

# Dignified through self-determination: Using space | flows

*The case of UNHCR refugee camps*

P5 presentation

TU Delft  
Urbanism

Samuel Hartman



From "UNWRA", by 'unknown', n.d.



From "VOANews", by 'unknown', 2020.



From "theuprooting", by E.S. Jafif, 2016.



From "Macleans", by J. Pix, 2014.

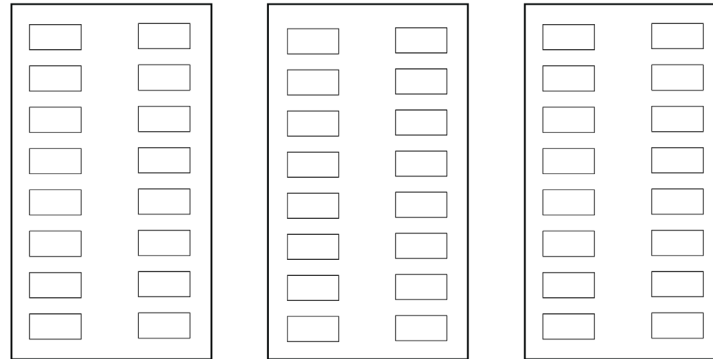


# Structure of this Presentation

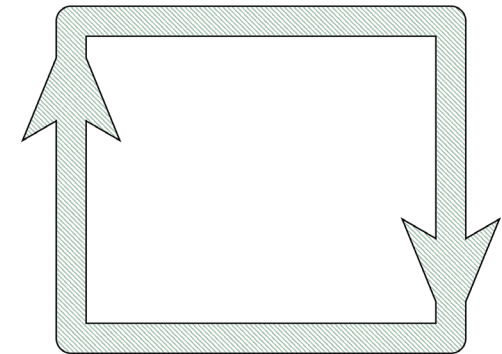
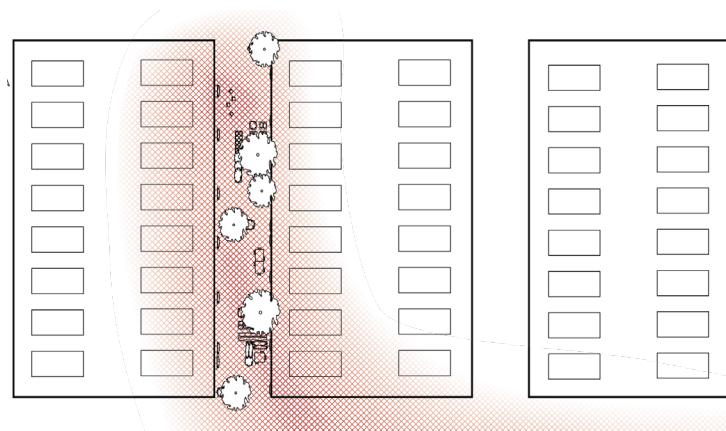
## Introduction



## Current practices



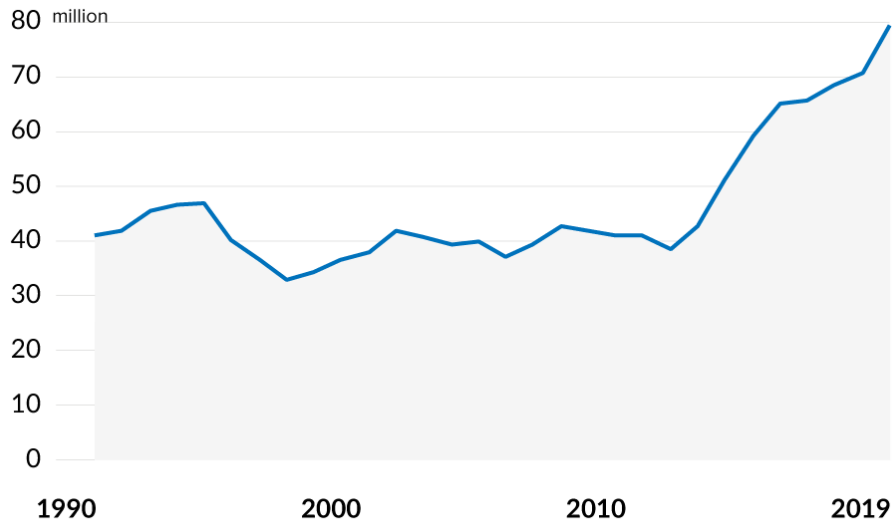
## Concept



## Proposed Interventions



## Displaced people: 79.5 million



<https://www.unhcr.org/figures-at-a-glance.html>

## Germany



**Newly displaced in 2019: 11.0 million persons**

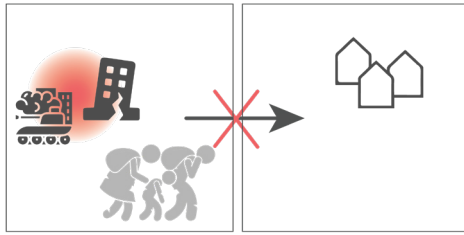
**Repatriated in 2019: 317,200 persons**

**Resettled in third countries in 2019: 107,800 persons**

**10.6 million people became EXTRA displaced in 2019**  
**In 2018: 10.0 million people**



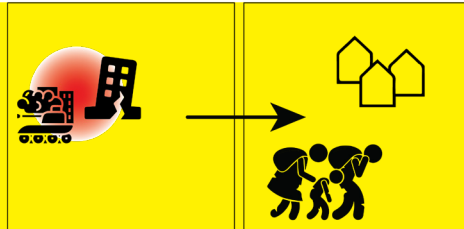
# UNHCR Mandate | Groups of Concern UNHCR (2003; 2019)



45.7 million

Internally Displaced People (IDP)

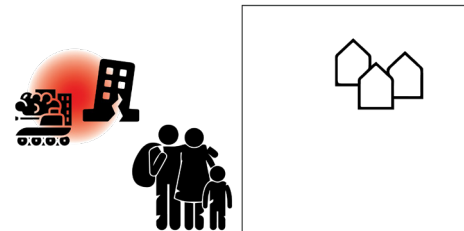
focus:



26 million

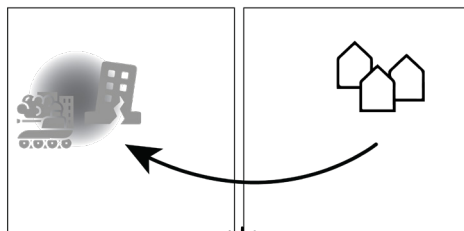
Refugees

3.9 million people live in planned camps



4.16 million

Stateless people



0.317 million

Returnees

Total: 79.5 million



# UNHCR Mandate | Provides or Enhances UNHCR (2003)





# UNHCR Emergency Handbook | Planological Guidelines UNHCR (2020)

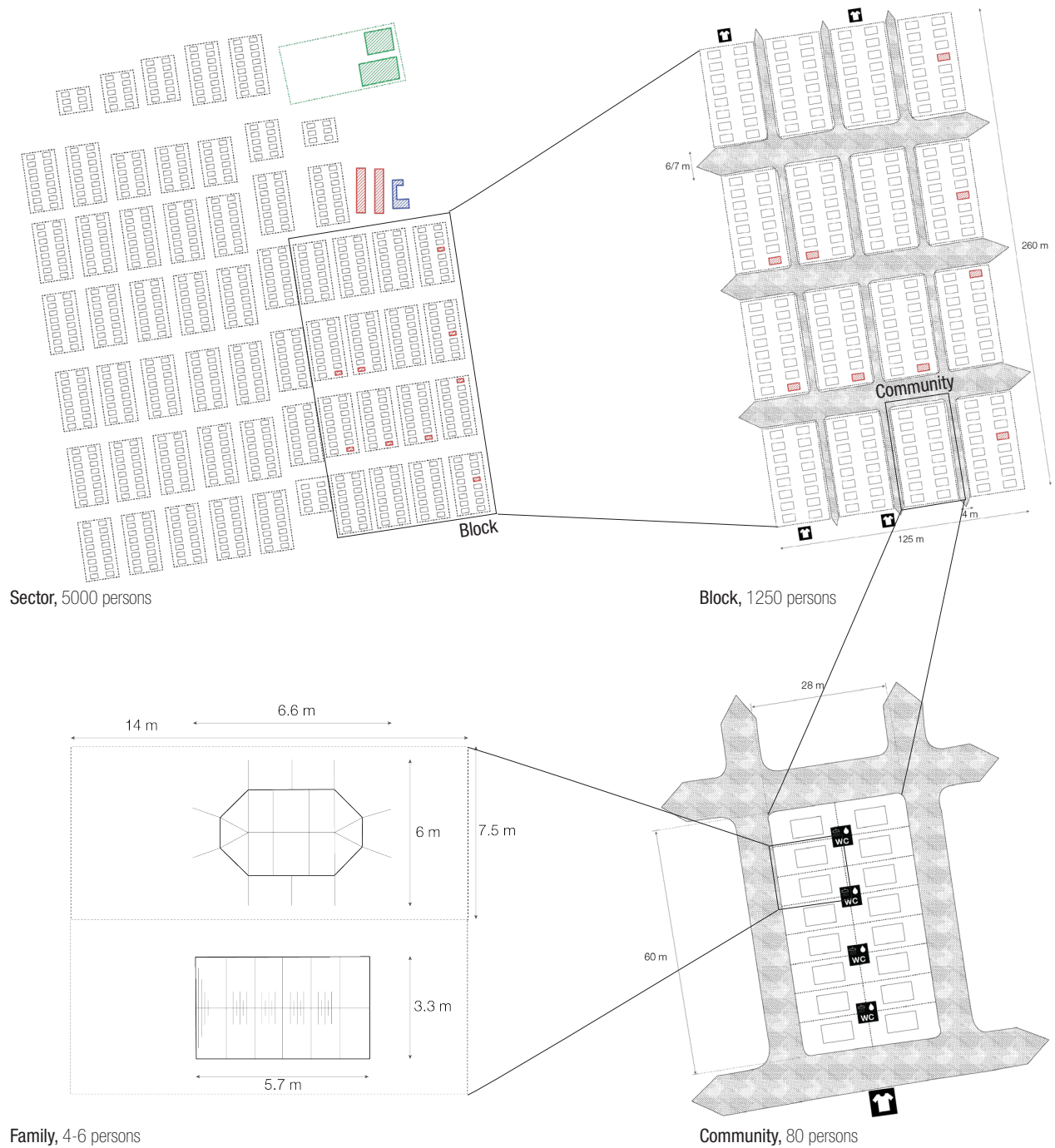
## Example: Qushtapa Refugee Camp, Iraq



### basic amenity standards

description	standard
communal latrine	1 per 20 persons
shower	1 per 50 persons
water tap	1 per 80 persons
rubbish container (100 liter)	1 per 50 persons
refuse pit (2x5x2m)	1 per 500 persons
school	1 per 5000 persons
distribution centre	1 per 5000 persons
market place	1 per 20.000 persons
feeding centre	1 per 20.000 persons
health centre	1 per 20.000 persons
referral hospital	1 per 200.000 persons
storage area (15-20 m <sup>2</sup> )	per 50 persons

# UNHCR Emergency Handbook | Scale Related Guidelines UNHCR (2020)





# UNHCR Emergency Handbook | Phase Related Guidelines UNHCR (2020)

## Emergency Phase

ensuring survival of people, minimum requirements

## Transition Phase

transitioning to Post Emergency standards

## Post Emergency Phase

create more durable systems and provide higher quantities and levels of comfort



7.5-15 Liter/p/day  
(e.g. using jerrycans)

15-20 Liter/p/day  
(e.g. extension of existing waternet)

>20 Liter/p/day  
(e.g. permanent waternet)



provide fuel for first 4-5 months;  
provide stoves

provide access to clean and sustainable fuels

-



'solar light'; electricity for health centers  
(e.g. using diesel generators)

provide enough for light and charging devices (200wh/household/day);  
using sustainable generation methods

-



1 toilet per 50 people  
(e.g. using pit toilets)

1 toilet per 20 people

1 toilet per household



collection to dumping pits

transfer to durable solution

create durable solution  
(e.g. processing by third party)

Emergency phase

Transitional phase

Post emergency phase

0 6 months

2 years

20 years



# Camps are built as temporary solution

.....G L O B A L   S H E L T E R.....

## 2.1 UNHCR FAMILY TENT

UNHCR Supply Catalogue - Item No 05353



**However: average ‘stay’ in camps is 17 years**  
**State of “Undetermined Temporariness”**



Life in Camps Khatib & Armenian (2010); Oka (2014); Turner (2016)

Exclusive focus on short term crisis management and efficiency

+

State of undetermined temporariness

reinforces:

Low sense of Normalcy

Lack of Agency and Voice

leads to:

**Low sense of dignity**



Refugees walking to the Austrian border  
10 / 51



Camp inhabitants waiting in line for food in Moria

# Dignity | Definition McCrudden (2008); Oka (2014)

## Kant's explanation of Dignity:

**“[T]o treat people with dignity is to treat them as autonomous individuals able to choose their destiny.”**

McCrudden, 2008, p. 659

## Premise:

**Dignity is positively influenced by Self-Determination**



# Self-Determination | Criteria Jacobsen, Oliver, and Koch (2009); Khatib & Armenian (2010); Oka (2014); Woroniecka-Krzyzanowska (2017)

## Self-Determination

is reached through:

1



From "ANHA"; by 'unknown', 2018.

Providing food in Ayn Issa camp, Syria

**providing first needs**

2



Informal shops in Camp Zaatari, Jordan

**(informal) economic activity**

3



From "Green Prophet"; by 'unknown', 2014.

Gardens in Camp Zaatari, Jordan

**spatial self-determination**



## Goal

To foster the dignity of UNHCR planned refugee camp inhabitants by:  
raising the sense of (spatial) self-determination  
+  
enhancing (informal) economic activity.

(informal) economic activity I defined

providing space for economic activity



providing day-labor jobs

installation (1 person 8 hour working days)



From "Daily Sahab", by AAPhoto, 2021.

maintenance (1 person 8 hour working days/month)



From "EU Neighbours", by ...



# spatial self-determination | defined

## physically self-structuring space



## self deciding how to use a space



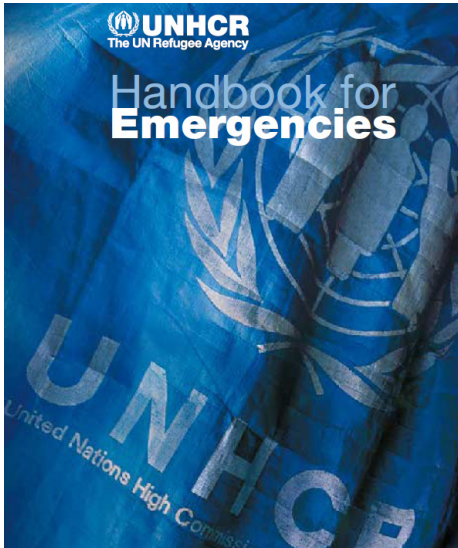
From "Oudestraat", by H. M. Dyer, 2021

From "HartAmsterdam", by M. Linsen, 2015.



# Methods | How to gain input?

## Literature reviewing



AMERICAN ANTHROPOLOGIST

Coping with the Refugee Wait: The Role of Consumption, Normalcy, and Dignity in Refugee Lives at Kakuma Refugee Camp, Kenya

Rahul Chandrashekar Oka

Scientific Research Publishing  
Journal of Geoscience and Environment Protection, 2020, 8, 116-132  
<https://www.scirp.org/journal/gep>  
ISSN Online: 2327-4344  
ISSN Print: 2327-4336

Groundwater Flow Modeling for Qushtapa Plain Unconfined Aquifer in Southern Erbil Basin, Kurdistan Region, Iraq

Shwan Seeyan

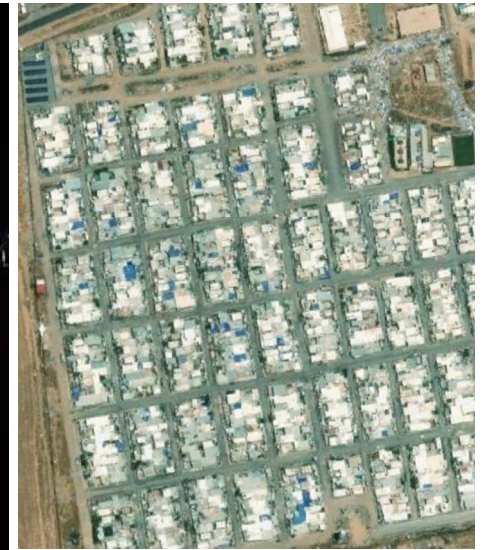
Performance evaluation of a biogas stove for cooking in Nigeria

I N Itodo  
Department of Agricultural and Environmental Engineering, University of Agriculture, Makurdi, Nigeria

G E Agbo  
Ministry of Agriculture and Natural Resources, Jalingo, Taraba State, Nigeria

P Yusuf  
Department of Agricultural and Environmental Engineering, University of Agriculture, Makurdi, Nigeria

## Case studies



## Interviews



## Best case study

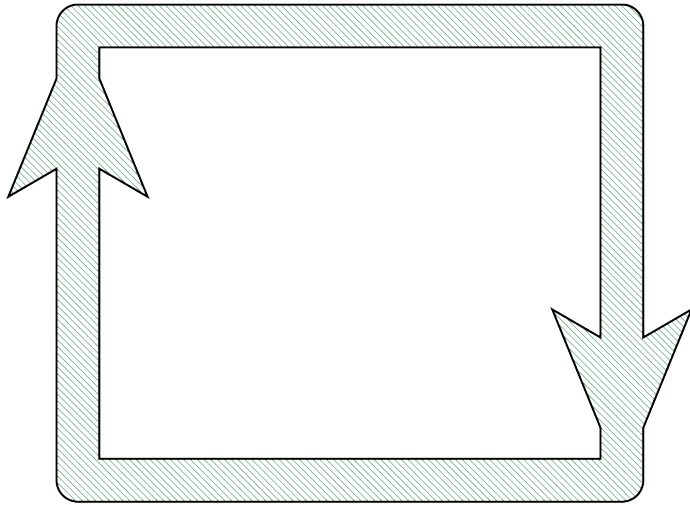




# Interventions

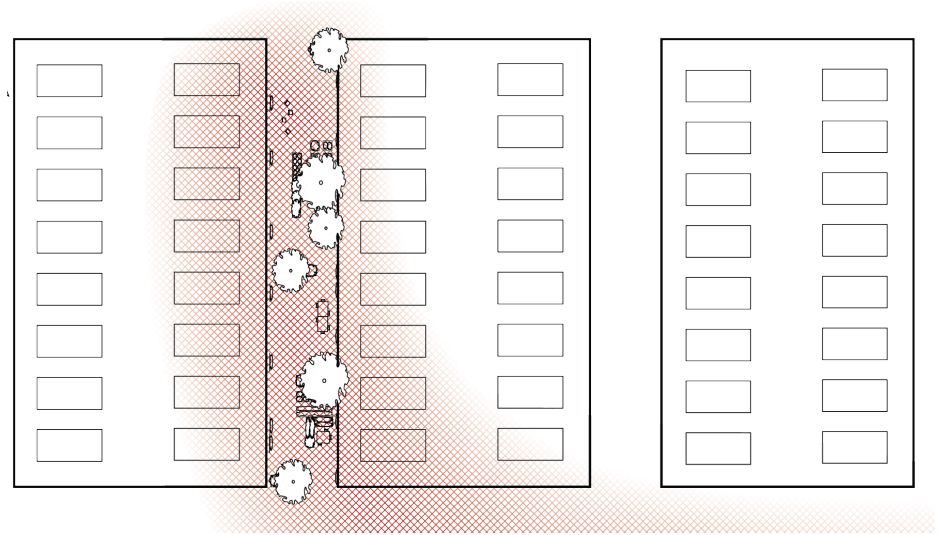
## Two Perspectives

### Flow-related Interventions



generate activities which are present in any camp in every context

### Spatial Interventions



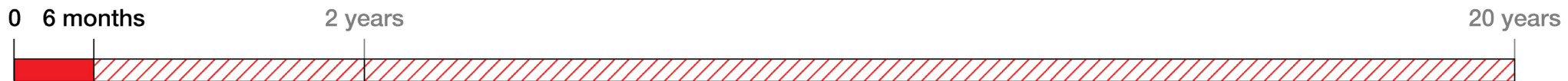
spatial interventions can enhance spatial self-determination and/or (informal) economic activity

that enhance

- (informal) economic activity
- spatial self-determination

# Flow-related Intervention Principles | **Emergency Phase**

- 1 provide and process essential flows in any way possible**
  - water, cooking fuel
  - sewage collection, waste collection

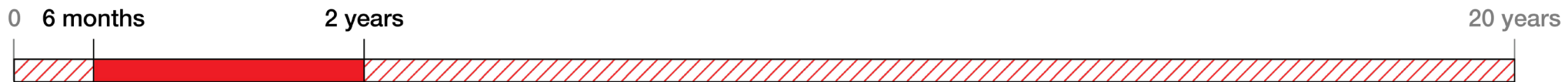
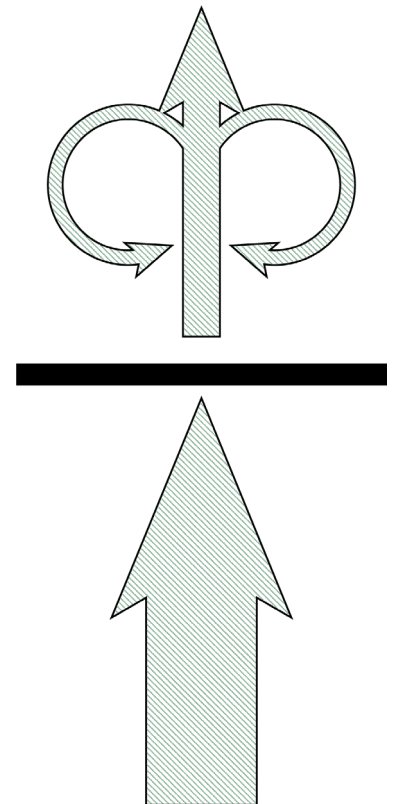


# Flow-related Intervention Principles | **Transition Phase**

**1 provide flows in any way possible**  
water, cooking fuel | biogas, electricity

+

**2 make use of waste flows**  
(grey) water | irrigation  
rainwater collection | irrigation  
sewage | biogas and fertilizer  
waste | recycled material



# Flow-related Intervention Principles | **Post Emergency Phase**

## 1 provide flows

water, cooking fuel | biogas, electricity

+

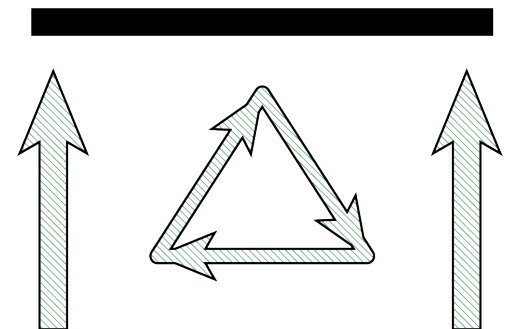
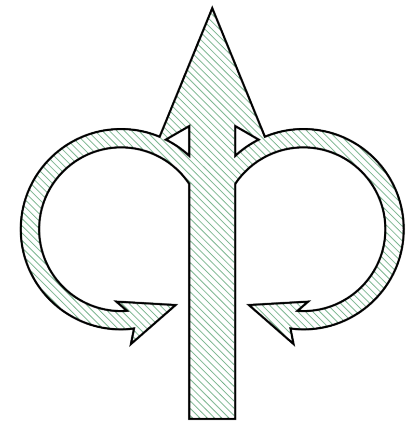
## 2 make use of waste flows

(grey) water | irrigation  
rainwater collection | irrigation  
sewage collection | biogas and fertilizer  
waste collection | recycled material

+

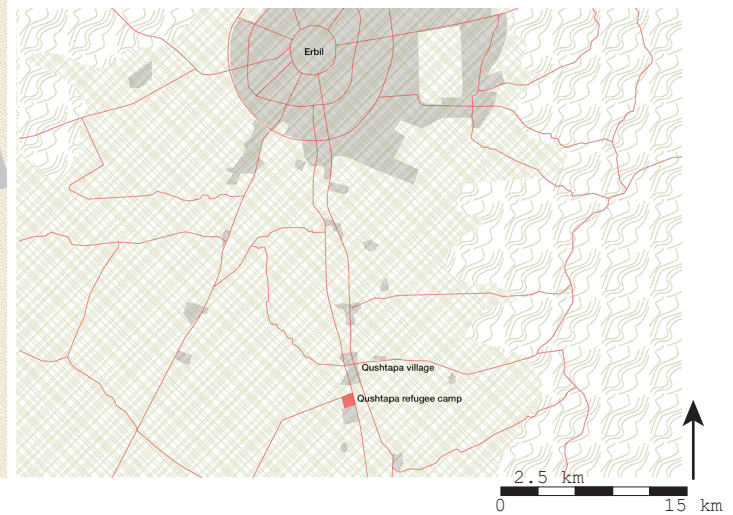
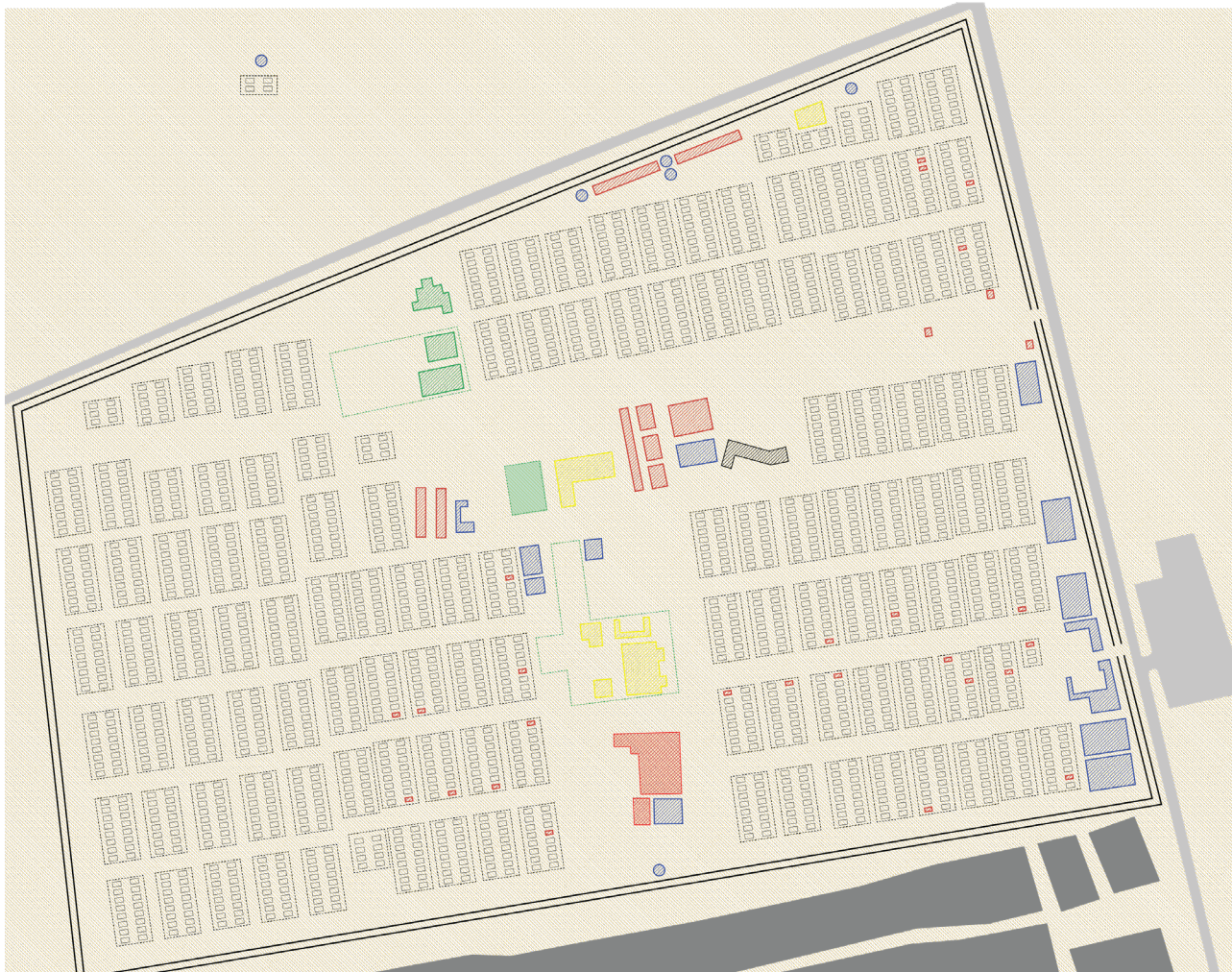
## 3 produce a maximum of flows locally

electricity  
(homegrown food)





# Illustration of Principles | Qushtapa Refugee Camp, Iraq (7900 inhabitants)



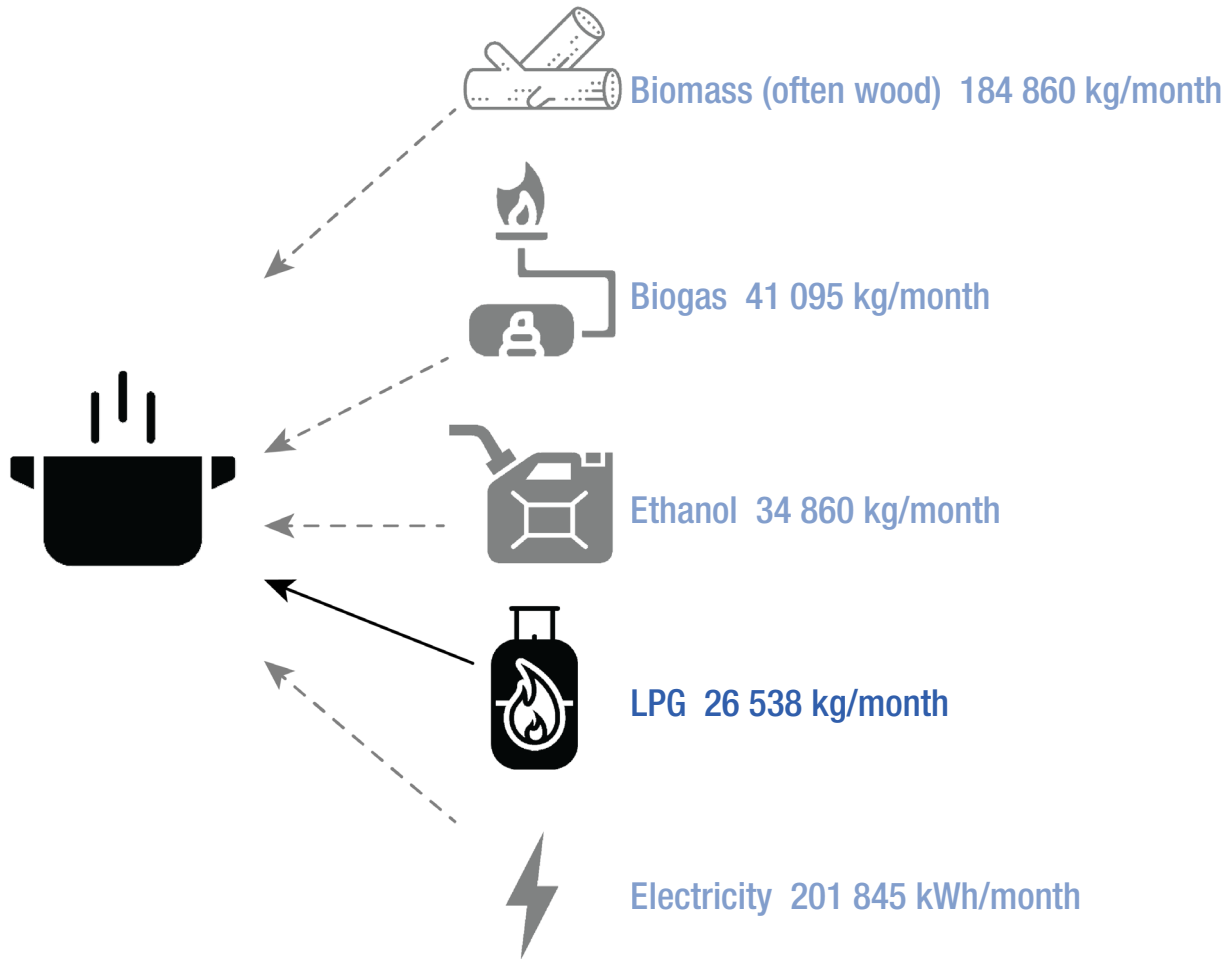
**example:** providing cooking fuel  
processing sewage sludge



# Flow-related Interventions, Qushtapa | Emergency Phase

Generate and Process essential Flows in any way possible

providing cooking fuel | LPG



work provision

installation: none

maintenance: 24 1p, 8h working days/month



0 6 months

2 years

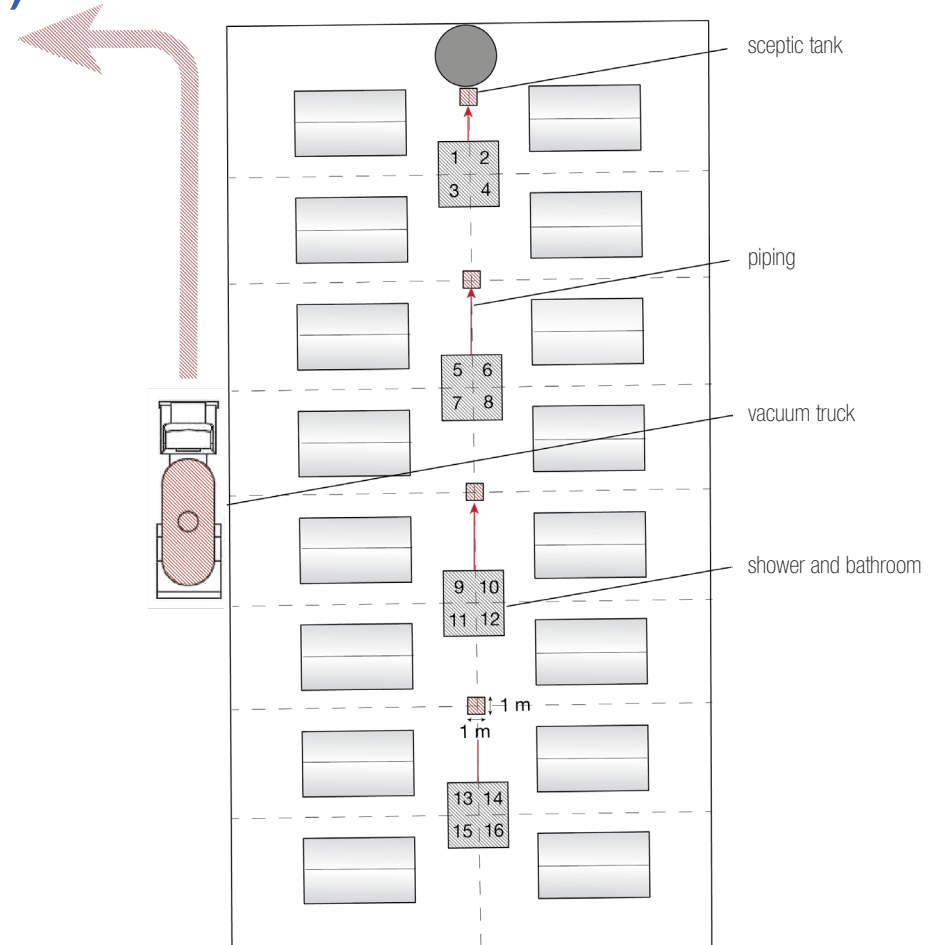
20 years



# Flow-related Interventions, Qushtapa | Emergency Phase

Generate and Process essential Flows in any way possible

processing sewage sludge (265 m<sup>3</sup>/month)



work provision

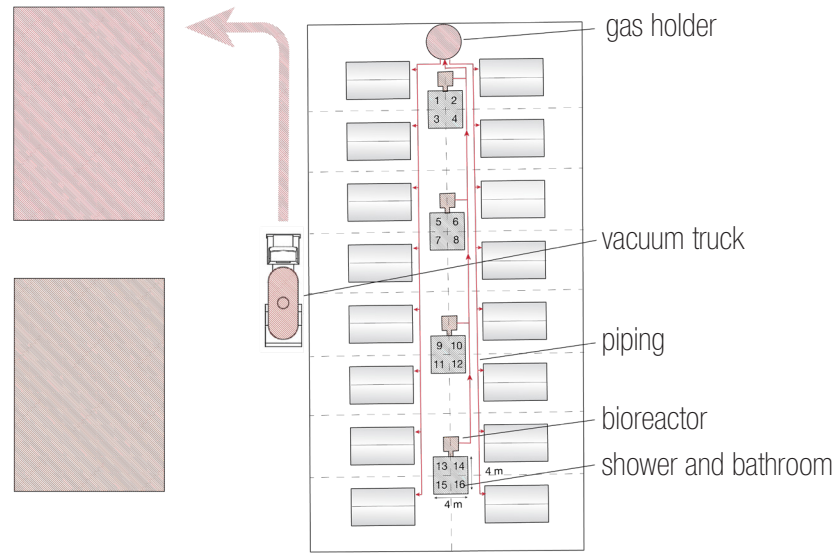
installation: none

maintenance: none

# Flow-related Interventions | Transition Phase + Post Emergency Phase

Re-Use Reststreams + Generate and Process all Flows Inside the Camp  
 producing biogas by processing sewage sludge

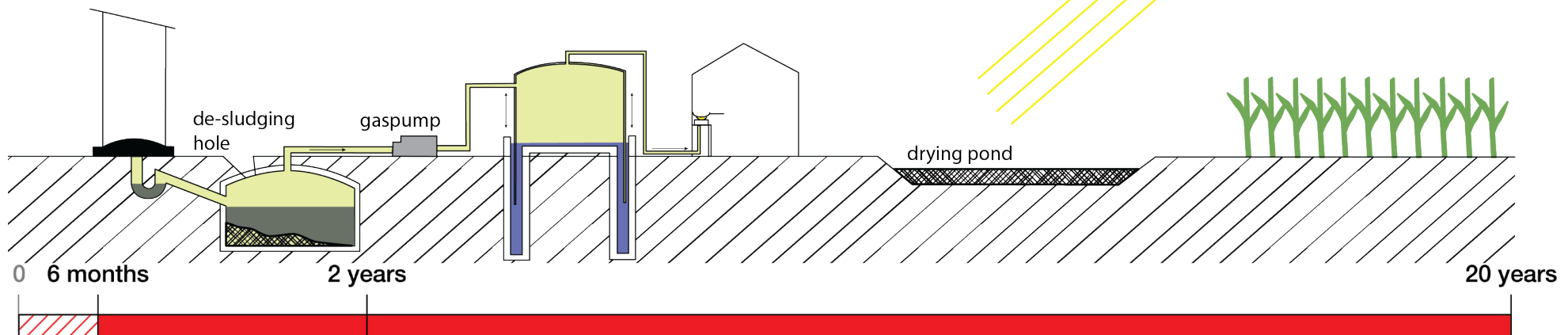
biogas (70 776 m<sup>3</sup>/month)  
 sewage sludge (34 m<sup>3</sup>/month)



From "IOCW-Deft", by unknown author, n.d.

## work provision

installation: 1764 1 p, 8 h working days  
 maintenance: 41 1 p, 8 h working days/month





# Flow-related Interventions

## Emergency Phase

## Transition Phase

## Post Emergency Phase

**drinking water** (8410 m<sup>3</sup>/month)

drilling wells

waternet

**grey water** (7190 m<sup>3</sup>/month)

greywater infiltration pits

grey water collection and filtering system

**rain water**

rainwater collection system

**electricity** (125 MWh/month)

electricity net

self generating electricity (PV-panels)

**solid waste** (19 223 kg/month)

collect solid waste

collect and recycle solid waste

# Flow-related Interventions



**TOTAL WORK PROVISION:**  
installation: 2949 1 p, 8h days  
maintenance: 839 1 p, 8h days/month



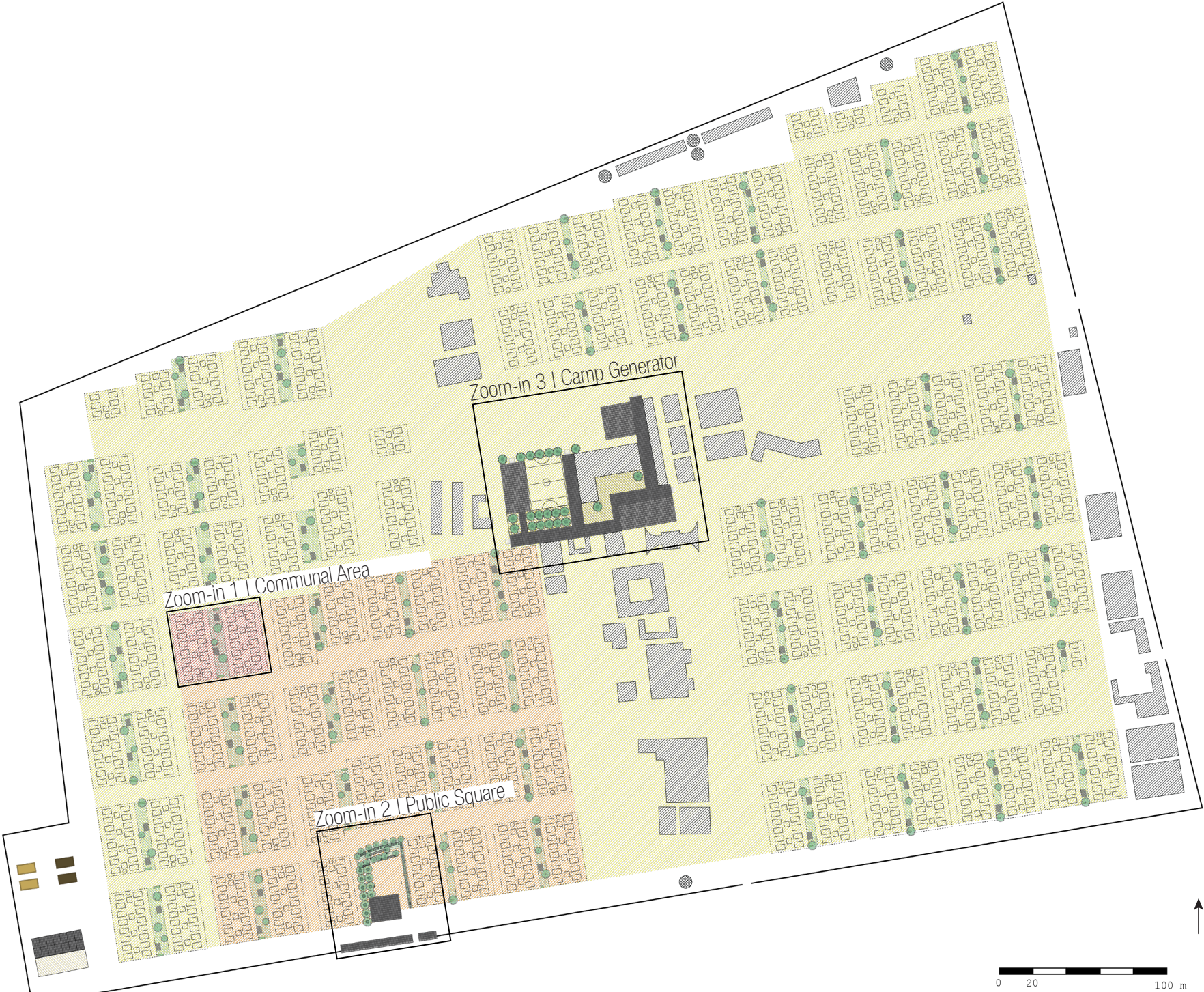


# Flow-related Interventions | What Does it Mean Spatially?





# Spatial Interventions





# Spatial Interventions



# Spatial Interventions | Design Principles

## Zoom-in 1 | Communal Area

Principle 1 | broken lines of sight

Principle 2 | creating diverse borders

Principle 3 | private-public transition

Principle 4 | arranging different entrances

Principle 5 | different pavement types

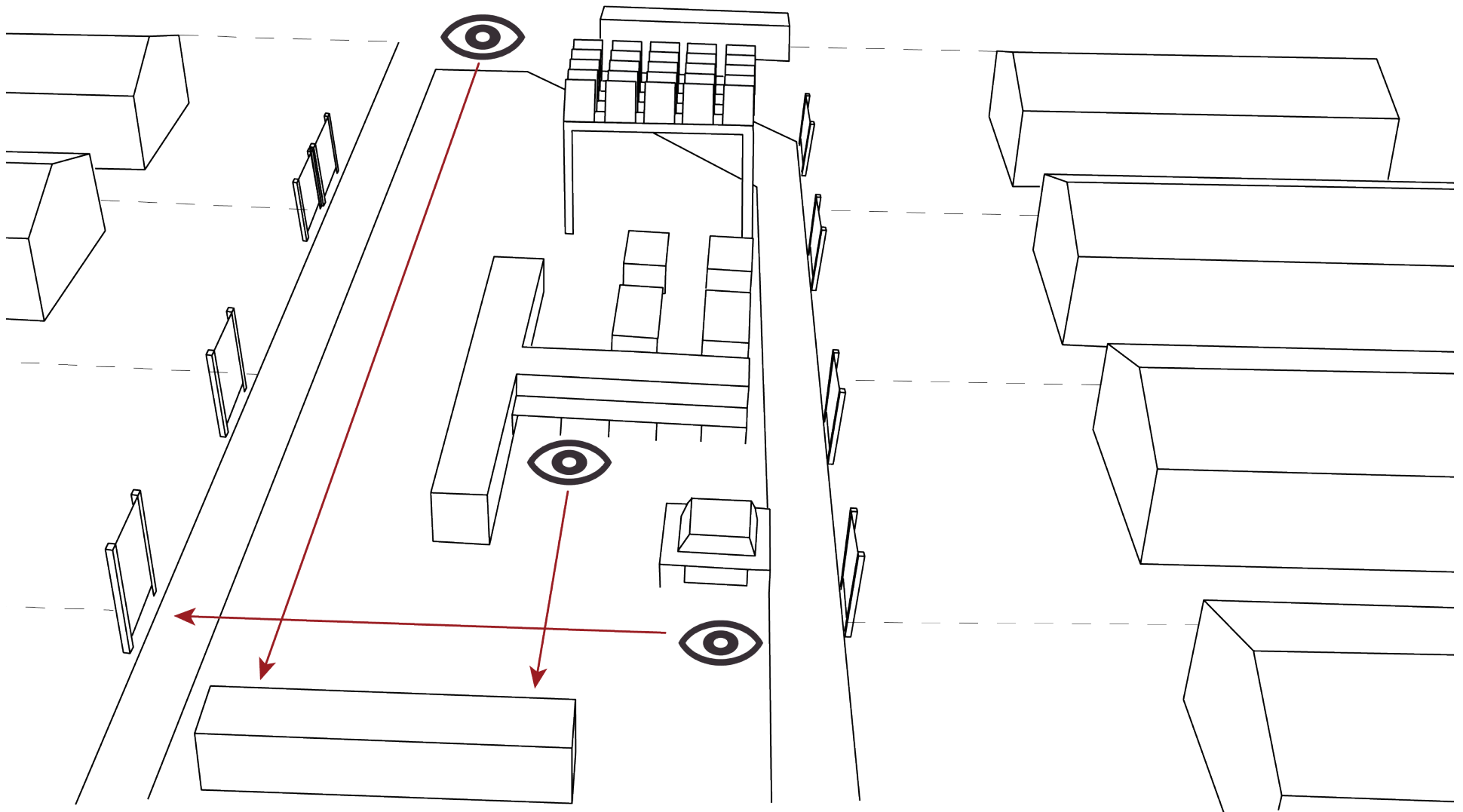
Principle 6 | providing shade and character

Principle 7 | provide seating possibilities

Principle 8 | provide materials for self-arrangement

Principle 9 | rainwater collection for irrigation

Principle 10 | allowing occasional passage of vehicles





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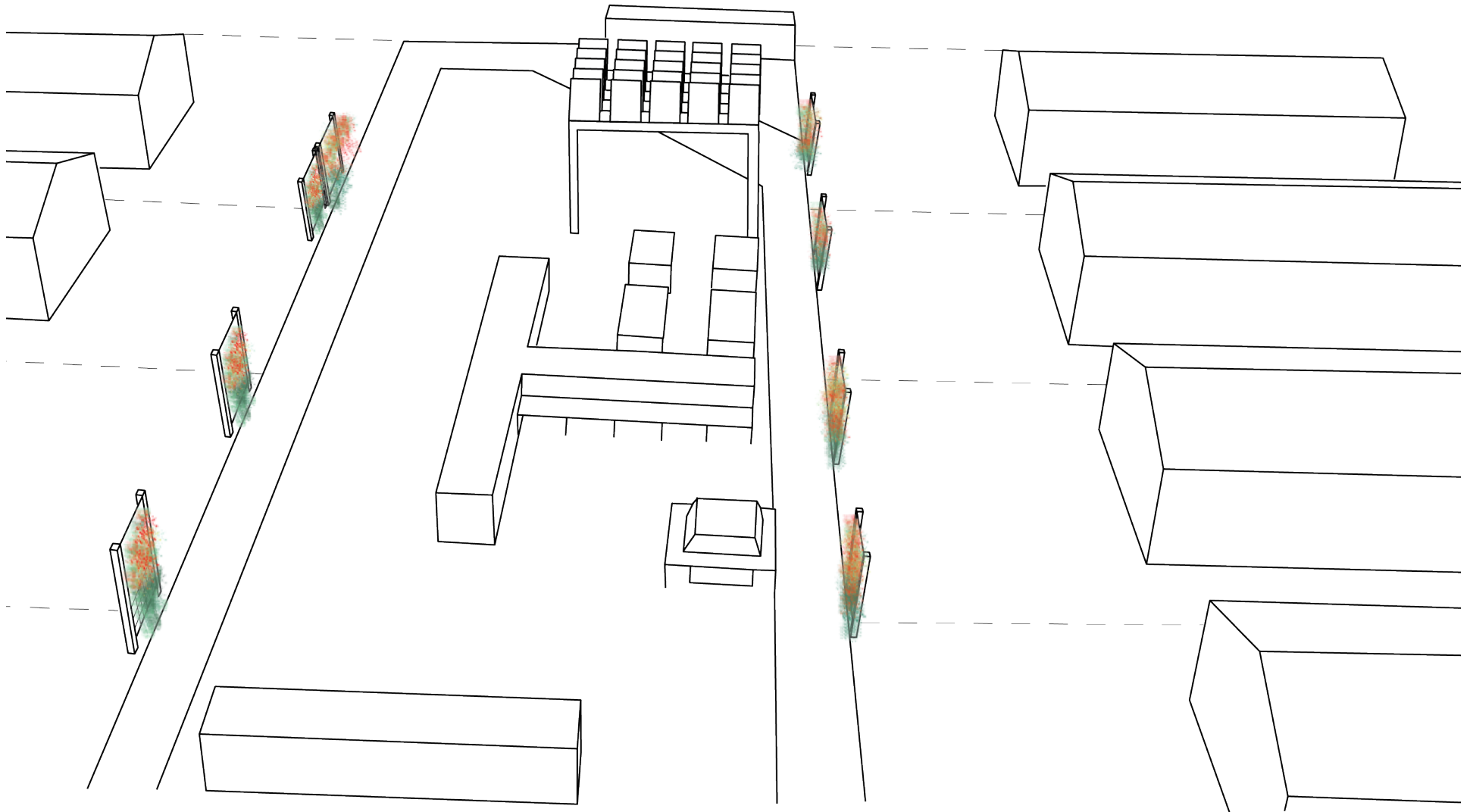
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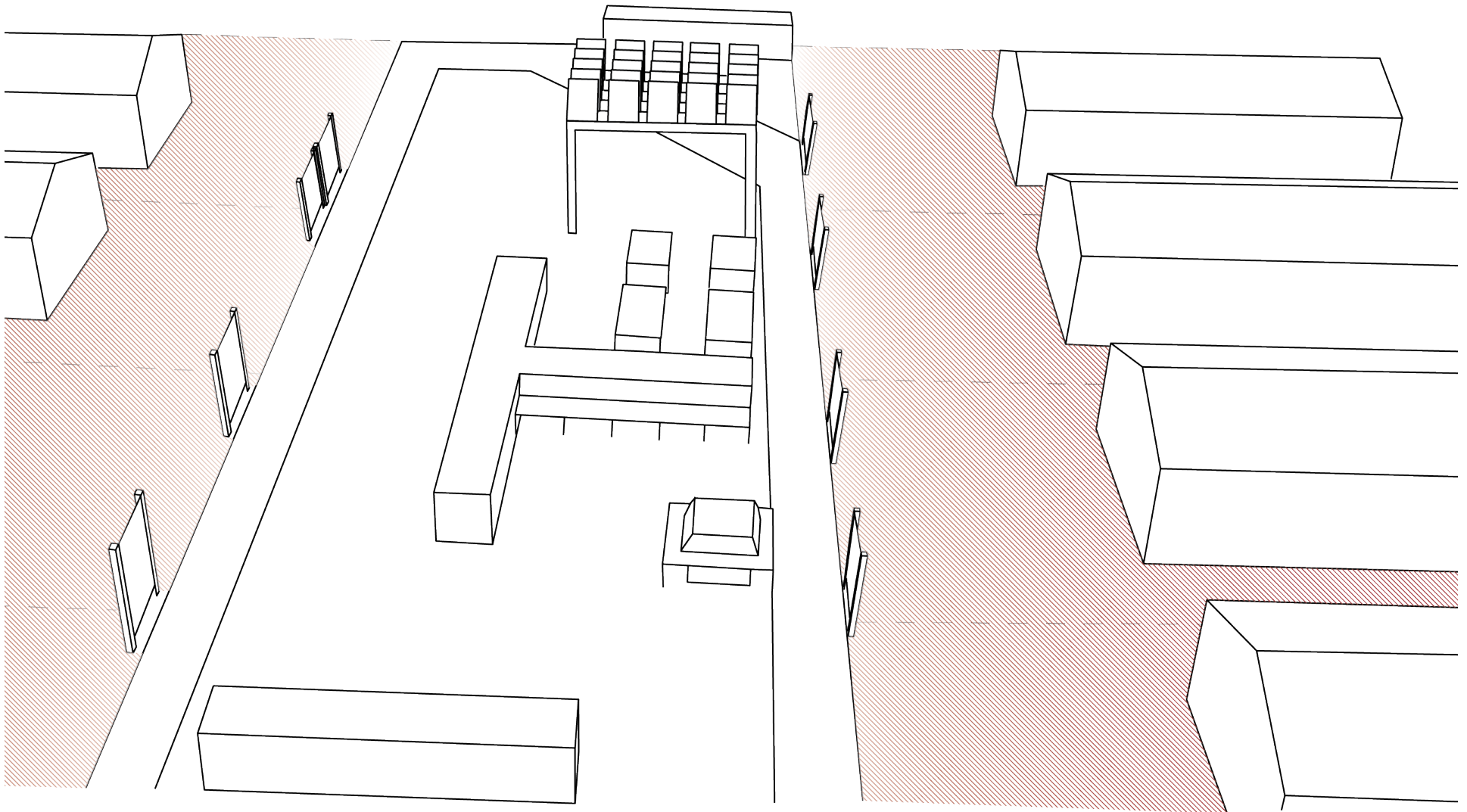
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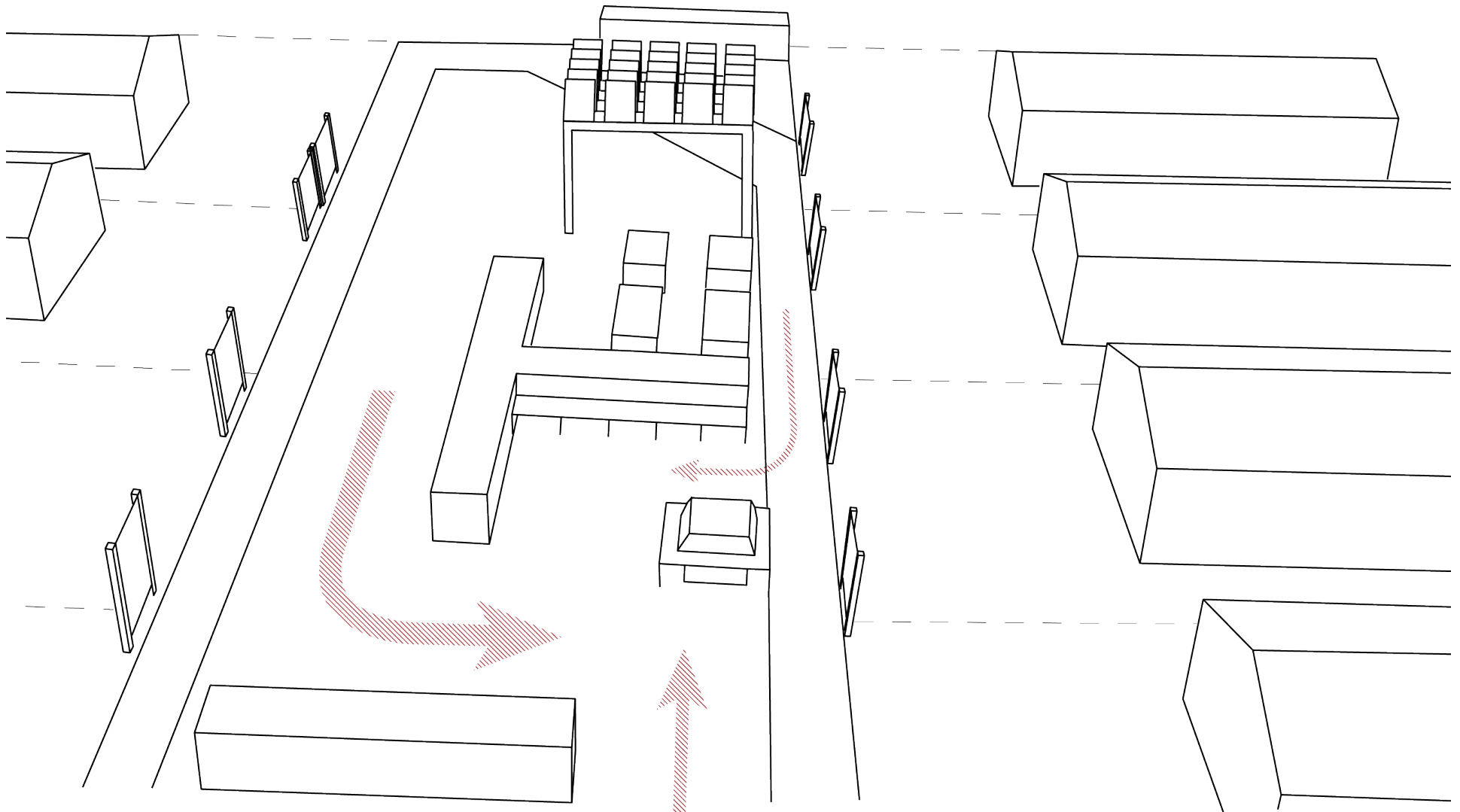
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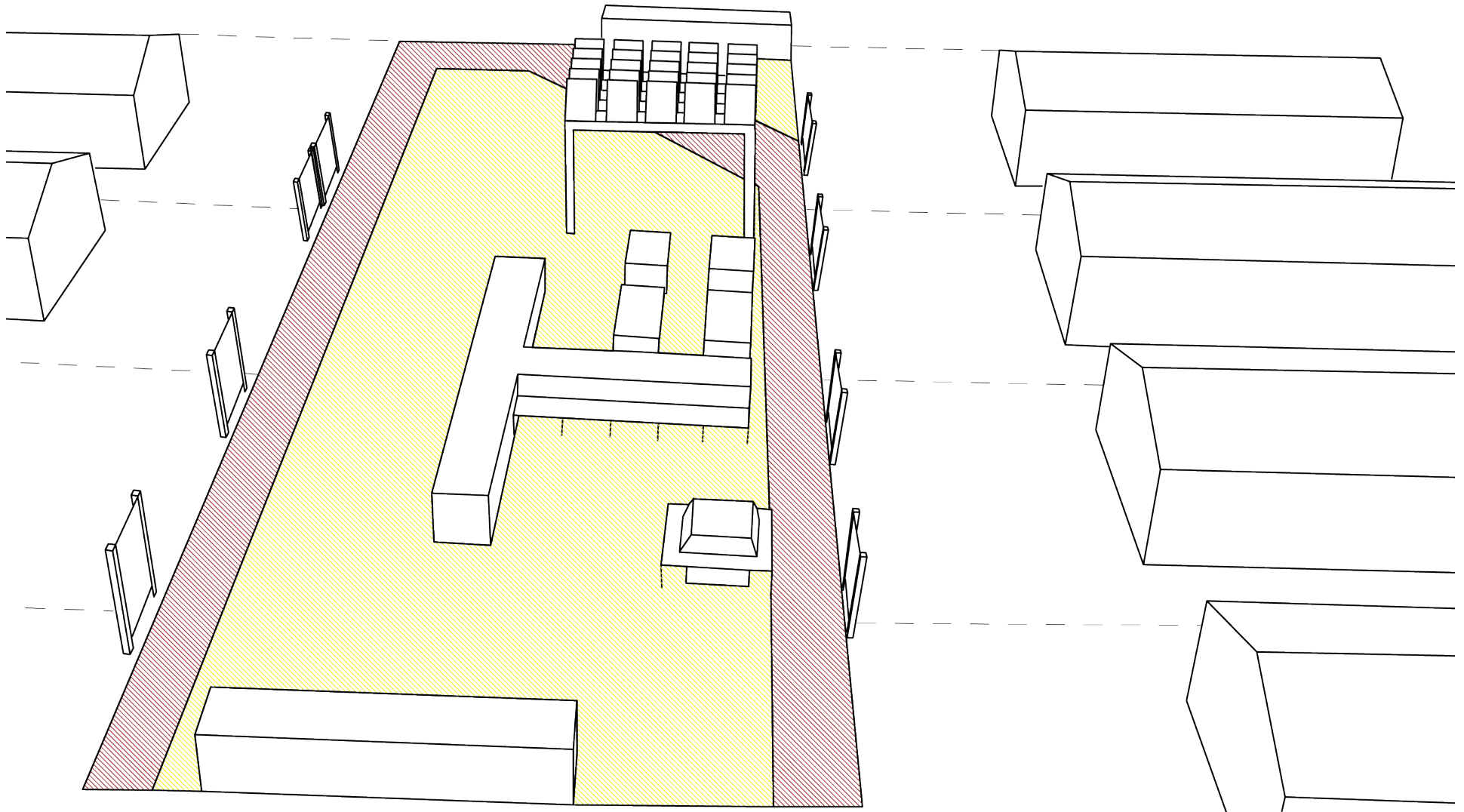
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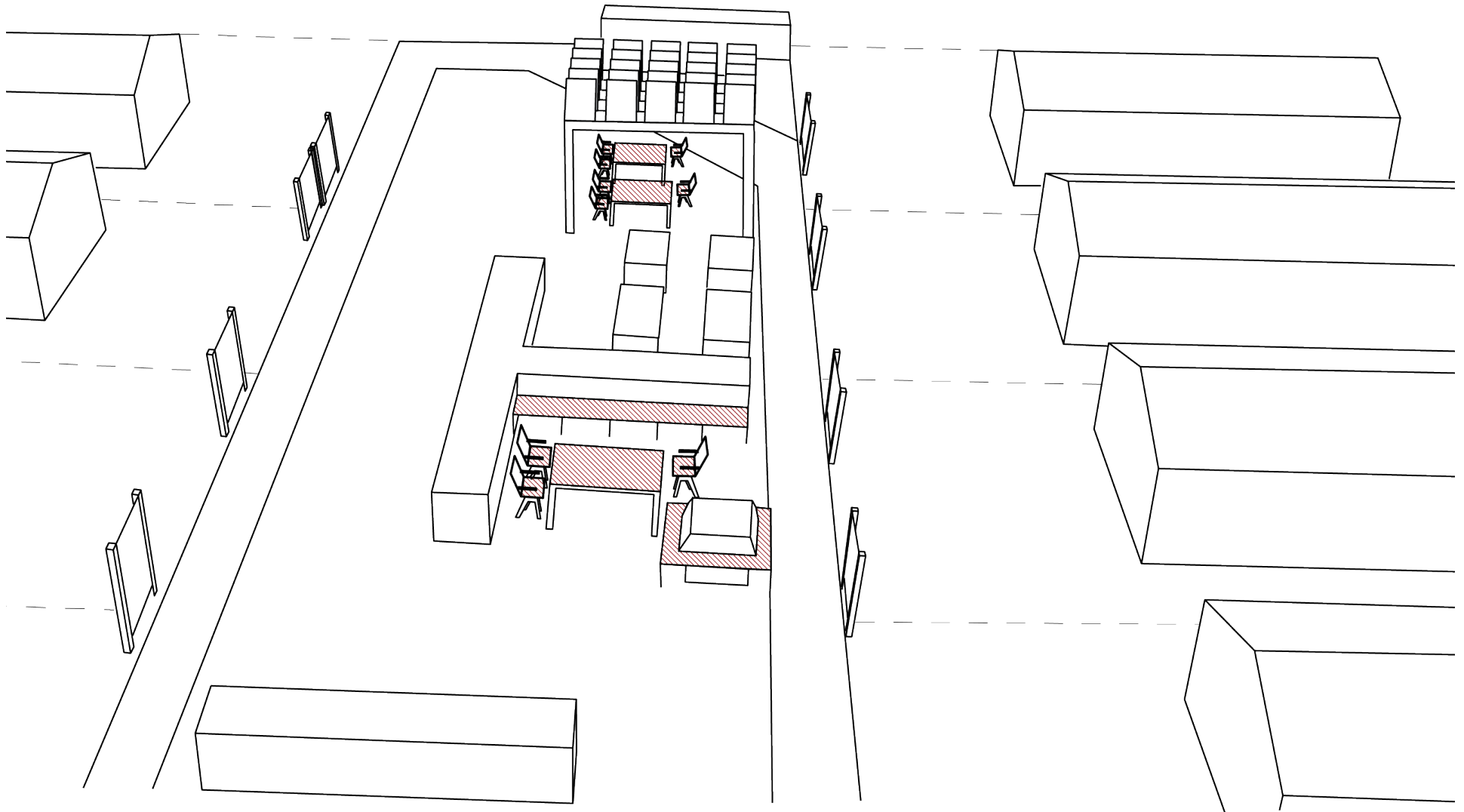
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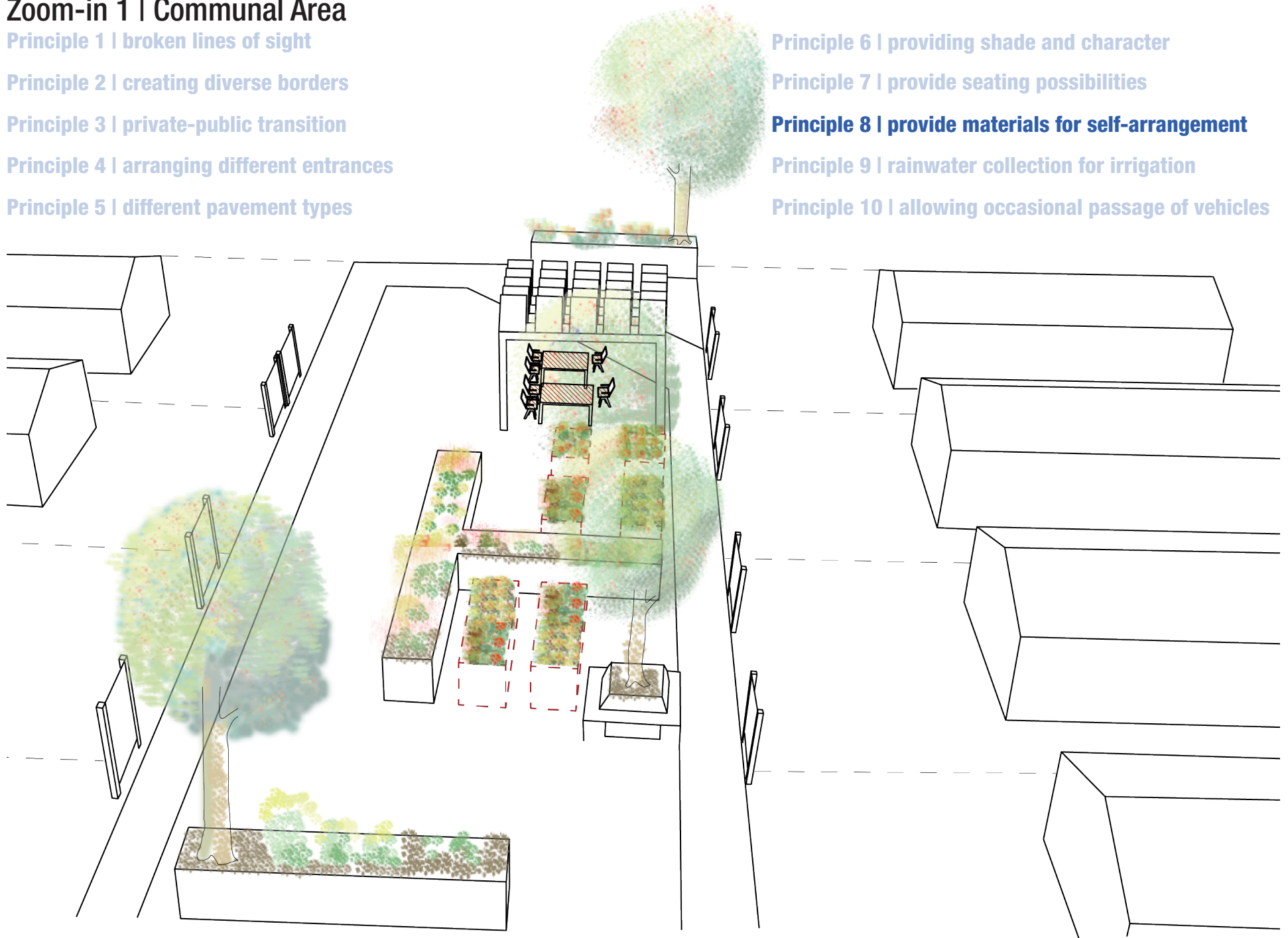
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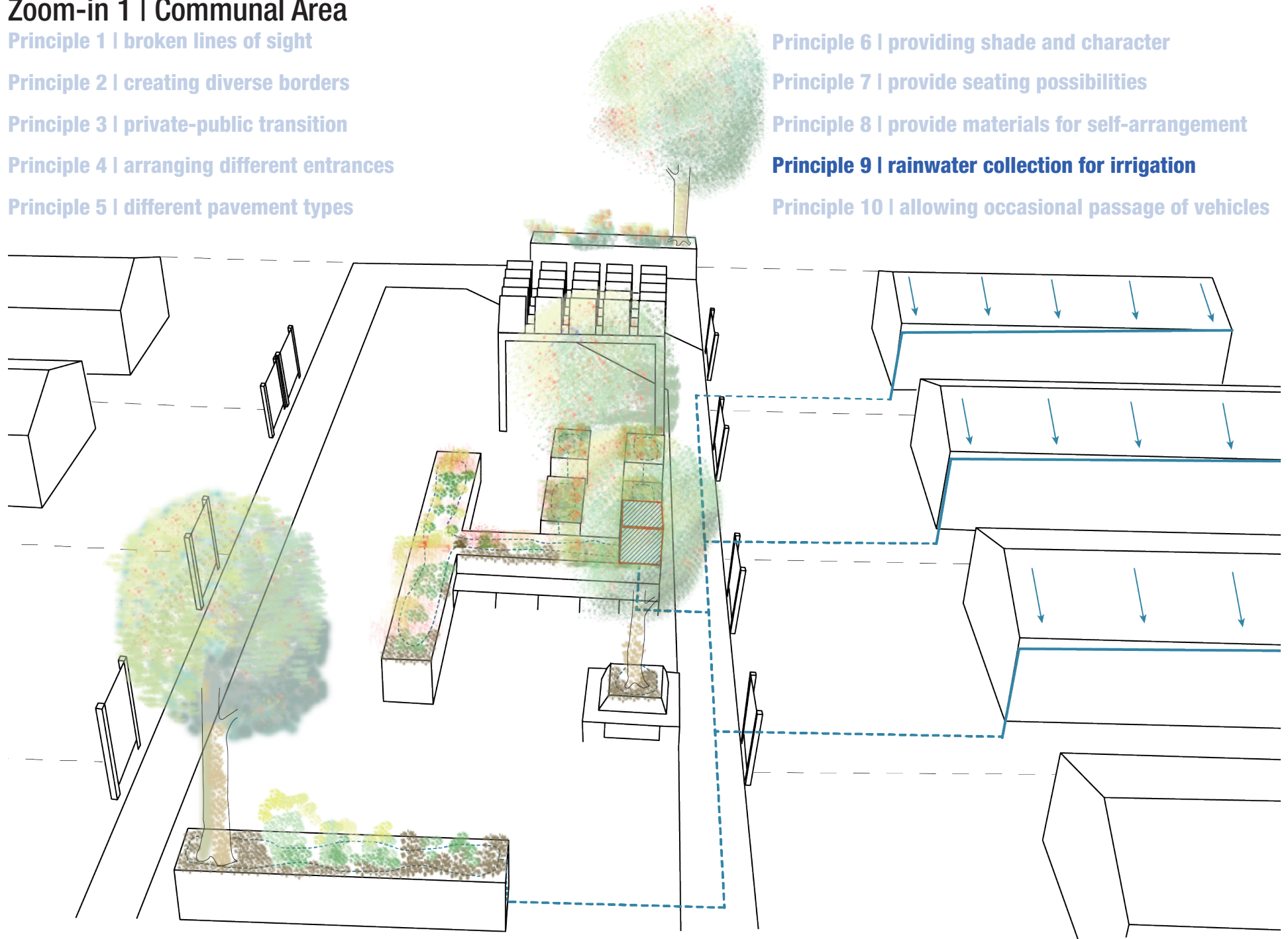
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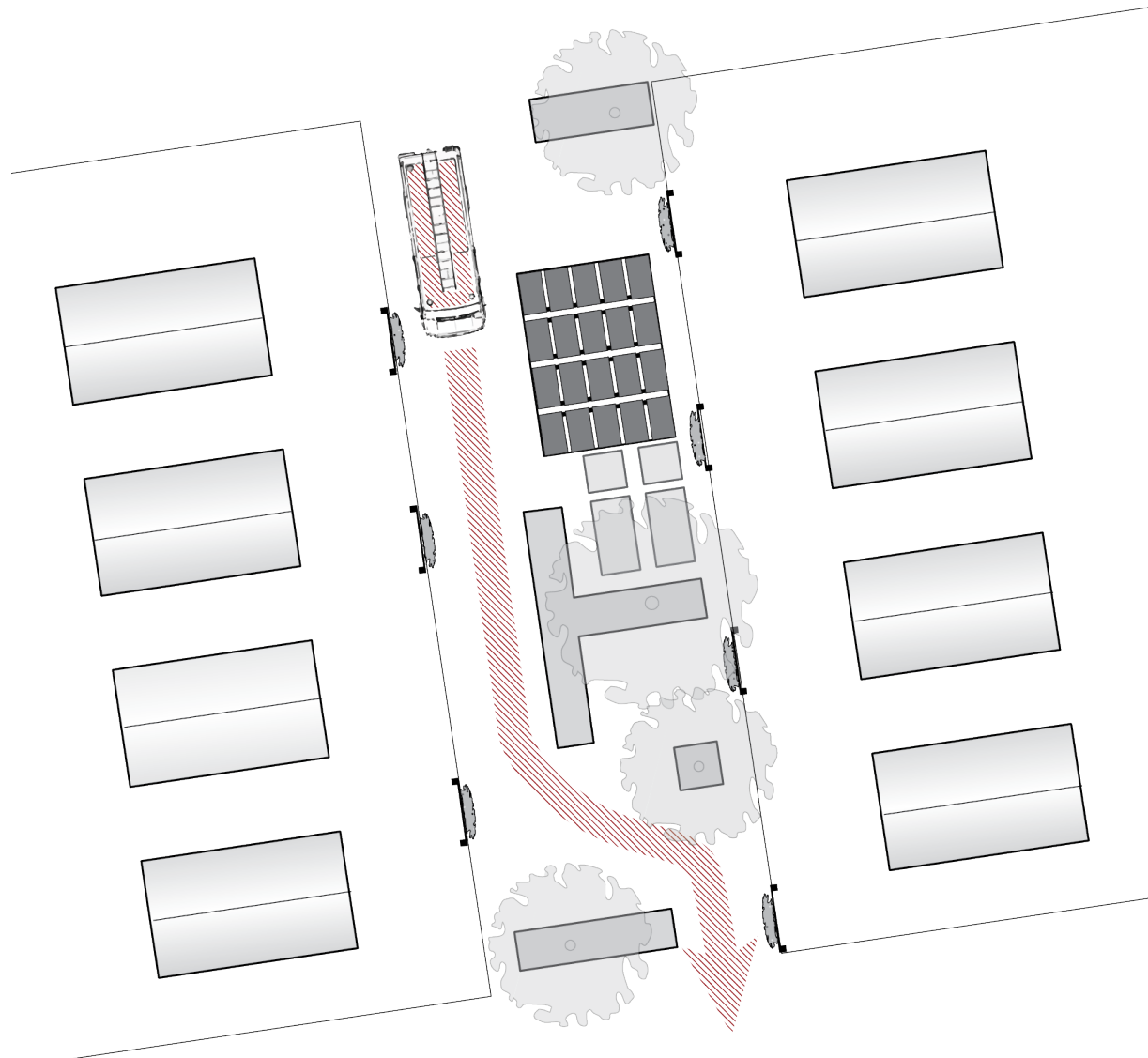
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# Spatial Interventions | Element requirements

## Zoom-in 1 | Communal Area

Element 1 (1x1x0.8m) | used cut open watertanks as plant beds

Element 2 (2x2x0.8m) | used cut open watertank with fixed bench

Element 3 (1.5x0.2x2m) | growframe

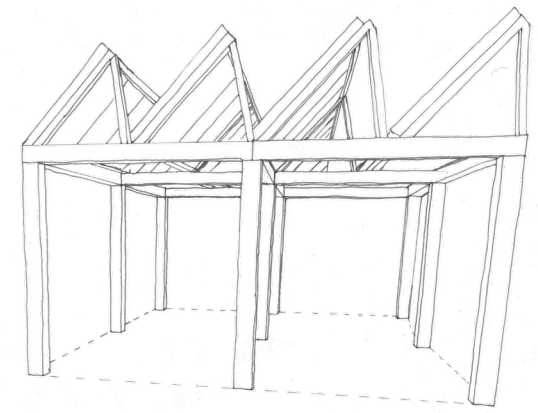
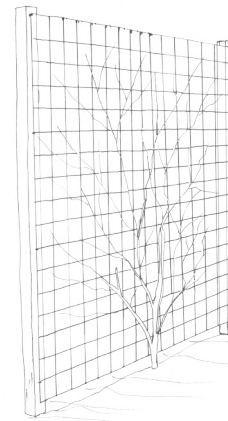
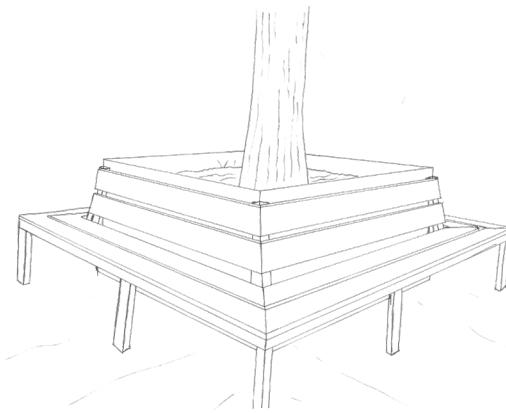
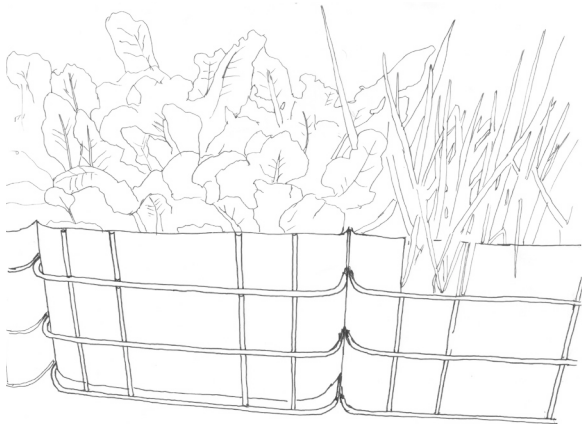
Element 4 (4x4x3m) | PV-structure

-cheap

-widely available

-simple to work with

-maintain a temporary character



# Spatial Interventions | Elements

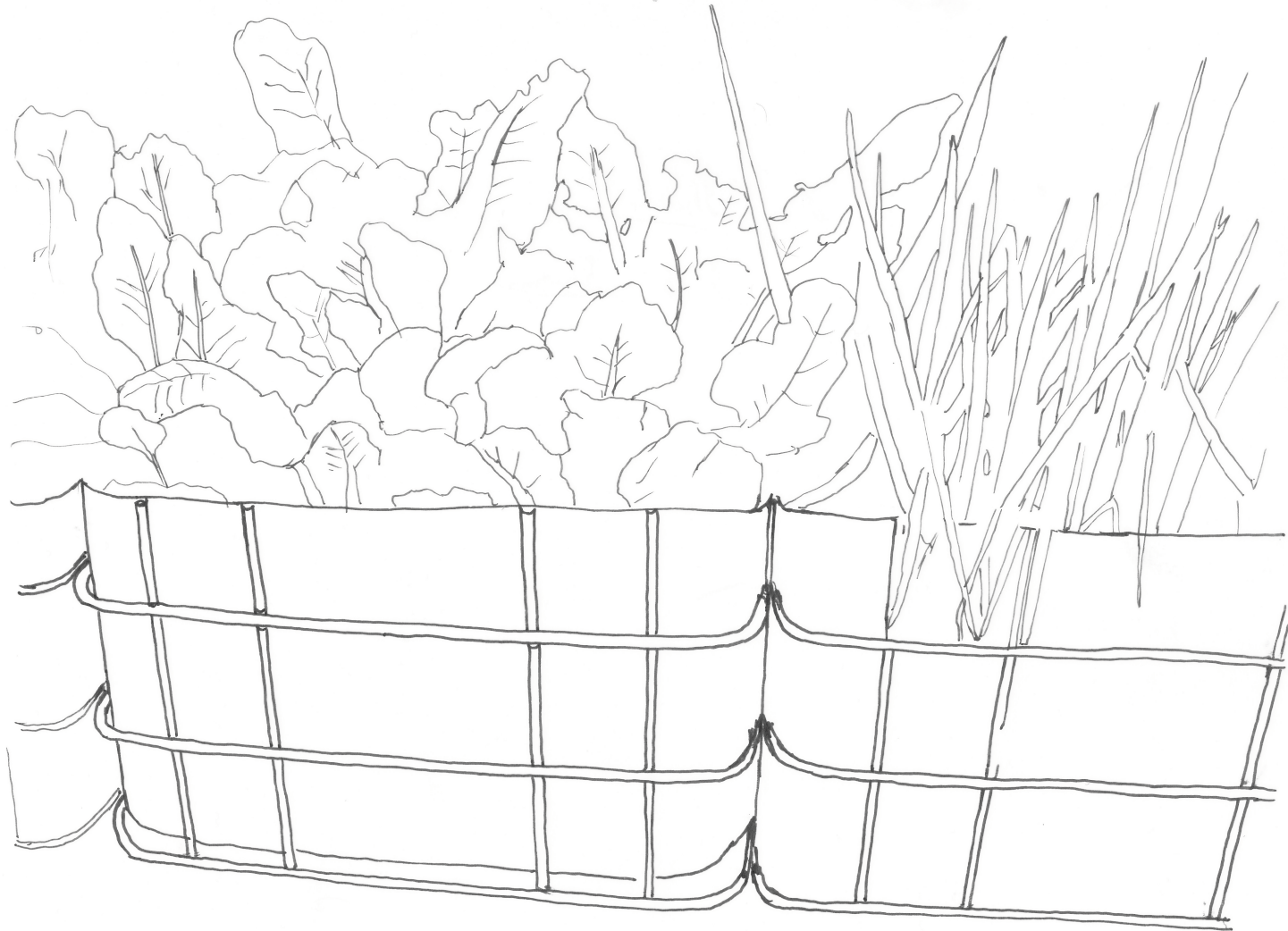
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Element 4 (4x4x3m) | PV-structure



# Spatial Interventions | Elements

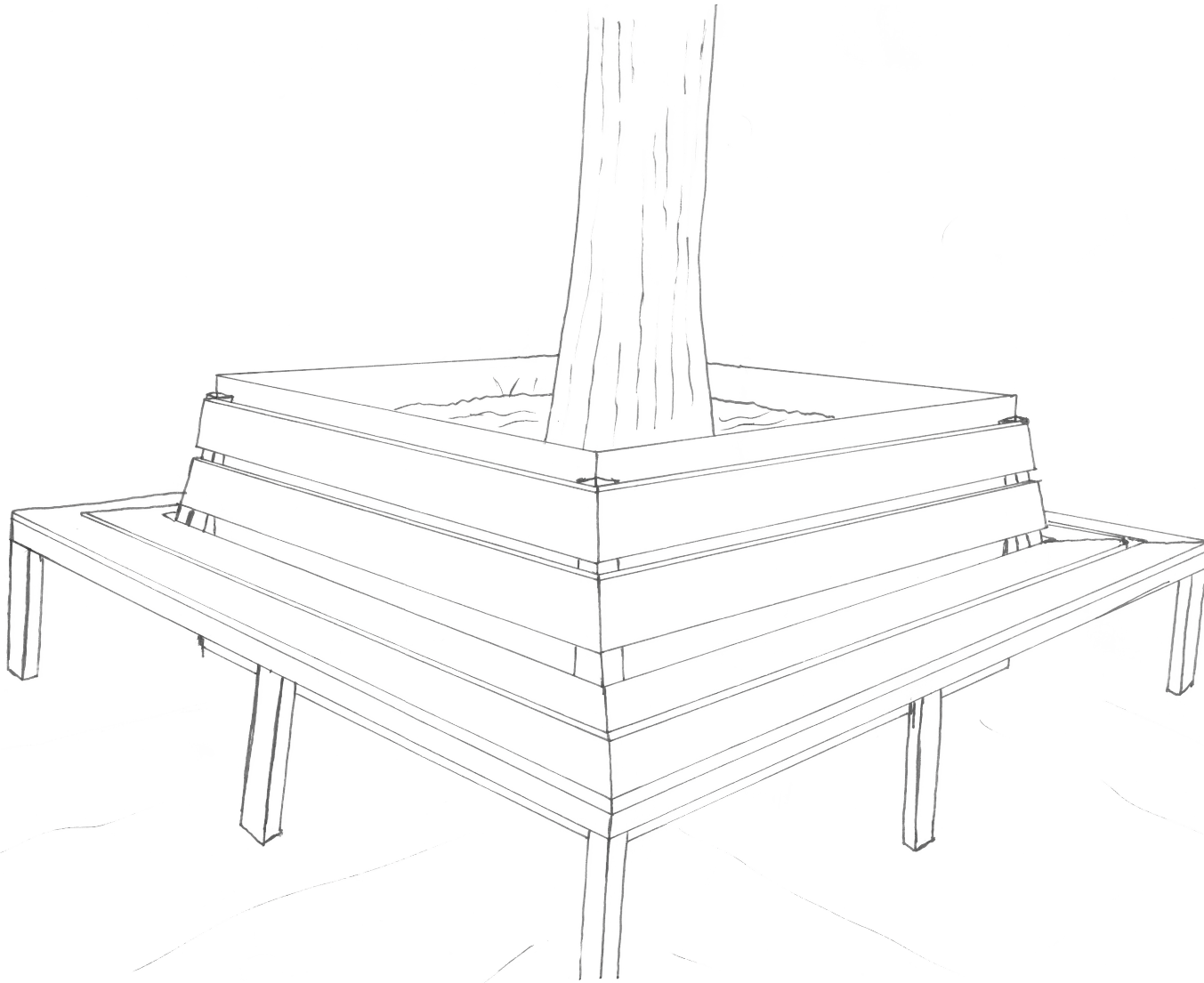
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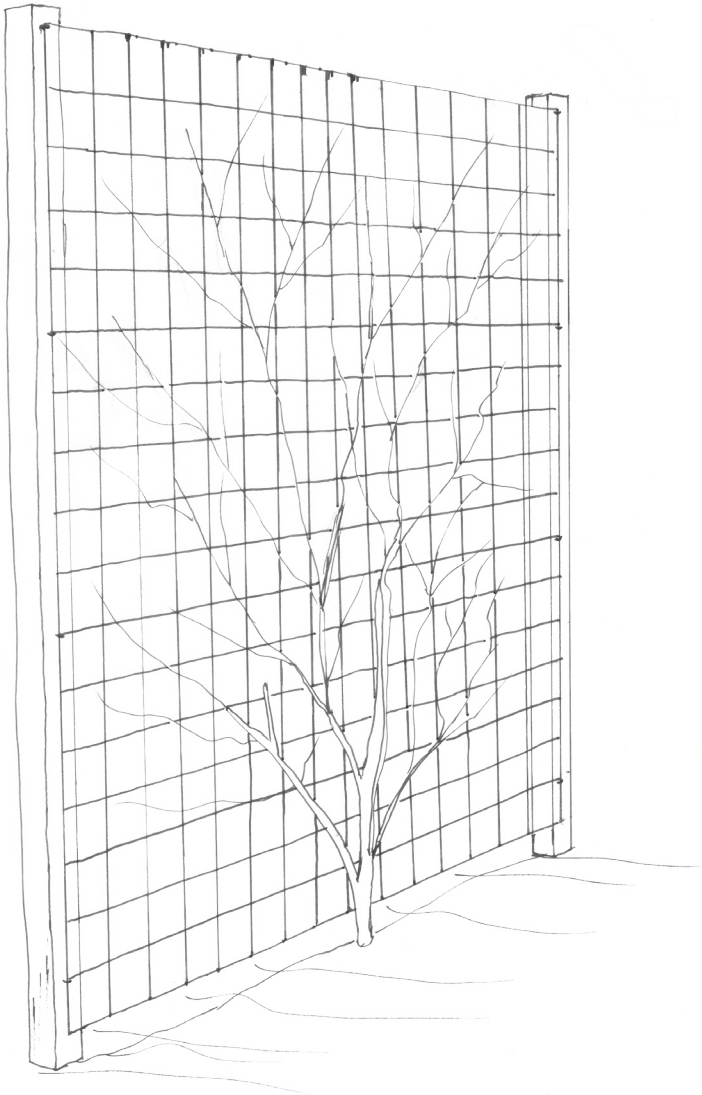
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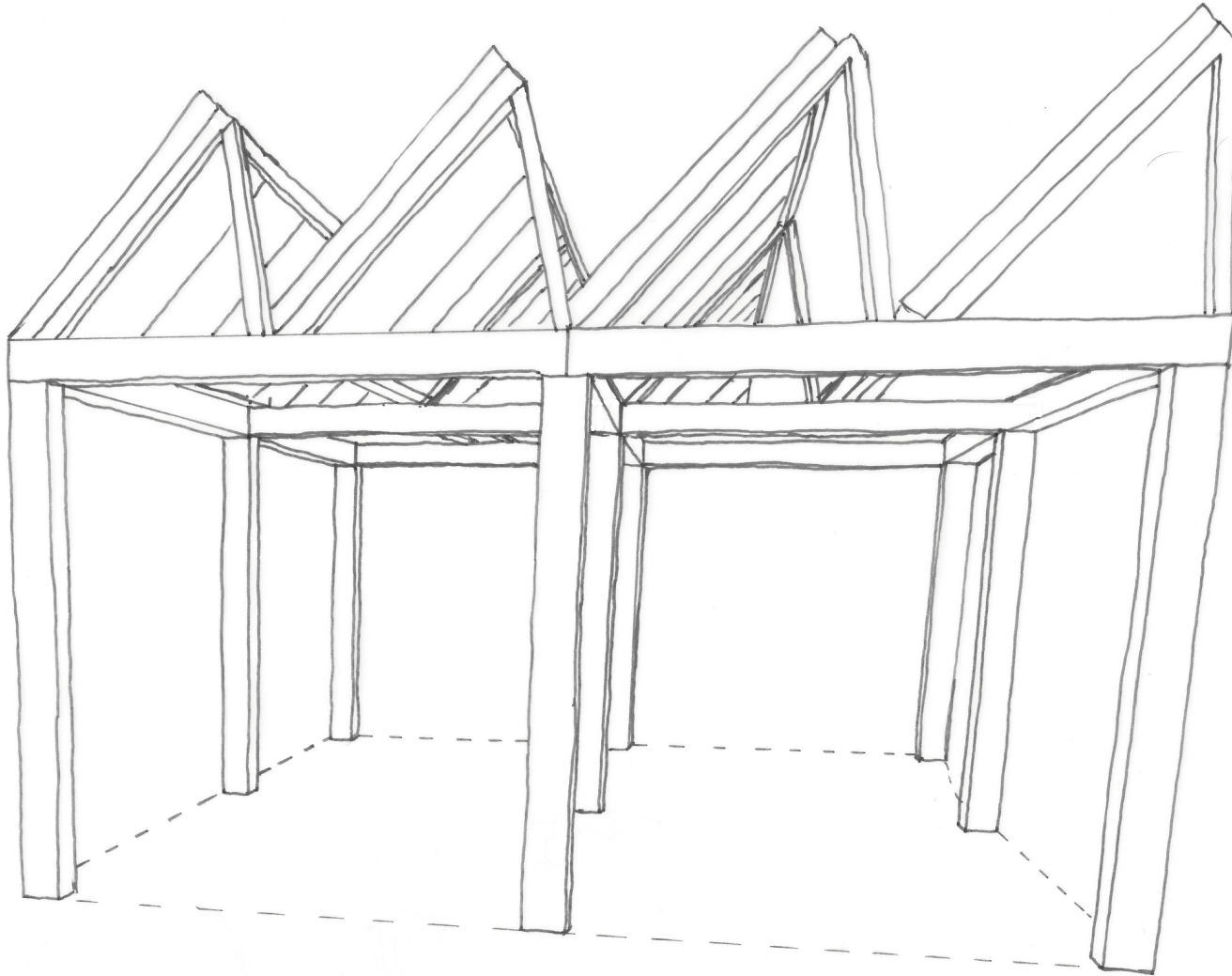
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


Element 4 (4x4x3m) | PV-structure

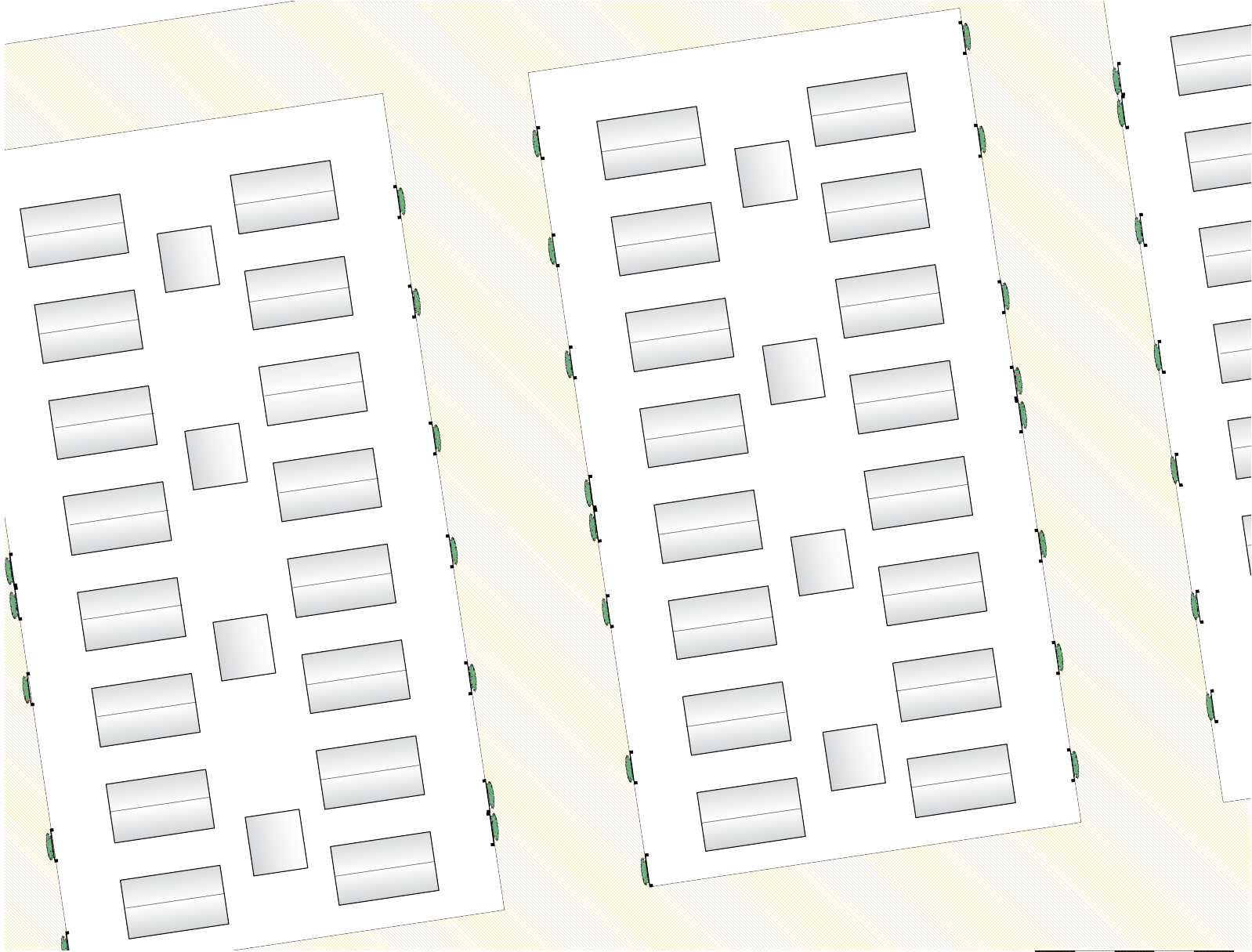


# Spatial Interventions | Emergency Phase

## Zoom-in 1 | Communal Area

### Legend

-  Road
-  Shelters
-  Bathroom
-  Growframe



0 2.5 5 12.5m



# Spatial Interventions | Transition Phase

## Zoom-in 1 | Communal Area

### Legend

- Road
- Gravel foundation
- Communal area
- Shelters
- Bathroom
- Informal shelter structures
- Gasholder
- Tree in water tank with fixed benches
- Linked water tanks with green
- Growframe



0 2.5 5 12.5 m



# Spatial Interventions | Post Emergency Phase

## Zoom-in 1 | Communal Area

### Legend

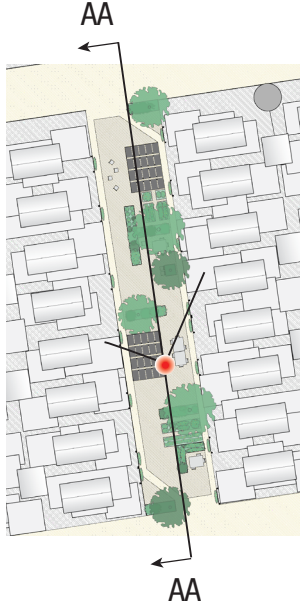
- Road
- Gravel foundation
- Communal area
- Shelters
- Bathroom
- Informal shelter structures
- Gasholder
- Tree in water tank with fixed benches
- Linked water tanks with green
- Growframe
- PV-structure



0 2.5 5 12.5 m

# Spatial Interventions | Post Emergency Phase

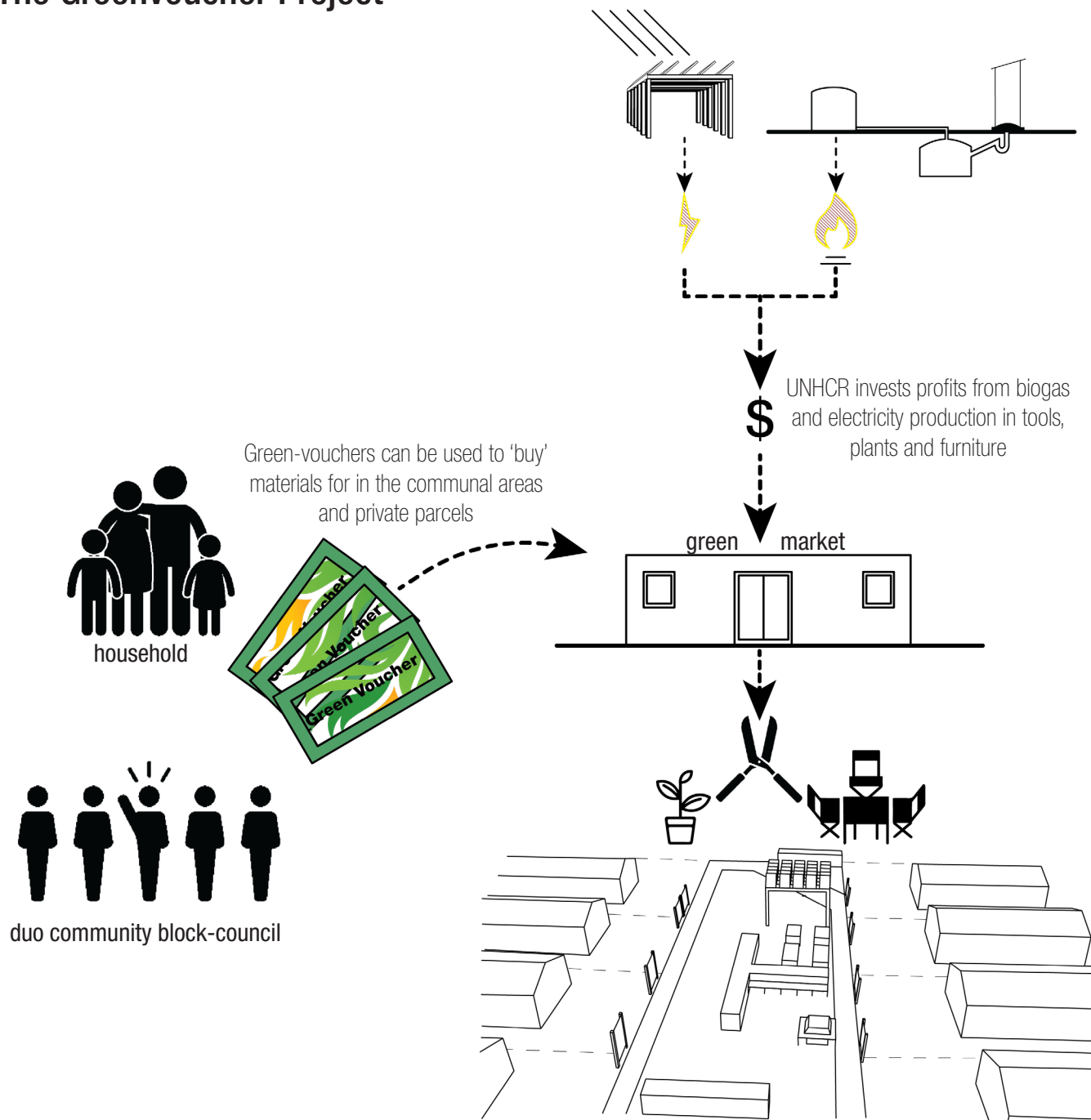
## Zoom-in 1 | Communal Area



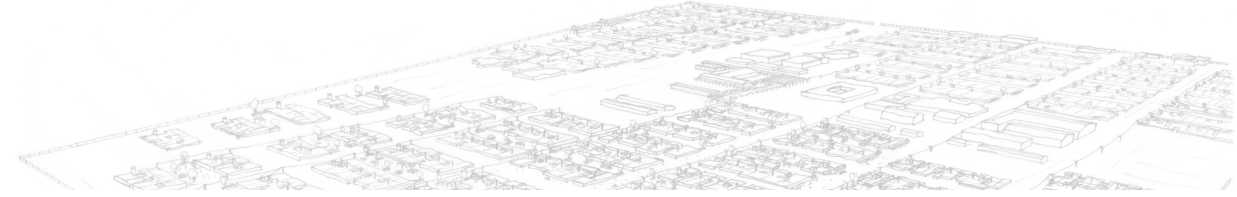
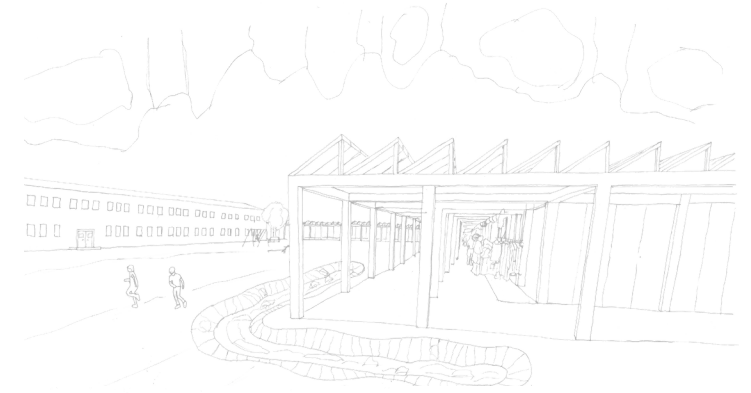


# Integration of the two perspectives

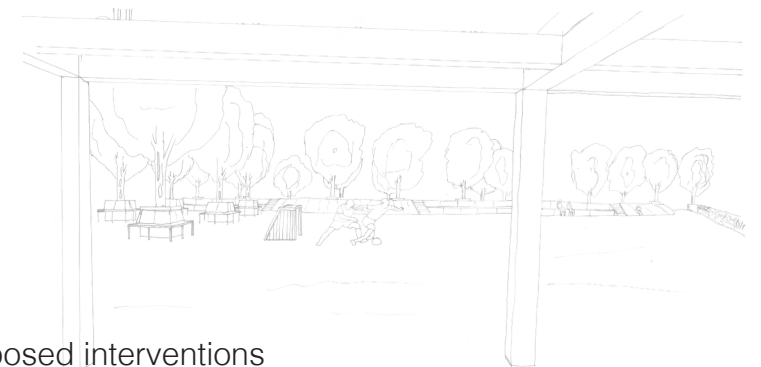
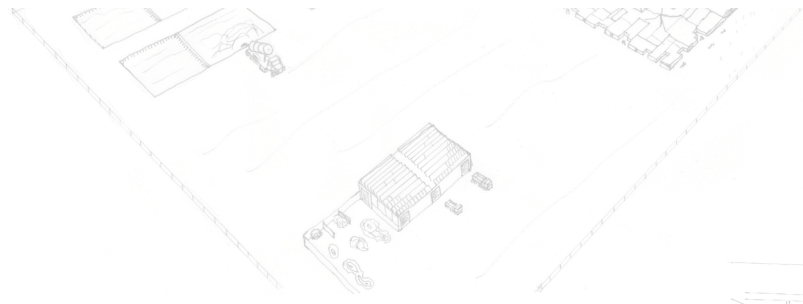
## The Greenvoucher Project



# recommendations:



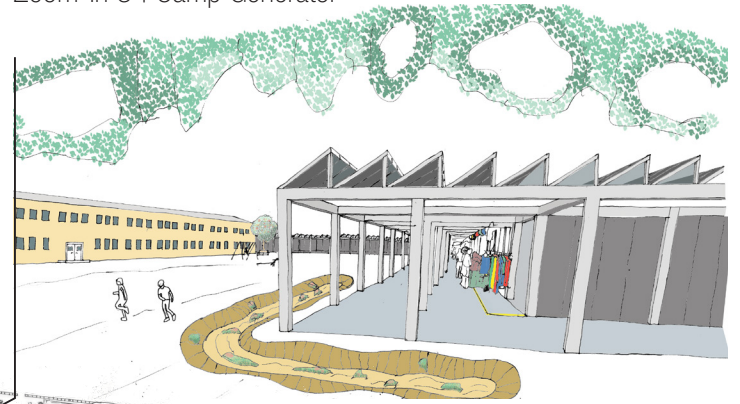
- give people freedom on their parcel
- include inhabitants in every facet of camp management
- implement modular interventions to enable win-win situations for all stakeholders
- be aware of the constant 'balance act' between temporariness and liveability



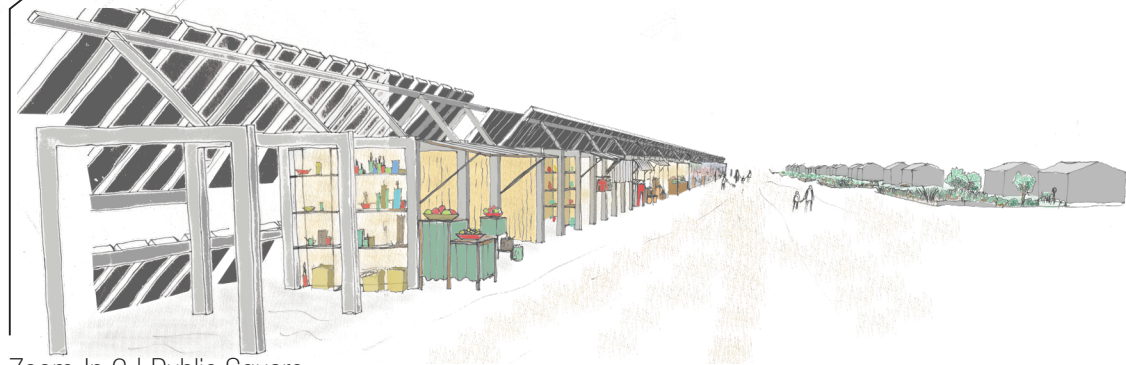
Zoom-In 1 | Communal Area



Zoom-In 3 | Camp Generator



Zoom-In 2 | Public Square








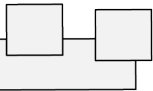


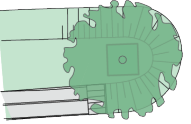

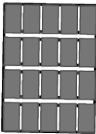
Zoom-In 2 | Public Square



# Spatial Interventions | Zoom-in 2

## Public Square

### Legend

-  Road
-  Gravel foundation
-  Public Square area
-  Shelters
-  Bathroom
-  Informal shelter structures
-  Gasholder
-  Tree in water tank with fixed benches
-  Height-difference with build in bench
-  Growframe
-  PV-structure








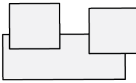




0 3 6 15 m

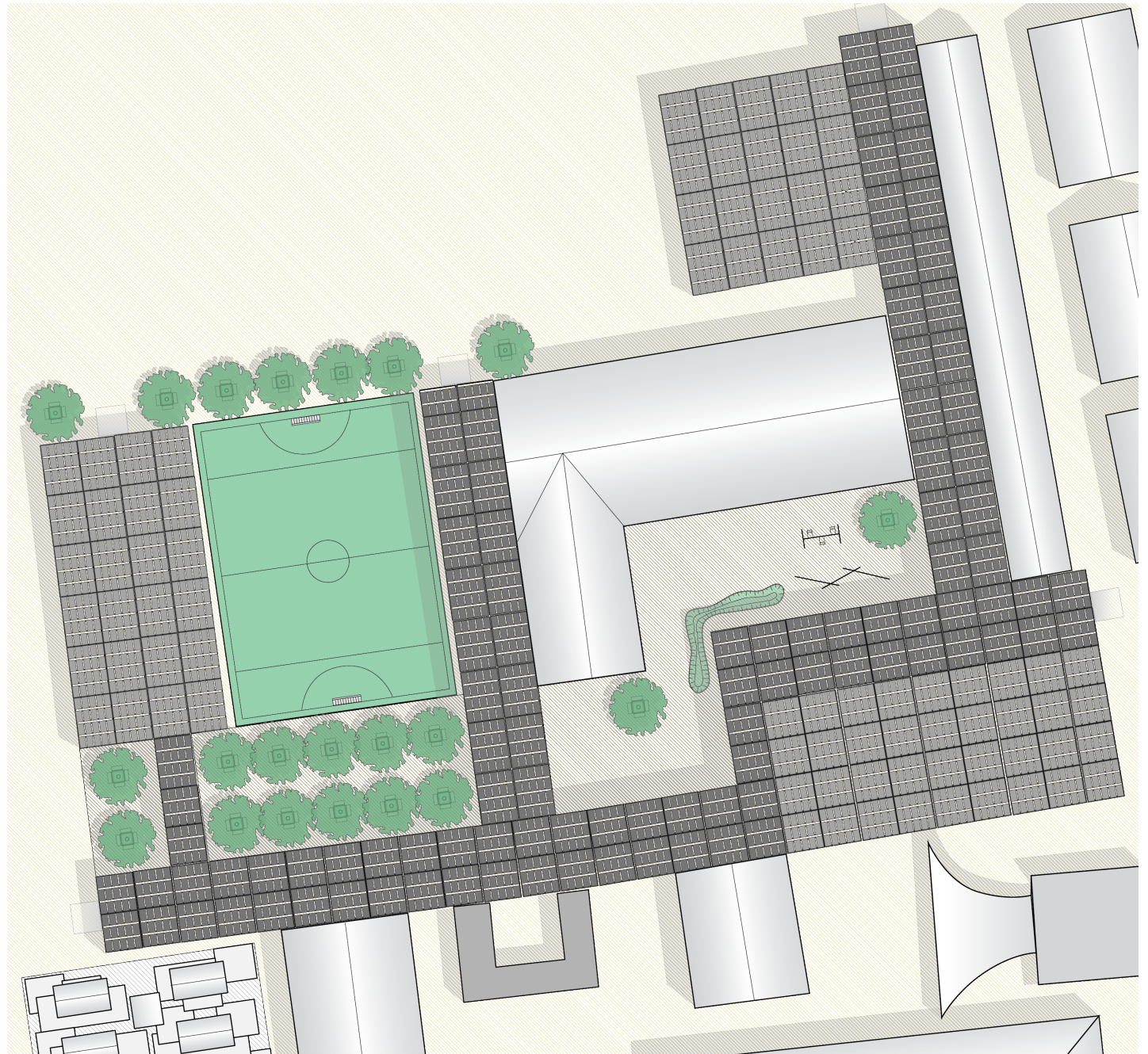


# Spatial Interventions | Zoom-in 3

## Camp Generator

### Legend

-  Road
-  Gravel foundation
-  Public Square area
-  Shelters
-  Bathroom
-  Informal shelter structures
-  Gasholder
-  Tree in water tank with fixed benches
-  PV-covered hall
-  PV-structure



0 5 10 25 m

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