forces of care

design as a system for collective acts of social and physical care, maintenance, and repair in neo-liberal cities

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Msc3/4 Architectural Design Crossovers Graduation Studio

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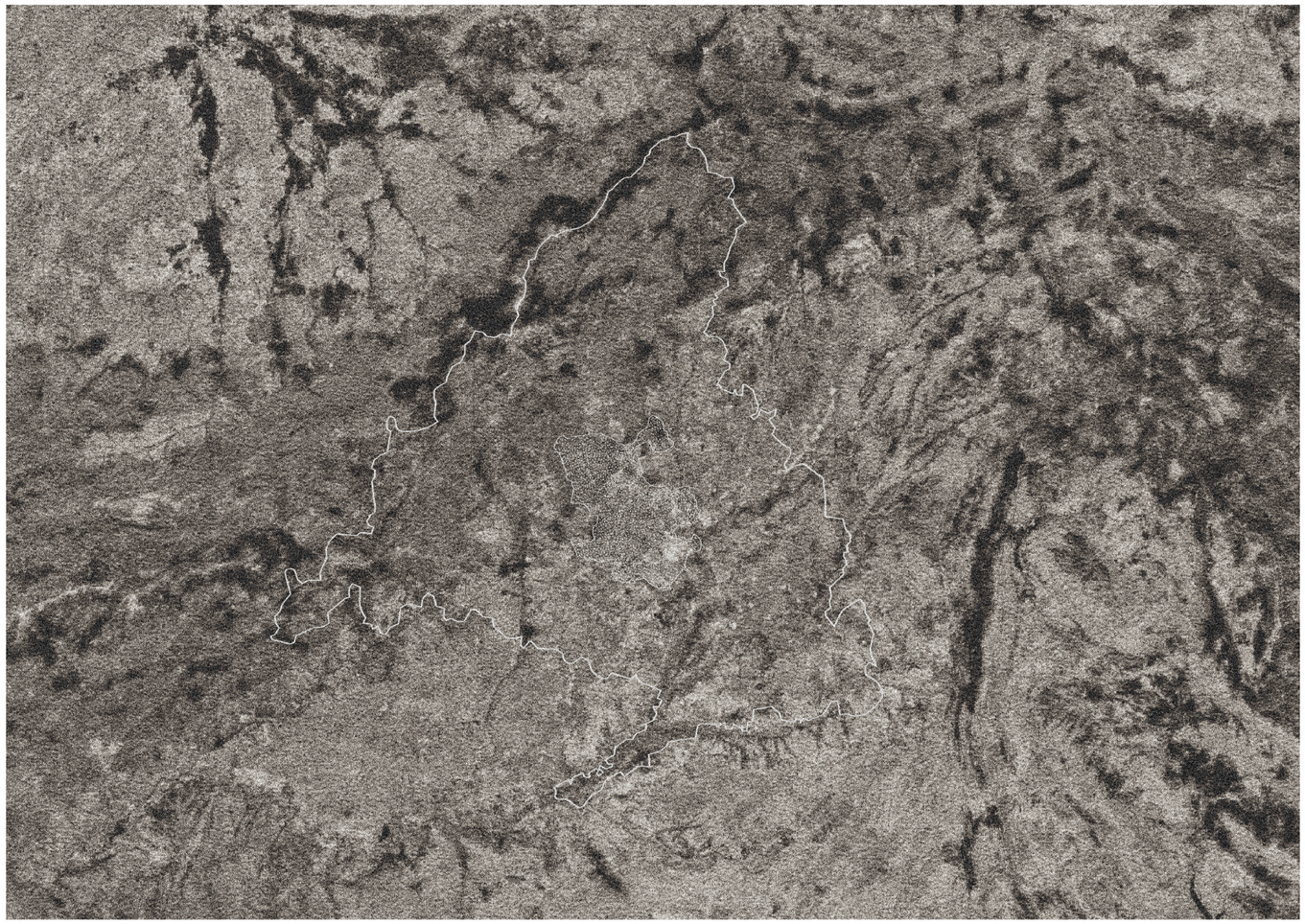
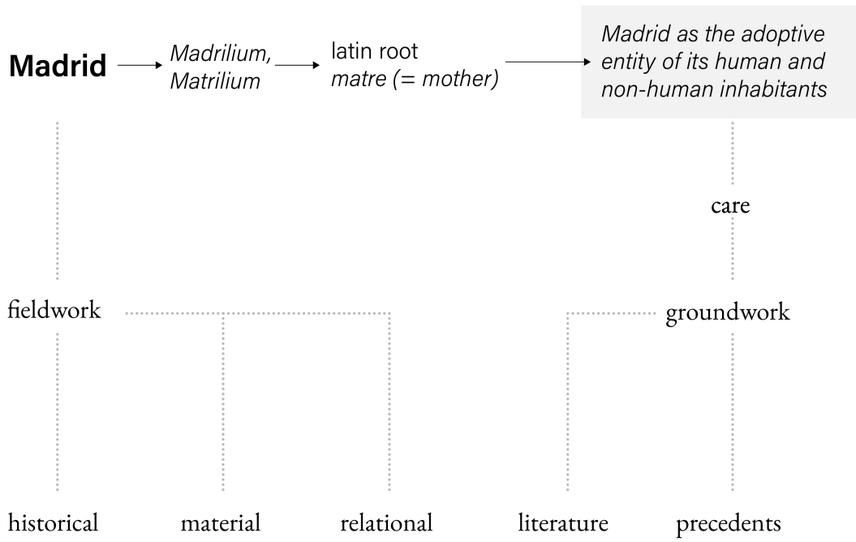
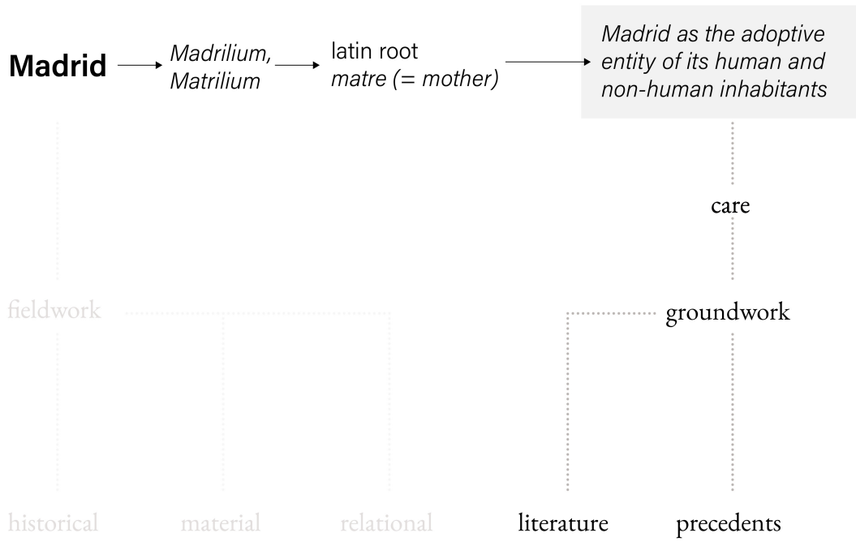
Georgios Karvelas
Alper Alkan

Delft University of Technology
02 July 2025






Madrid
Madrilium, Matrilium
latin root
matre (= mother)
Madrid as the adoptive entity of its human and non-human inhabitants
care
fieldwork
groundwork
historical
material
relational
literature
precedents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What if notions of critical care could be addressed in the formation of equitable communal spatial infrastructures?

How can these accommodate performative acts of maintenance as a form of collective responsibility?

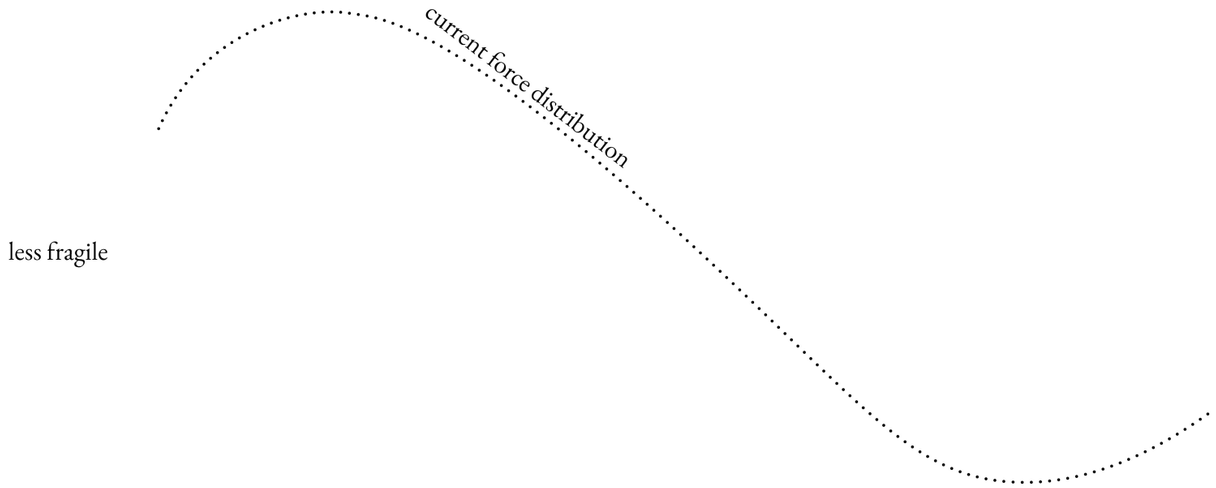
What if notions of critical care could be addressed in the formation of equitable communal spatial infrastructures?

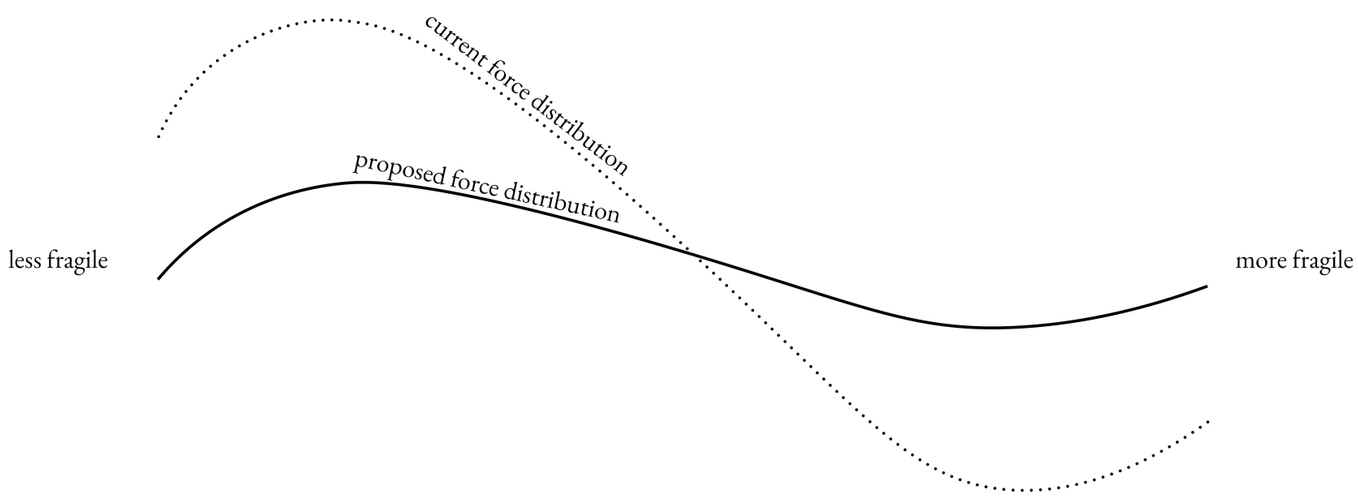
How can these accommodate performative acts of maintenance as a form of collective responsibility?

Maintenance and Care: A Working Guide to the Repair of Rust, Dust, Cracks, and Corrupted Code in Our Cities, Our Homes, and Our Social Relations.
Mattern, Shannon

Critical Care : Architecture and Urbanism for a Broken Planet
Fitz, Angelika, Elke Krasny, Brian Dorsey, Timothy Savage, and Architektur Zentrum Wien

Toward a Minor Architecture. Cambridge, MA: The Mit Press
Stoner, Jill.


current force distribution
less fragile
more fragile


current force distribution
proposed force distribution
less fragile
more fragile

maintenance - act of kindness that implies daily attention towards social and physical structures in order to sustain their resilience

repair - act of kindness that generates a change in social and physical structures (from one state to another) as a contemplated reaction to a given opportunity

critical care - form of kindness, thoughtfulness and effort put into actions and processes which are directed towards any other living or non-living actors, treating each of them in an equitable manner by taking time to listen, understand and, adapt

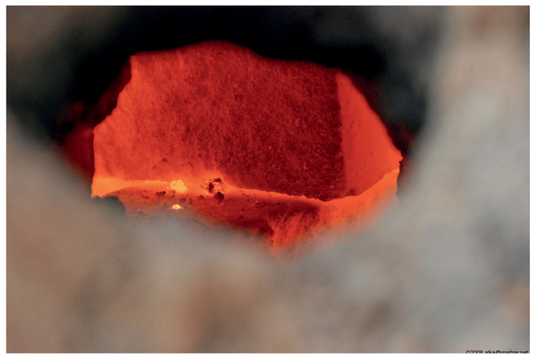
careful urban system as a kind, thoughtful, patient system that accounts for multiple details and uncertainties throughout its lifespan and which is **not concerned with finished products but rather with ever-evolving entities**

What if notions of critical care could be addressed in the formation of equitable communal spatial infrastructures?

How can these accommodate performative acts of maintenance as a form of collective responsibility?


WERKSTATT
HAUS DER STATISTIK


RAUM
/KULTUR
KANT
-INE
-VIER
ZEHN

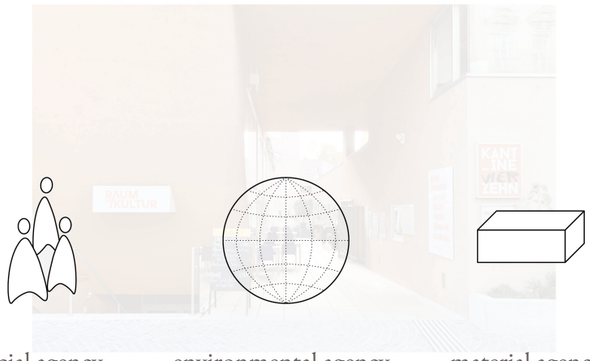



WERKPLAATS





institutional agency



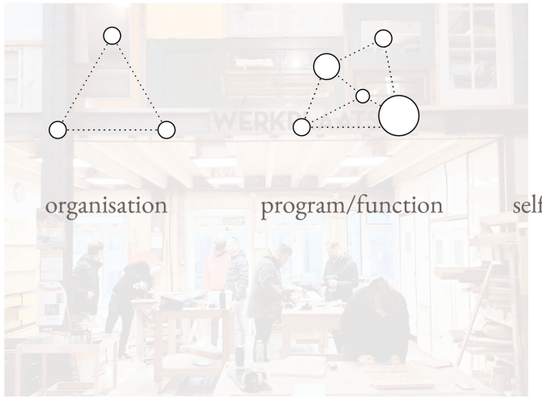
social agency

environmental agency

material agency



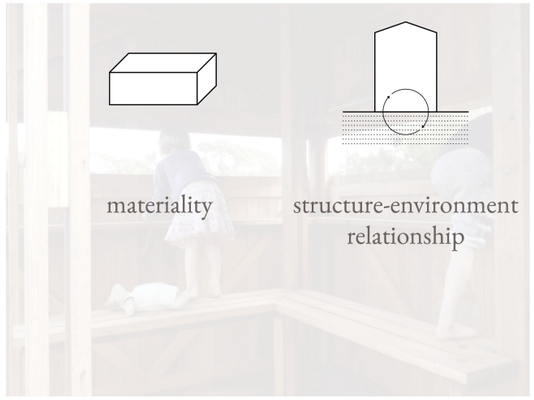
architectural agency



organisation

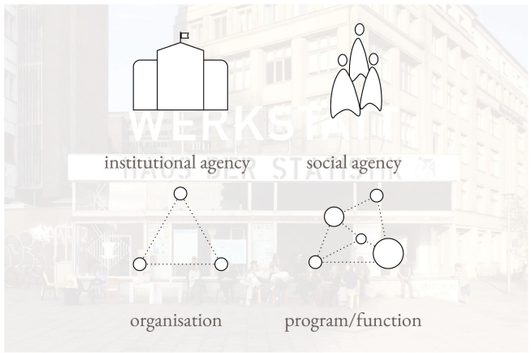
program/function

self-construction



materiality

structure-environment relationship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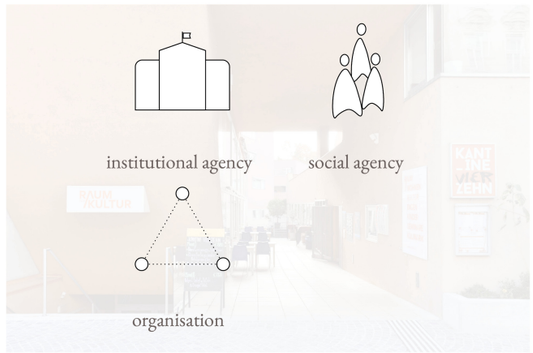
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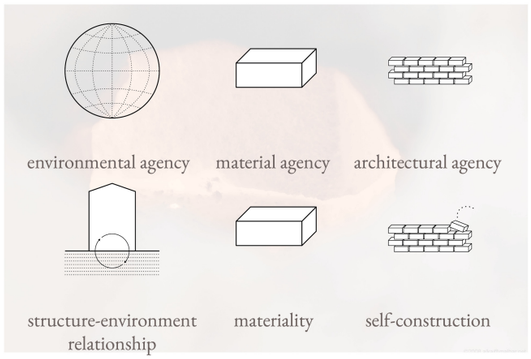
environmental agency
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architectural agency
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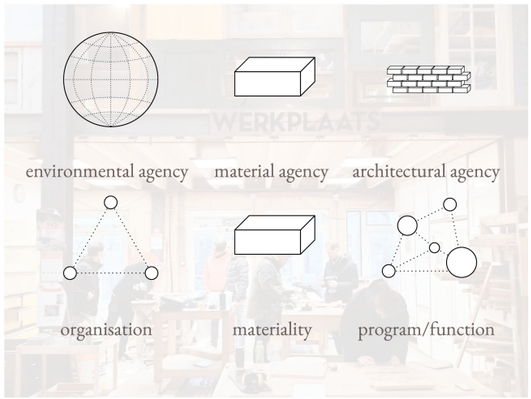
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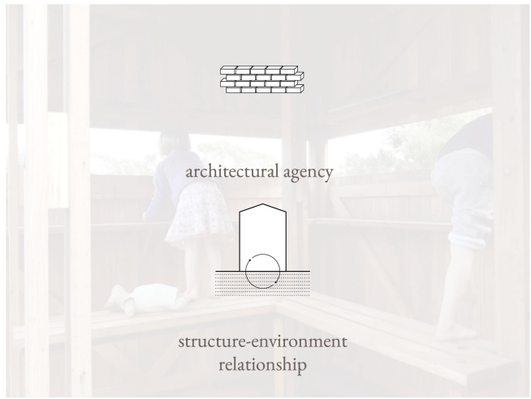

architectural agency
structure-environment relationship



cooperative governance

collective ownership

bending norms

self-construction

test and proof design strategy

building as producer and consumer

simplicity as affording physical framework

minimal disruptions

neighbourhood activation

commitment over capital exchange

infrastructure interplay

compensation strategy

creative use of urban waste

accounting for non-human

subject to ageing

affordability

collective responsibility

action-based engagement strategies

knowledge exchange

social condenser

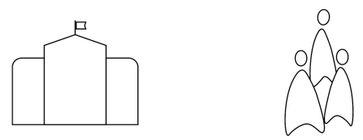
economy of solidarity

ever-evolving design

material availability

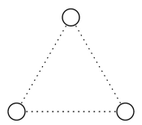
use of clay



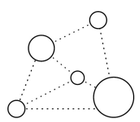


institutional agency

social agency



organisation



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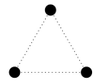
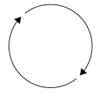


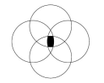
cooperative governance



neighbourhood activation



commitment over capital exchange



infrastructure interplay



collective ownership



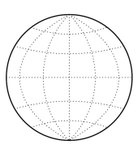
bending norms



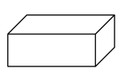
collective responsibility



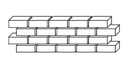
Baked-in-situ mud construction to construct the low-cost housing complex (Kundoo 2008)



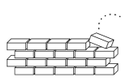
environmental agency



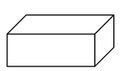
material agency



architectural agency



self-construction



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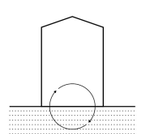


structure-environment relationship



self-construction



creative use of urban waste



building as producer and consumer



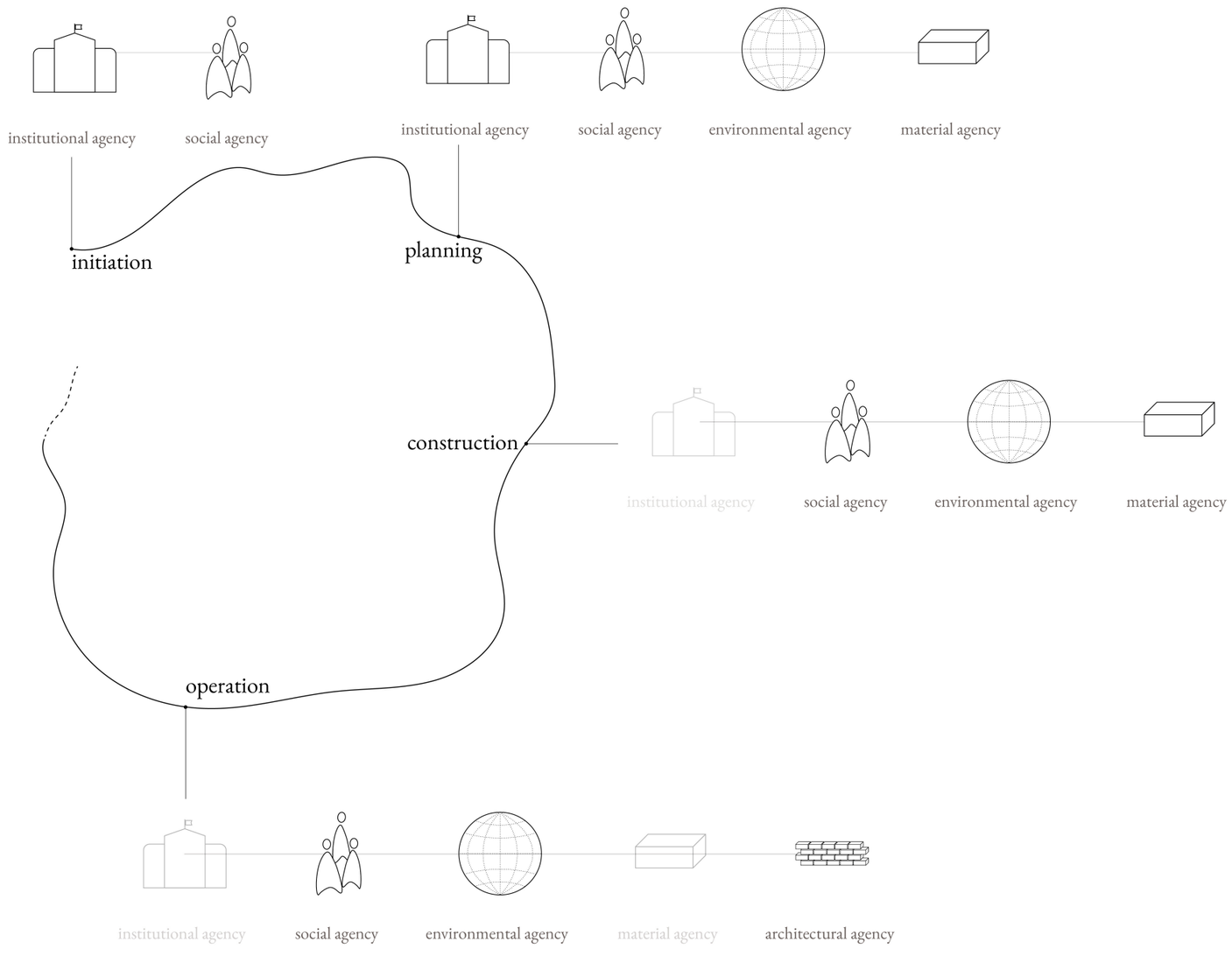
use of clay

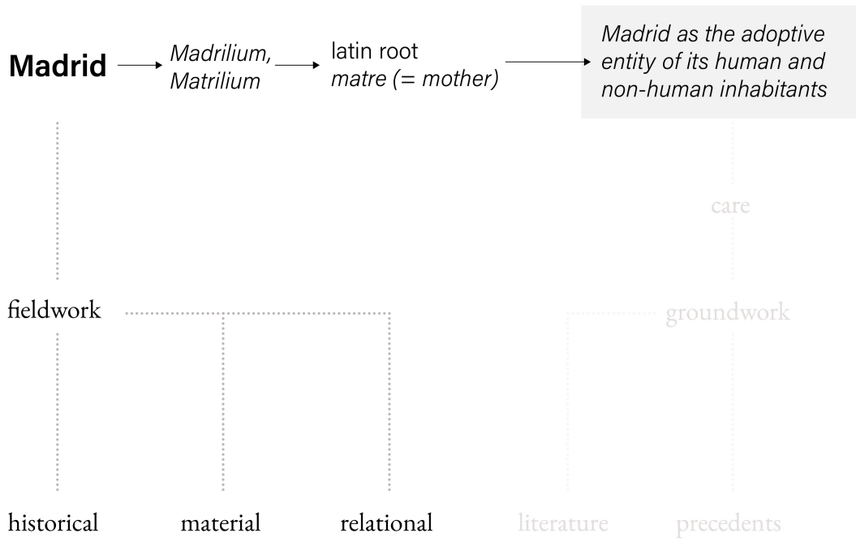


affordability



material availability


institutional agency
social agency
institutional agency
social agency
environmental agency
material agency
initiation
planning
construction
institutional agency
social agency
environmental agency
material agency
operation
institutional agency
social agency
environmental agency
material agency
architectural agency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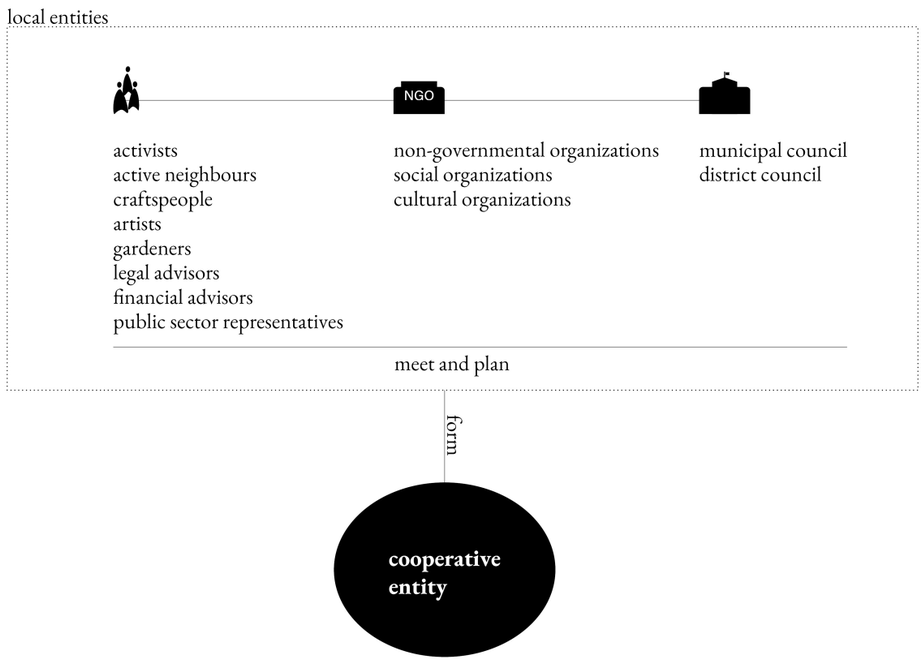
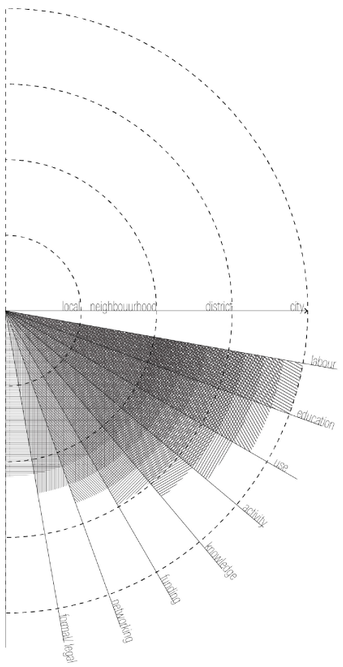
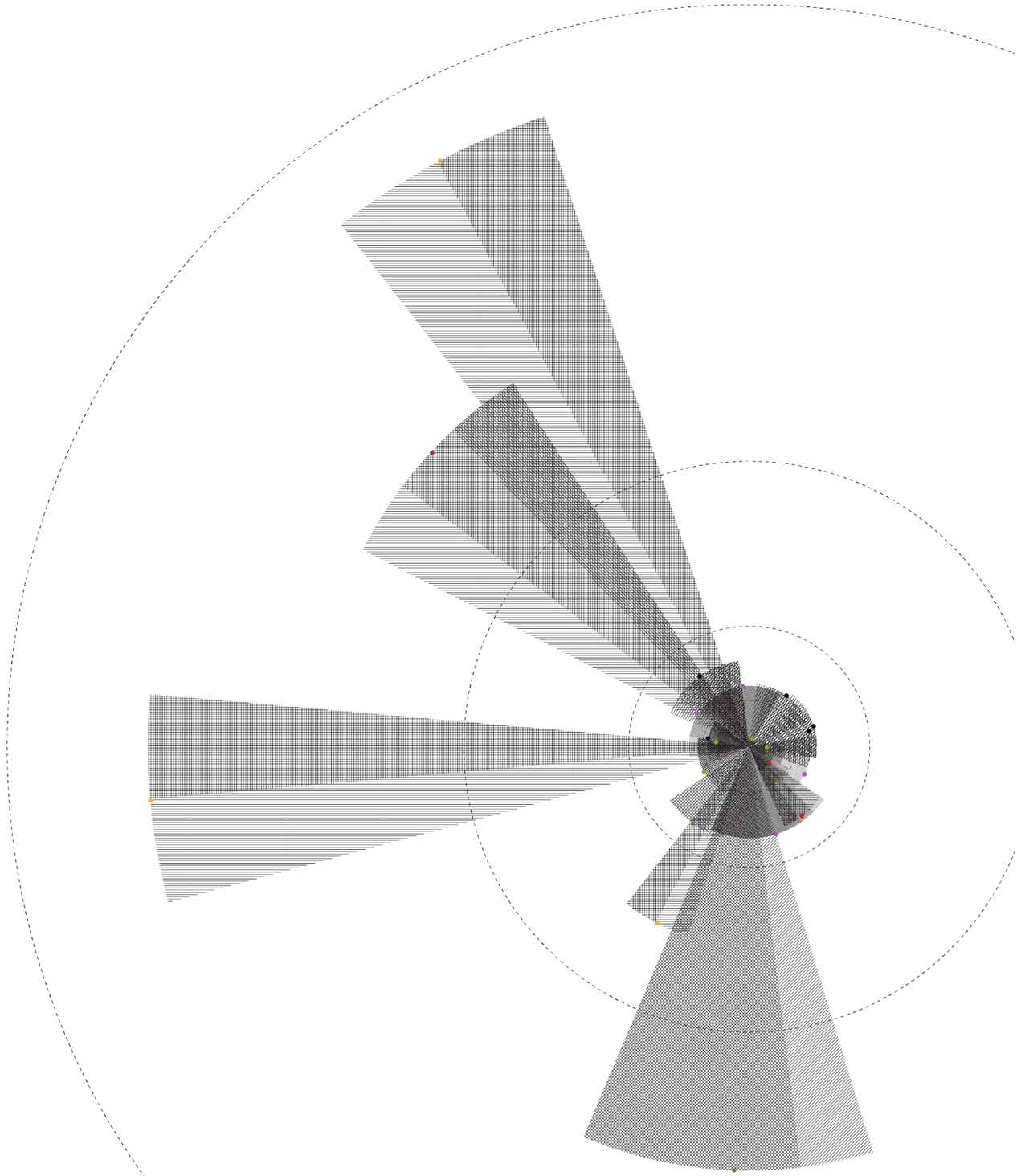
NUESTROS PADRES EMIGRARON
NOSOTROS NO VIVIENDAS AQUI YAHORA
VALLECAS NUESTRO
VALLECAS NUESTRO
PENSION

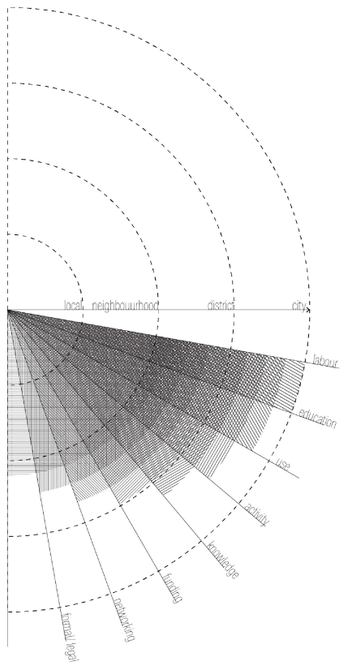



local entities
NGO
activists
active neighbours
craftspeople
artists
gardeners
legal advisors
financial advisors
public sector representatives
non-governmental organizations
social organizations
cultural organizations
municipal council
district council
meet and plan
form
cooperative entity





larger social organization
local social organization
public institution
recycling centre
cultural centre
local community


local
neighbourhood
district
city
labour
education
use
activity
knowledge
warding
networking
formal legal

larger social organization
local social organization
public institution
recycling centre
cultural centre
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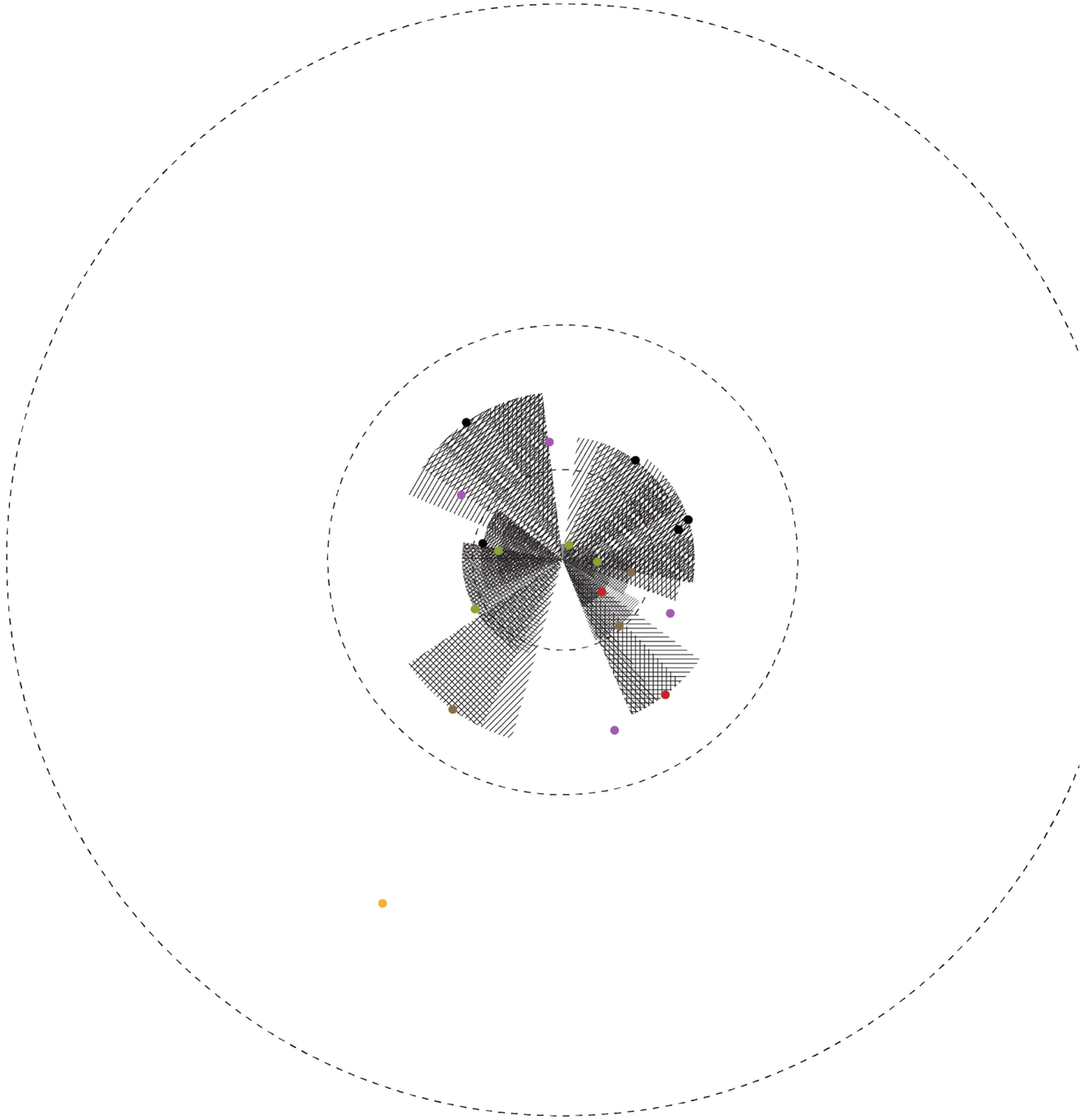
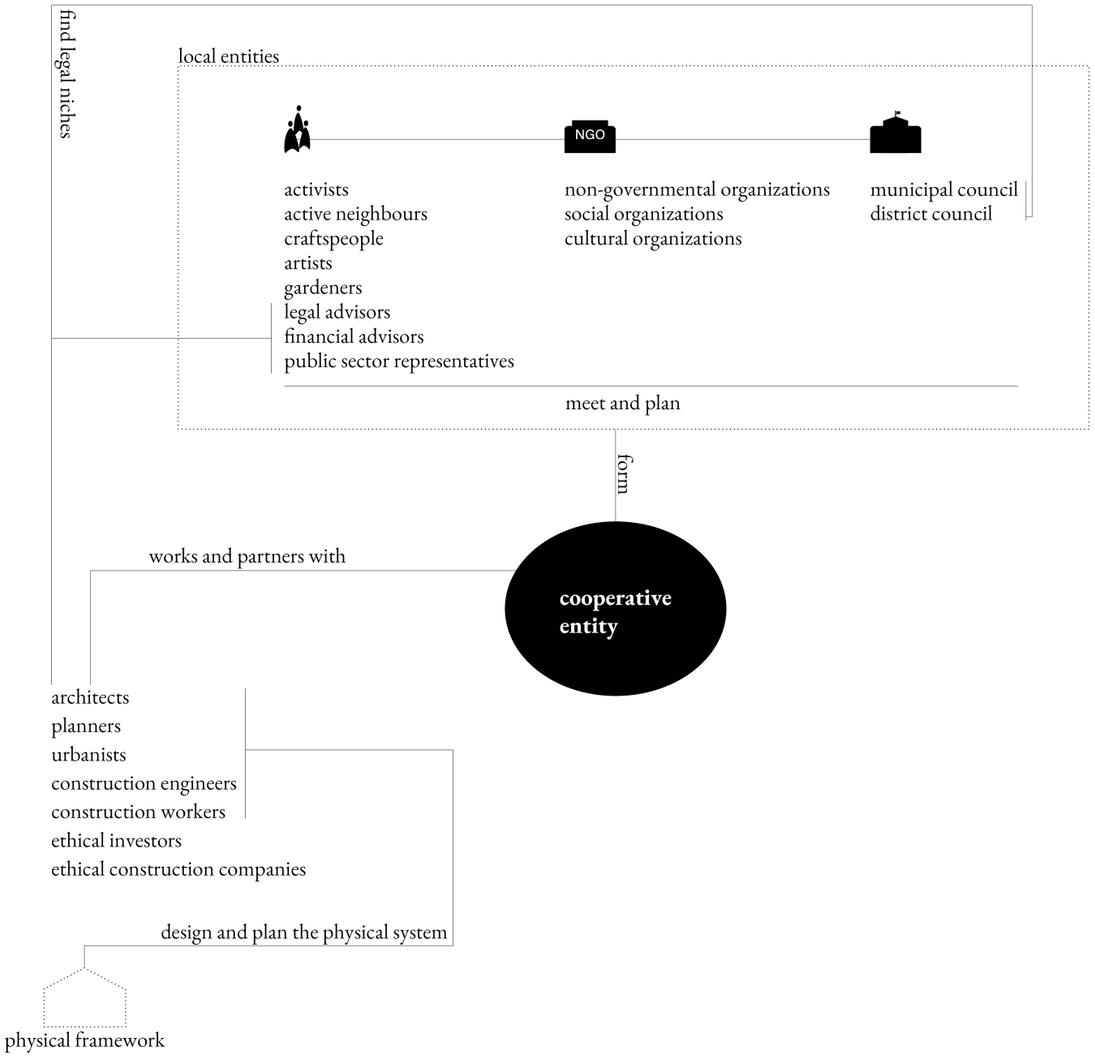
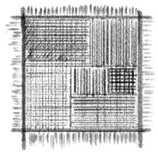



find legal niches
local entities
NGO
activists
active neighbours
craftspeople
artists
gardeners
legal advisors
financial advisors
public sector representatives
non-governmental organizations
social organizations
cultural organizations
municipal council
district council
meet and plan
form
works and partners with
cooperative entity
architects
planners
urbanists
construction engineers
construction workers
ethical investors
ethical construction companies
design and plan the physical system
physical framework

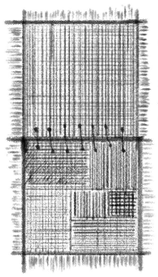


community center as pioneering intervention



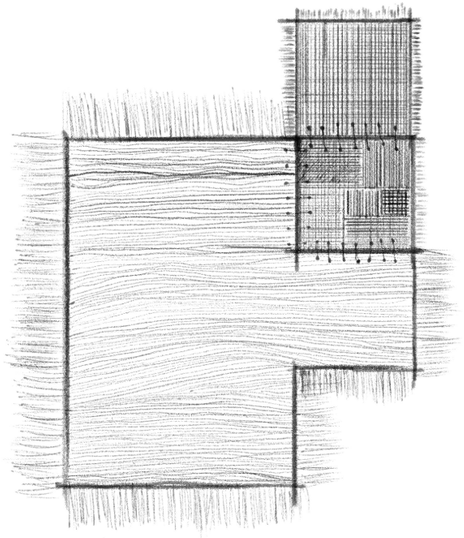
manufacturing workshop

jobs for local craftsmen
building knowledge and skills within the community of residents on construction techniques and material manipulation, with a focus on the primary materials available and commonly used in their neighbourhood.



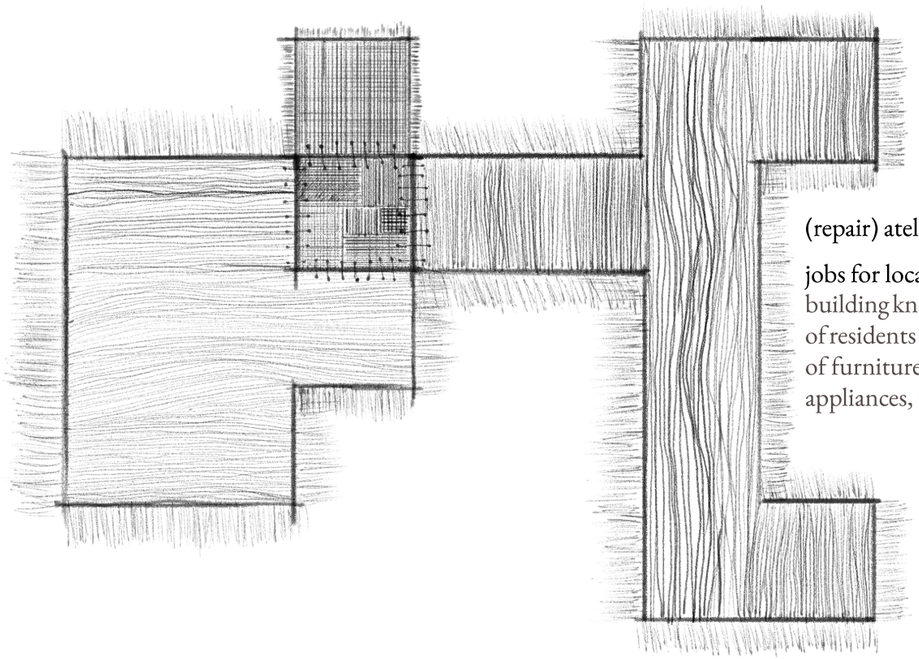
communal dining room and leisure area

jobs for other groups of people
offering meals, a space to pause and socialise



residence

housing for responsible inhabitants
instead of monetary payment, housing is offered as an exchange: a home in return for the commitment to take care of some of the key aspects of the ensemble



(repair) atelier

jobs for local craftsmen
building knowledge and skills within the community
of residents on building and maintenance techniques
of furniture, building elements, electrical lamps and
appliances, clothes

daycare centre

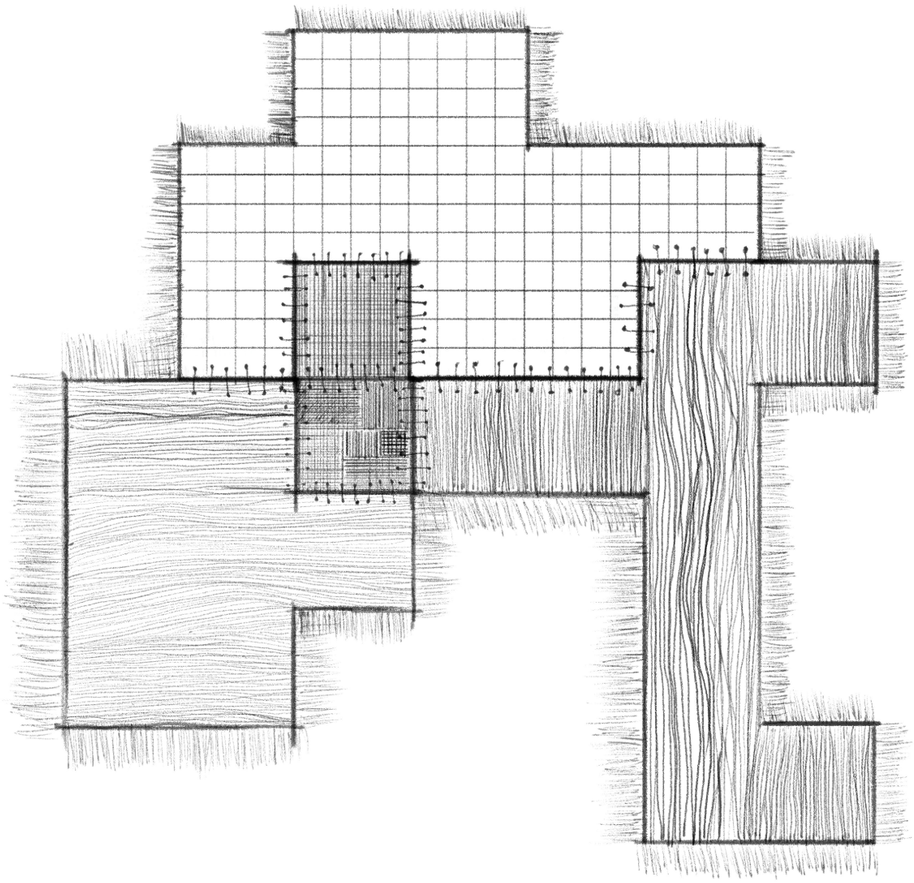
activity for elderly population

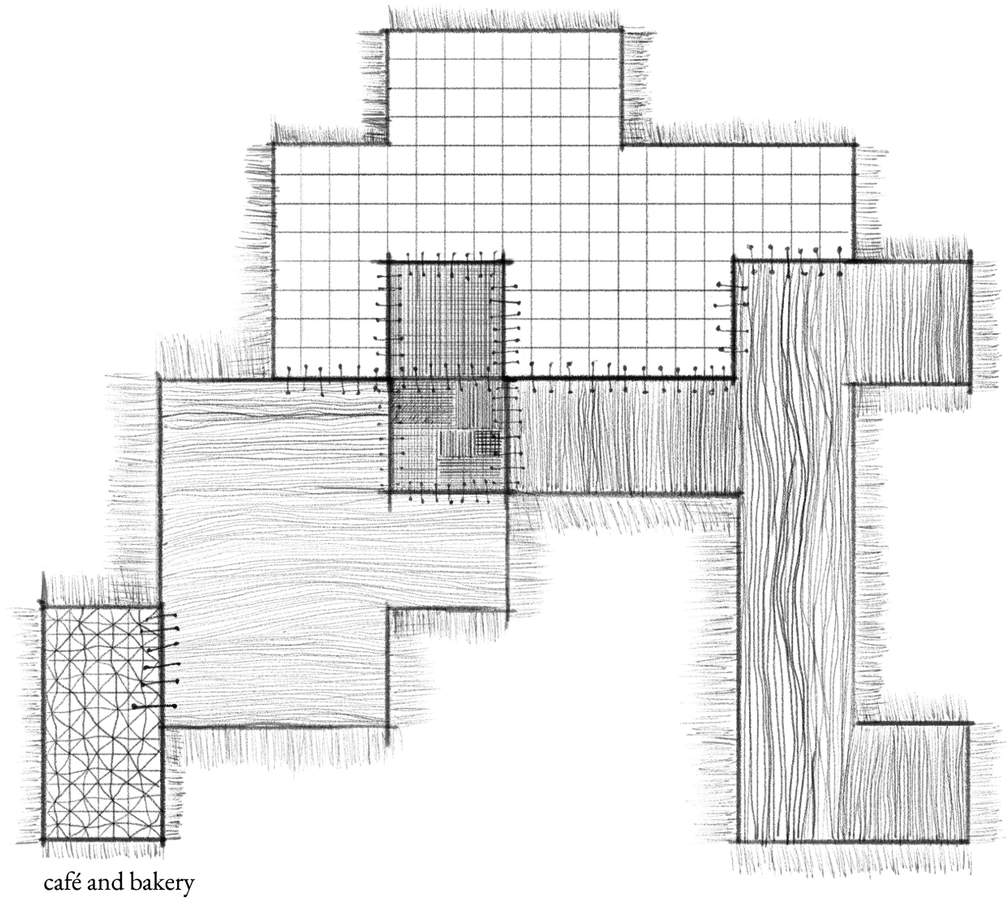
nightcare centre

jobs for other groups of people

study area

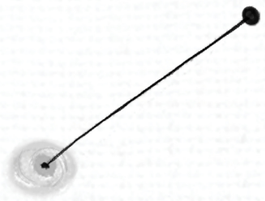
activity for people with financial and legal expertise
building knowledge and skills within the community of residents on taxes, subsidies and loans related to the maintenance and resilience of their building blocks





café and bakery

jobs for other groups of people
generating revenue and offering a space of pause to the community



community center as pioneering intervention

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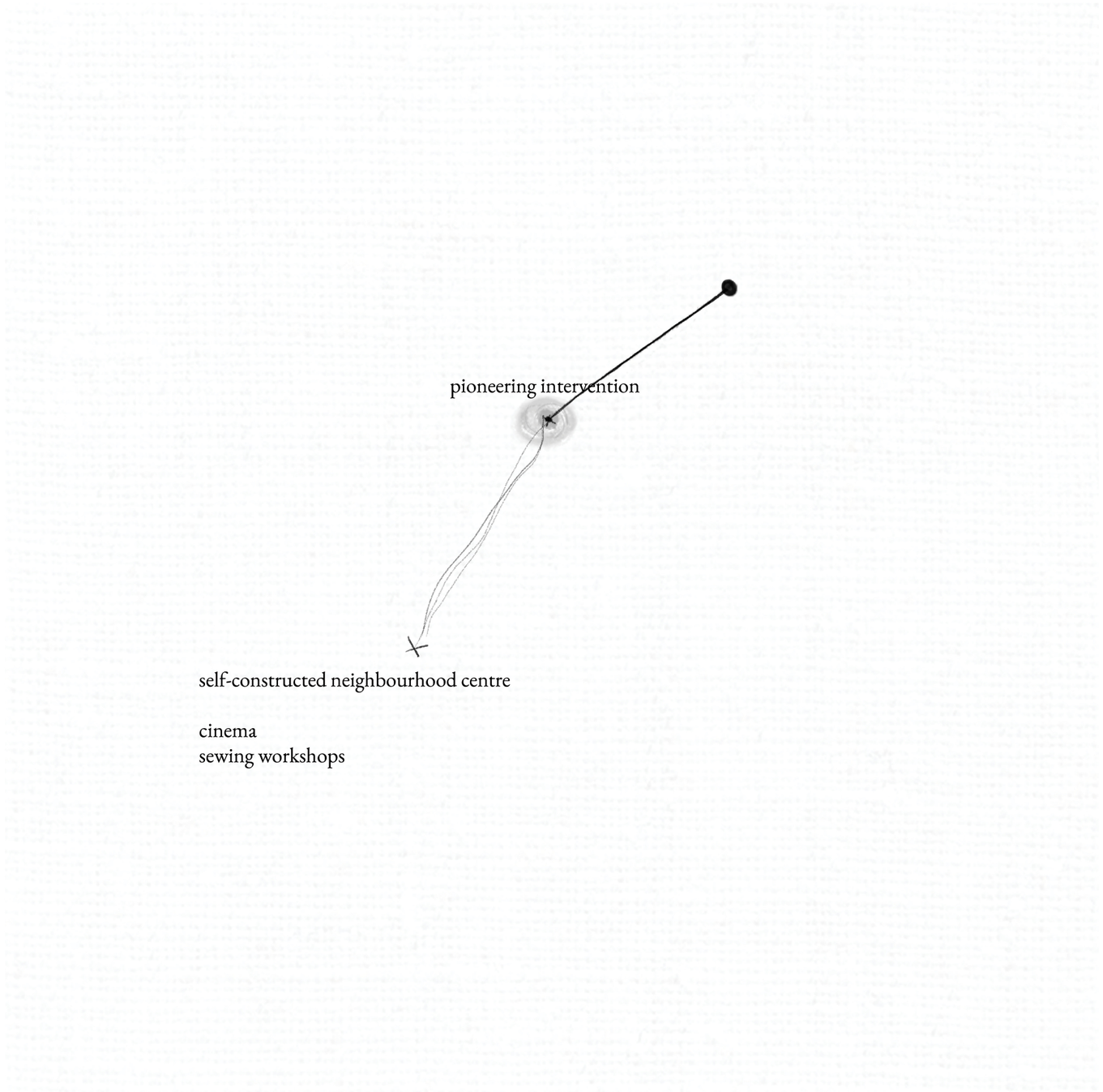
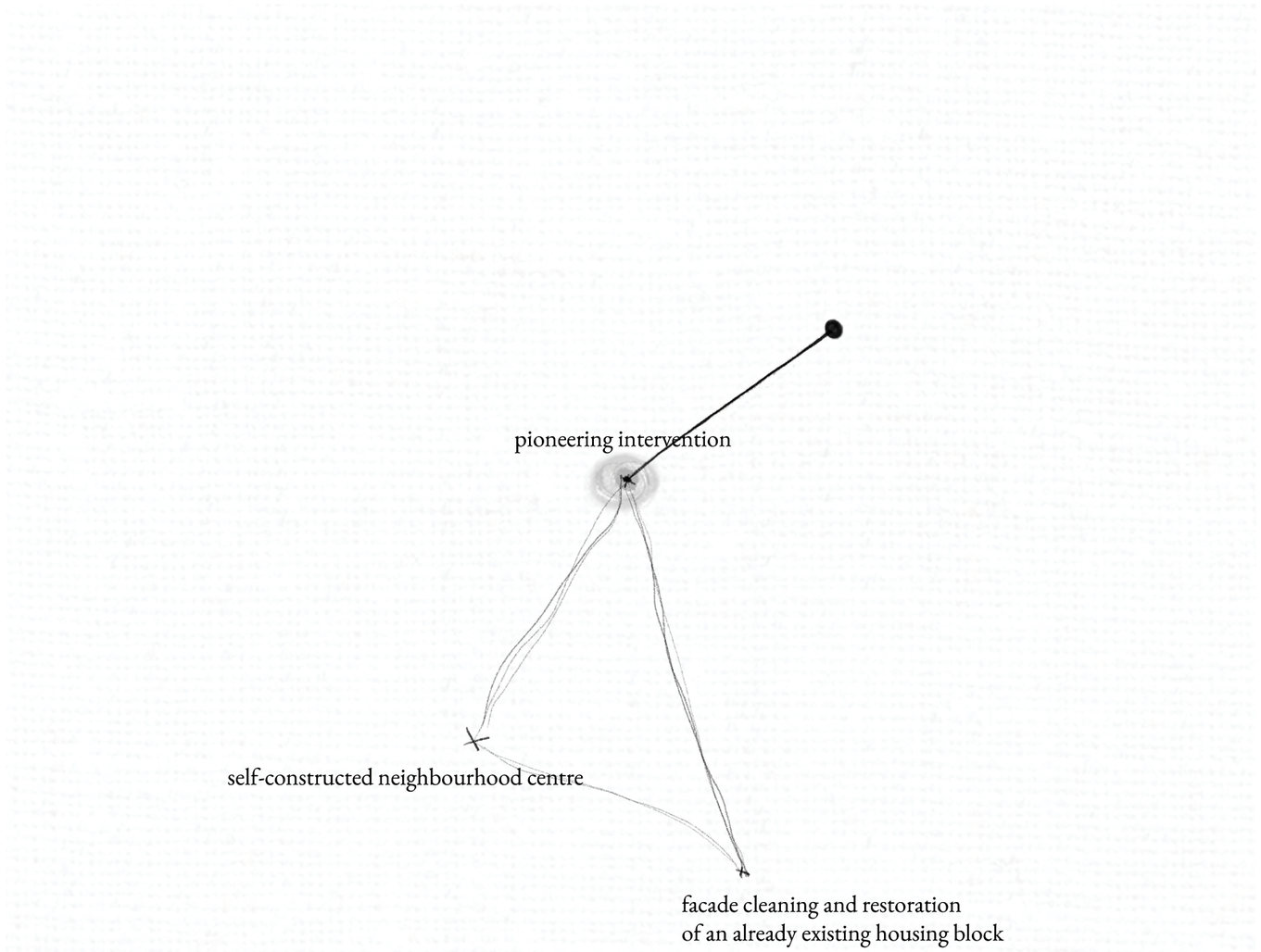
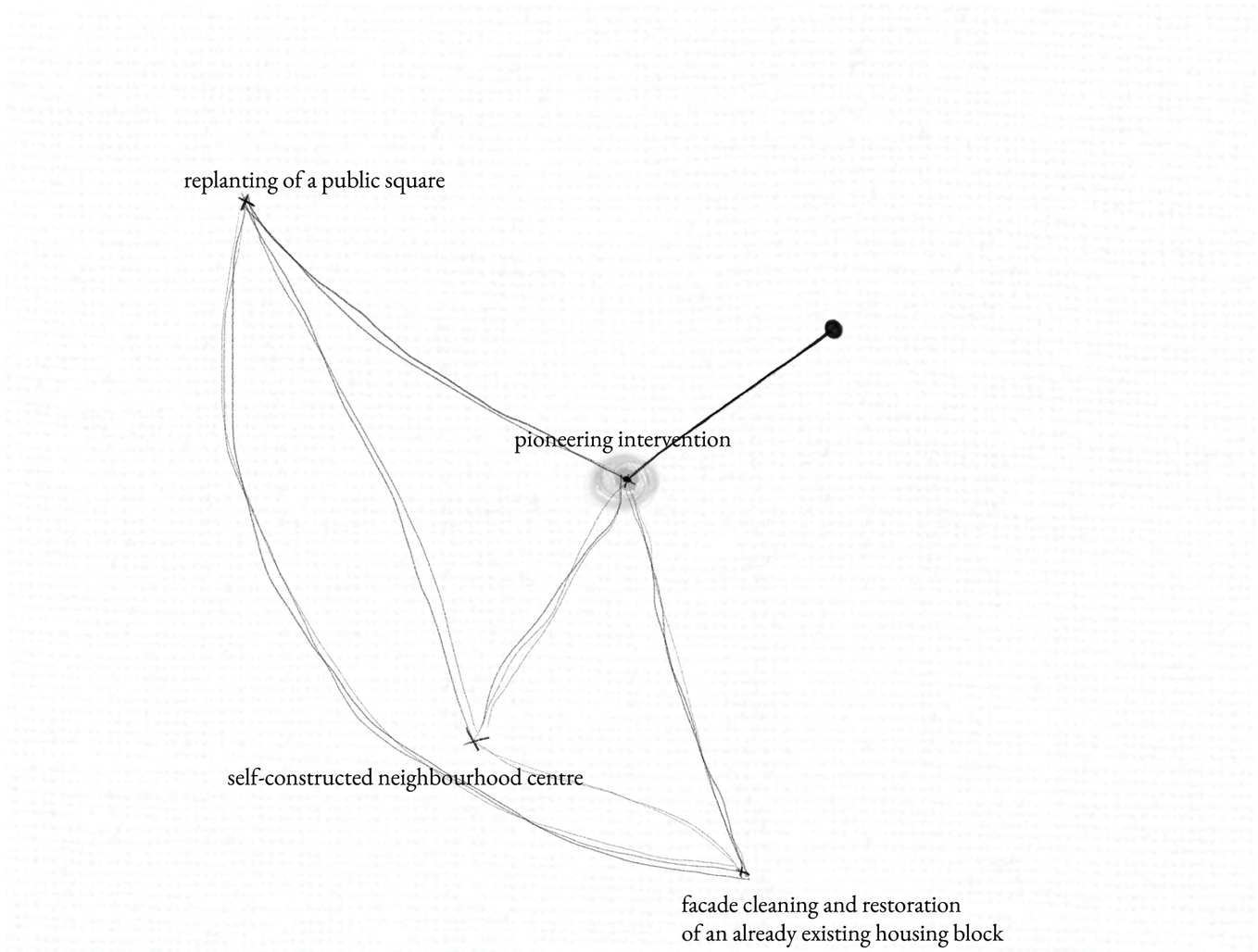
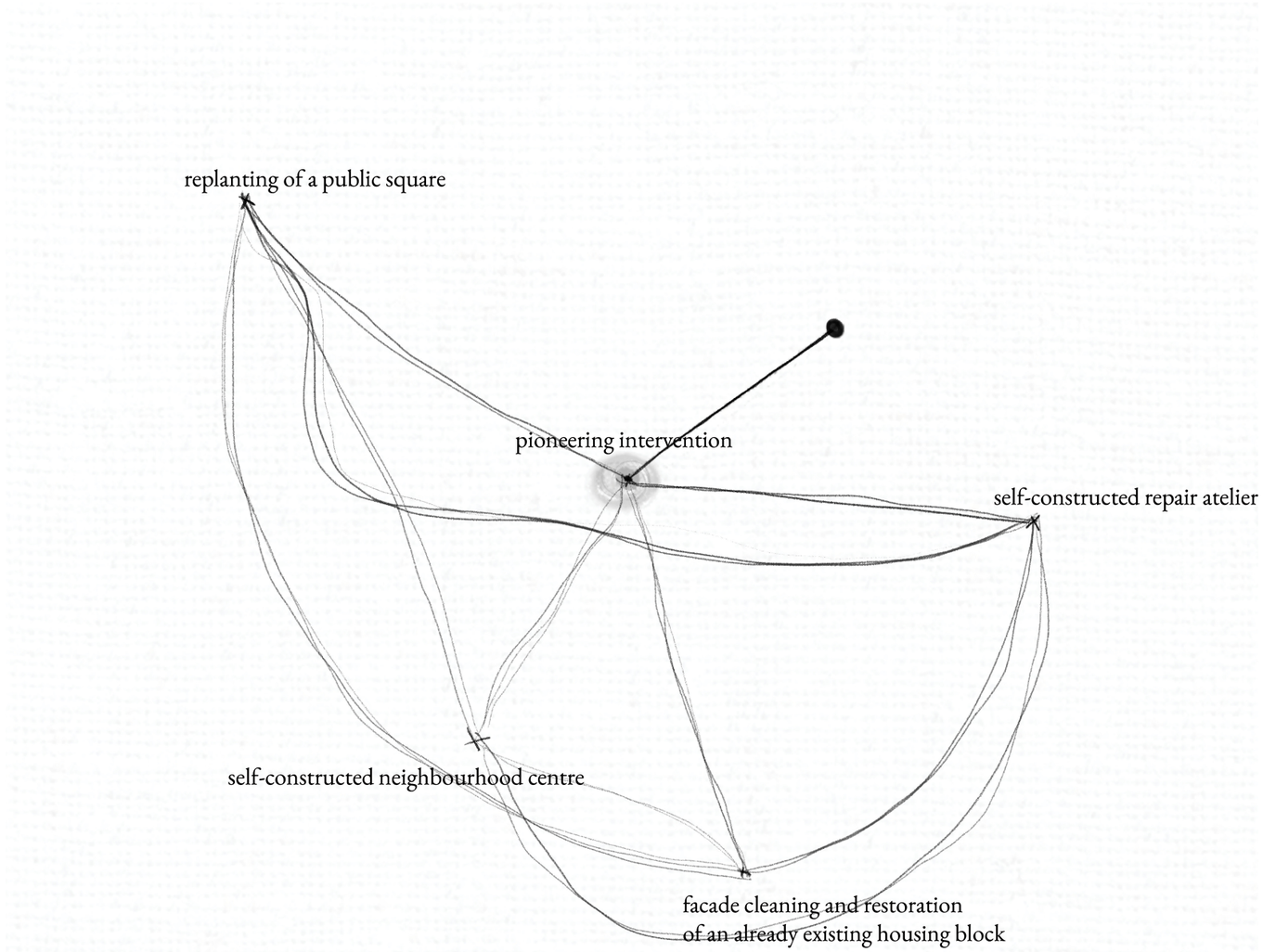
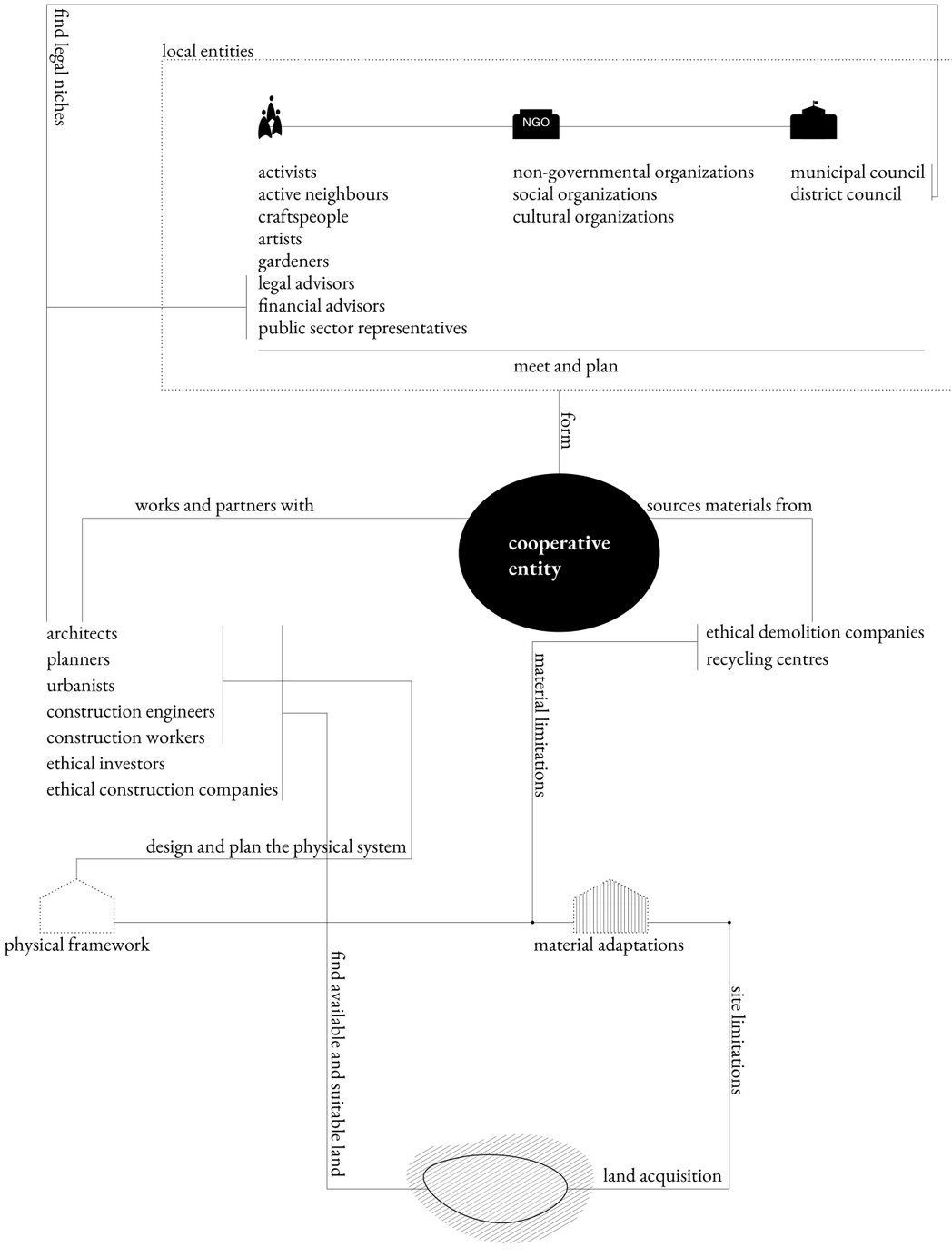

pioneering intervention
self-constructed neighbourhood centre
cinema
sewing workshops


pioneering intervention
self-constructed neighbourhood centre
facade cleaning and restoration
of an already existing housing block


replanting of a public square
pioneering intervention
self-constructed neighbourhood centre
facade cleaning and restoration
of an already existing housing block


replanting of a public square
pioneering intervention
self-constructed repair atelier
self-constructed neighbourhood centre
facade cleaning and restoration
of an already existing housing block


find legal niches
local entities
NGO
activists
active neighbours
craftspeople
artists
gardeners
legal advisors
financial advisors
public sector representatives
non-governmental organizations
social organizations
cultural organizations
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recycling centres
material limitations
design and plan the physical system
physical framework
material adaptations
find available and suitable land
site limitations
land acquisition

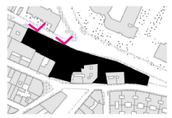


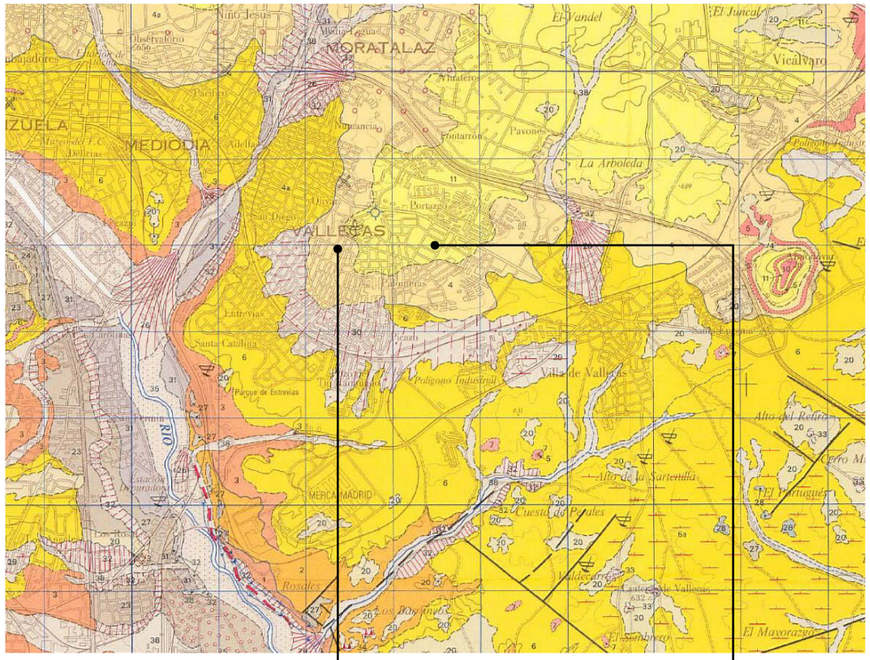
pioonering intervention site

0 1000









4 Medium- or fine-grained arkosic sands, silts, and brown clays

4a Coarse arkoses with pebbles, pebble beds, muds, and arkosic sands

11 Coarse-grained arkosic sands and brownish-red clays

6 Green and pink clays, micaceous sands, marls, and carbonate and chert layers

5 Sepiolite layers

7 Carbonate layers (dolomites and calcretes)

20 Quartz-feldspathic sands with gravels and pebbles (glacis and surfaces)

Sands and silts with scattered pebbles (colluvium, debris flows, and alluvial fans)









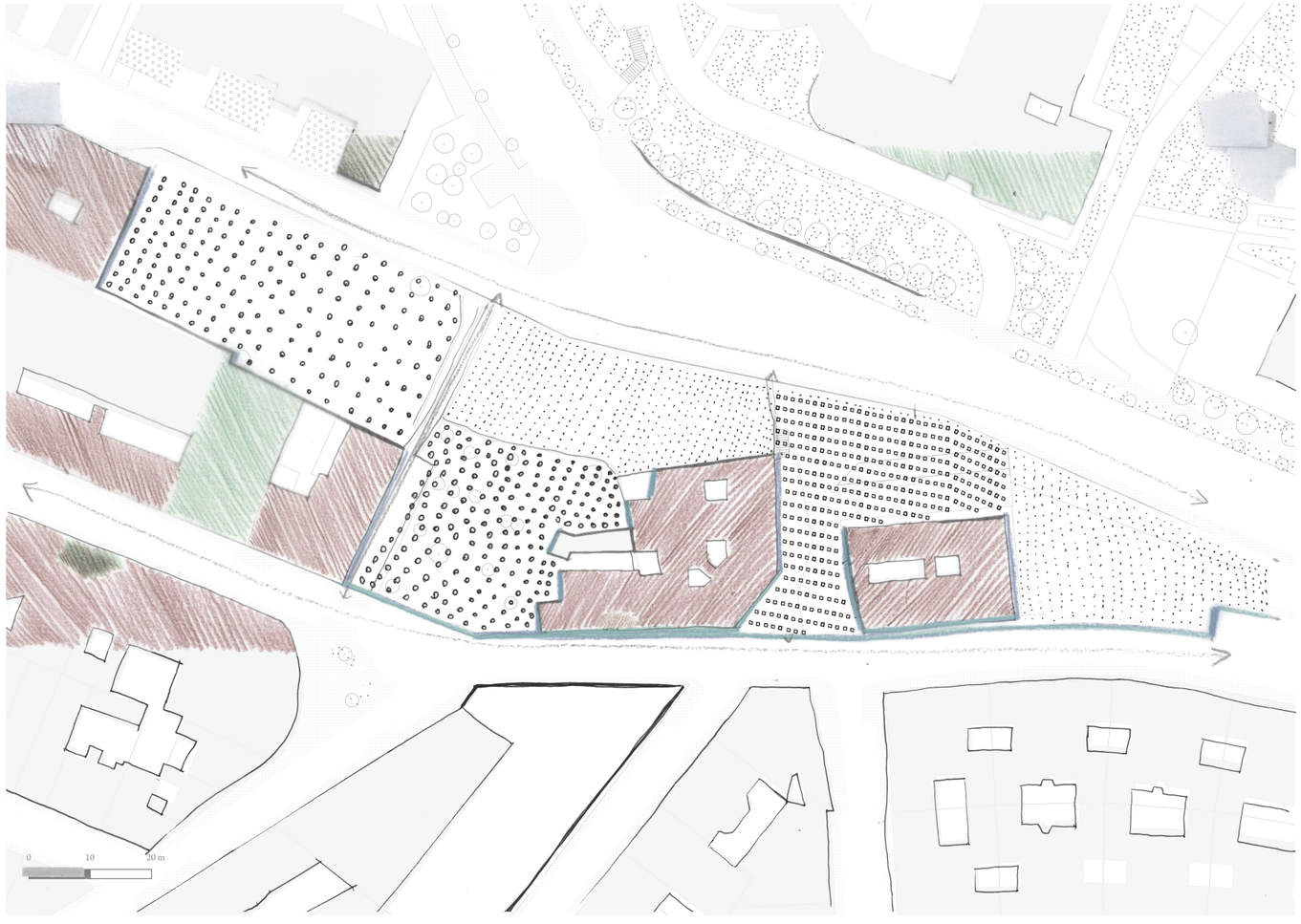






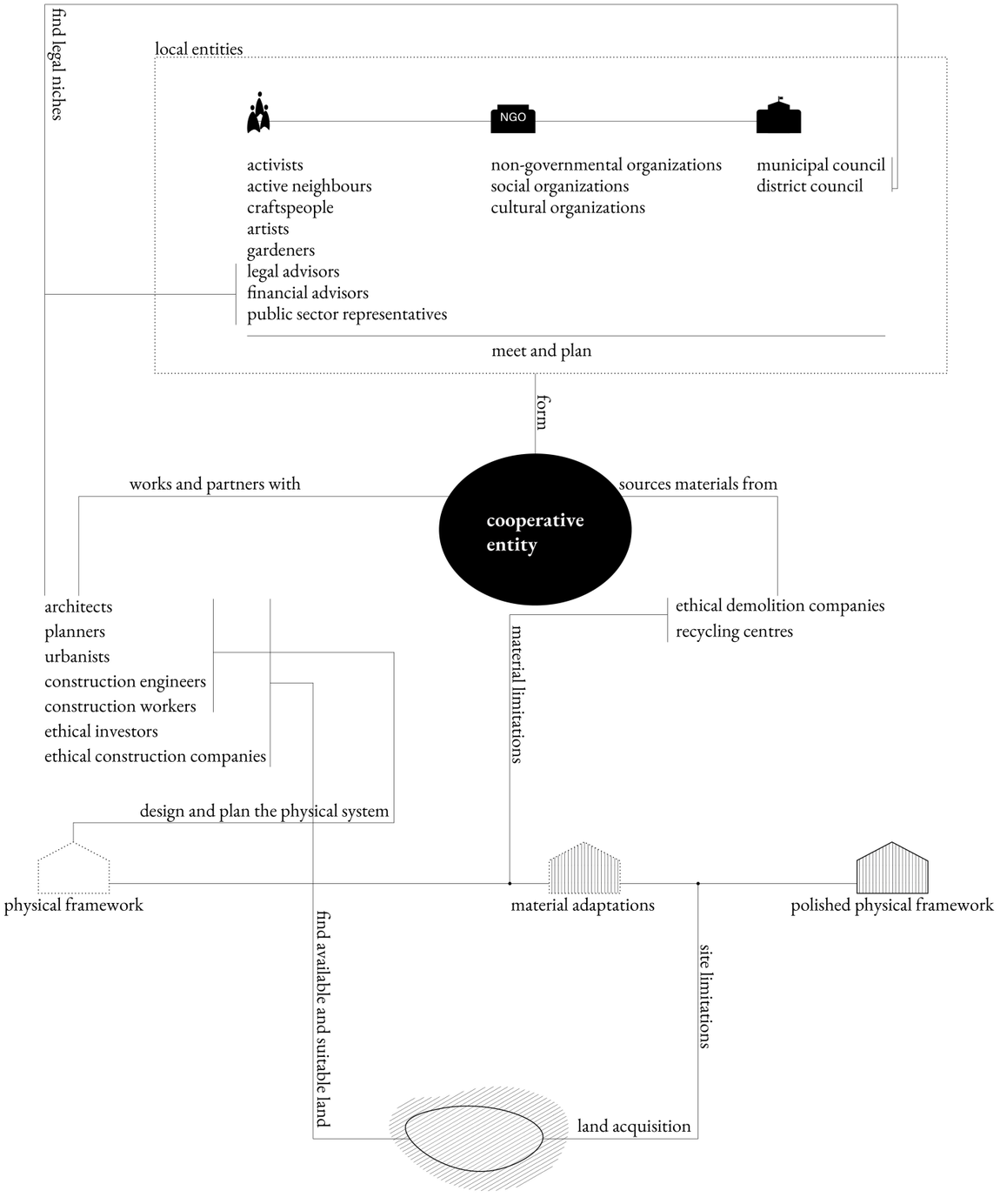






Housing
Social service
Education
Wellness
Food and beverage service

Sand
Earth with vegetation
Cement pavement tiles
Eastern sun
Western sun
Southern sun
Blind walls


find legal niches
local entities
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social organizations
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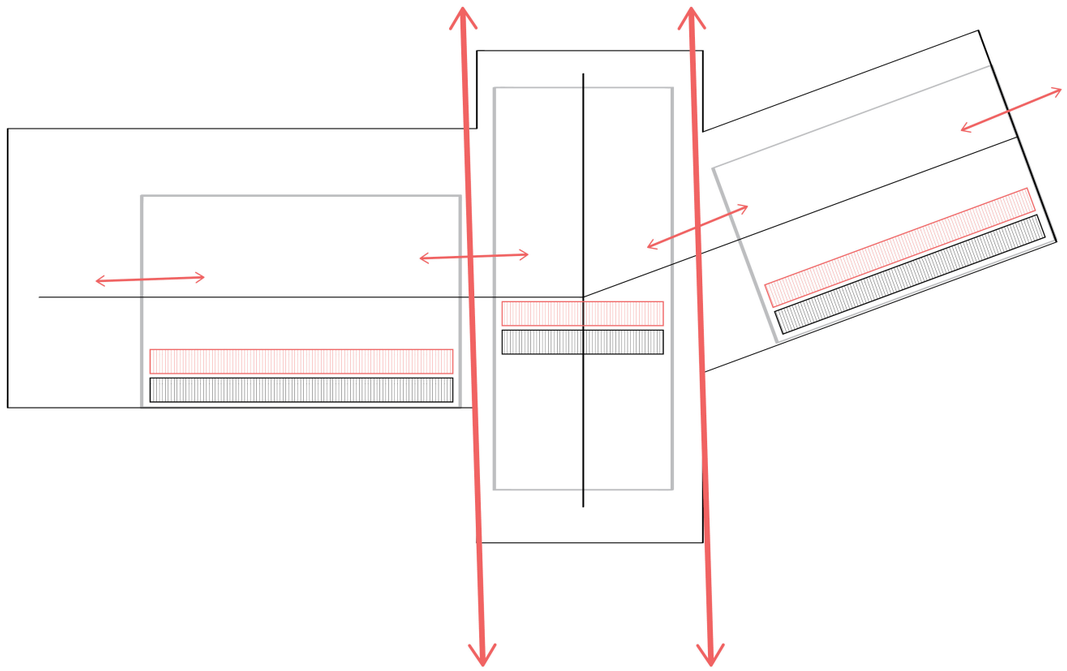
recycling centres
material limitations
design and plan the physical system
physical framework
material adaptations
polished physical framework
find available and suitable land
site limitations
land acquisition



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non-governmental organizations
social organizations
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municipal council
district council

legal advisors
financial advisors
public sector representatives

meet and plan

get instructed and participate in the building process

zoning approvals and formal agreements

funding in the form of subsidies and loans

form

works and partners with

cooperative entity

sources materials from

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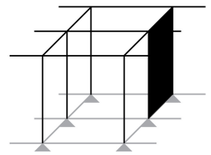
urbanists
construction engineers
construction workers
ethical investors
ethical construction companies

ethical demolition companies
recycling centres

material limitations

aquired
material supply

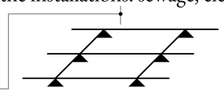
aquired and produced material supply



build up the structural system made out of
vertical and horizontal supports

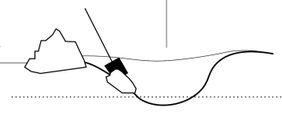
and connect the installations to
the available sources and sewers

integrate the installations: sewage, electricity, gas



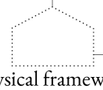
construct the foundation for the entire planned built space

use excess soil
for manufacturing



dig until the minimum required depth

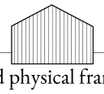
design and plan the physical system



physical framework



material adaptations



polished physical framework

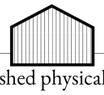
positive bureaucratic feedback



start building process

negative bureaucratic feedback

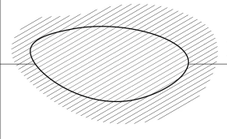
adaptations



double-polished physical framework

site limitations

find available and suitable land

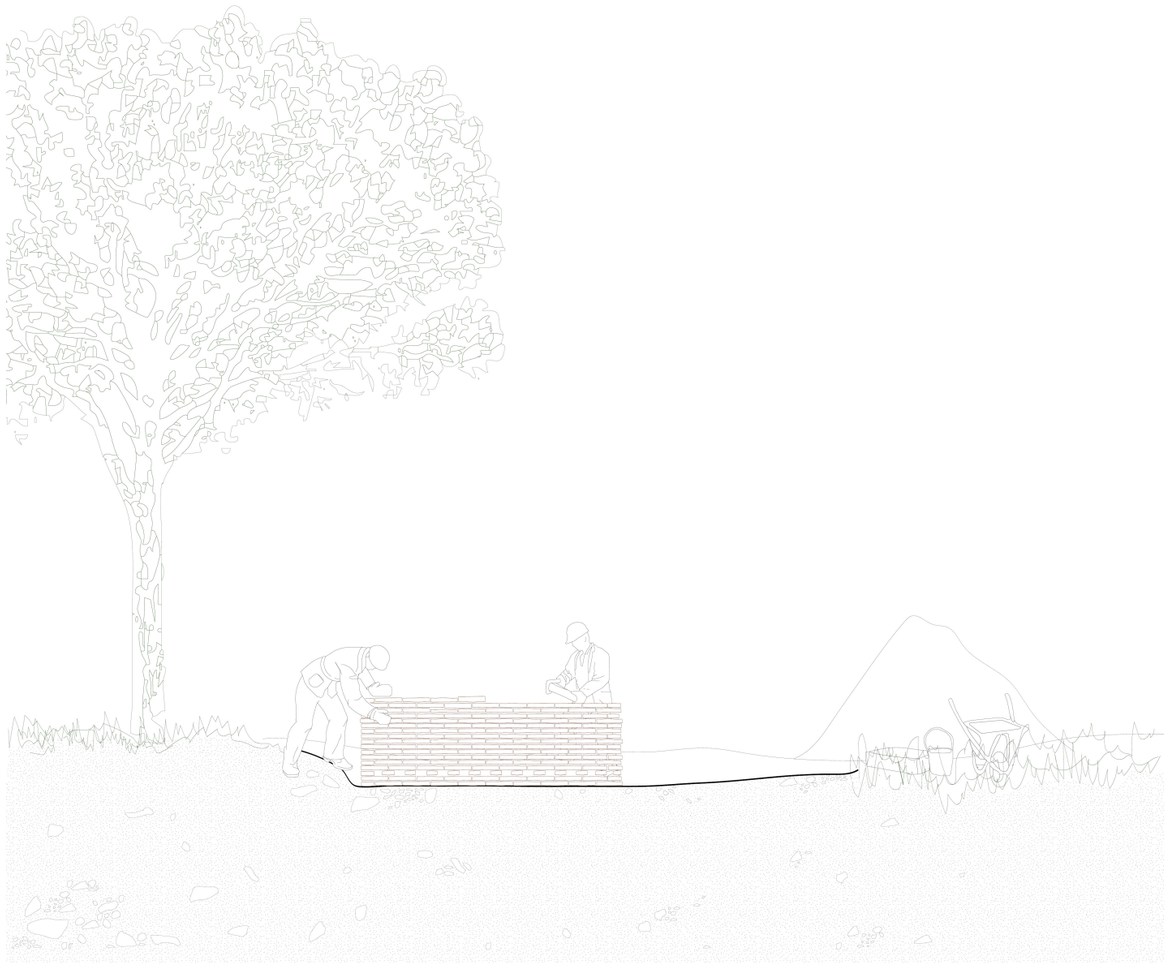


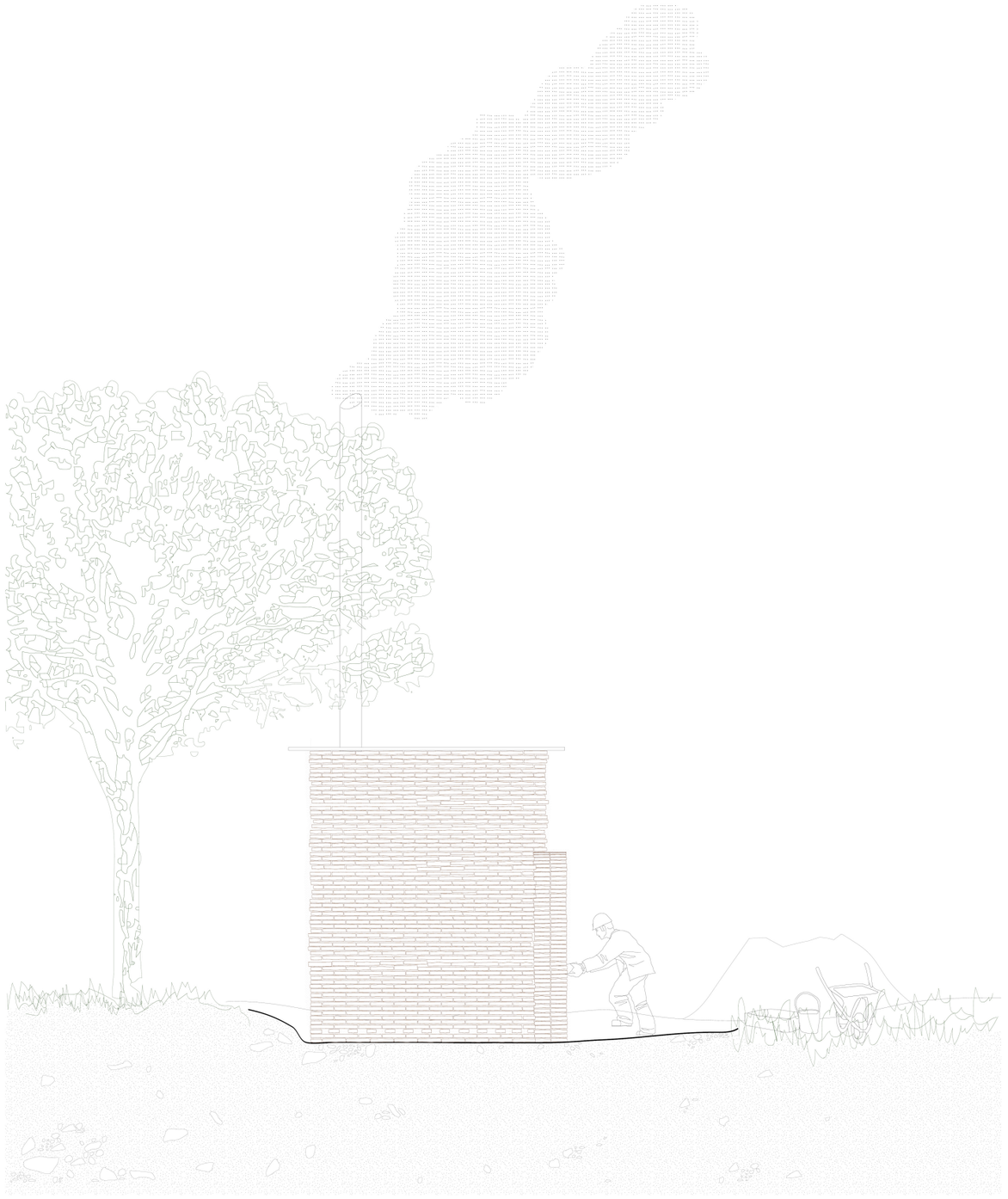
land acquisition

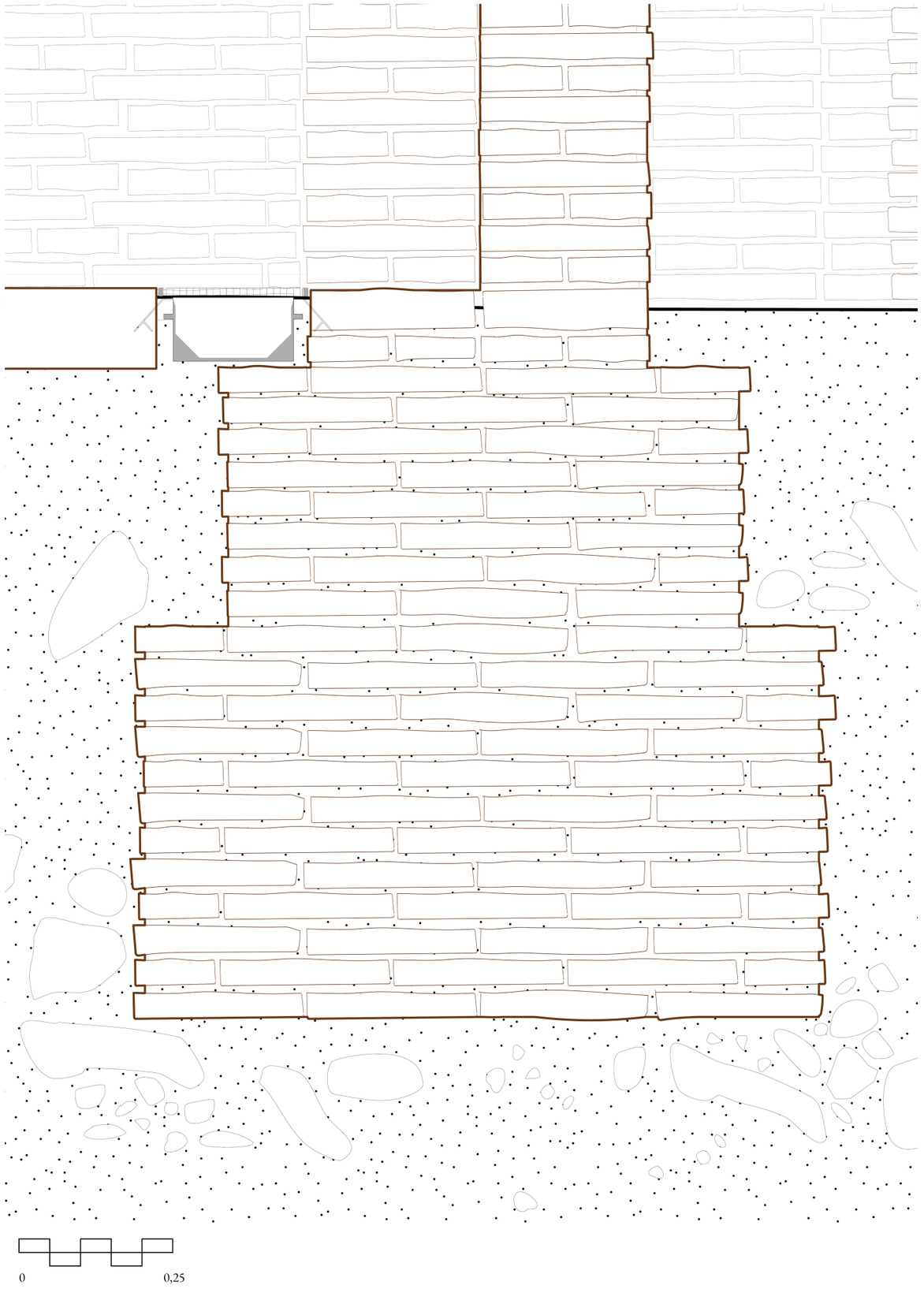
collaborating to construct the physical pioneering built space and instruct the other actors

tools supply





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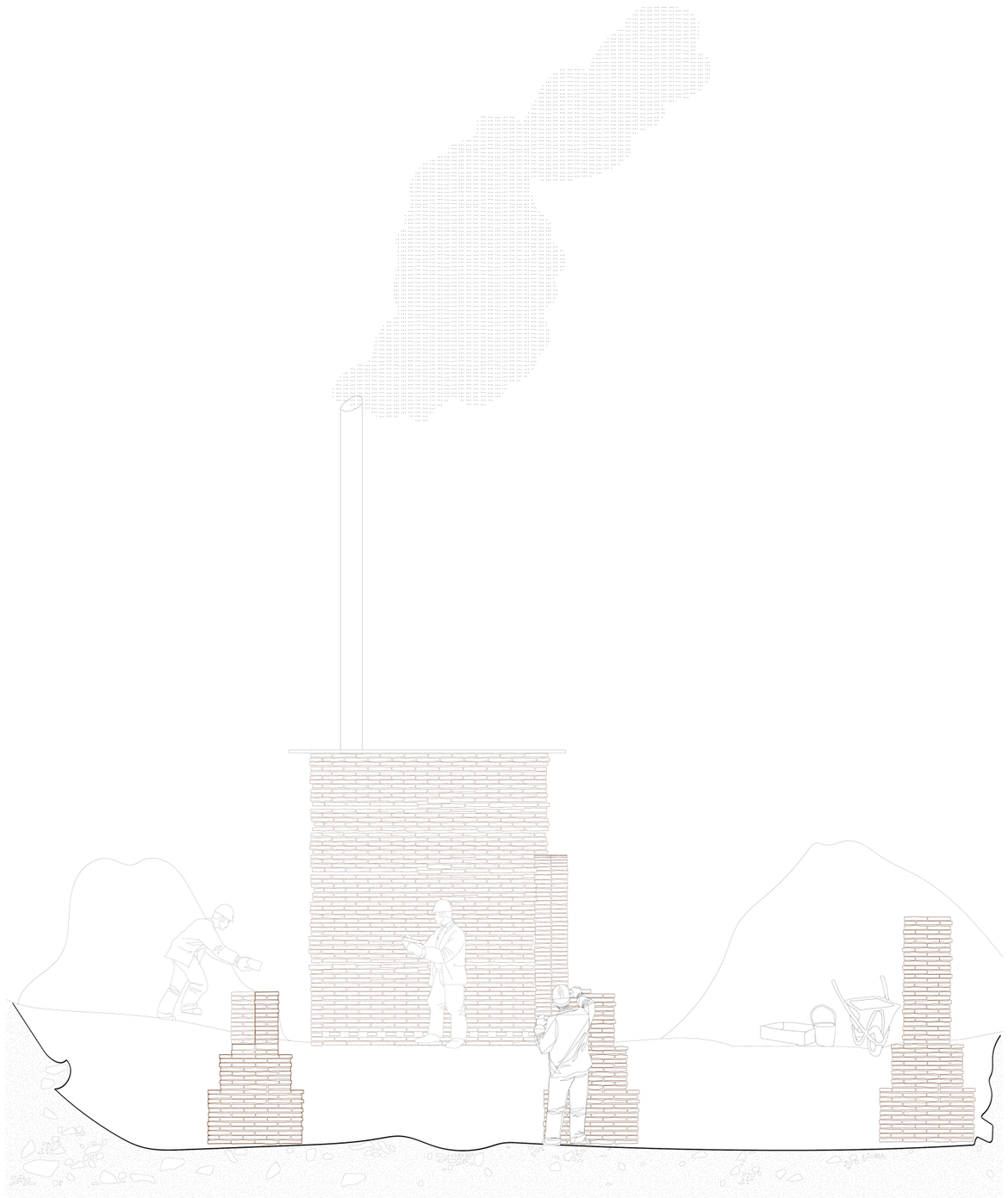
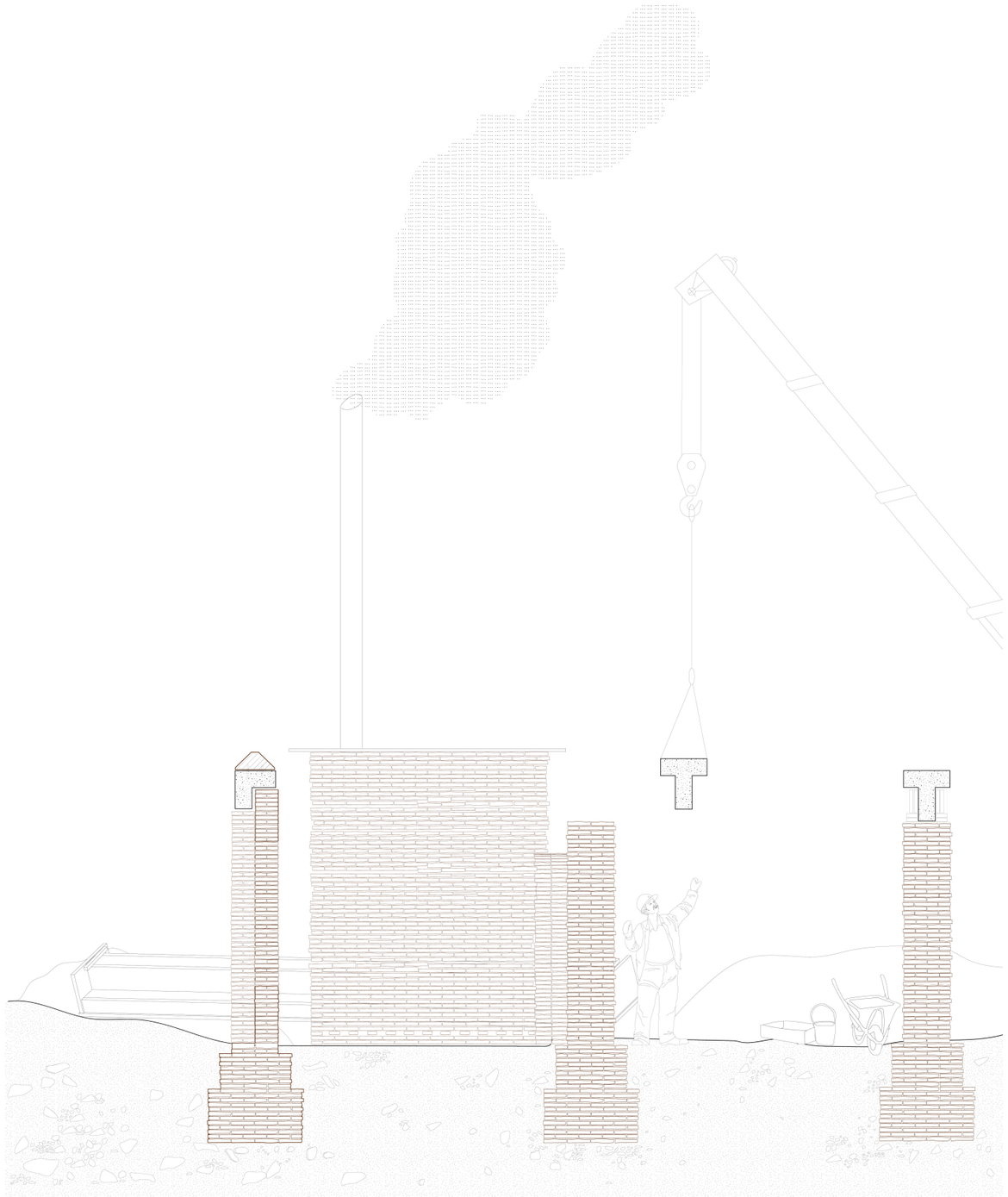
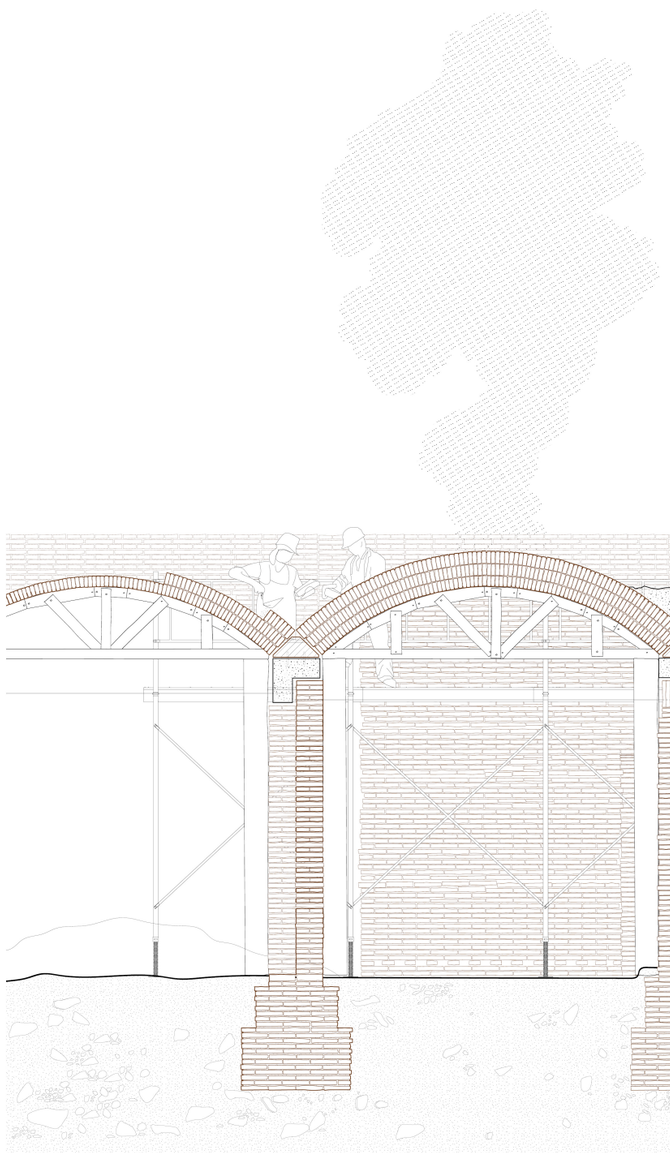
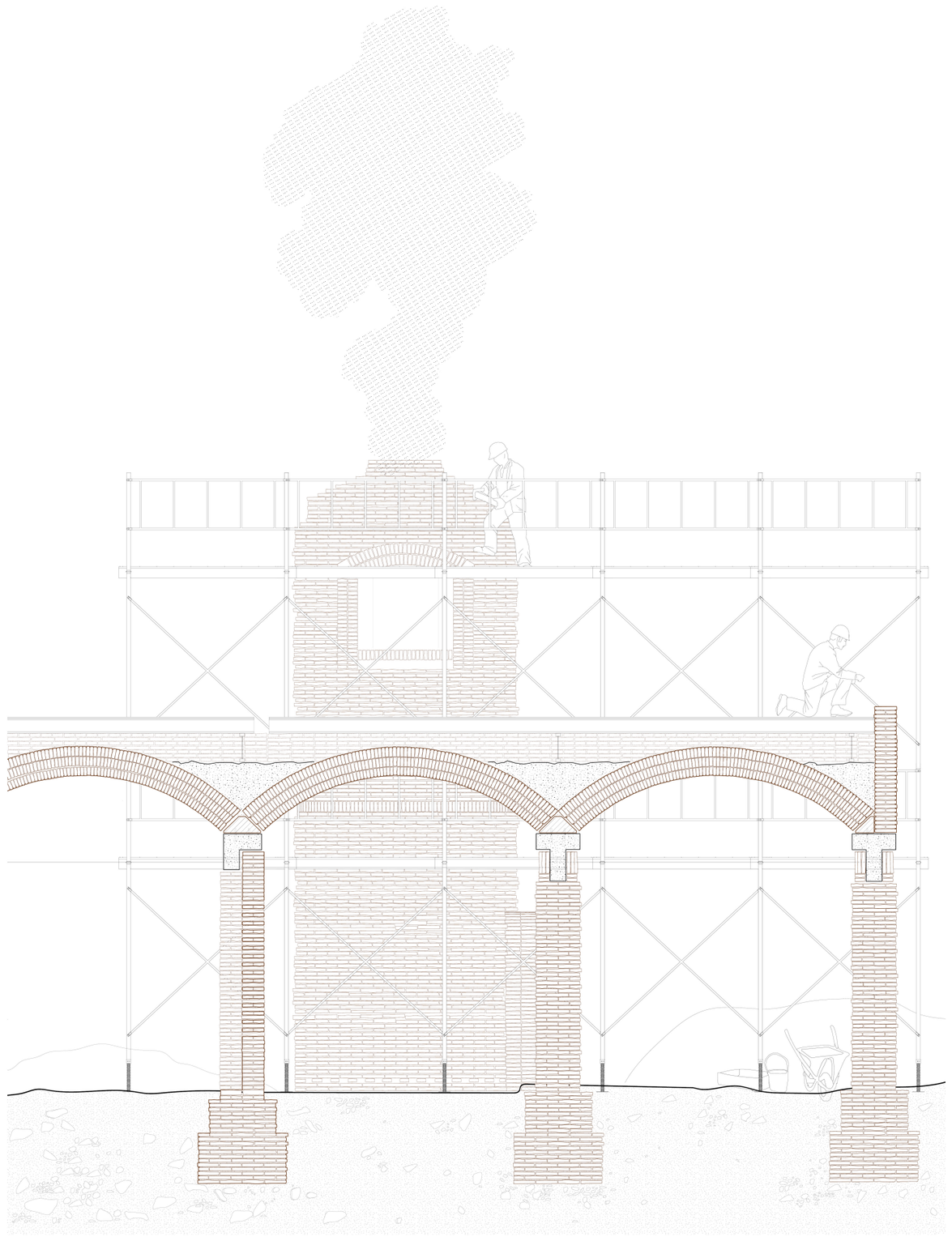








find legal niches

local entities

NGO

activists
active neighbours
craftspeople
artists
gardeners

non-governmental organizations
social organizations
cultural organizations

municipal council
district council

legal advisors
financial advisors
public sector representatives

meet and plan

get instructed and participate in the building process

zoning approvals and formal agreements

funding in the form of subsidies and loans

form

works and partners with

cooperative entity

sources materials from

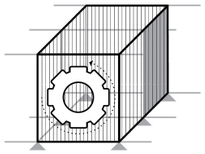
architects
planners
urbanists
construction engineers
construction workers
ethical investors
ethical construction companies

ethical demolition companies
recycling centres

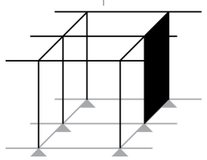
material limitations

aquired
material supply

aquired and produced material supply



build the outer shell, partition walls, and
necessary facilities of the productive area



build up the structural system made out of
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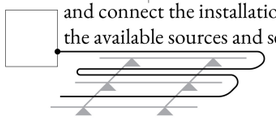

and connect the installations to
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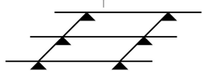
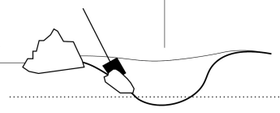
integrate the installations: sewage, electricity, gas



construct the foundation for the entire planned built space

use excess soil
for manufacturing



dig until the minimum required depth

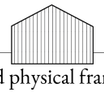
design and plan the physical system



physical framework



material adaptations



polished physical framework

positive bureaucratic feedback



start building process

negative bureaucratic feedback

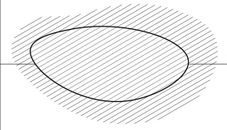
adaptations



double-polished physical framework

site limitations

find available and suitable land

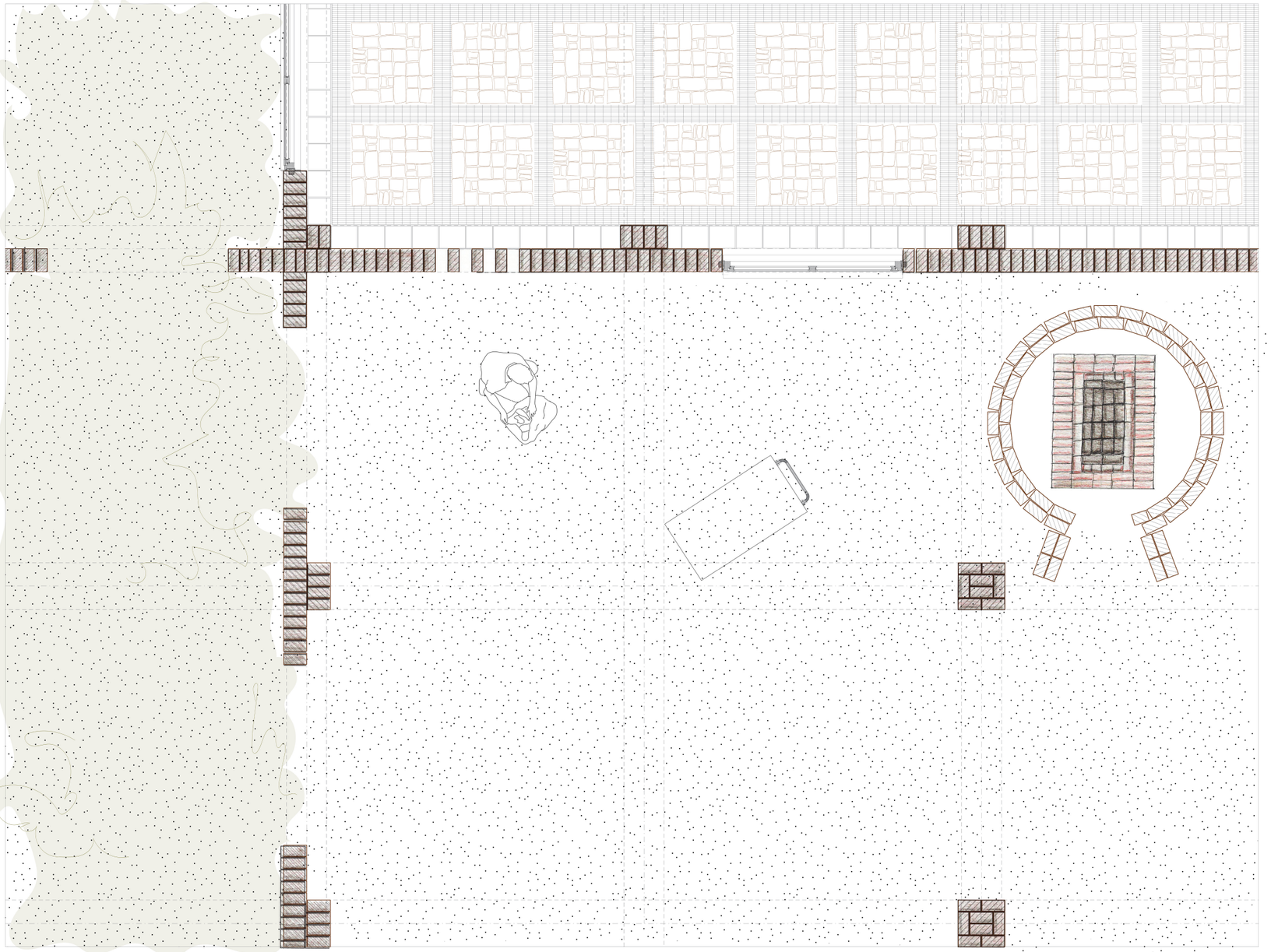


land acquisition

collaborating to construct the physical pioneering built space and instruct the other actors

tools supply





find legal niches

local entities

NGO

activists
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craftspeople
artists
gardeners

non-governmental organizations
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municipal council
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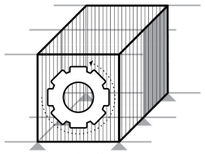
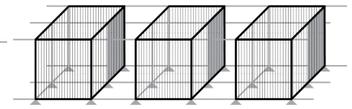
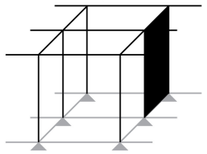
aquired and produced material supply



build the outer shell, partition walls, and necessary facilities of the productive area



build the outer shell, partition walls, and necessary facilities of the other areas



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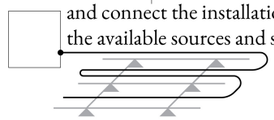

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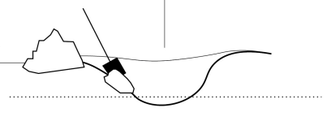
integrate the installations: sewage, electricity, gas



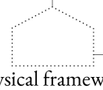
construct the foundation for the entire planned built space

use excess soil
for manufacturing



dig until the minimum required depth

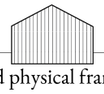
design and plan the physical system



physical framework



material adaptations



polished physical framework

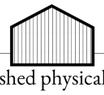
positive bureaucratic feedback



start building process

negative bureaucratic feedback

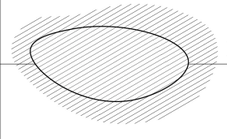
adaptations



double-polished physical framework

site limitations

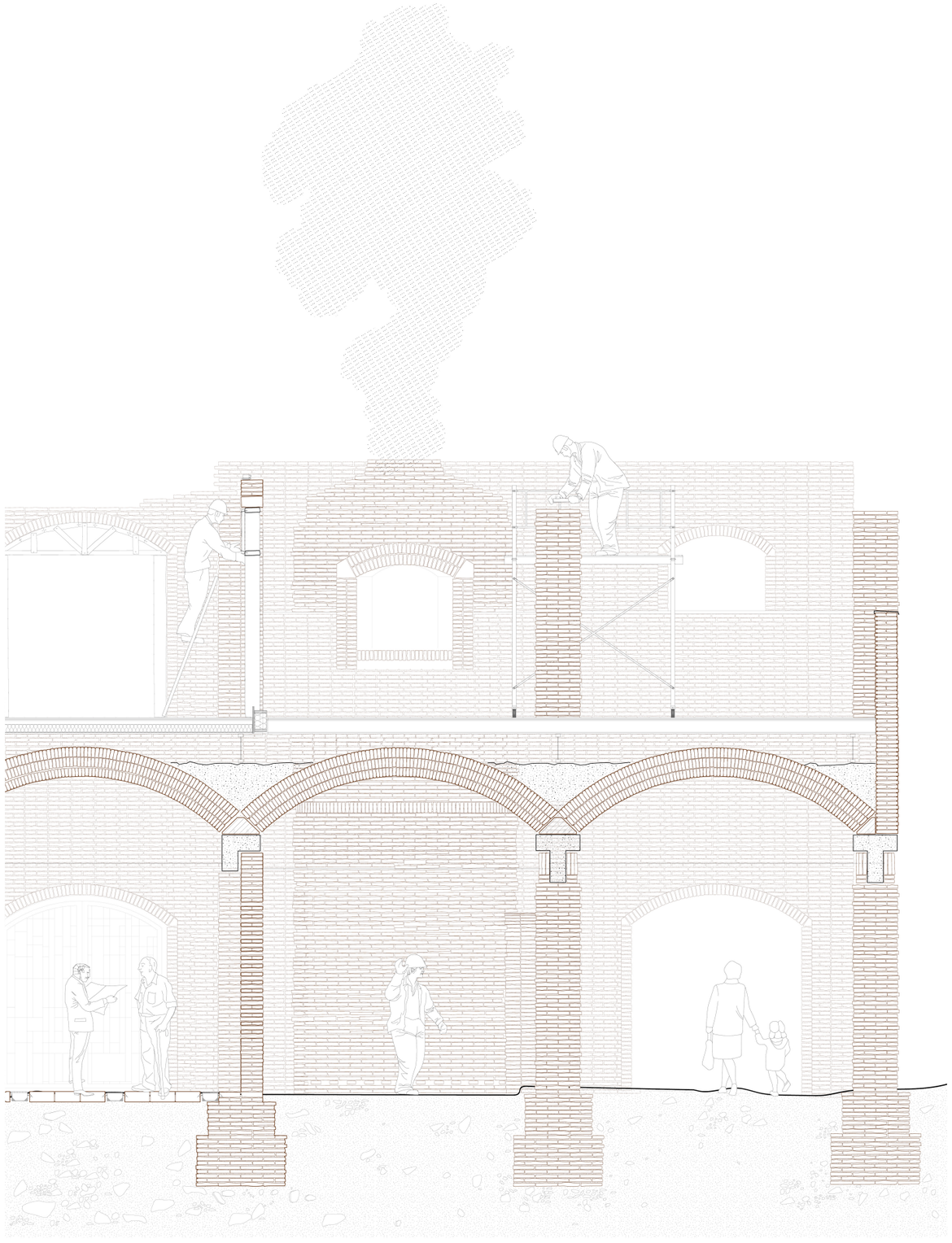
find available and suitable land

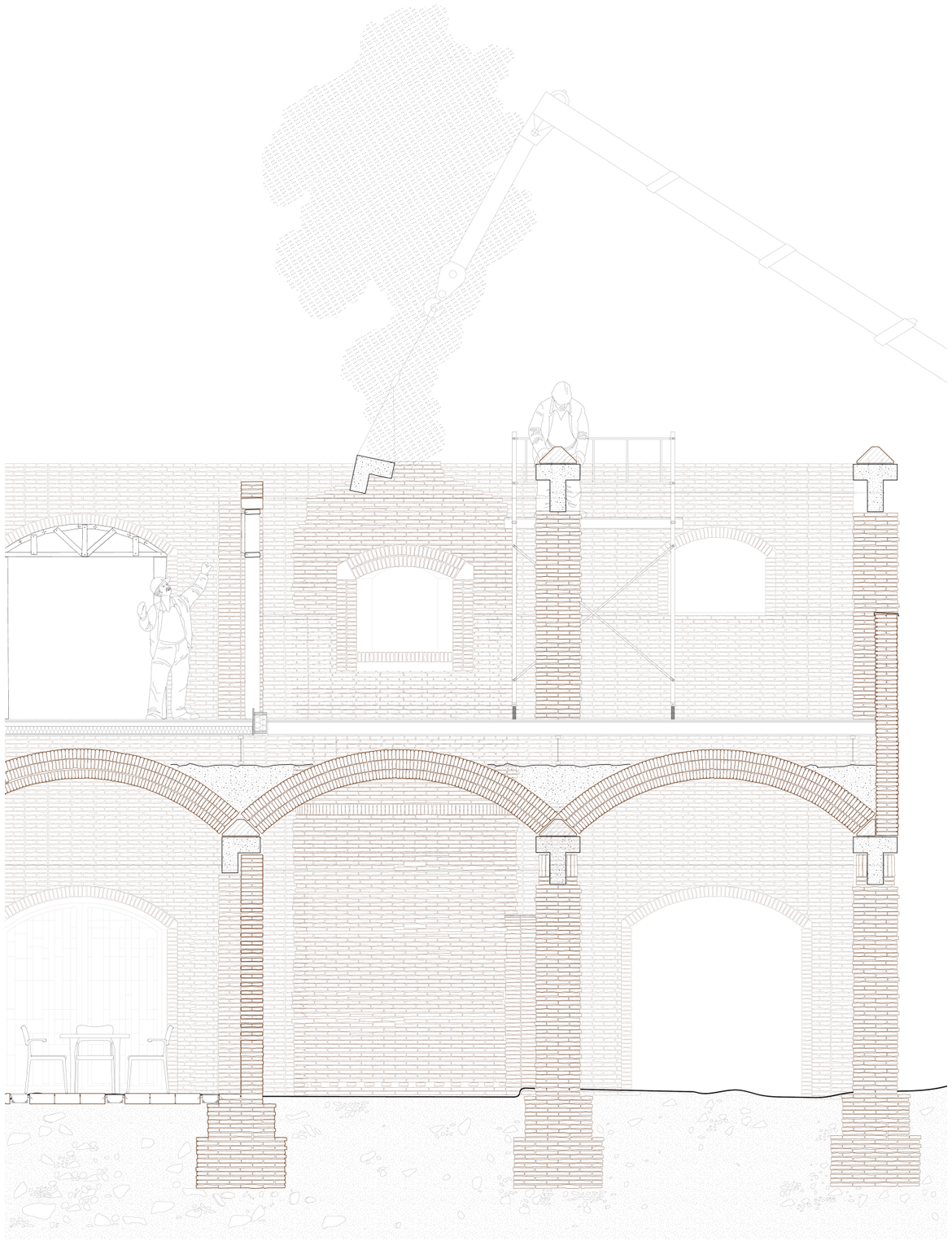


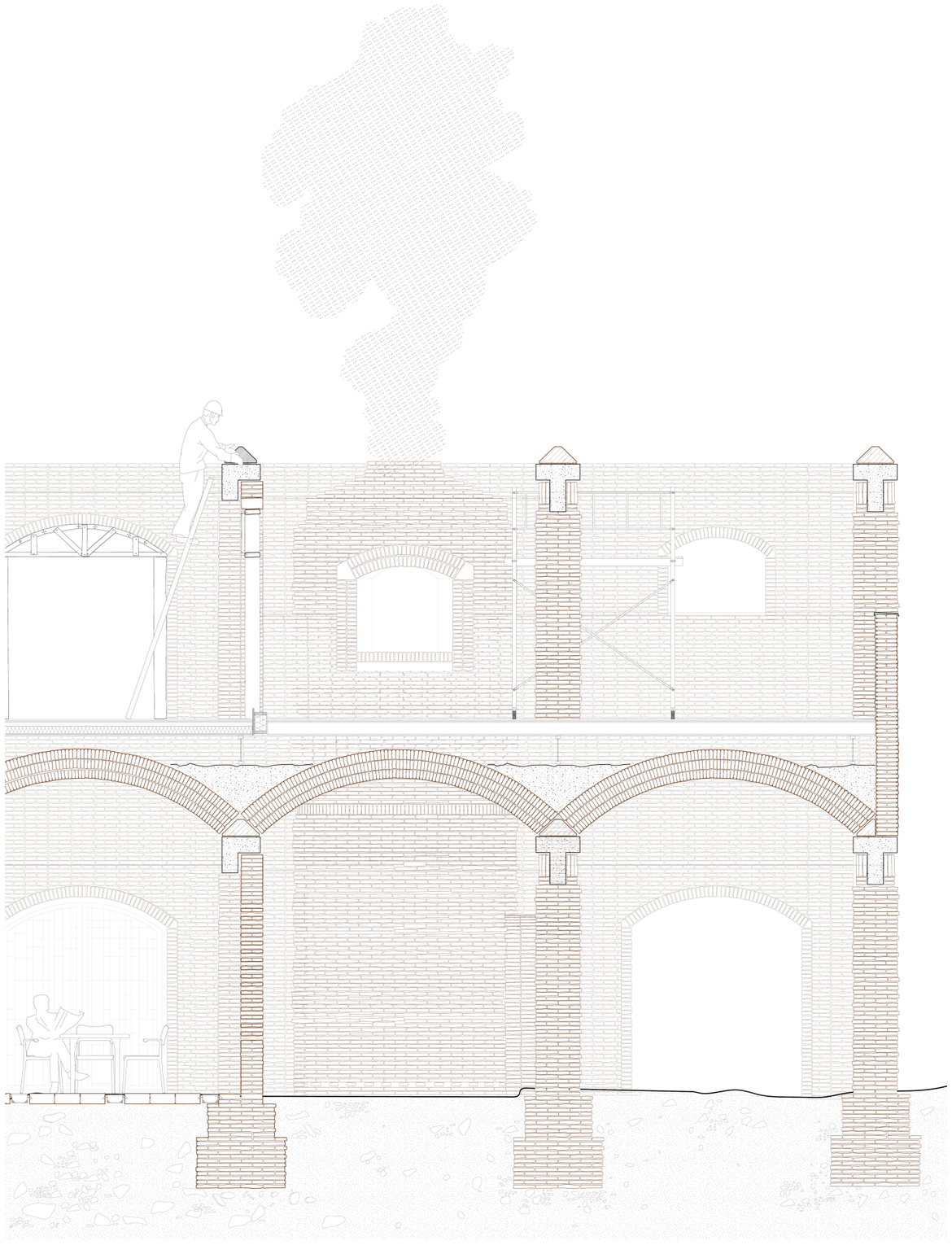
land acquisition

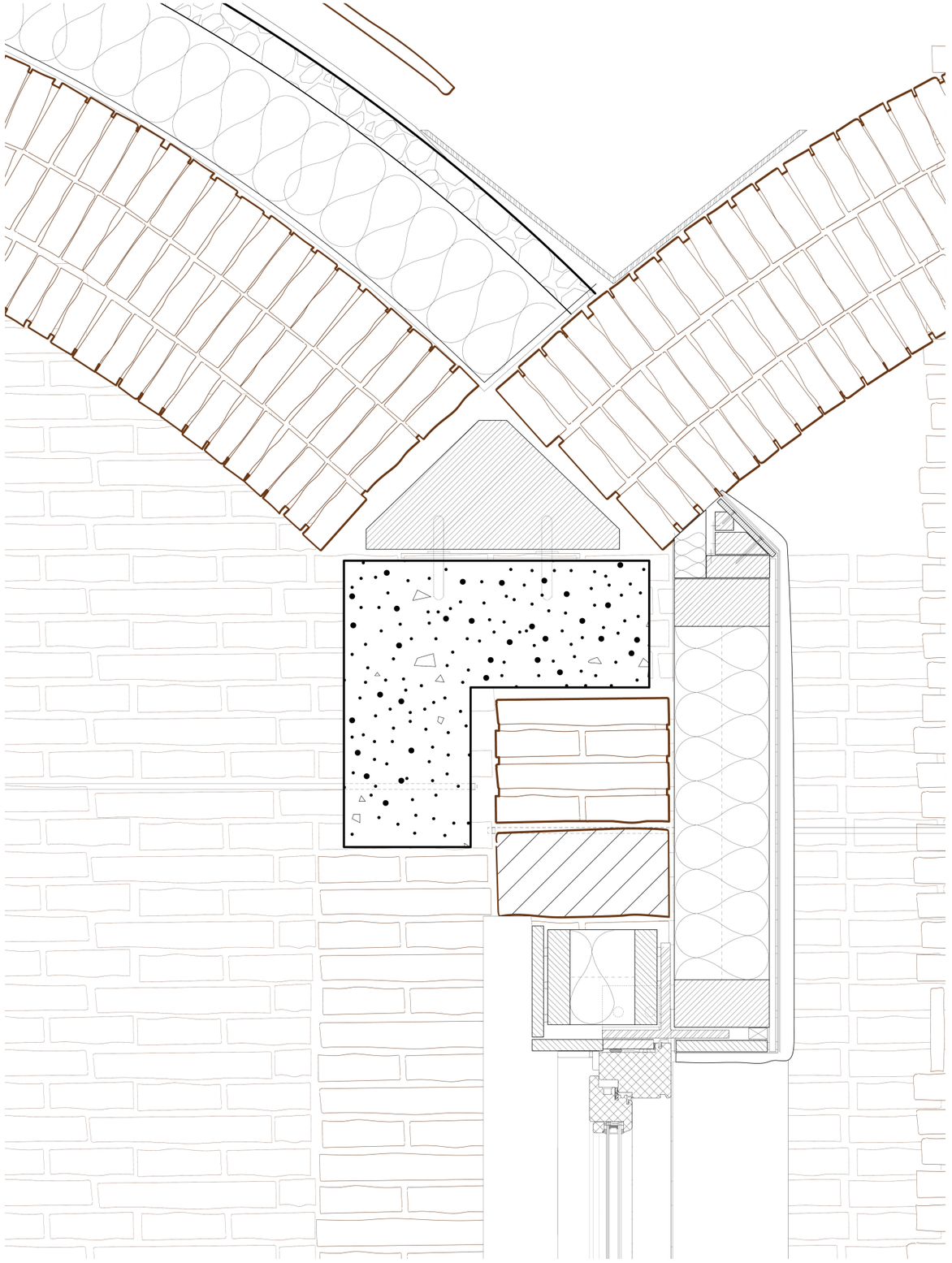
collaborating to construct the physical pioneering built space and instruct the other actors

tools supply





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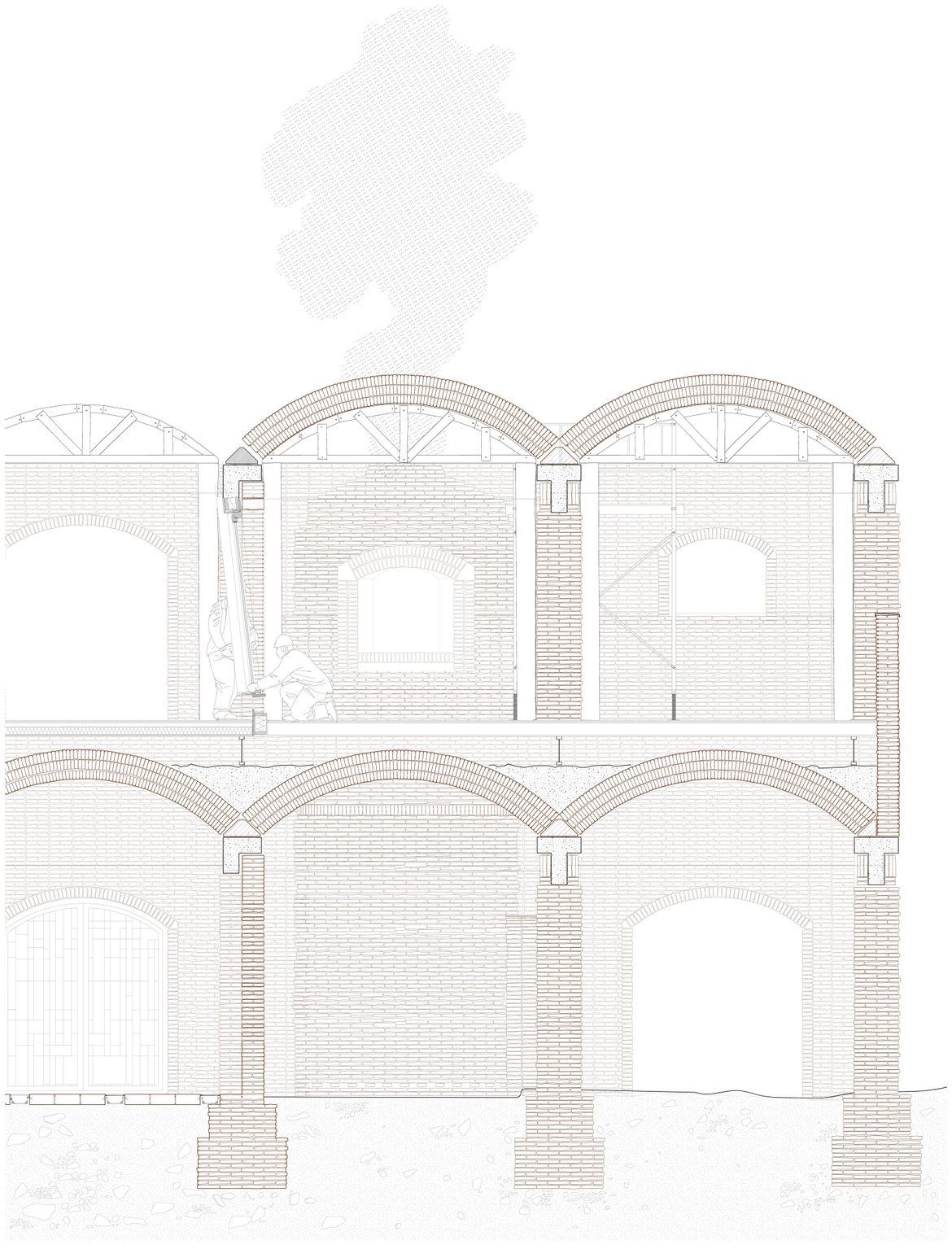

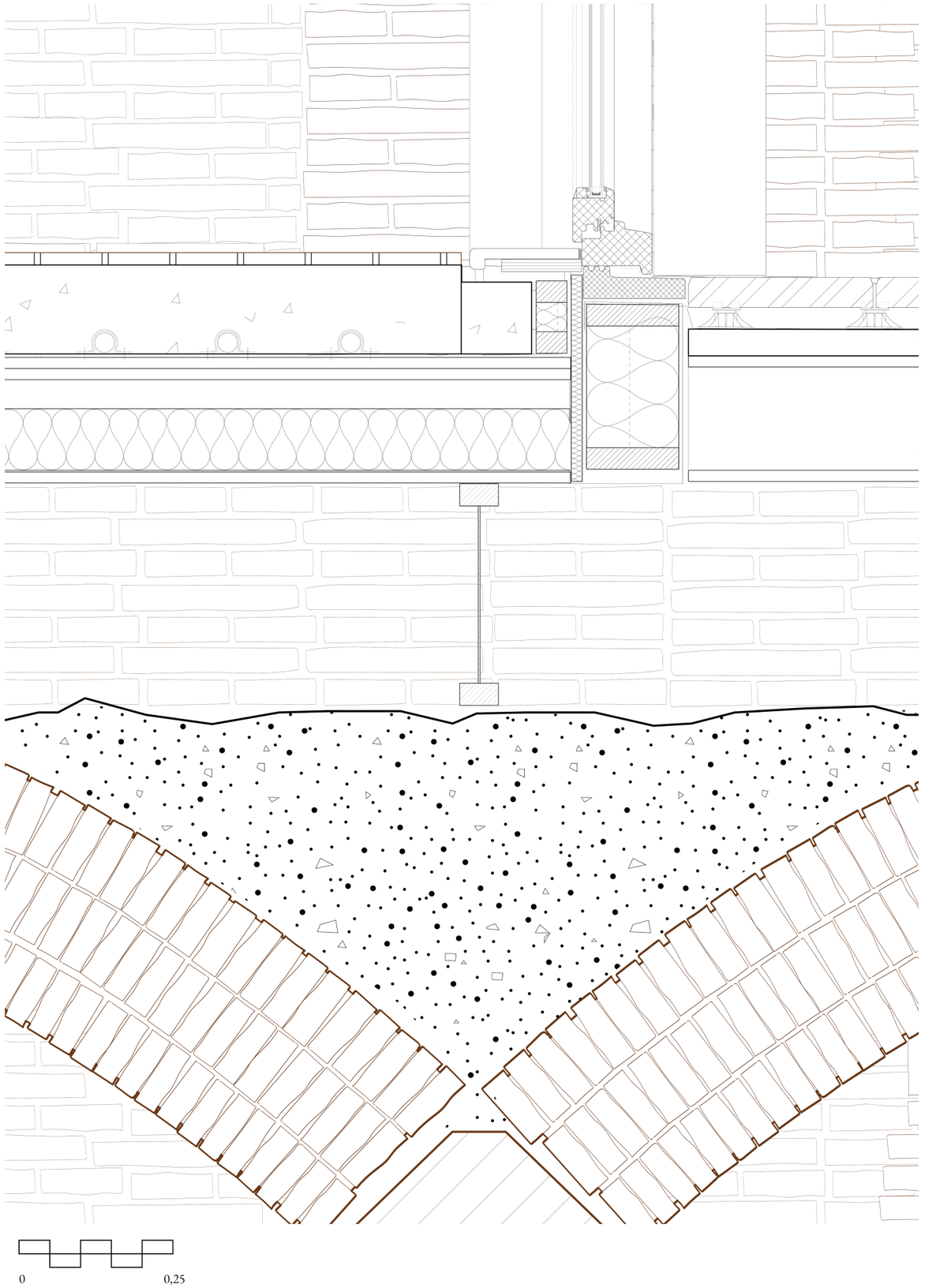
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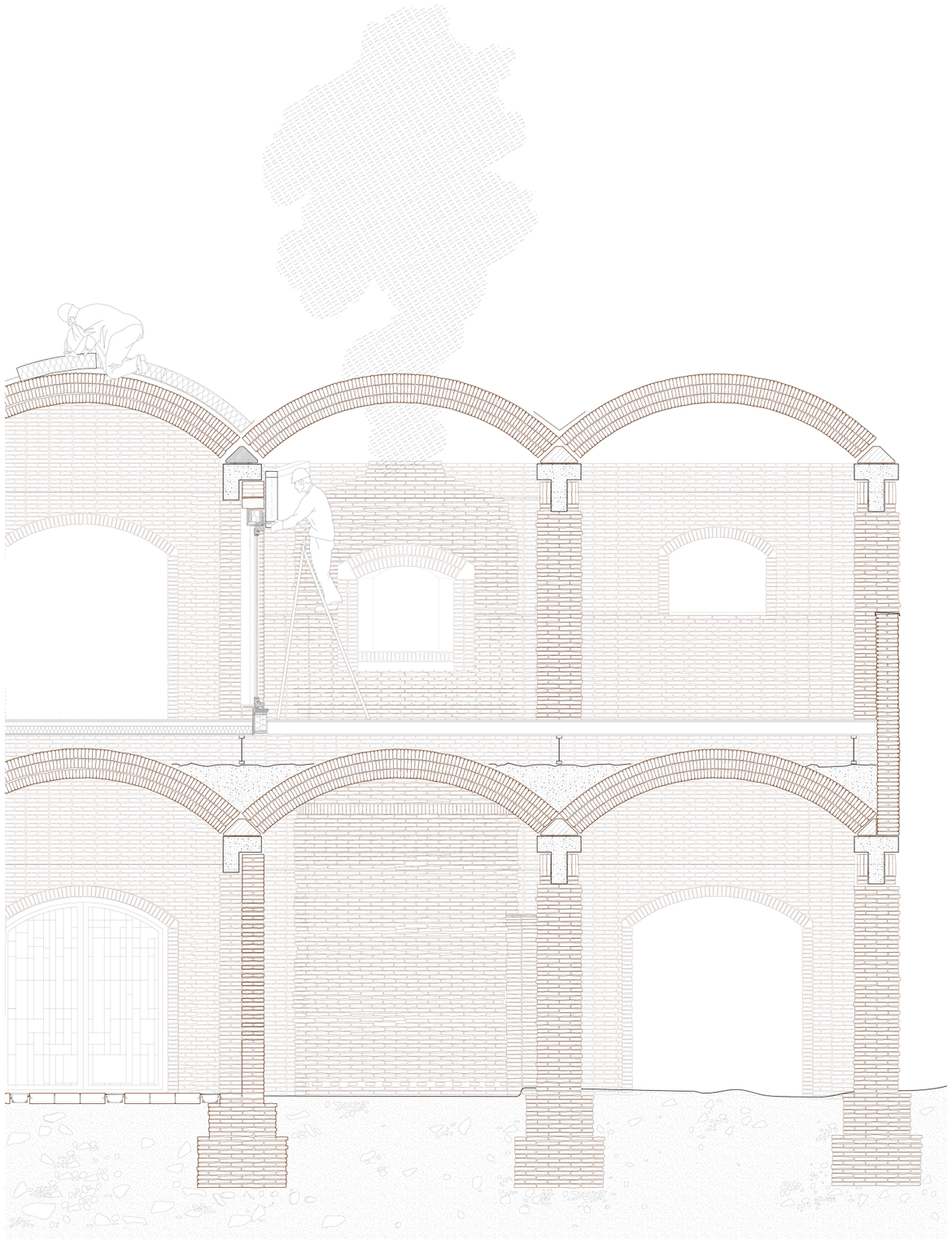

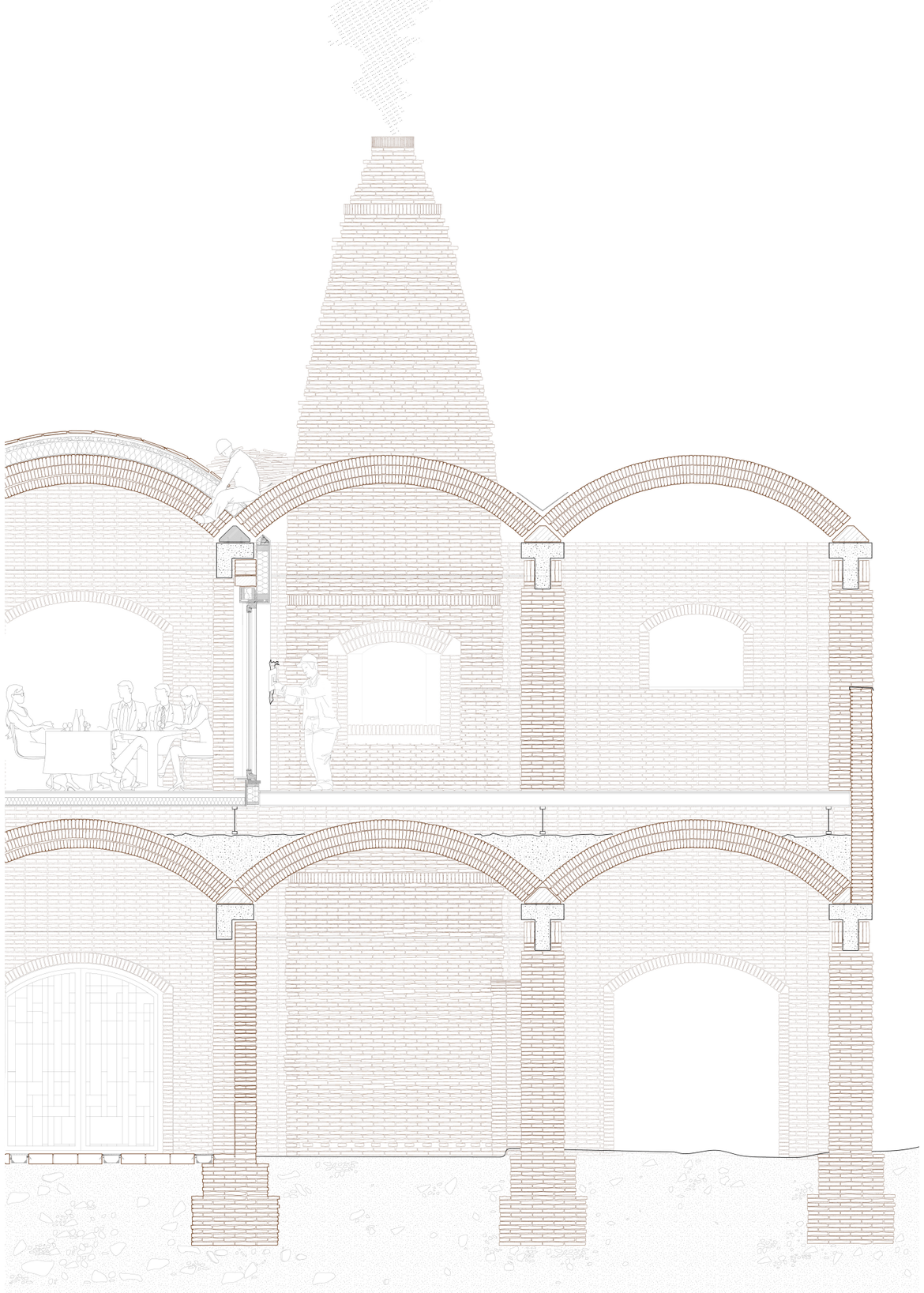

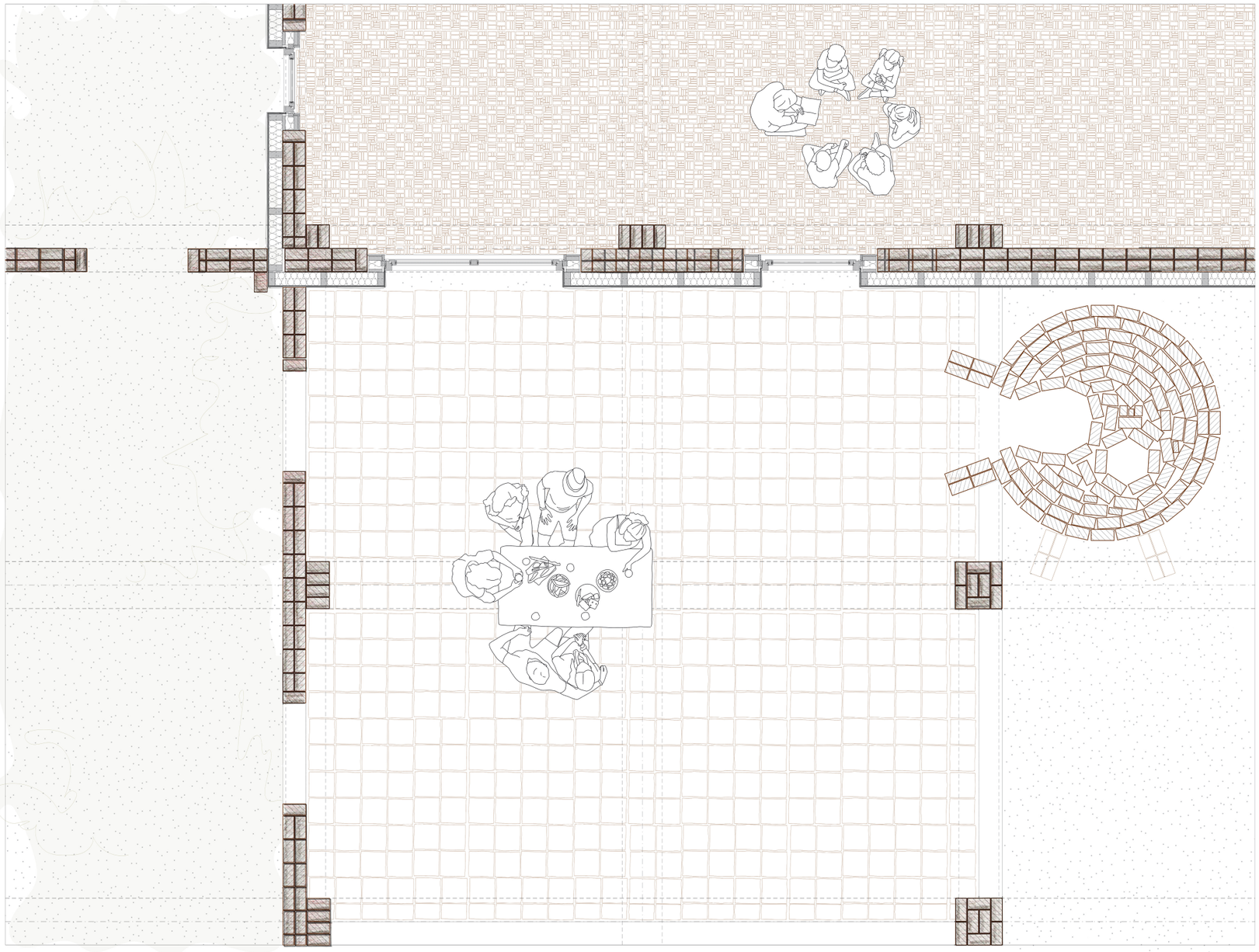

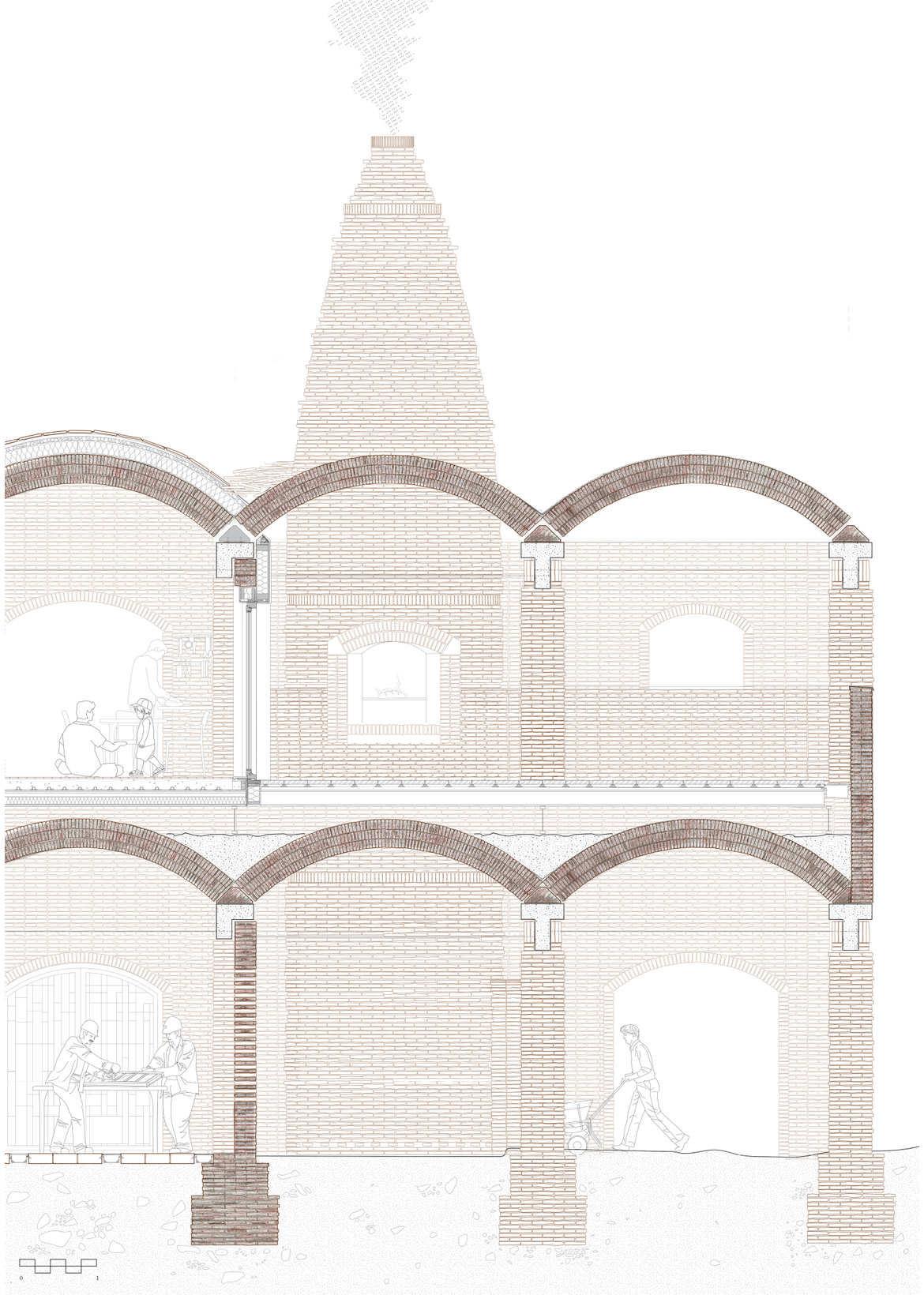


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find legal niches

local entities

NGO

activists
active neighbours
craftspeople
artists
gardeners
legal advisors
financial advisors
public sector representatives

non-governmental organizations
social organizations
cultural organizations

municipal council
district council

meet and plan

get instructed and participate in the building process

zoning approvals and formal agreements

funding in the form of subsidies and loans

form

works and partners with

cooperative entity

sources materials from

architects
planners
urbanists
construction engineers
construction workers
ethical investors
ethical construction companies

ethical demolition companies
recycling centres

material limitations

aquired
material supply

aquired and produced material supply

build the outer shell, partition walls, and necessary facilities of the productive area

build the outer shell, partition walls, and necessary facilities of the other areas

build up the structural system made out of vertical and horizontal supports

operate

appropriate and decorate

and connect the installations to the available sources and sewers

integrate the installations: sewage, electricity, gas

construct the foundation for the entire planned built space

use excess soil
for manufacturing

dig until the minimum required depth

design and plan the physical system

physical framework

material adaptations

polished physical framework

positive bureaucratic feedback

start building process

negative bureaucratic feedback

adaptations

double-polished physical framework

site limitations

find available and suitable land

land acquisition

collaborating to construct the physical pioneering built space and instruct the other actors

tools supply











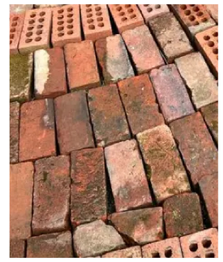



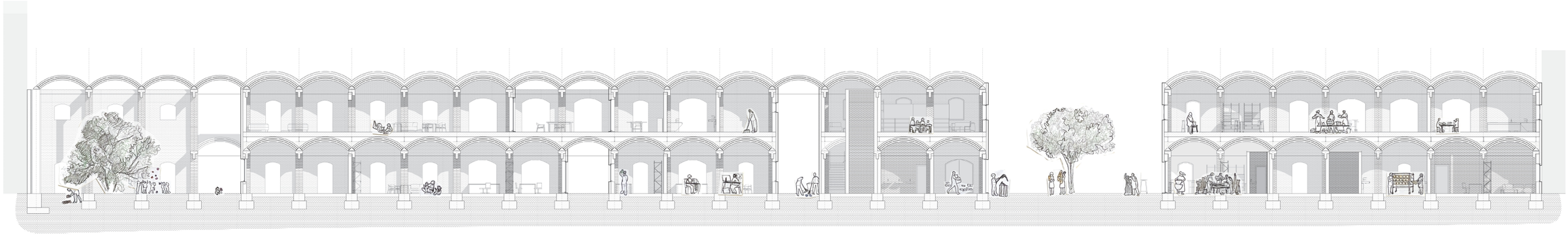


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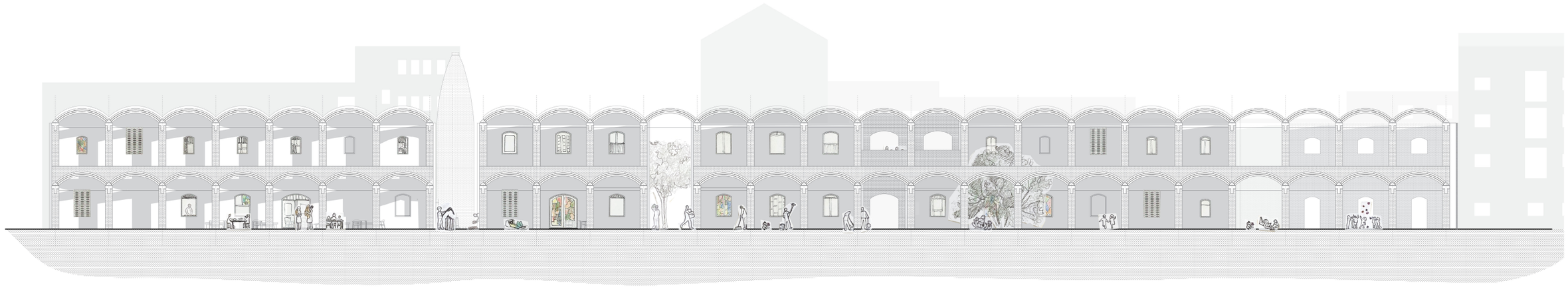

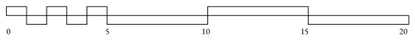
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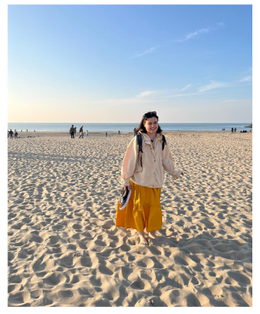






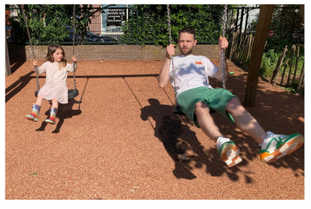






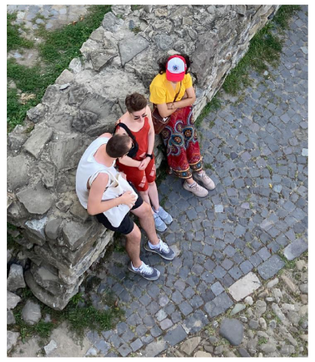









thank you! :)