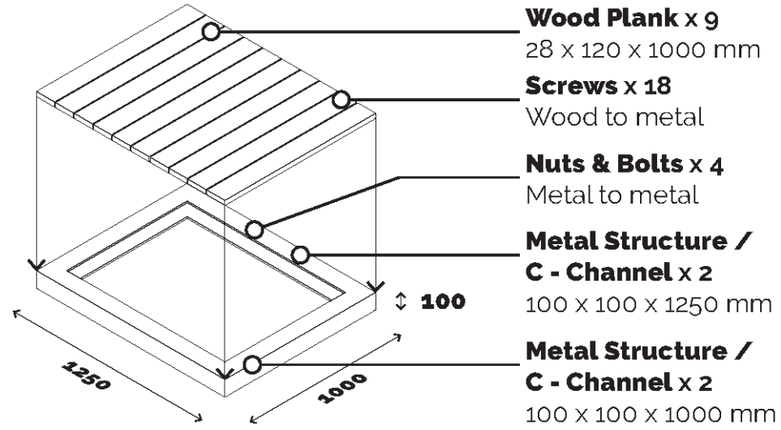
During *"Startup Staples: Tuesday Talks"* I drew an NABC (Need, Approach, Benefit, Competition) for the Mamlet concept, which I later improved with the help of Nicolas Arriagada during my personal coaching meetings. This work led to a **successful 10.000 Sek grant application from IKS Test**. The grant will allow the construction of an MVP (minimum viable product) to test a Mamlet in reality.

Once the Mamlet prototype is built and tested, data will be collected. These collected data can be the basis of further research on how we can make better cities for people with people.

10.000 Sek

GRANT
IKS TEST

BASE MODULE



Wood Plank x 9
28 x 120 x 1000 mm

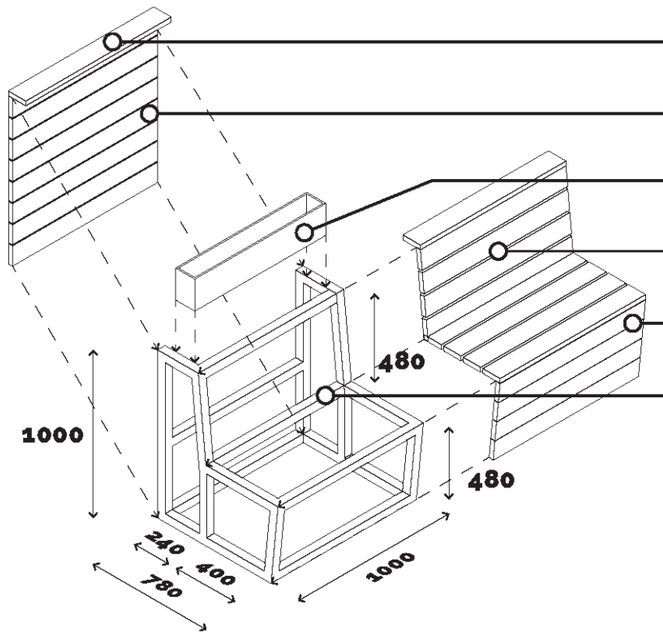
Screws x 18
Wood to metal

Nuts & Bolts x 4
Metal to metal

Metal Structure / C - Channel x 2
100 x 100 x 1250 mm

Metal Structure / C - Channel x 2
100 x 100 x 1000 mm

BENCH MODULE



Wood Plank x 9
28 x 120 x 1000 mm

Screws x 18
Wood to metal

Planter Box x 1
130 x 190 x 900 mm

Wood Plank x 13
28 x 120 x 1000 mm

Screws x 26
Wood to metal

Metal Structure / □ - Channel
50 x 50 x 1000 mm **x 8**
50 x 50 x 780 mm **x 2**
50 x 50 x 470 mm **x 4**
50 x 50 x 380 mm **x 4**
50 x 50 x 180 mm **x 2**

APPENDIX

Mobility Survey

Mobility in Malmö

This survey is anonymous, consists of 9 questions and can be completed in under 2 minutes.

The purpose is to gather information regarding how people move throughout Malmö and their satisfaction level regarding car and bicycle parking. These data will be used as research for a current thesis project regarding urban space recovery at Lund University.

By doing this survey you agree to collecting your data (GDPR).

If you have any questions you can contact me at: ja4665na-s@student.lu.se

Thanks a lot for your time!

Javier

* Indicates required question

1. 1. What is your gender? *

   Mark only one oval.

   - ◯ Female
   - ◯ Male
   - ◯ Other
   - ◯ Prefer not to say

2. 2. What is your age? *

3. 3. What is your main means of transportation? *

   Mark only one oval.

   - ◯ Walking
   - ◯ Cycling
   - ◯ Electric Scooter
   - ◯ Public transport
   - ◯ Car
   - ◯ Other

4. 4. How often do you cycle? *

   Mark only one oval.

   - ◯ Daily
   - ◯ Weekly
   - ◯ Monthly
   - ◯ Never

5. 5. How often do you use an electric scooter? *

   Mark only one oval.

   - ◯ Daily
   - ◯ Weekly
   - ◯ Monthly
   - ◯ Never

6. 6. Do you think active mobility (walking, cycling, using scooters, rollerblading, etc.) in Malmö is: *

   Mark only one oval.

   - ◯ Easy
   - ◯ Ok
   - ◯ Hard
   - ◯ Very Hard

7. 7. I would like the level of active mobility in Malmö to be: *

Mark only one oval.

- ◯ Much higher
- ◯ Higher
- ◯ Lower
- ◯ Much lower

8. 8. I would like street car parking spaces in Malmö City to be: *

Mark only one oval.

- ◯ Much lower
- ◯ Lower
- ◯ Higer
- ◯ Much higher

9. 9. “I am satisfied with bicycle parking facilities in Malmö City” *

Mark only one oval.

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Agree
- ◯ Strongly agree

Parklet Survey

Parklets in Malmö

This survey is anonymous, consists of 10 questions and can be completed in under 2 minutes.

The purpose is to acknowledge if Malmö citizens know what a Parklet is, if they would like to have Parklets in Malmö city and how they would like the Parklet to be.

These data will be used for a current thesis project at Lund University regarding urban space recovery.

The data will be processed in accordance with existing legislation.

If you have any questions you can contact me at: ja4665na-s@student.lu.se

Thanks a lot for your time!

Javier

* Indicates required question

1. 1. What is your gender? *

   Mark only one oval.

   - ◯ Female
   - ◯ Male
   - ◯ Other
   - ◯ Prefer not to say

2. 2. What is your age? *

   _____

3. 3. Do you know what a Parklet is? *

   Mark only one oval.

   - ◯ Yes
   - ◯ No

What is a Parklet?

A Parklet is a small (temporal) public area with seating, greenery and/or other amenities usually placed on a street car parking space.

A Parklet can be state or privately funded and aims to make a better democratic urban space, promote community building and encourage sustainable innovation.

The idea originated in San Francisco in 2005. Since, have been reproduced in other cities such as Berlin, São Paulo, Vancouver, Vienna and much more!

Parklet in Vienna - Image courtesy of Grätzl Oase

4. 4.Would you use a Parklet? *

   Mark only one oval.

   - ◯ Yes
   - ◯ No

5. 5.“I would like Malmö to have Parklets”. *

Mark only one oval.

- ◯ Agree
- ◯ Partly agree
- ◯ Partly disagree
- ◯ Disagree

6. 6.What amenities would you like a Parklet to have? *

Check all that apply.

- ☐ Art
- ☐ Bicycle Parking
- ☐ Bicycle Services (tools, air pumps,etc)
- ☐ Garbage bins
- ☐ Lighting
- ☐ Playground
- ☐ Rain shelter
- ☐ Seating
- ☐ Urban Farming
- ☐ Vegetation
- ☐ Wayfinding (maps, street signage, etc)
- ☐ WC
- ☐ Wi-fi
- ☐ Other: _____

7. 7.What would be a good location for a Parklet? *

Check all that apply.

- ☐ Near my home
- ☐ Near plazas
- ☐ Near restaurants / cafés
- ☐ Near schools
- ☐ Where there are many street car parking spaces
- ☐ Other: _____

8. 8.“I would consider Malmö Stad providing funding for Parklets”. *

Mark only one oval.

- ◯ Very helpful
- ◯ Helpful
- ◯ Unhelpful
- ◯ Very unhelpful

9. 9.“I would participate in the construction of a Parklet”. *

Mark only one oval.

- ◯ Agree
- ◯ Partly agree
- ◯ Partly disagree
- ◯ Disagree

10. 10.“I would participate in the care of a Parklet”. *

Mark only one oval.

- ◯ Agree
- ◯ Partly agree
- ◯ Partly disagree
- ◯ Disagree

Grant Application

2023-16-04

Test Grant Application 2023-04-16

The application concerns test grant from IKS Test, which is a financial support for specific activities with the intention of making an early assessment of an idea. The activities should be completed within 3-6 months. Each individual project can apply for a maximum of 10,000 SEK. It is possible to receive the test grant maximum two times (both per project, as well as per student even if you have a new project). If there is a team working on a project only one in the team should be the applicant, and only one person per team can apply.

The test grant will be open for applications 4 times per year. **The application must be submitted before 23.59 April 16th, 2023.** You need to send the application to your business developer at VentureLab before the deadline. The estimated date for the announcement of the decisions is **May 15th, 2023, and for payment May 22nd, 2023**.

A jury will read the application and decide if you will be granted the Test Grant. If you receive the grant, it is not guaranteed you will be granted the full amount you apply for. The final amount may be adjusted based on the jury's decision.

Any questions about the application process can be taken through your assigned business coach at VentureLab.

ASSESSMENT CRITERIA

These criteria will be judged by a jury that reviews the applications:

- The long-term potential of the project
- The entrepreneurial ability of the applicant and team composition
- The innovation height
- That the Test grant makes a difference to the project
- The description of expected achievements/outcomes with the grant and the alignment with the proposed budget
- The sustainability aspect of the project
- Have a VentureLab business coach that has been involved in the creation of the application, and a minimum of one coaching meeting.

If you have received a test grant before, we would also like a description of how the first Test grant was used and the results and outcome from those activities.

In addition to the application itself, the jury might also, when required, have an interview with the applicant or ask for complementary information.

If you are a student at the master program in entrepreneurship and innovation at Sten K Johnson Centre for Entrepreneurship:

- You do need to have a business developer from VentureLab/LU Innovation
- To apply for the test grant, send your written application to Nicolas.arriagada@innovation.lu.se, before the deadline 23.59, **April 16th.**

2023-16-04

COMMITMENT

If you get the Test grant, you are expected to work with the project as described in the application. It is also expected that you hand in a report about the project development with the grant and what was learned from the activities done. A follow up-questioner will be sent to you after approximately 6 months. It is the person who received the grant who is responsible to hand in the report.

PROJECT DETAILS

- The business developer at VentureLab you have been in contact with: **Nicolas Arriagada**
- Project name: **MAMLETS – "Parklet System in Malmö"**
- Name of applicant: **Javier Ignacio Navarro Puig**
- Student program/area of studying: **MSc in Sustainable Urban Design**
- Student-id (eg "ab1234cd-s"): **ja4665na-s**
- Personal number or samordningsnummer (yyyymmdd-xxxx): **19871029-7956**
- E-mail: **jinavarropuig@gmail.com**
- Phone: **0734999853**
- Have you received the test grant previously: **No**
- How long have you worked with the project: **5 Months**
- How much money are you applying for in this application (sek): **10.000**

Formal requirements:

Check boxes to confirm that you:

☒ Is registered as active student at Lund university (or have graduated within past 6 months).
☒ Has the intention to work with the project as described in the application.
☒ The application is in PDF-format
☒ The budget does not exceed 10 000SEK

SUMMARY

- The purpose of the project is:

Promote a healthier life and social interactions while educating and gathering data that can help develop city innovation and better decision-making.

- Current application relates to:

Build an MVP, run a pilot, and gather data to validate if the product solves people's needs.

NEED

Malmö Stad has ambitious plans for 2030, aligned with the SDGs and aiming to make a more sustainable and attractive city for everyone. Moreover, the plans for mobility in 2030 are to reduce 10% the share of cars while increasing the cycling

share by 8% and the public transport share by 4% compared to 2013. Aiming to make a more active and sustainable city.

Quality data was gathered by running two different surveys among Malmö residents to test if Malmö Stad's plans align with people's needs and if there is a need for Parklets in Malmö.

From the 1st survey - answered by 121 persons - we can conclude that cycling is malmöits main means of transport, that 76.9% would like higher levels of active mobility, and 71.1% would like fewer street car parking spaces.

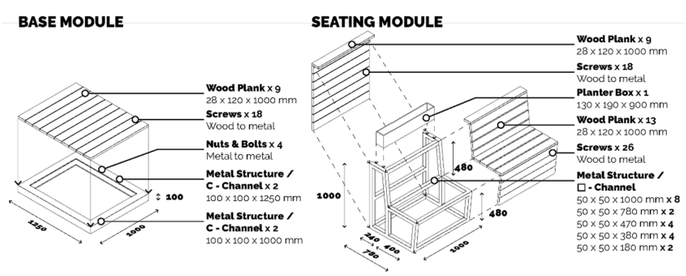
From the 2nd survey - answered by 132 persons - we can conclude that 90.9% of the surveyees would use a Parklet, 83.3% would like Malmö to have Parklets, and that seating, vegetation and lighting are the top three amenities preferred by people.

APPROACH

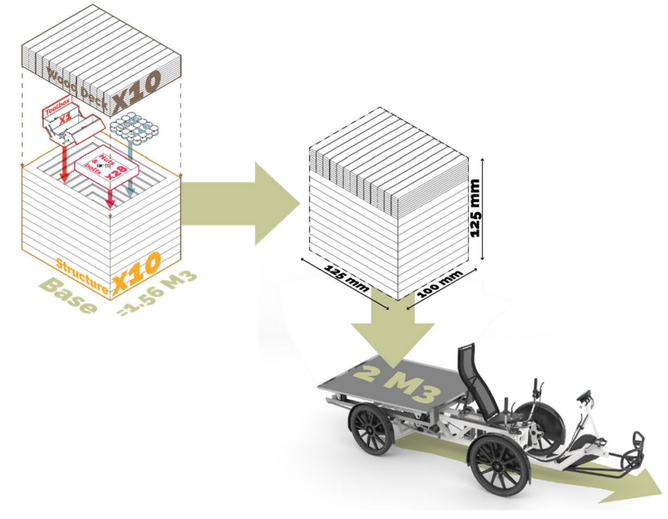
A Parklet is a small (temporal) public park with seating, greenery and other amenities usually placed on a street car parking space. A Parklet can be state or privately funded.

The idea of Parklets has been well-developed and tested in many cities around the world. However, Mamlets bring a new innovative system funded on sustainability and circular economy.

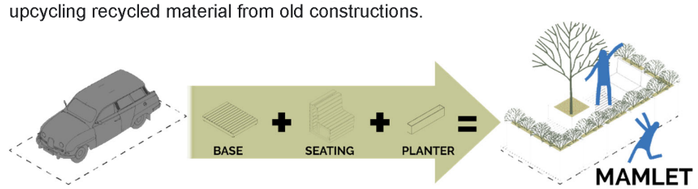
Inspired by pallets and legos, Mamlets are designed in human-size modules, 1 m x 1.25 m, which can be stacked, exchanged and combined in multiple ways.



The versatility of these human dimensions implies that Mamlets can also be smart-packed and delivered by cargo bicycles around the city. Furthermore, Mamlets will also aid the cycling infrastructure, providing bicycle services such as air pumps and new places for bicycle parking, making them a crucial ally to active mobility.



Moreover, in order to produce the smallest carbon footprint possible, the idea is to work with materials from Malmö Återbyggdepå and Varvsstaden Material Bank, upcycling recycled material from old constructions.



BENEFIT

Mamlets will enable Malmö to make better democratic urban spaces, promote community building, encourage sustainable innovation, and test future permanent city changes cheaply and quickly,

Mamlets will also aid the active mobility network, inviting more people to the urban realm and translating into economic growth for local small businesses.

The prefabricated module system will allow the components to be smartly packed and delivered by cargo bicycles, reducing Co2 emissions.

Furthermore, these modules will permit people without prior construction skills to assemble the Mamlet parklet efficiently, rapidly, and without requiring any complex tools.

2023-16-04

COMPETITION

In Malmö, the initiative "sommargata" has been well welcomed by malmöits since 2017. Yet, this action only takes place during the summer months while the Parklets are meant to be in place all year round. Furthermore, this new network does not aim to compete with "sommargatorna" but to collaborate with it.

On the other hand, Nola Design has a Parklet proposal which was tested during Southern Sweden Design days in 2022. However, their Parklets are constructed with new materials, and their modularity is based on big modules which require big machinery and trucks for transportation, hence bigger production of Co2.

SUSTAINABILITY

Mamlets align primordially with the 11th SDG "Sustainable cities and communities", as well as, Skåne's initiative towards carbon neutrality, LFM30.

Materials, logistics and construction account for almost 75% of global greenhouse emissions. For this reason, Mamlets aim to make a considerable sustainable impact with an innovative modular system.

Replacing street car parking spaces with Mamlets will reduce the number of cars, pollution and noise while promoting cycling and urban space recovery. (One car produces between 9 tons to 37 tons of CO2-eq during its lifetime in Sweden, according to energifork.se)

To measure sustainable impact, materials will be upcycled from Malmö Återbyggdepå and PEAB's Varvsstaden Material Bank.

Furthermore, Mamlets will be smartly packed and delivered throughout the city by cargo bicycles, reducing fifteen times the Co2 emissions compared to an electric van.

In conclusion, this design and approach will promote a circular economy, focusing on upcycling, local transformation, and the reduction of Co2 emissions. Improving Malmö's urban realm, as well as the green, social and mobility networks.

TEAM

Currently, the team is composed of Javier Ignacio Navarro Puig, an Architect and Msc in Sustainable Urban Design candidate, who has lived in more than eight countries, on three different continents. Besides, he has more than eight years of experience in the hospitality business.

These experiences allow him to see the bigger picture and easily converse and collaborate with people from different backgrounds, combining his passion for cities and community building.

In the future, he would love to collaborate with people who want to make better cities for people and can help Mamlets become alive. Particularly, persons with experience in working with economics, municipalities and liability.

PLAN FOR THE USE OF THE GRANT

The purpose of the use of the grant is to build an MVP and run a pilot test which allows gathering data regarding how the Mamlet works, which vegetation would be more appropriate and test the viability and feasibility of the approach.

Running the pilot during the summer months would be a great opportunity to take advantage of the better weather conditions and be able to reach more potential users.

The goal is to reach more than 250 people, and the MVP would consist of half of the Parklet base and one seating prototype with vegetation.

Activity	Purpose	Estimated cost
Buying Metal	Build the base modules	2000
Buying Wood	Build the base module floor	1500
Buying Hardware	Attach the metal base and floor together	500
Buying Metal	Build the seating structure	1750
Buying Wood	Finish of the seating structure	1250
Buying Hardware	Attach the finish to the seating structure	250
Buying Planter, plants and soil	Build the vegetation planter	750
Construction and logistics	Paying the carpenter and delivery	2000
TOTAL		10000

EXPECTED RESULT FROM THE USE OF THE GRANT

During the surveys, between 121 and 132 people provided valuable feedback. The expectation with testing the idea in a physical pilot is to reach at least 250 users.

Also, to gather feedback regarding the seating design, its resistance, and how it works with the proposed vegetation.

Moreover, to compute how much time takes to prefabricate a module and how much time takes to assemble a Mamlet. At the same time, test if someone without prior construction knowledge can build a Mamlet.

The potential outcome of running this MVP would be confirmation of the hypothesis, visibility and feedback regarding the design.

PLAN FORWARD

The plan forward after a successful test is to analyse the gathered data and polish the design according to the user feedback. On the same note, assess if the

materials chosen were appropriate. If not, look for an alternative that could be more resistant.

A successful test would also imply visibility, leading to better storytelling and proof when pitching the proposal to potential buyers.

Furthermore, this first pilot test would be a very considerable milestone that could lead to more funding and a second pilot test during the month of September on the occasion of the open calls for the architecture event “Malmö in the making”.

EARLIER TEST GRANTS RECEIVED

If you have received a test grant before (otherwise ignore this section), we would also like a description of how the first Test grant was used and the results and outcome from those activities. *Max 1 page for text + table*

Activity	Outcome	Cost
TOTAL		

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