



STEDELIJK
METABOLISME

ONTWERPEN VOOR
EEN CIRCULAIRE ECONOMIE

OLV KLIJN - YPE CUPERUS - BOB GELDERMANS - SIEBE BROERSMA

DAAN VITNER

14-03-2018

INHOUD

PROBLEEM

THEORIE

AANPAK

ONTWERP

CONCLUSIE



© SHUTTERSTOCK

MATERIAAL SCHAARSTE



© WWW.MILIEU-VERVUILING.JOUWWEB.NL

PLASTIC SOEP



© TONY GUTIERREZ-AP

DROOGTE

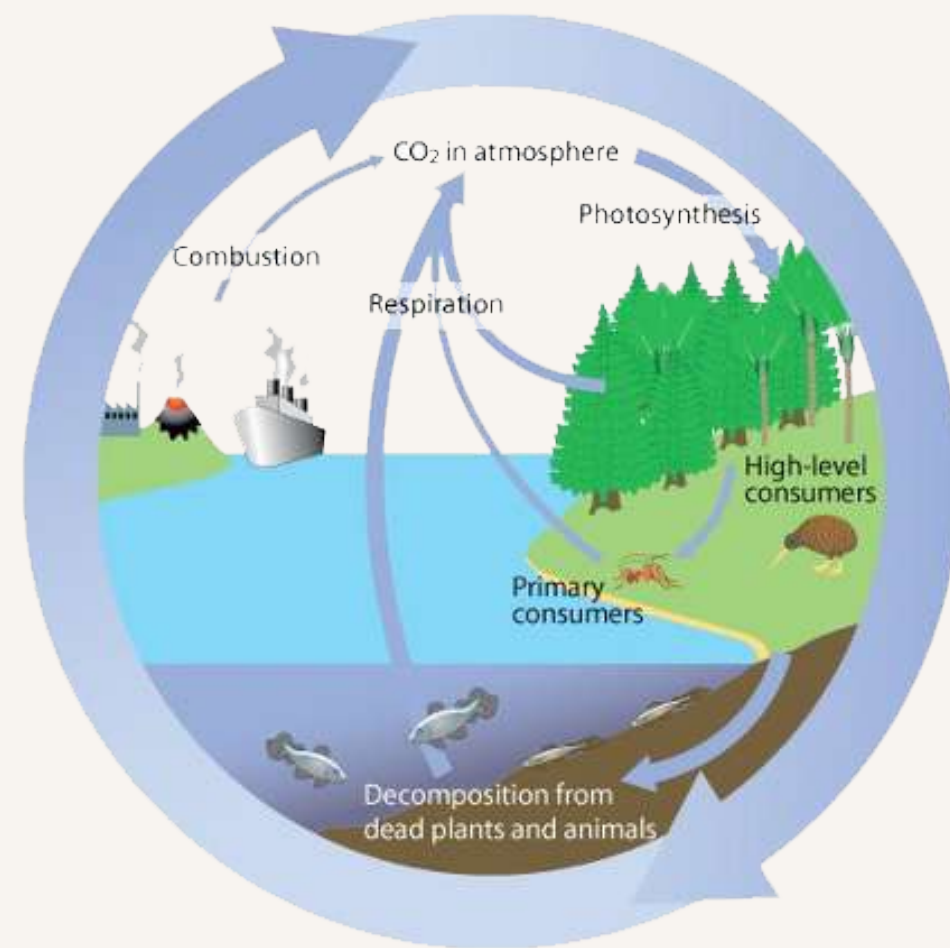


© ROMEO GACAD-AFP-GETTY IMAGES

ONTBOSSING

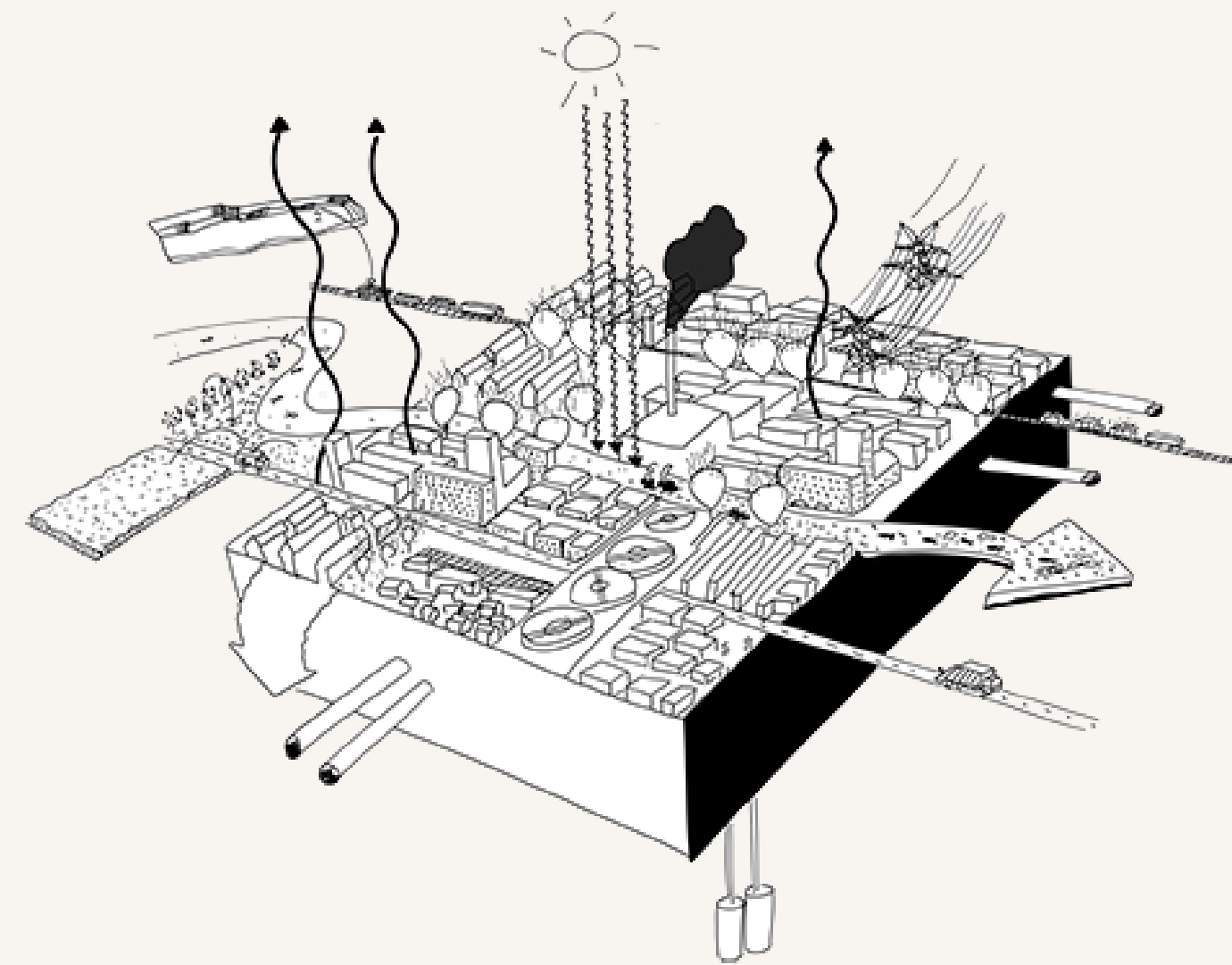


STEDELIJK METABOLISME



© WWW.BIOLOGY-IGCSE.COM

NATUURLIJKE
KOOLSTOF KRINGLOOP



© H+N+S LANDSCAPE ARCHITECTS

STEDELIJKE KRINGLOPEN

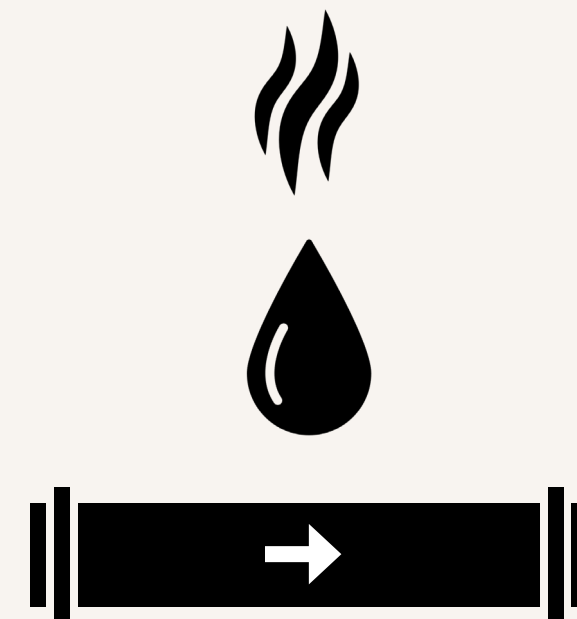
OP IEDERE PLAATS IN DE STAD IS HET MOGELIJK
OM MET RESTPRODUCTEN EEN NIEUW GEBOUW TE MAKEN
/ FACILITEREN

SYMBIOSE



© WWW.ONLINEGALERIJ.NL

HERMITAGE

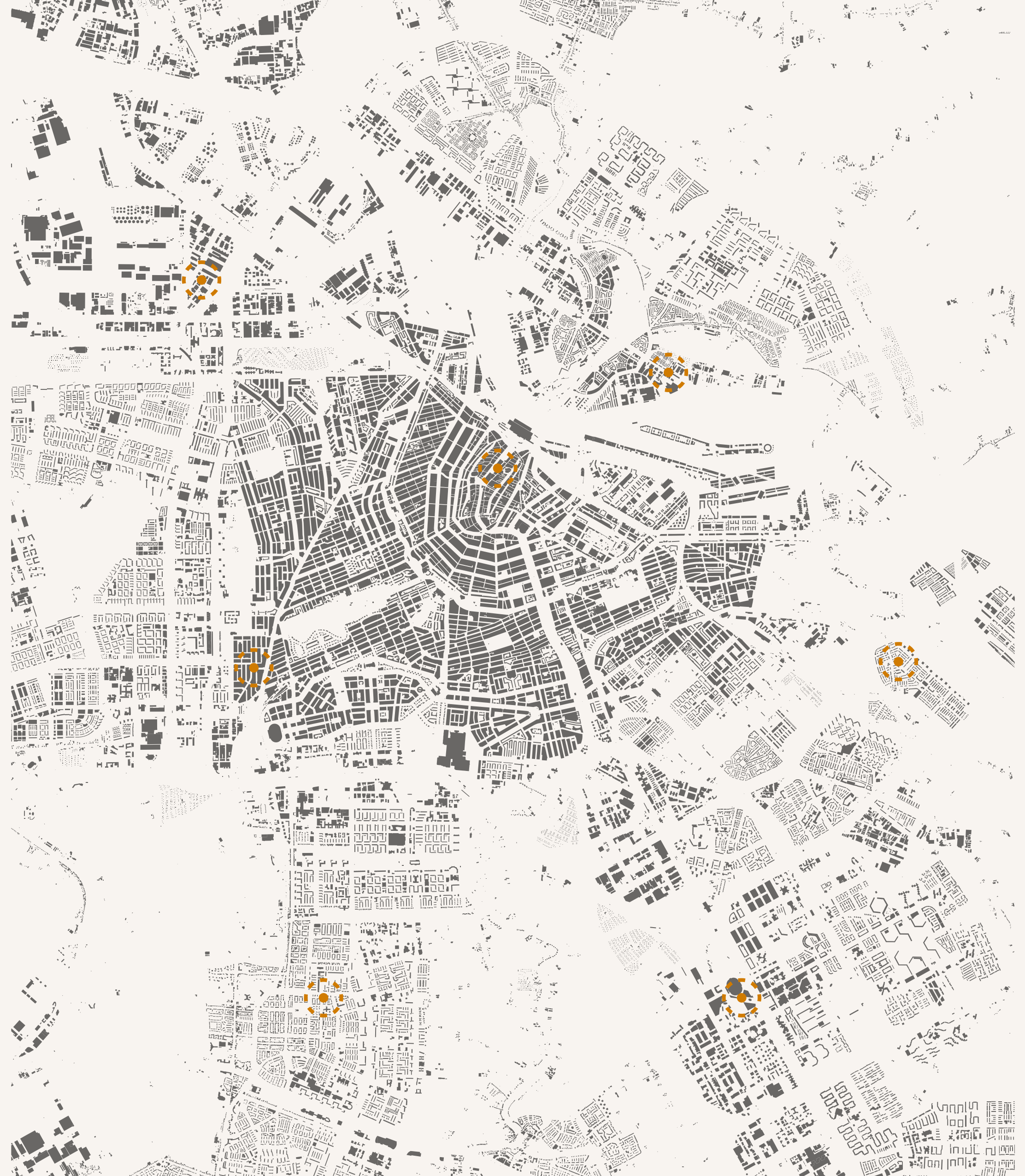


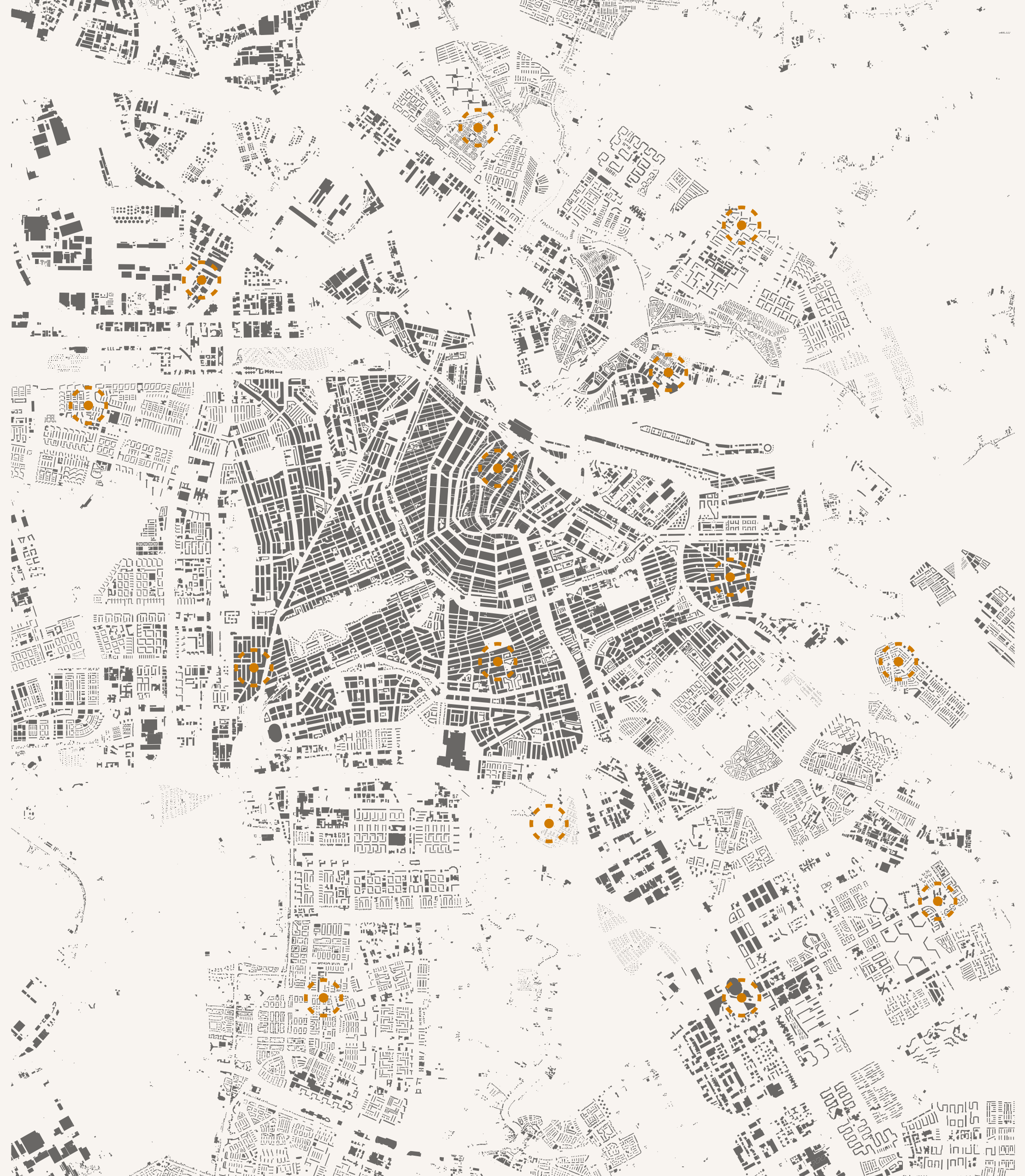
© WWW.PICHIU.COM

HORTUS BOTANICUS

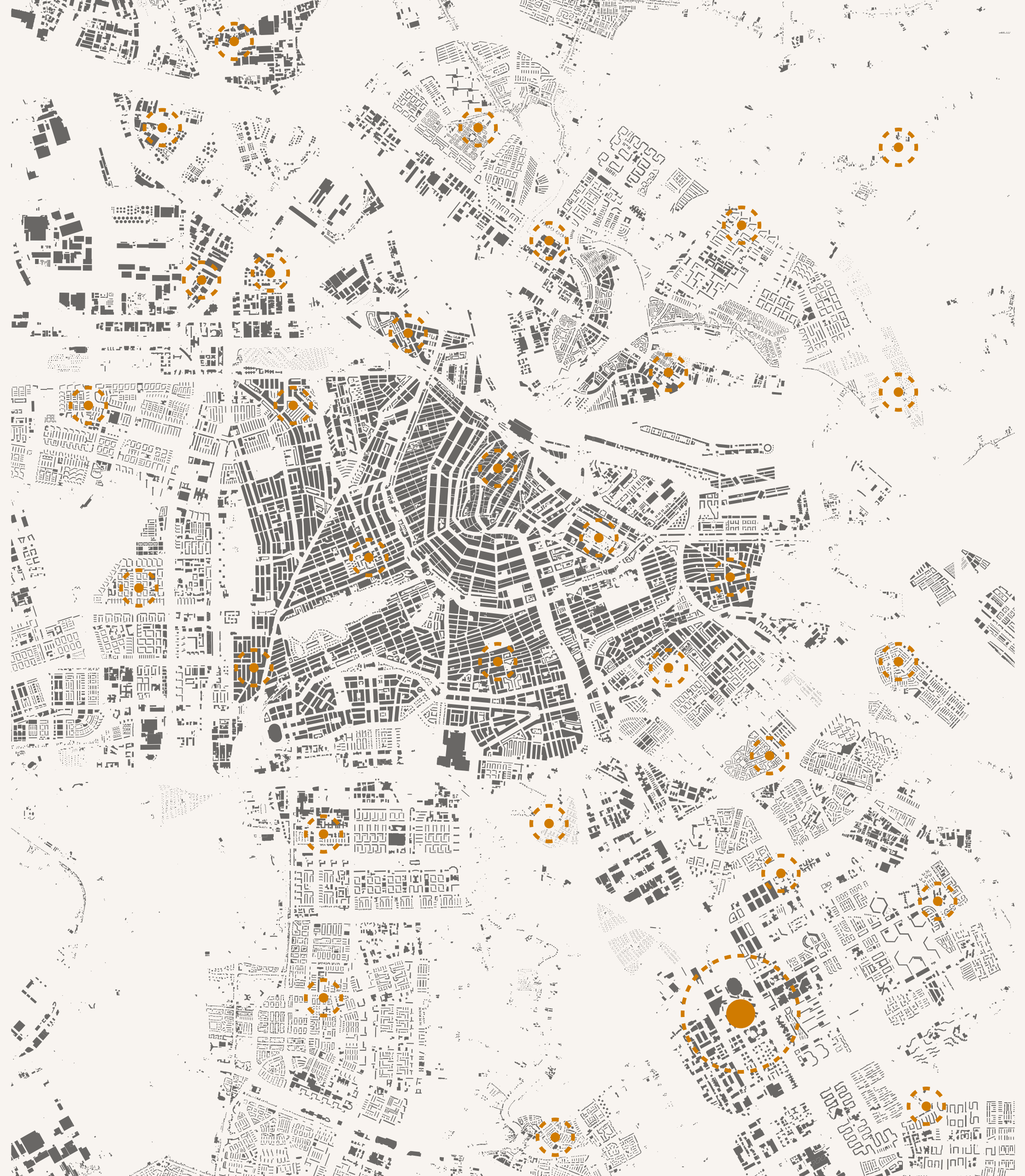
SYNERGIE

“EFFECT VAN DE SAMENWERKING IS GROTER DAN WAT DE AFZONDERLIJKE PARTIJEN INDIVIDUEEL KUNNEN BEREIKEN.”

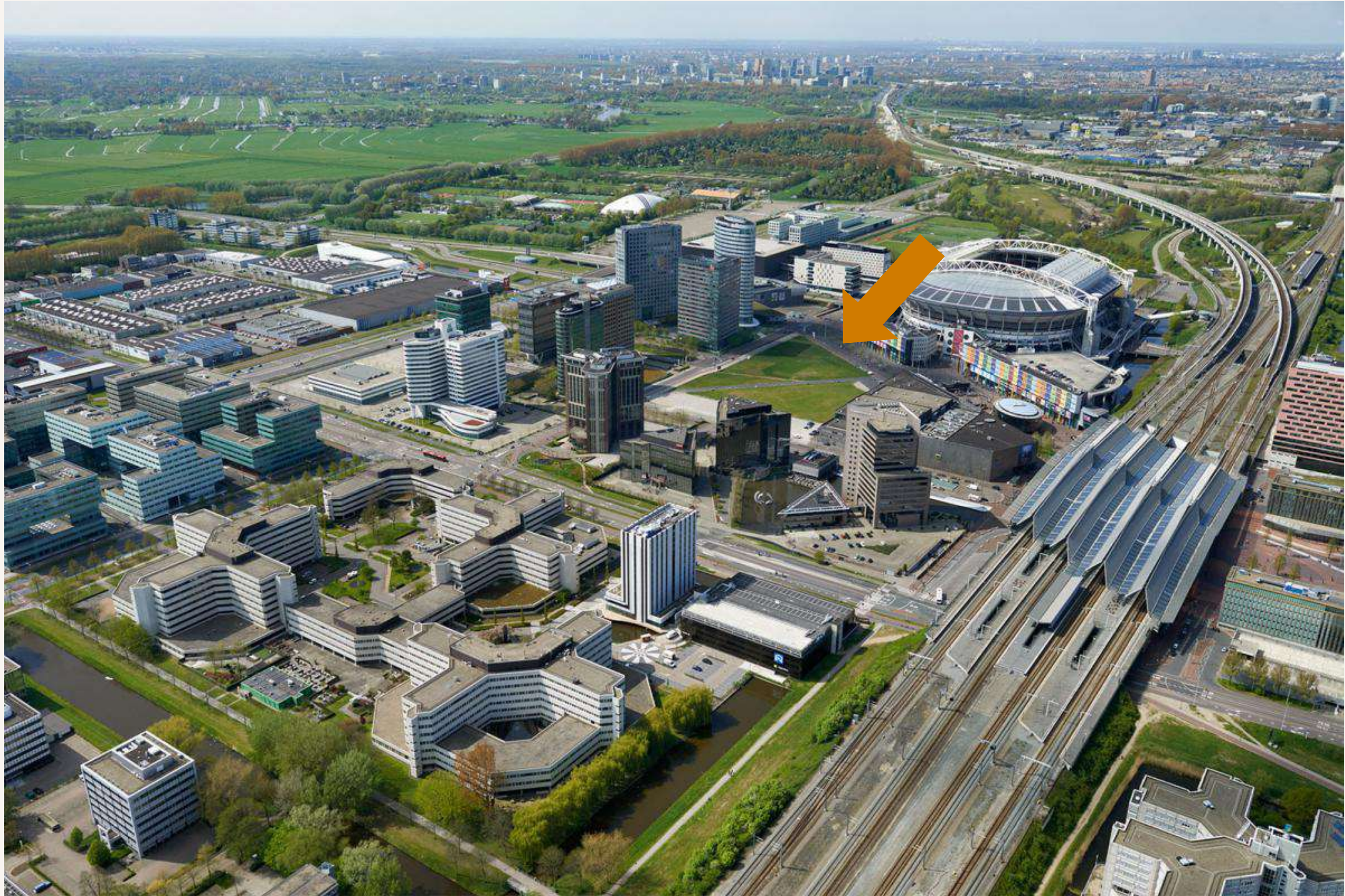




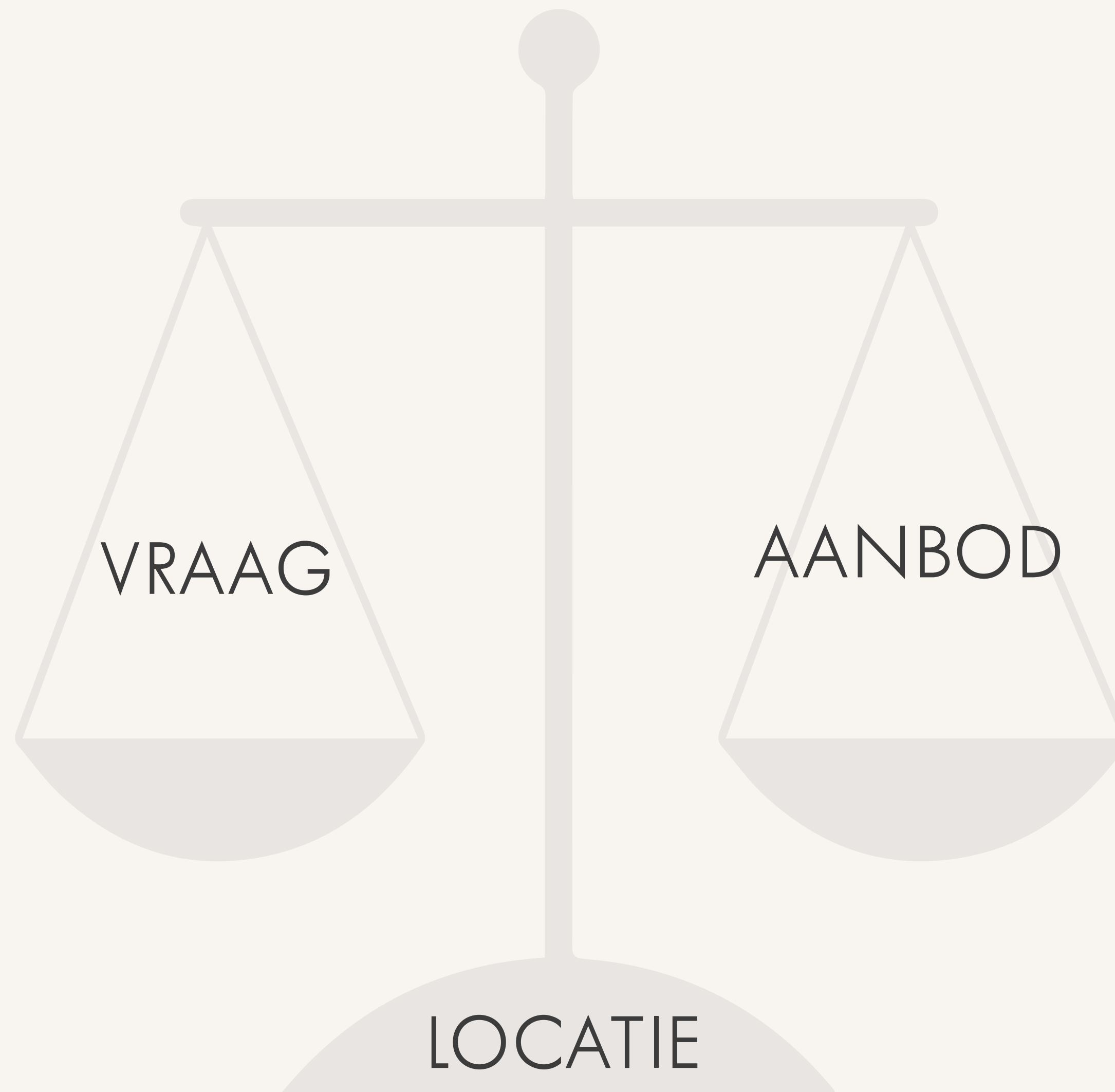










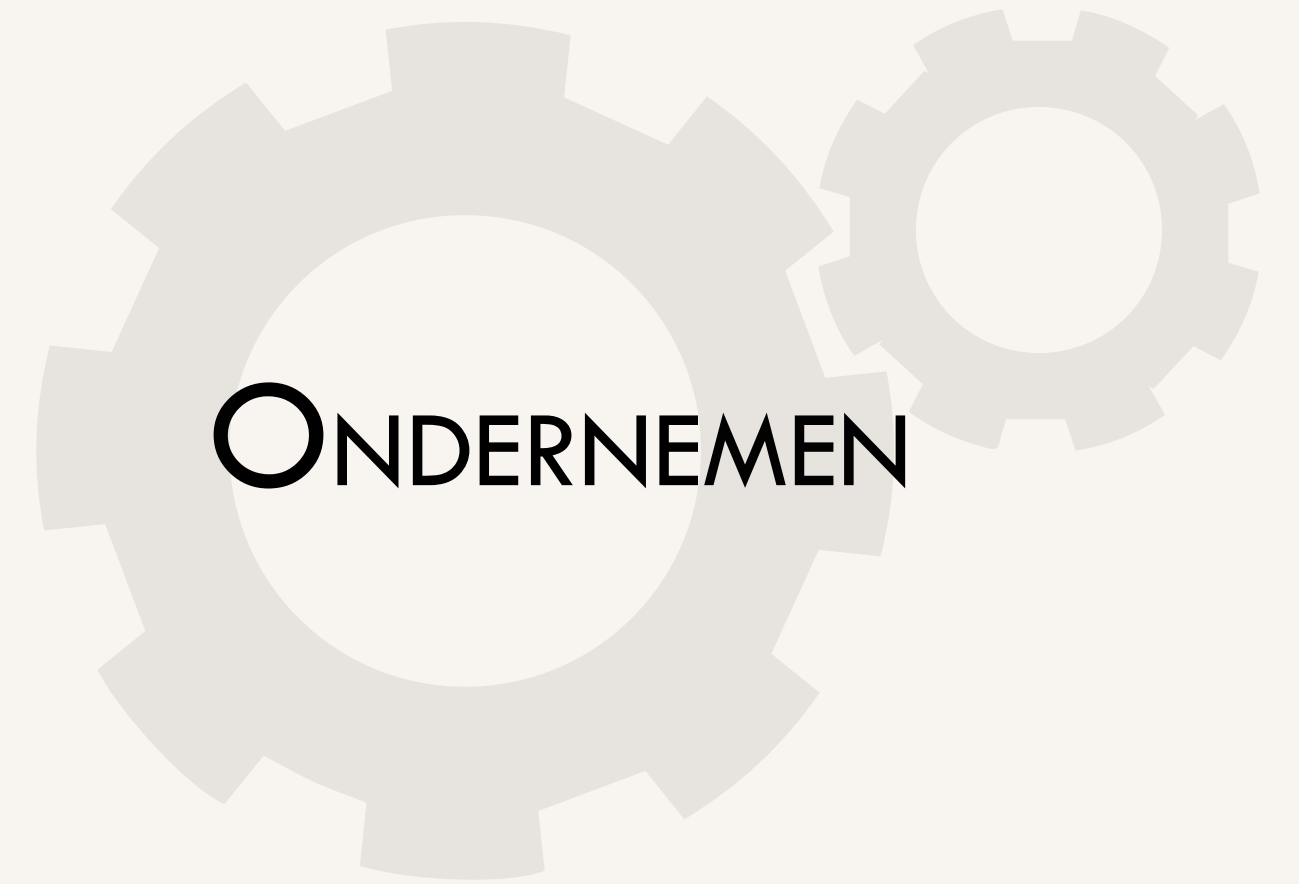




WERK



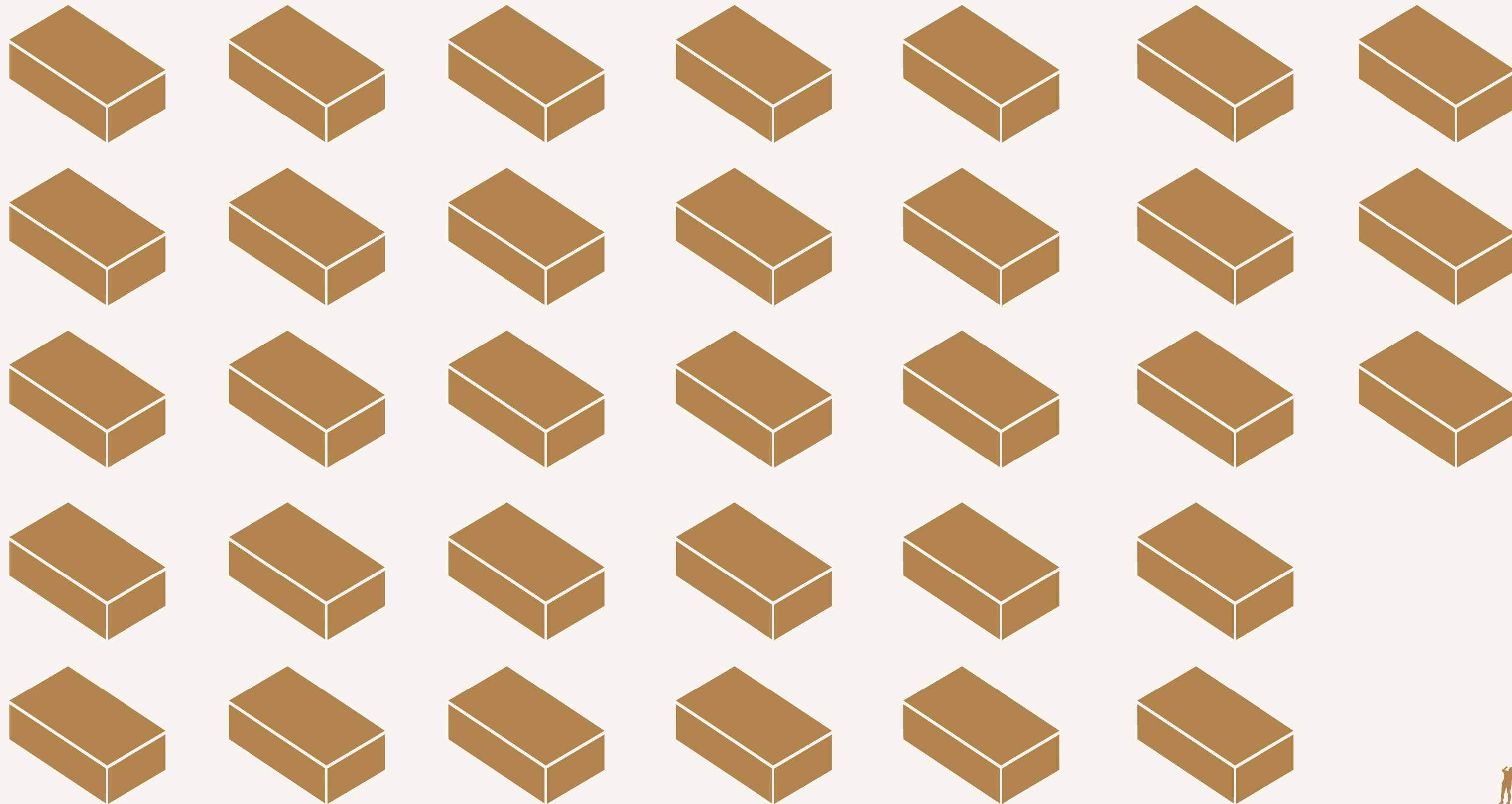
PARTICIPATIE



ONDERNEMEN

83.000 M^3 OPSLAG

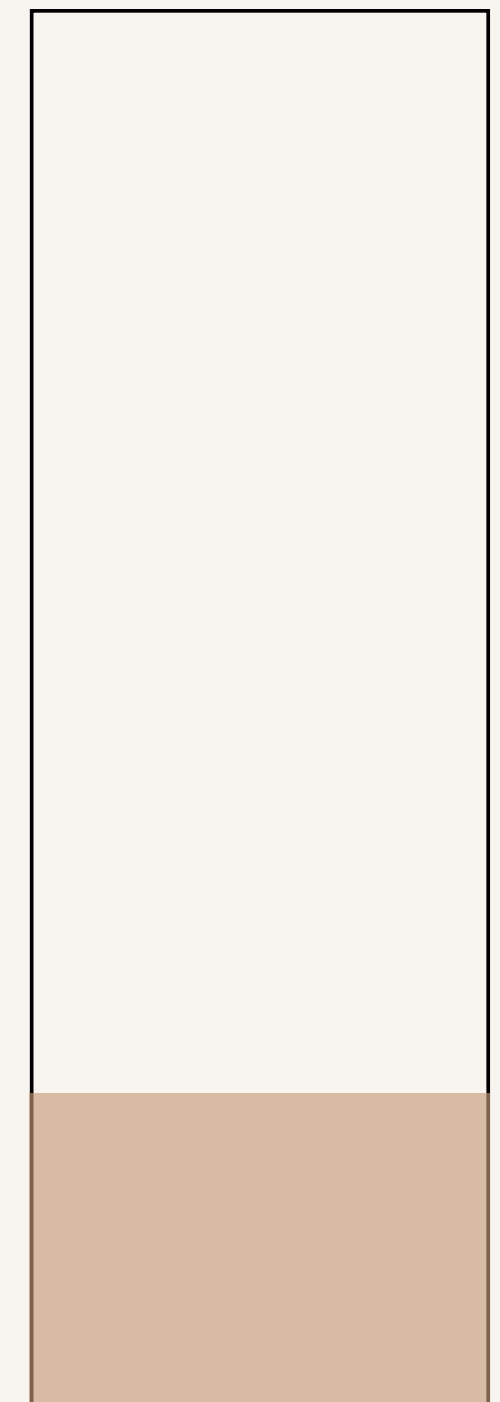
33 OLYMPISCHE ZWEMBADEN





1 5 0 m

Potentiële
opslagruimte

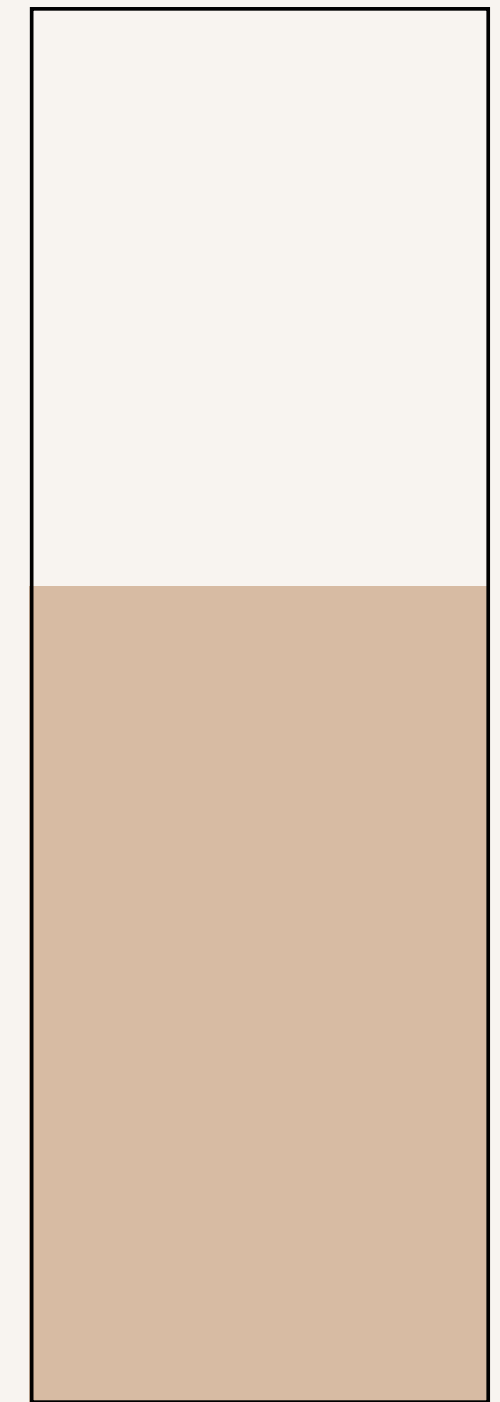


19 %



5 0 0 m

Potentiële
opslagruimte

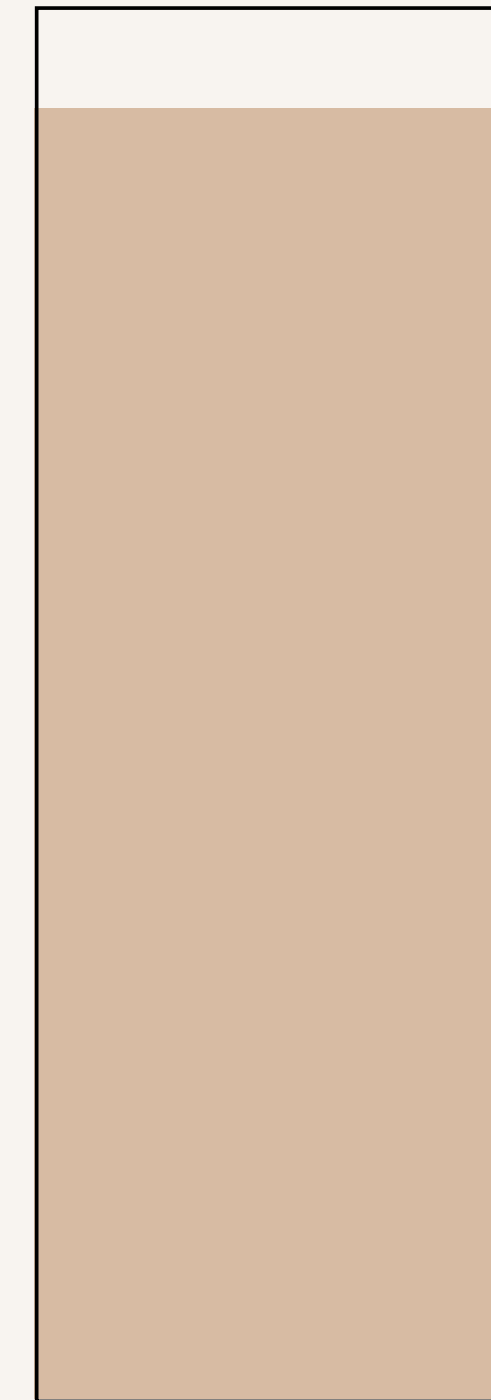


63 %



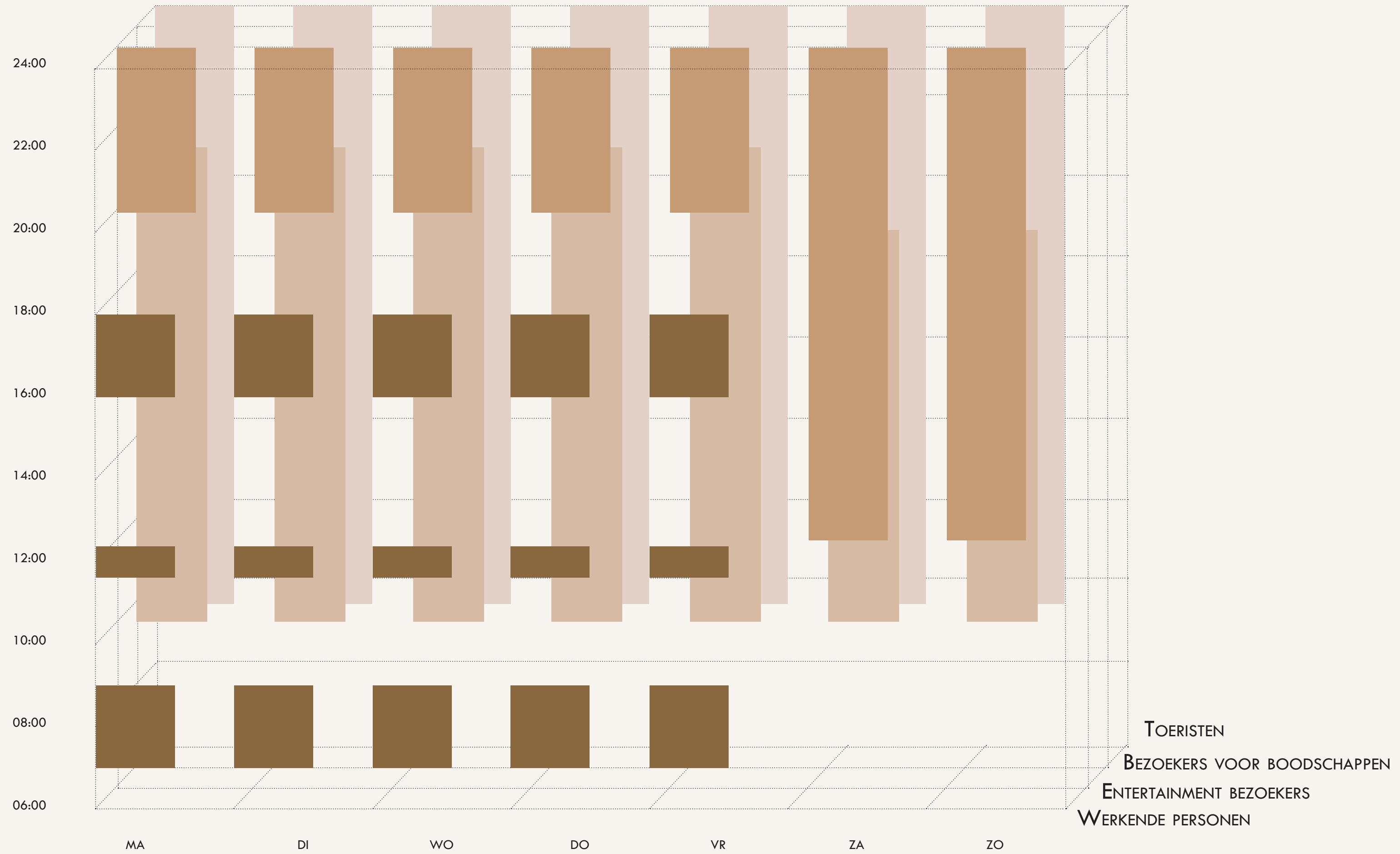
7 5 0 m

Potentiële
opslagruimte



92 %

DOELGROEPEN





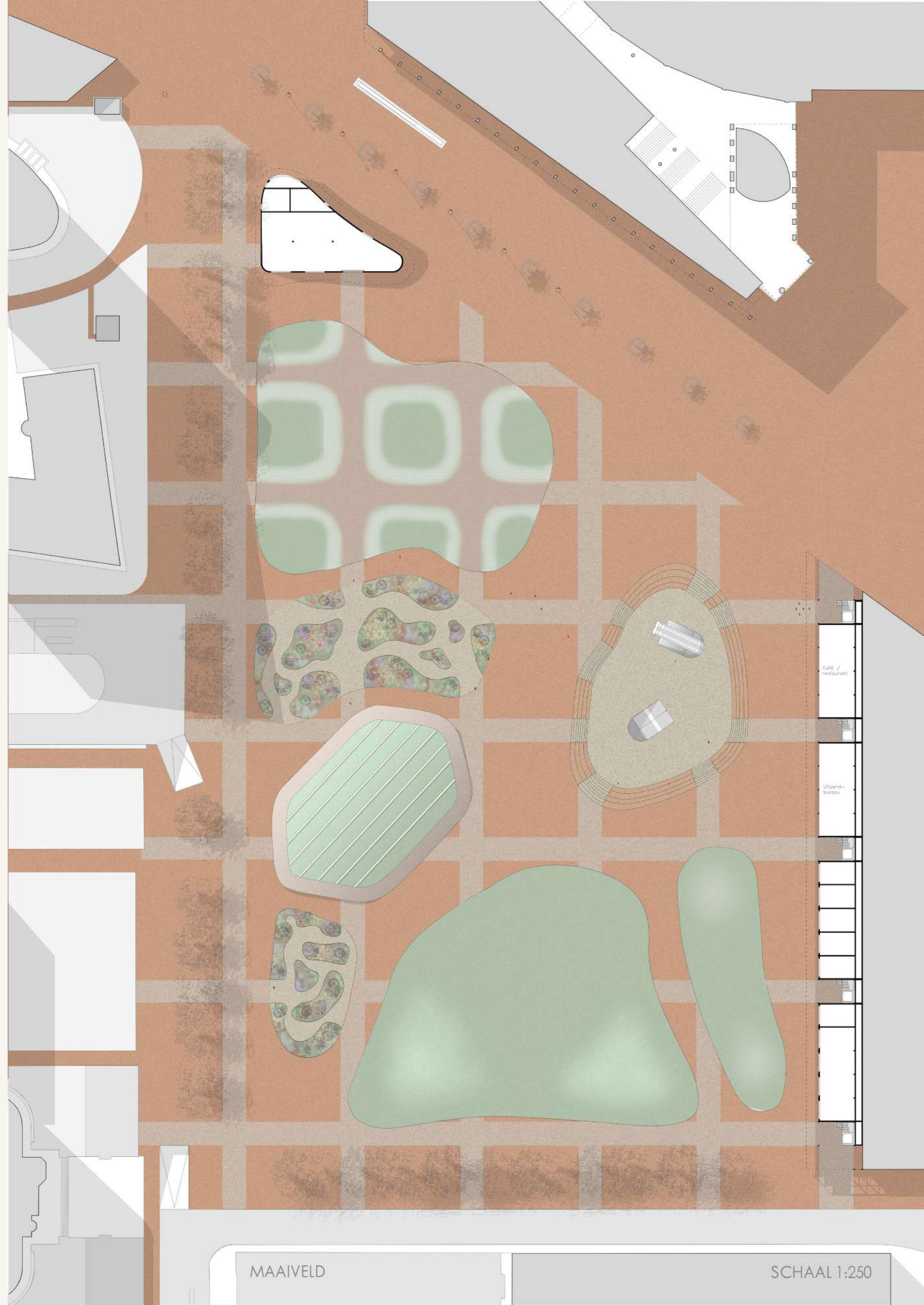
© WWW.ARENAPARK.NU

RANDVOORWAARDEN

INRICHTEN VAN OPENBARE RUIMTE

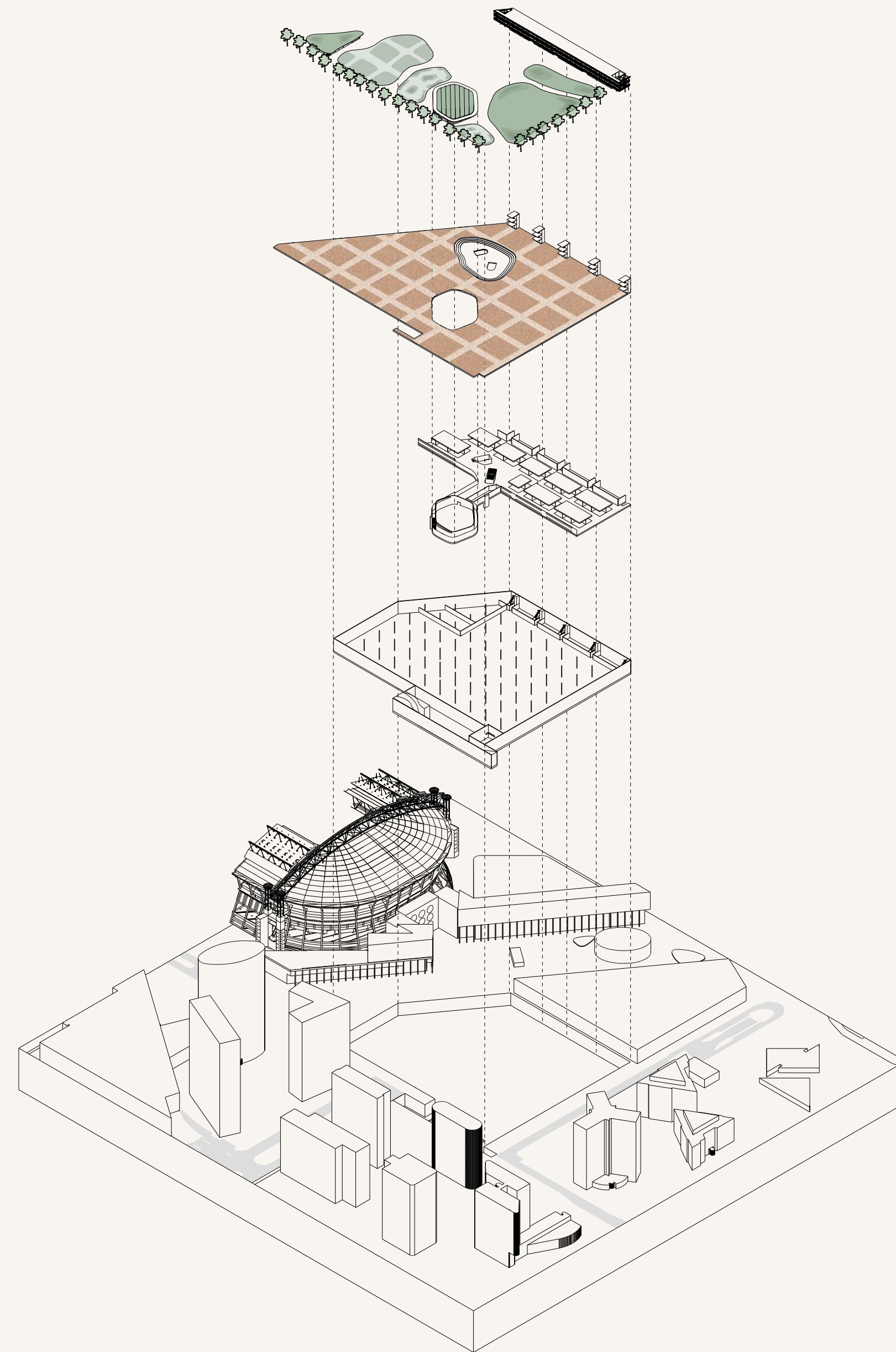
CREËREN VAN STEDELIJKE STRUCTUUR

BEHOUD VAN WAARDEVOL PLEIN



MAAIVELD

SCHAAL 1:250



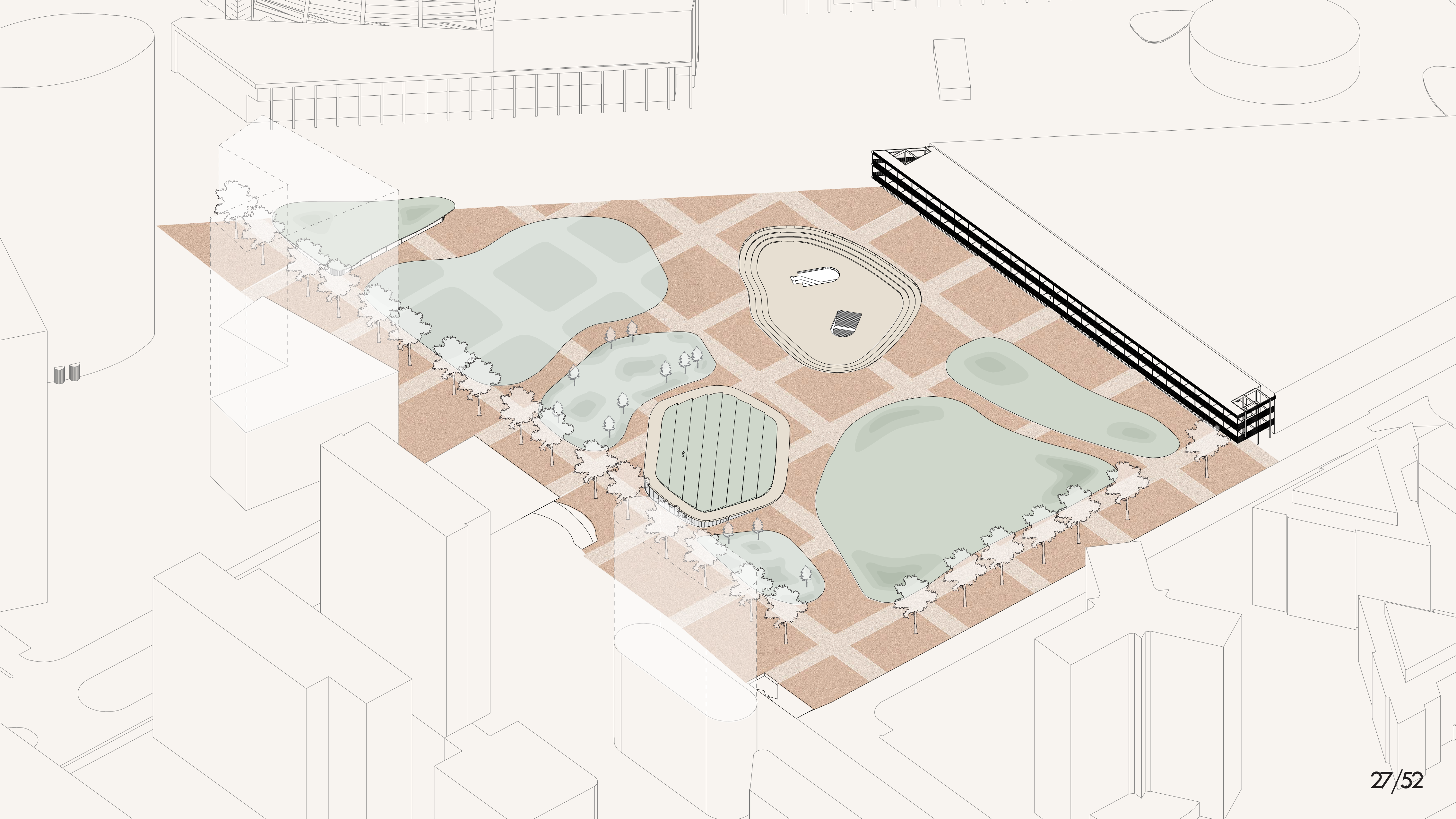
Groenstructuur

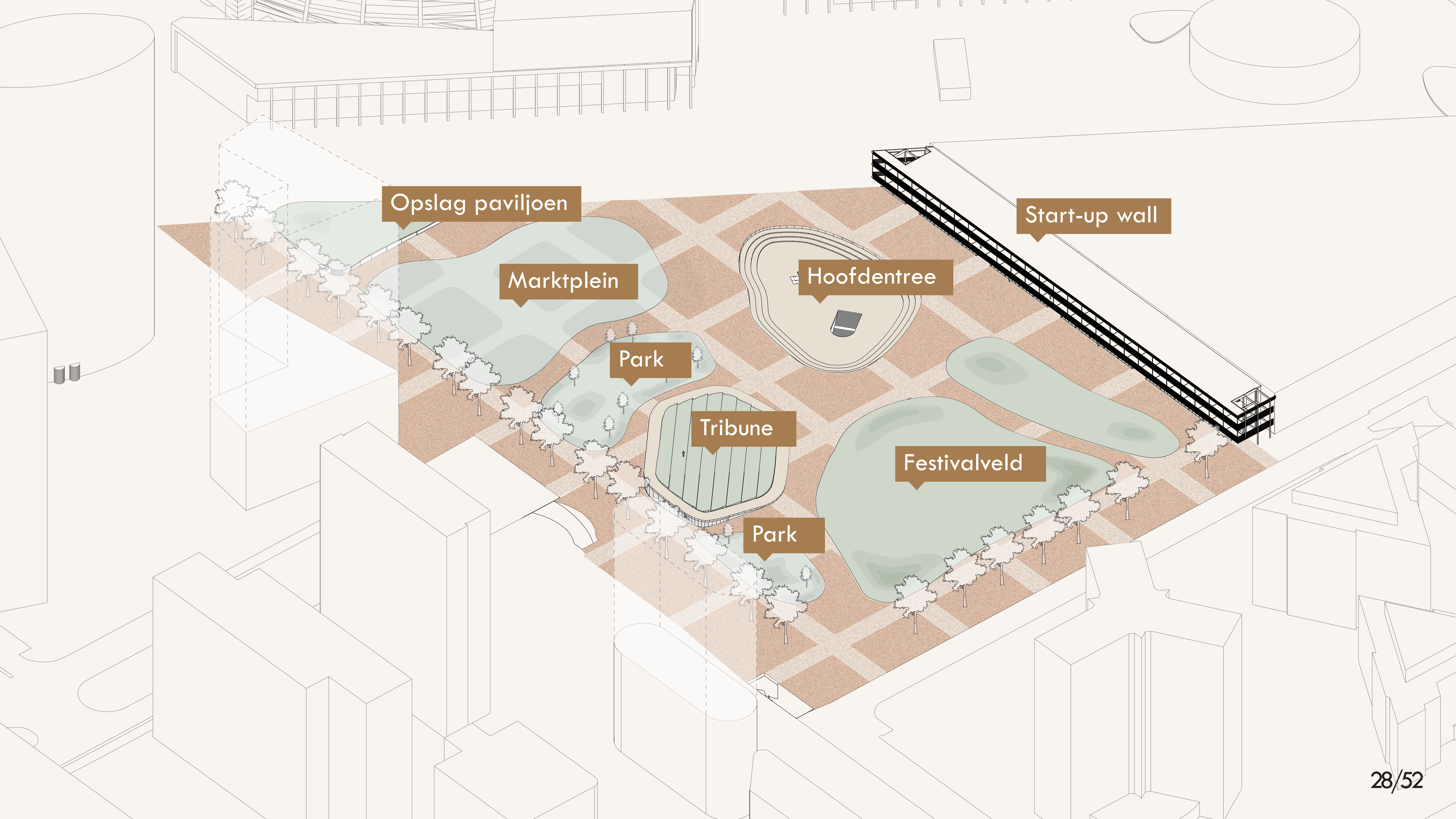
Maaiveld

Winkels &
expositieruimte

Magazijn

Omgeving





Opslag paviljoen

Marktplein

Park

Tribune

Park

Hoofdentree

Festivalveld

Start-up wall



Werkplaats

Start-up wall

Hoofdentree

Winkels

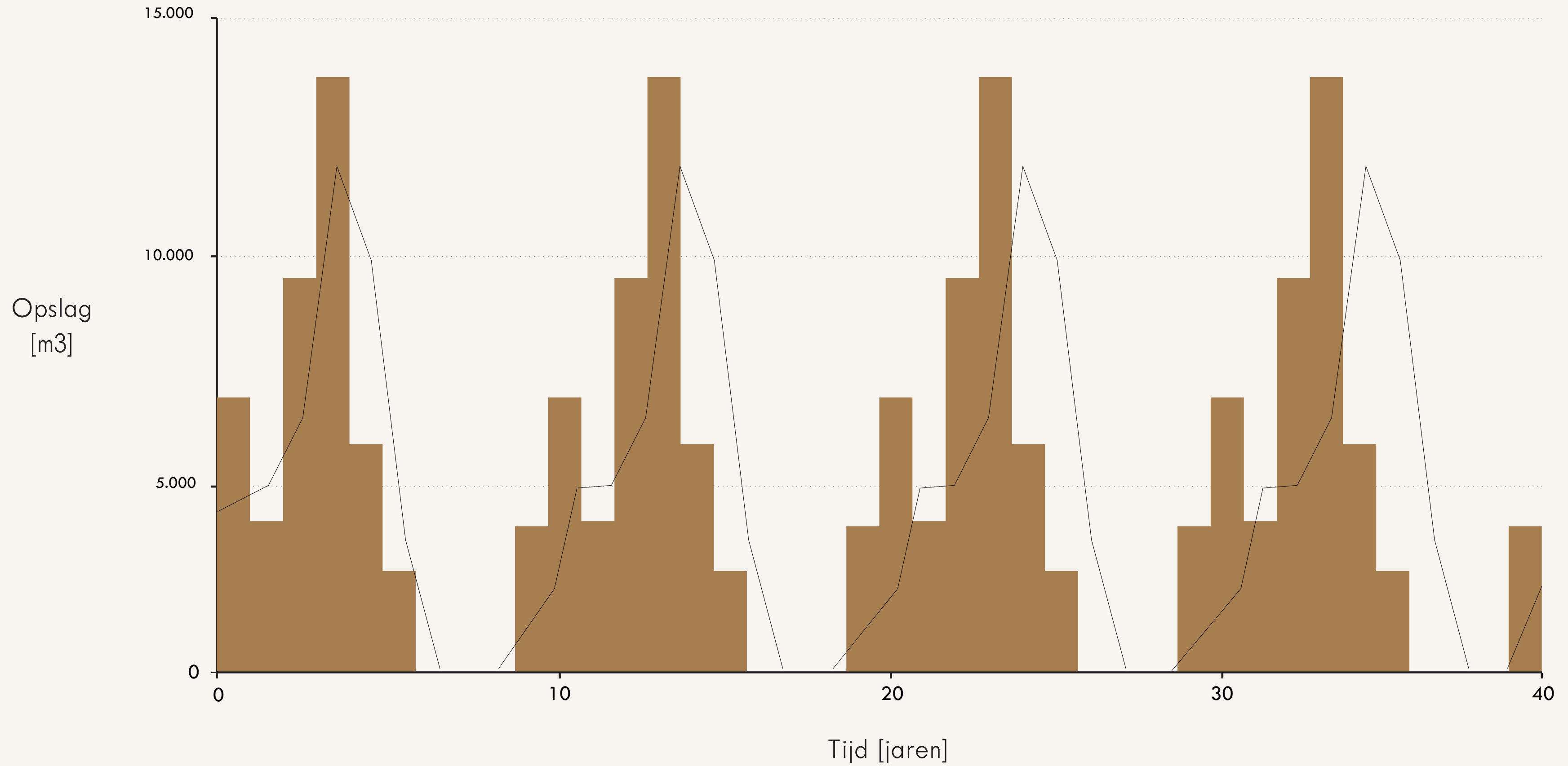
Expositieruimte

Magazijn

Transport docks

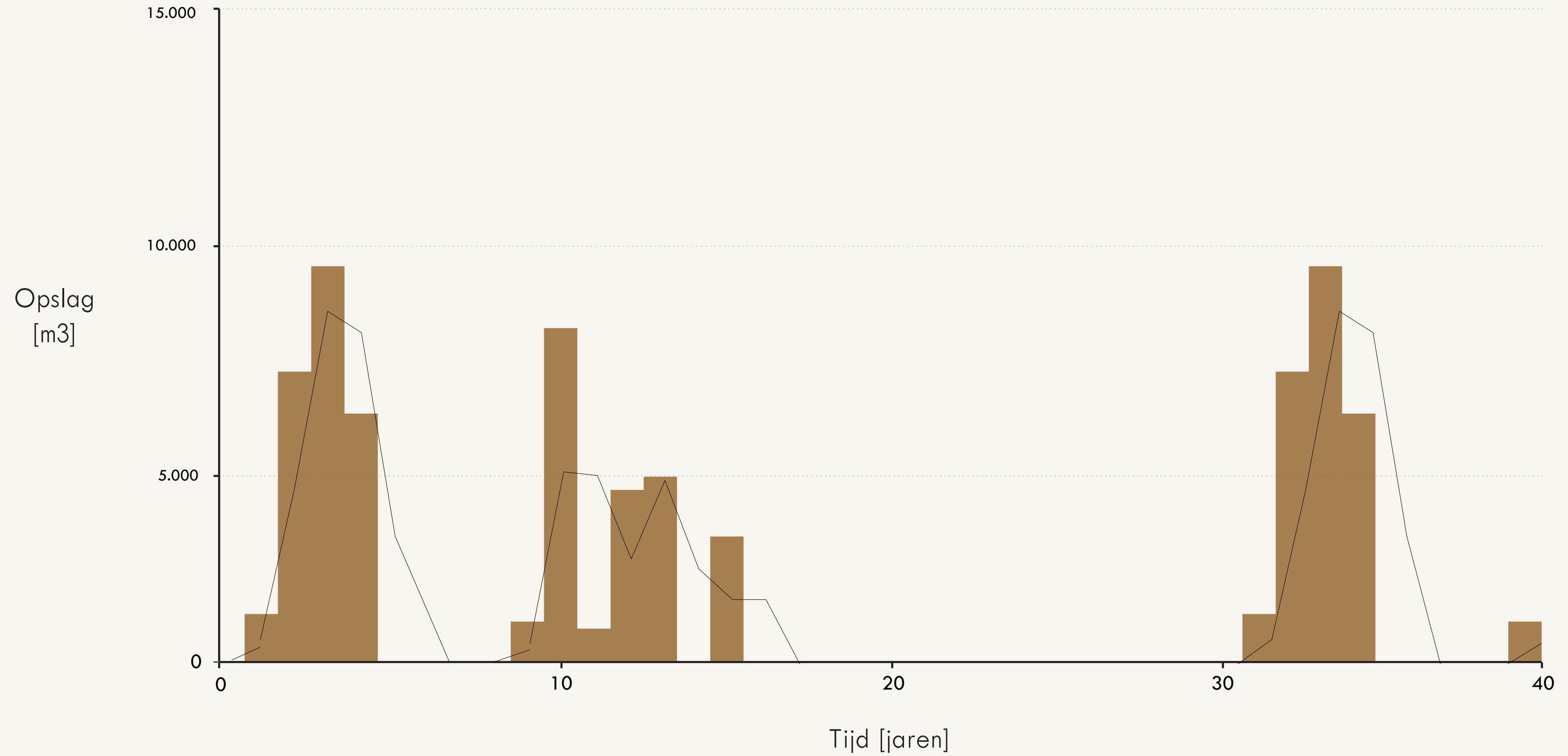
MEUBILAIR

AFSCHRIJFPERIODE: 10 JAAR



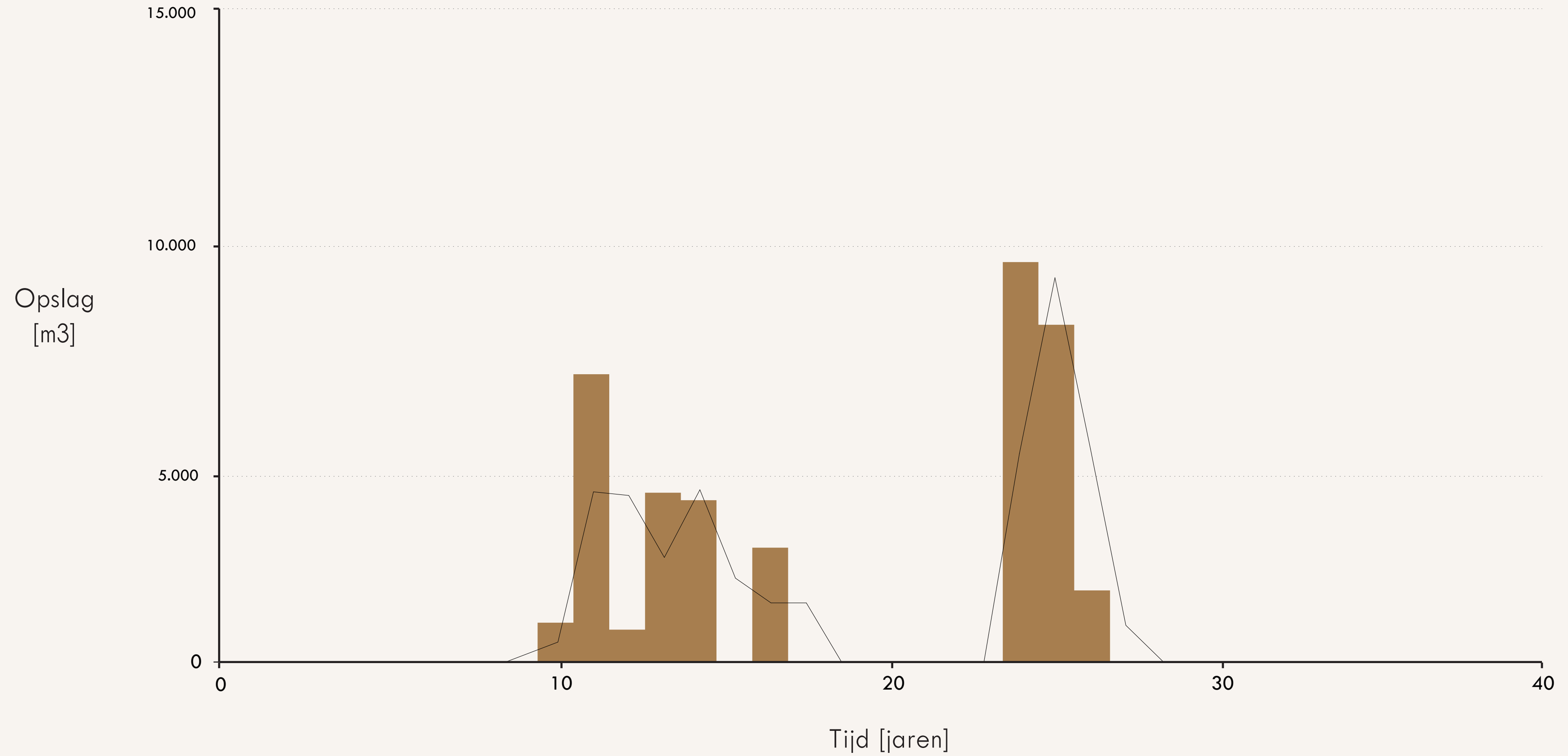
INBOUW

AFSCHRIJFPERIODE: 20 JAAR

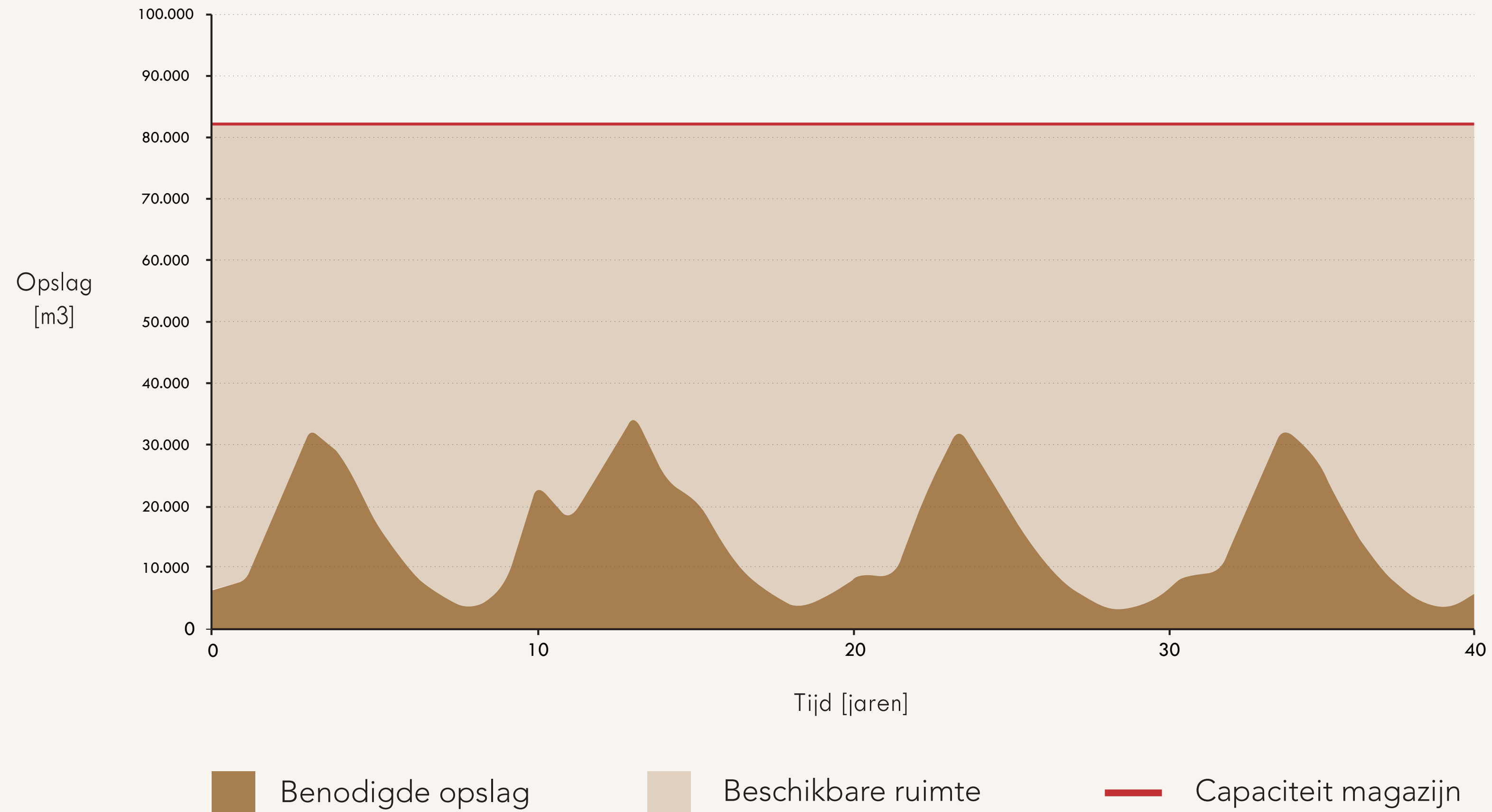


GEVEL

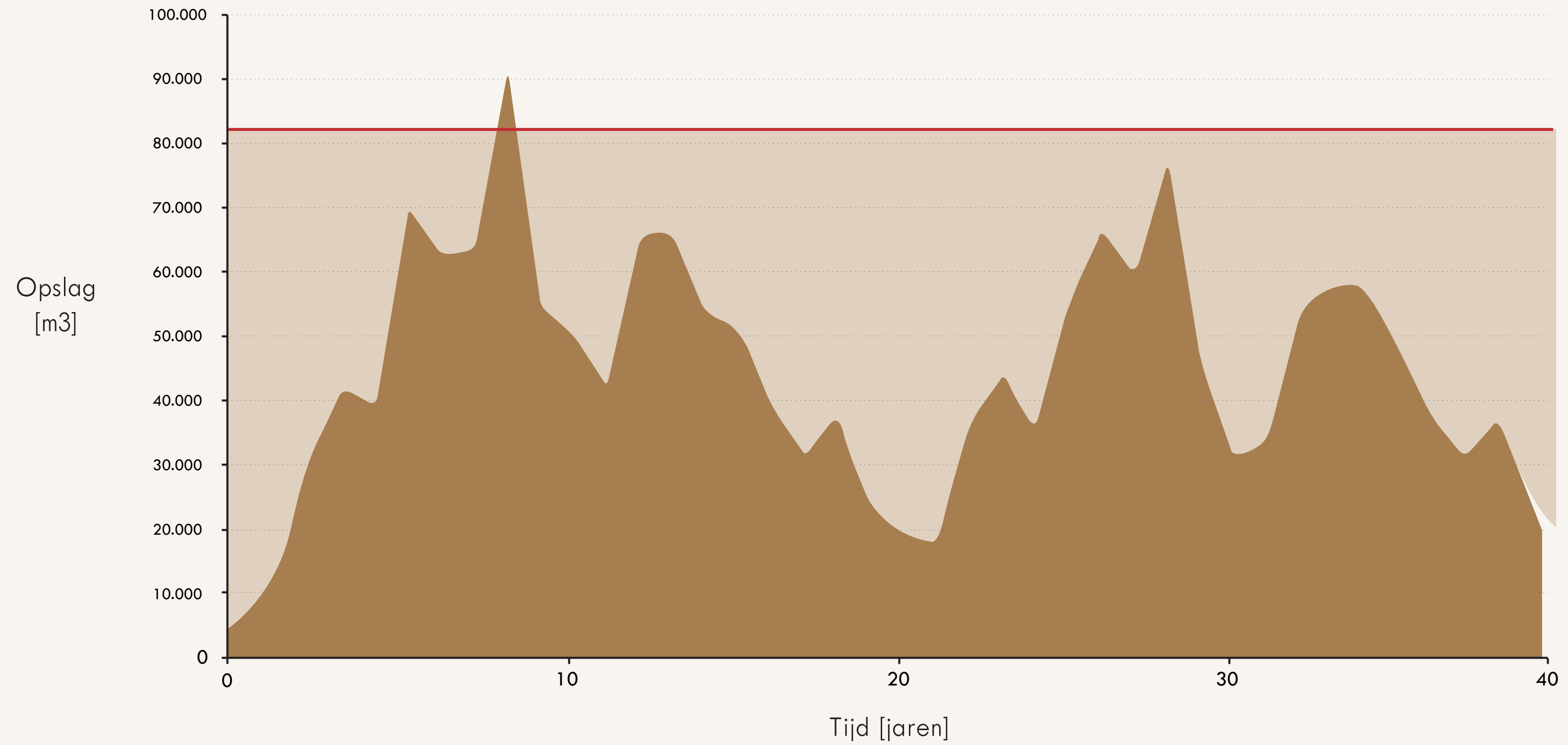
AFSCHRIJFPERIODE: 40 JAAR



150 METER ROND ARENAPARK

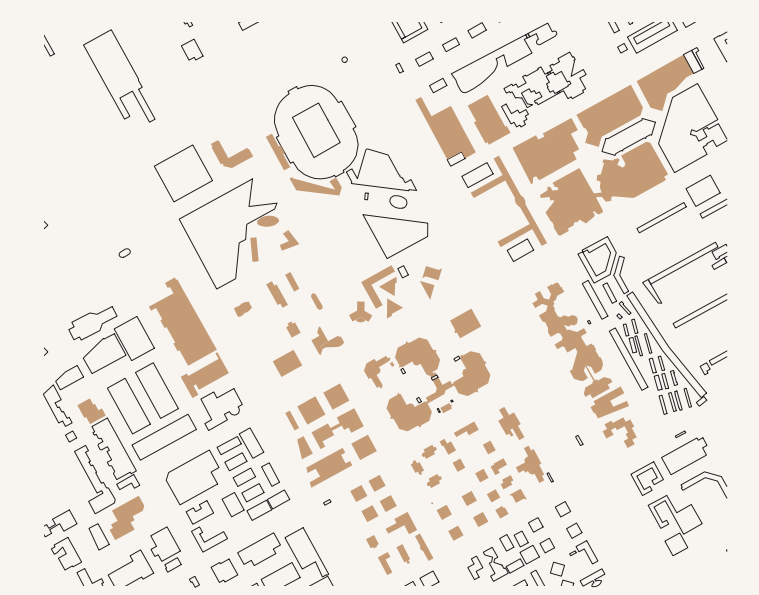
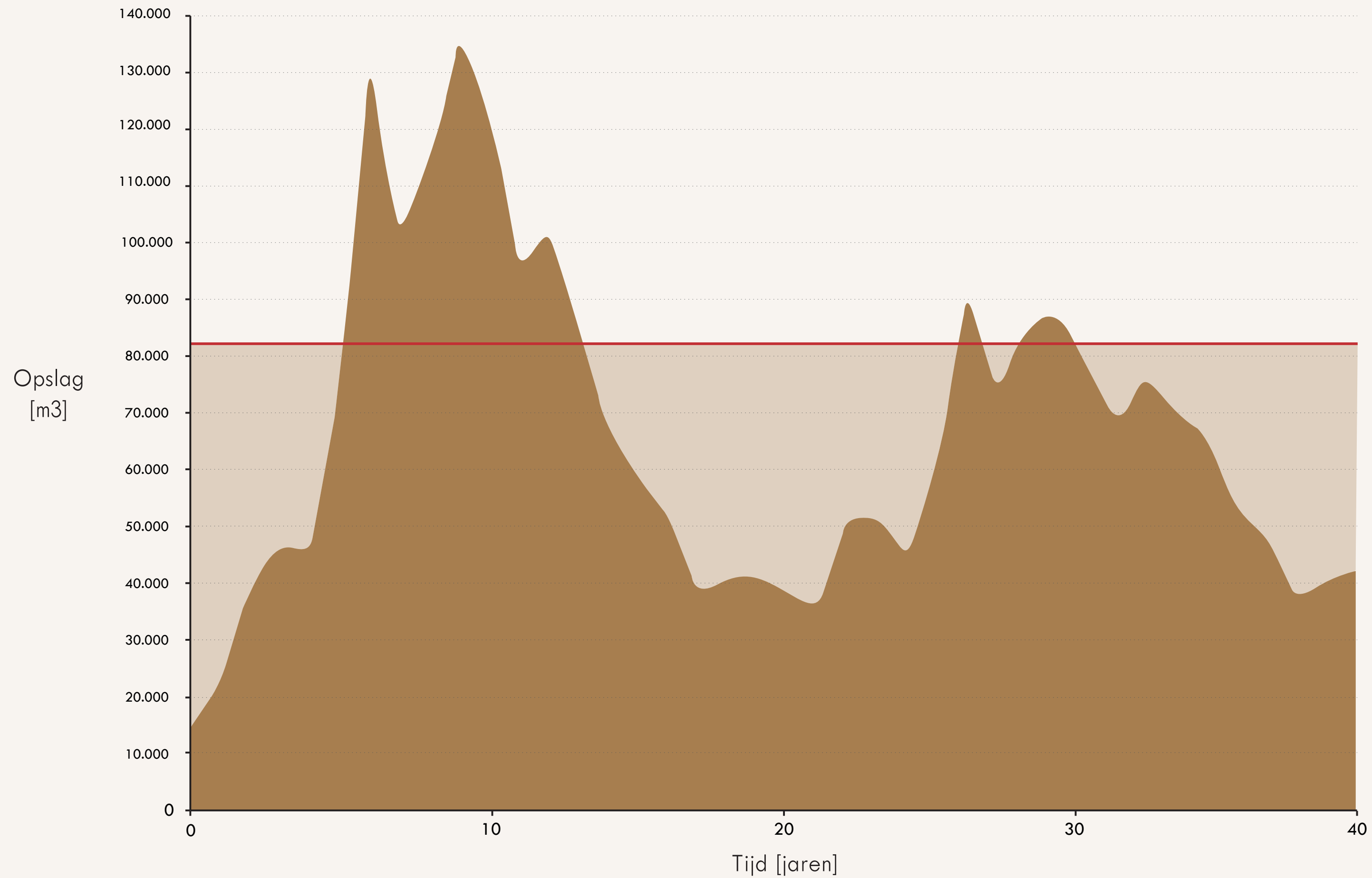


500 METER ROND ARENAPARK



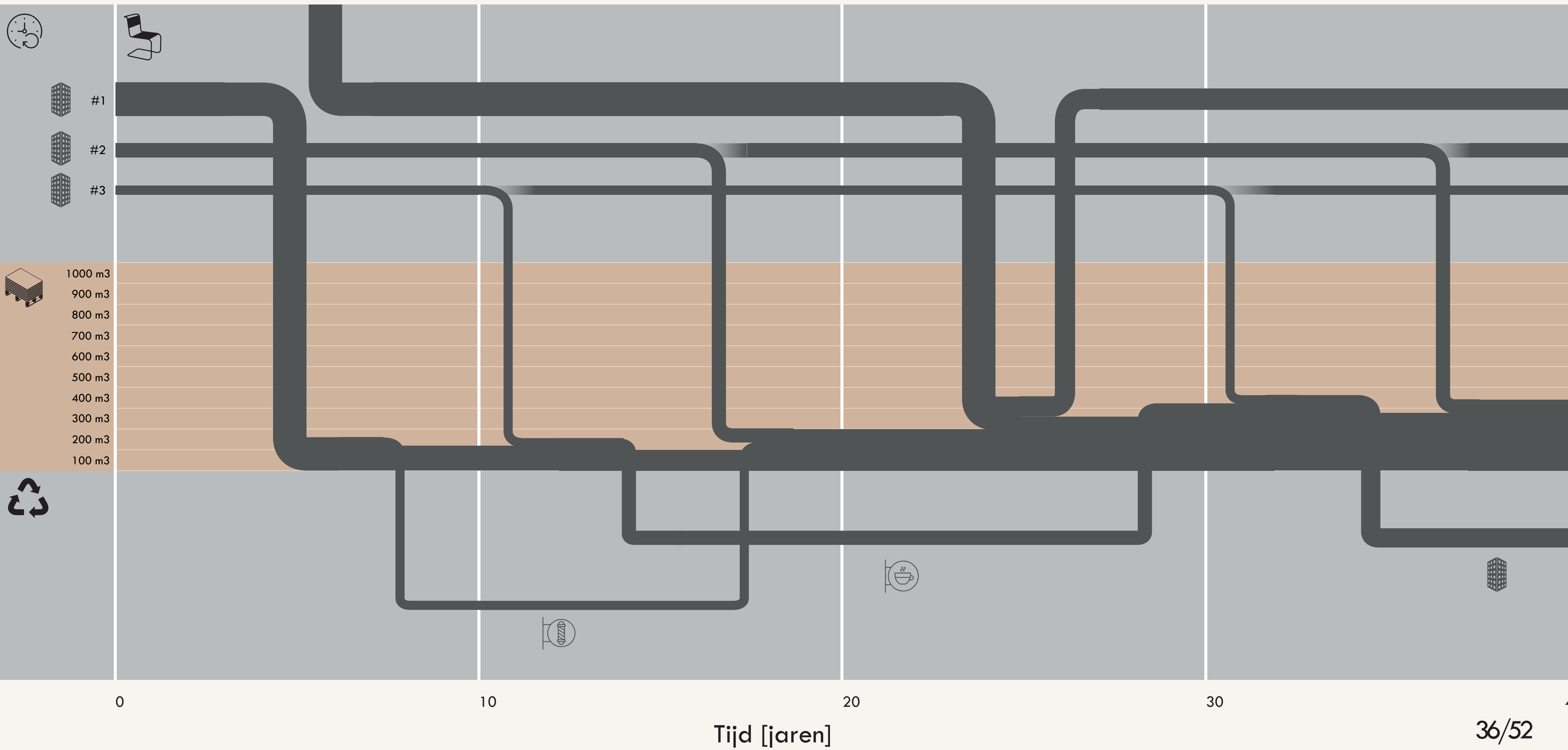
Benodigde opslag Beschikbare ruimte Capaciteit magazijn

750 METER ROND ARENAPARK



Benodigde opslag Beschikbare ruimte Capaciteit magazijn

Aankoop nieuw
meubilair



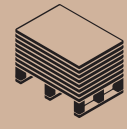
#1



#2



#3



1000 m³

900 m³

800 m³

700 m³

600 m³

500 m³

400 m³

300 m³

200 m³

100 m³



0

10

20

30

Tijd [jaren]

36/52

MEUBILAIR (2544 M3)

INBOUW (3868 M3)

GEVEL (741 M3)

Werkplekken
1562 m3

Bureaus
125 m3

Stoelen
244 m3

Kasten
746 m3

Computers
91 m3

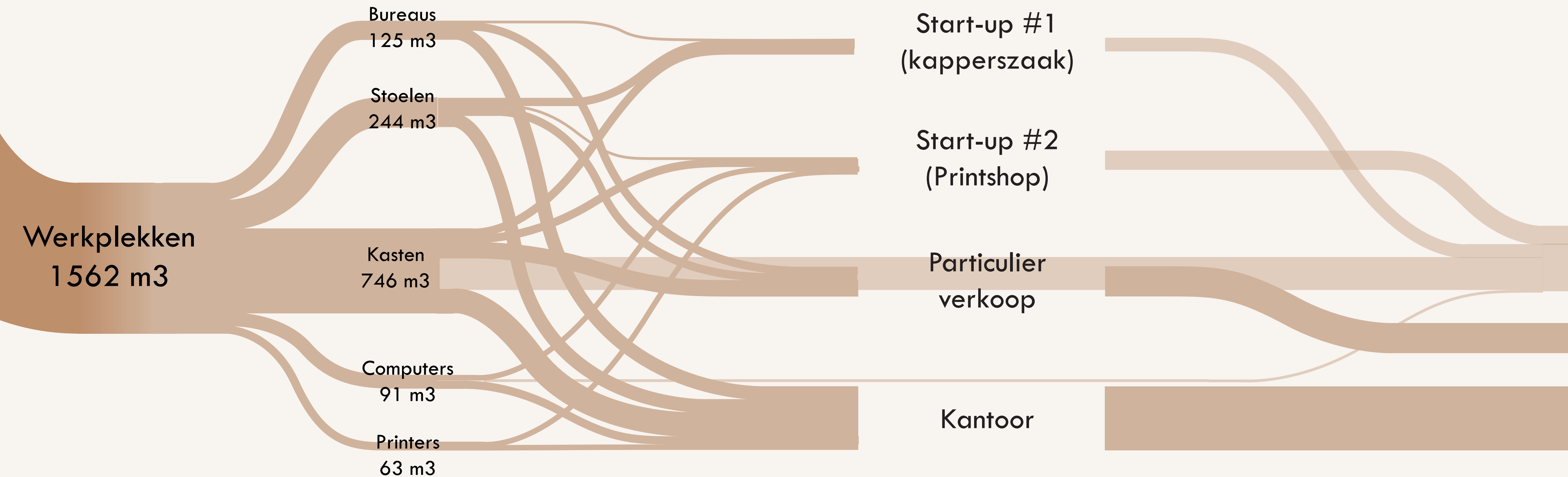
Printers
63 m3

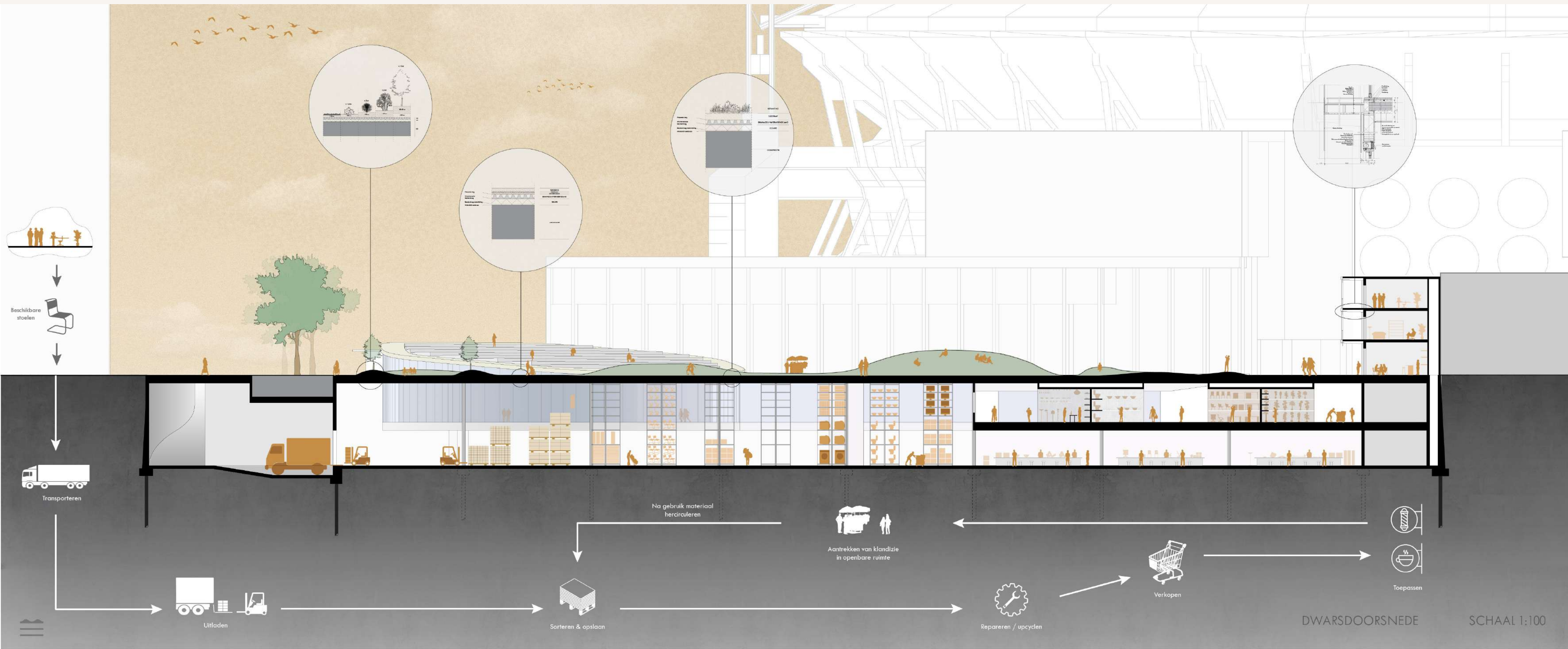
Start-up #1
(kapperszaak)

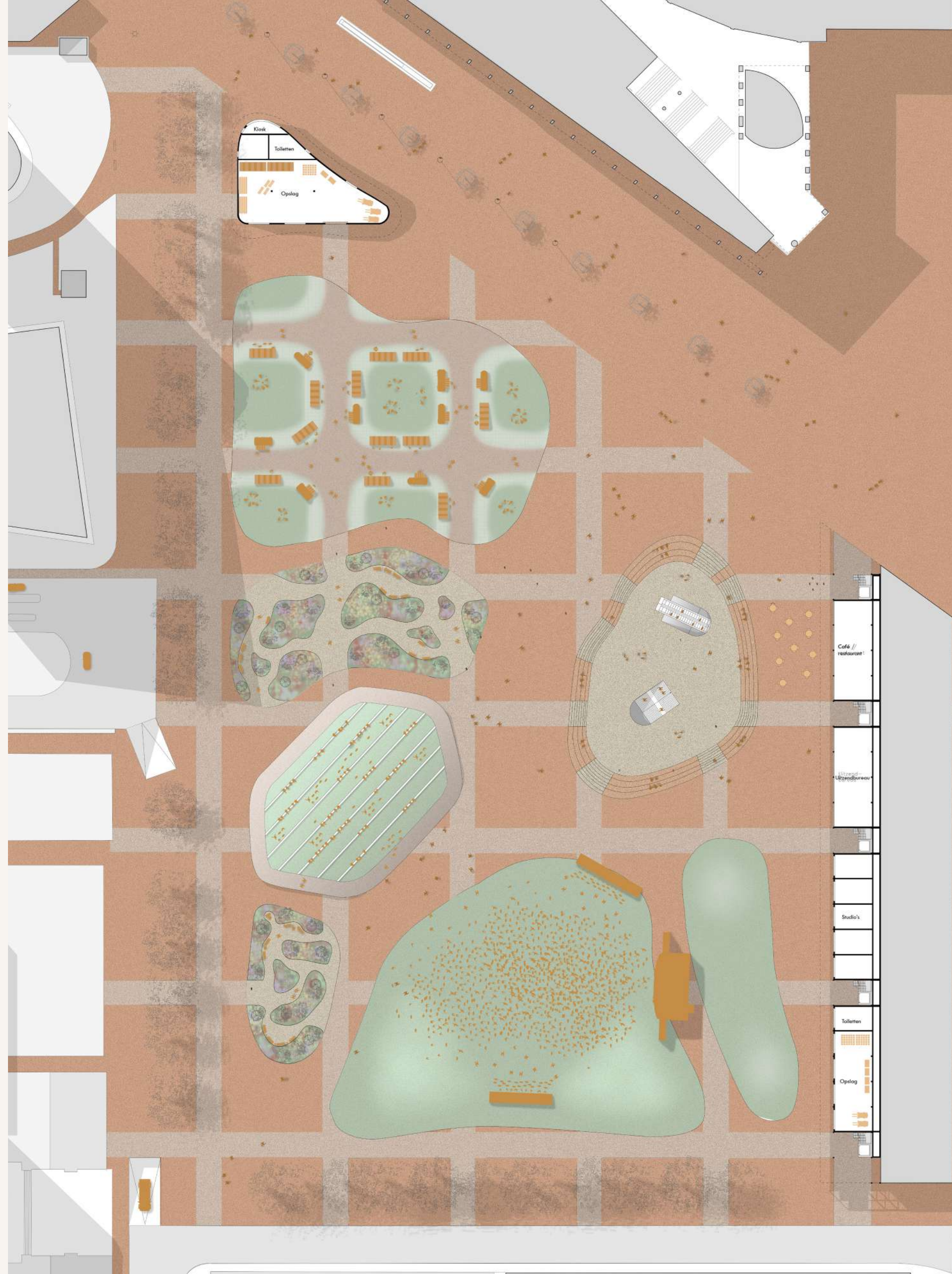
Start-up #2
(Printshop)

Particulier
verkoop

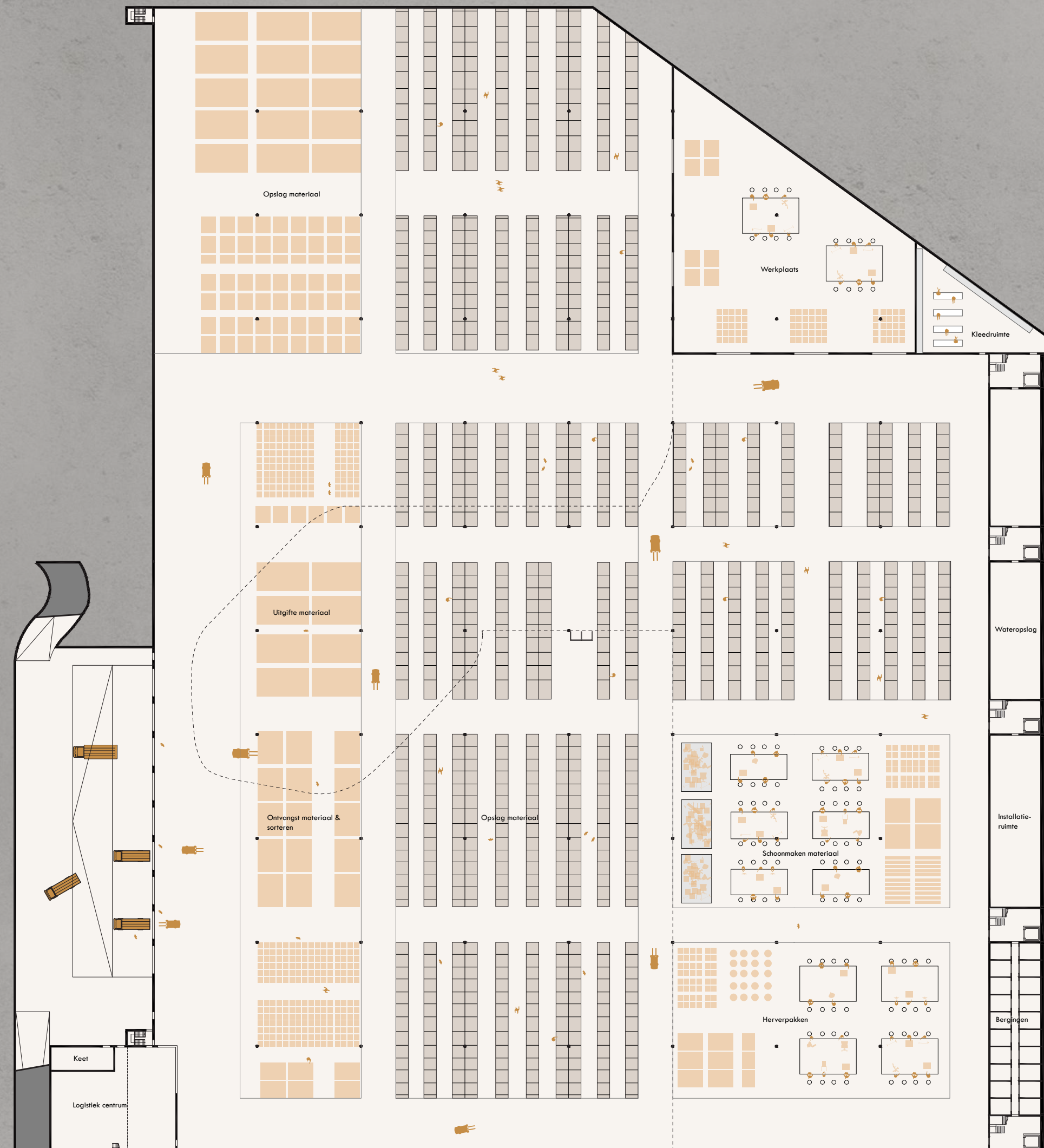
Kantoor









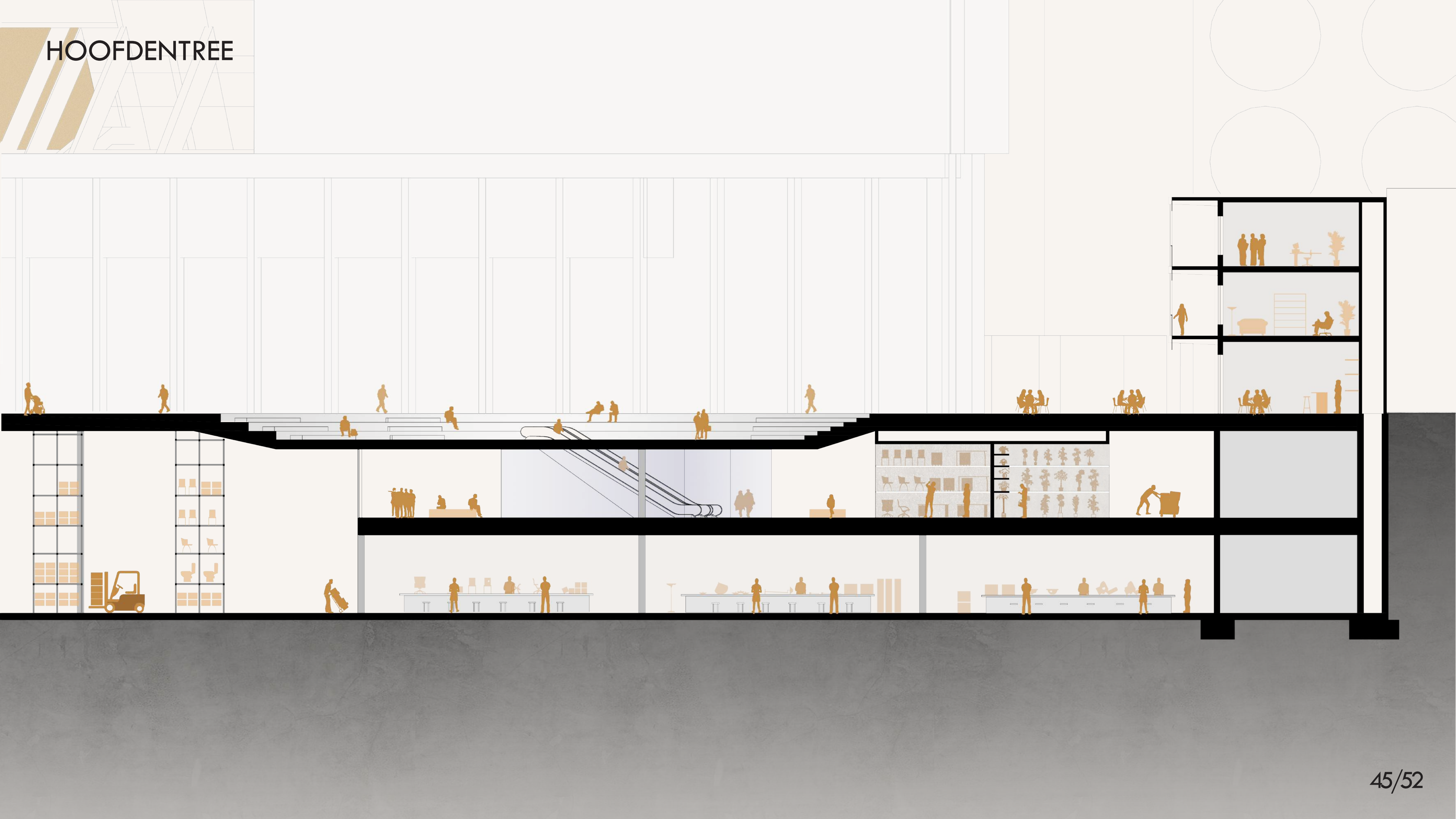


EXPOSITIERUIMTE

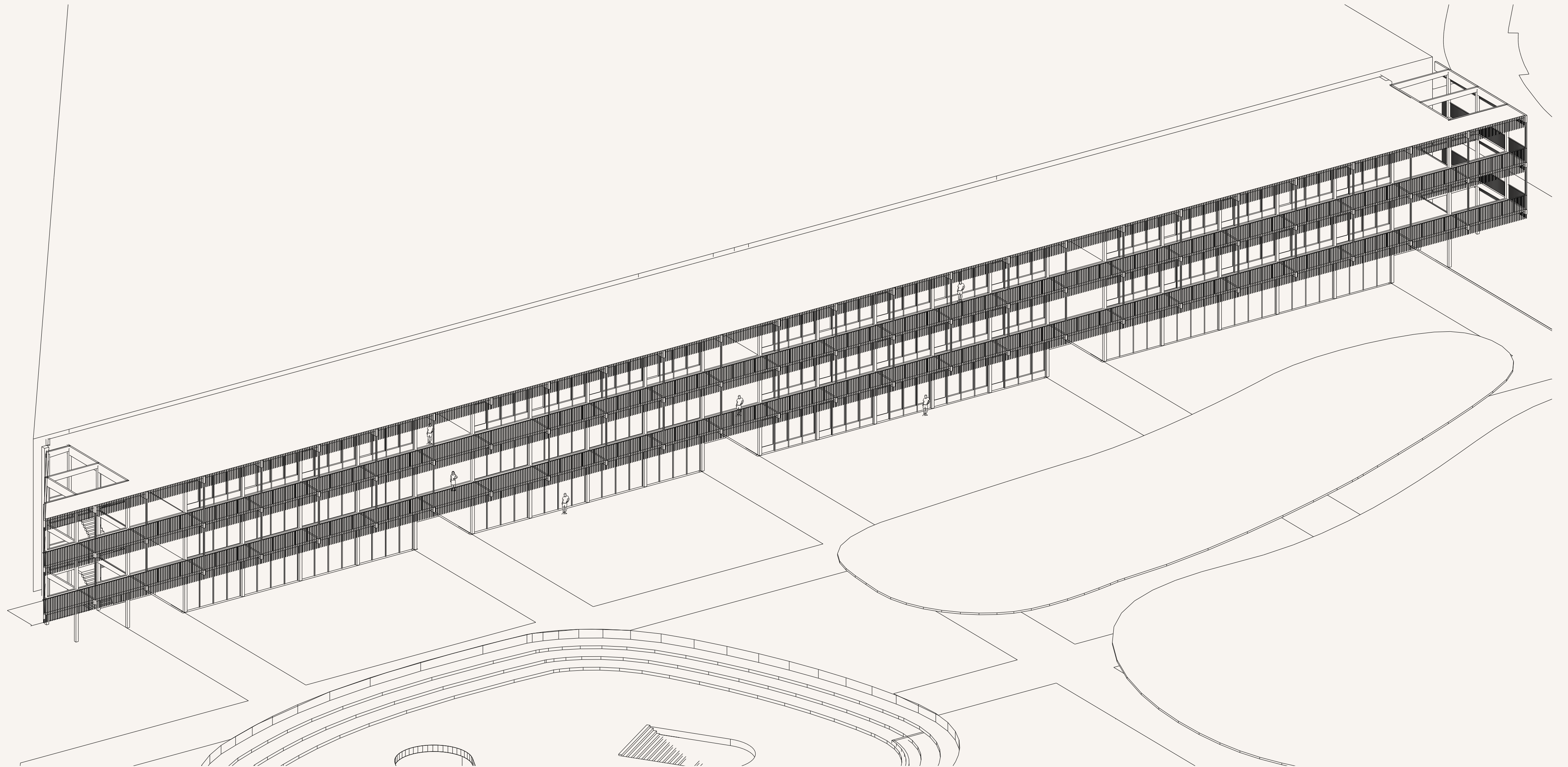




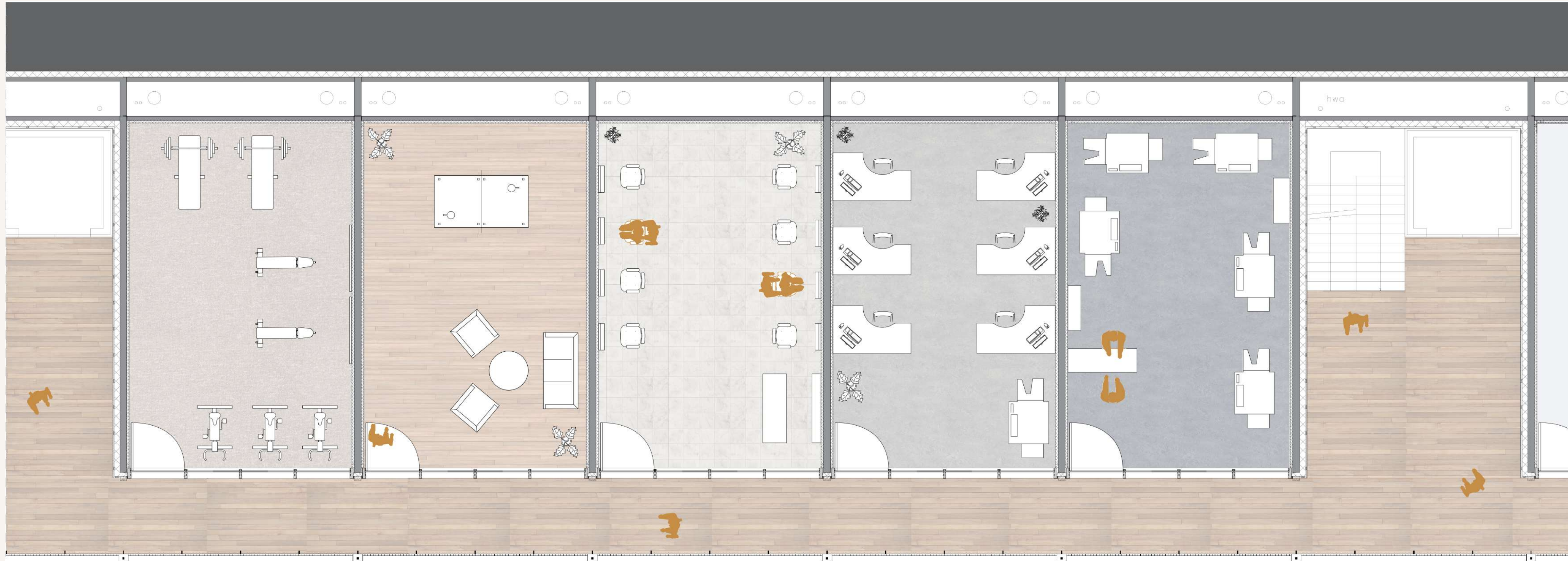
HOOFDENTREE



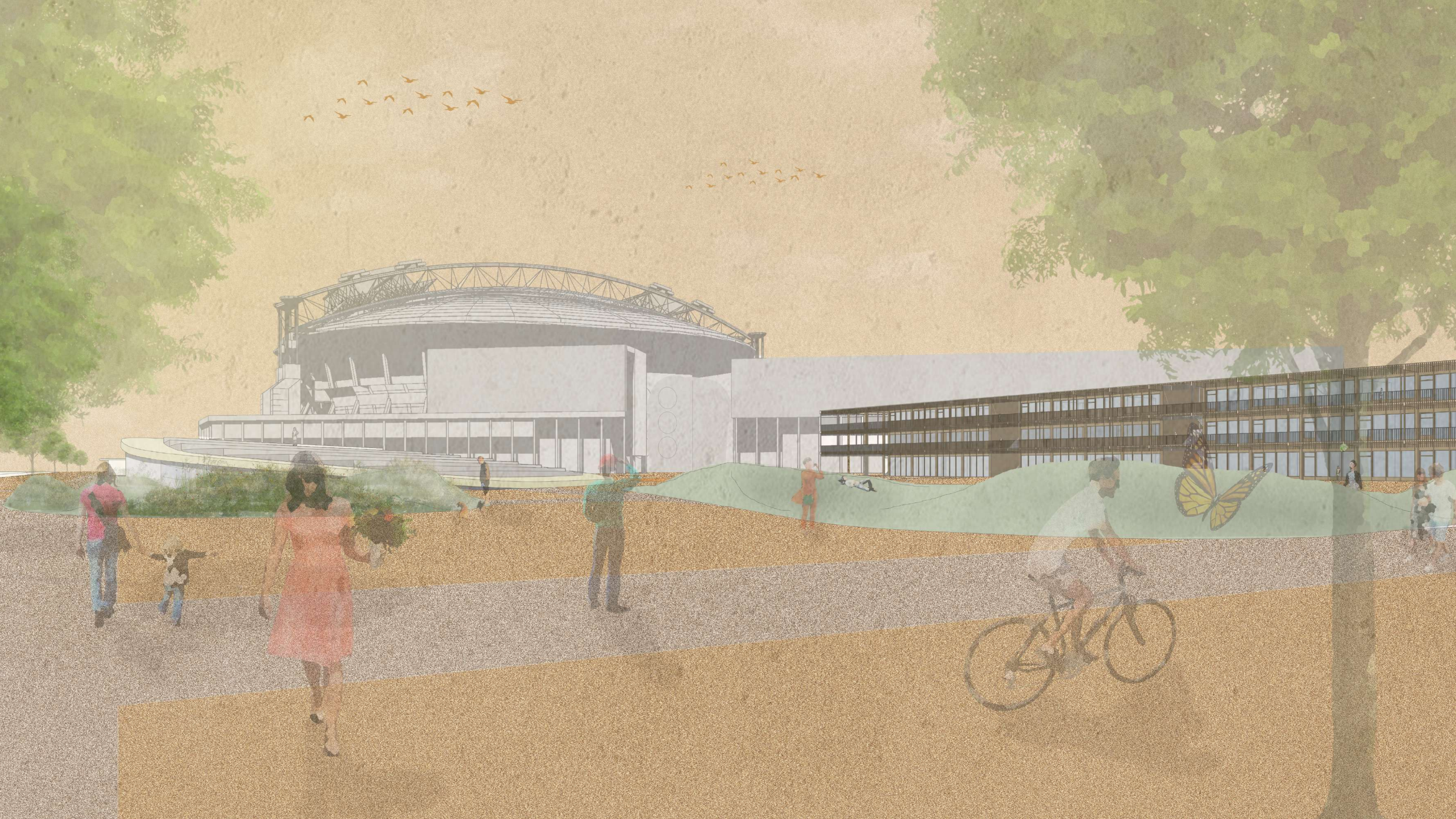
START-UP WALL

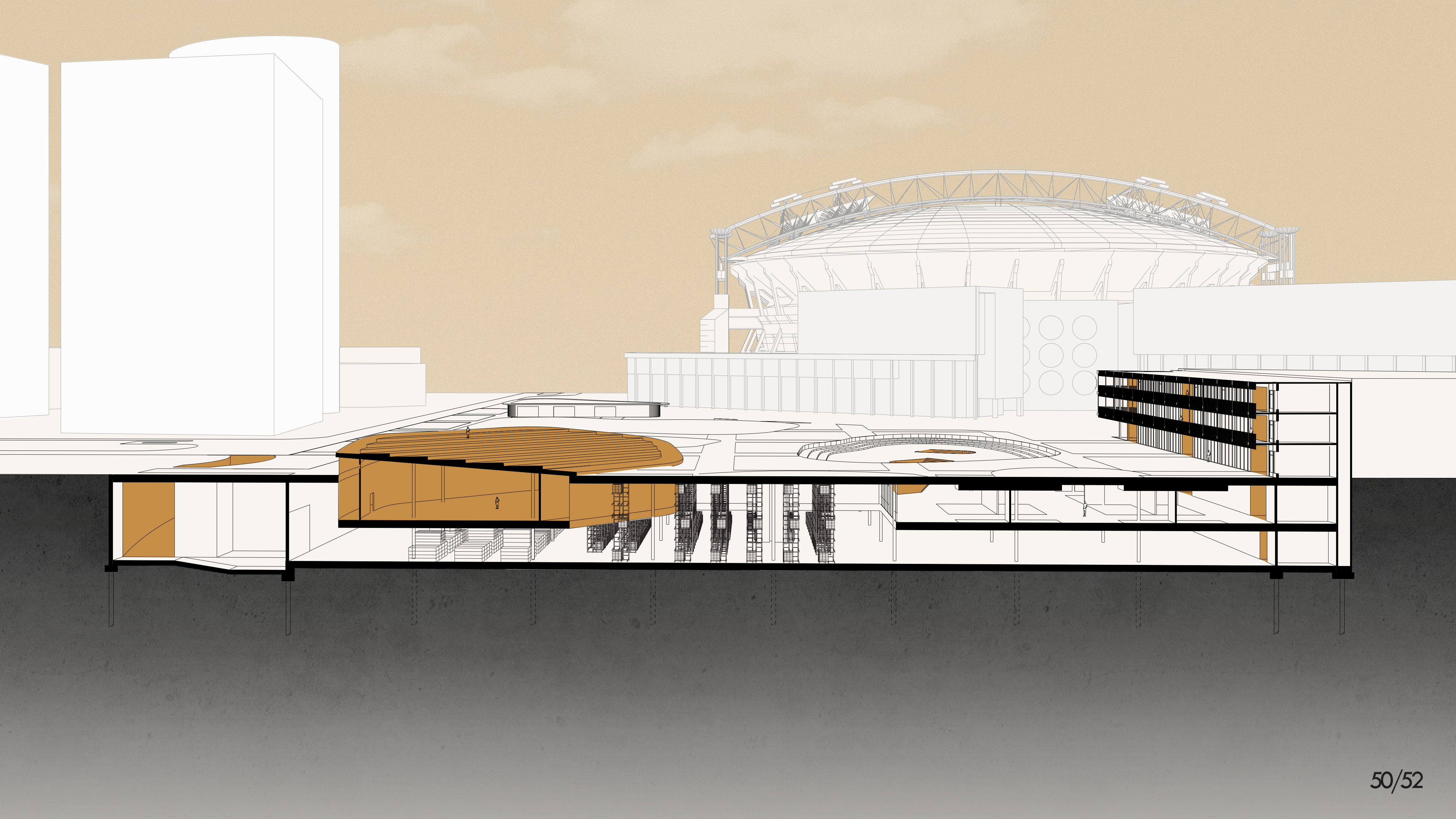


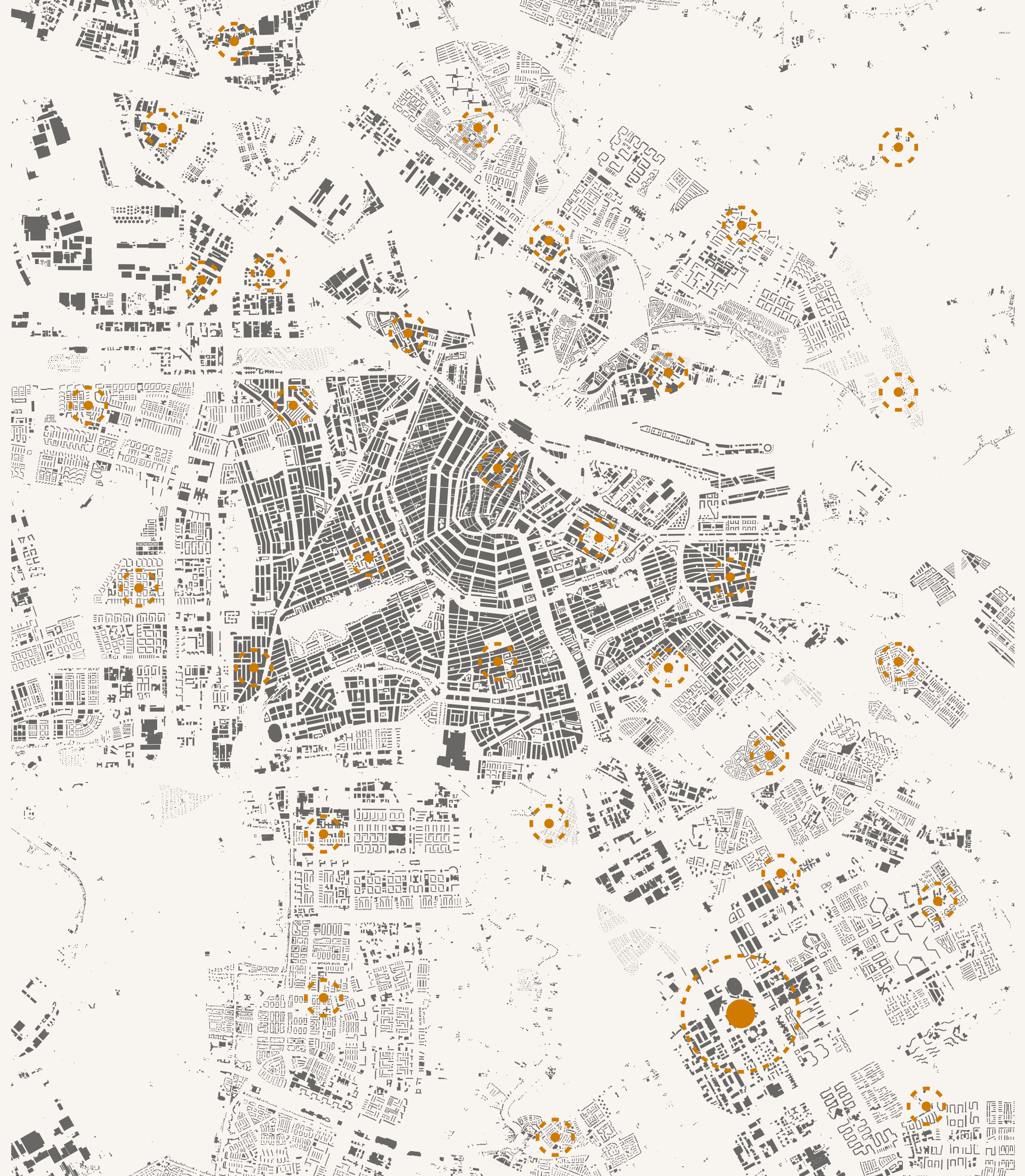
STUDIO'S

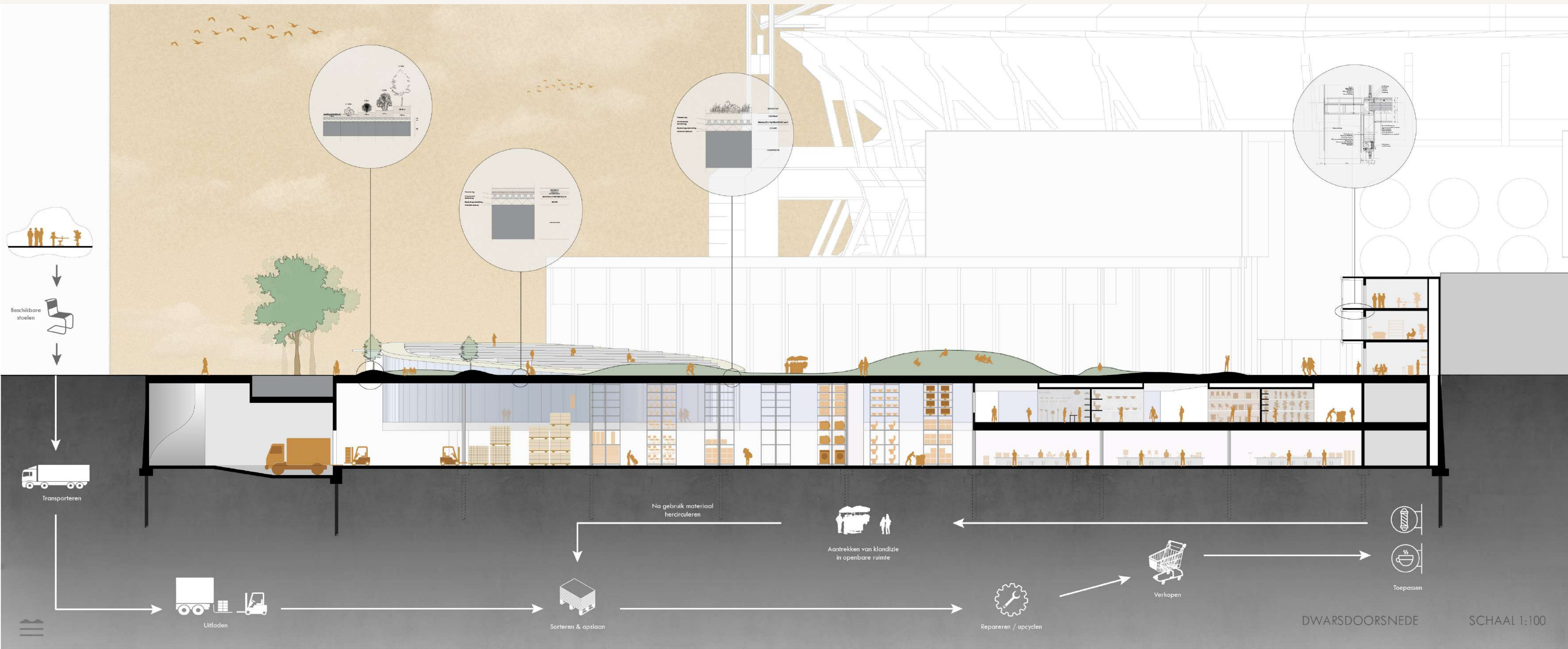


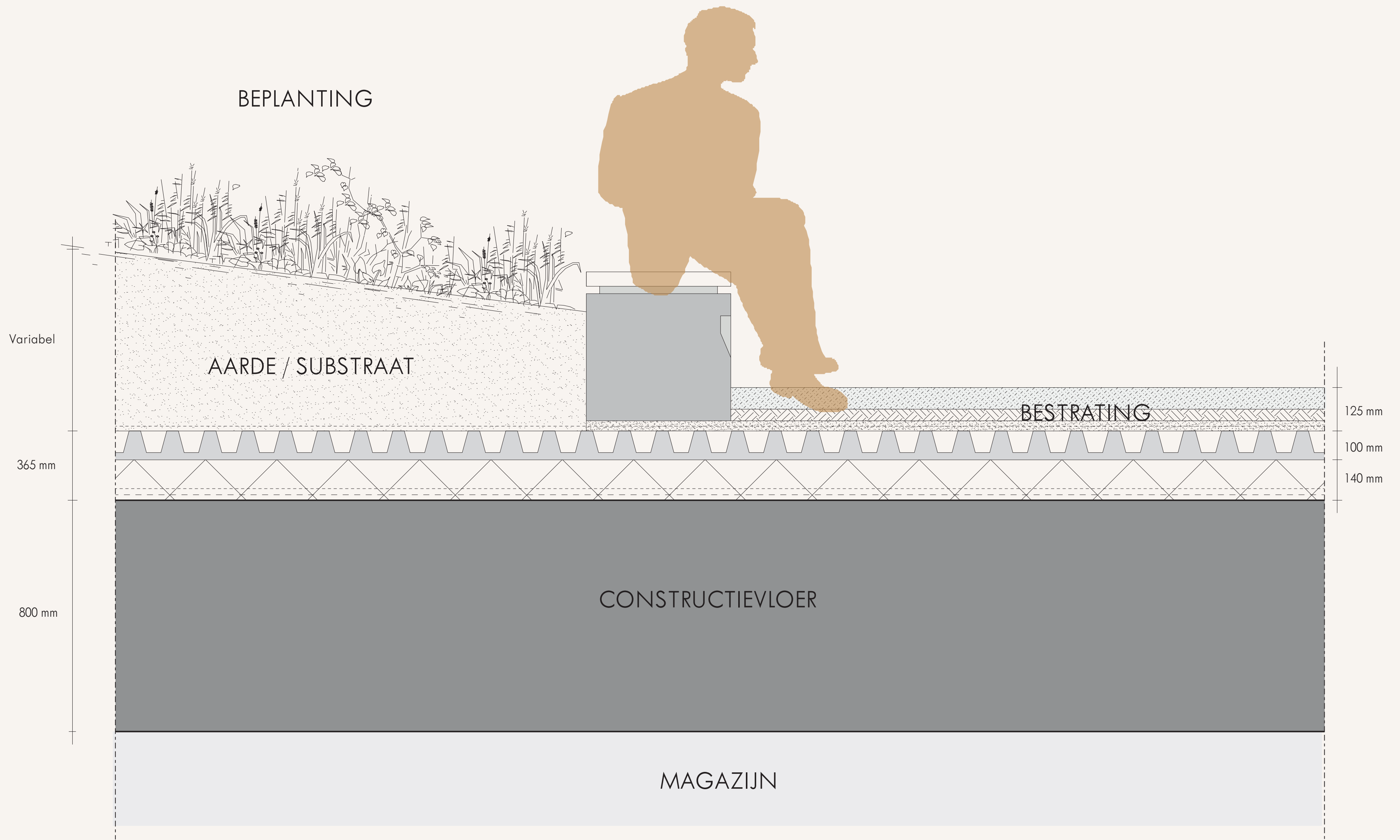


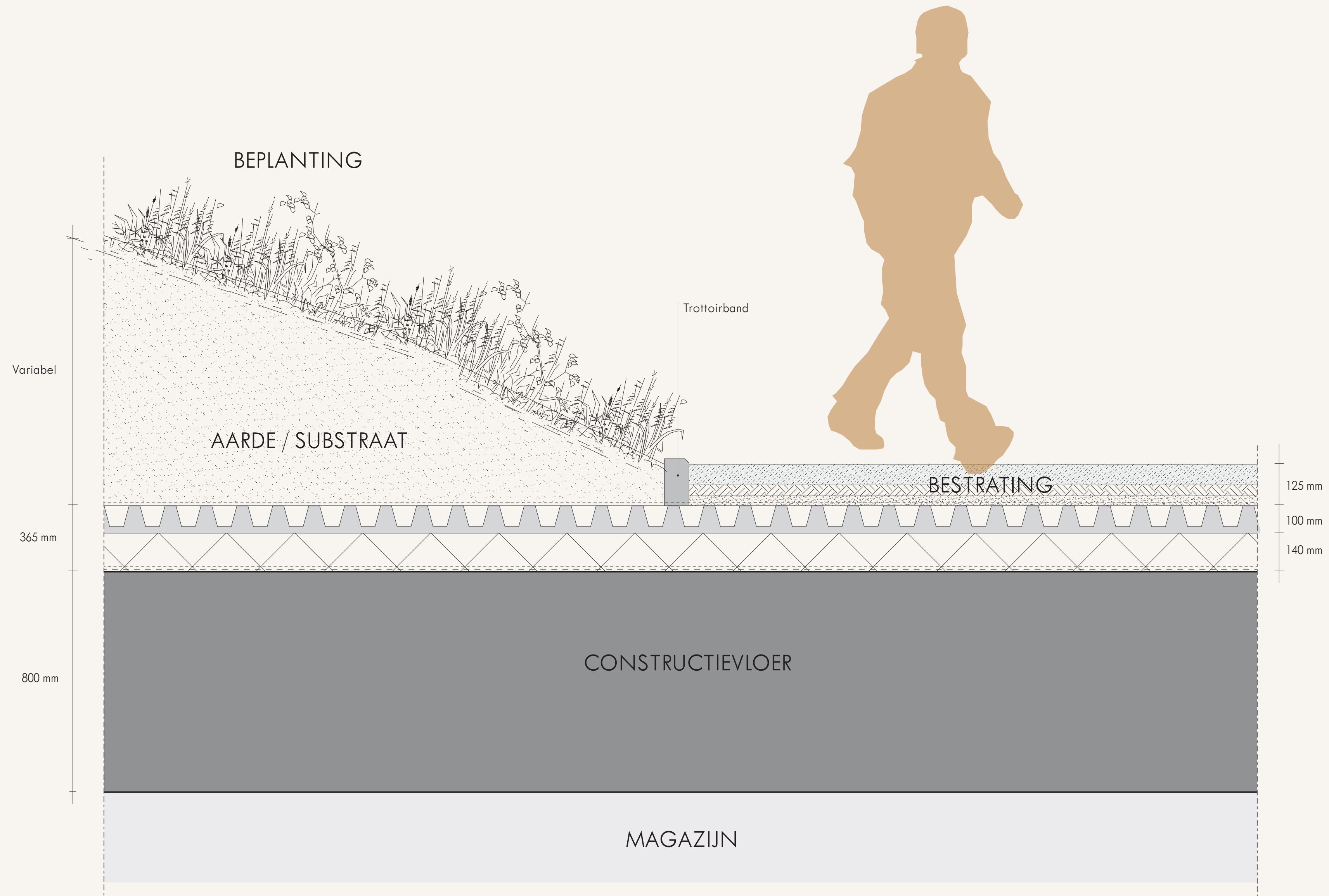


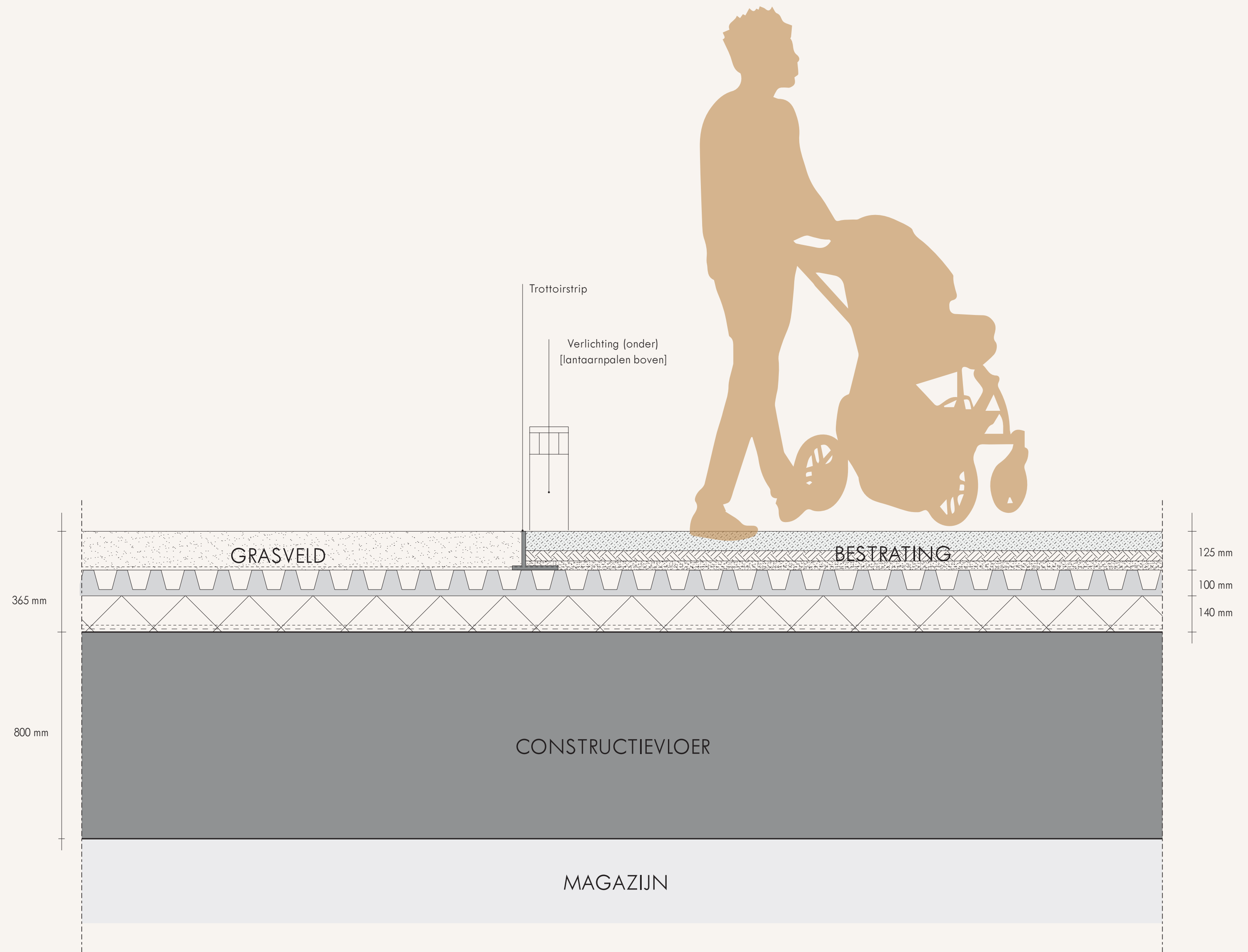


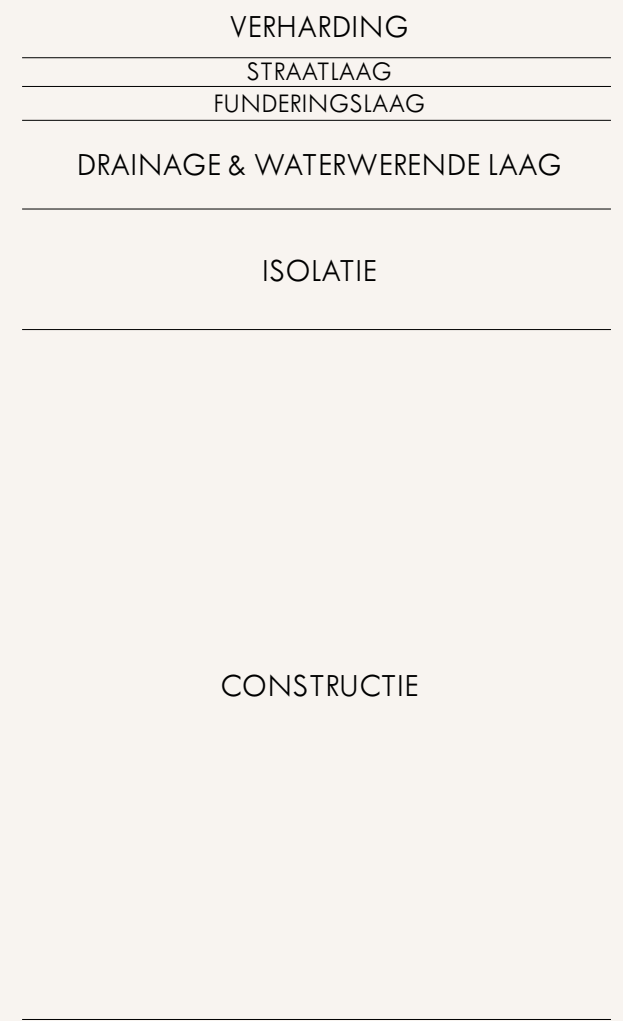
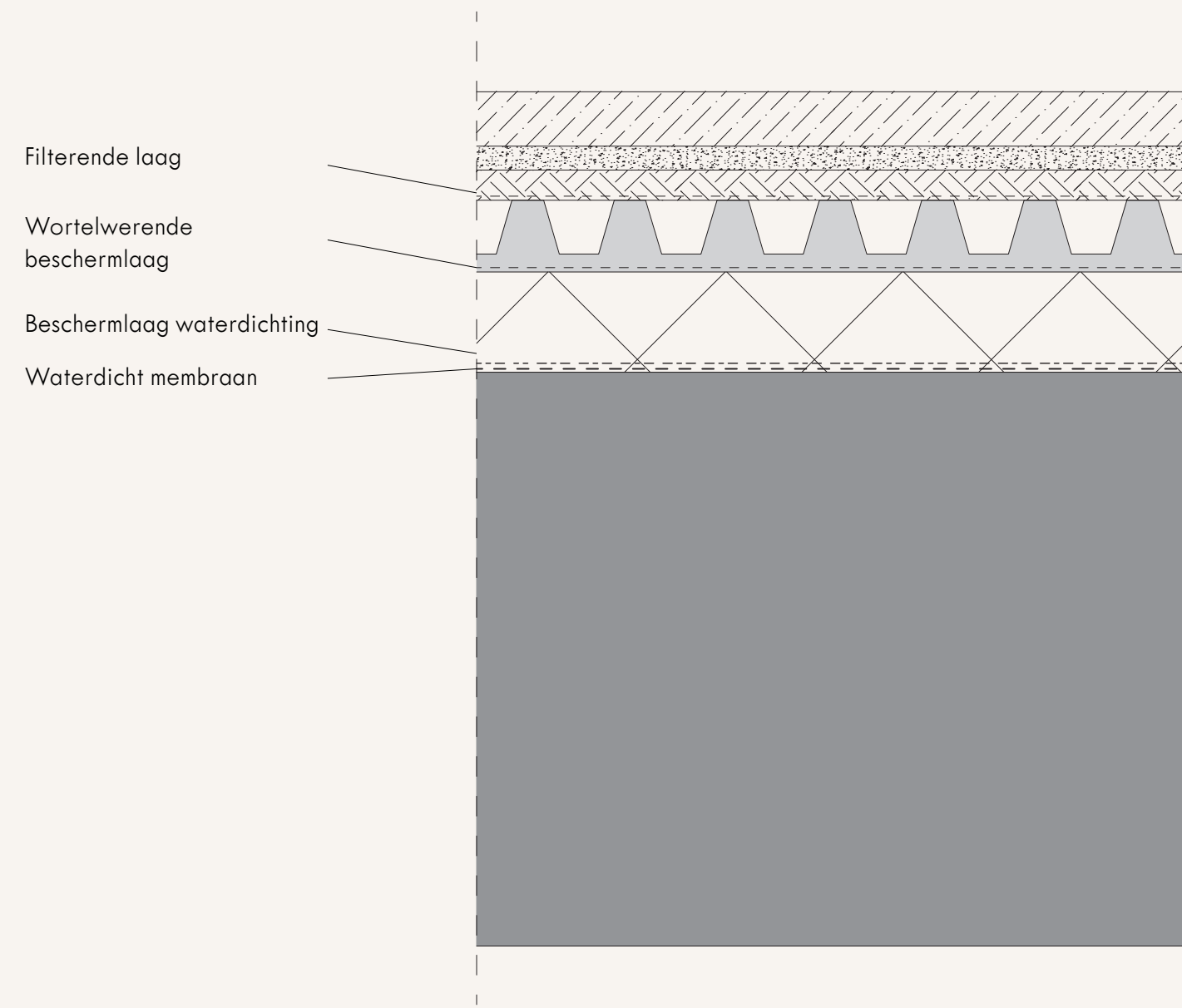
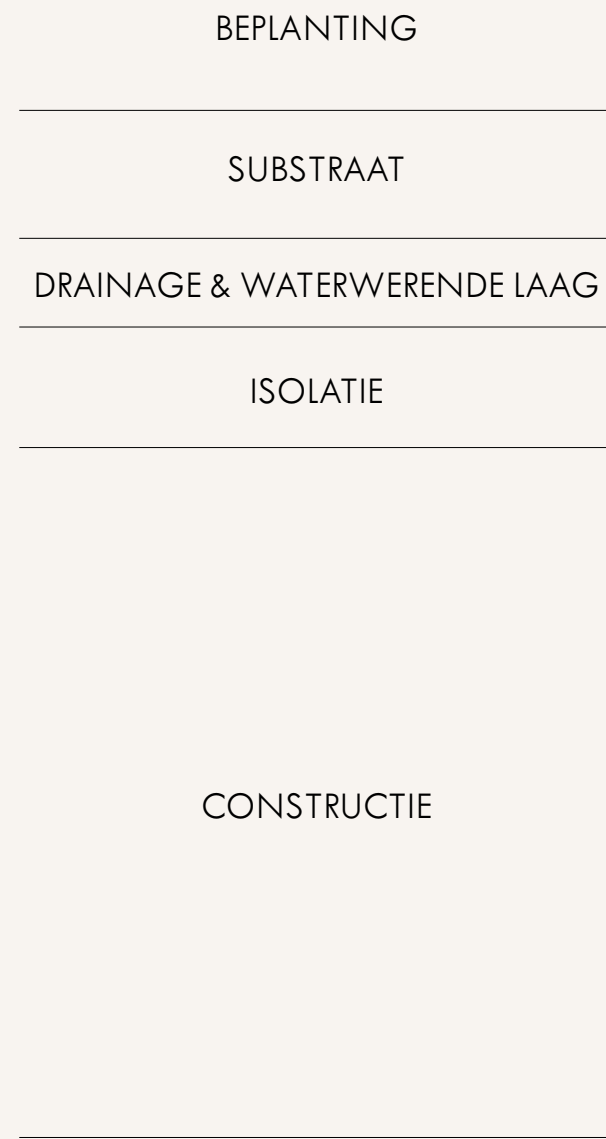
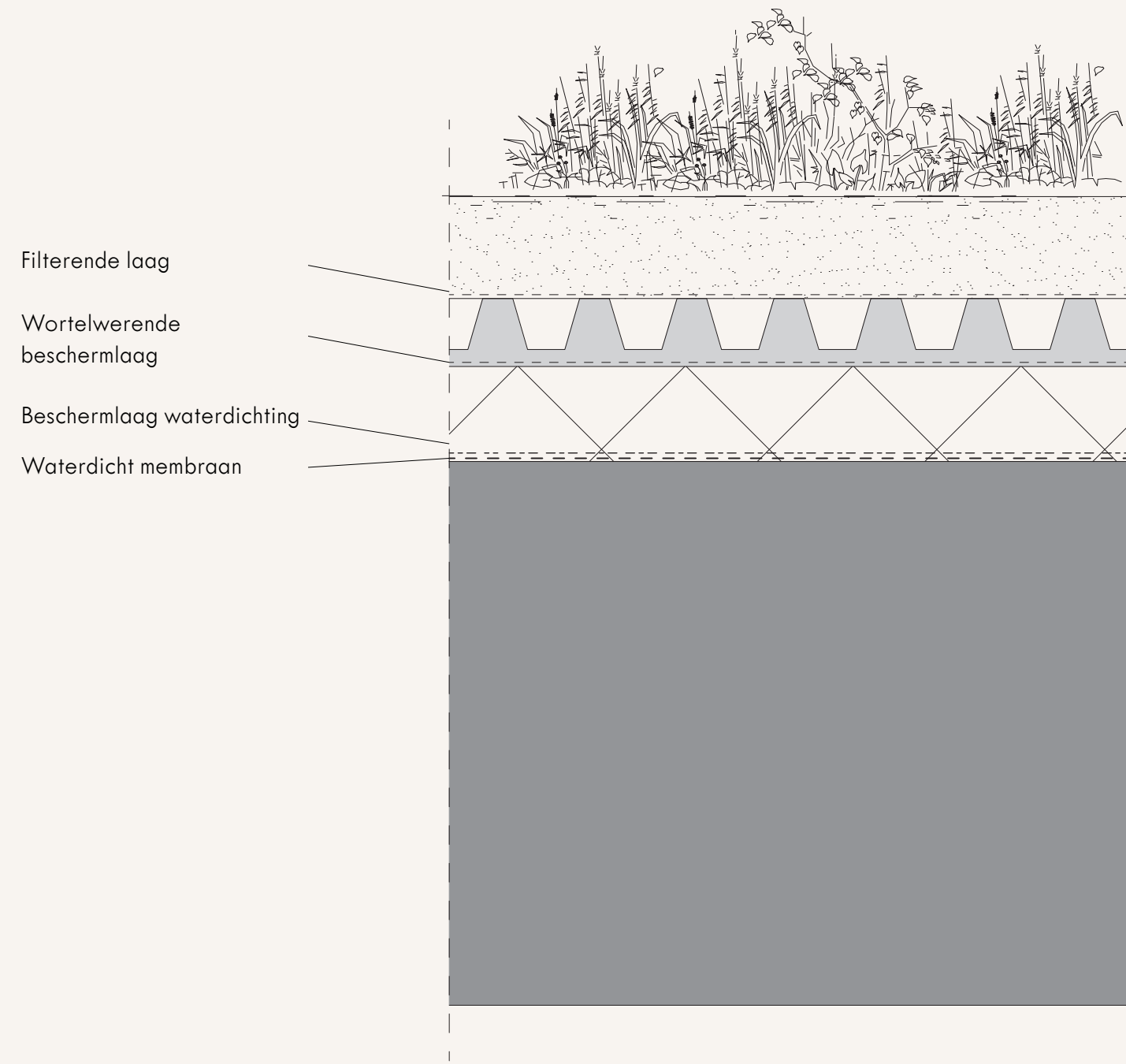


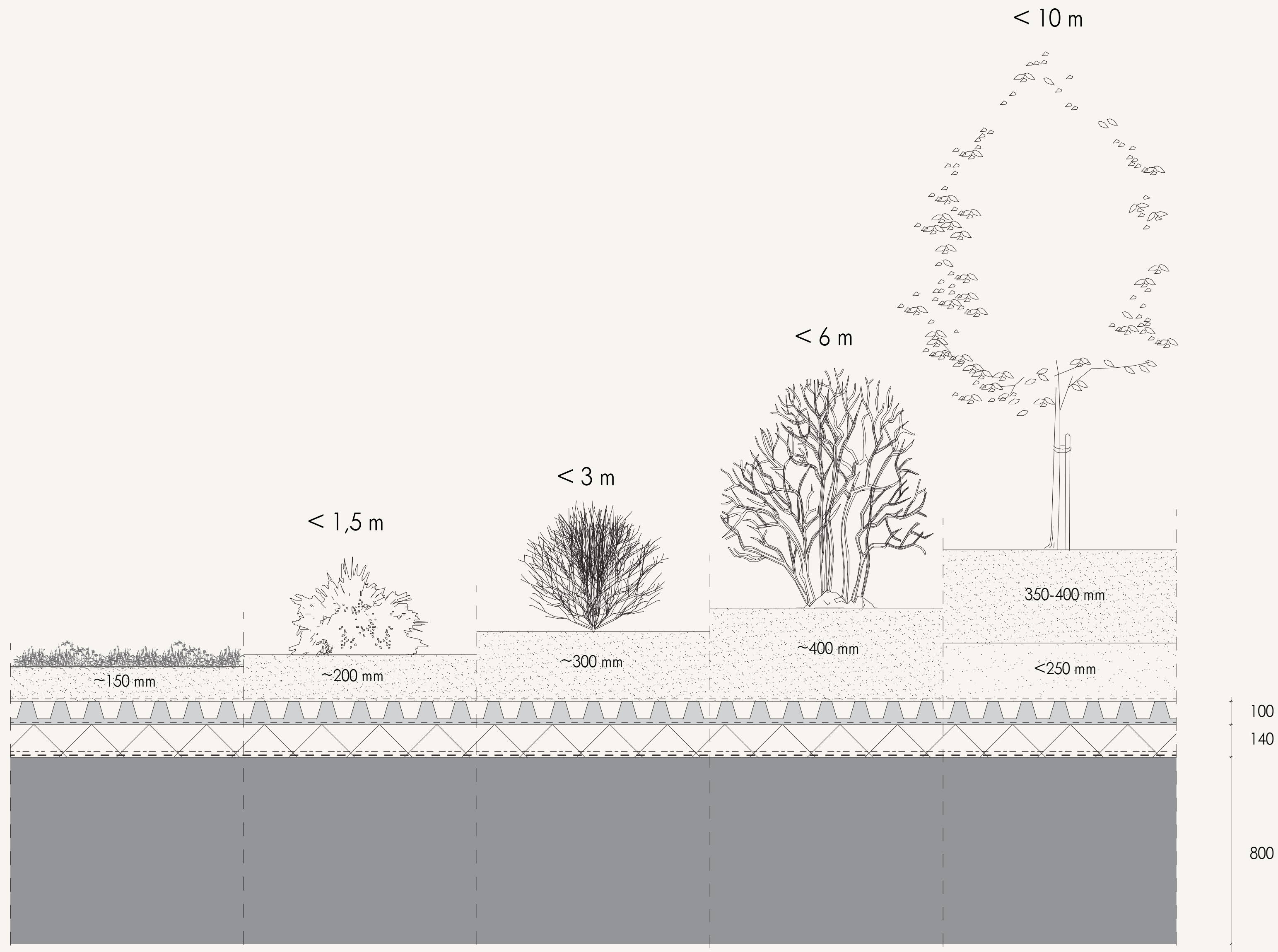


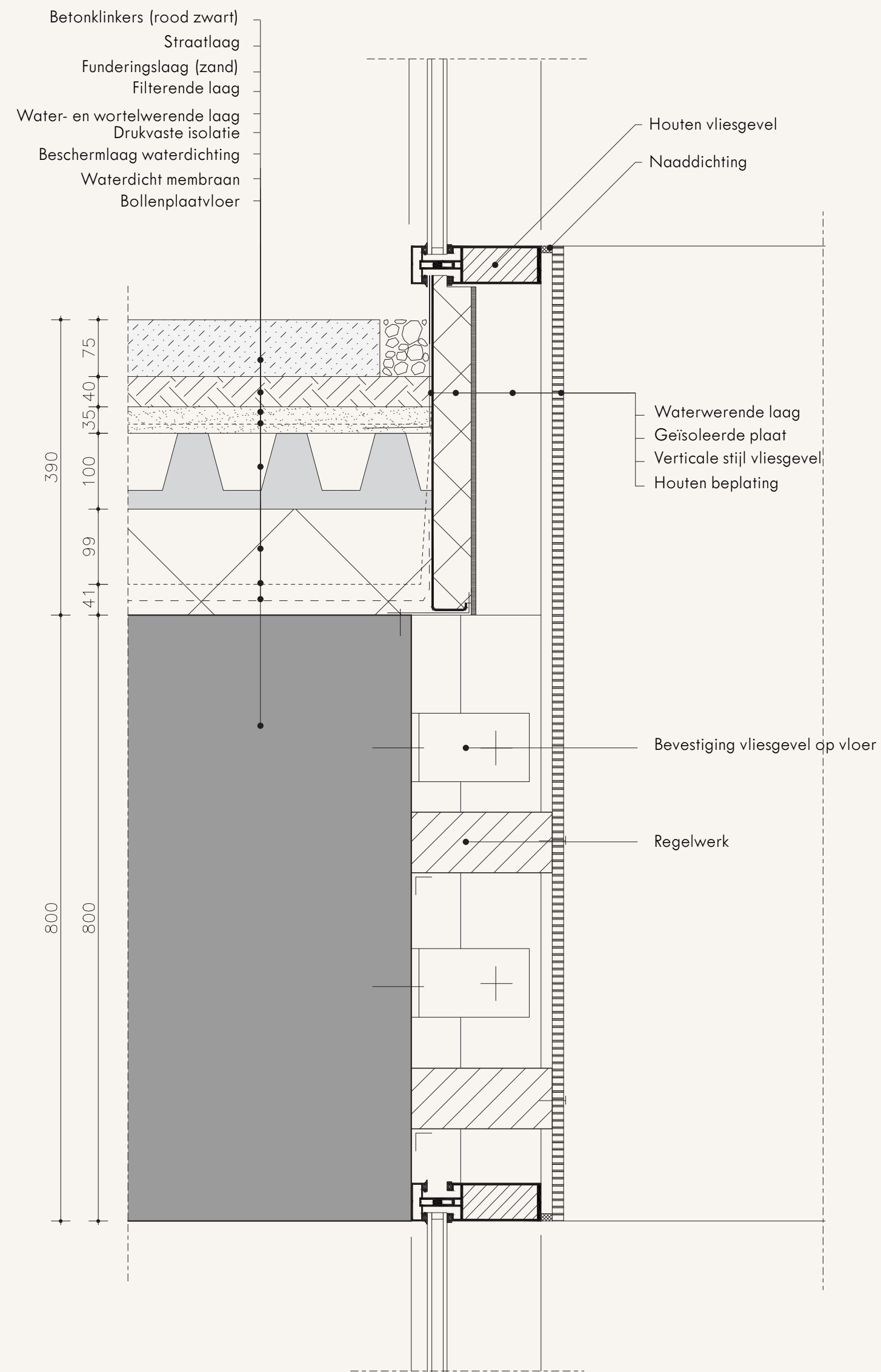
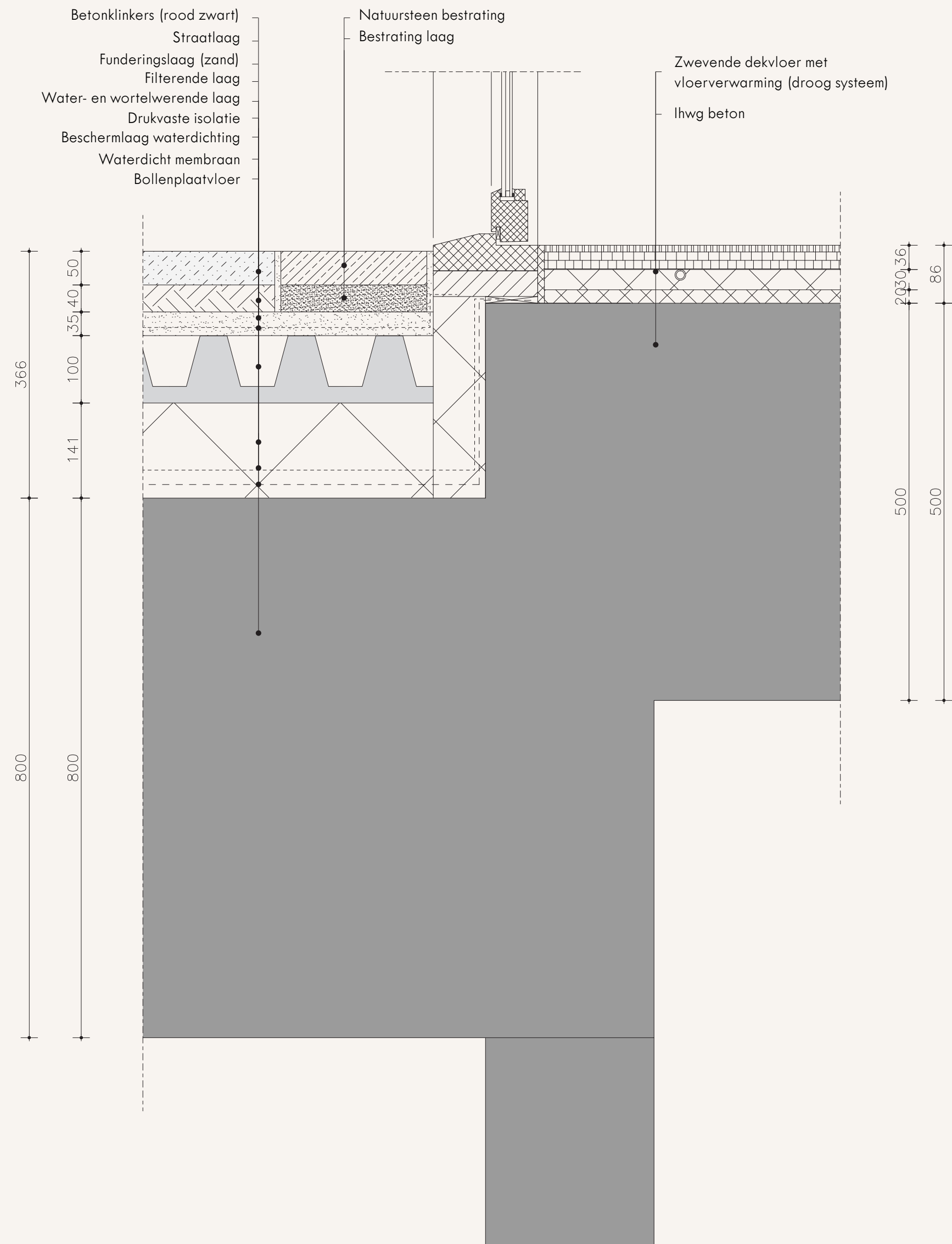


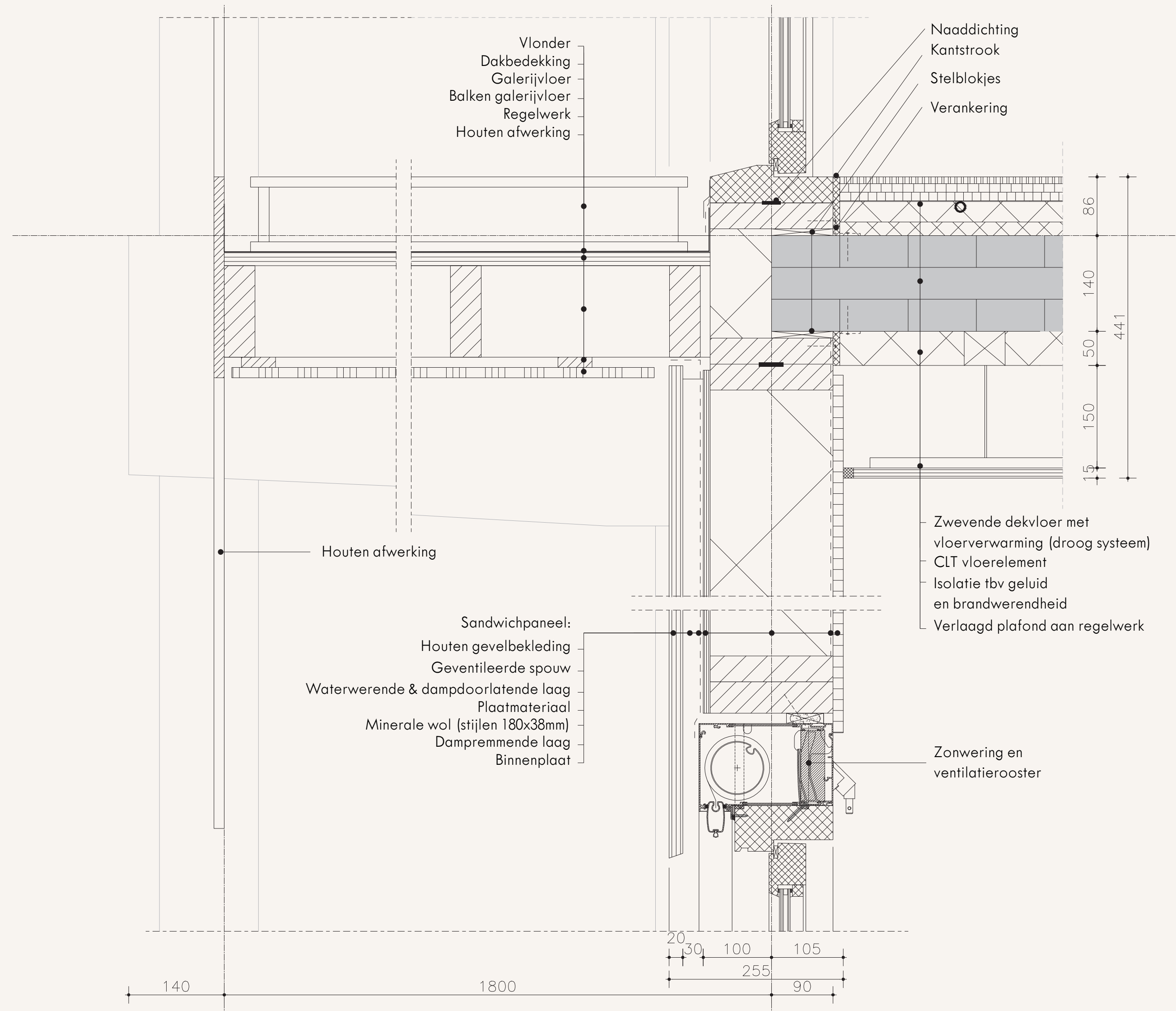


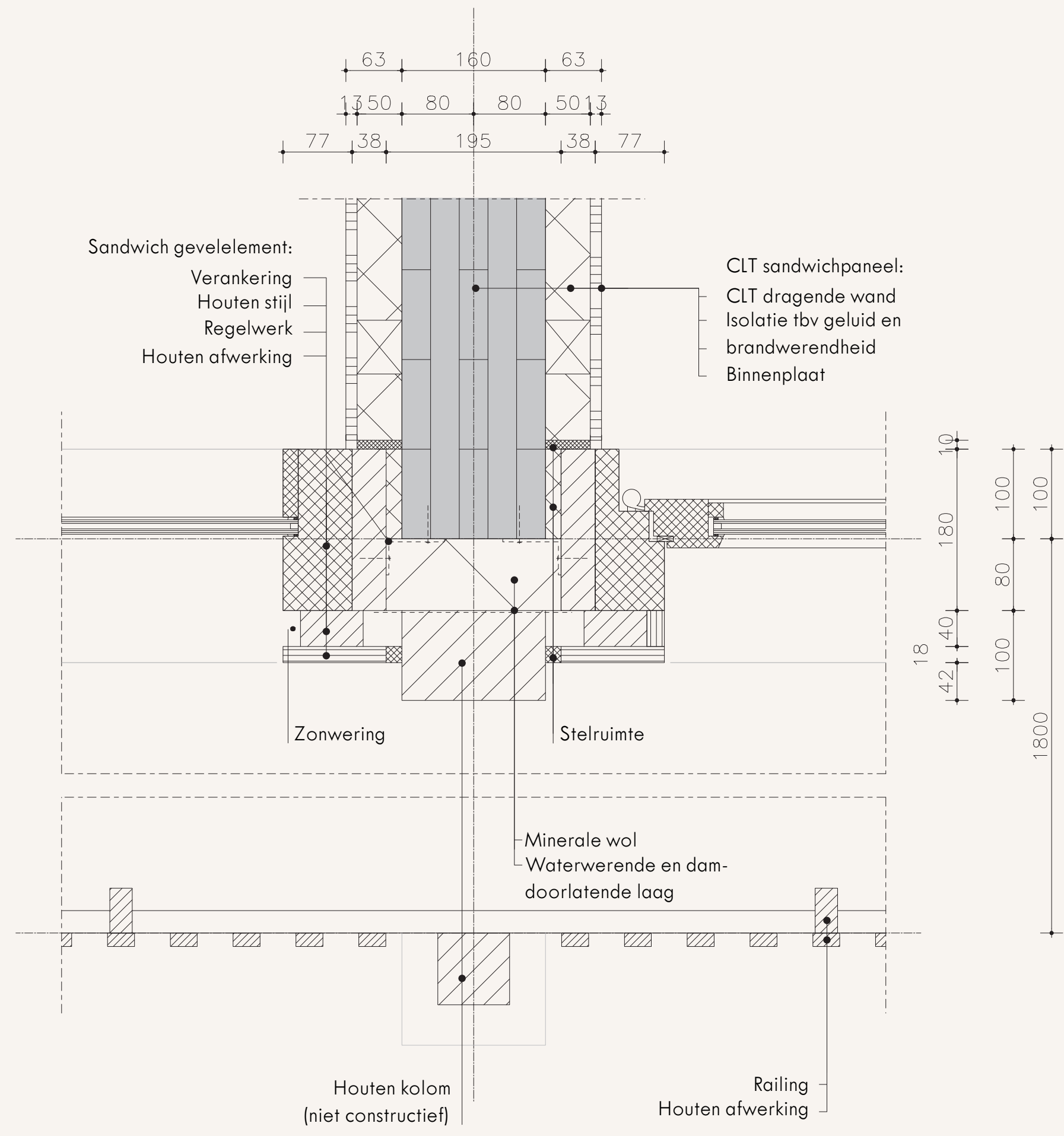


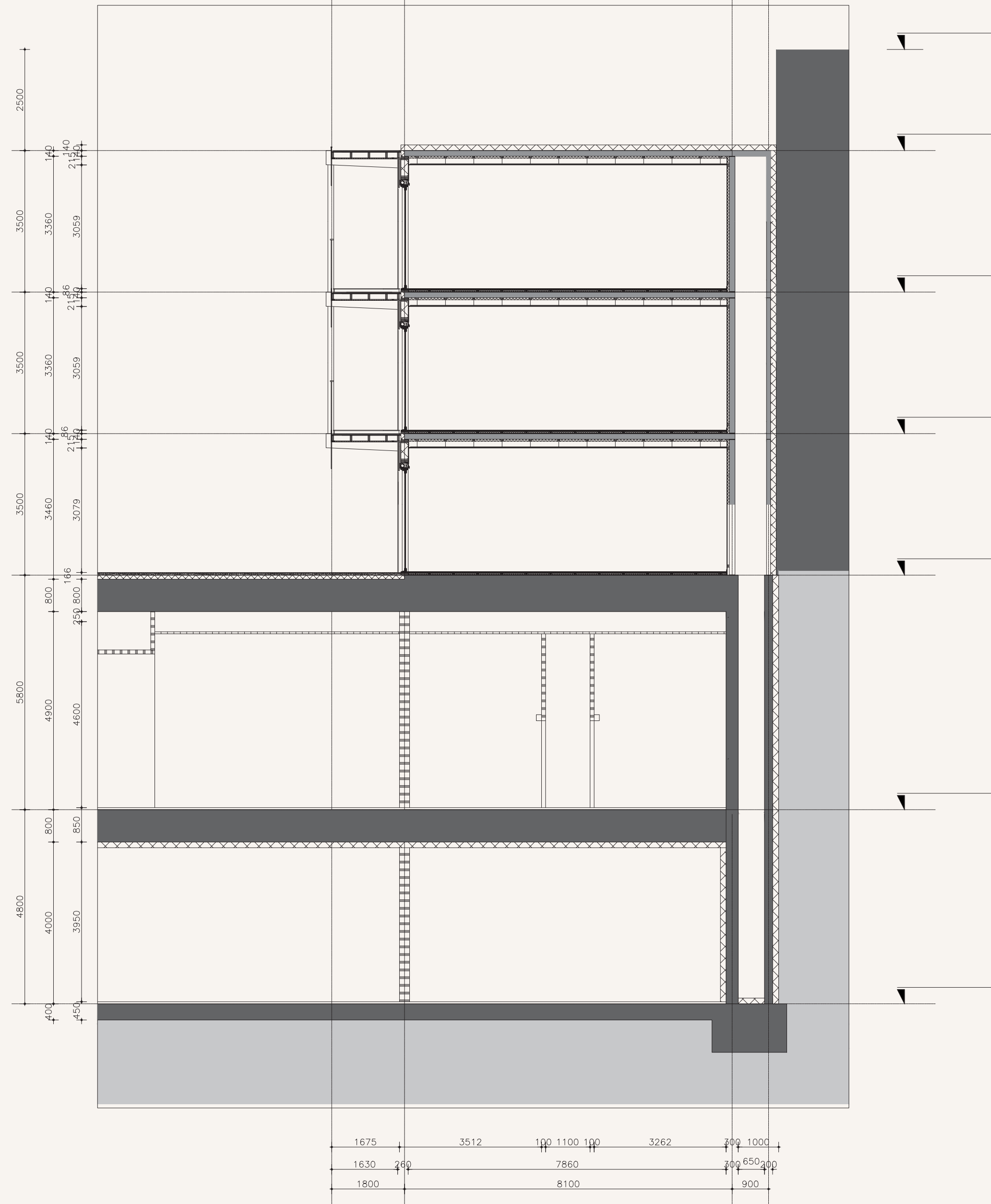


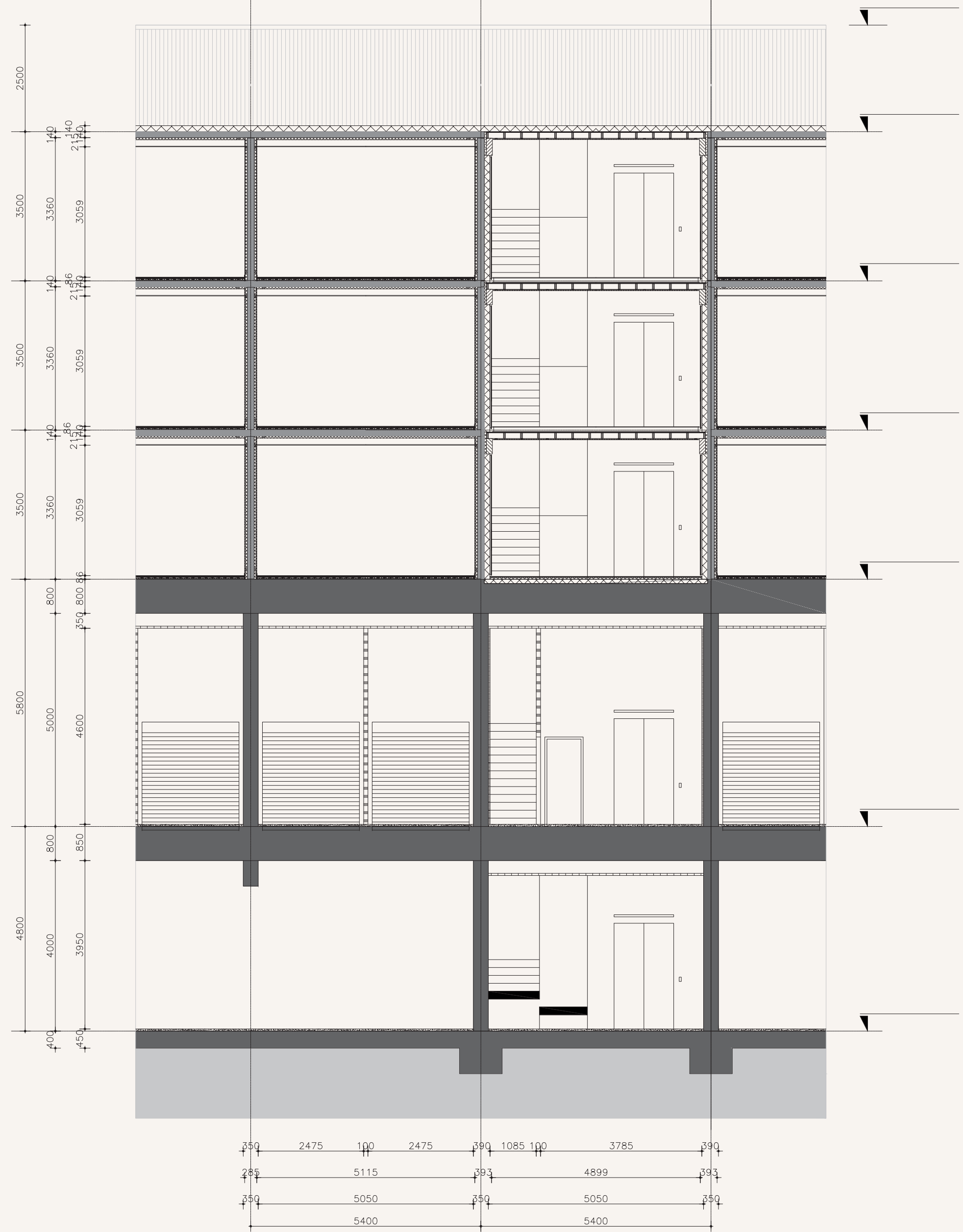


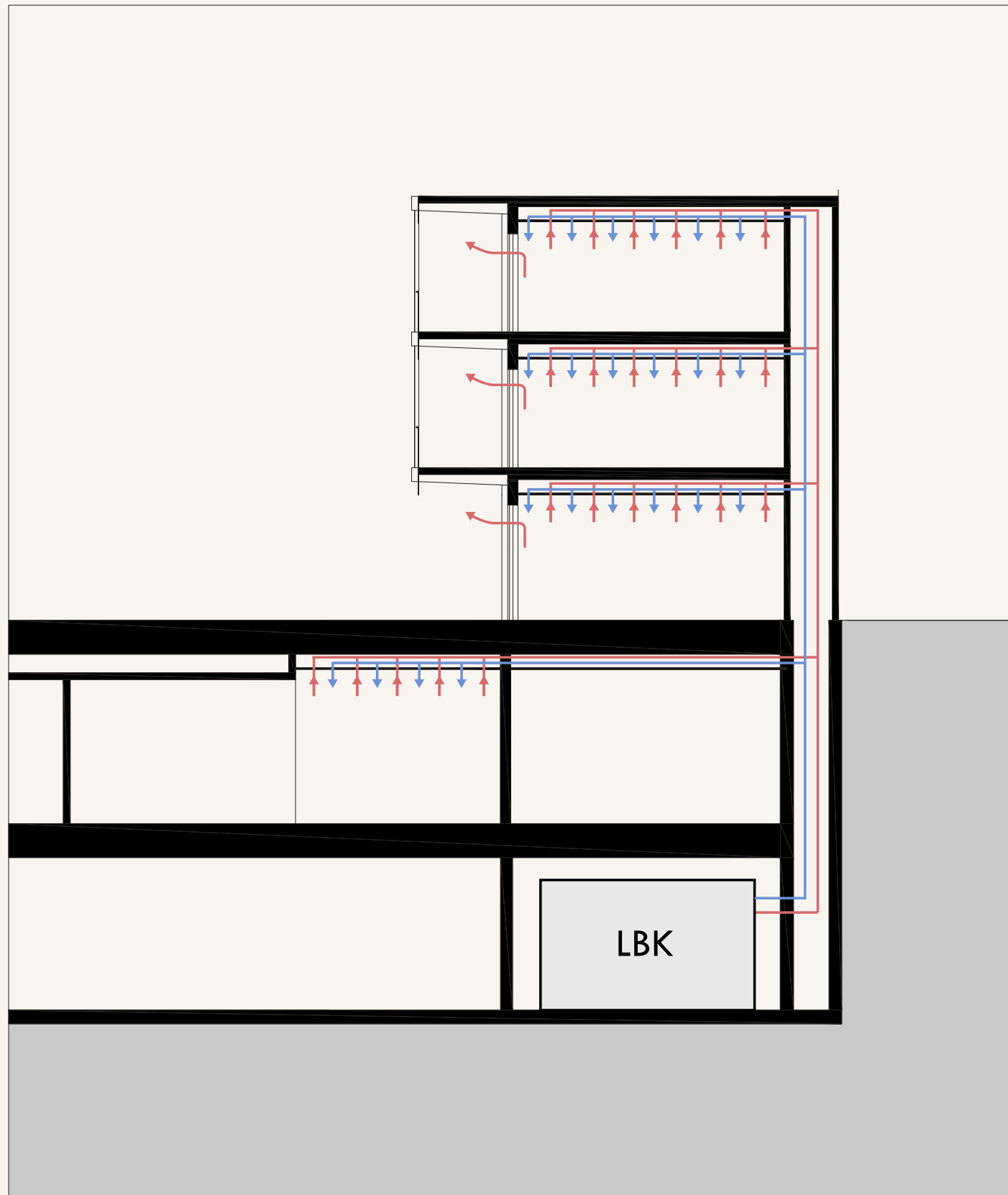




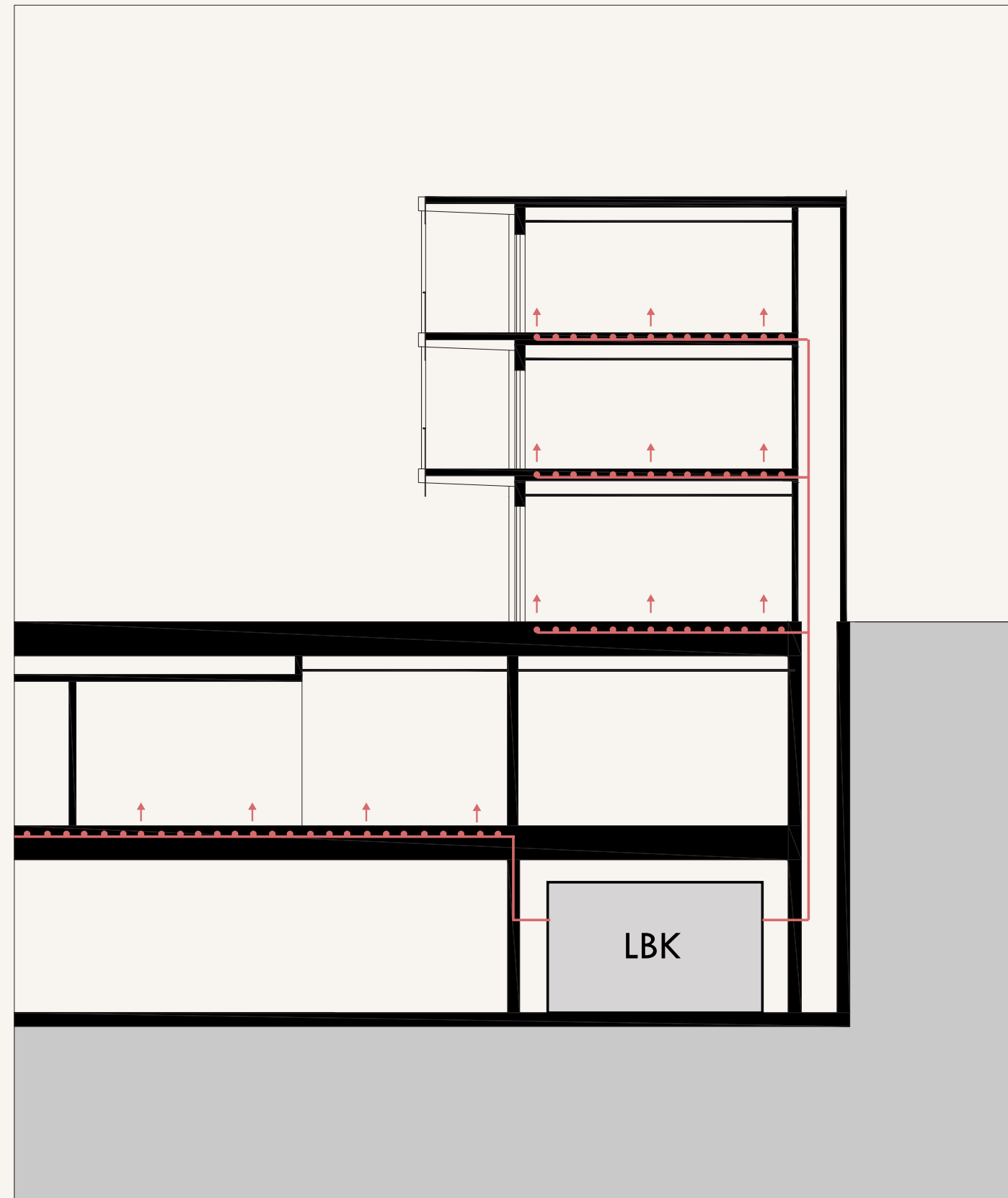




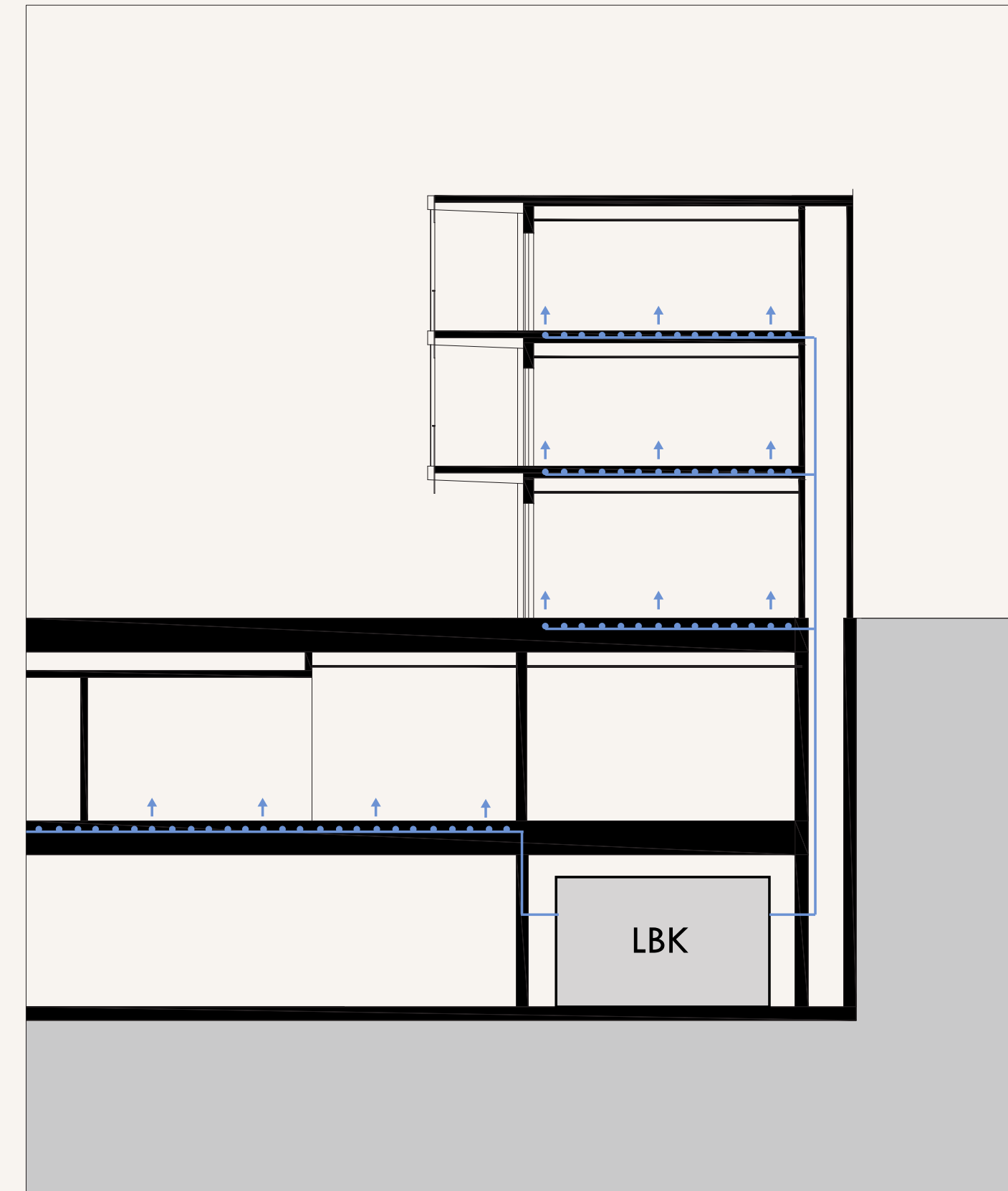




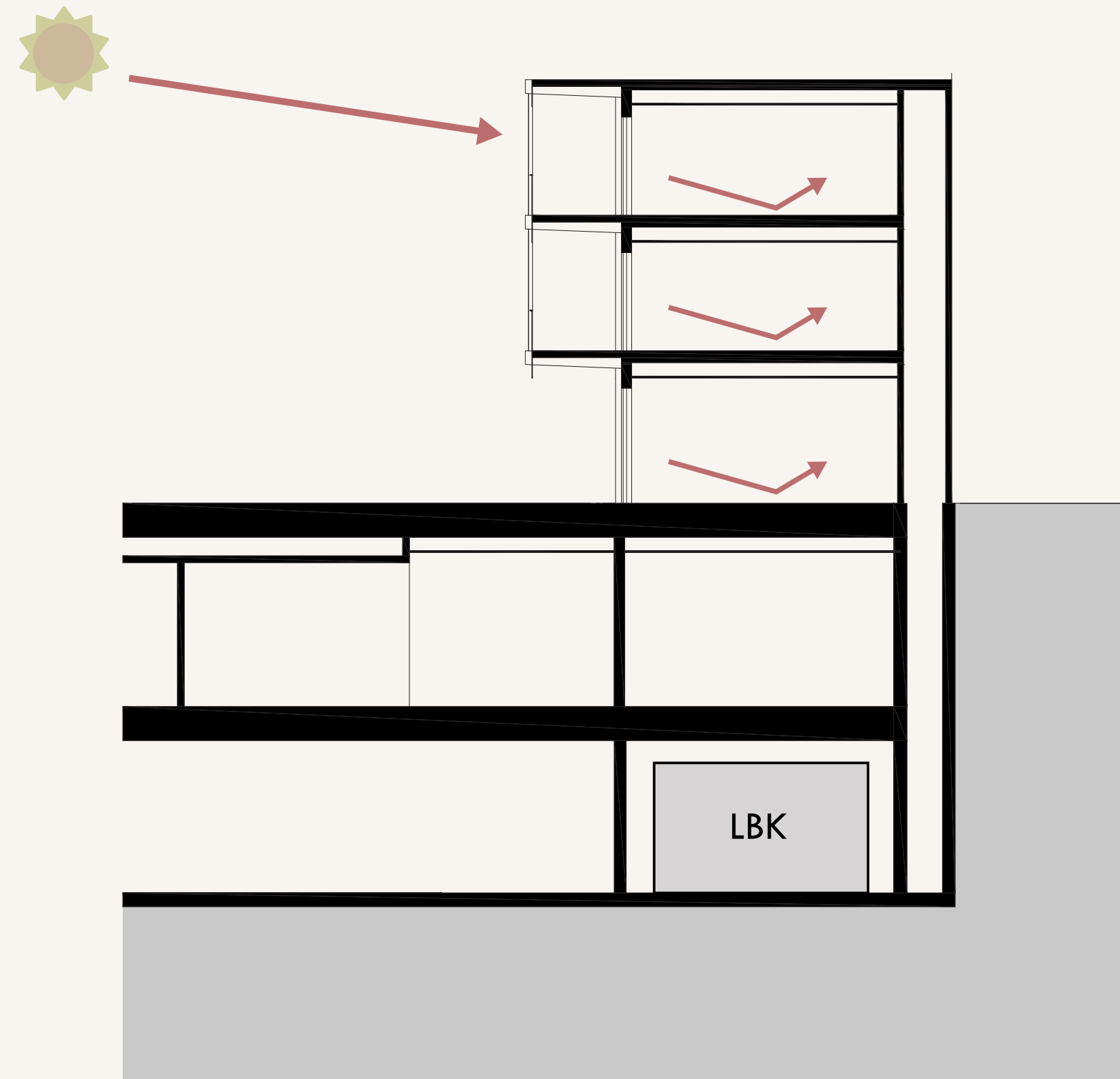
VENTILATIE



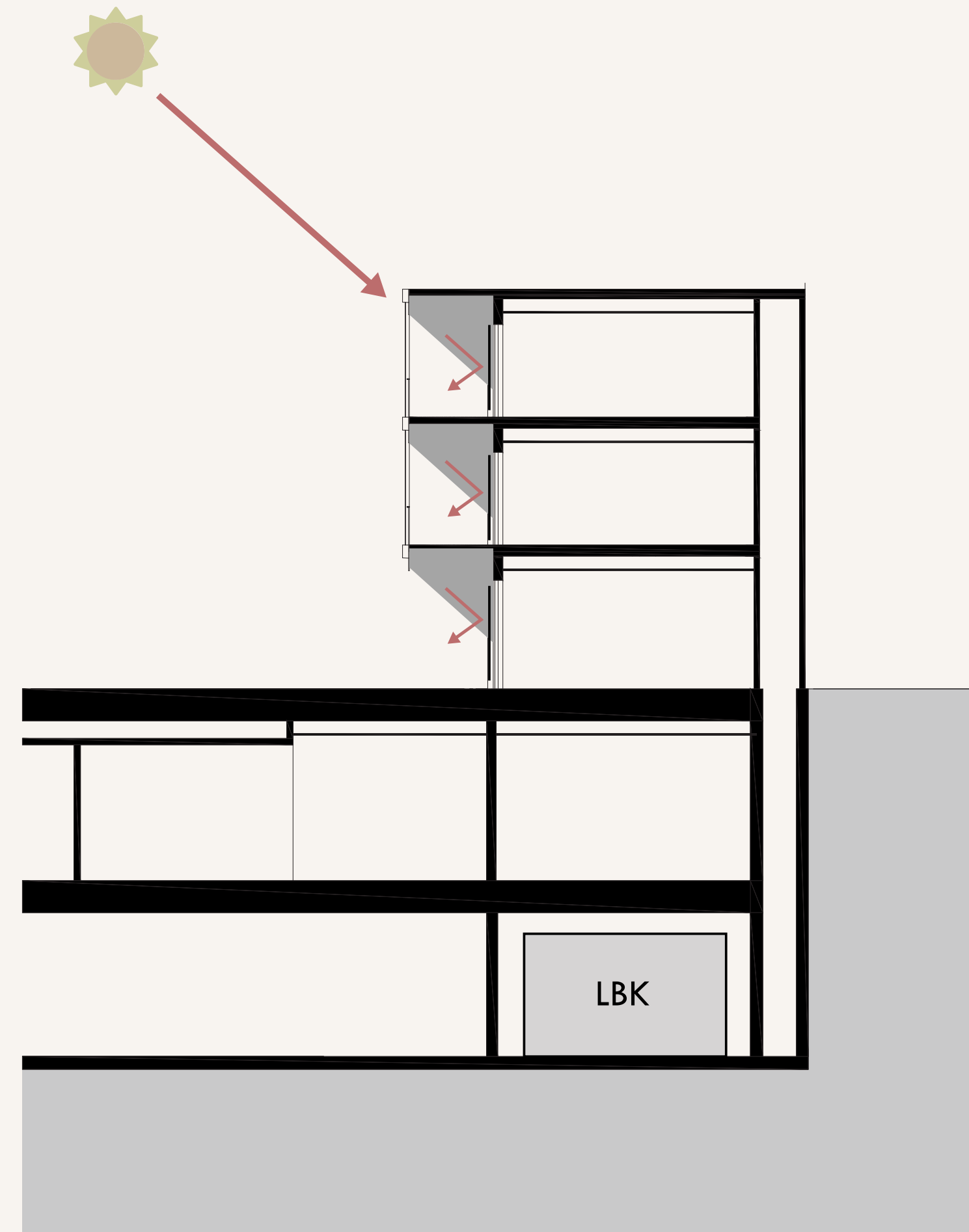
VERWARMING



KOELING



WINTER



ZOMER