

How could we, by suggesting a new form of village, tackle the hindrances and harvest the potentials of the modern Swedish tiny home movement while benefiting the local community, Mark municipality and society as a whole?

‘VI BEHÖVER MARK!’

‘We need Land! (Mark)’

The tiny homes movement and how it could develop (in) Mark

Tiny homes in Mark

A tiny home is a home below 30 m², often built on a trailer or otherwise moveable. They come in all shapes and with different sets of standards, ranging from very simple to fully equipped small houses. The movement today is strongly connected to self-build and a wish to live more sustainably, but also a life in greater freedom both concerning economy and location.

The tiny home movement is growing rapidly in Sweden. It can be seen to have roots stretching all the way back to a pre-agricultural human tradition of nomadism, as well as to a more modern American trend. In this project we examine some of the possibilities and challenges of tiny homes and what effects this alternative way of living could have.

How tiny homes could help battling the climate crisis

- Tiny homes use less material in construction
- Tiny space means less area to heat
- Tiny homes provide a closer connection to nature
- Moveability means flexibility and no permanent damage on land
- Self-build means more awareness of materials and system
- Self-build means creativity and more resilience

Mark municipality, along with the rest of the world, stands at a crossroad as to how to react to the climate crisis. Sooner rather than later our ways of life will have to change, if we are to counteract the threat of global warming and overuse of resources that we are faced with. The building industry stands for 37% of CO₂-emissions (UN) and is therefore the perfect place to start.

Mark municipality could stand in the forefront of this change by starting

to experiment with new and more sustainable ways of living. Allowing for a tiny home village means allowing and providing for diversity and creativity, meaning Mark municipality would be more resilient and have alternative tried-out solutions ready if the crisis hits.

It would also attract a new group of inhabitants to the municipality, as well as open up for new business opportunities.

Why in Mark municipality?

- Mark needs to react to the climate crisis
- Opportunity for more variation and resilience in the building sector
- New business opportunities
- Mark has a history of bending the rules (Knalleandan)
- Opportunity to attract new inhabitants



Research: Interviews

Linn, 28, wanted to find a way of life with more freedom. The tiny home allowed her to have a low rent and no mortgage. She now experiences less stress and feels she has more time to spend on stuff that matters. She wants to live in a tiny village but on a semi-private plot of land. She would like to share project areas and a big kitchen. She wants a tool- and car-pool and a common garden as well as a circular solution for sewage and electricity.

In order to understand the tiny house movement in Sweden today, we have conducted a series of interviews with tiny home owners. The outcome of these interviews will form the base of the future design proposal, so that it meets the actual needs of its inhabitants.



Markus, 48, lives in a small community with a few other families. His house is heated by a wooden stove. Drinking water is gathered from the neighbor, and rainwater is gathered for other uses. He likes that tiny homes can be placed in nature without leaving negative impact when moved. But he wishes for more of a community and sees a potential in sharing a washing room, shower, toilet, library, workshops etc.

Conclusion of needs

Mobile buildings

- Need to be placed with car/tractor
- Need for space to turn around.
- Need for a relatively flat surface

Freedom from regulations

- Being able to place and remove your house without difficult and expensive process
- Voluntary simplicity and downsizing allowed
- Freedom from accessibility requirements
- Freedom for experimentation

Infrastructure

- Plug-in central for electricity (3-phase)
- Freshwater central
- Greywater sewage solution
- Common compost for toilet

Community/integrity

- Have your private plot of land with limited insight
- Be part of a community
- A common house with shared functions:
 - Kitchen
 - Showers
 - Toilet
 - Washing machine
 - Tools
 - Carpool
 - Common garden



Andrea, 31, is an architecture student living in her tiny home in Gothenburg. She sees potential in the tiny homes movement in regards to tackling the environmental crisis as well as posing an alternative to soulless standardized architecture and crippling mortgages. She wishes for tiny homes to be more integrated in society, and think the biggest hindrances are strict building laws. She'd love to see tiny home communities as a sustainable living alternatives.

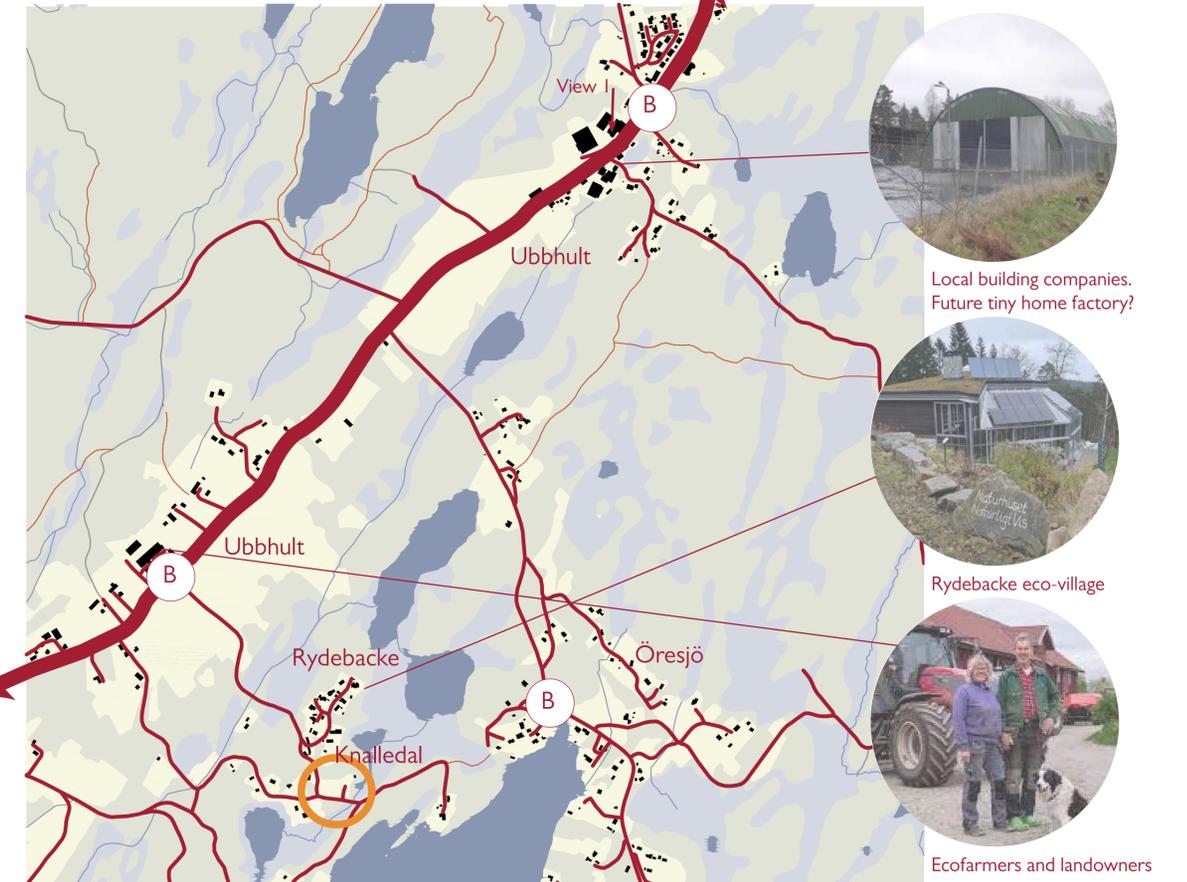
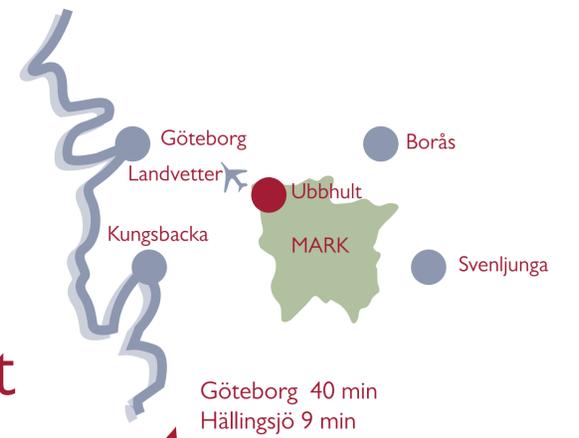


PerViktor, 42, lives in Gothenburg and studies to become an architect. For ten years he lived with his family of 5 in a tiny home that developed into an art piece in Karjalohja, Finland. It started out as a 10 square meter small wooden house built on top of an old caravan and has been expanded since. Since 2009 it has moved back and forth from Sweden to Finland several times.

Knalledal

Tiny home village

Location: Ubbhult



Ubbhult and Rydebacke

Ubbhult has a population of 1000, and has a church, a bygdegård, a school and an interior warehouse. The tiny home village could benefit the local society by attracting more young inhabitants. In the valley south of Ubbhult lies the eco-village Rydebacke. It consists of 16 households. The village has its own circular system for toilet waste, water and sewage. The landowners of the proposed site are willing to sell land for a tiny home village in connection to Rydebacke.

The factory

Knalledal opens up for new business opportunities; a tiny homes factory could start up, as Ubbhult has both a prefabricating company and facilities ready. It would create new jobs in the area and put Ubbhult on the map as an innovative and forward-thinking town.



Laws and rules

A tiny home falls under the regulation of a vehicle as well as a house. Rules regarding trailers decide the outer dimensions of the house as well as its maximum weight. The tiny homes movement runs into problems in relation to building permits, as it is a mobile home and building permits are permanent and quite expensive and complicated for a home builder to manage. The tiny home also falls short on many of the demands of a full time residence due to its small size. Especially the rules of wheelchair accessibility are impossible to meet in such a downsized space.

Need for freedom

The welfare mindset of providing everyone with good quality housing by implementing stricter and higher standards was done with a good intention. But it leaves us in a society where we have ended up illegalizing downsizing and voluntary simplicity. It means that a big group in society, who desperately want to handle the climate crisis in a radical way, are prohibited from doing so. It also means that the society at large cannot experiment their way towards a more sustainable future. And by that true creativity and uniqueness in the building industry is made impossible.

Bending the rules

Today people living in tiny homes use gray zones and loopholes in the law to put up their homes. What is really needed is a revision of the laws to allow for alternative ways of living. But until that happens, a lot of the power to try new things out lies in the hand of willing municipalities. We see that Mark with its history of "knalleanda" (strong sense of entrepreneurship and not being too hung up on laws put down by the authorities) could be a perfect starting point for change. One way is by formulating a detail plan for a new village, that allows for more than the general law.

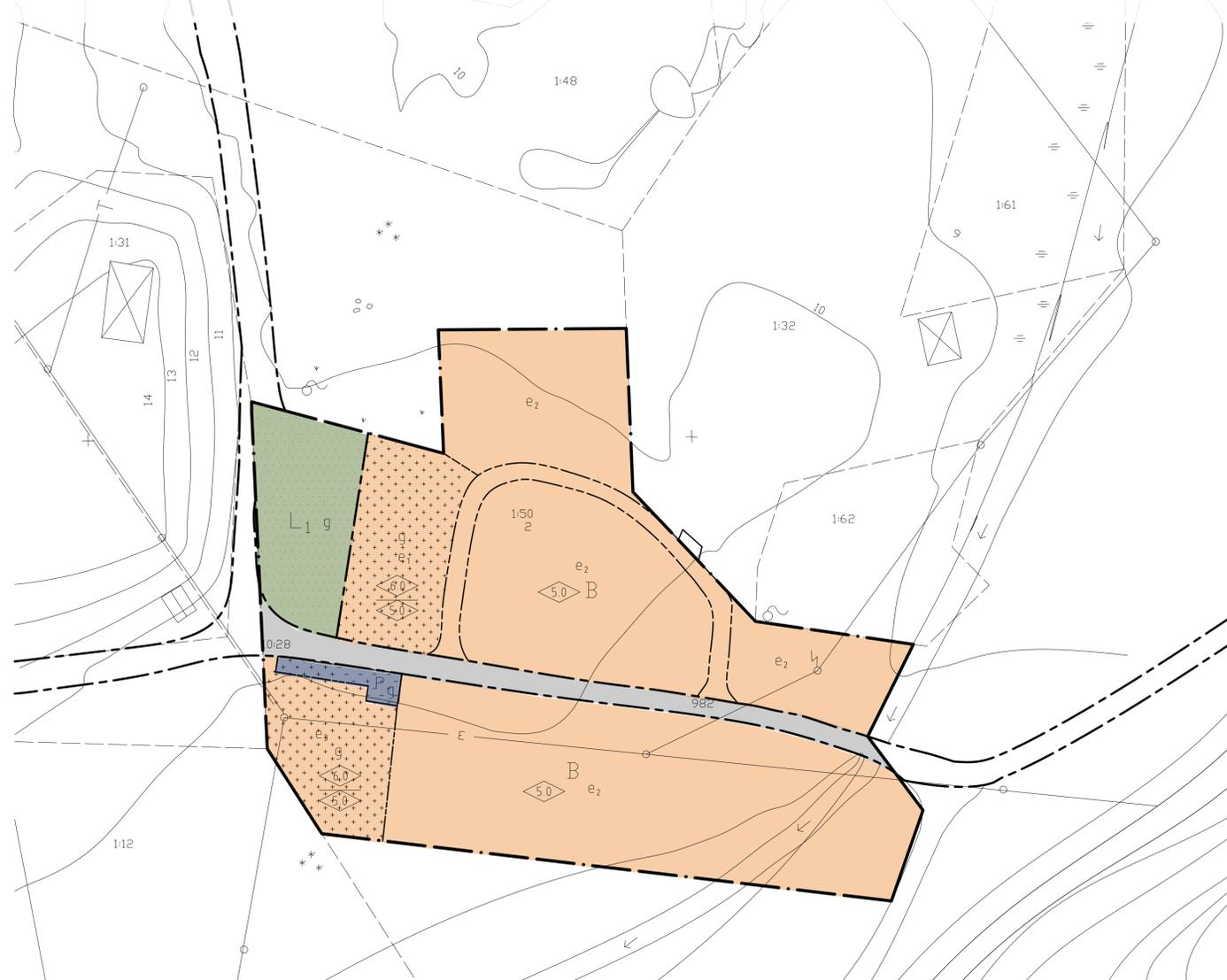
Our proposal

The proposed detail plan for Knalledal tiny home village presents the basic idea of how to bend the rules enough to meet the needs of tiny home owners and establish a new kind of village. It relieves the individual houses from fulfilling all the set standards of a full time residence, by instead providing these functions with a common house. This is backed up by BBR 3:227, a law about collective housing, in which 12 units may share kitchen, bathrooms, washing room etc. In Knalledal, the common area also provides a wheelchair accessible bedroom and services such as post, garbage collection, water and electricity.

The detail plan is unusual in that it states that the houses may not be built with extensive groundwork and that the land should be possible to return to its original state if needed. This allows for this type of village to be placed at areas otherwise unfit for housing such as agricultural land.

Finally, the detail plan states that building permits are not needed. This allows for greater freedom and possibility to experiment for the many home builders. It also allows for the mobile houses to come and go easily. A simplified form of building permit is instead handled internally by a governing association.

The association consists of all 12 households of the village. It owns the land and leases it to the individual members. It is responsible for providing the needs not met by the individual houses in the common areas, as well as handling the internal building permits and making sure that important standards such as fire regulations are met. Detailed information about ownership and the structure of the village can be read in the document "Knalledal minihusby stadgar" that complements the detail plan.



ÄNDRING AV PLANEN FÖR KNALLEDAL MINIHUSBY MARKS KOMMUN VÄSTRA GÖTALANDS LÄN

STADSBYGGNADSKONTORET
MARKS KOMMUN 20xx-xx-xx

GODKÄND FÖR SAMRÅD 20xx-xx-xx
ANTAGEN 20xx-xx-xx
LAGA KRAFT 20xx-xx-xx

- GRANSBETECKNINGAR
- Planområdets gräns
 - Användningsgräns
 - Egenskapsgräns
 - Illustrationslinje

PLANBESTÄMMLER

Följande gäller inom området med nedanstående beteckningar. Där beteckningar saknas gäller bestämmelserna hela området. Endast angiven användning är tillåten.

Markanvändning

Allmänna platser

GATA Gata

Kvartersmark

- B Bostäder och lokaler för kontor, hantverk, handel.
- L₁ Odlingslotter
- P Parkering

Utnyttjandegrad

- E₁ Gemensamhetsanläggning med servicehus som ersätter funktioner i enskilda bostäder samt samlar gemensam sophämtning och posthantering. Anläggning av brunn och BDT-avlopp.
- E₂ Totalt får max 12 huvudbyggnader uppföras utöver gemensamhetshus. Högst 25% av området får bebyggas. Största byggnadsarean är 50 m² för huvudbyggnad.
- E₃ Gemensamhetsanläggning. Högst 25% av området får bebyggas.

Begränsning av markens bebyggelse

- Marken får inte bebyggas.
- g Marken skall vara tillgänglig för gemensamhetsanläggning.
- u Marken skall vara tillgänglig för underjordiska ledningar.

Markens anordnande

- Marken skall anordnas för gemensamma funktioner så som servicehus, umgängesyta, tillgänglighetsanpassade sov- och badrum, kök, tvätt, odling, verkstad, brunn, BDT-avlopp, hantering av toalettavfall, el, förråd, sophämtning och posthantering.
- Högsta byggnadshöjd i meter för gemensamhetsanläggning: 6.0
- Högsta nockhöjd i meter för gemensamhetsanläggning: 5.0
- Högsta byggnadshöjd i meter för bostadshus: 5.0

Placering, utformning, byggt teknik

Huvudbyggnader får inte placeras närmare än 4,5 meter och komplementbyggnader inte närmare än 2 meter från gräns mot granntomt utan grannars medgivande. Inom fastighet får byggnader placeras fritt så länge krav på avstånd för brandskydd uppfylls. Huvudbyggnader respektive komplementbyggnader får sammanbyggas parvis vid gemensam tomtgräns.

Utformning

Bebyggelsen begränsas till största tillåtna byggnadshöjd 5 m och största byggnadsarea per hus 50 m² för bostäder. Servicehus begränsas till största tillåtna byggnadshöjd 6 m och största byggnadsarea 200 m². Öppet byggnadsätt (friliggande hus eller parhus).

Byggt teknik

Bostäder och komplementbyggnader får ej utföras med omfattande markarbete. Marken skall kunna återställas till ursprungligt skick.

Administrativa bestämmelser.

Genomförandetid

Genomförandetiden är 15 år från den dag planen vinner laga kraft.

Bygglöv

Bygglöv och byggnadsåtgärder krävs inte för att i enighet med planen uppföra, ändra eller utföra andra åtgärder som avses i PBL 8:1-2.

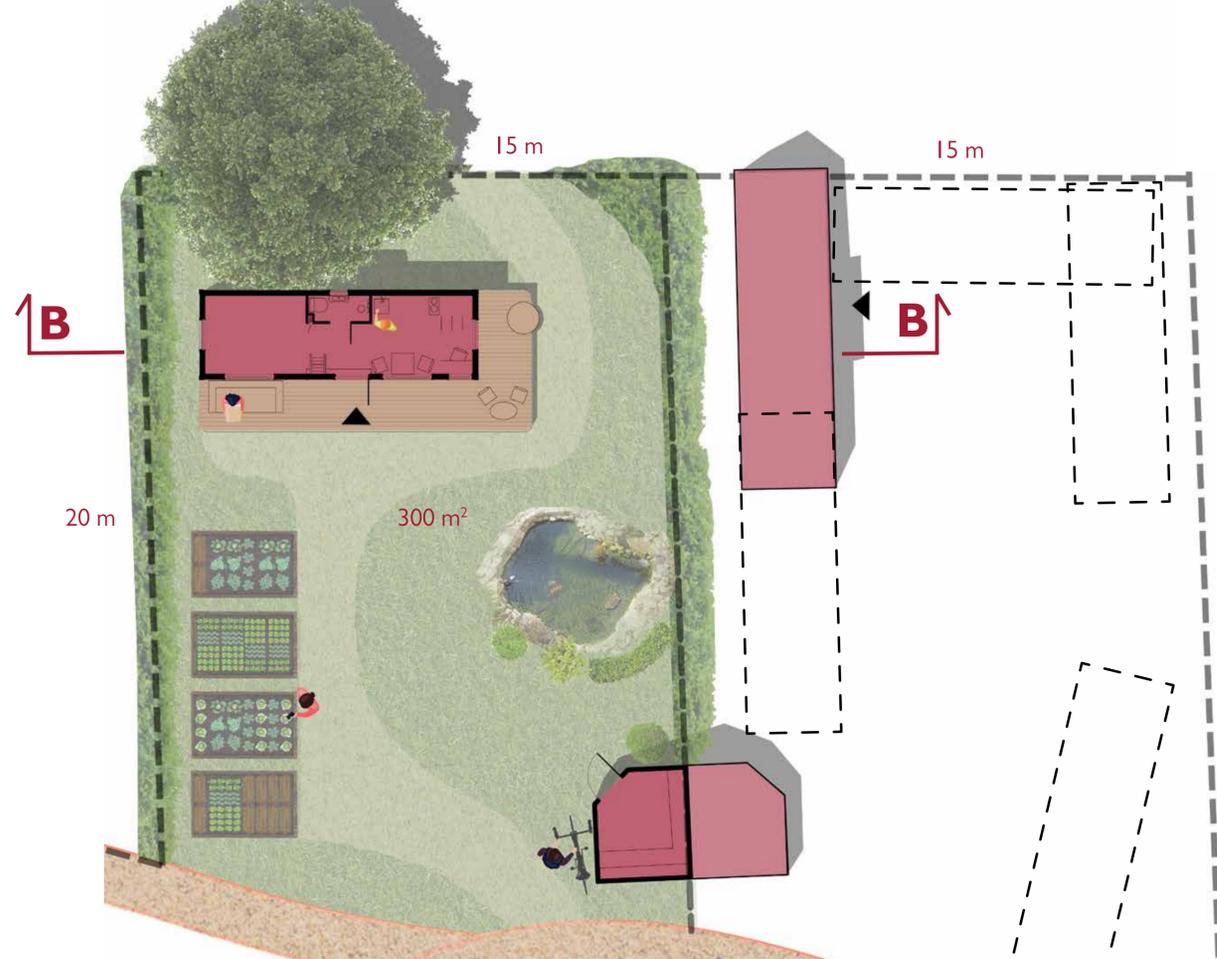
Annan huvudman

Kommunen skall inte vara huvudman för allmänplatsmark.

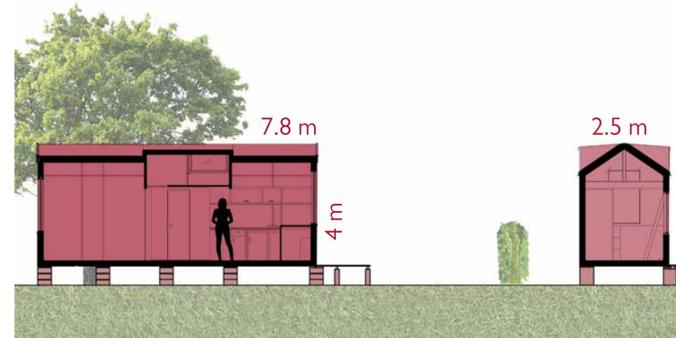
PLANKARTA DETALJPLAN FÖR KNALLEDAL MINIHUSBY

UBBHULT 1:2, SÄTILA SOCKEN
MARKS KOMMUN, ÄLVSBORGS LÄN

UPPRÄTTAD 2022-12-11 AV OLAGA ARKITEKTER I SAMARBETE MED
STADSARKITEKTKONTORET, MARKS KOMMUN REVIDERAD 2022-12-15



EXAMPLE GARDEN, PLAN 1:100 (A1)

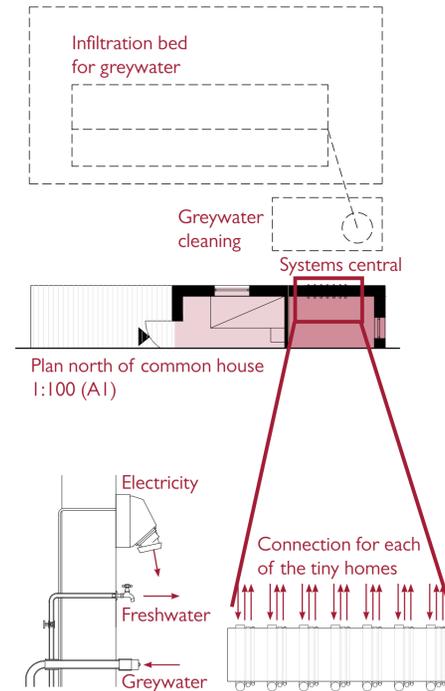


SECTION B-B 1:100 (A1)

Private plots

Members of the village rent a plot and bring their own house when moving in. The plots are designed to be small but still allow for mobile house-delivery and enough space between buildings to uphold the fire regulations. One may build additional structures and plant gardens, but the land must be able to return to its original state if the member decides to move.

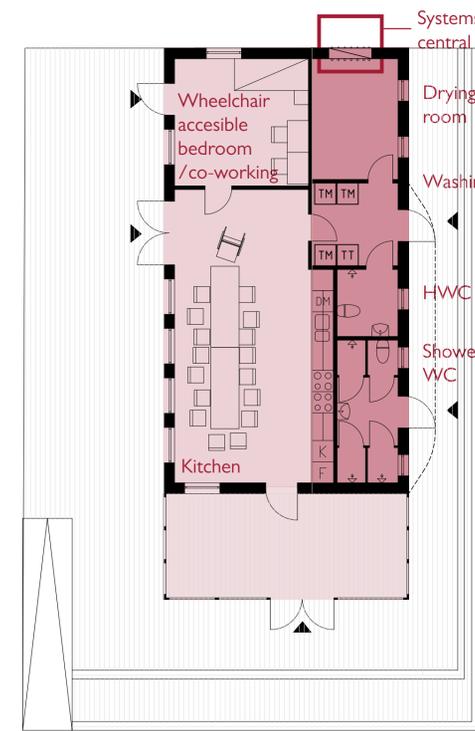
The proposed placement of houses is only a suggestion. The village will be ever-changing and look different from year to year.



Detail section 1:20 (A1) Detail plan 1:20 (A1)

System

At the founding of the village, a well is drilled for freshwater and a system for cleaning greywater with an infiltration bed is dug out above the common house. The individual houses can connect to this system via the system centrals located at the common house and the workshops. In winter water is only available at the common house (unless one or many of the houses decides to dig a pipe). At the centrals the inhabitants can also connect to electricity from the municipal grid with individual 3-phase cables.

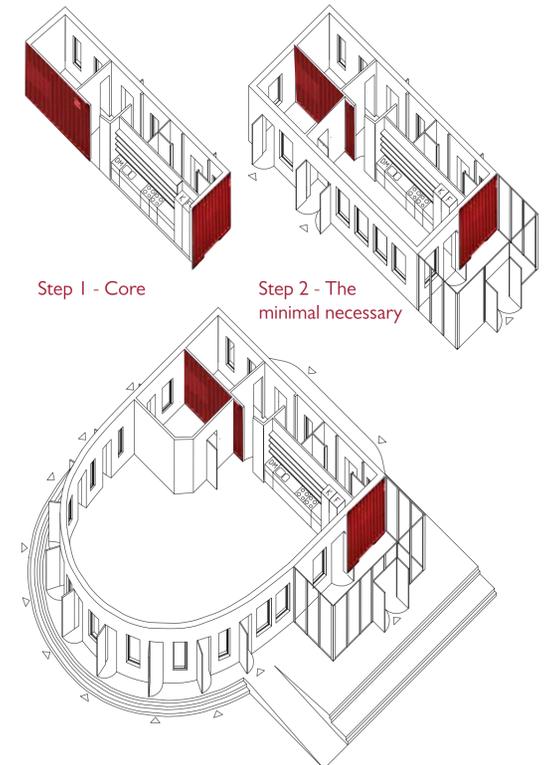


Plan common house (the minimal necessary) 1:100 (A1)

Community

The common house compensates for the functions lacking in the tiny homes. The common house consists of a core fitted into a container. This can be placed at the site and instantly provide for the basic systems and functions. The rest of the house can then be built around it according to the needs of the inhabitants of the village. The common house, the workshop and the common garden, provides the base of the communal life in the village.

Below: The common garden at the entrance of town. Situated below Rydebacke common garden, it connects the two villages.



Step 3 - Expanded according to the needs and wishes of the tiny home owners

The future

Tiny homes are challenging the space and comfort that we have grown used to. It is challenging the core of what has brought the climate crisis upon us. Tiny homes are not the answer to all problems, but a powerful tool for society to meet the future. The village meets the needs expressed by tiny home owners, while providing new inhabitants and new business opportunities to the municipality. The project shows a viable concept that could be placed at all kinds of locations; inside and outside of Mark. It is a starting point for an innovative exploration of new ways of living.



2; A view from one of the gardens



3; The common gardens