

EXPLORE LAB #27

MACHINIC MAGIC

— Antea Divić

dr. ir. Stavros Kousoulas

dr. ir. Heidi Sohn

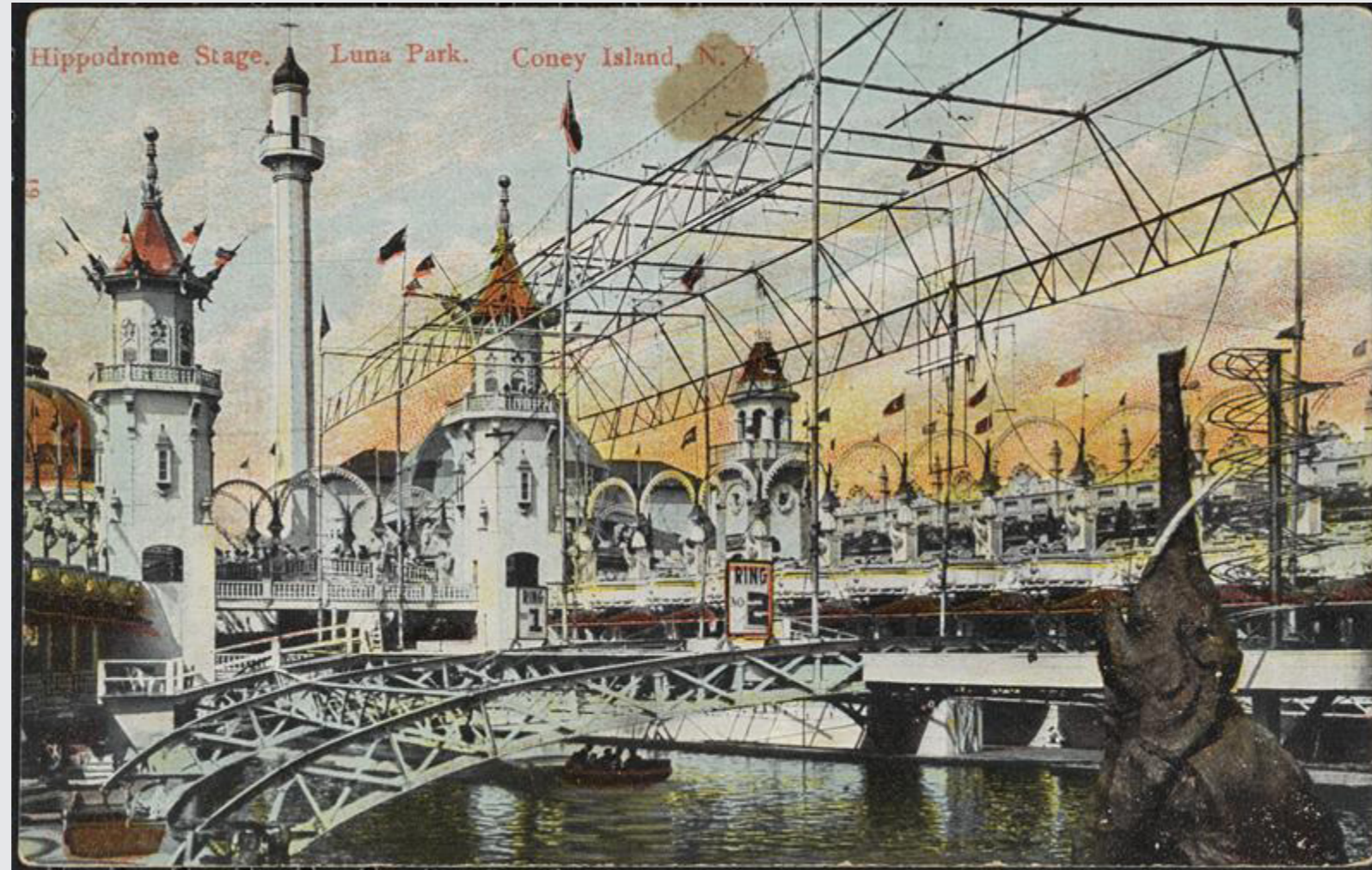
ir. Hubert van der Meel

Content

- fascination
- research
- synthesis
- design
- building technology

Fascination

Fascination



Luna Park, Coney Island, NY, postcard, c1910

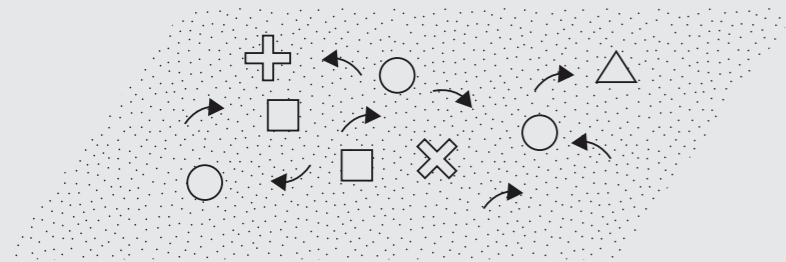
Research

— methodology, island, park, ride

Methodology

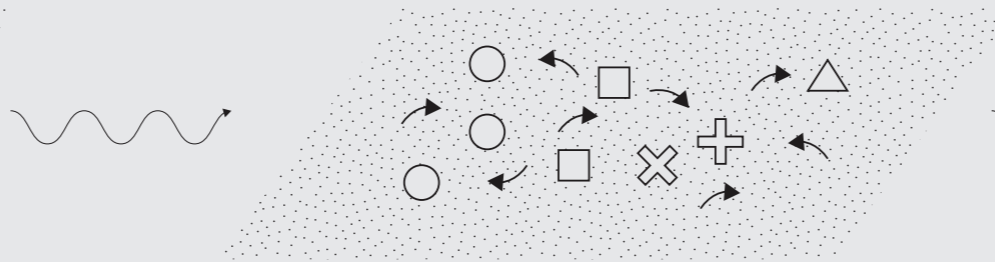
ANALYSIS

Territory A



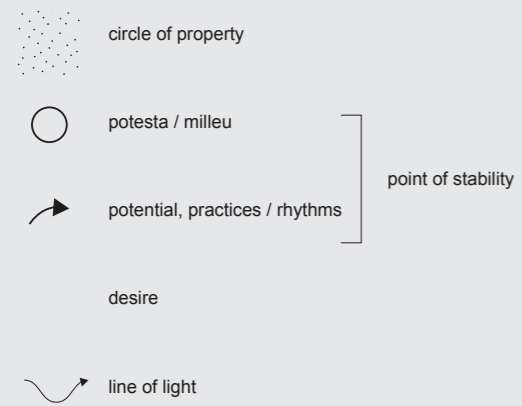
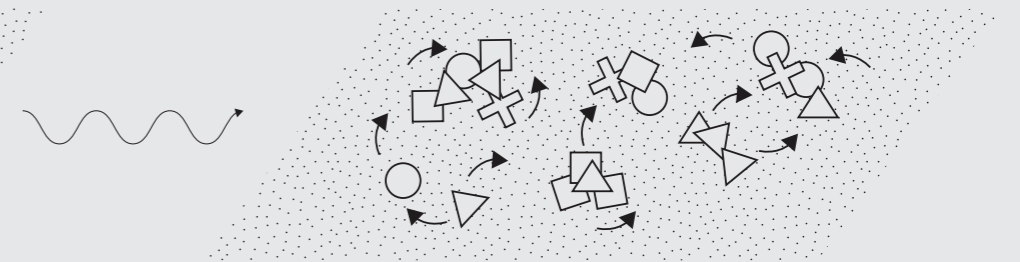
SYNTHESIS

Territory B



DESIGN

Territory N



Methodology

Research question

How can *desire* (both individual and collective) as expressed in the current form of entertainment park help in re-evaluating the *value* of *play*?

Problems

1. Consumption oriented entertainment
2. Enclosed, fixed environment
3. Scripted and repetitive behaviour
4. Invariable experience
5. Subjects are absent and reactive
6. Privileging individual over collective
7. Objects are not completely fixed
8. Bodies in various positions
9. Memory of the day
10. Machinic

Sub-questions

How is the site organized?
What is the site doing?
What are the potentials of the site?

Why one wants to be absent and reactive?
Why one has the desire to suppress oneself?
What are the forces that are imposing the rules?

Where and when in the entertainment park you suppress yourself?
What is the main element that makes entertainment park?

Method

= island - layers - field

= park - game - rules

= ride - element - constraint

Research paper

Chapter 1 **Island**
Mapping the strip
Layers - architecture as stratum

Chapter 2 **Park**
Mapping the game
Rules - architecture as referee

Chapter 3 **Ride**
Mapping the furniture
Element - architecture as constraint

Mapping

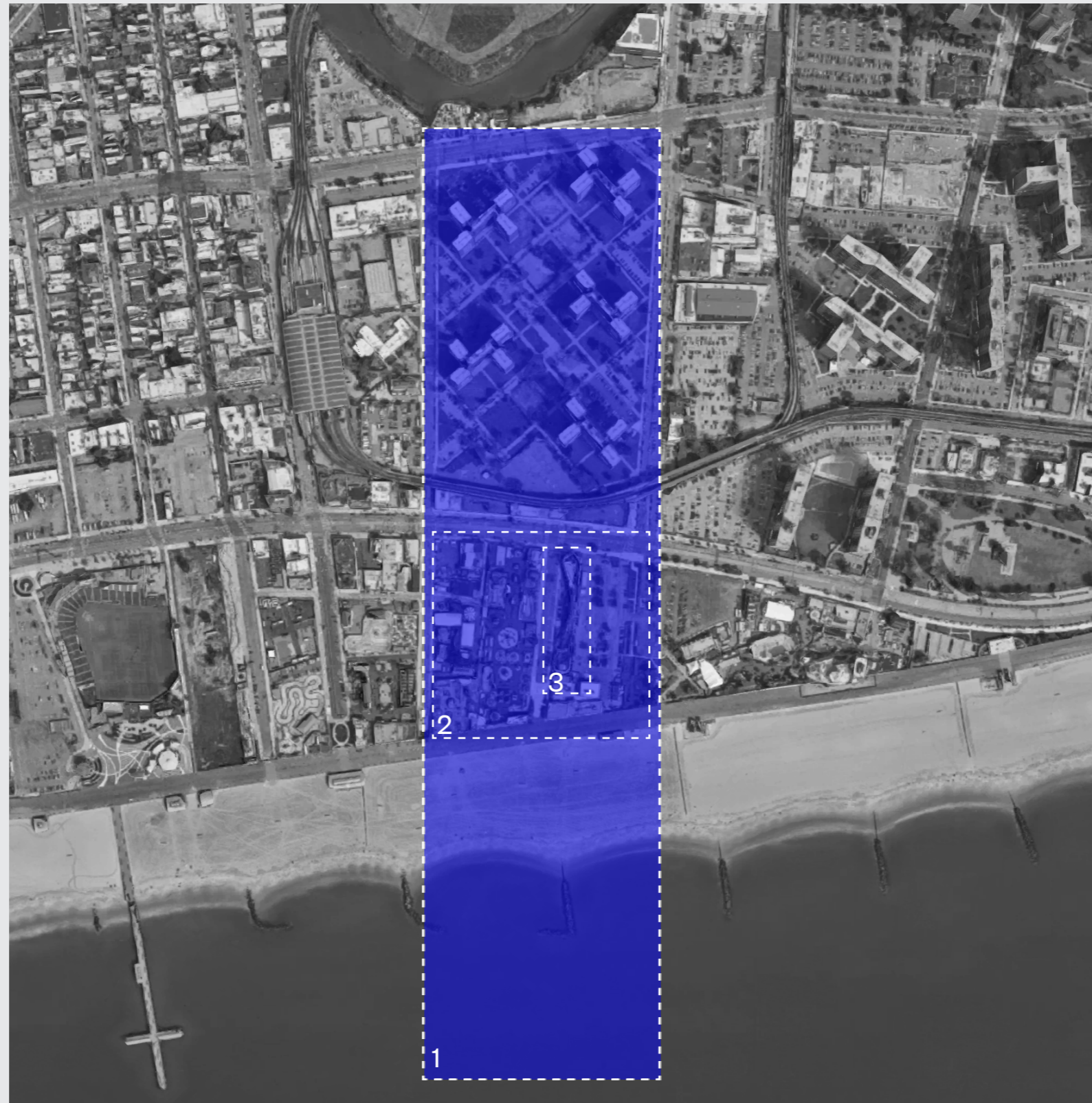
“As a creative practice, mapping precipitates its most productive effects through a finding that is also a founding; its agency lies in neither reproduction nor imposition but rather in uncovering realities previously unseen or unimagined, even across seemingly exhausted grounds. Thus, mapping unfolds potential; it re-makes territory over and over again, each time with new and diverse consequences.”

The Agency of Mapping: Speculation, Critique and Invention
James Corner

Island



Strip — Game — Element



Layers

— architecture as stratum

Function

Use

Program

Scale

Typology

Morphology

Movement

Speed

Forces

Flows

Actions

Elements

Territories

Rhythms

Habits

Patterns

Relations

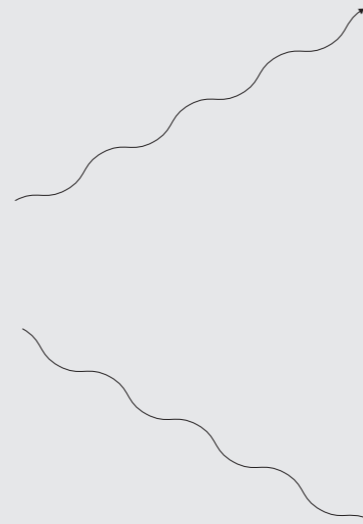
etc.

Layers

— architecture as stratum

Function-
Use
Program
Scale
Typology
Morphology

Movement
Speed
Forces
Flows
Actions
Elements
Territories
Rhythms
Habits
Patterns
Relations
etc.



Desire
Value
Play

How?
Where?
When?
What purpose?
For whom?

Strip

social housing

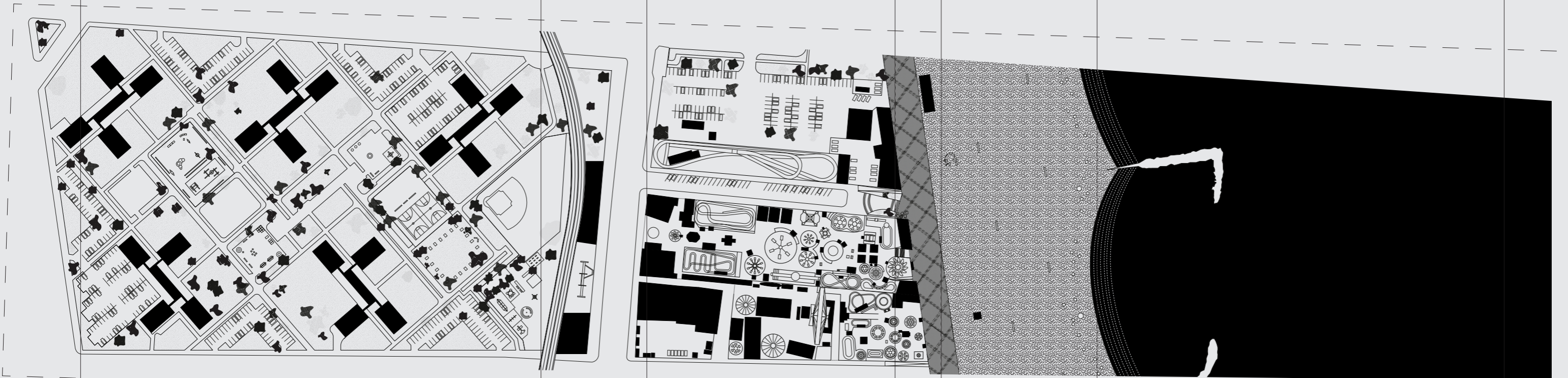
traffic

entertainment park

broadwalk

beach

ocean



how?
where?
when?
what purpose?
for whom?

Strip — patterns

social housing

metric
grid
ortogonal

ep

loops
circles
curved

brodwalk

linear

beach

grain
noise
doted

ocean

raidal
circular
concentric

striated ————— smooth

Strip

— fast movement

elevators

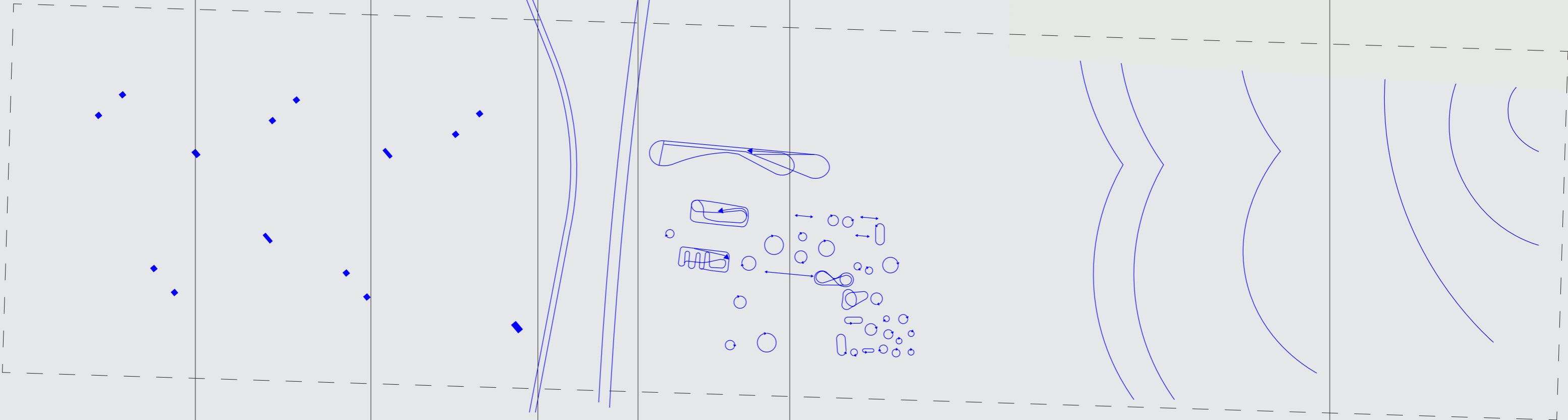
slides

trains

cars

rollercoasters

ocean



how?
where?
when?
what purpose?
for whom?

rigid / semi controlled
every 50 m in a building
few times a day
to reach high floors fast
residents

not rigid / not controlled
on every playground
afternoon
to play
residents

rigid
on the tracks
every day
to host life
everyone

rigid / controlled
on the road
every day
to travel faster
above 16 / everyone

not rigid / extremely controlled
every few m
every couple of hours
to be entertain
depends

not rigid / not controlled
across the earth
all the time
to host life
everyone

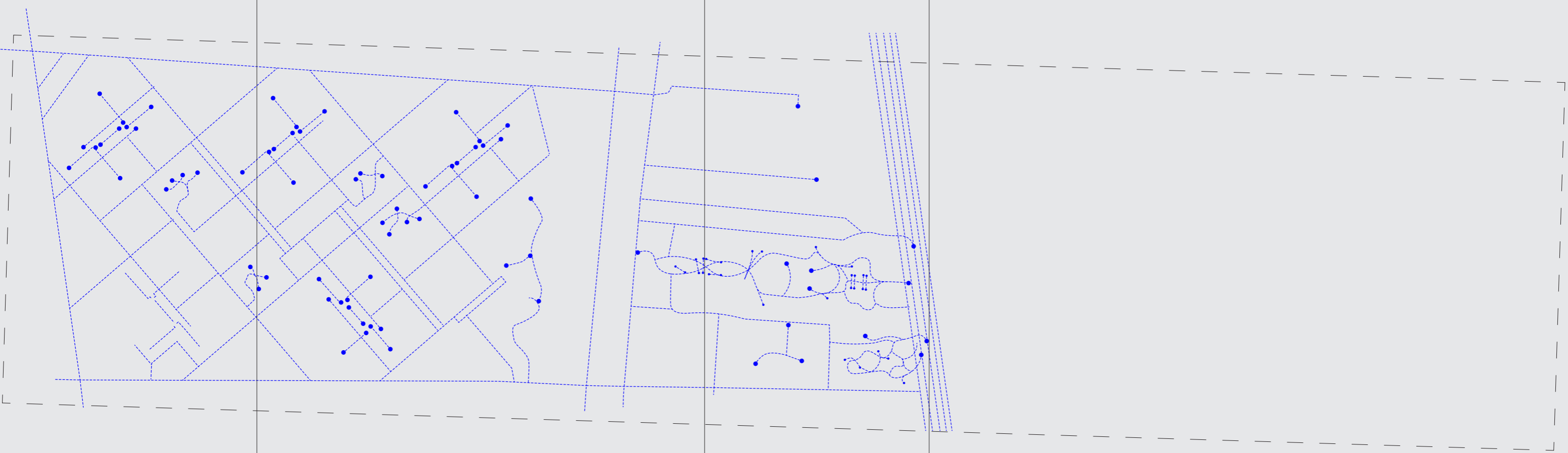
Strip

— medium movement

social housing paths

ep paths

broadwalk



how?
where?
when?
what purpose?
for whom?

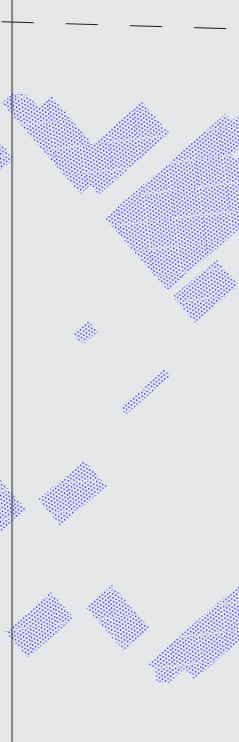
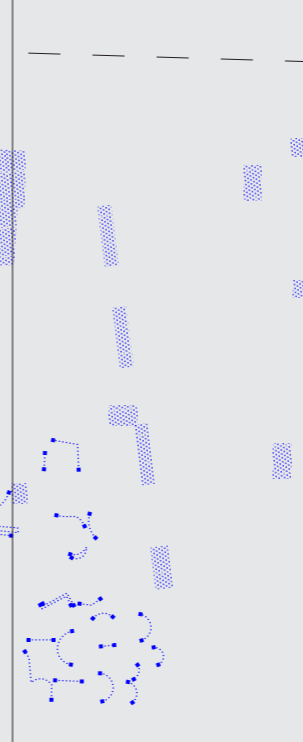
rigid
every 50 m
few times a day
to reach home
residents

not rigid
not strict
seasonal
to use as many rides as possible
whoever pays the ticket

rigid
along the beach for few km
mostly seasonal
to walk/jog/eat/drink/rest
everyone

Strip

— slow (0) movement

	parking	sleeping	sitting on a bench	waiting for a traffic light	parking	waiting in line	sunbathing
							
how? where? when? what purpose? for whom?	rigid every 100 m daily parking a car residents	rigid in apartments daily rest residents	rigid playgrounds every few days rest residents	rigid crossroad all the time crossing the road everyone	rigid next to EP seasonal parking a car EP visitors	rigid next to a ride seasonal to go on a ride EP visitors	not rigid next to the sea/ ocean seasonal rest everyone

Strip

— forces



Strip

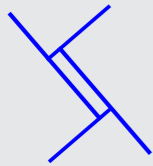
— ocean, unleashed forces

social housing

ep

water
sewage

water rides



Strip

— ocean, unleashing forces

social housing

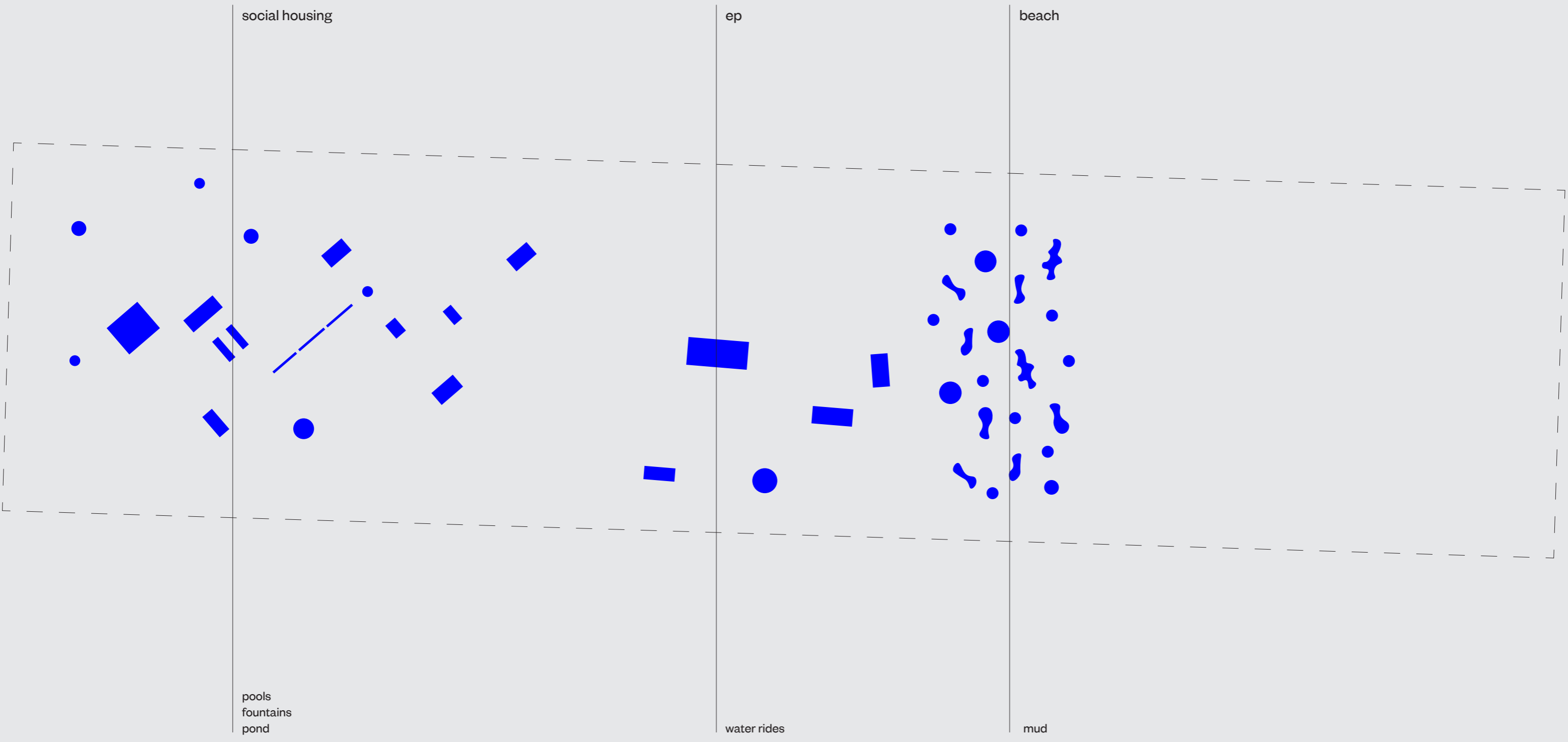
ep

beach

pools
fountains
pond

water rides

mud



Strip

— ocean, unleashing forces

social housing

ep

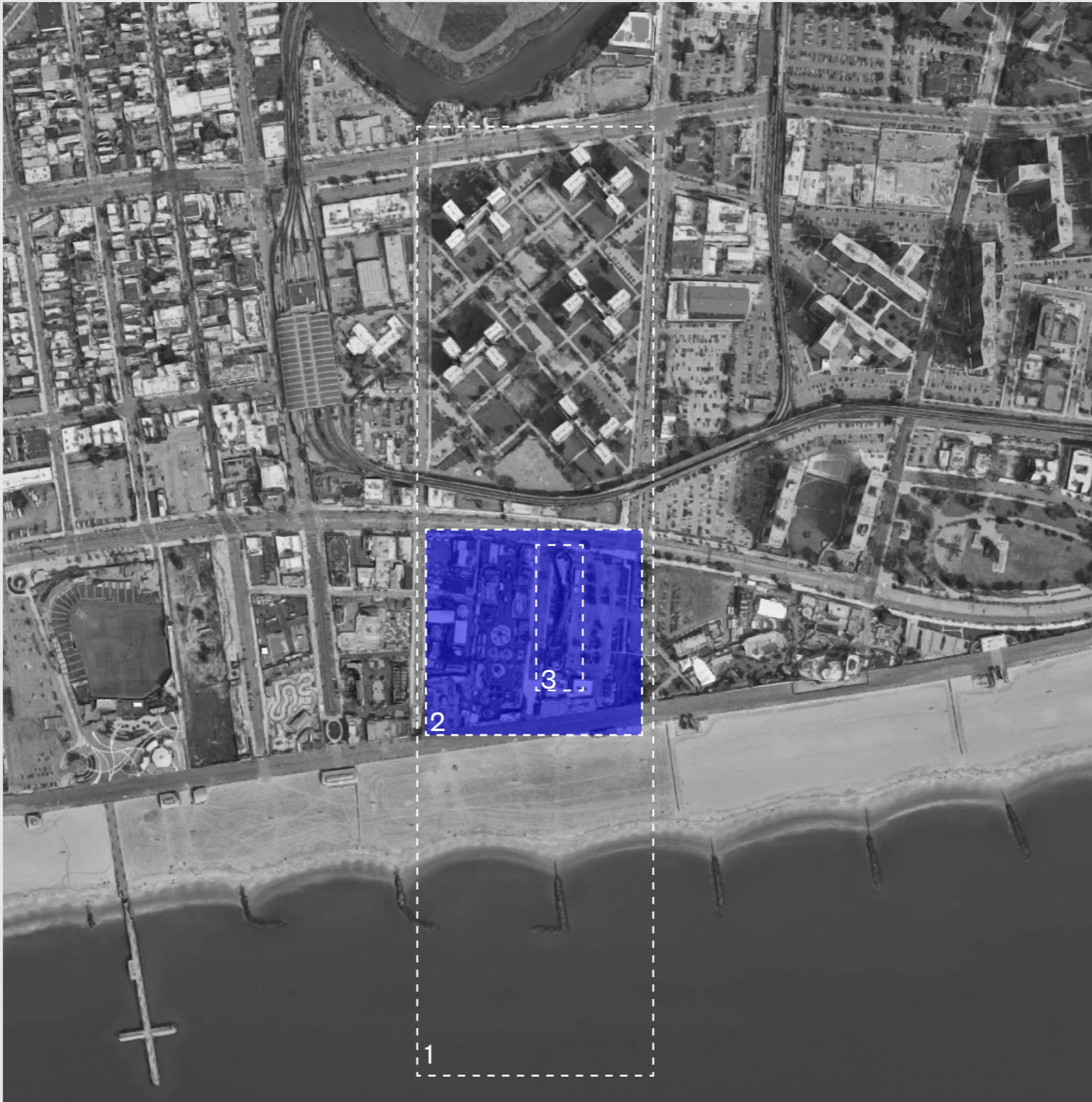
beach

rotation
floating beds
whirlpool (sucked into)

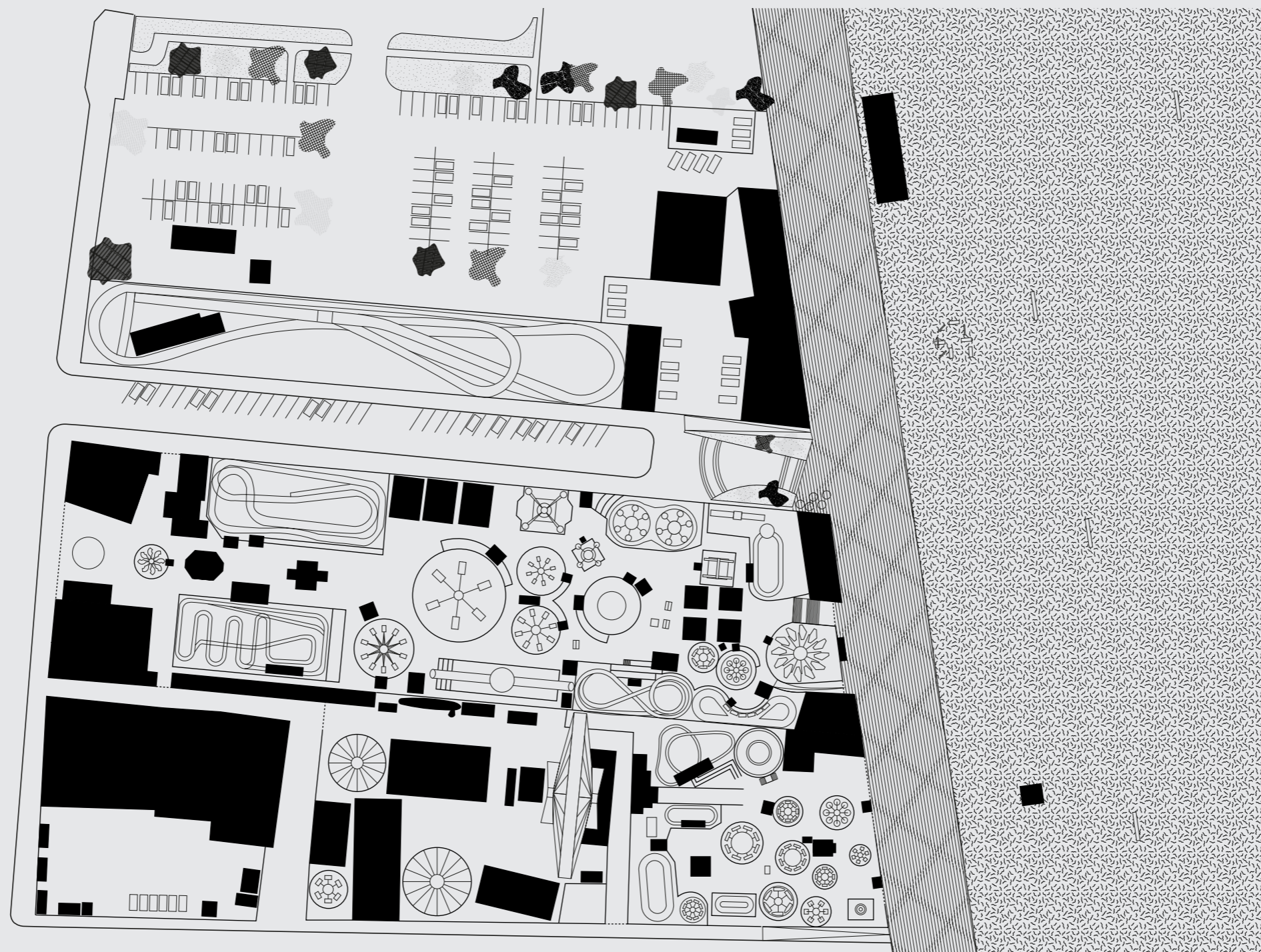
wind moving rides
up-down

floating beds

Strip — Game — Element

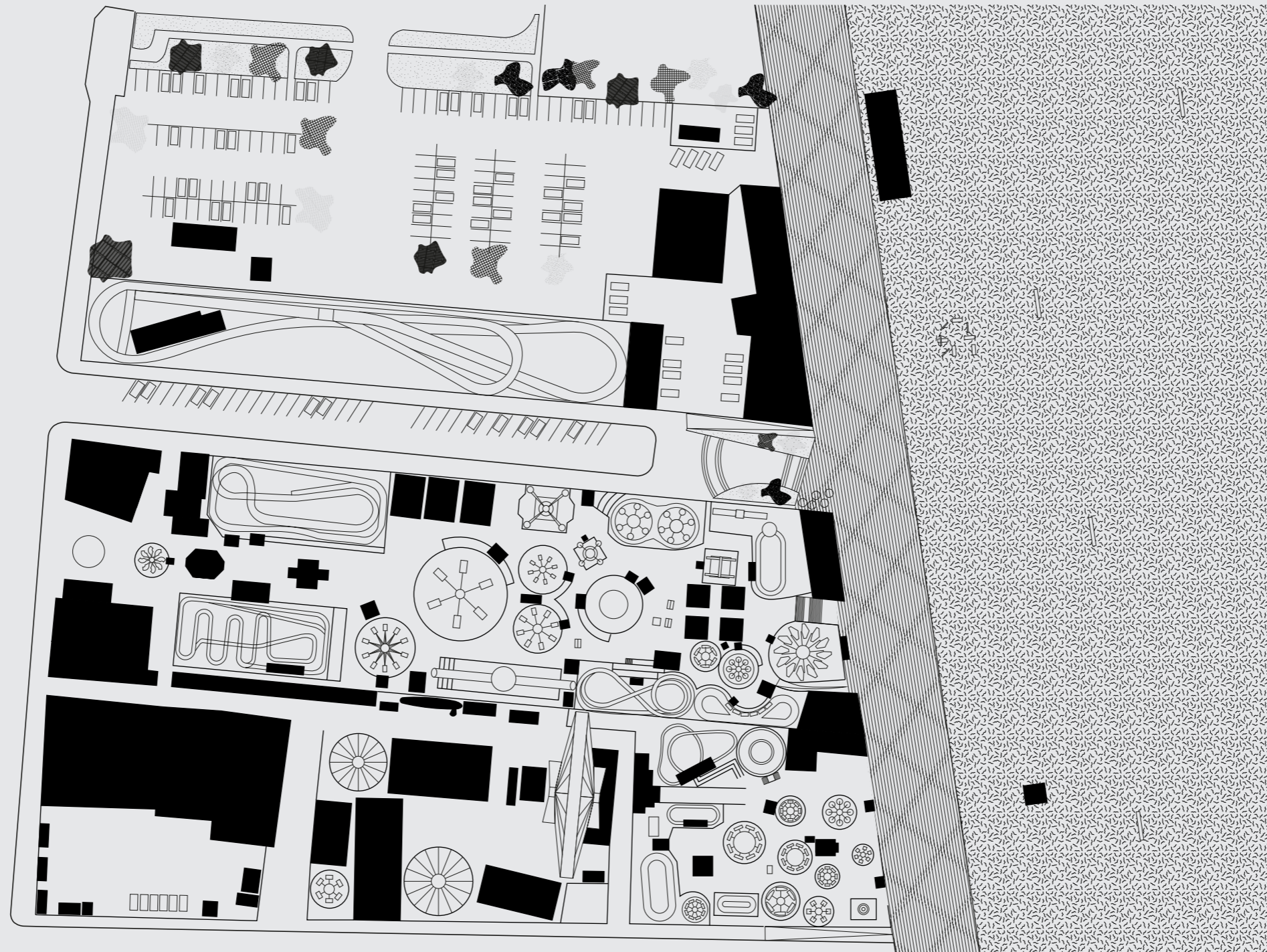


Park



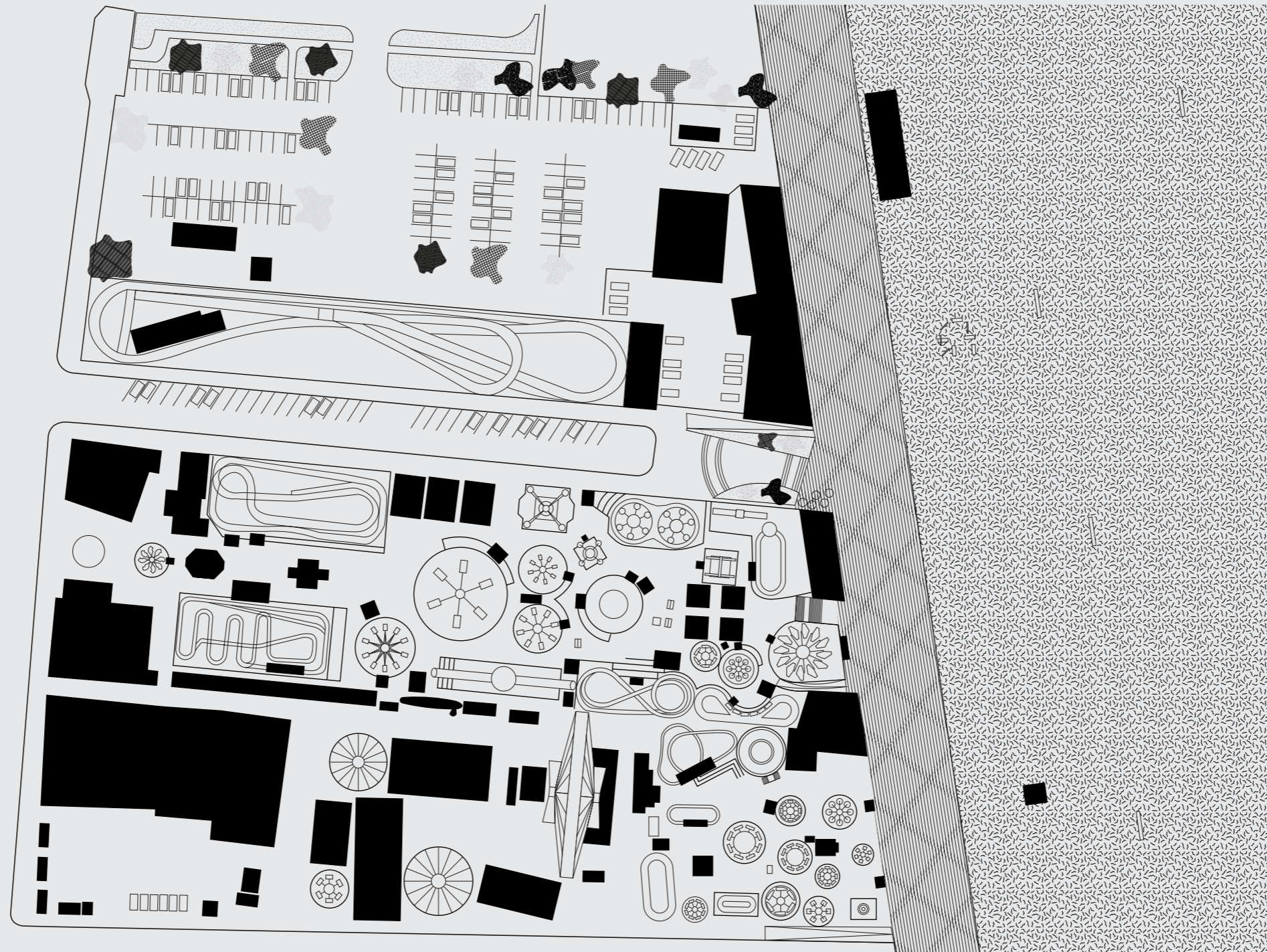
Park

— doors



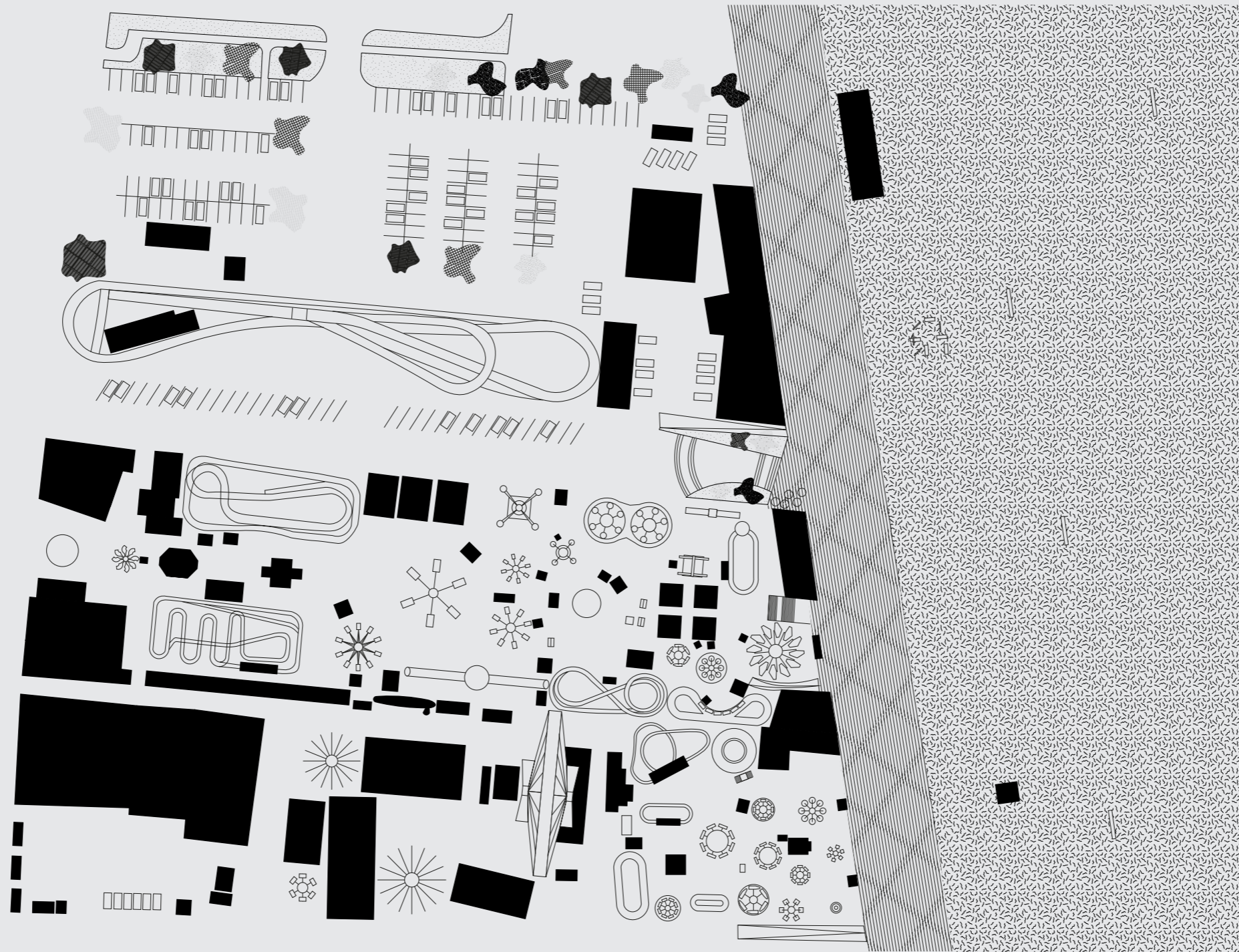
Park

— fence outside



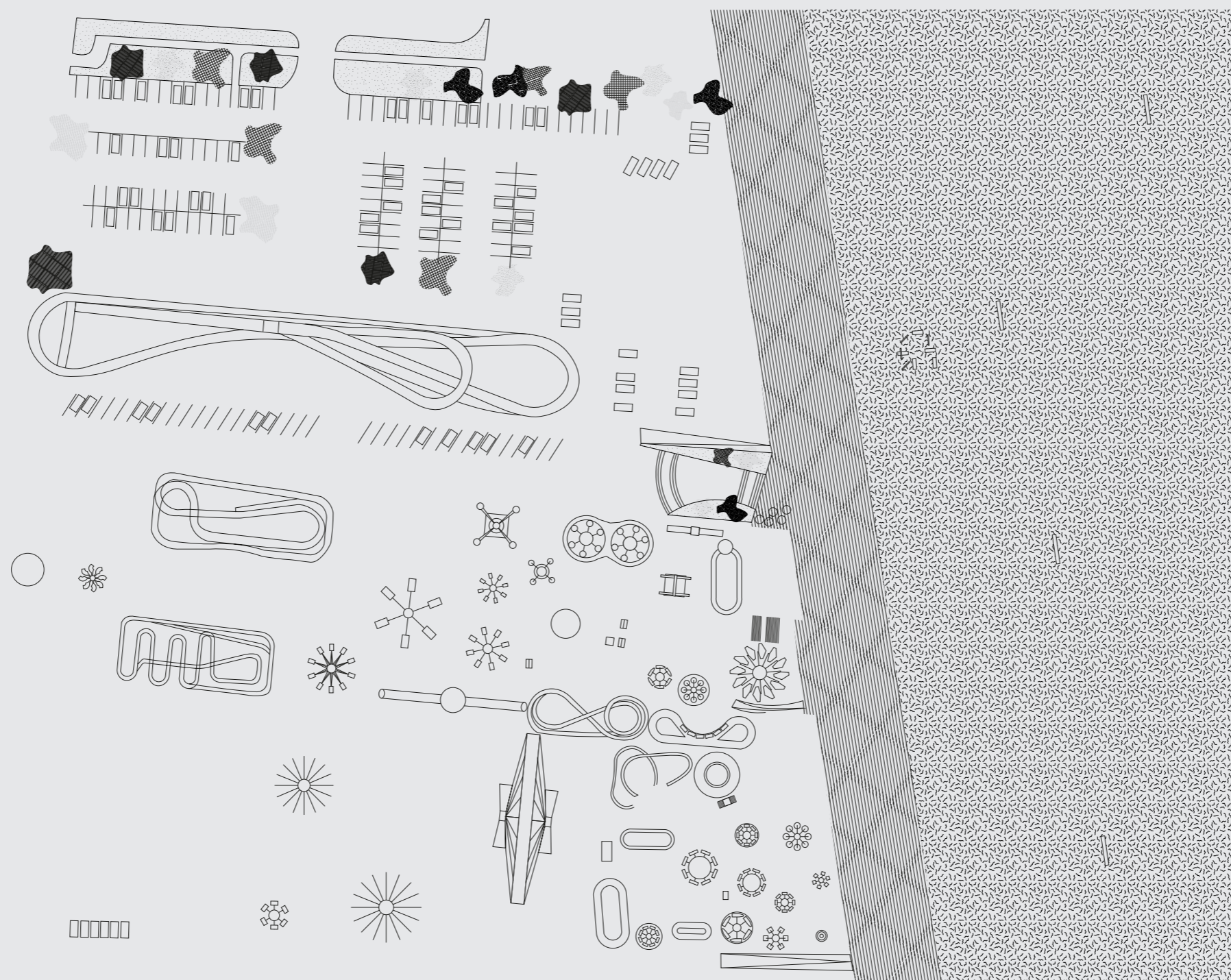
Park

— fence inside



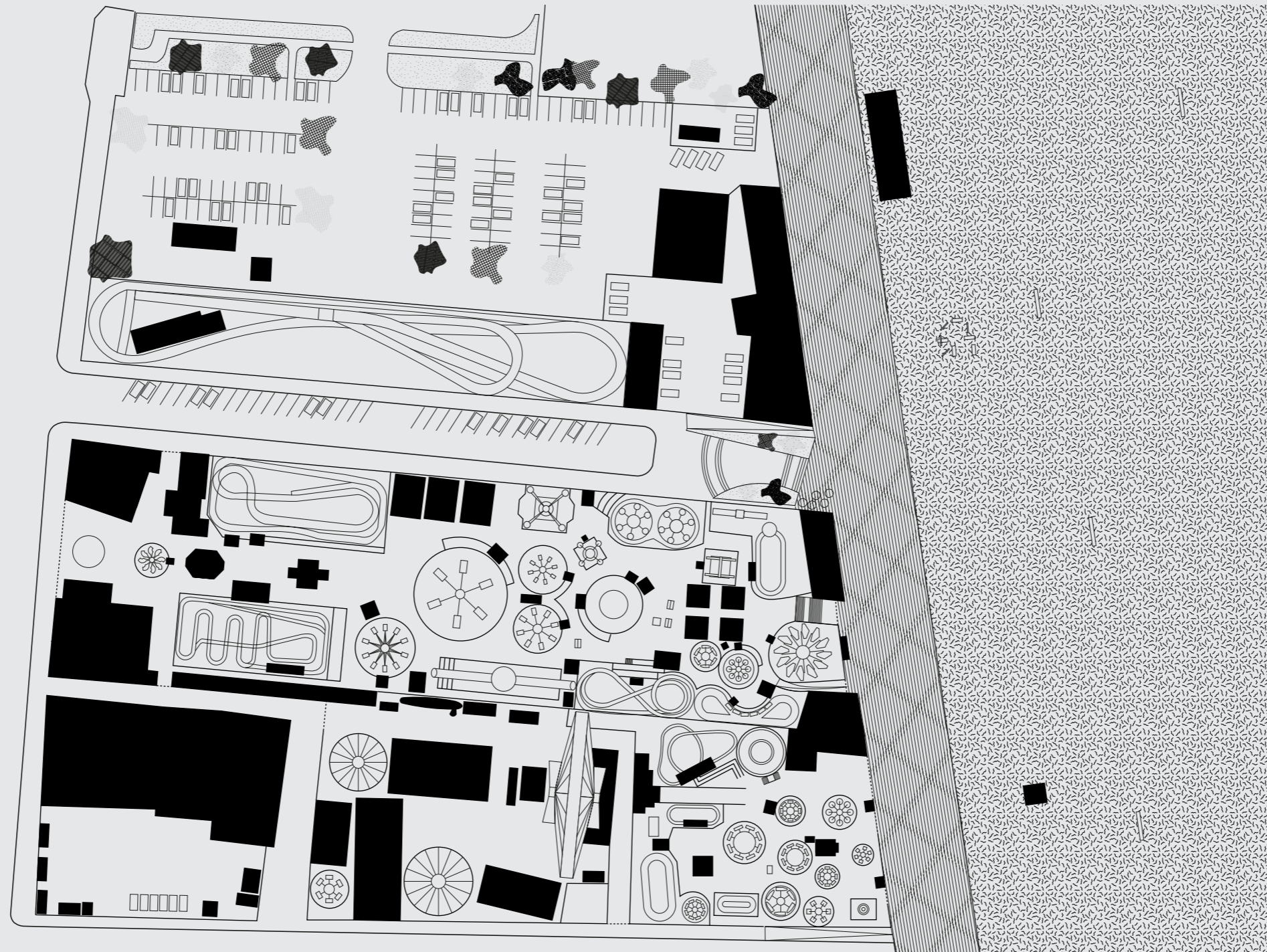
Park

— buildings



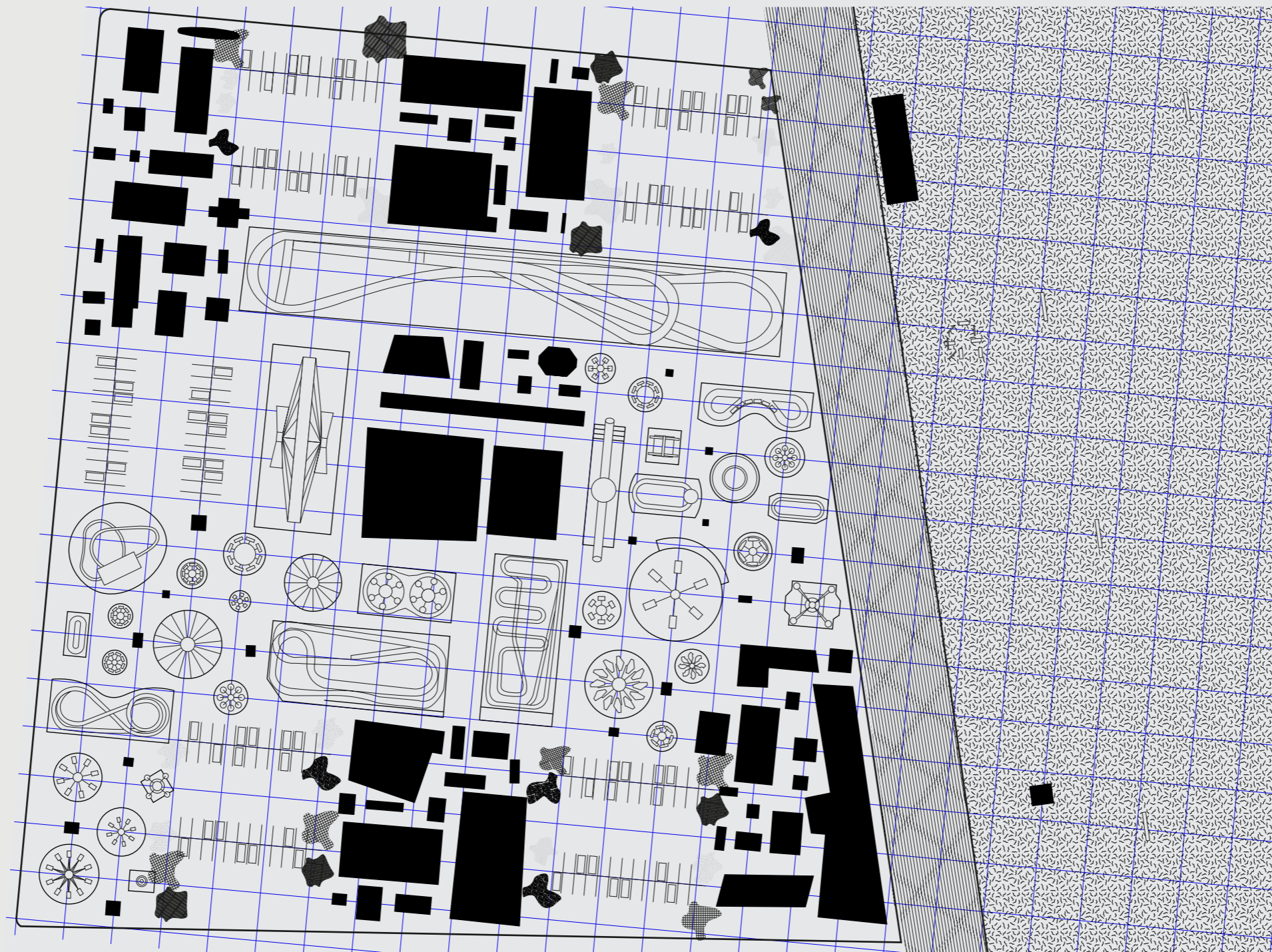
Rules

— architecture as referee



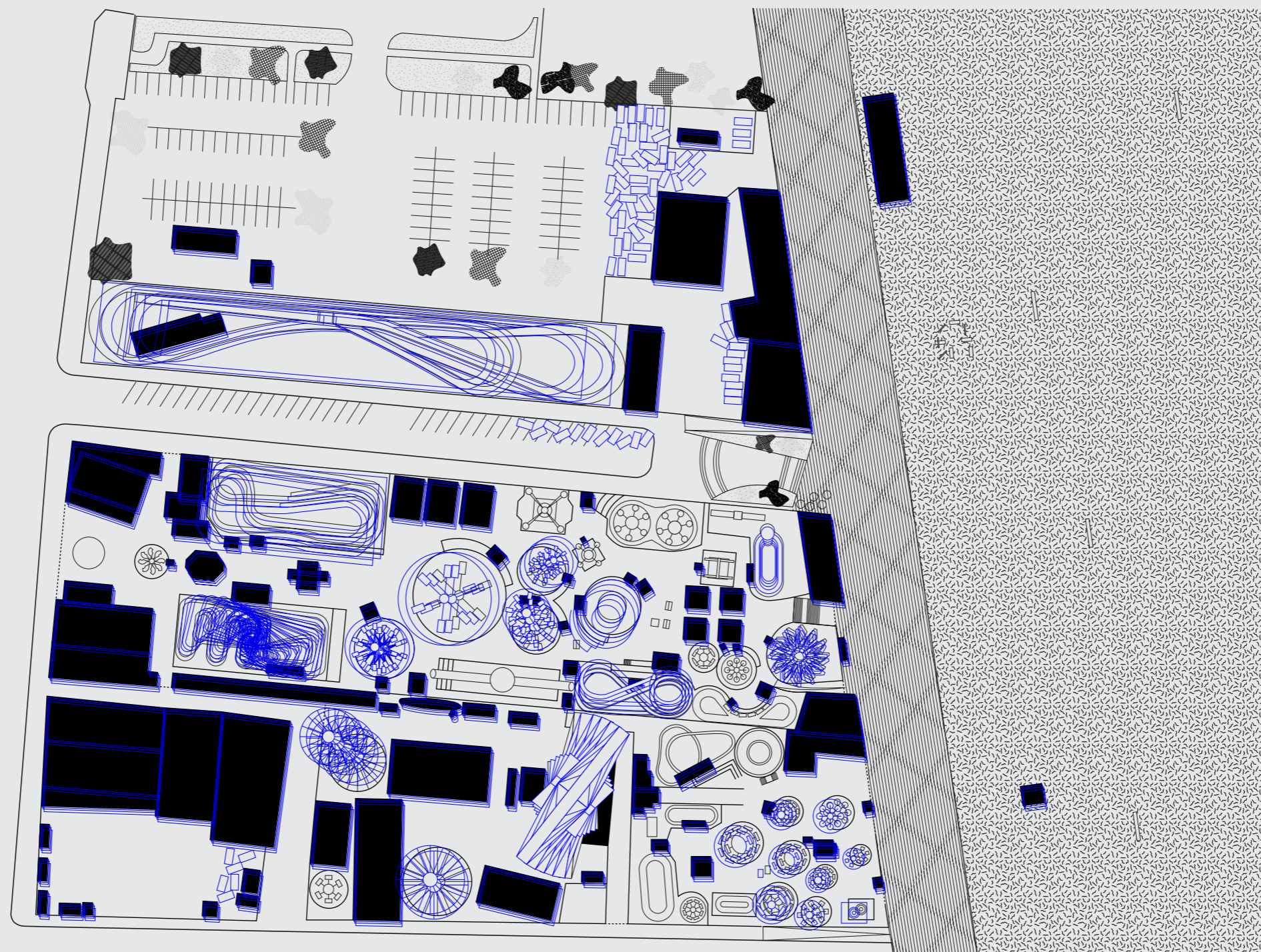
Entertainment park

— rules of housing



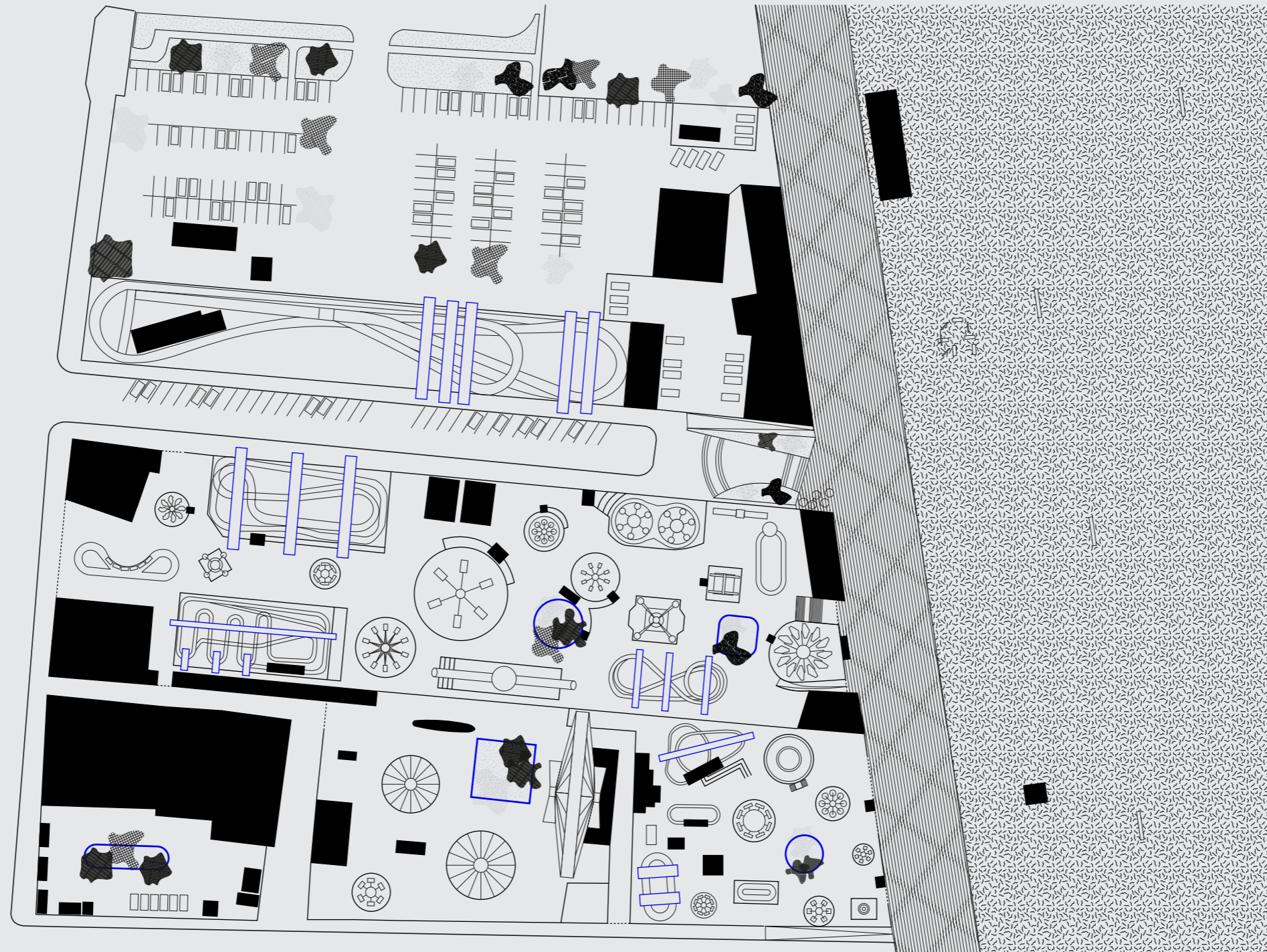
Entertainment park

— rules of sea




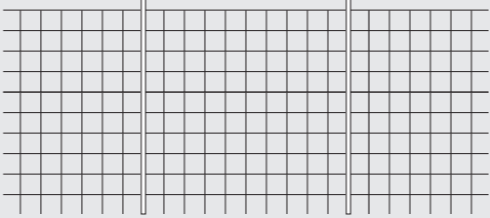
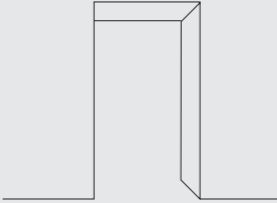
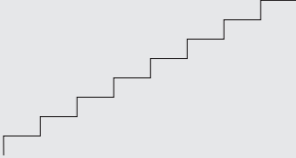
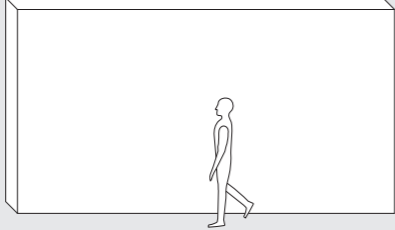
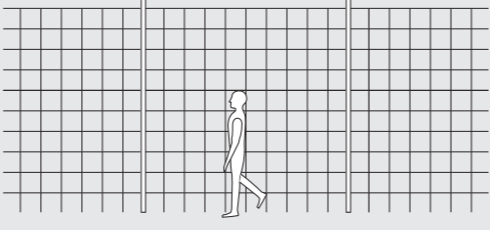
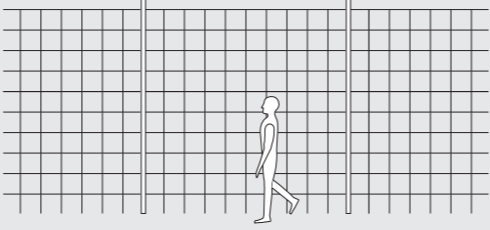
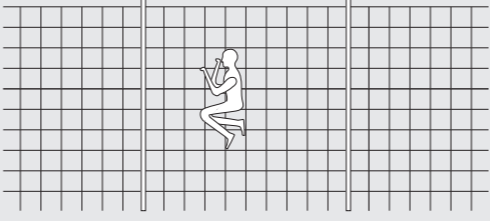
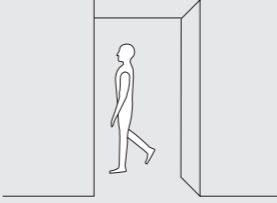
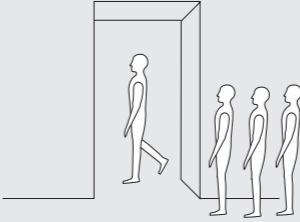
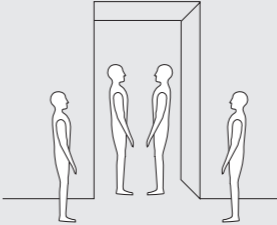
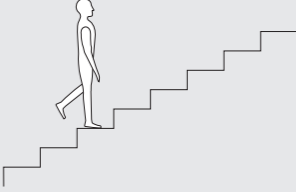
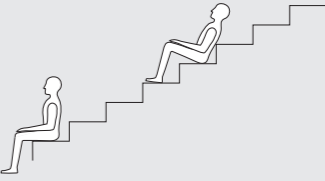

Entertainment park

— rules of sand



Rules

— architecture as referee

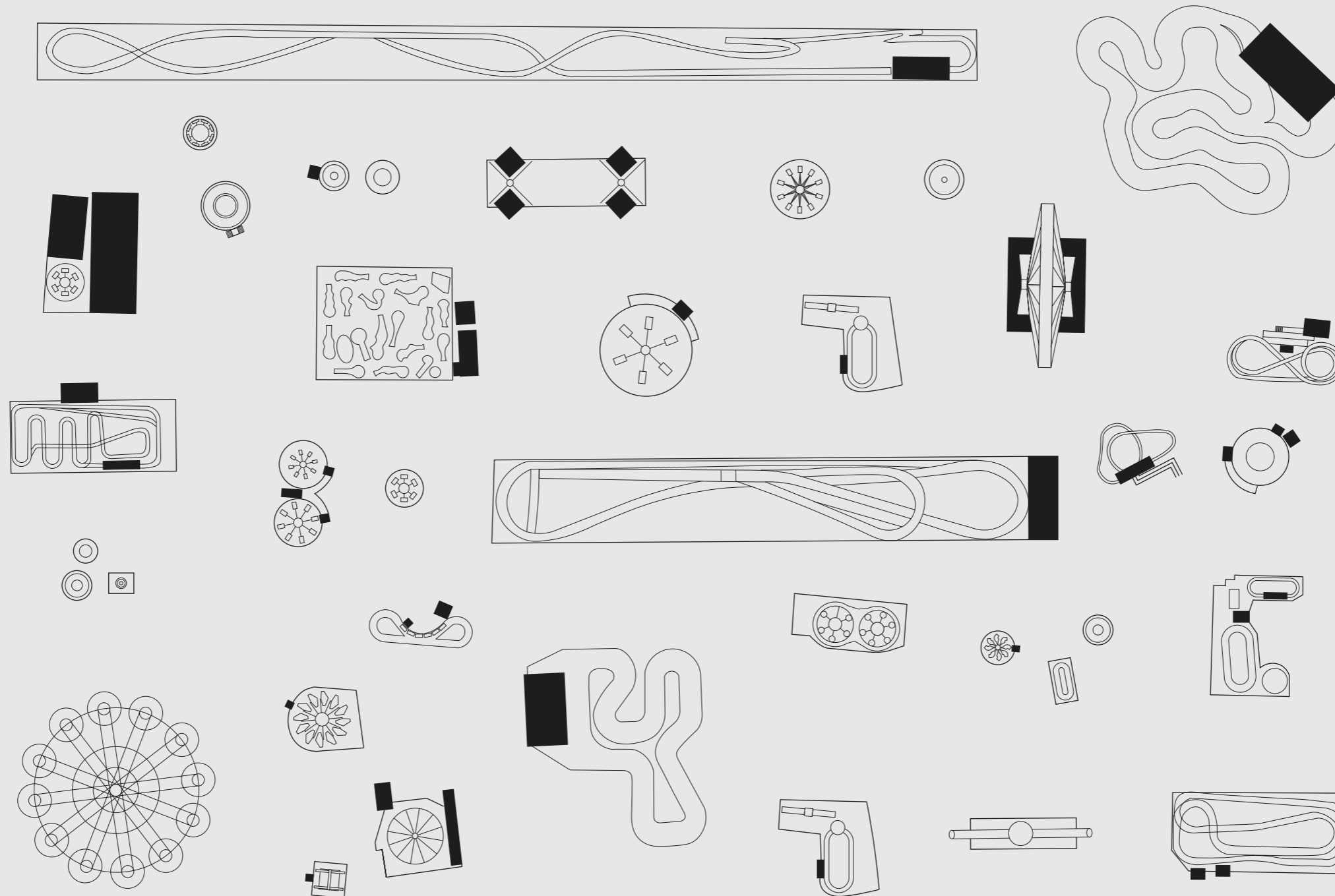
	wall	fence	entrance	stairs
elements				
habits		  	  	  

Strip — Game — Element



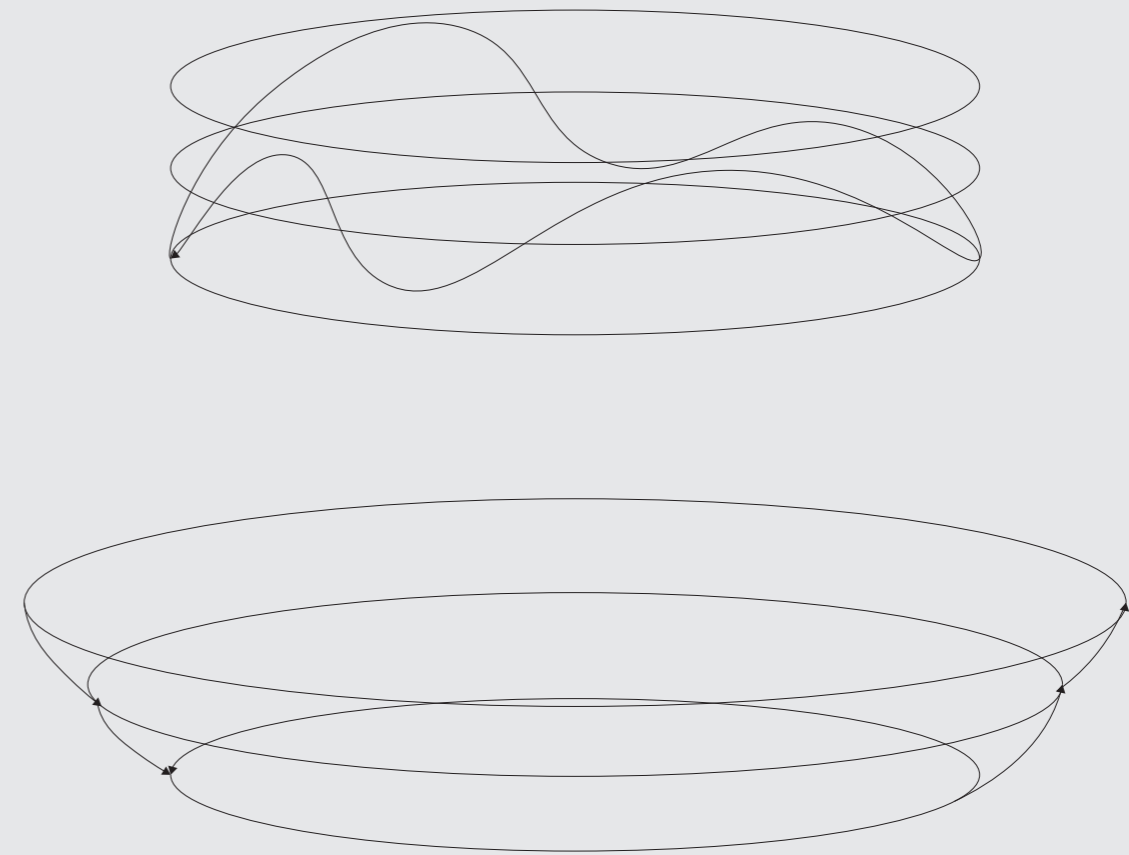
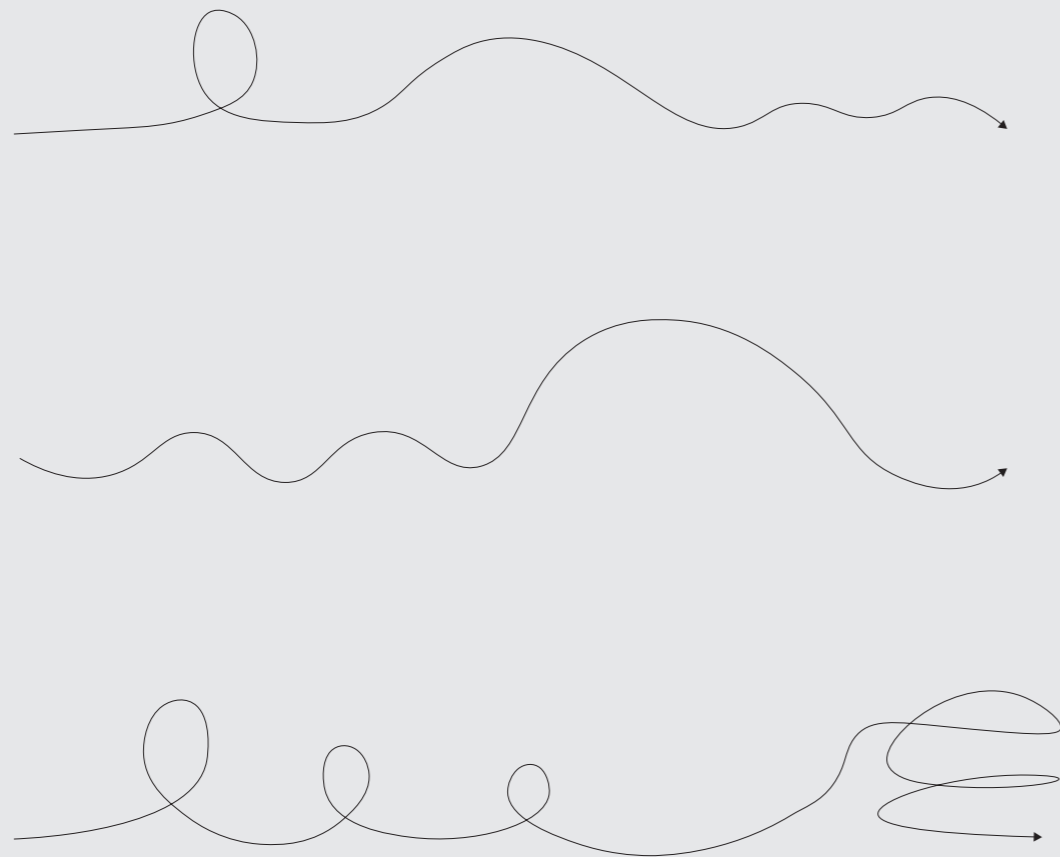
Ride

— architecture as a constraint



Ride

— architecture as a constraint



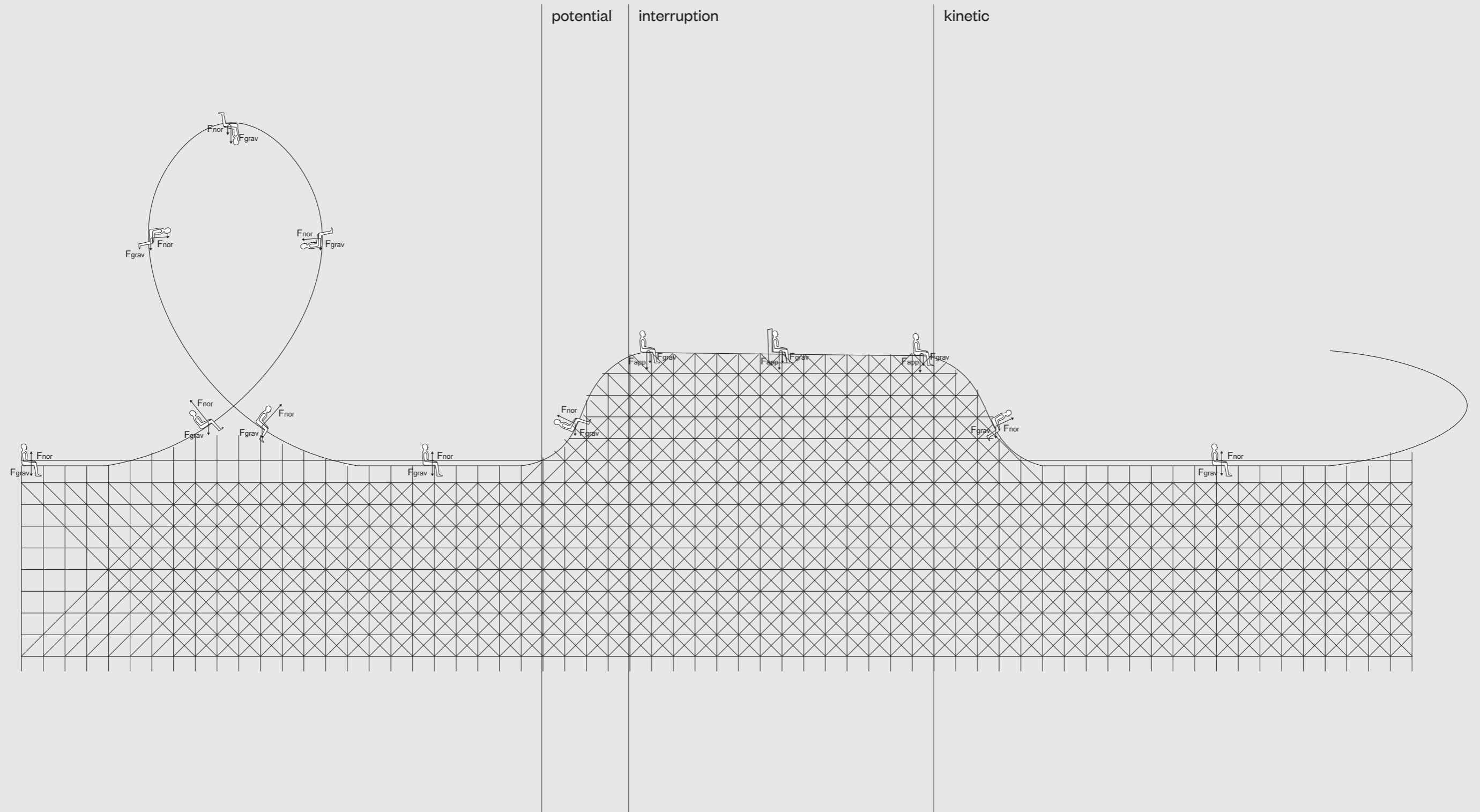
Ride

— architecture as a constraint



Ride

— architecture as constrain



Synthesis

— methodology, conclusion, what if, design question

Methodology

Method

Conclusions

What if?

Design questions

island - layers - field

1. Architecture **captures and control the flows**
2. Territories are formed in encounter of different forces
3. Forces overflow the territories

... we follow the flows instead of controlling them?
... territories shift?
... forces of one territory overflow to another?

How to intuit the following of flows and break them accordingly in order to produce the potentials?

park - game - rules

1. Architecture is a **rule giver and a referee**
2. Rules create habits and rituals
3. Subjects suppress themselves because of the desires

... there are no rules?
... the rules are shifted?
... door, fence, walls are removed?

How to create architecture where subjects generate their own rules depending on their own activity and complying to them?

ride - element - constraint

1. Architecture is a **producer of constraints**
2. Constraint affords experience
3. Constraint can lead to production and / or consumption

... this experience is introduced somewhere else?
... the shape is translated into something else?

How can a constraint connect production and consumption of the subject that undergoes it?

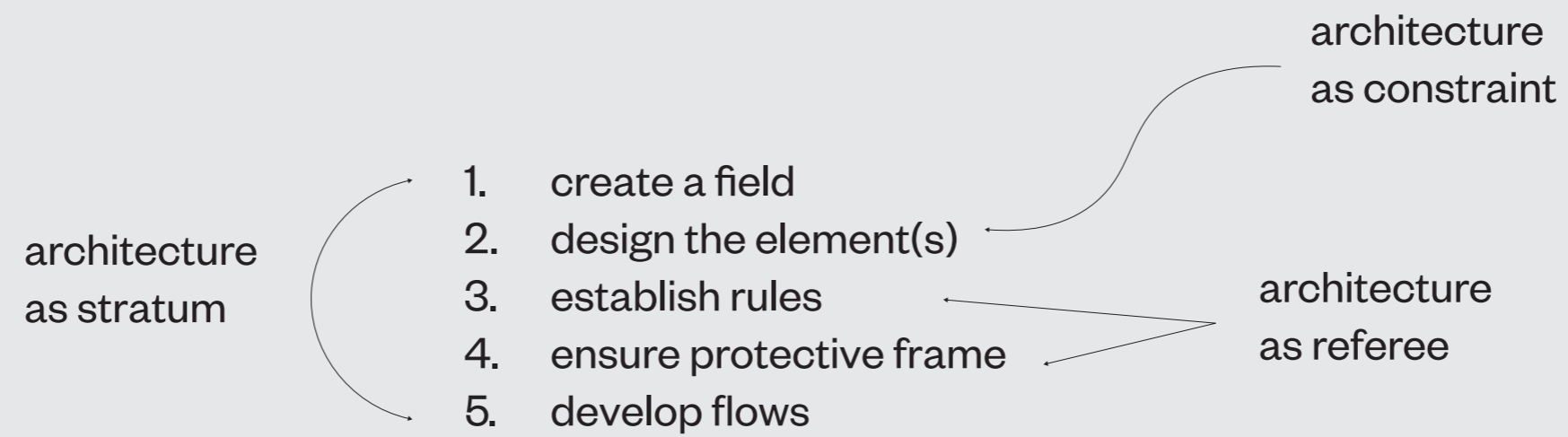
Design

— brief, methodology, project(s)

Brief

1. create a field
2. design the element(s)
3. establish rules
4. ensure protective frame
5. develop flows

Brief



Methodology

Design questions

How to intuit the following of flows and break them accordingly in order to produce the potentials?

How to create architecture where subjects generate their own rules depending on their own activity and complying to them?

How can a constraint connect production and consumption of the subject that undergoes it?

Purpose

different reality

new subjectivity

play

Proposal

performative architecture

event

deviant objects

Theory

circle of possession / expression

line of light

point of stability

Design

membrane / skin

movement

markers

Research paper

Chapter 1 **Island**
Mapping the strip
Layers - architecture as stratum

Chapter 2 **Park**
Mapping the game
Rules - architecture as referee

Chapter 3 **Ride**
Mapping the furniture
Element - architecture as constraint

Project(s)

Chapter 1 **Island**
Mapping the strip
Layers - architecture as stratum

Chapter 2 **Park**
Mapping the game
Rules - architecture as referee

Chapter 3 **Ride**
Mapping the furniture
Element - architecture as constraint

Membrane
Creating the field
Layers - architecture as stratum

Movement
Transforming the ways
Rules - architecture as referee

Markers
Introducing the intensities
Element - architecture as constraint

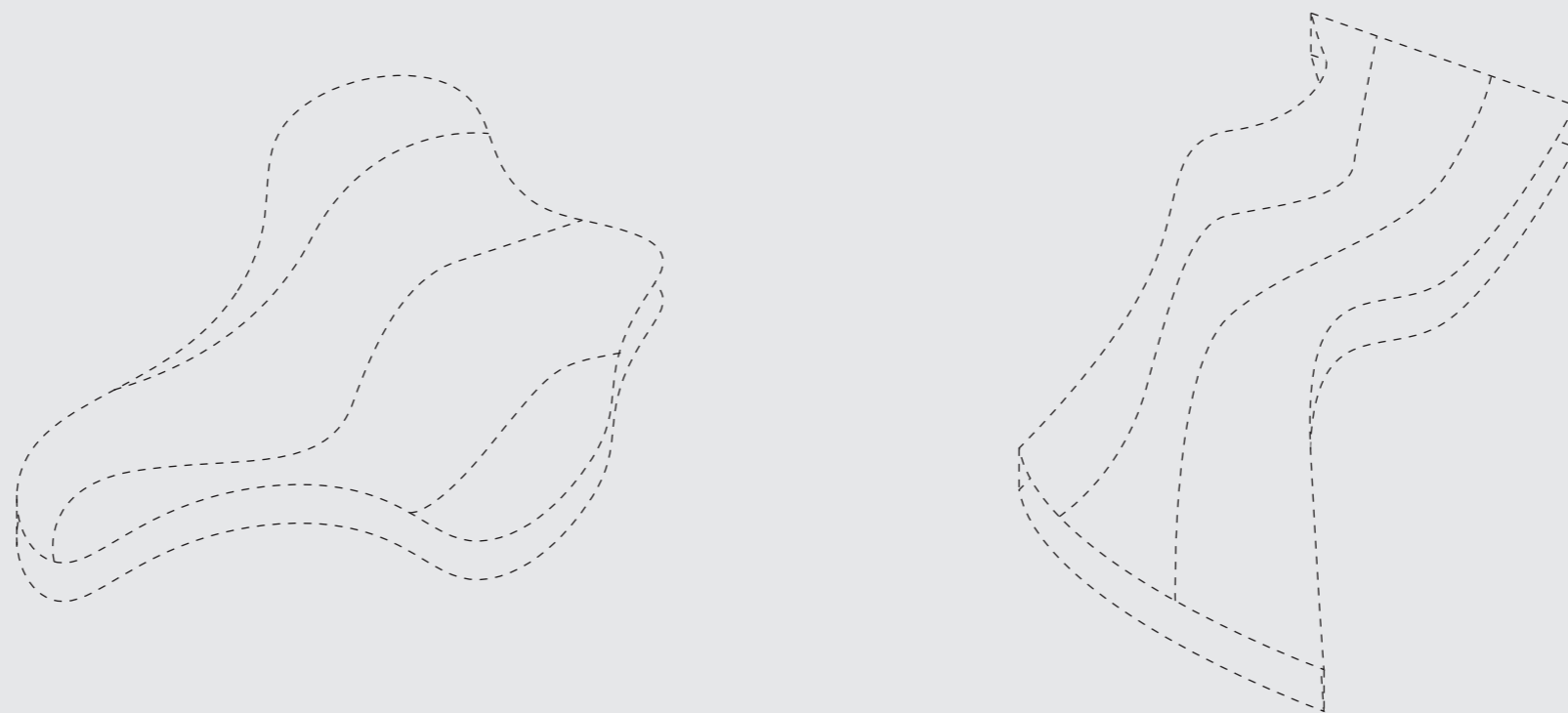
Approach

“Designers are very good at making things, but medium design is less like making a thing and more like having your hands on the faders and toggles or organizations. It is the design of interdependencies, chemistries, chain reactions and ratches. It benefits from an artistic curiosity about spatial wiring or reagents in spatial mixtures, a curiosity about designing not a single object but a platform for inflecting populations of objects or setting up relative potentials within them.”

*Medium Design
Keller Easterling*

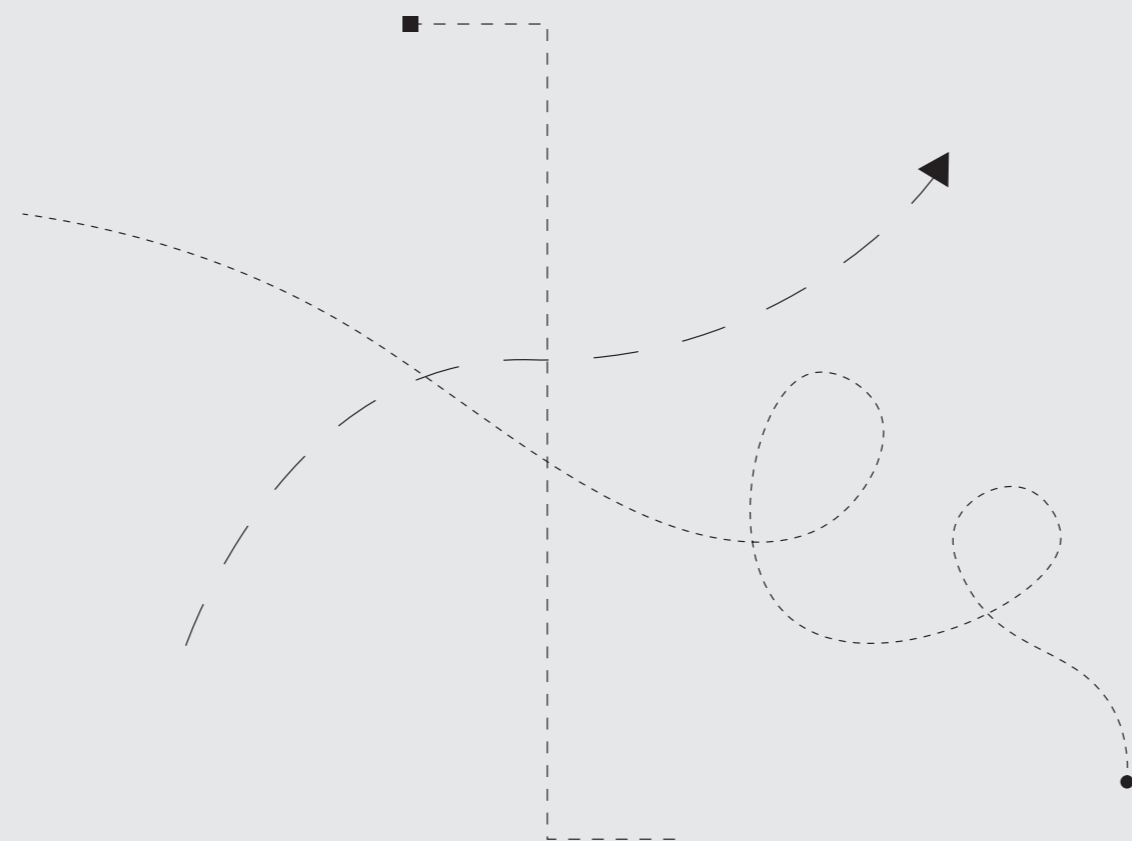
Membrane

— playful slab



Movement

— ways of playing



Markers

— elements of play



Conceptual drawings



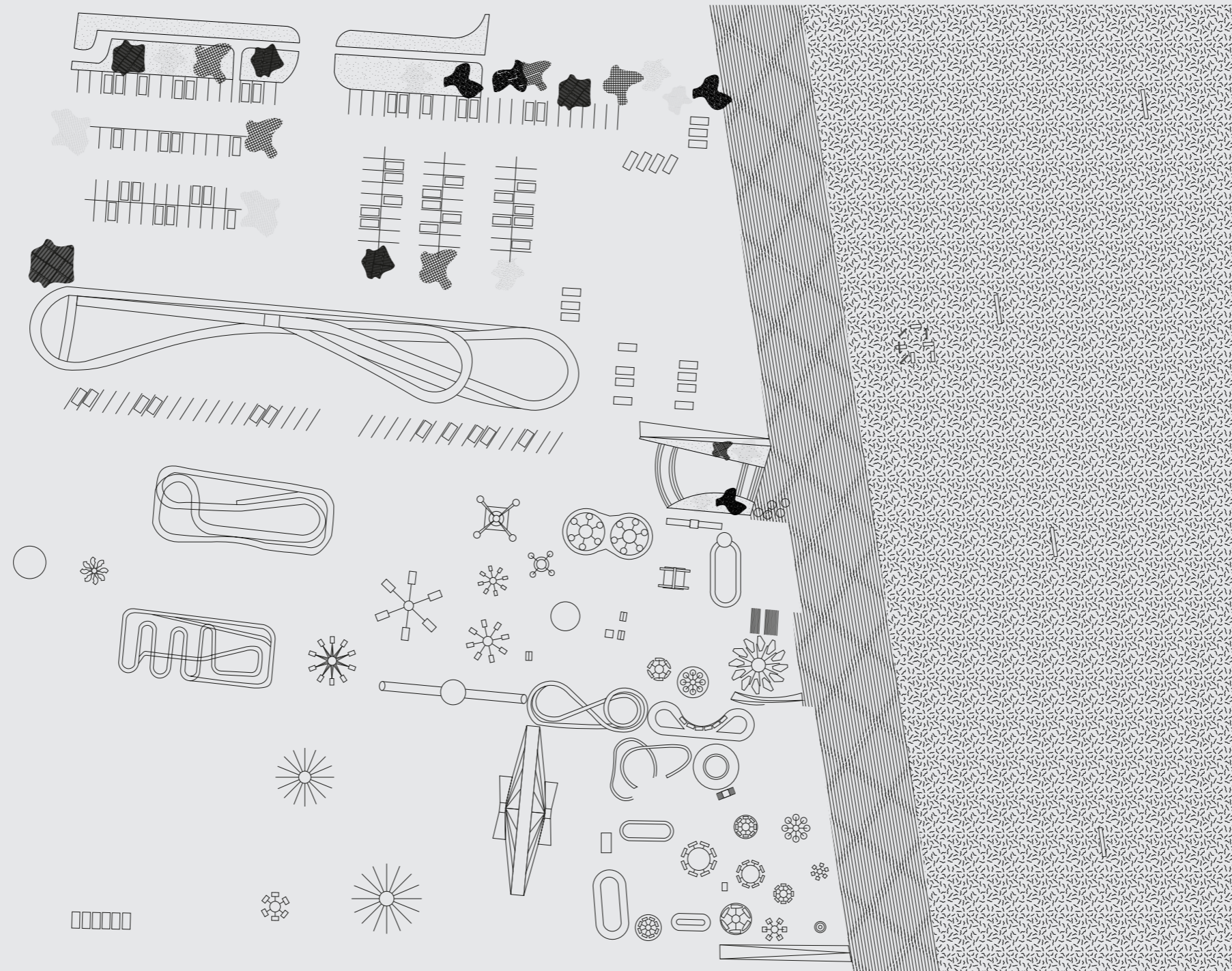
membrane

markers

movement

Rules

— architecture as referee



movement

movement

markers

markers

membrane

membrane



movement

markers

membrane



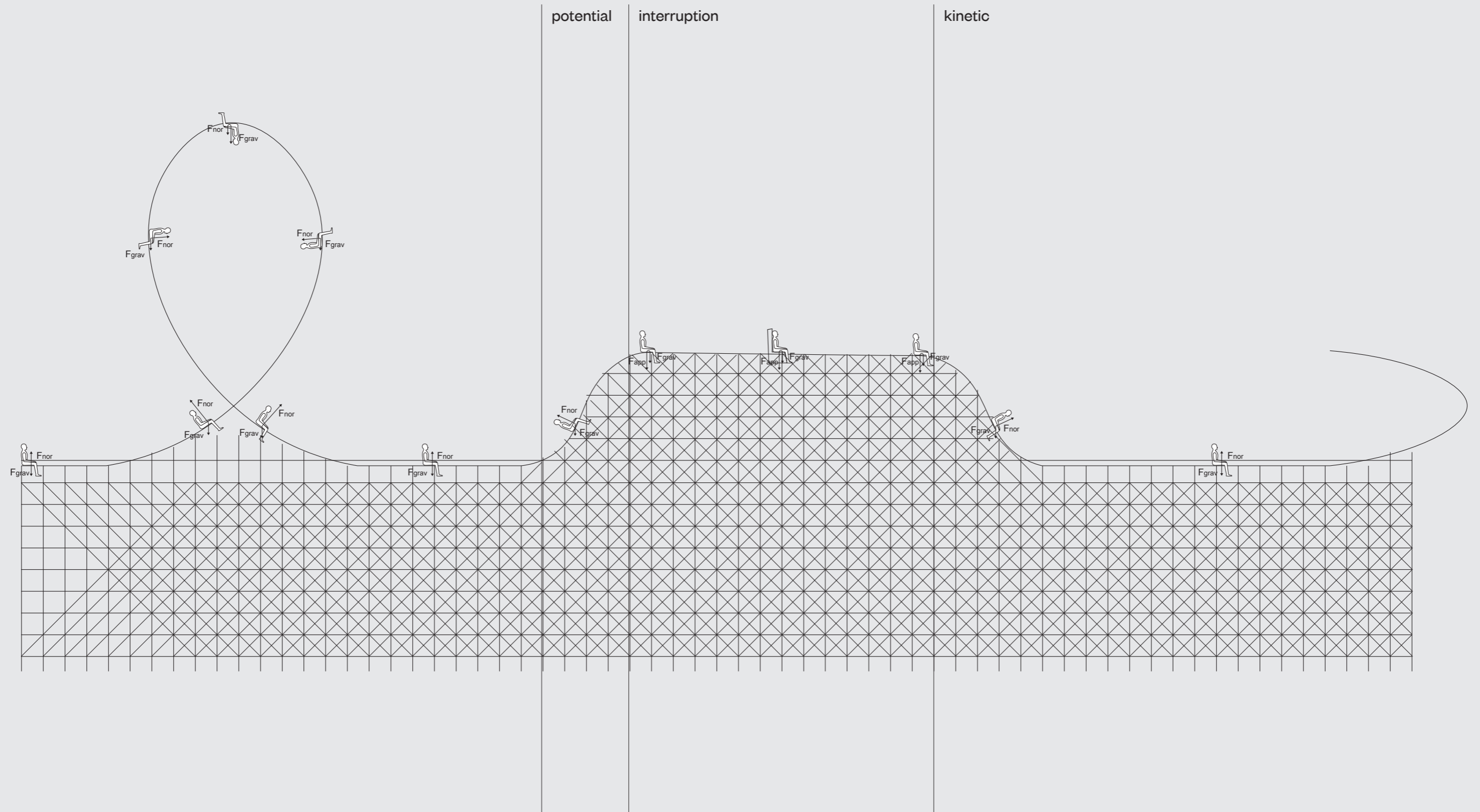
movement

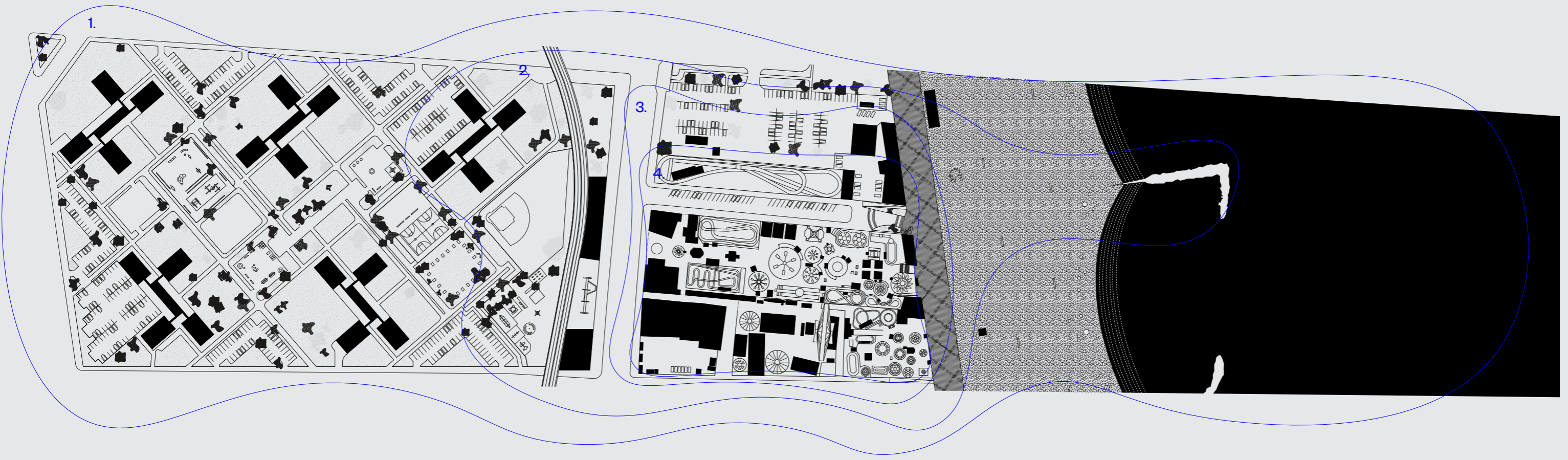
membrane

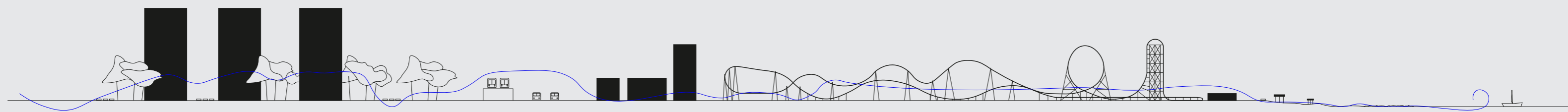
markers

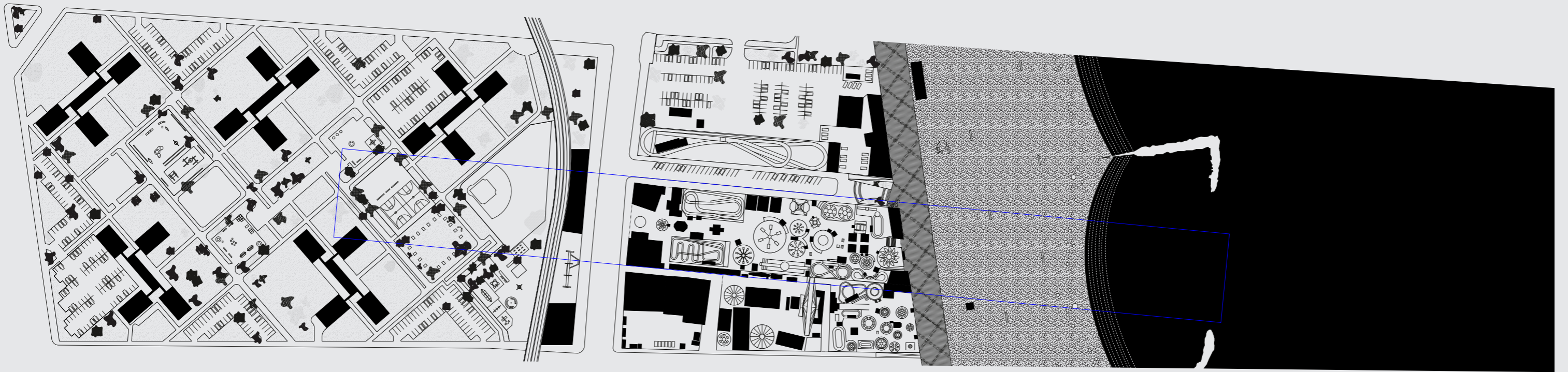
Ride

— architecture as constrain

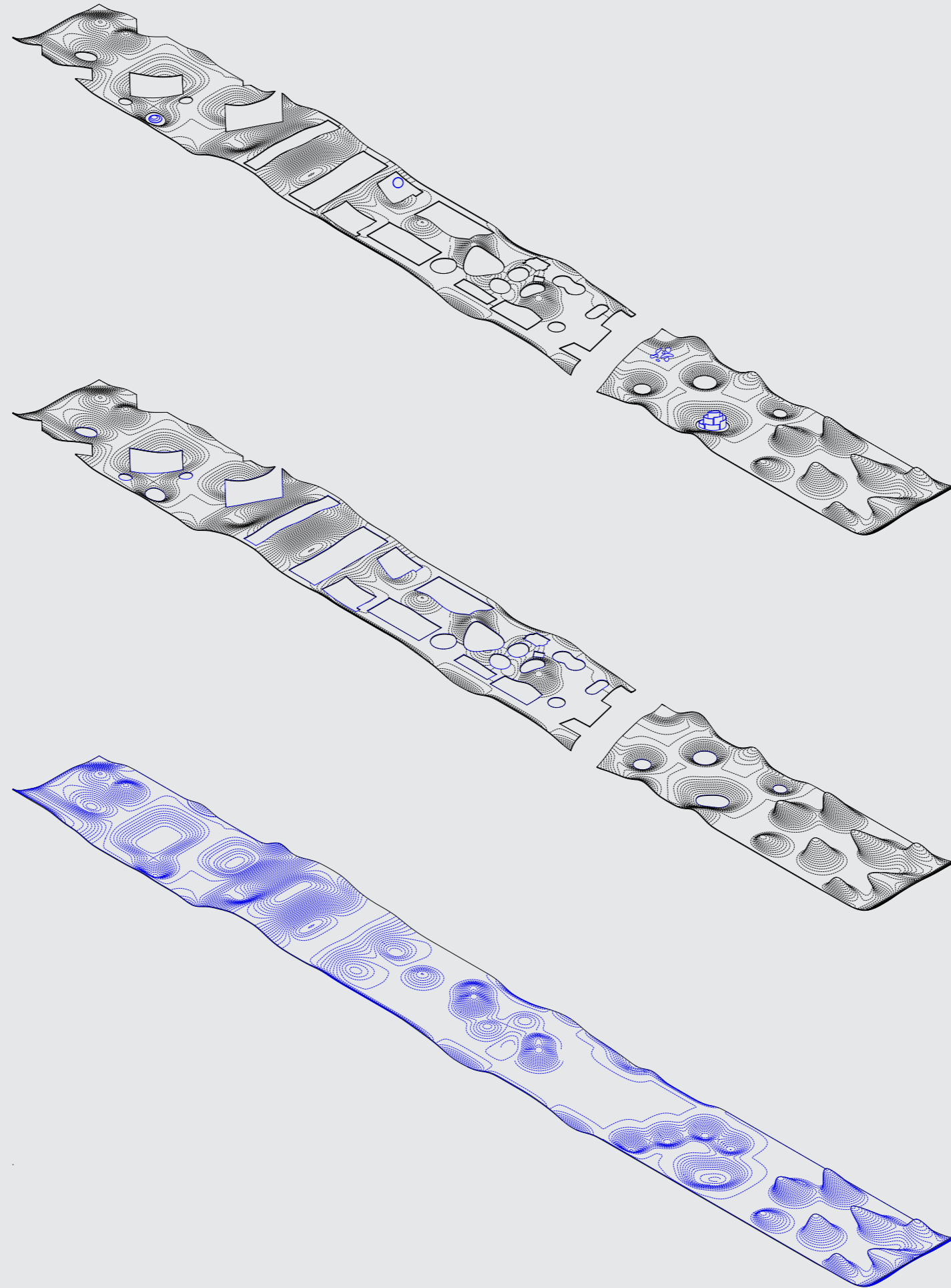








Project(s)

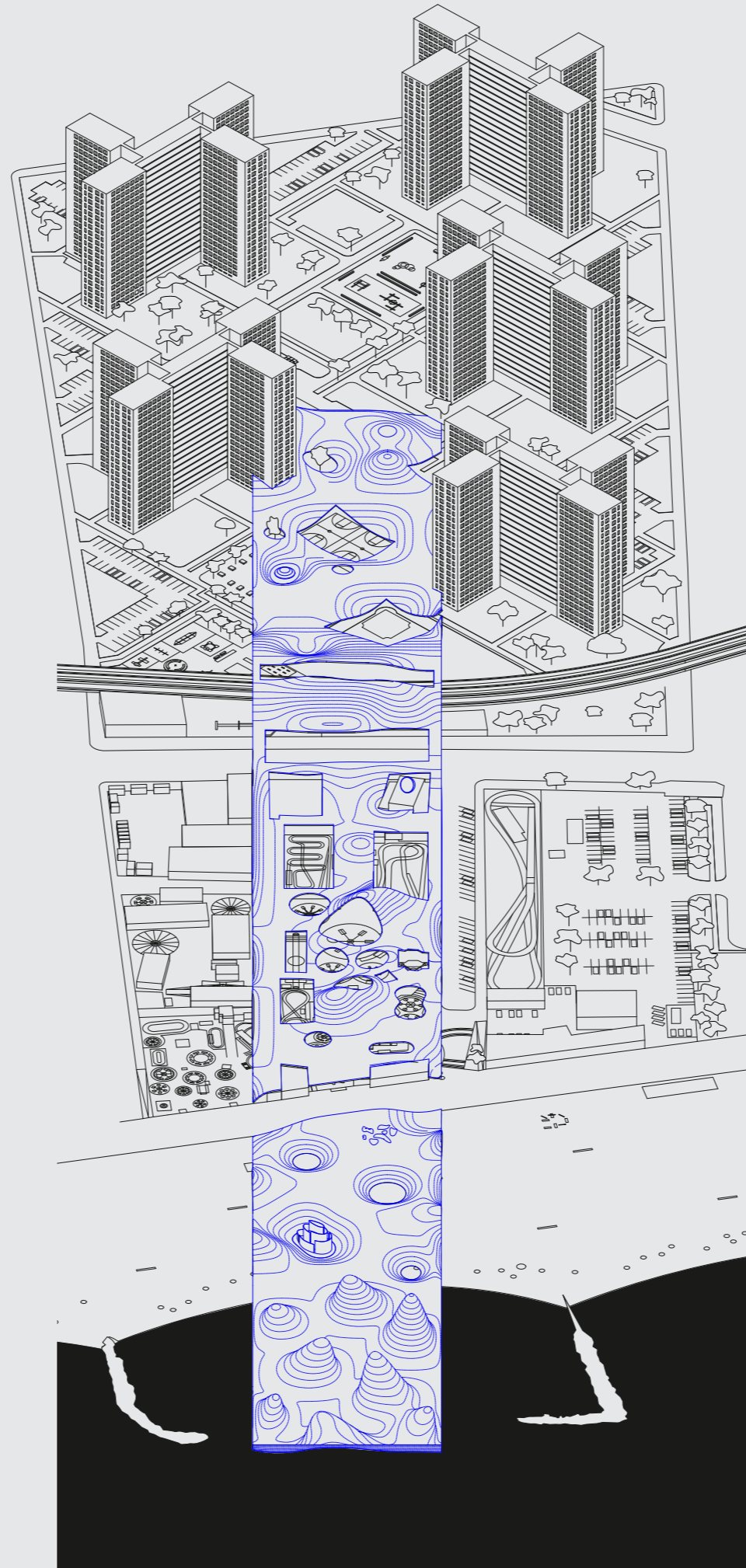


markers

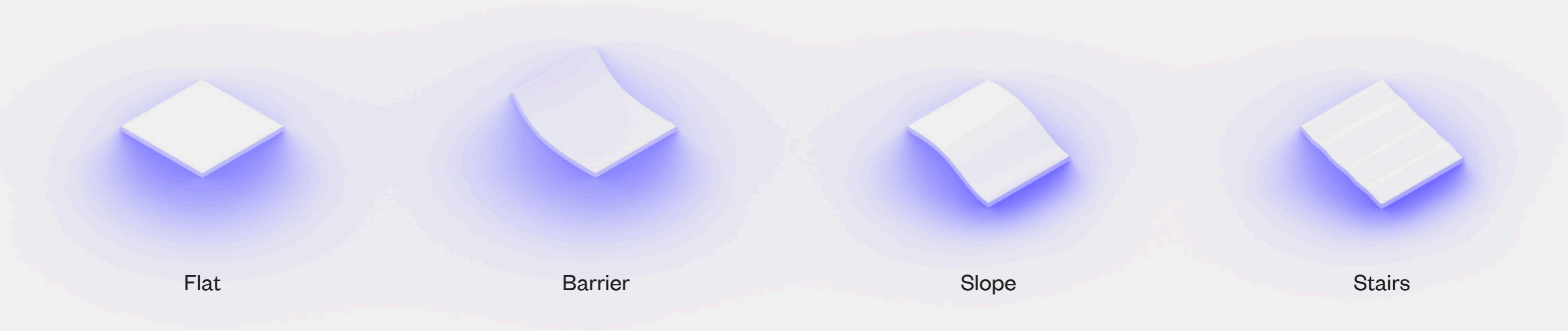
movement

membrane

Project(s)



Membrane



Flat

Barrier

Slope

Stairs



Nest

Mountain

Amphitheatre



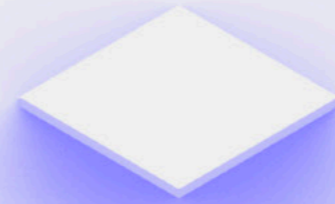
Movement



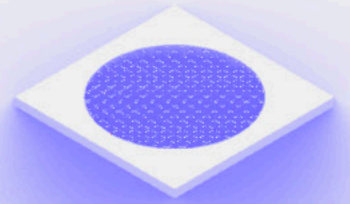
Hole



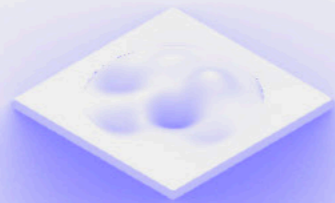
Bridge



Glass



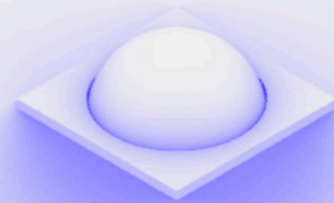
Net



Topo



Tramp

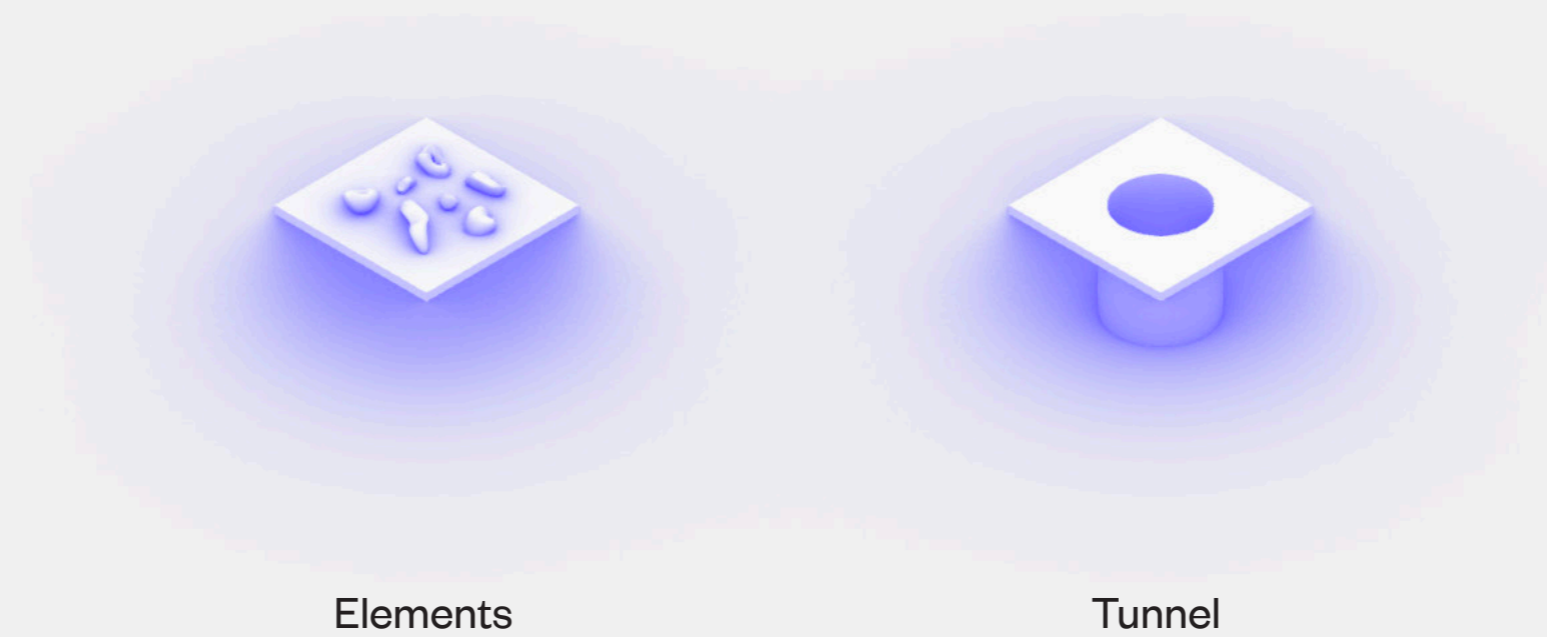


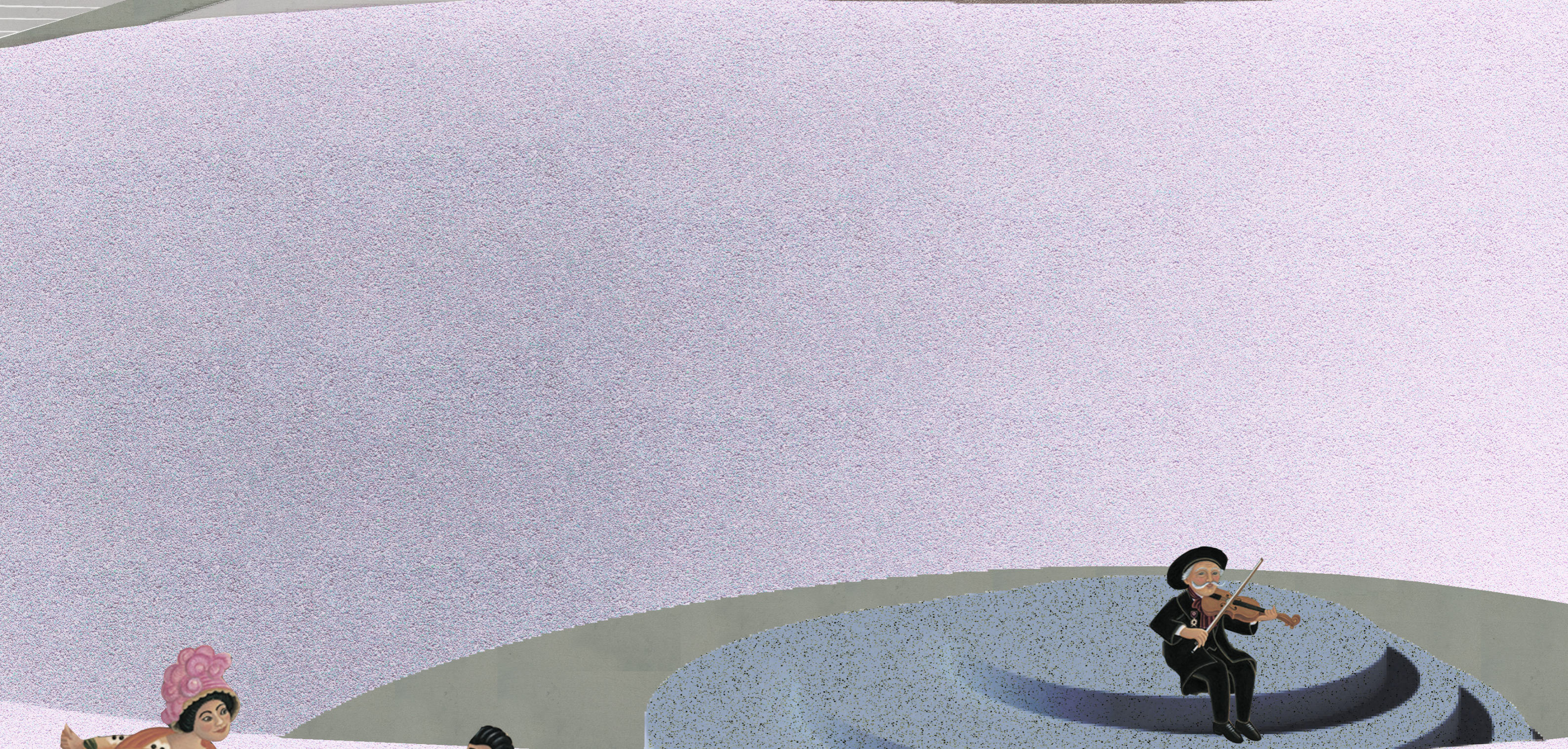
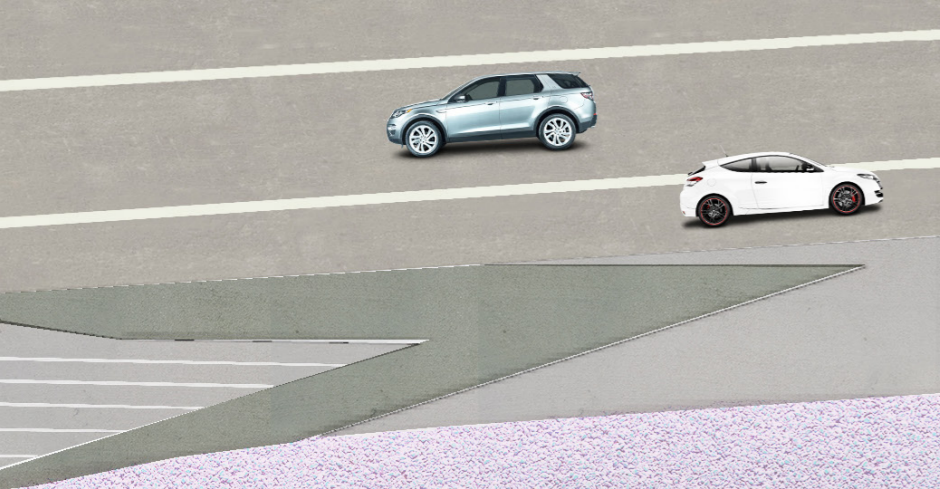
Bubble

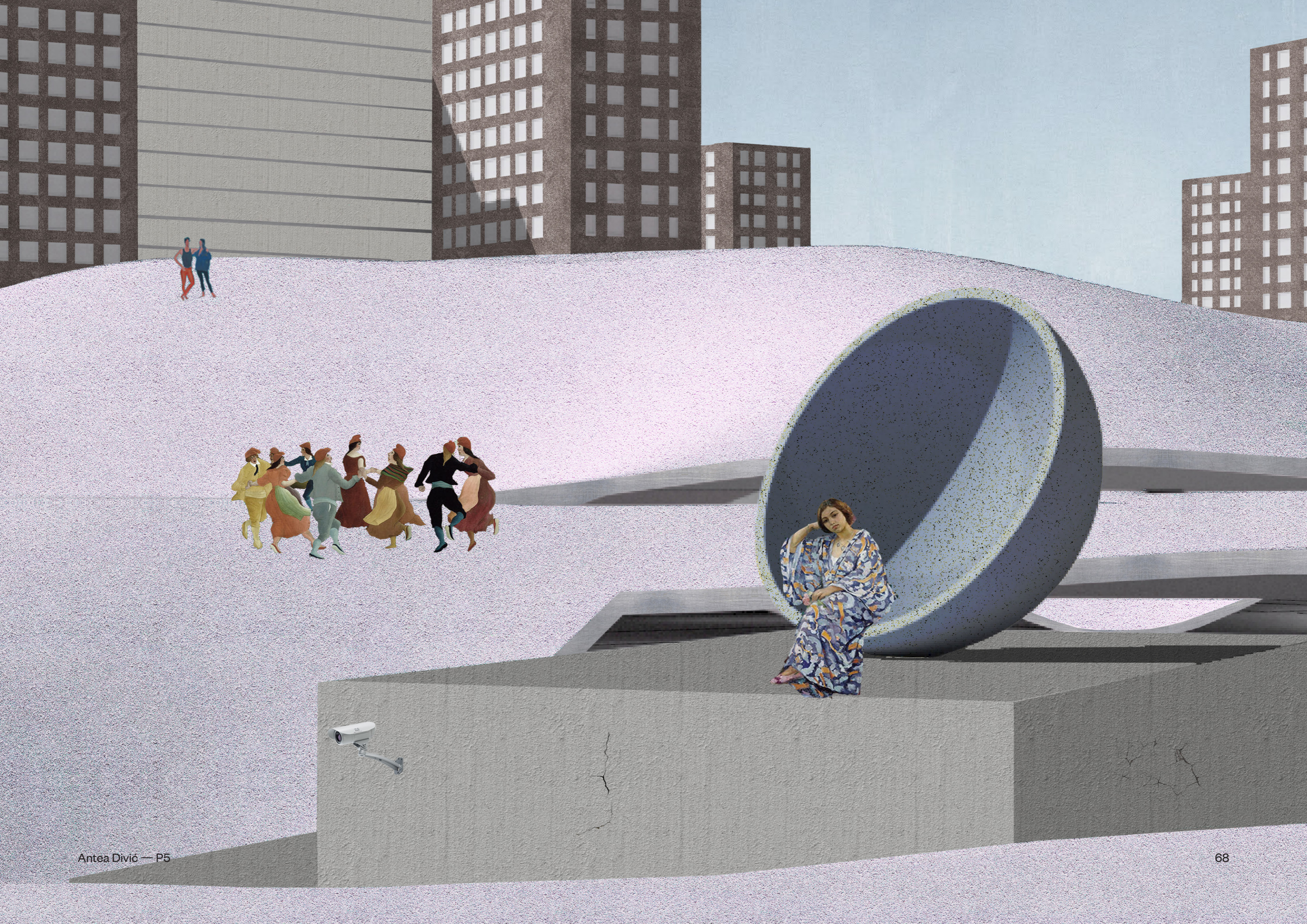




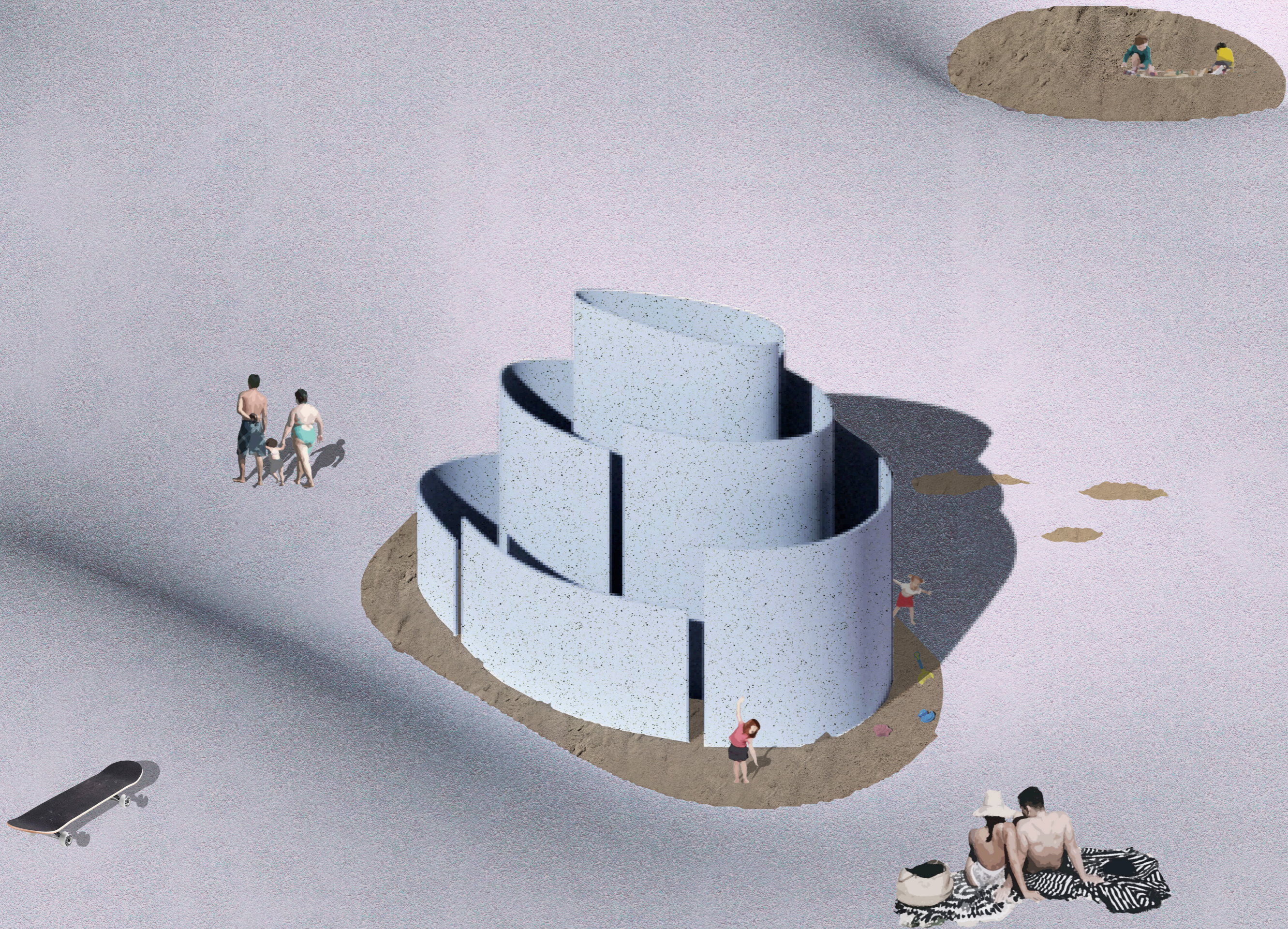
Markers















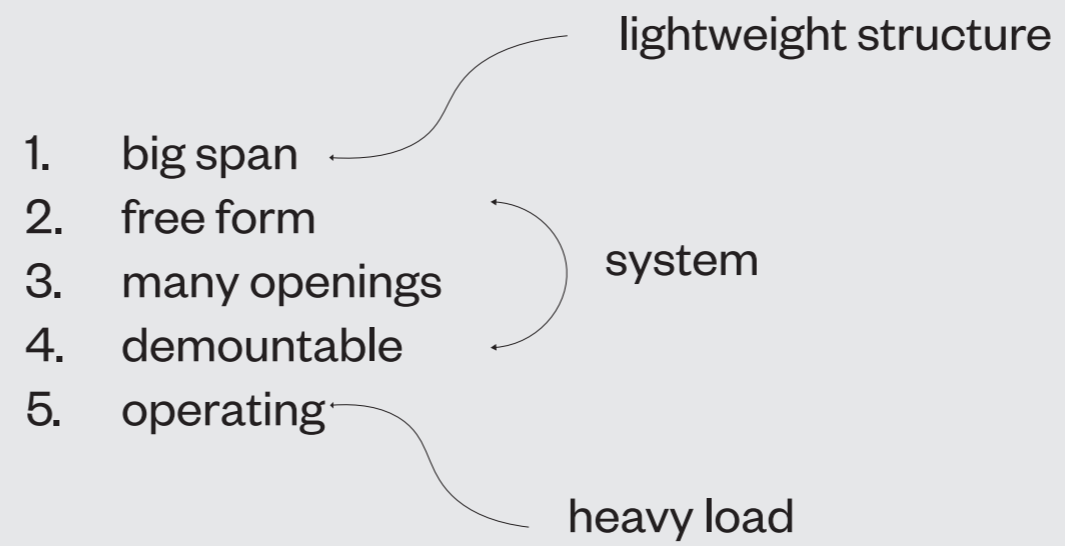
Building Technology

— brief, structure, floor plans, details

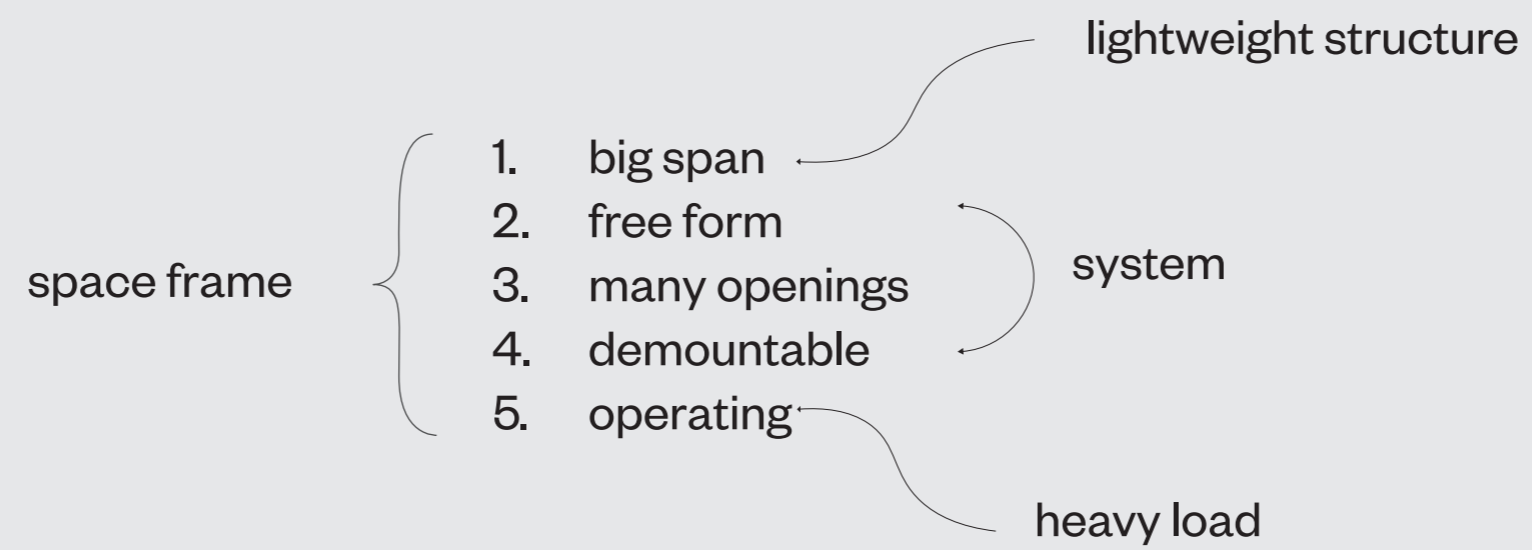
Brief

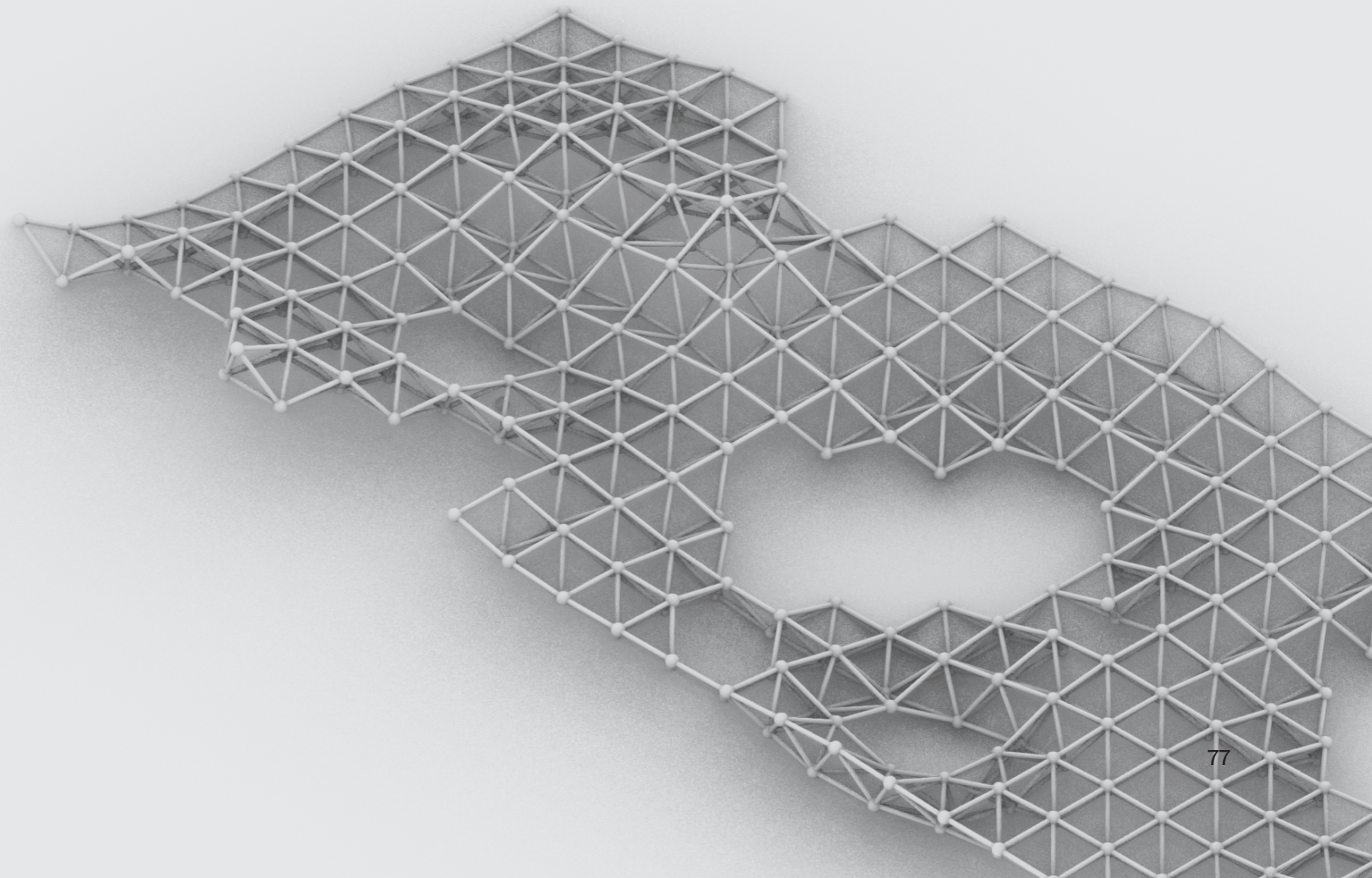
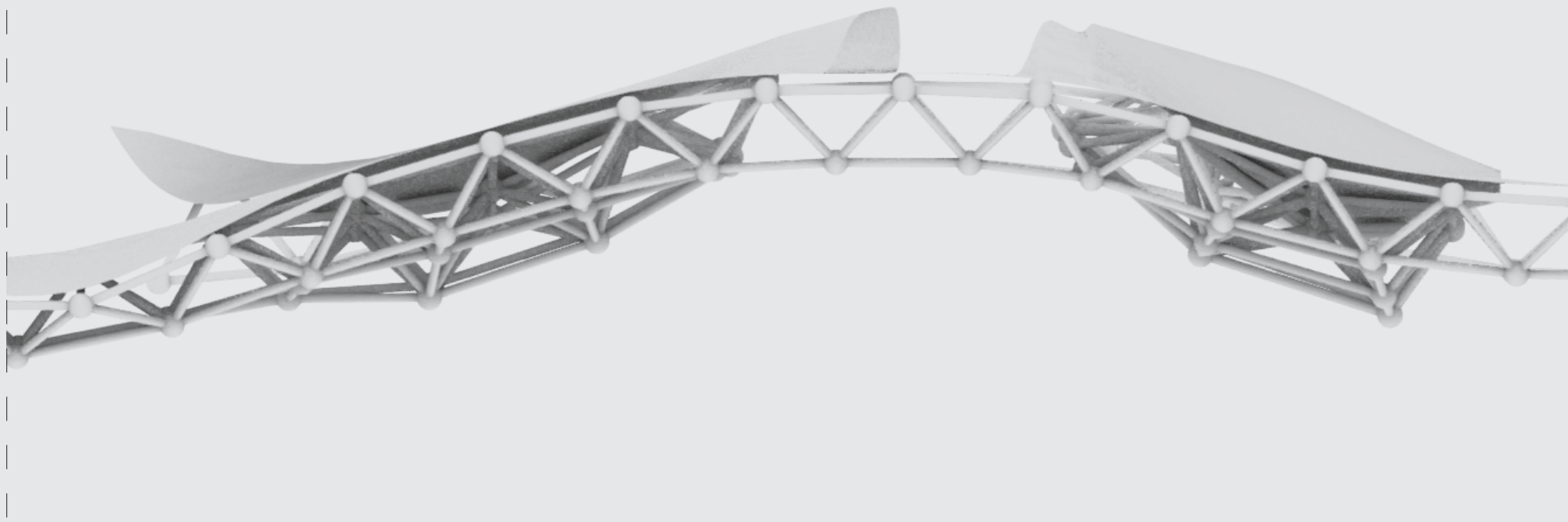
1. big span
2. free form
3. many openings
4. demountable
5. operating

Brief

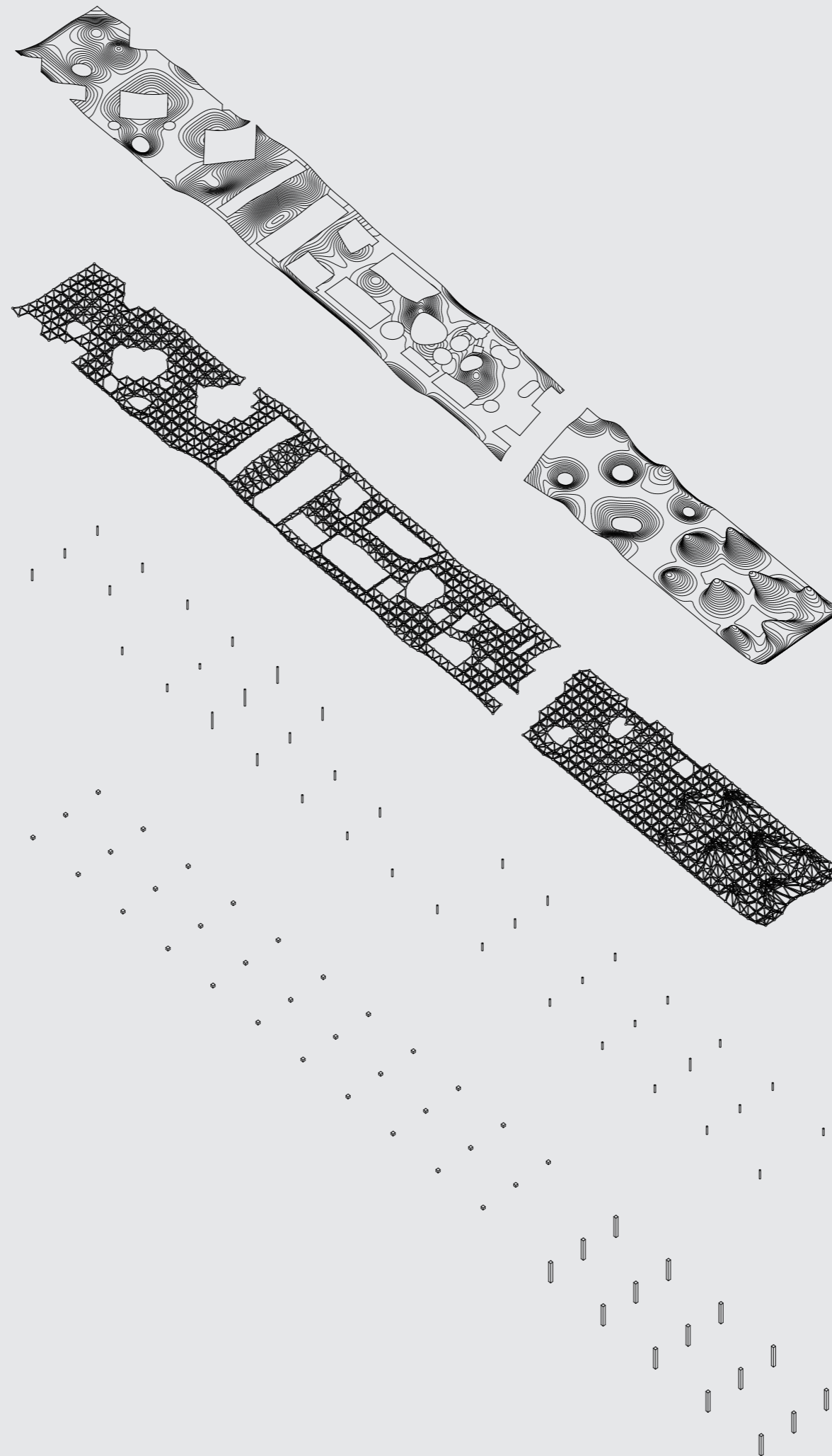


Brief





Structure



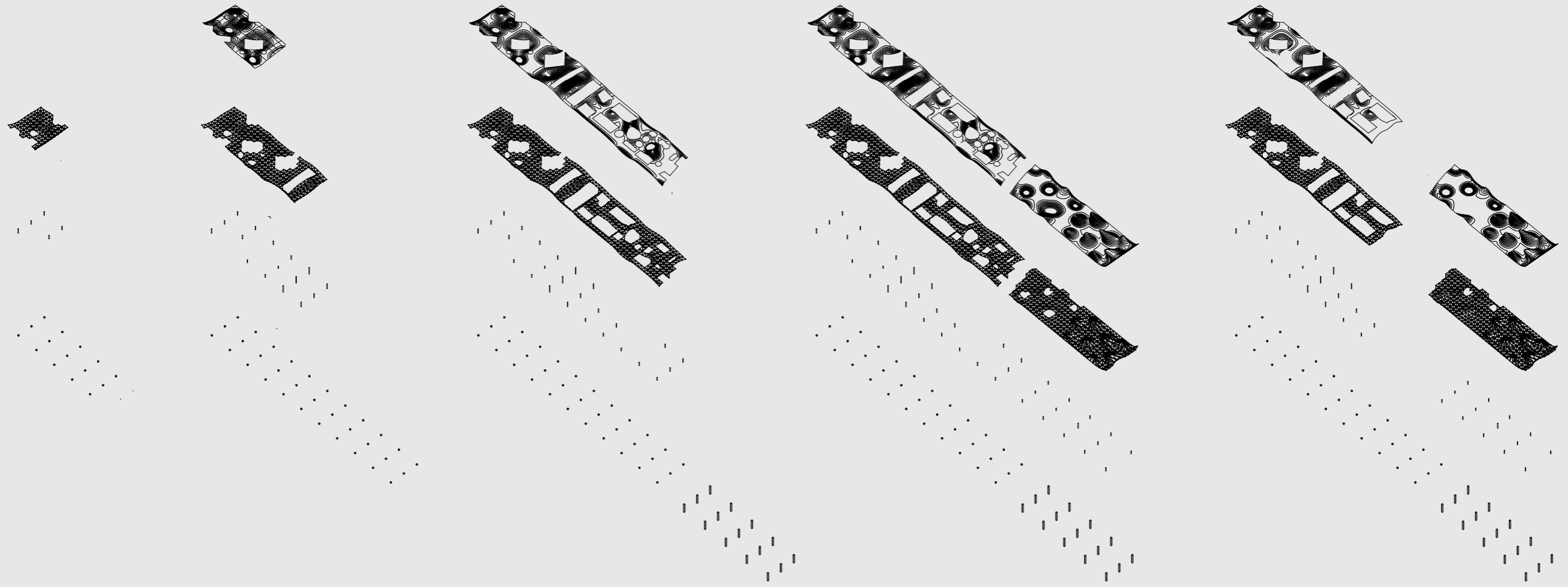
roof

space frame

columns

foundation

Phases



Stage 1:
foundation - columns - space frame

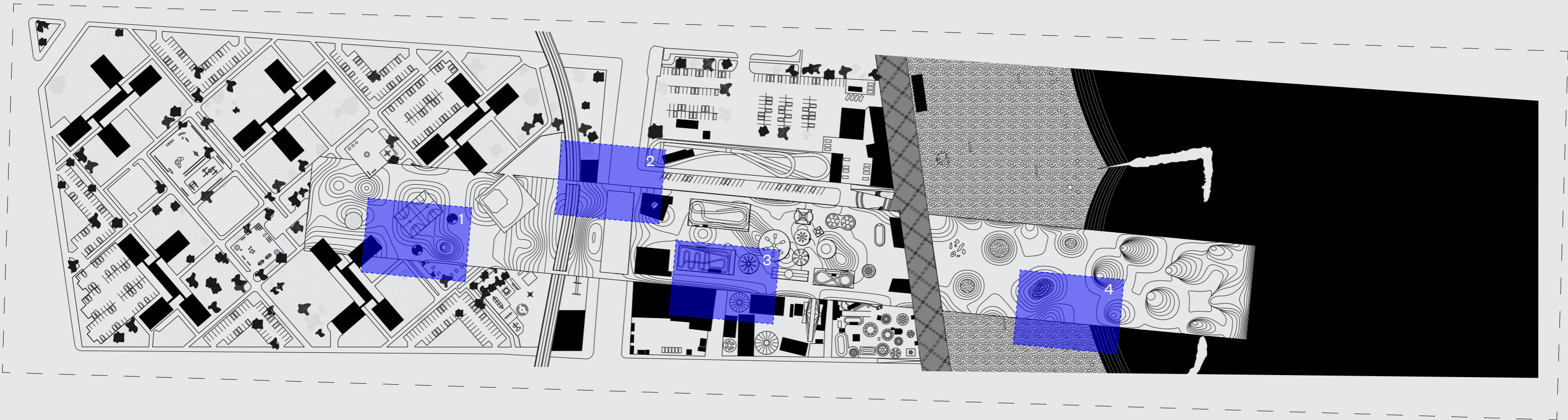
Stage 2:
roof layers in parts

Stage 3:
pile foundation in the ocean

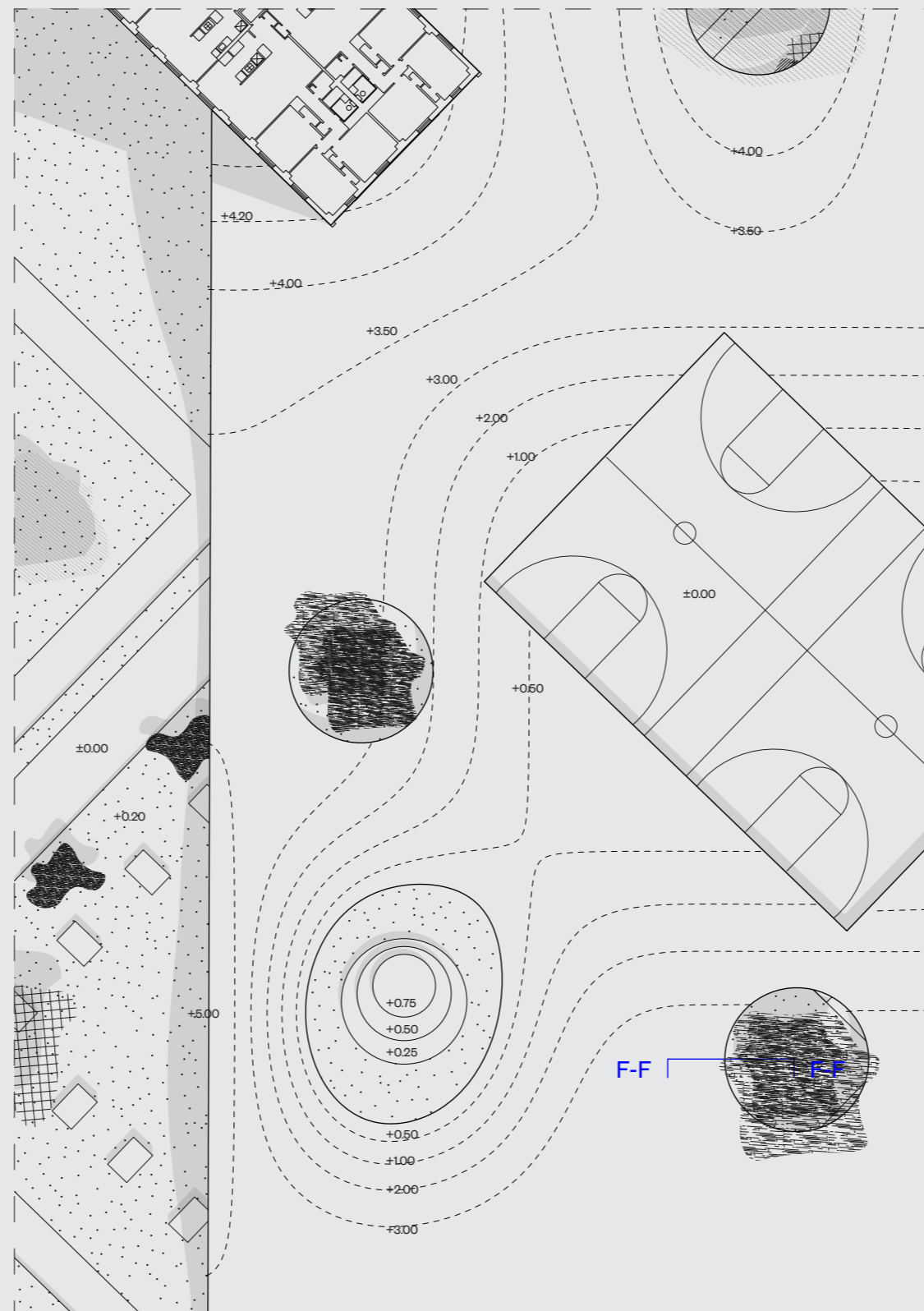
Stage 4:
final arrangement

Stage 5:
removing / changing / adding

Floor plans

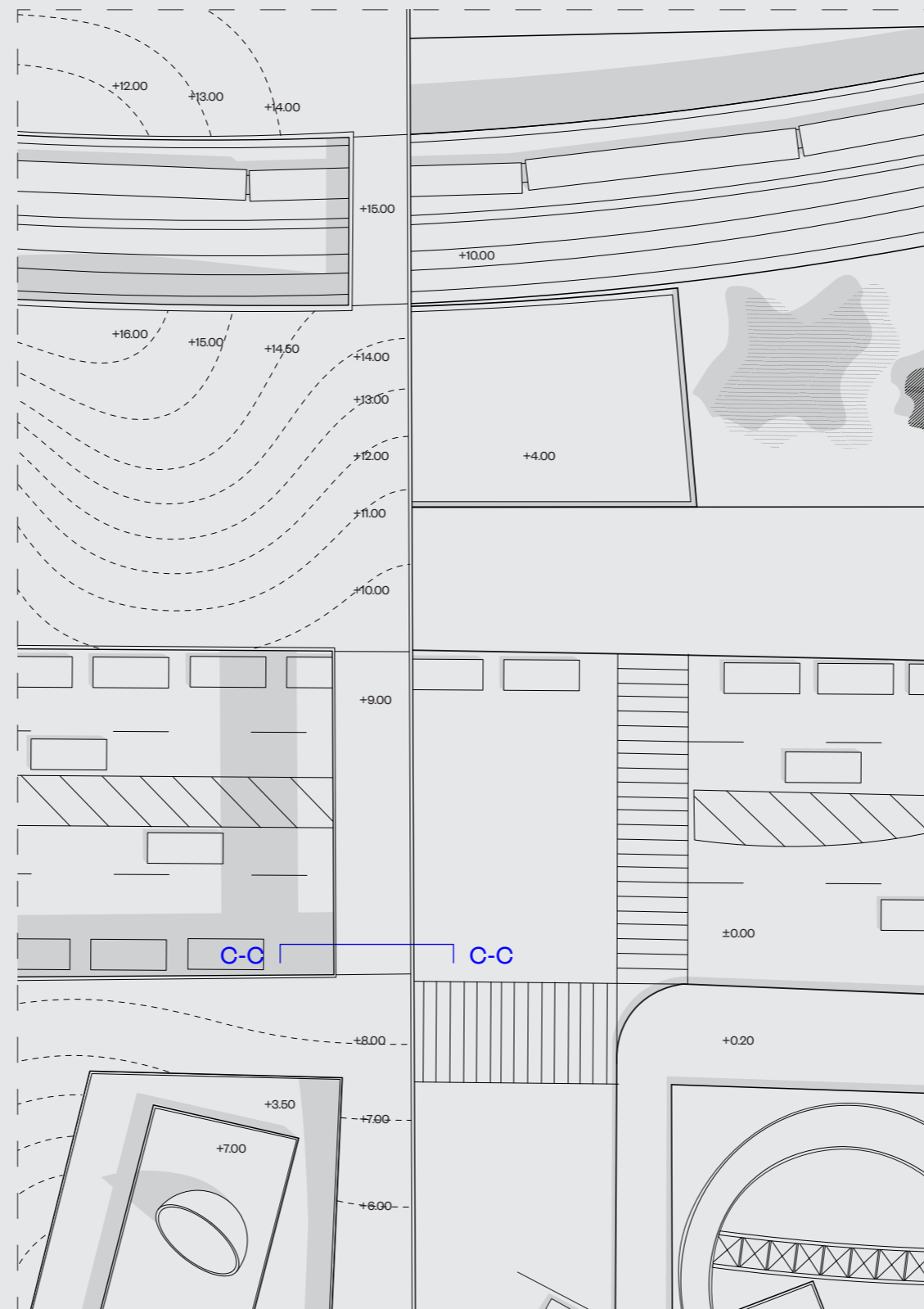


Social housing — floor plan



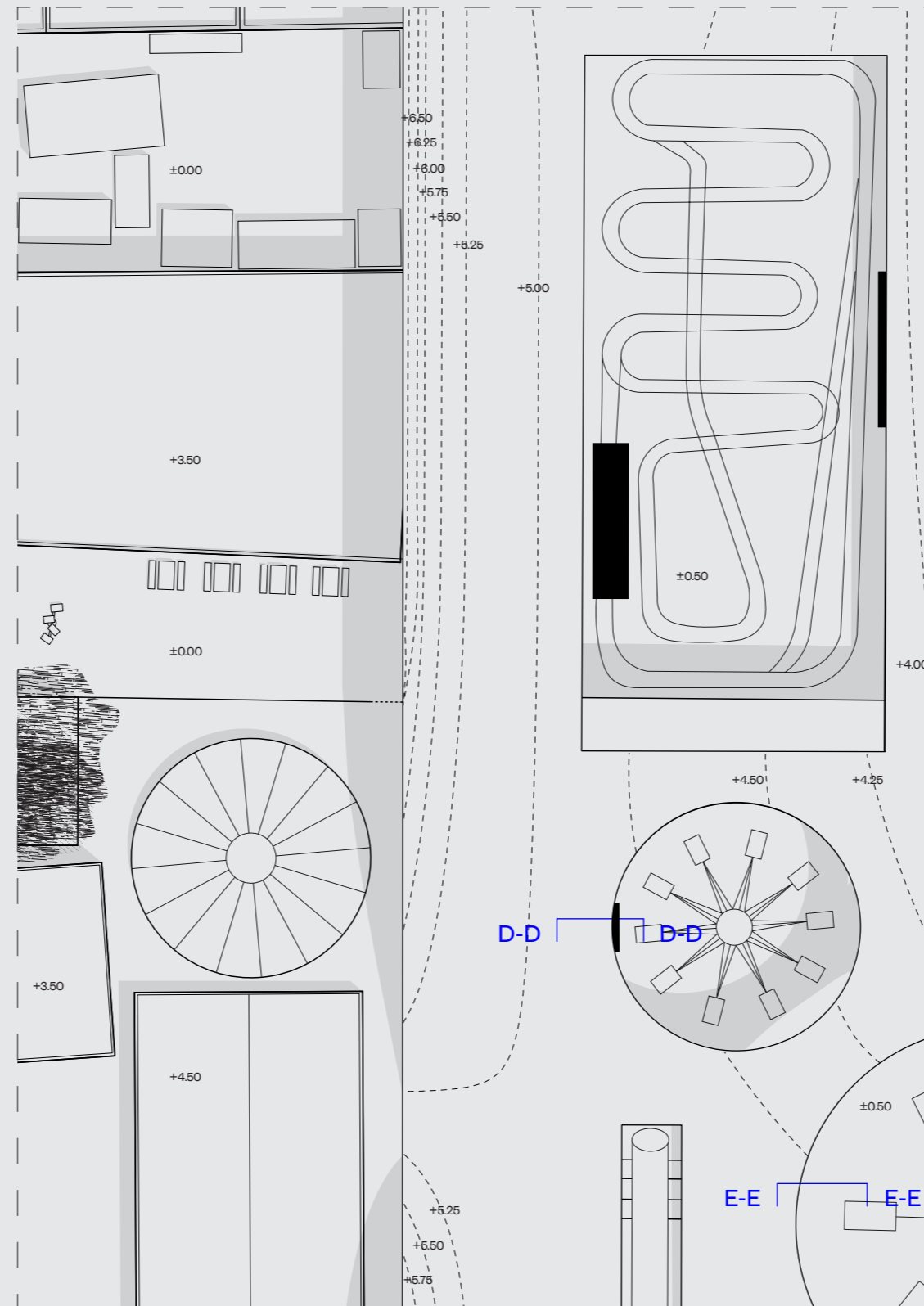
Traffic

— floor plan

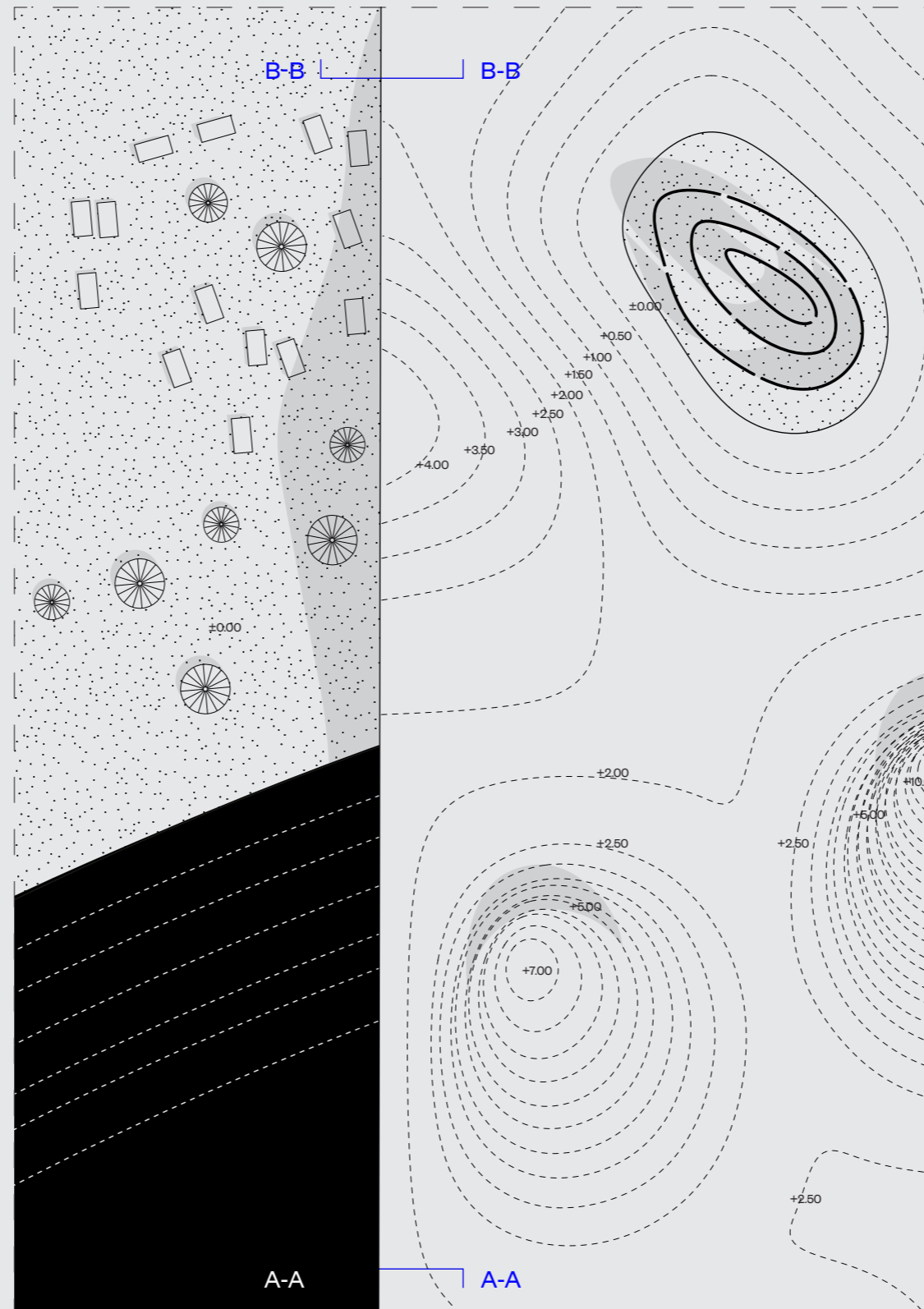


Entertainment park

— floor plan



Ocean and the beach — floor plan



Strip

— ocean, unleashing forces

social housing

ep

beach

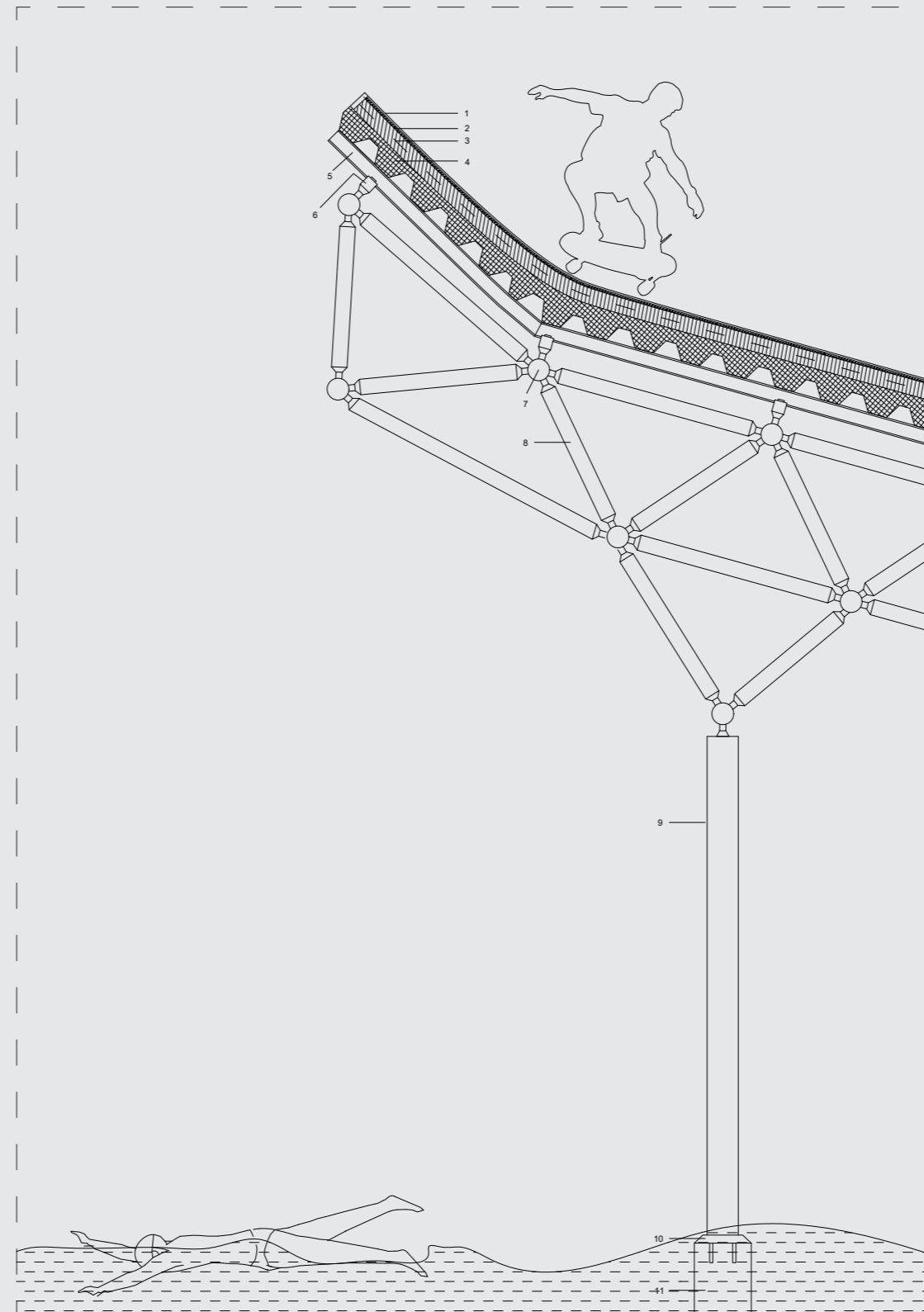
rotation
floating beds
whirlpool (sucked into)

wind moving rides
up-down

floating beds

Barrier

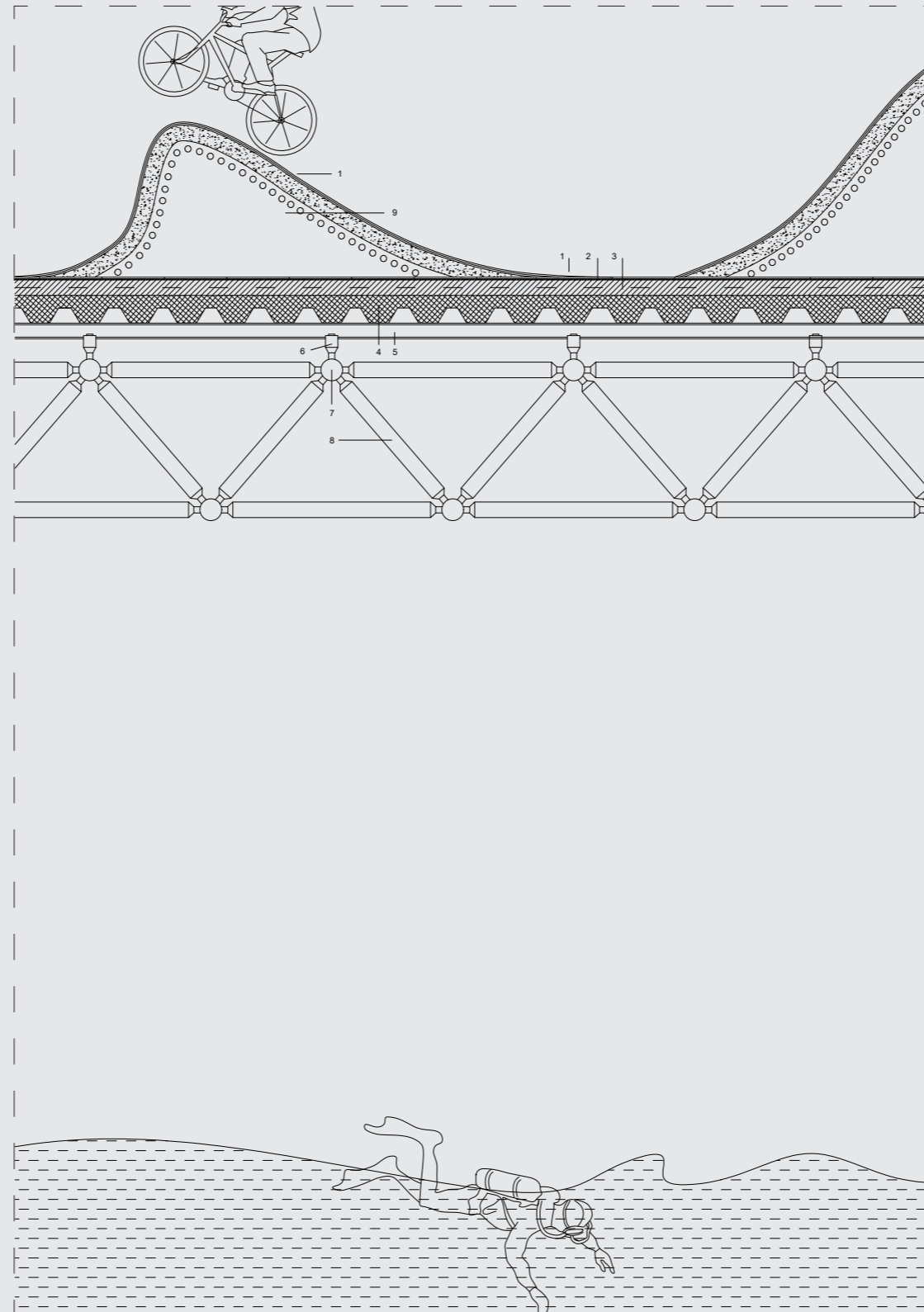
— detail A-A



1. rubber tiles made from recycled granulate
2. bitumen waterproof sheets
3. smooth concrete in tilt 1,5%
4. trapezoidal metal deck filled with reinforced concrete
5. secondary L shaped steel structure
6. steel connector - nod
7. connecting joints of primary steel structure
8. main tubes of primary steel structure
9. tube steel column
10. steel connector with steel plate bolted into foundation
11. pile foundation

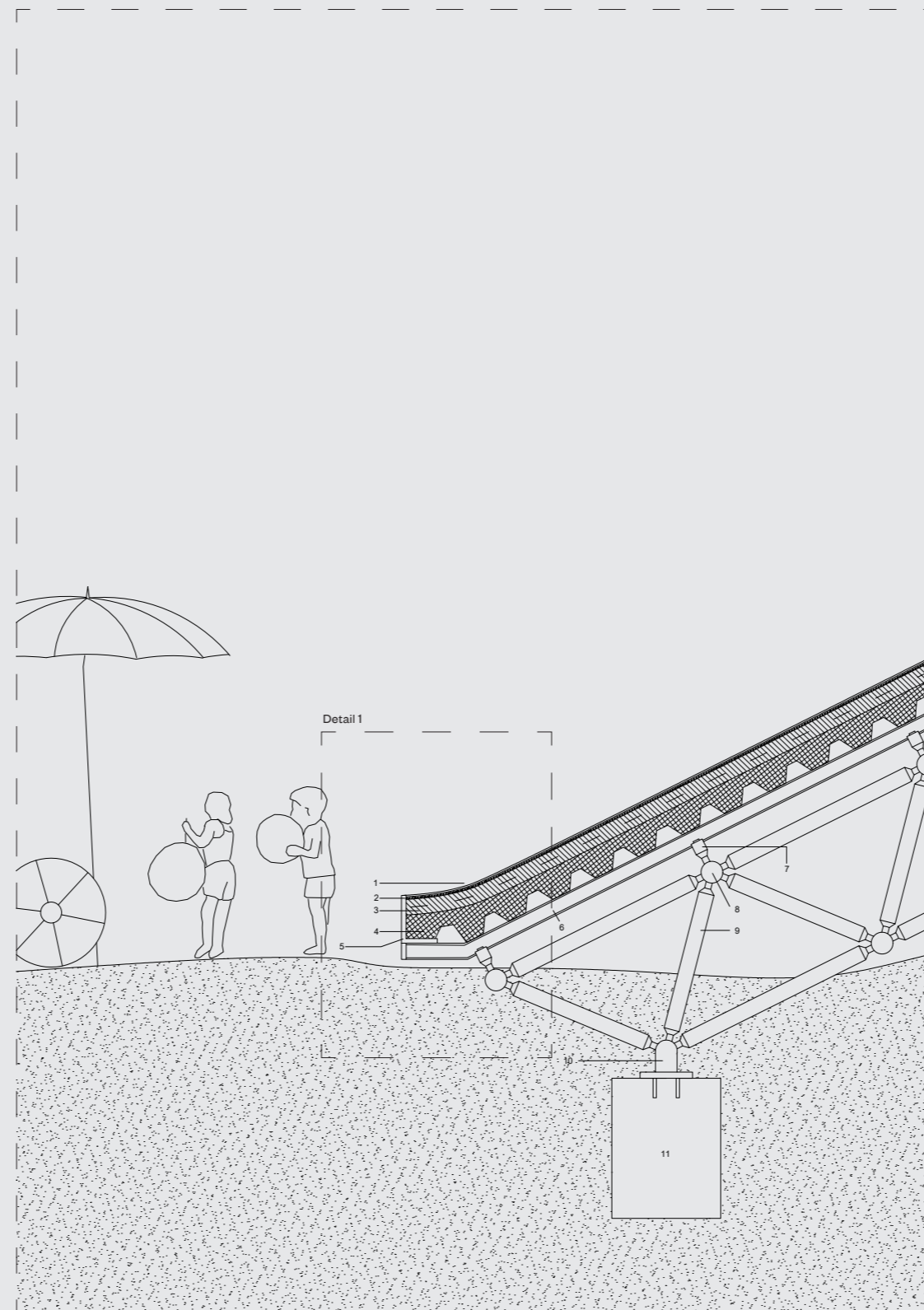
Hole - mountain

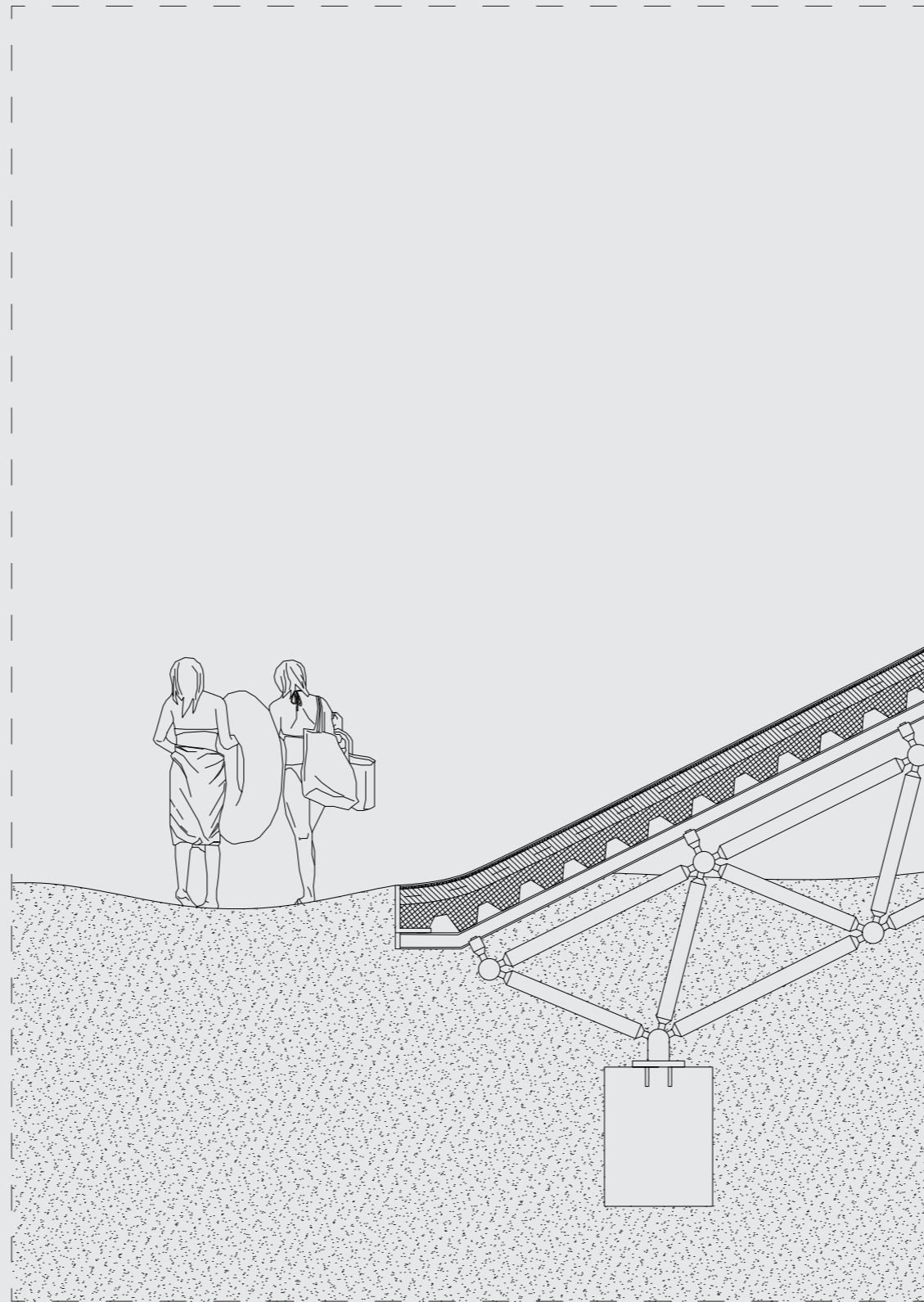
— detail G-G

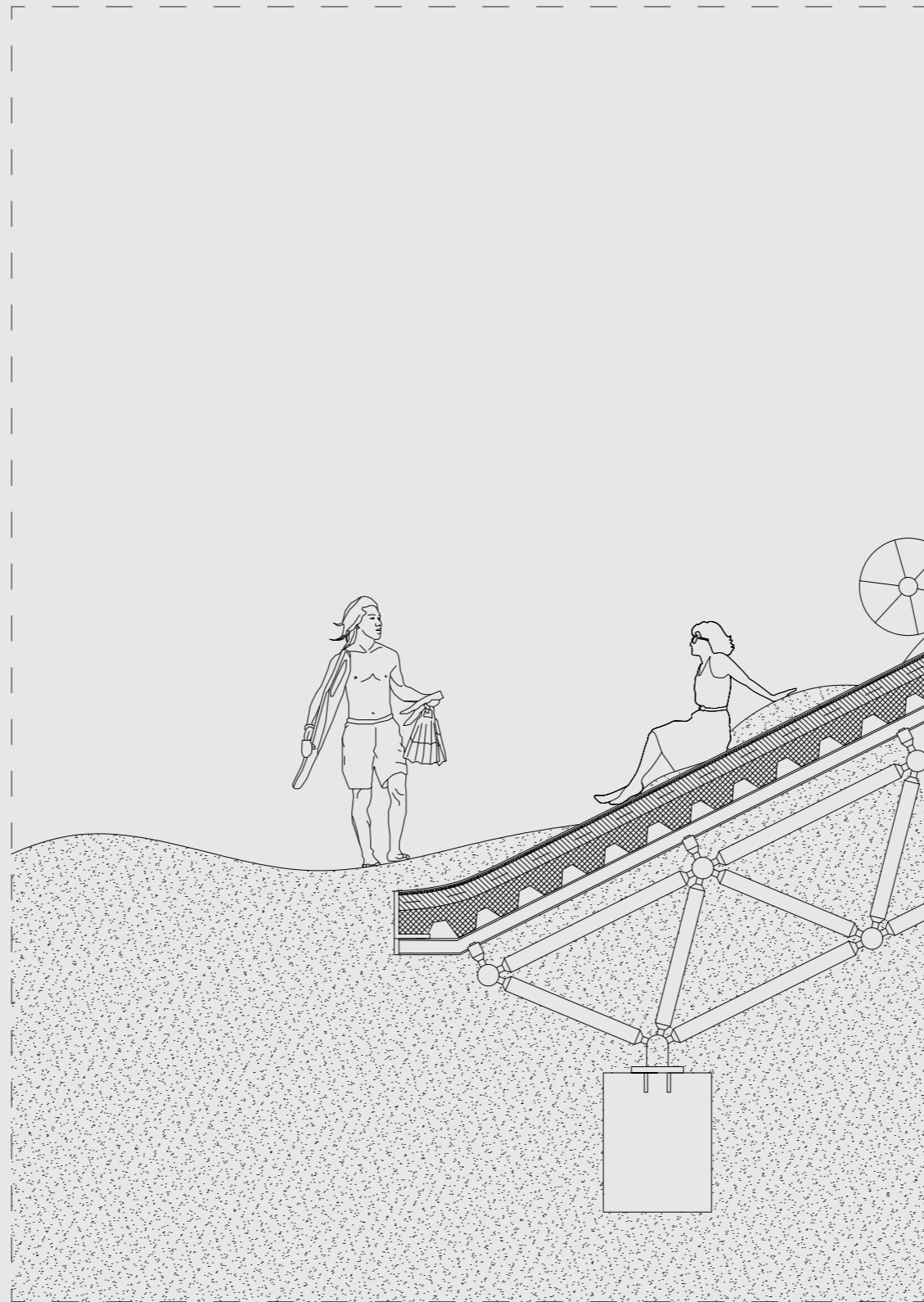


Slope

— detail B-B

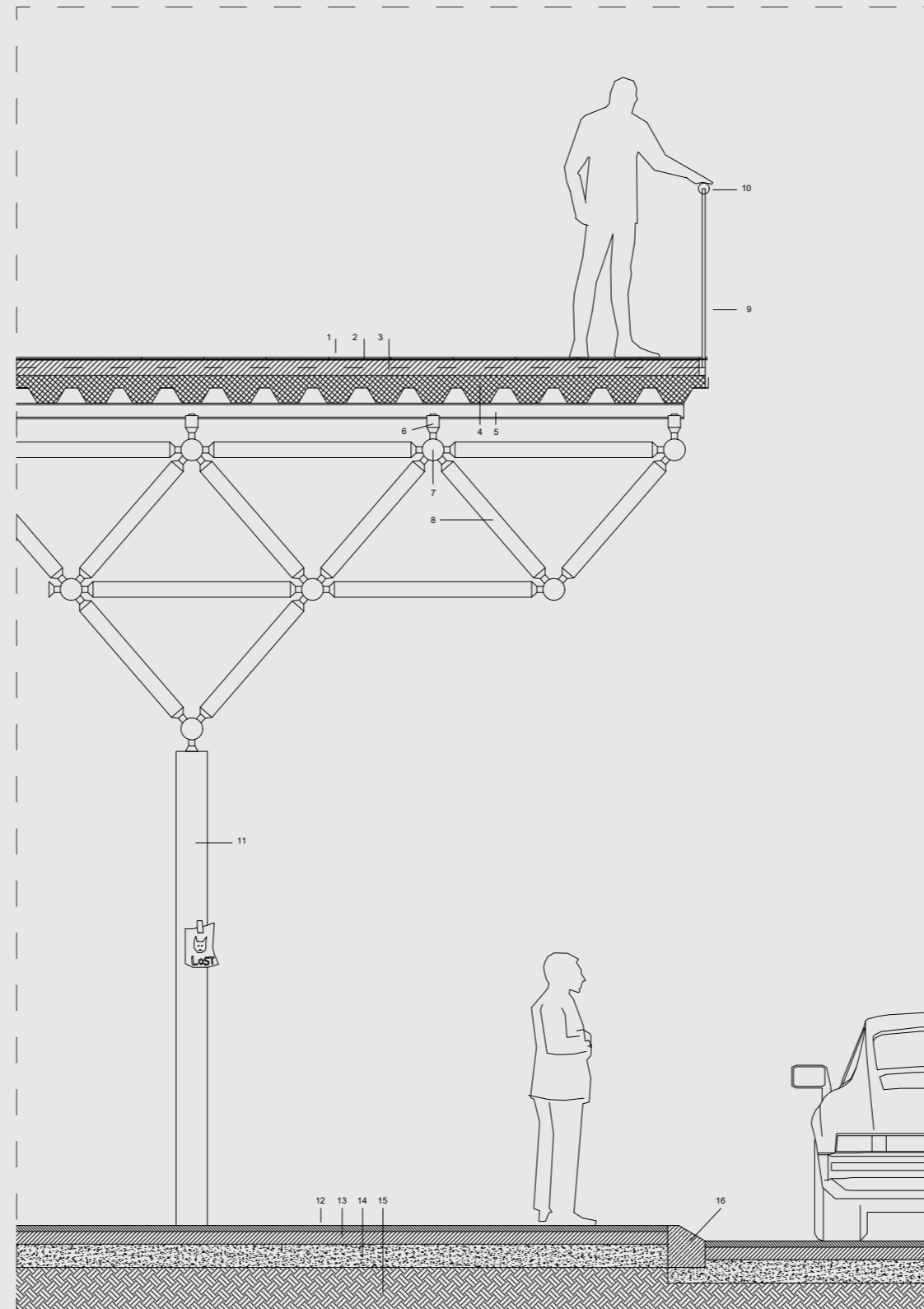




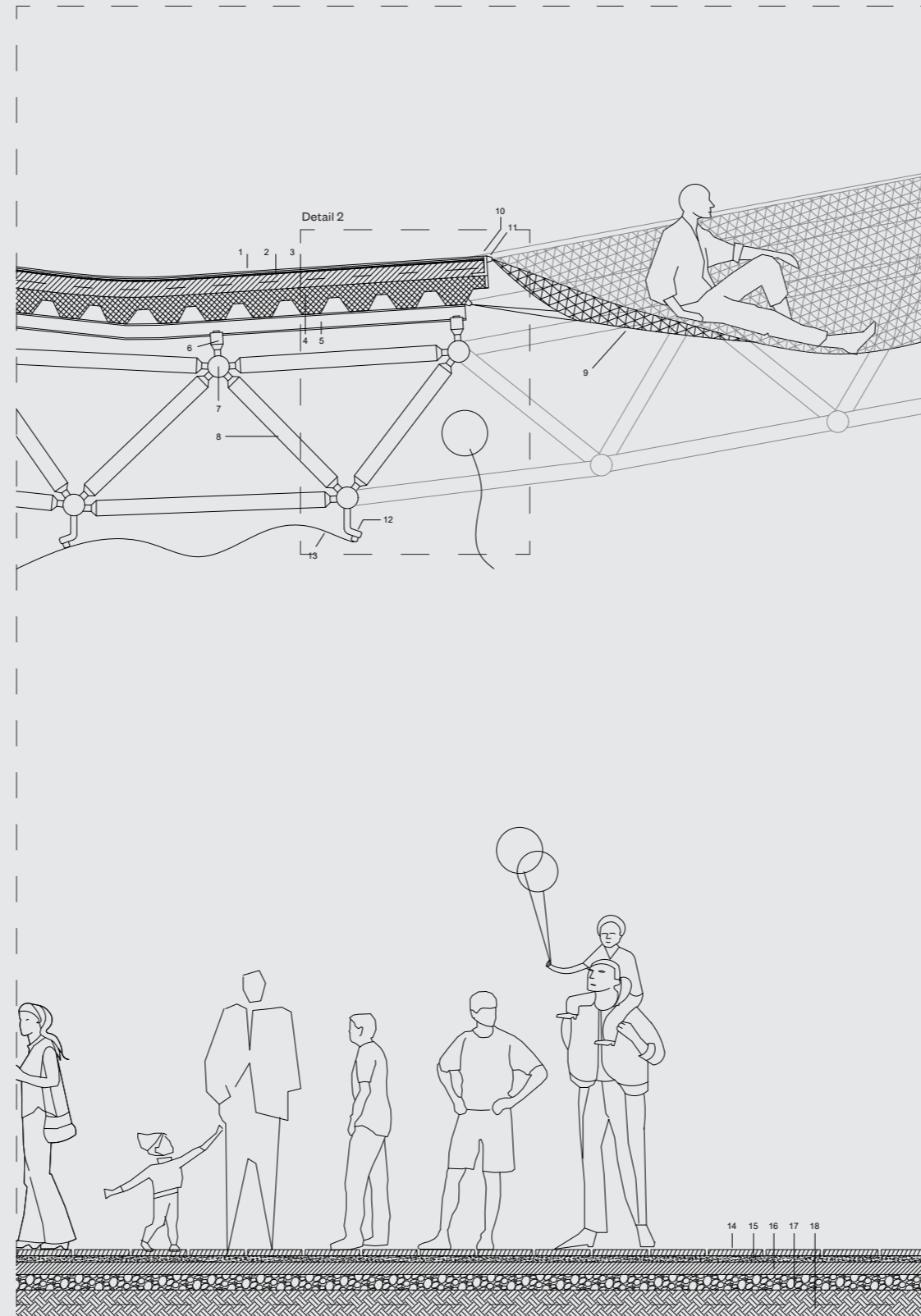


Flat

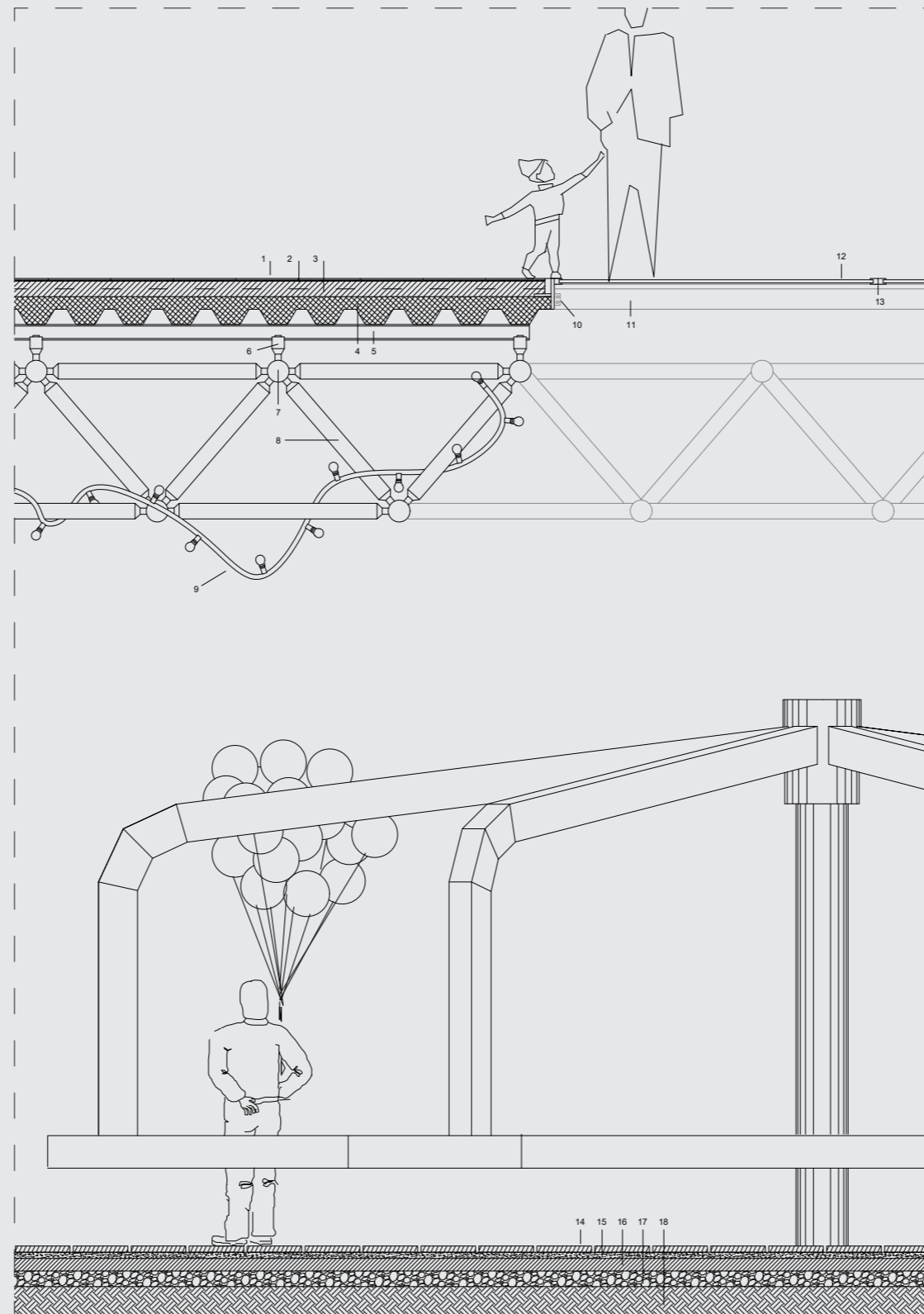
— detail C-C



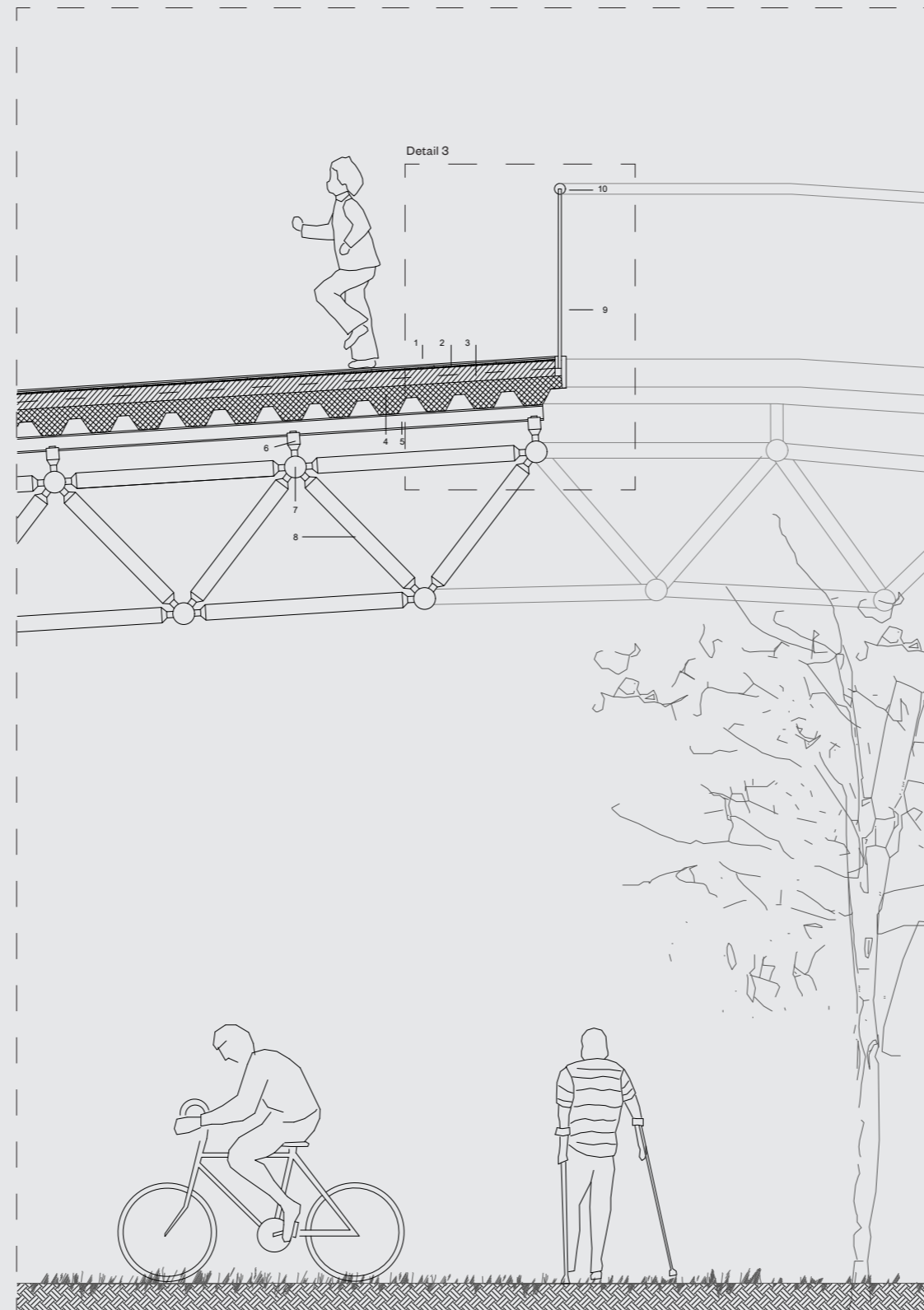
Hole - net — detail D-D

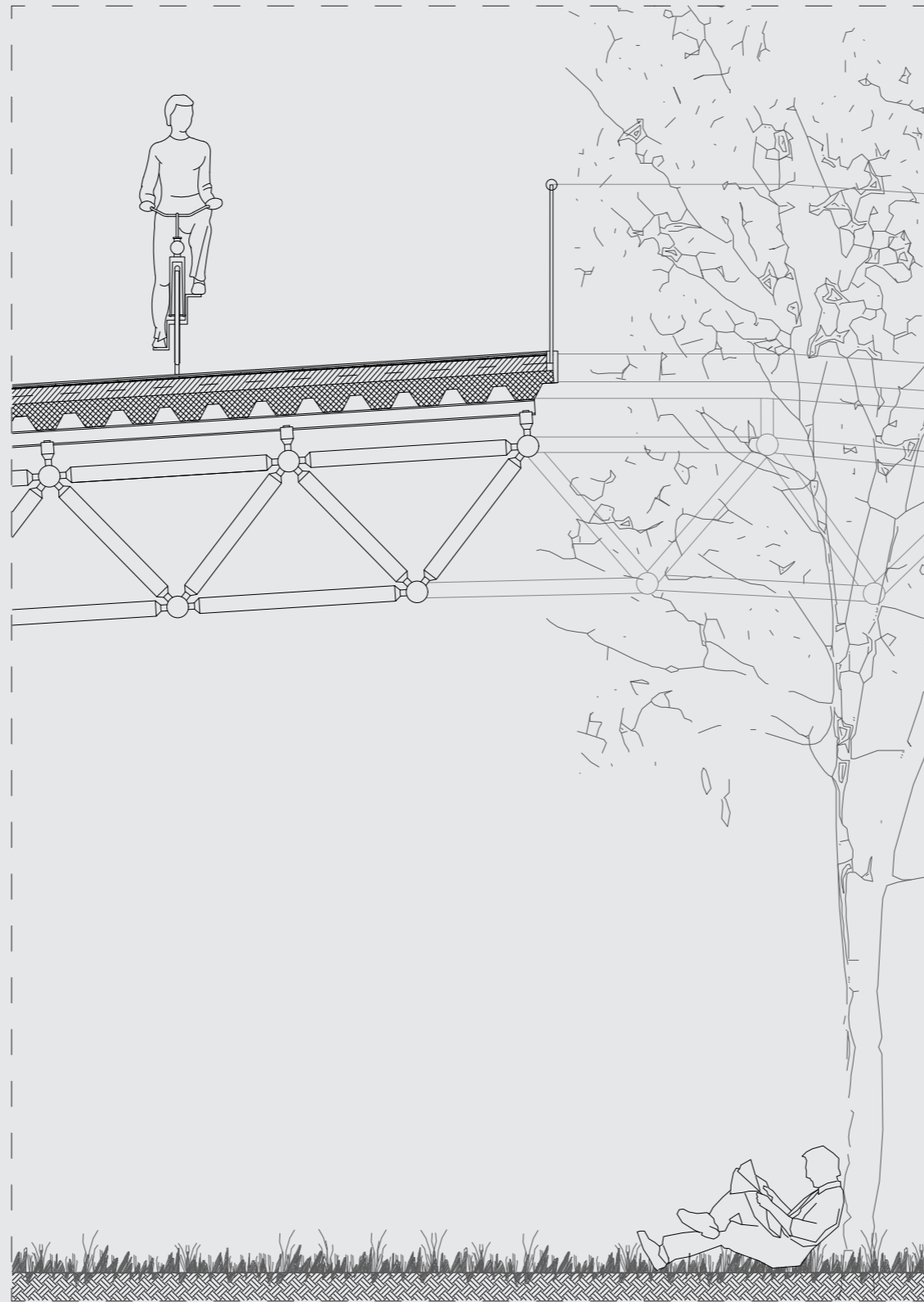


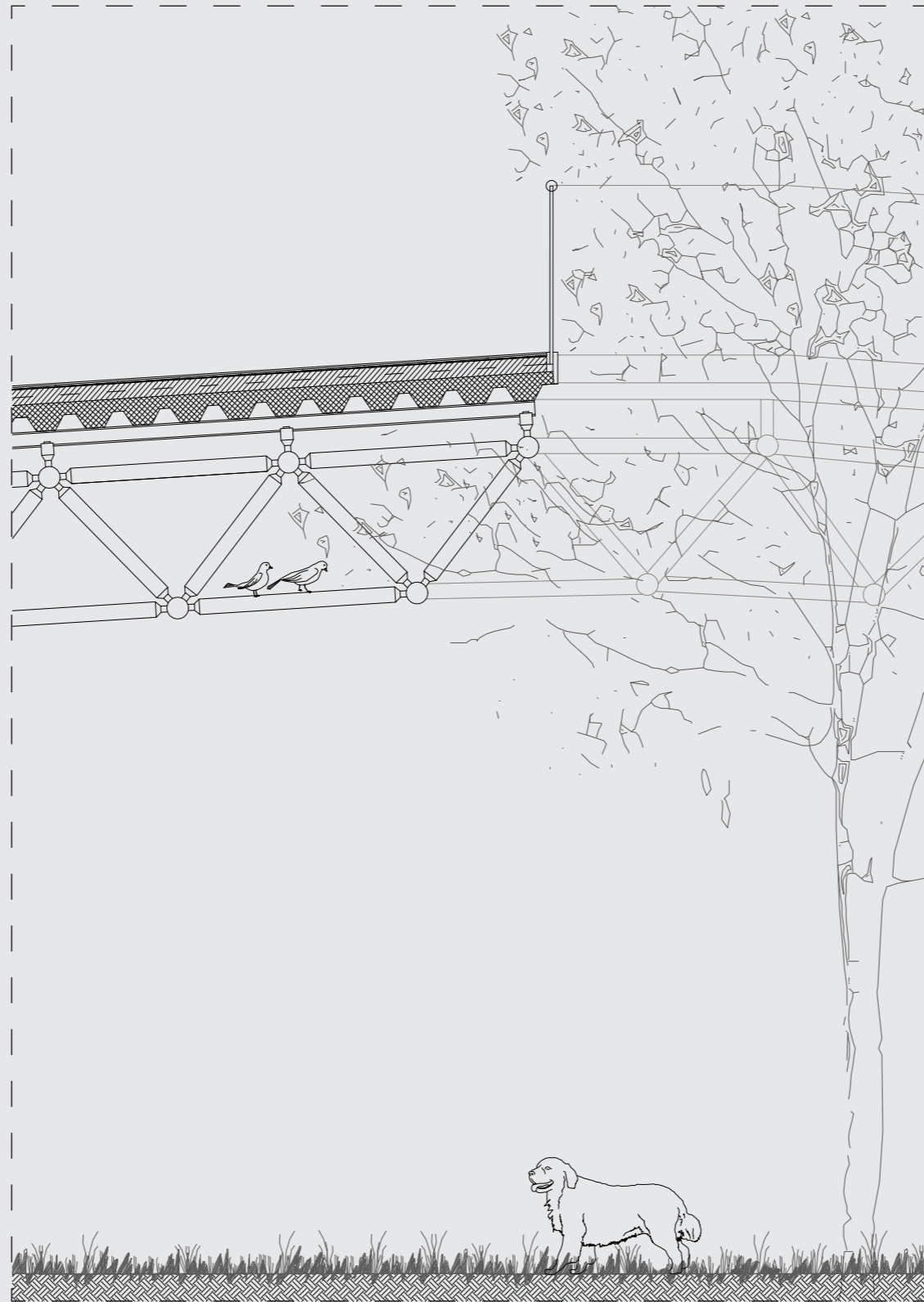
Hole - glass
— detail E-E



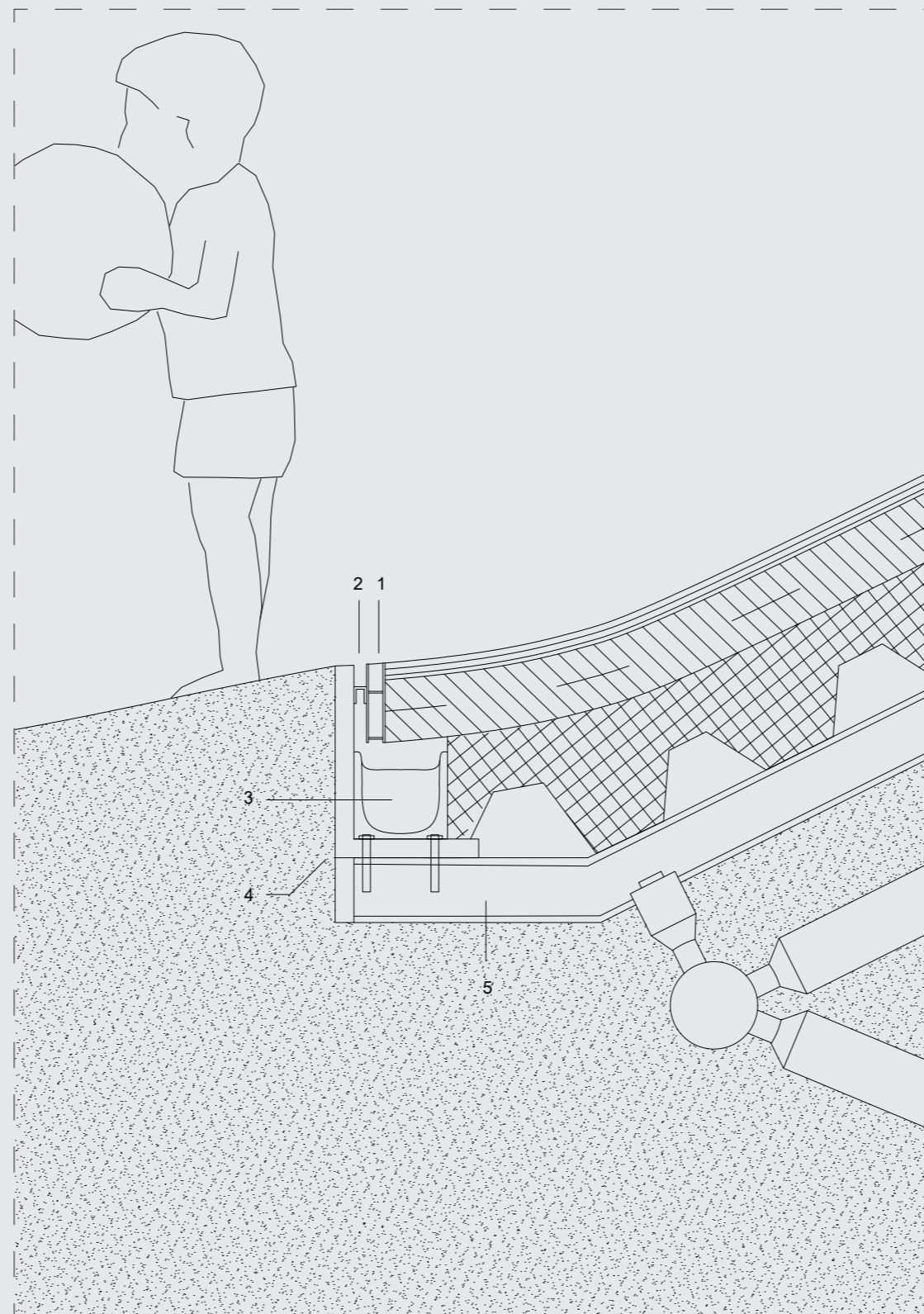
Hole - fence — detail F-F



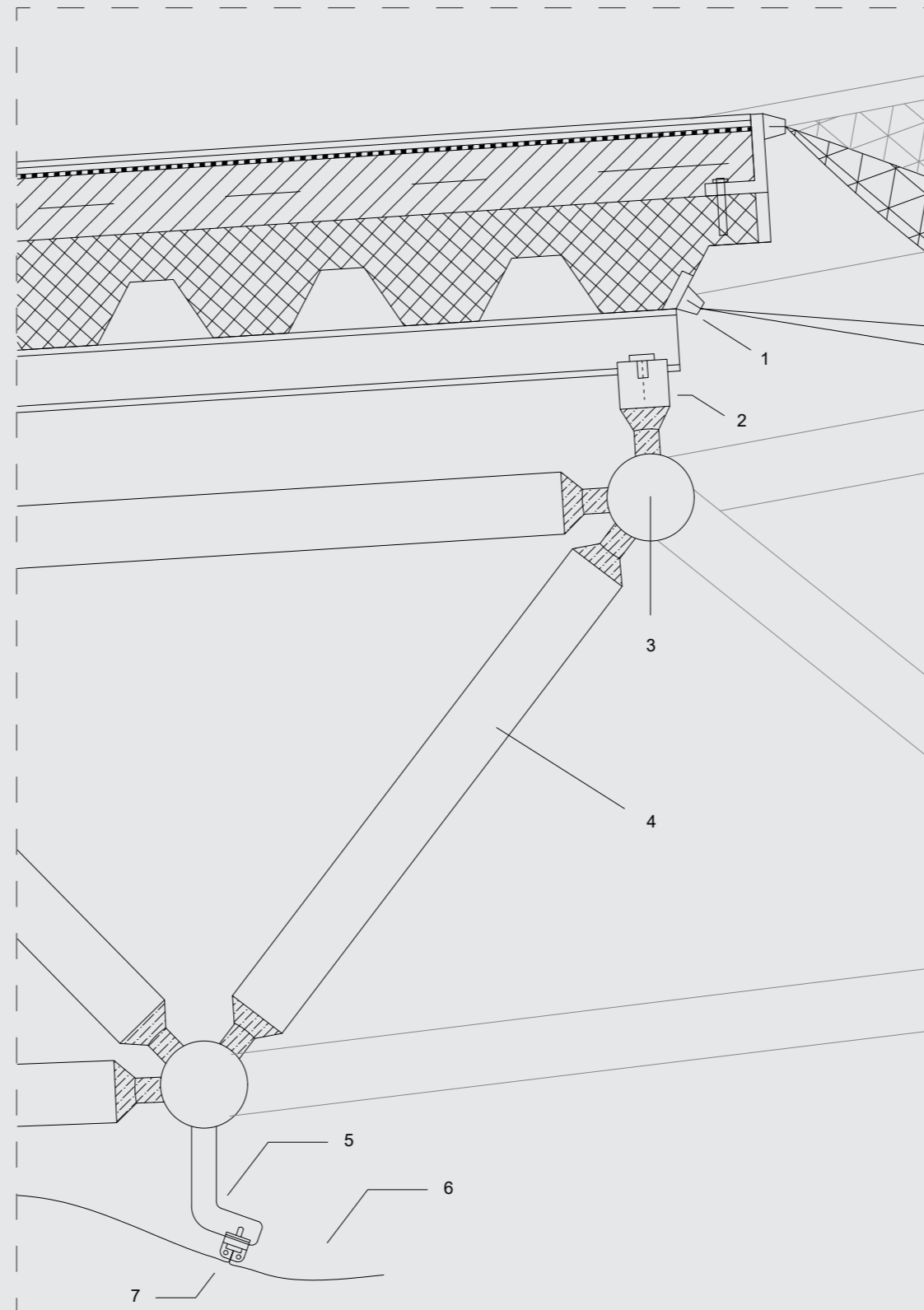




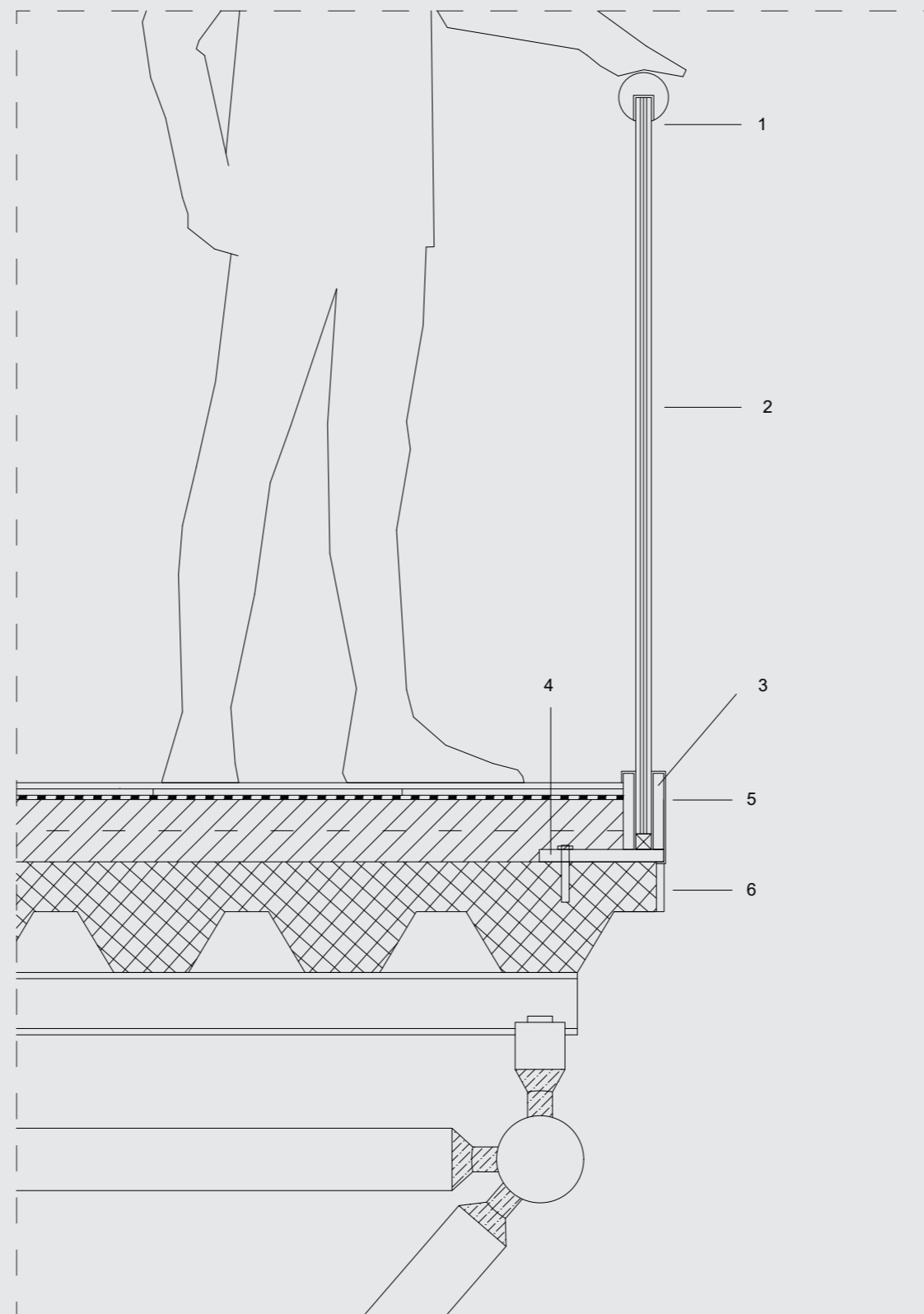
Hole - slope — detail



Hole - net — detail



Hole - fence — detail



Appendix

Strip

— patterns

