

COMPLEX PROJECTS
ITSALLA BAYRUT

Urban Sports Centre
Sebastiaan de Boer
15-06-2022
P5

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introduction
lebanon

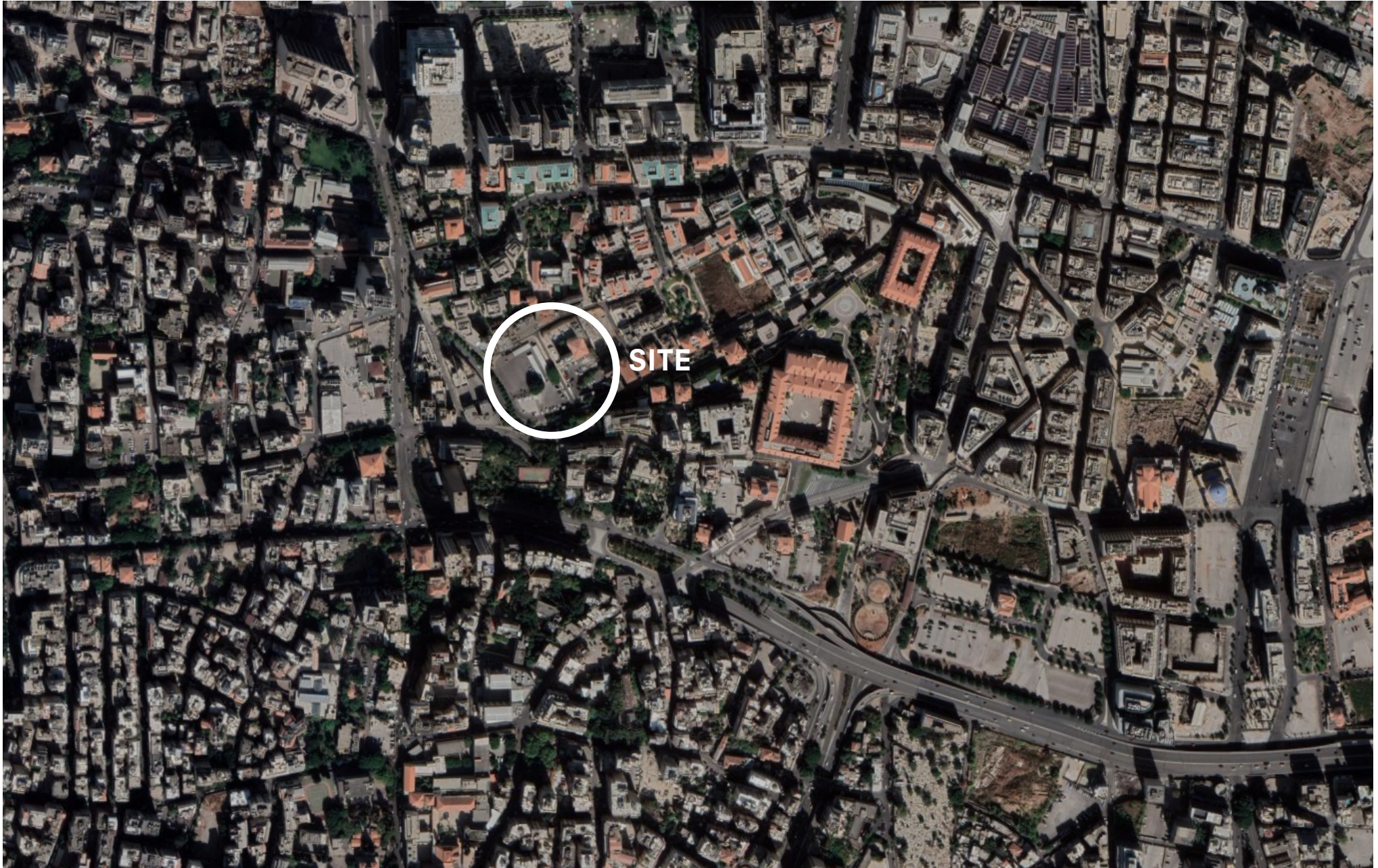


introduction
beirut



introduction

site



lebanese in need of public gathering space for leisure



sport as type of leisure

Leisure is not just a sense of enjoyment, but is time not spent working or sleeping. Sport is the most efficient form of leisure to bring Beiruti together.

the social cement

“**Sport** is the ‘social cement’ that **helps** build the social cohesion that **binds families, communities and neighbourhoods**”

(Spaaij, 2013)

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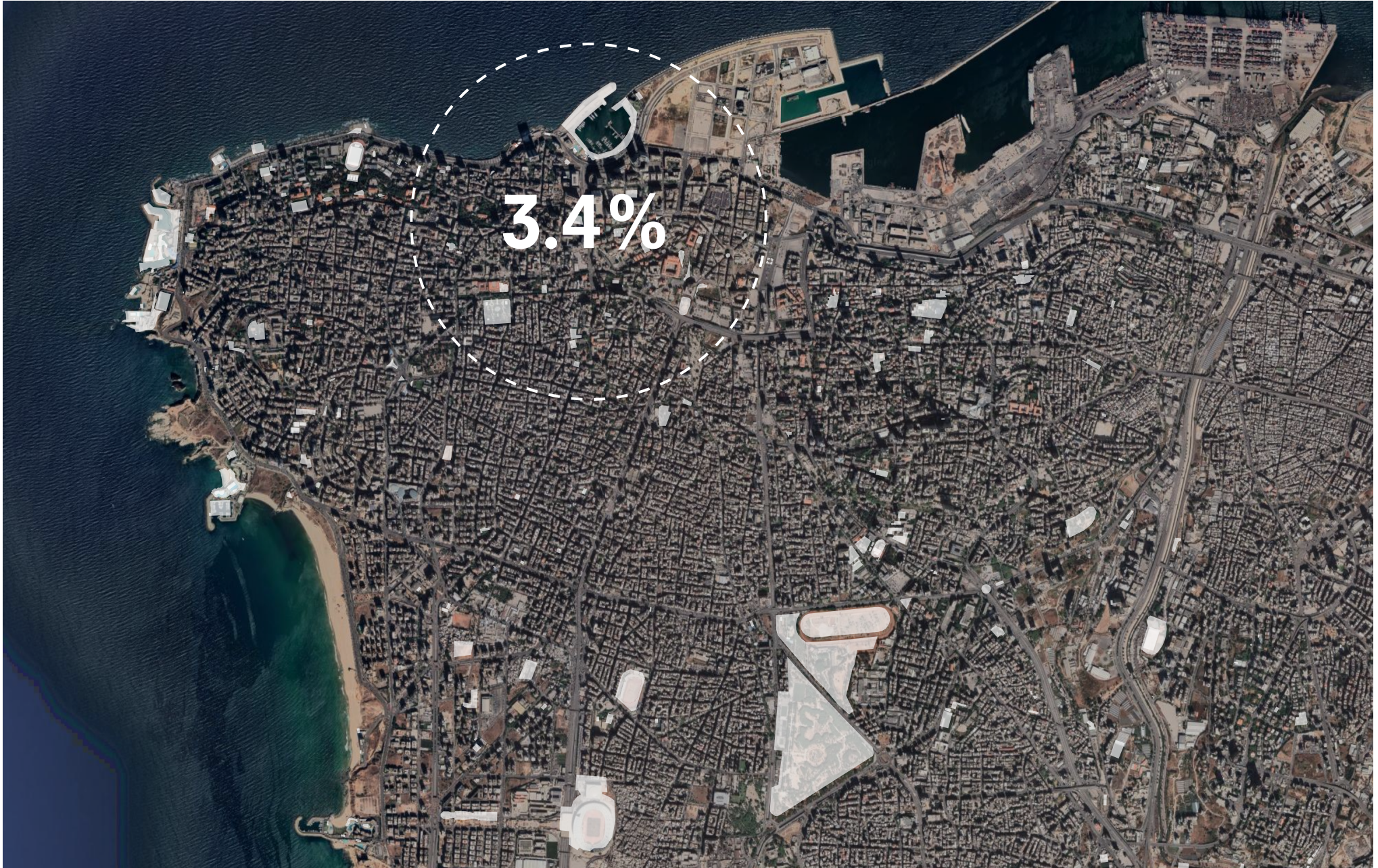
research

quantity of public gathering space



research

lack of public gathering space

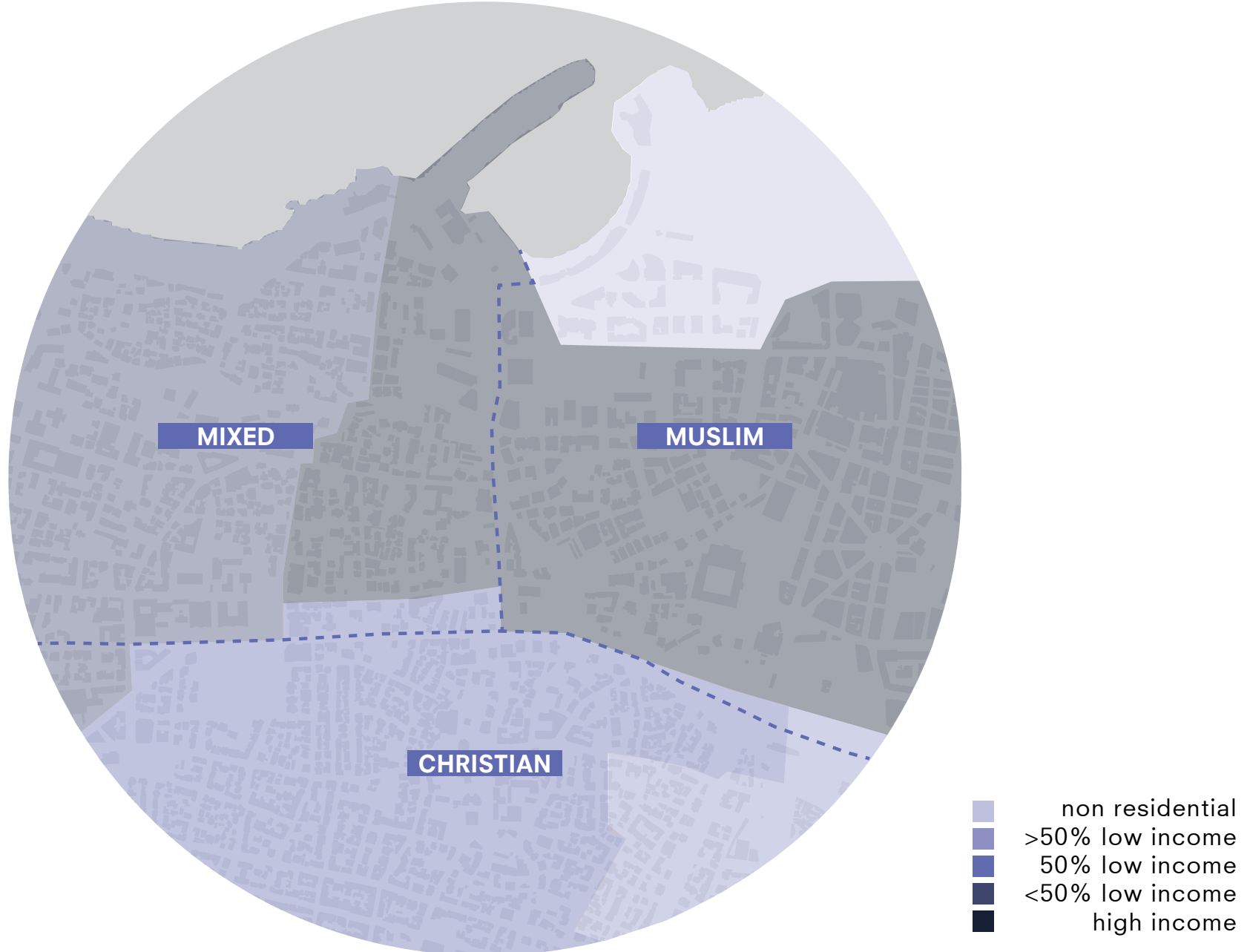


quality of public gathering space

“The limitations of Beirut’s spectacle city center are further underscored by residents, who criticize the new Down Town for **providing little “neutral” space** for people to **meet, socialize, or engage** with one another.”

(Larkin, 2010)

socially fragmented city



overall benefits of social cohesion

“**Social cohesion** is a key factor in **defragmentating** the city.”

(Jennings & Bamkole, 2019)

research

main problems



research

main problems



research

main problems



research

the ambition is to...



research

...build a sports hub...



...where people come together and spend time together



research

research question

How can a sports facility influence the socio- spatial development of Beirut's city centre?

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design brief
plot size



design brief

current challenges

**PHYSICAL
OBSTRUCTIONS**

**UNATTRACTIVE
AREA**

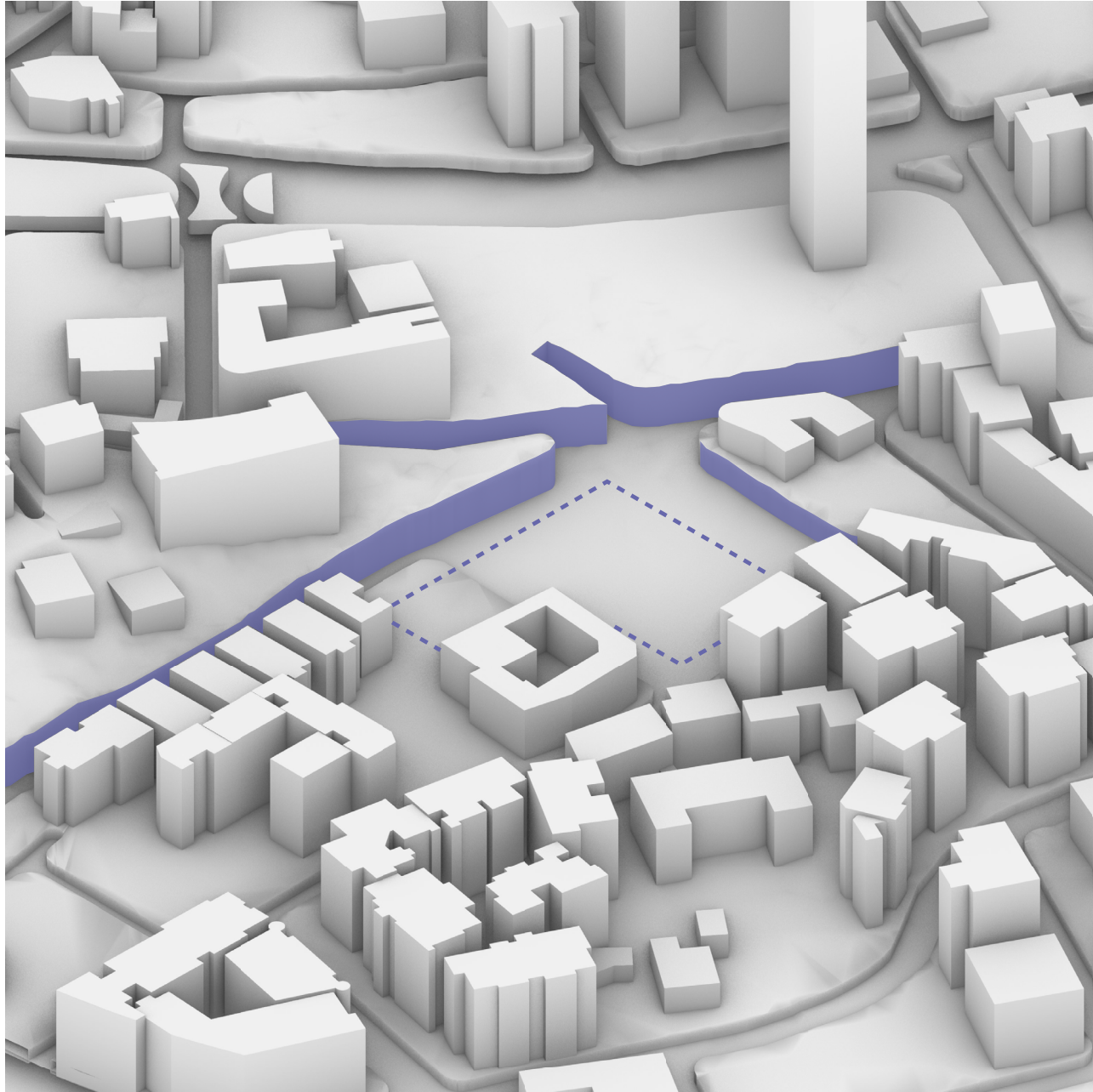
design brief

flat surface



design brief

height difference

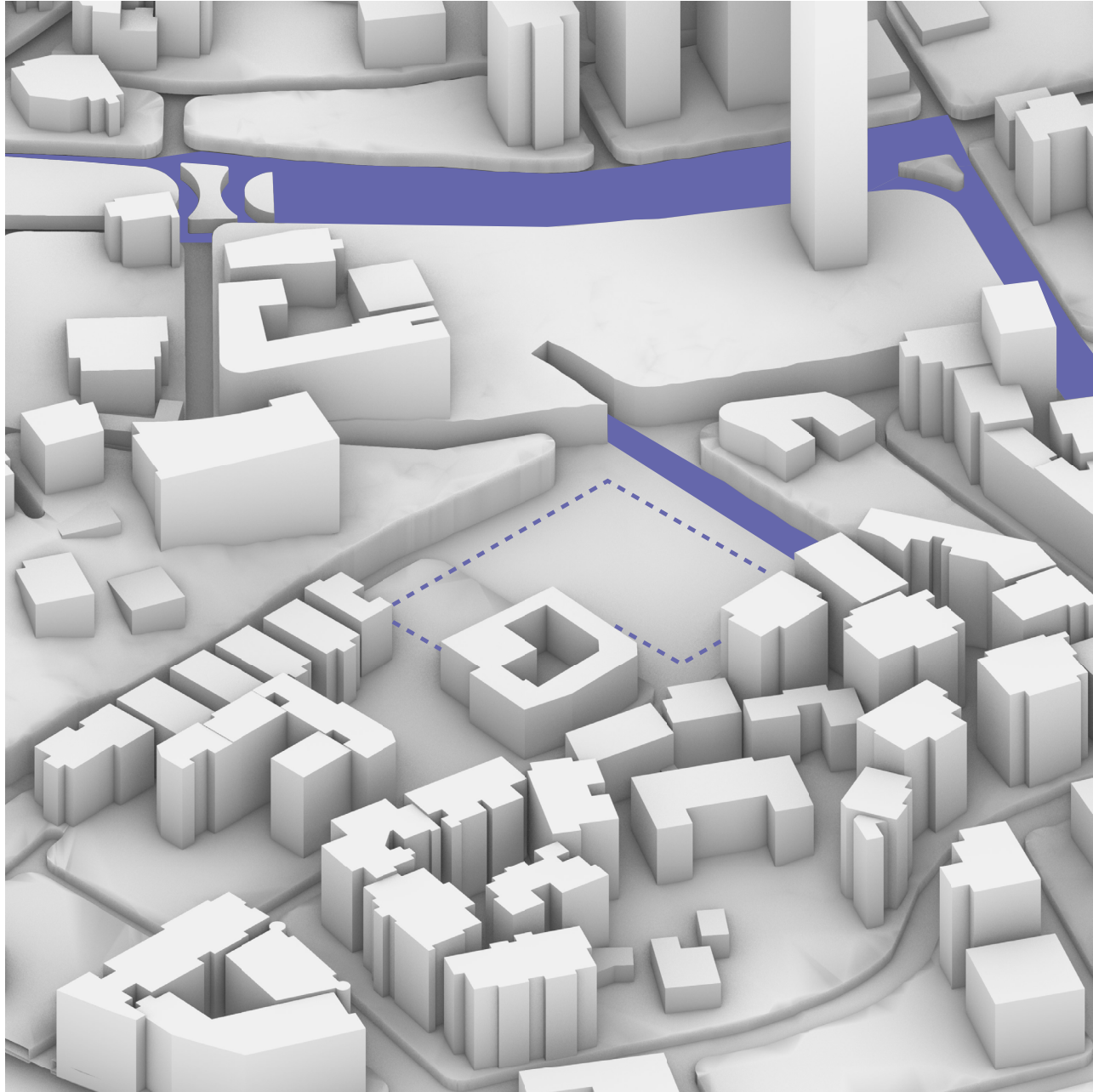


design brief

height difference



design brief
highway



design brief
highway



bidhara'l beirut strategy

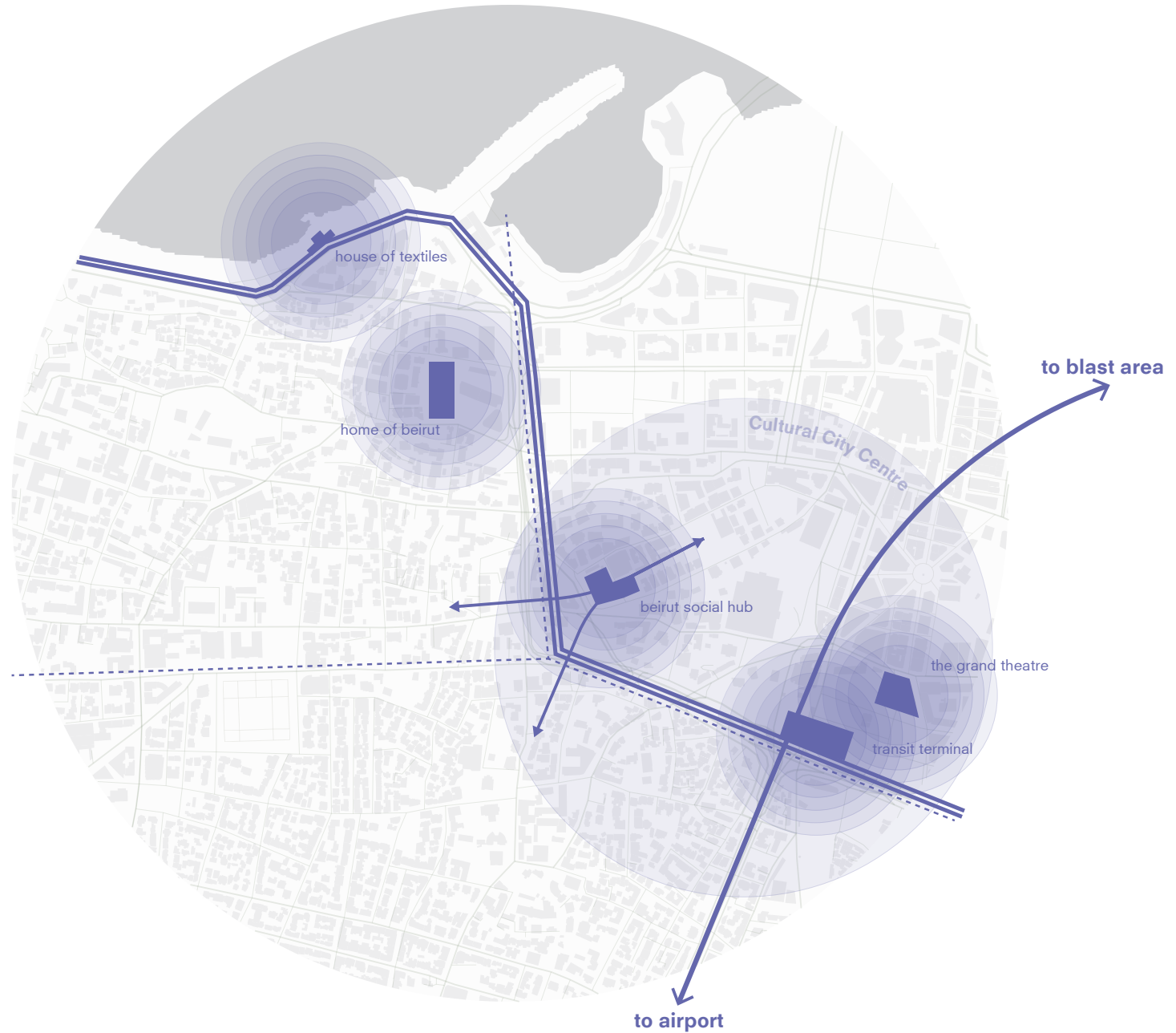


design brief

bidhara'1 beirut strategy

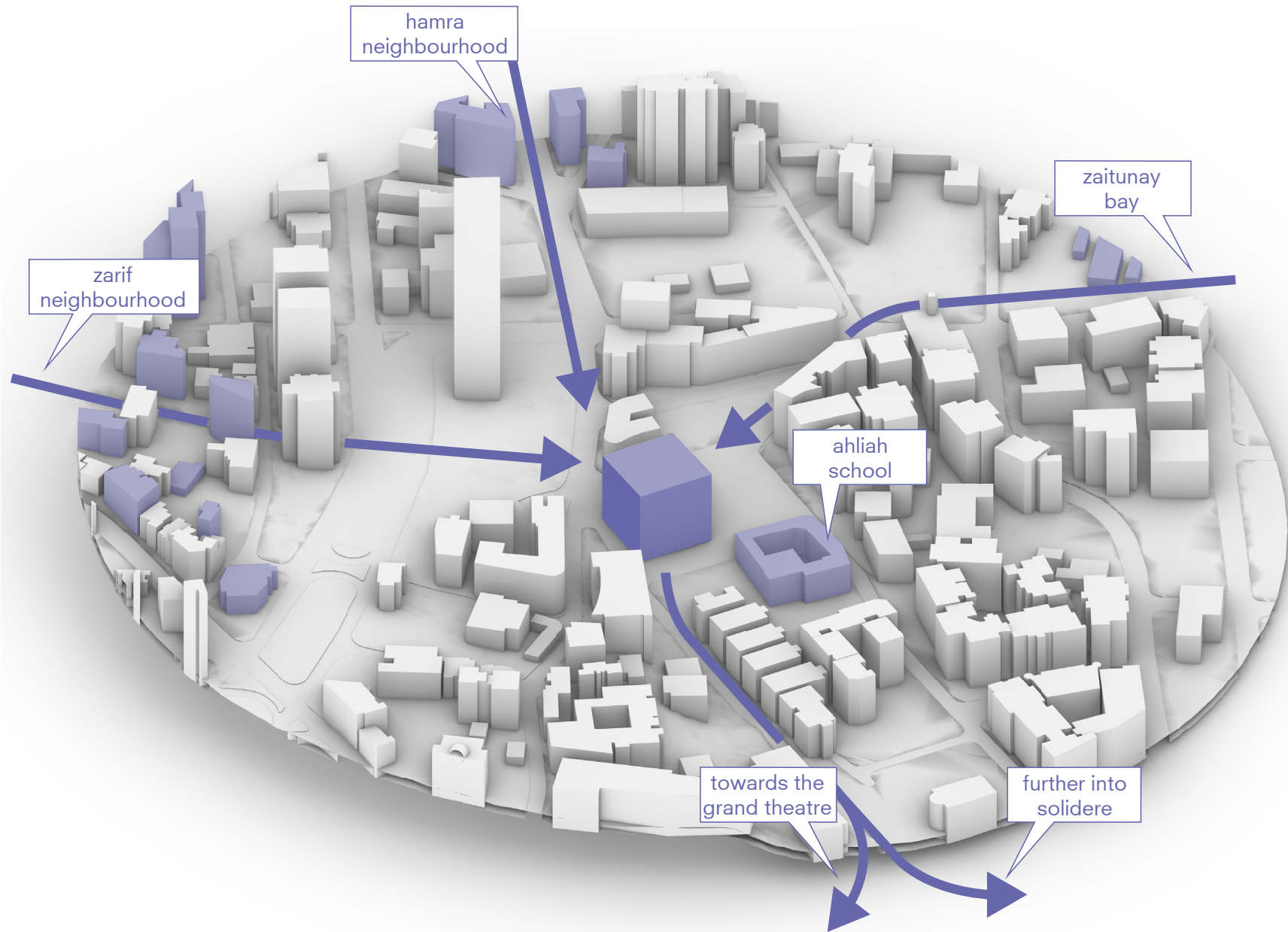


design brief
cultural city centre



design brief

users



users



KIDS



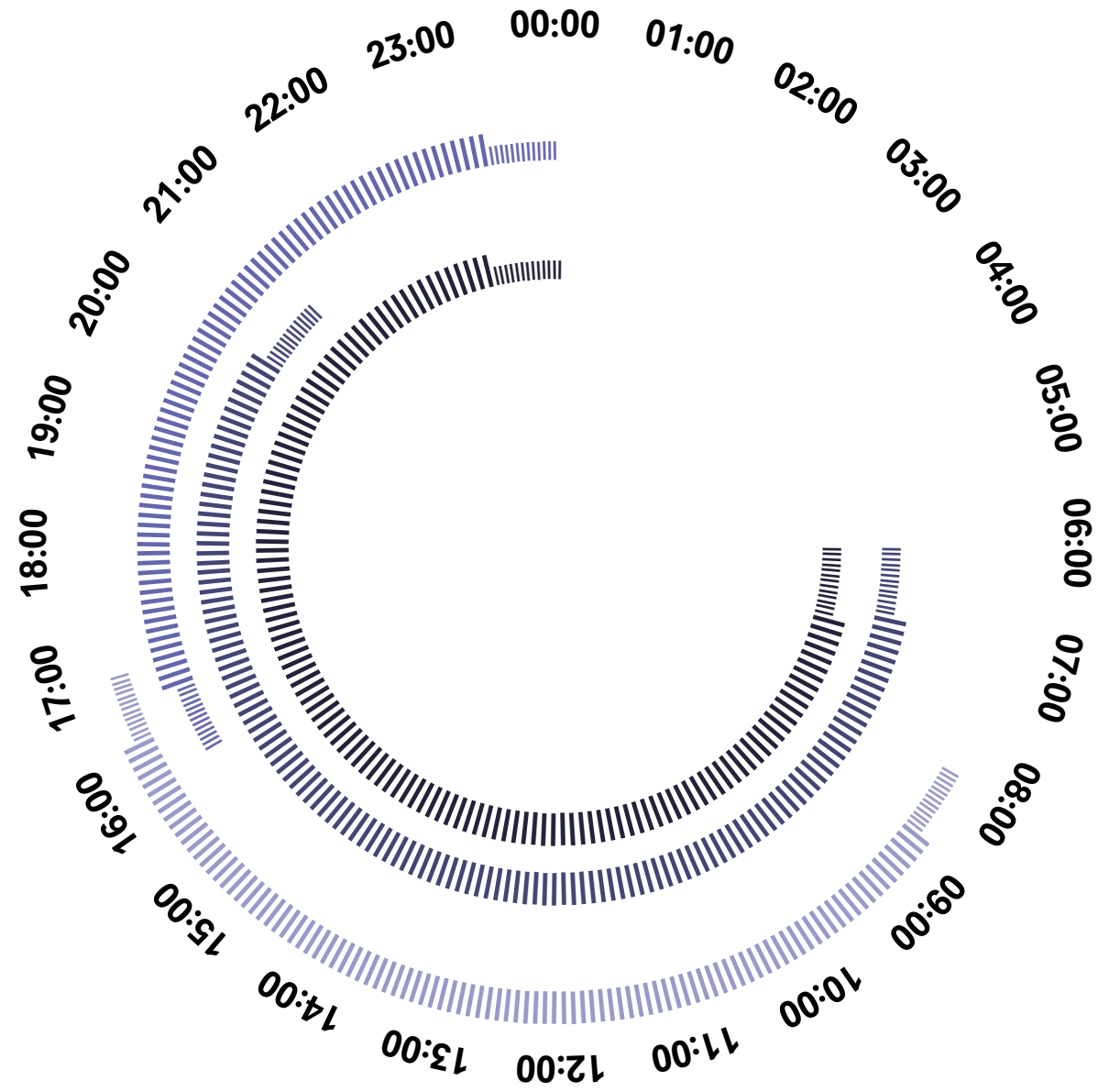
WORKING PEOPLE



ELDERLY



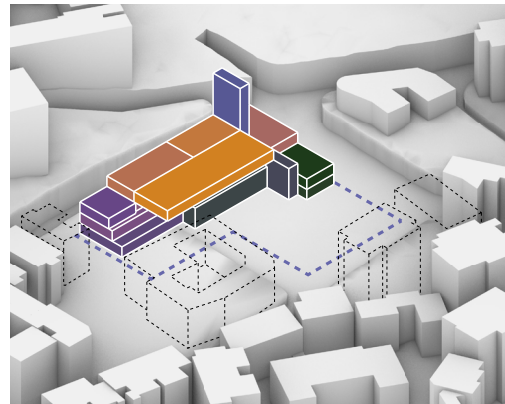
STUDENTS



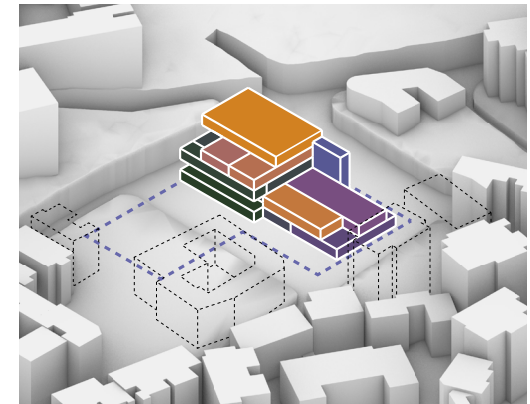
program on site studies



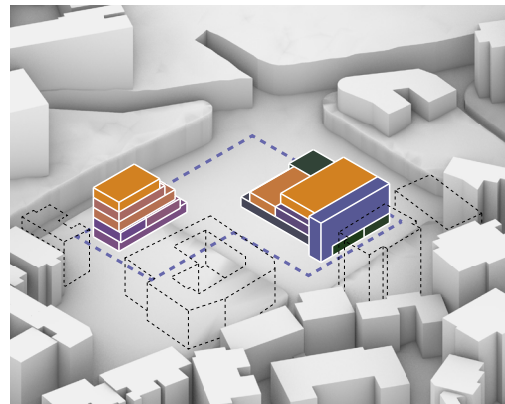
the tower



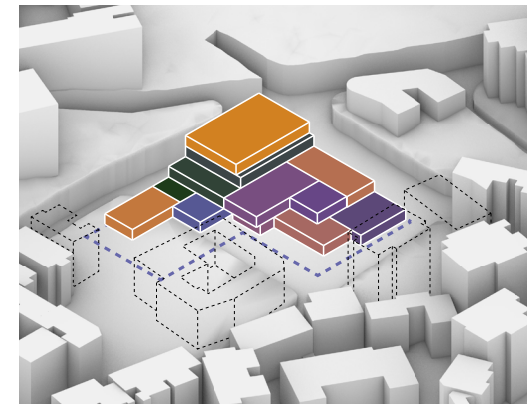
the public slab



along the highway



the two volumes



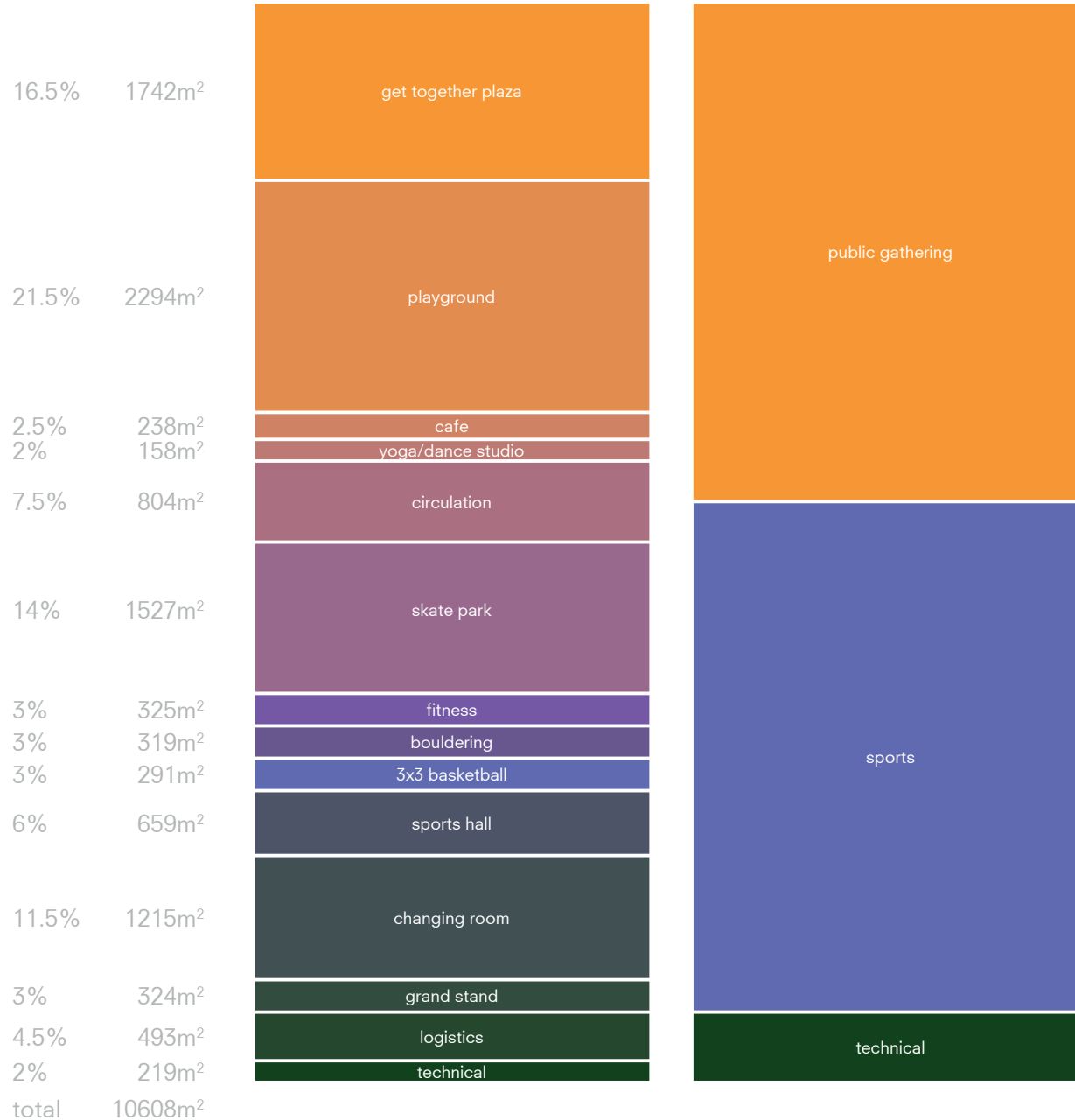
the hill

design brief

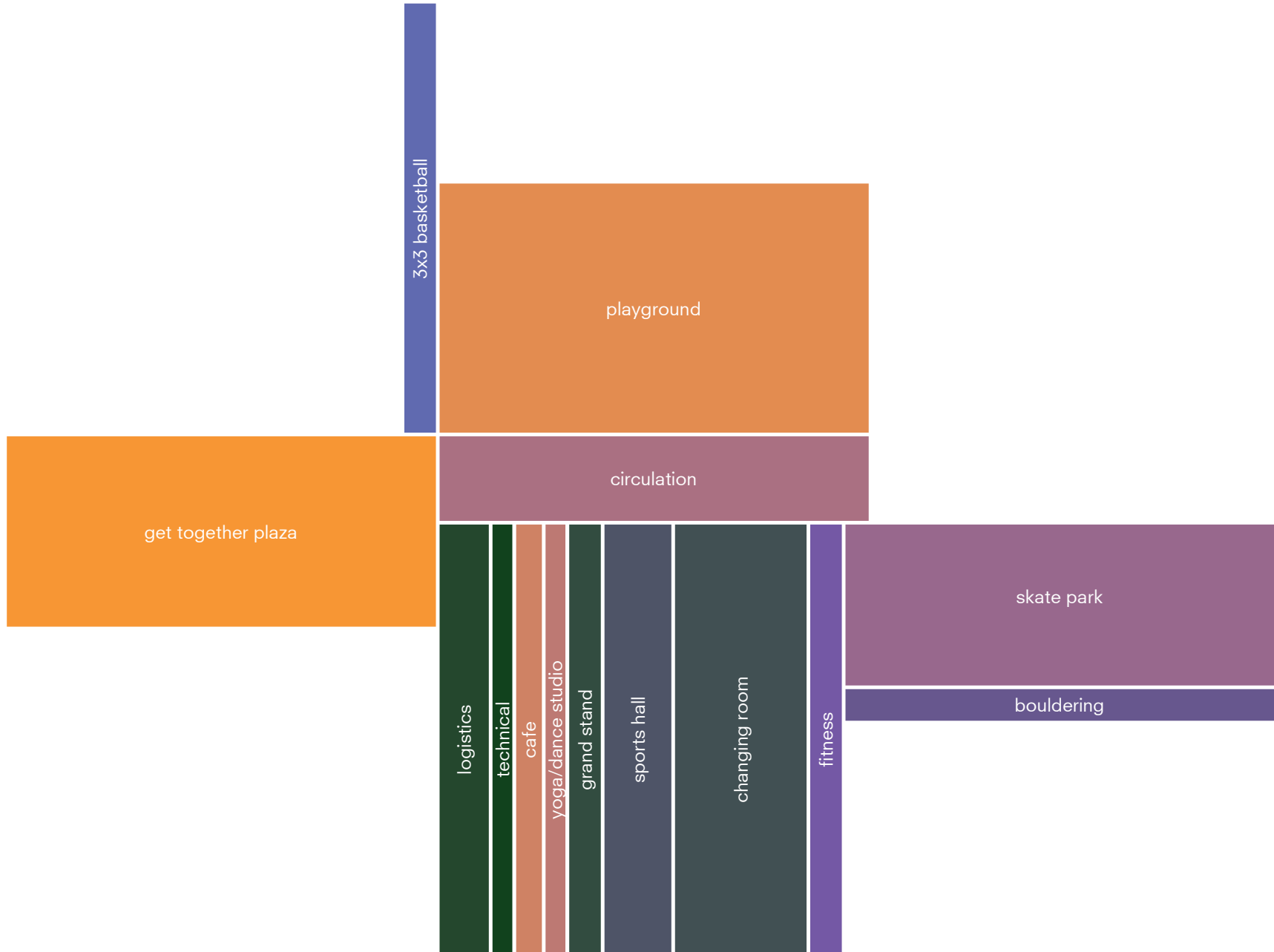
communal and affordable sports



design brief program bar



design brief
relation diagram



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concept

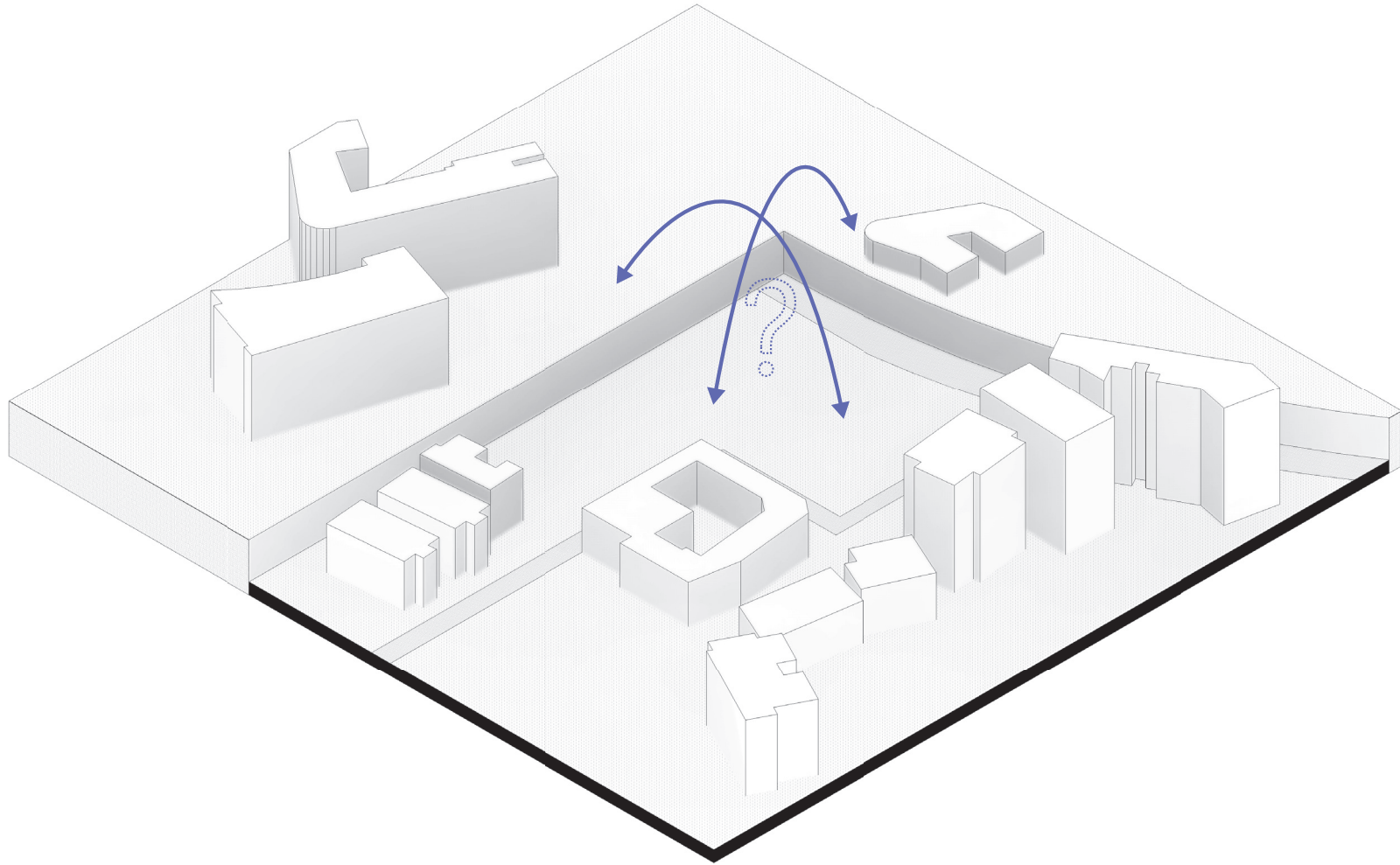
design ambitions

**TO CREATE
ACCESSIBILITY**

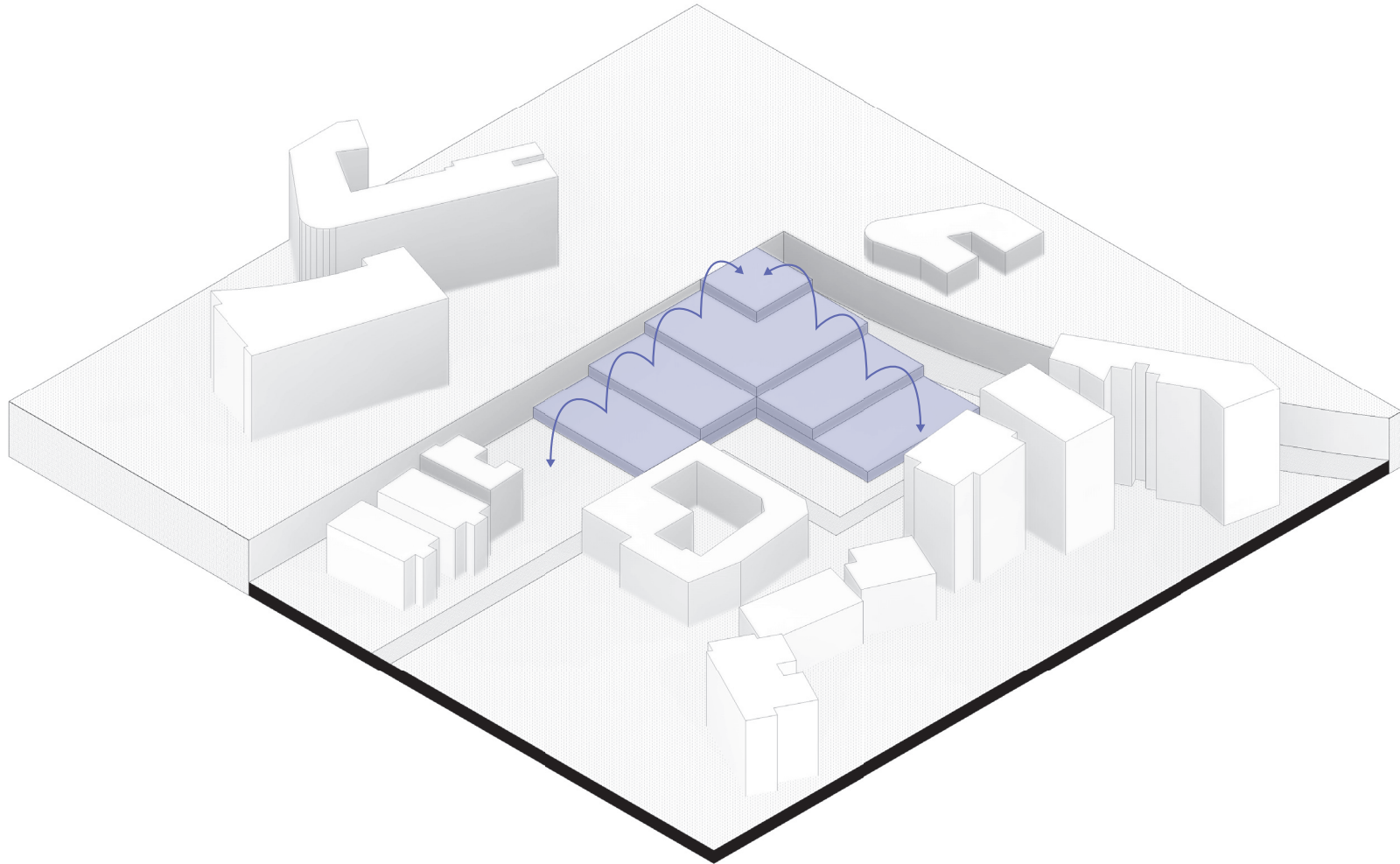
**TO BE
INCLUSIVE**

**PROVIDE
PUBLIC SPACES**

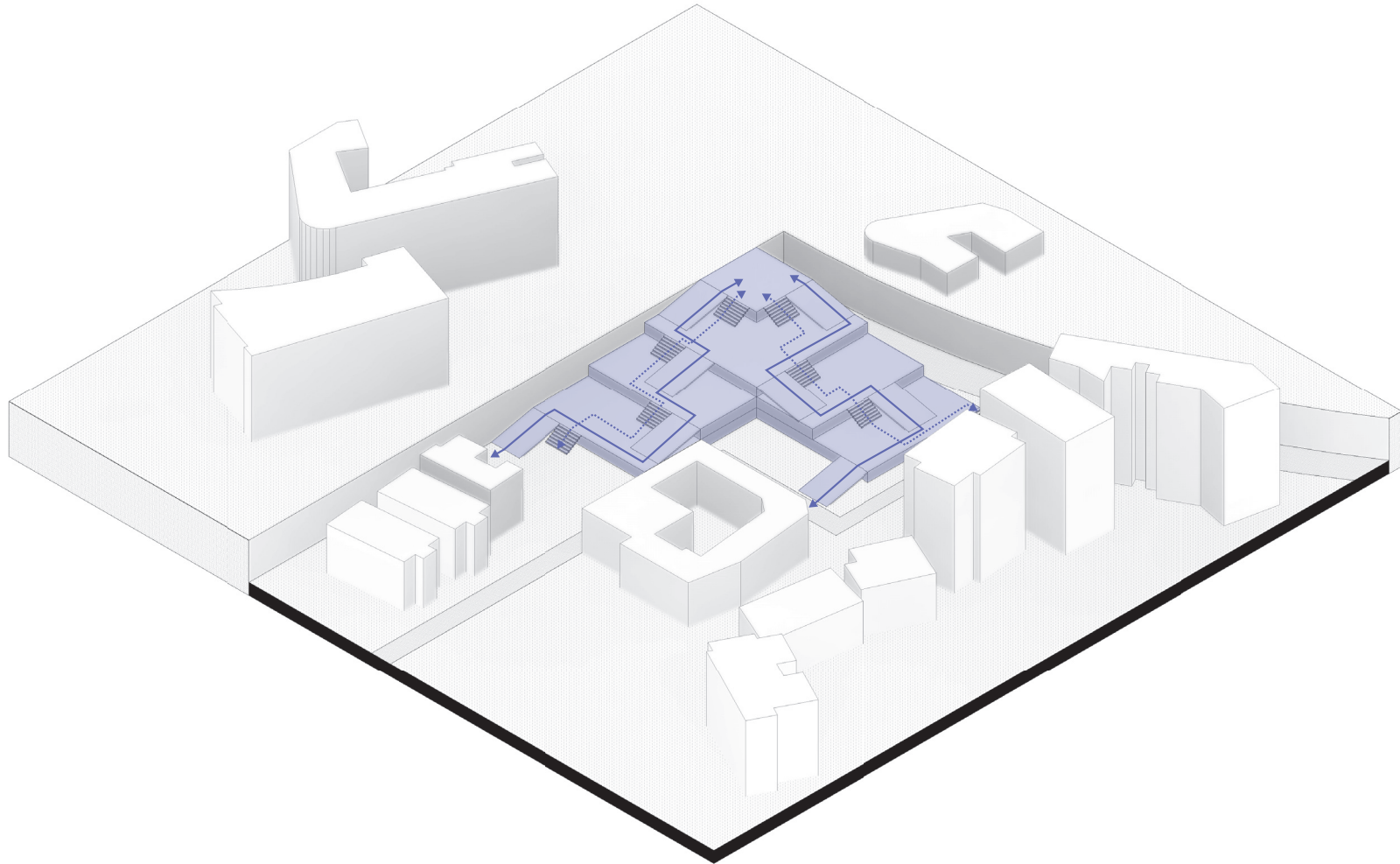
concept
accessible



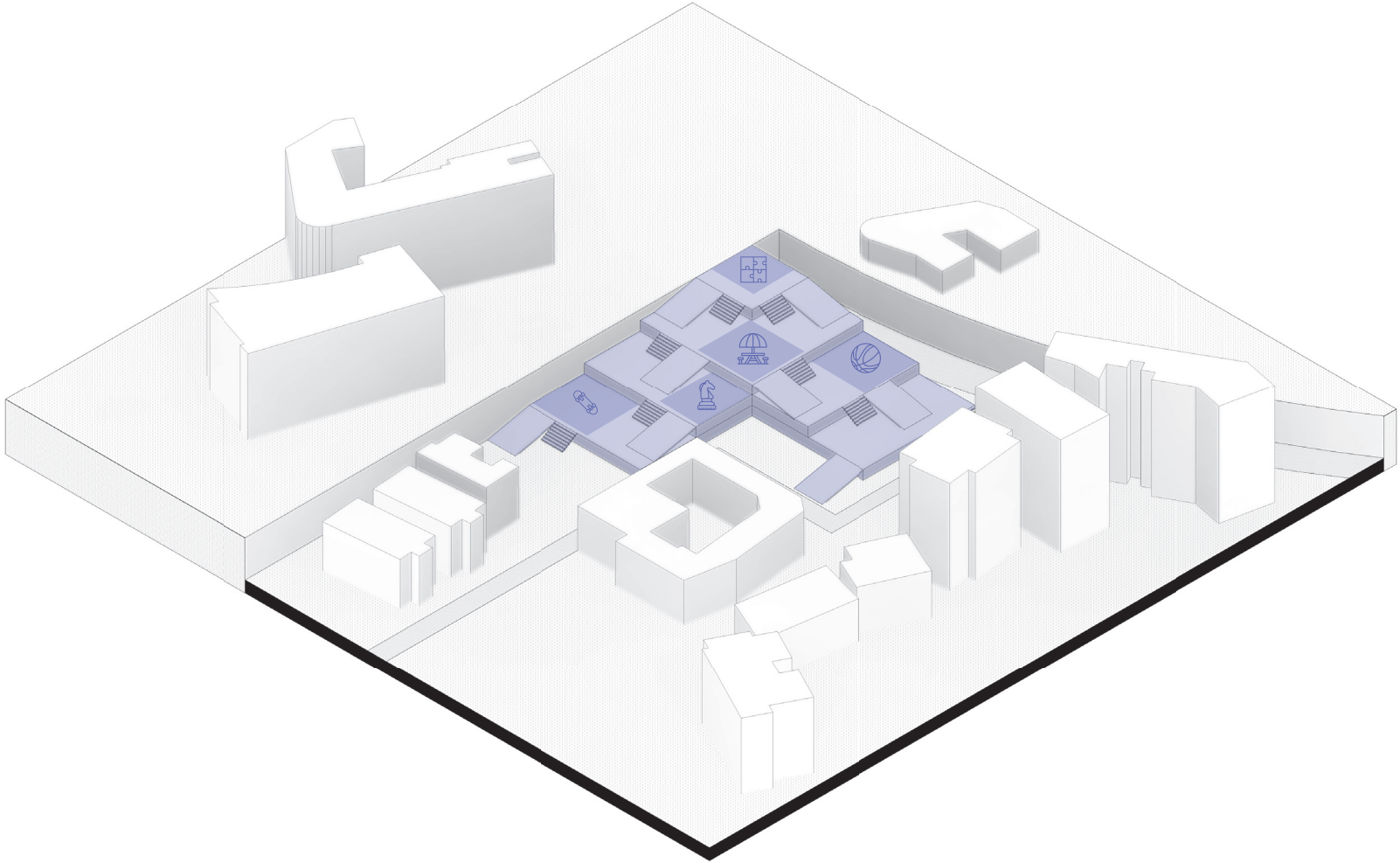
concept
accessible



concept
inclusive



concept
public spaces



concept
building bridges




concept: sport + public gathering spaces

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implementation
group site plan




drawn scale 1:10.000
rescaled to fit page

implementation
site plan



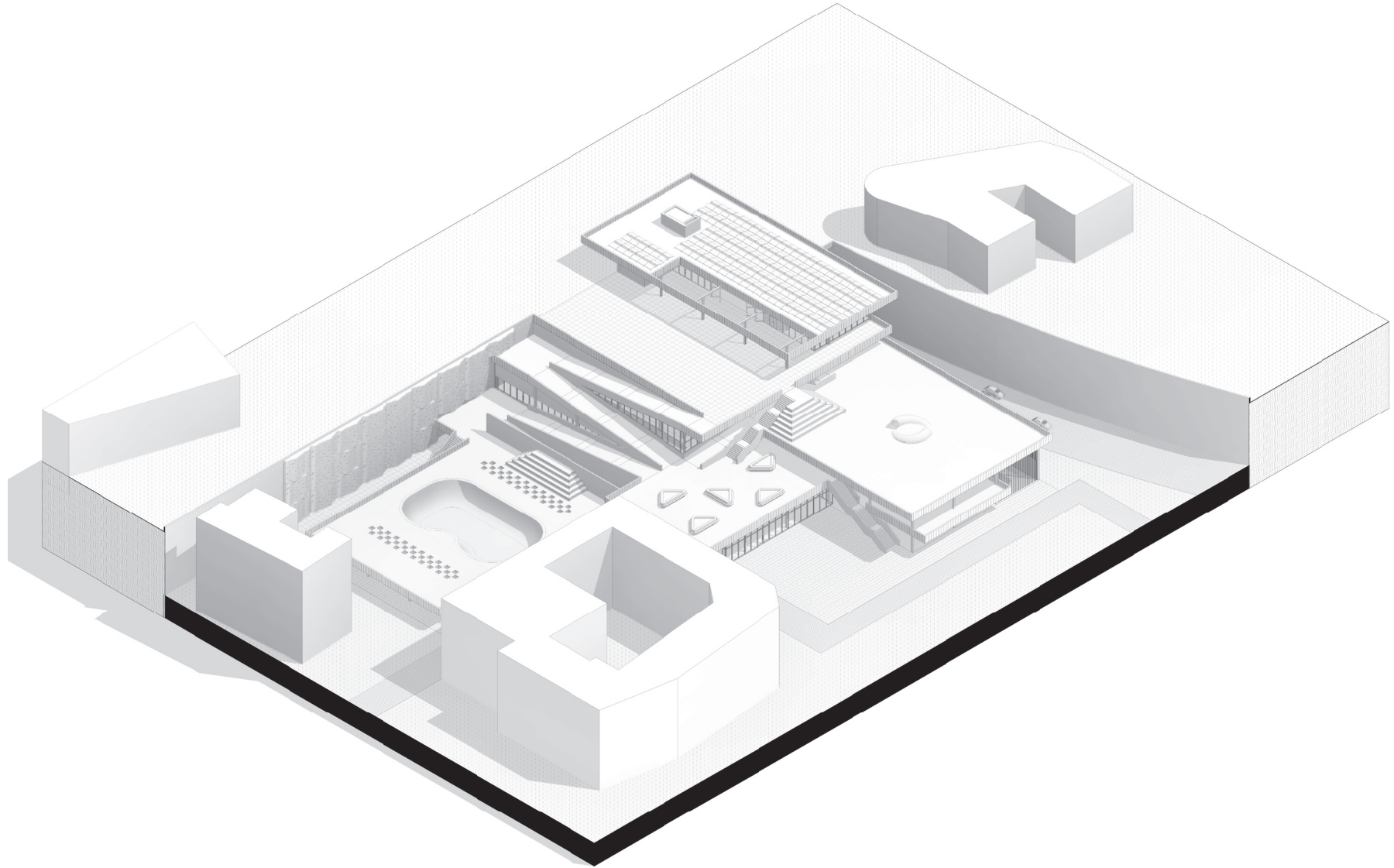
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implementation
site plan

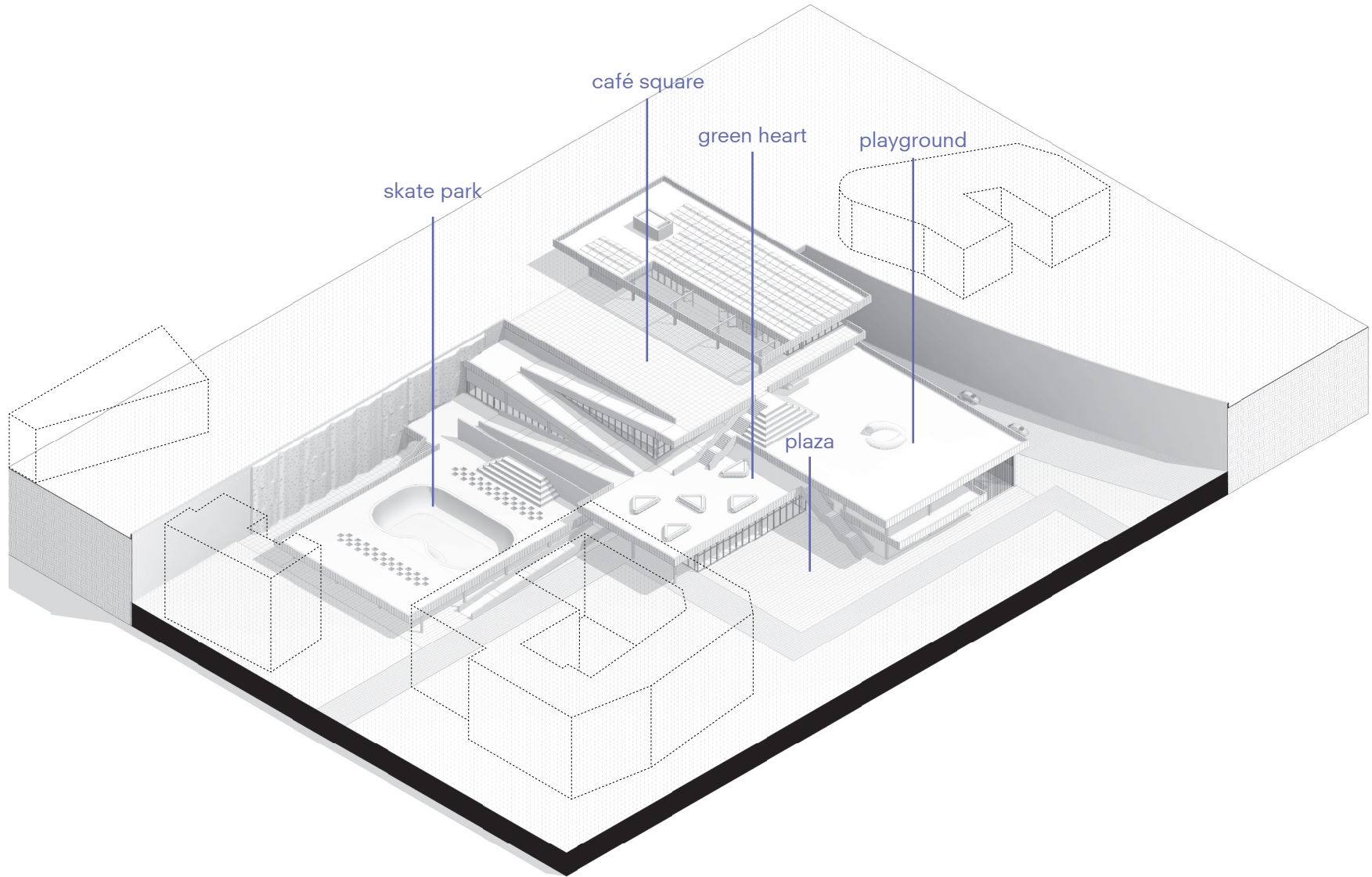


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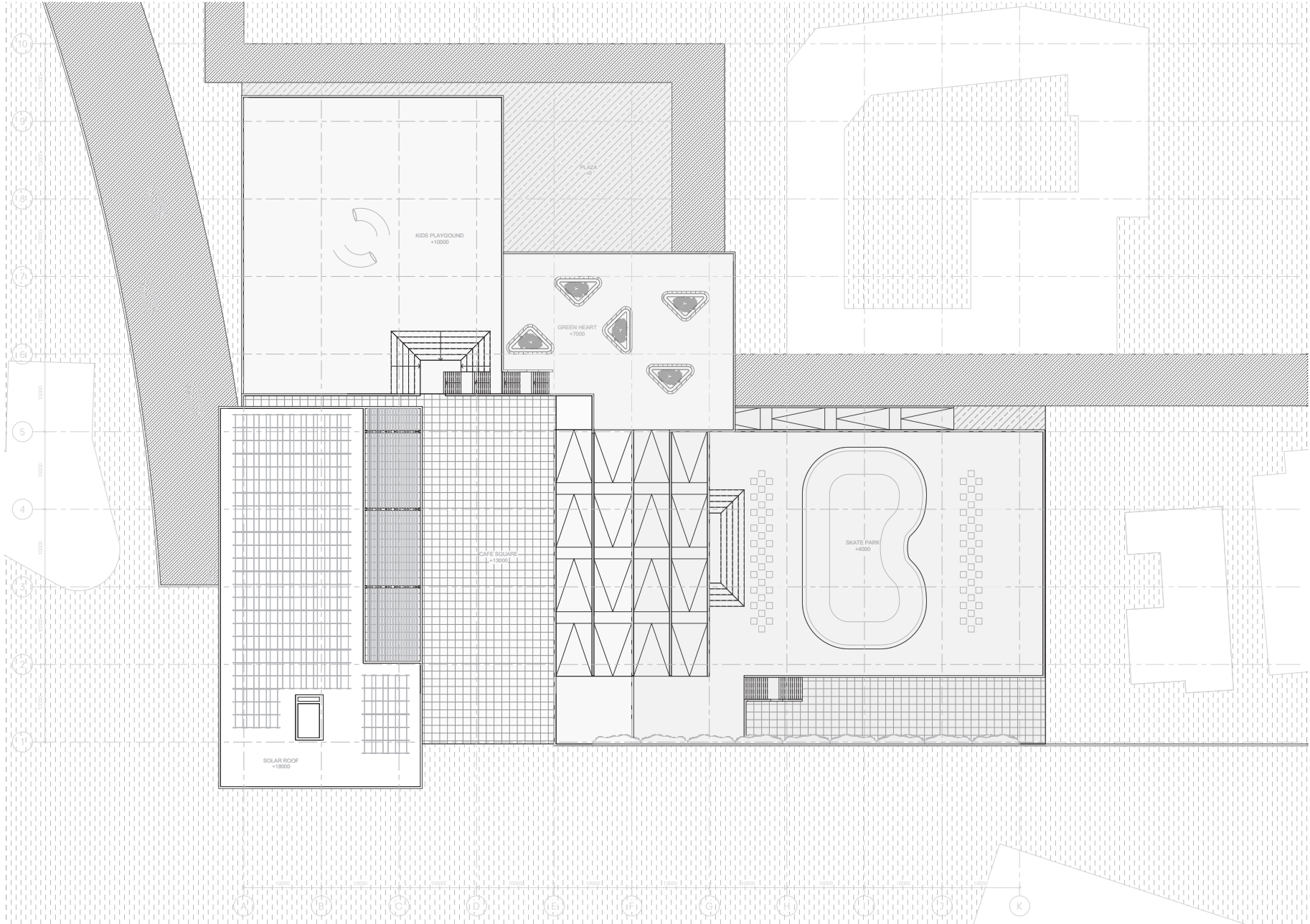
implementation
top to bottom



implementation
themed platforms

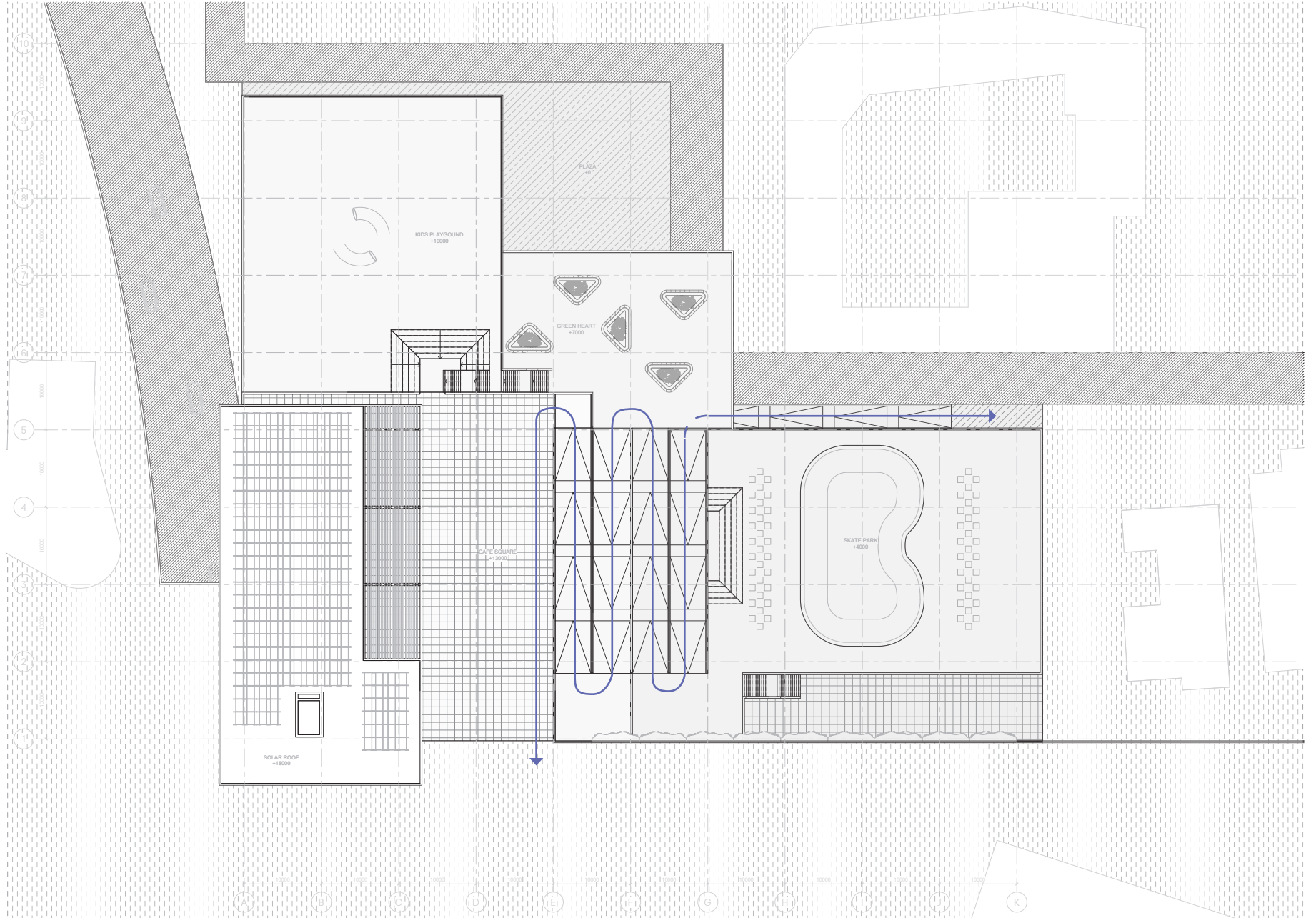


implementation
plan view roof



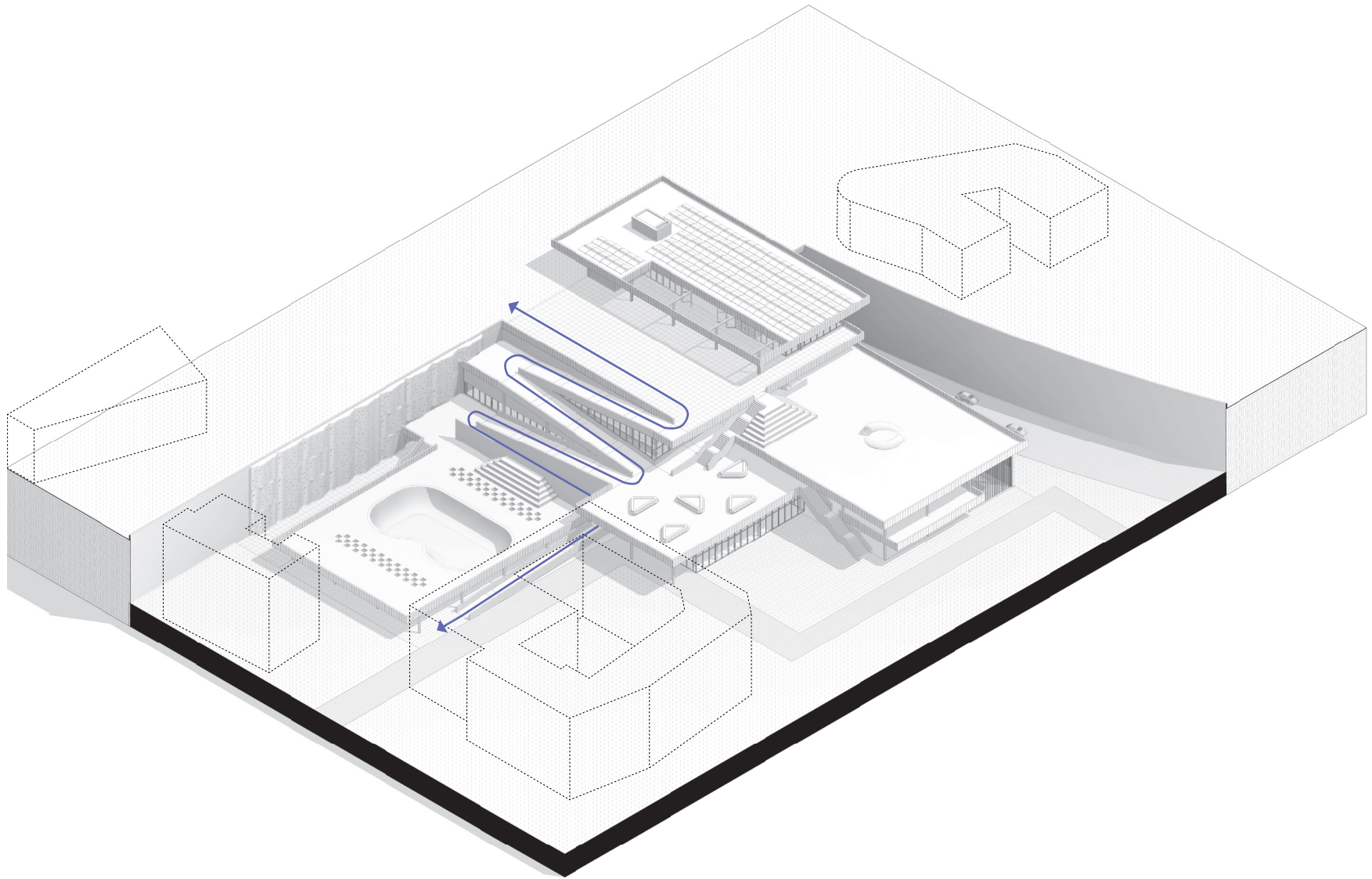
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implementation main route

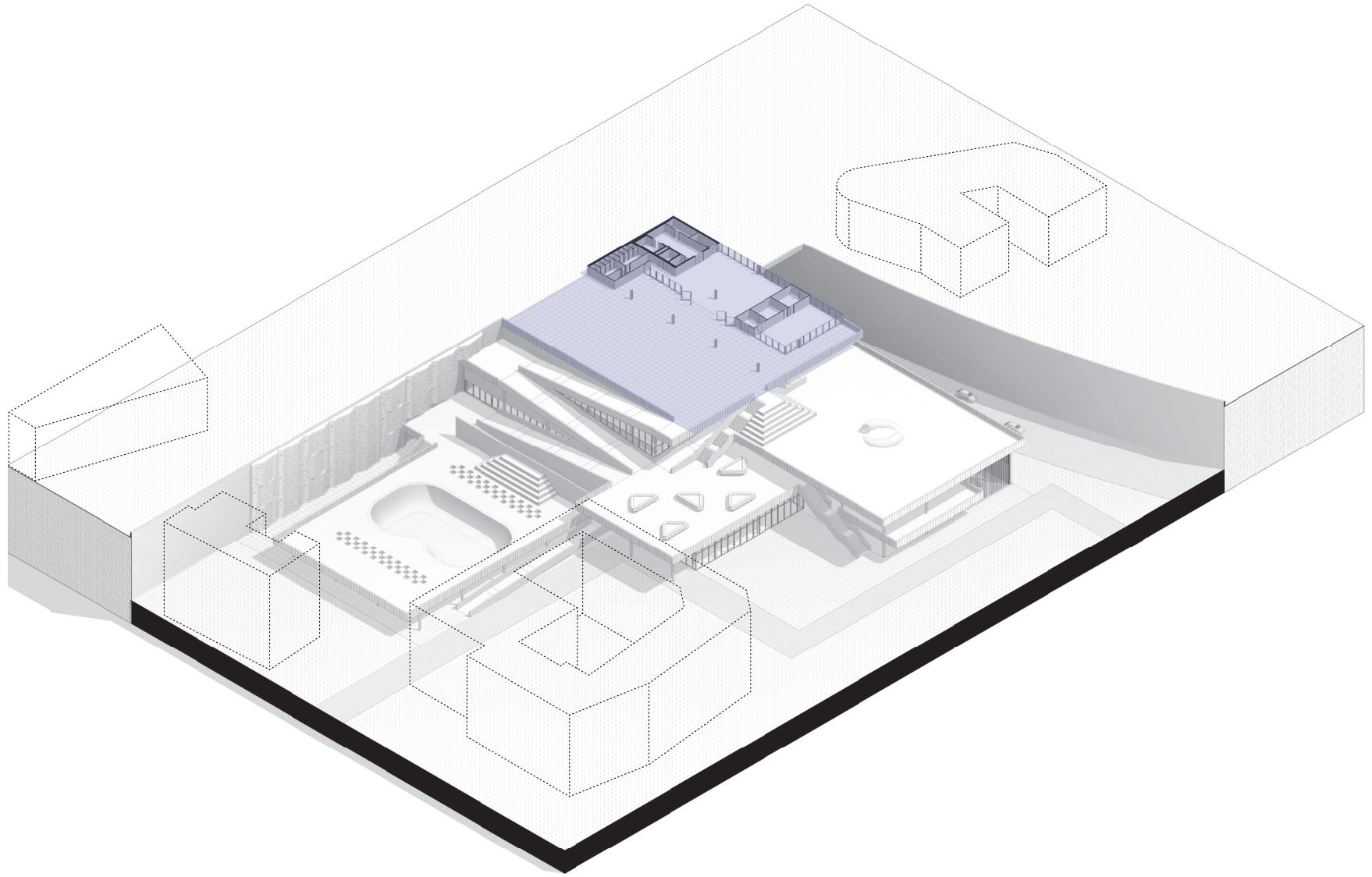


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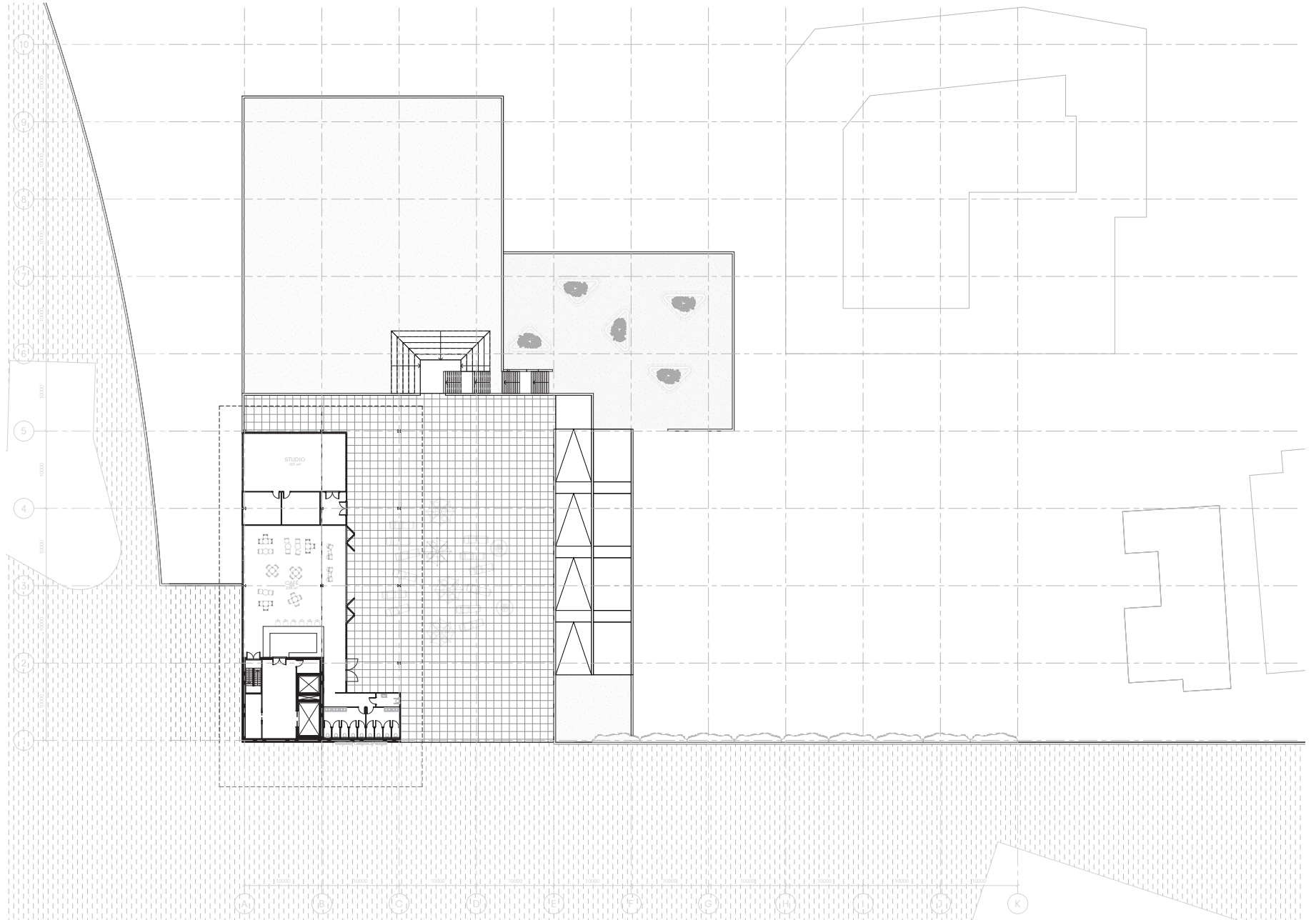
implementation
main route



implementation
café square

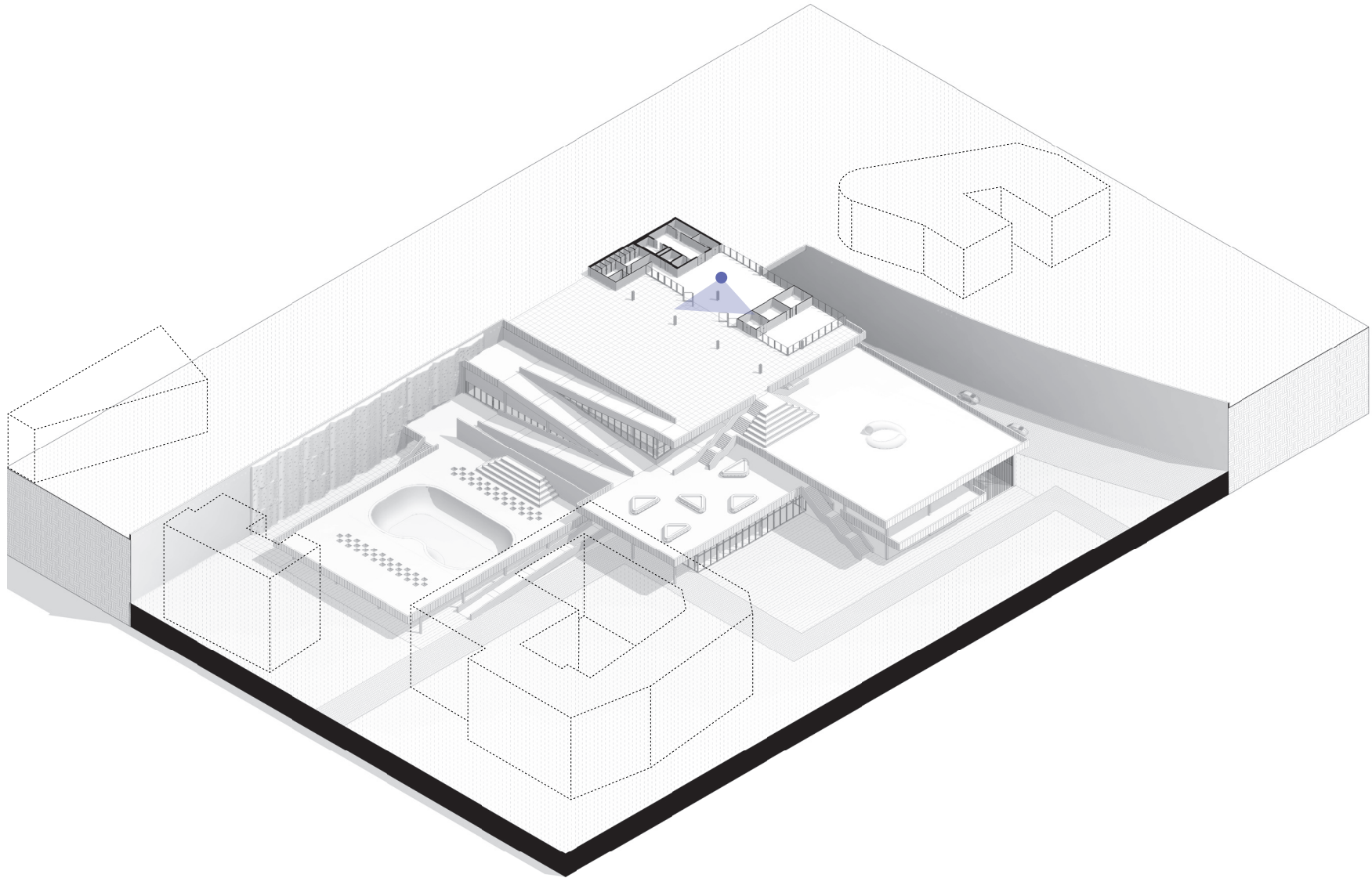


implementation
floor +13000



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rescaled to fit page

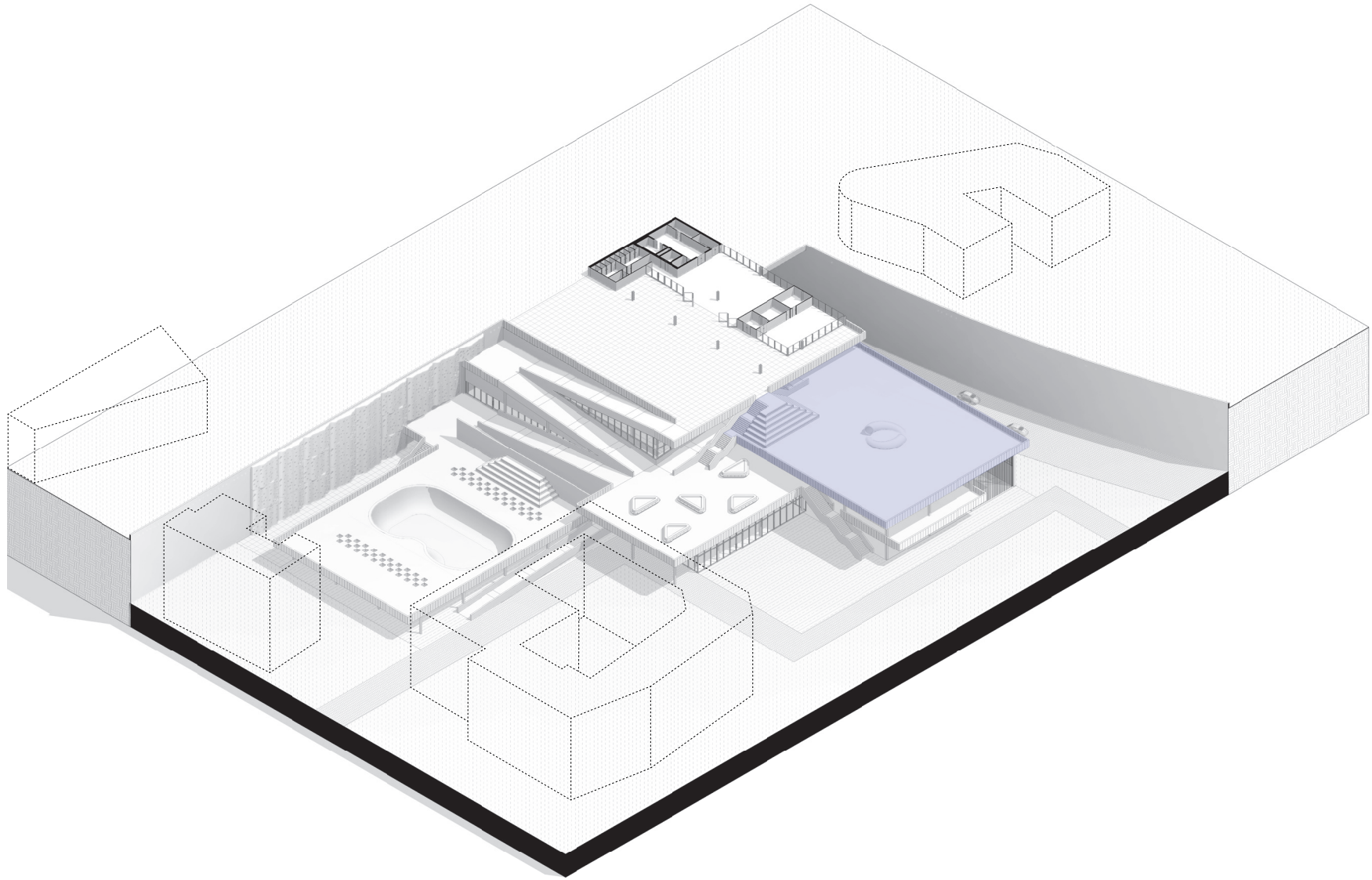
implementation
café square



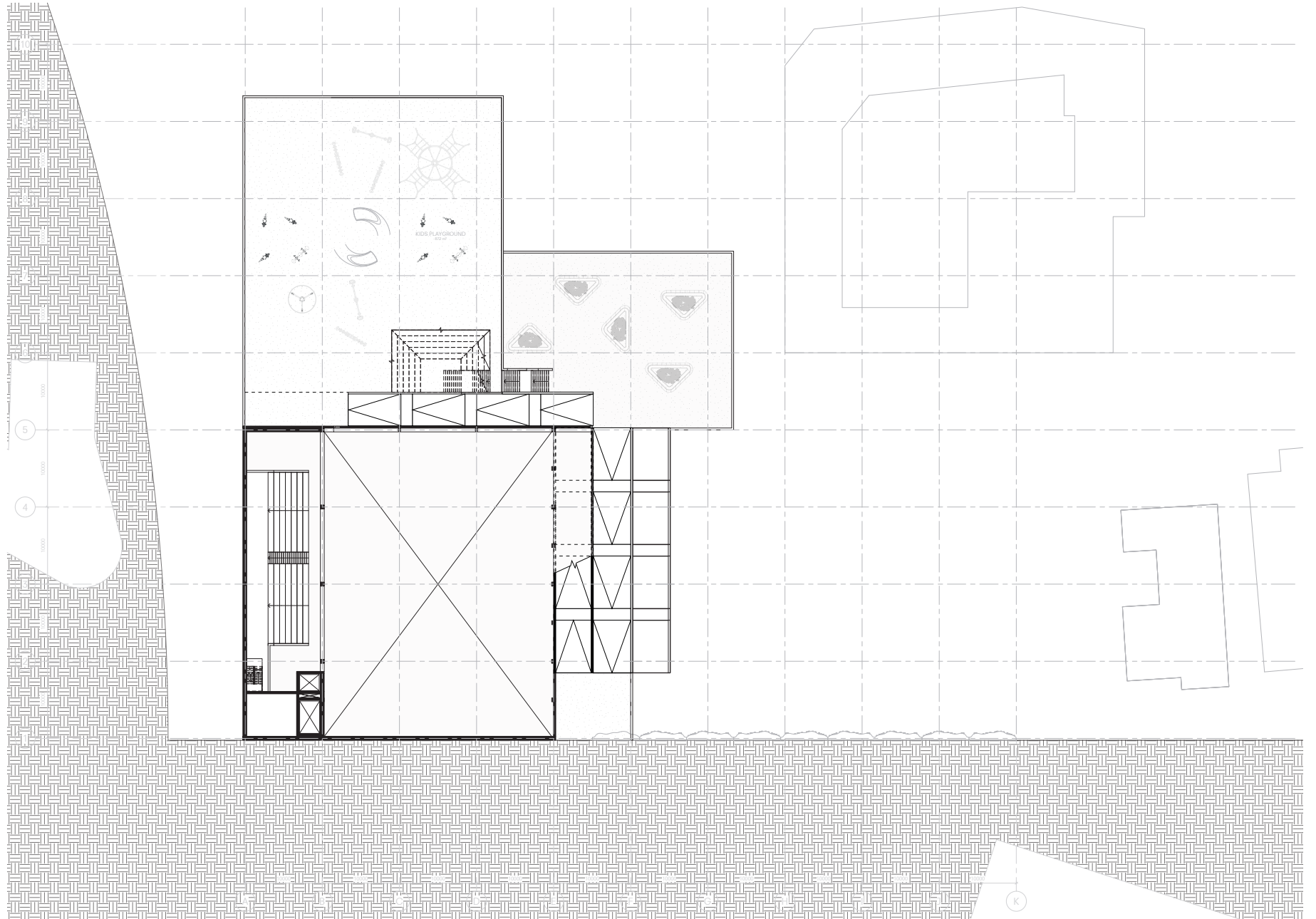
implementation
impression café



implementation
playground

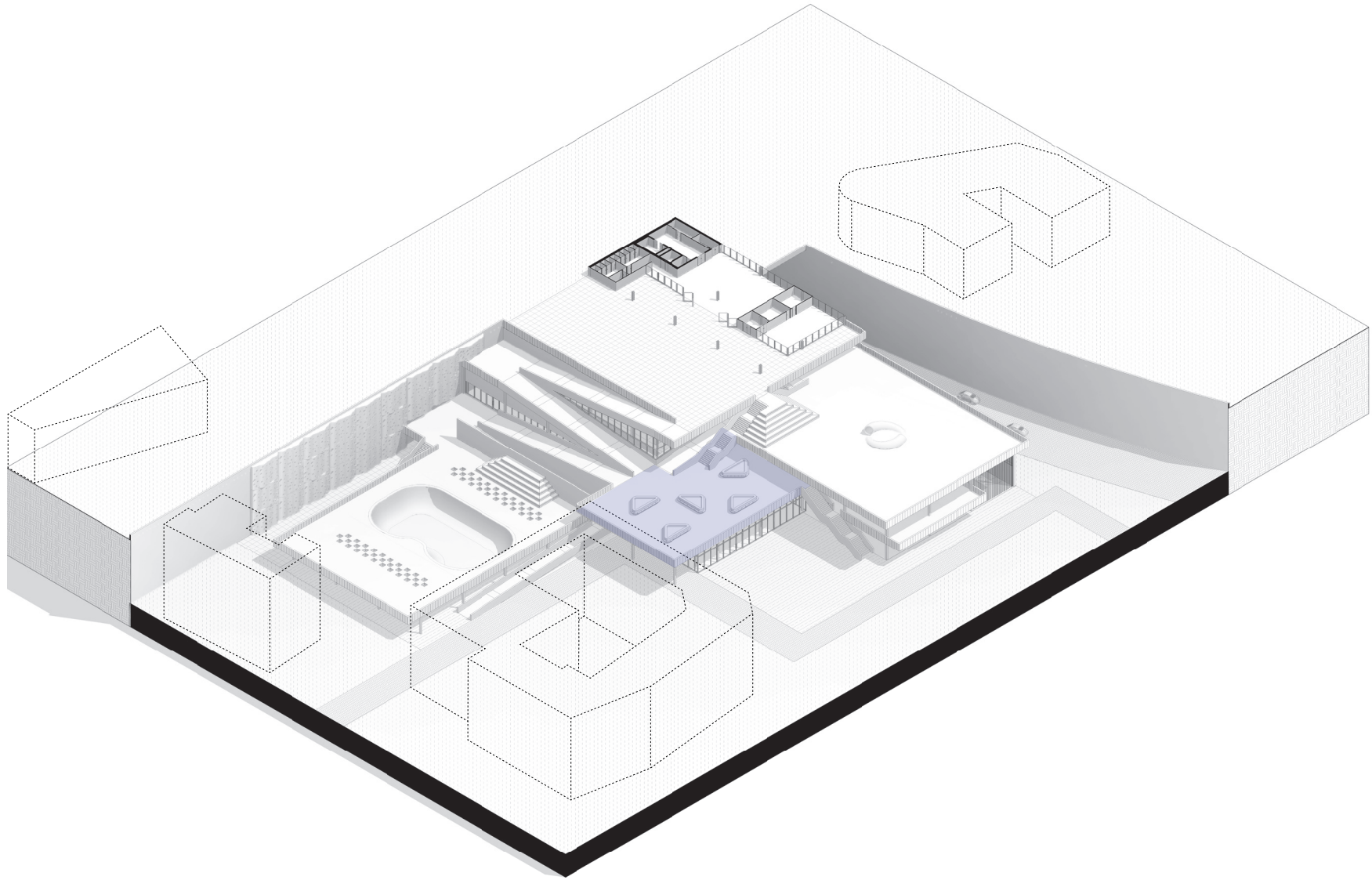


implementation
floor +10000

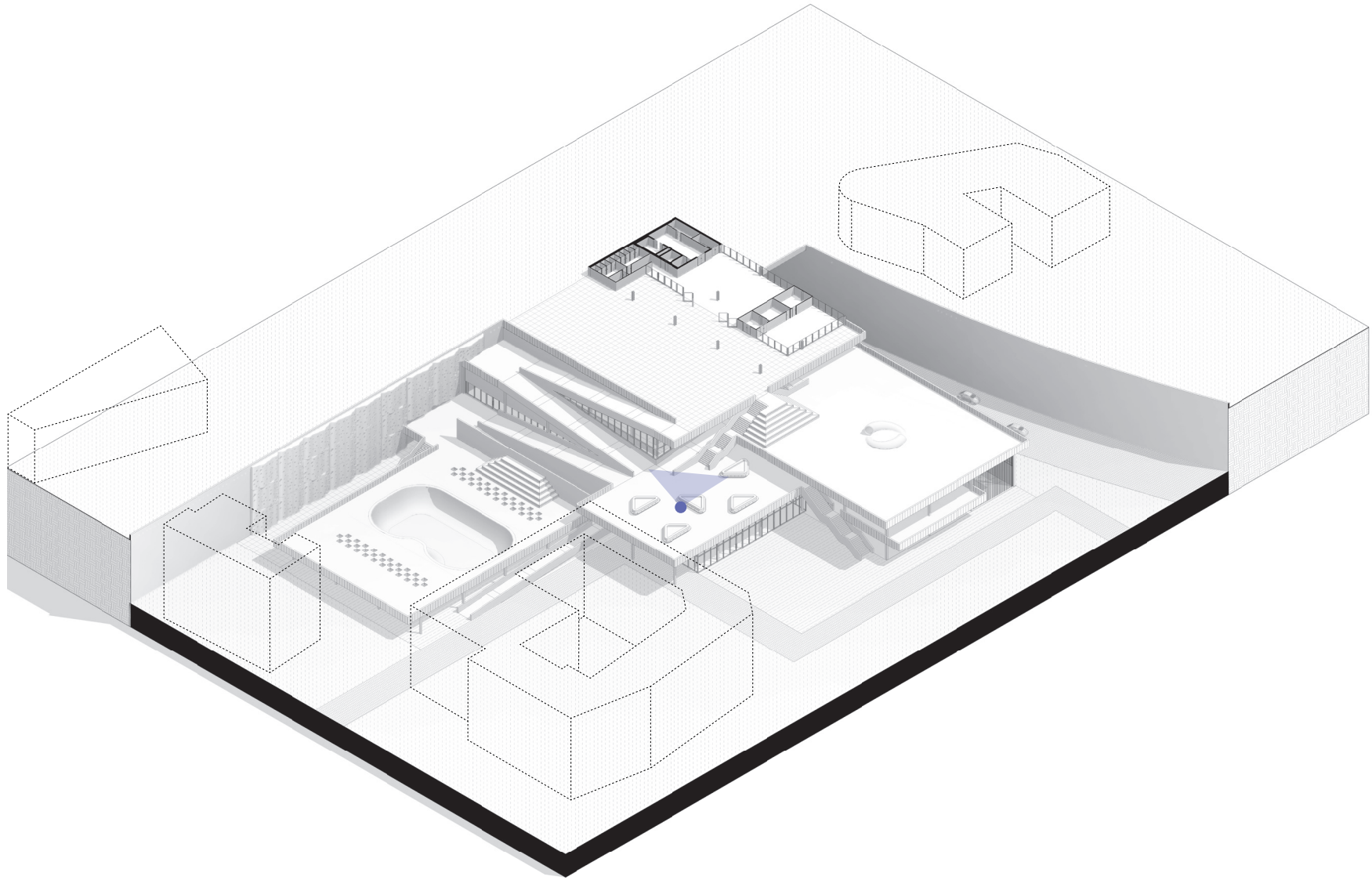


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implementation
green heart



implementation
green heart

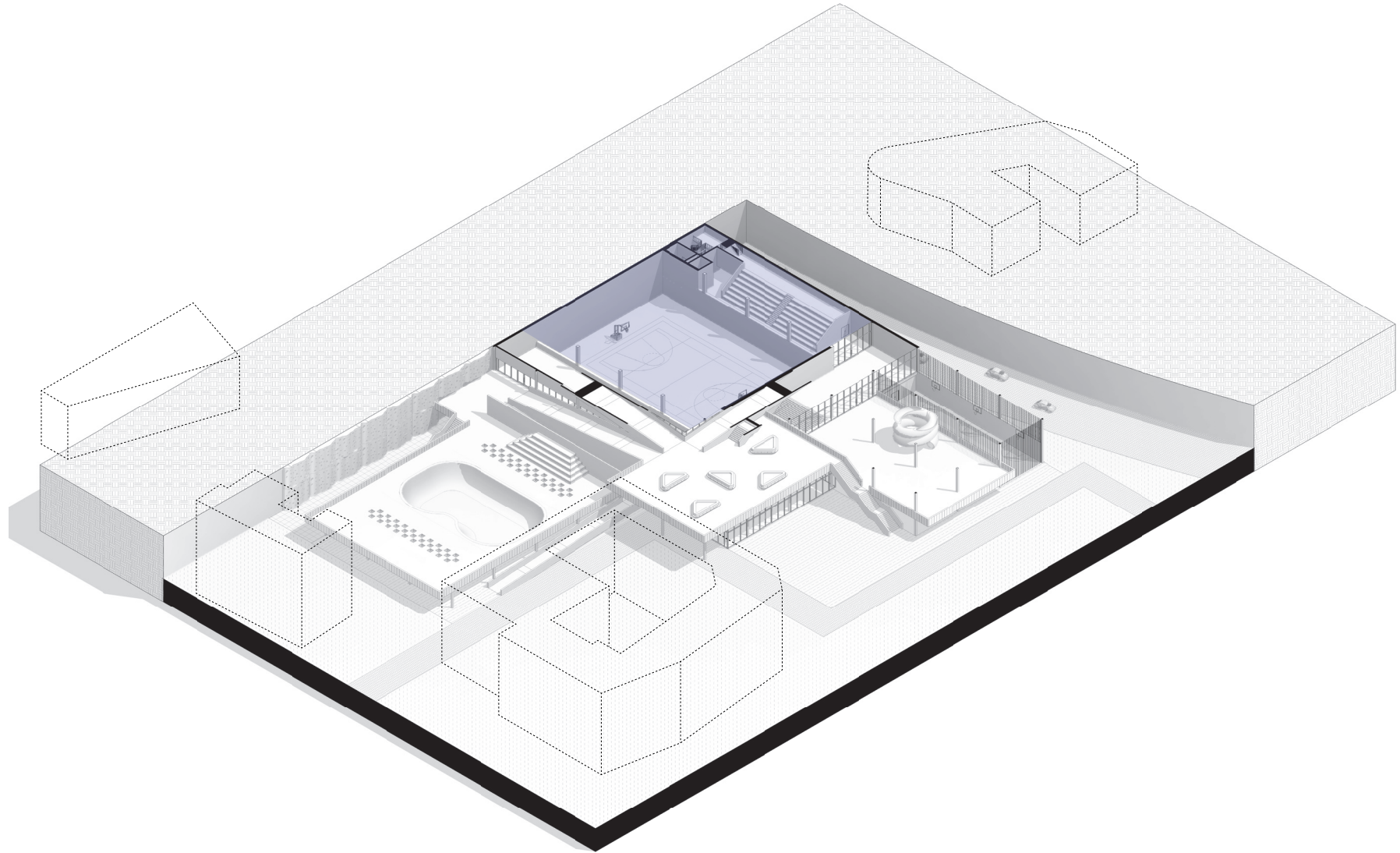


development

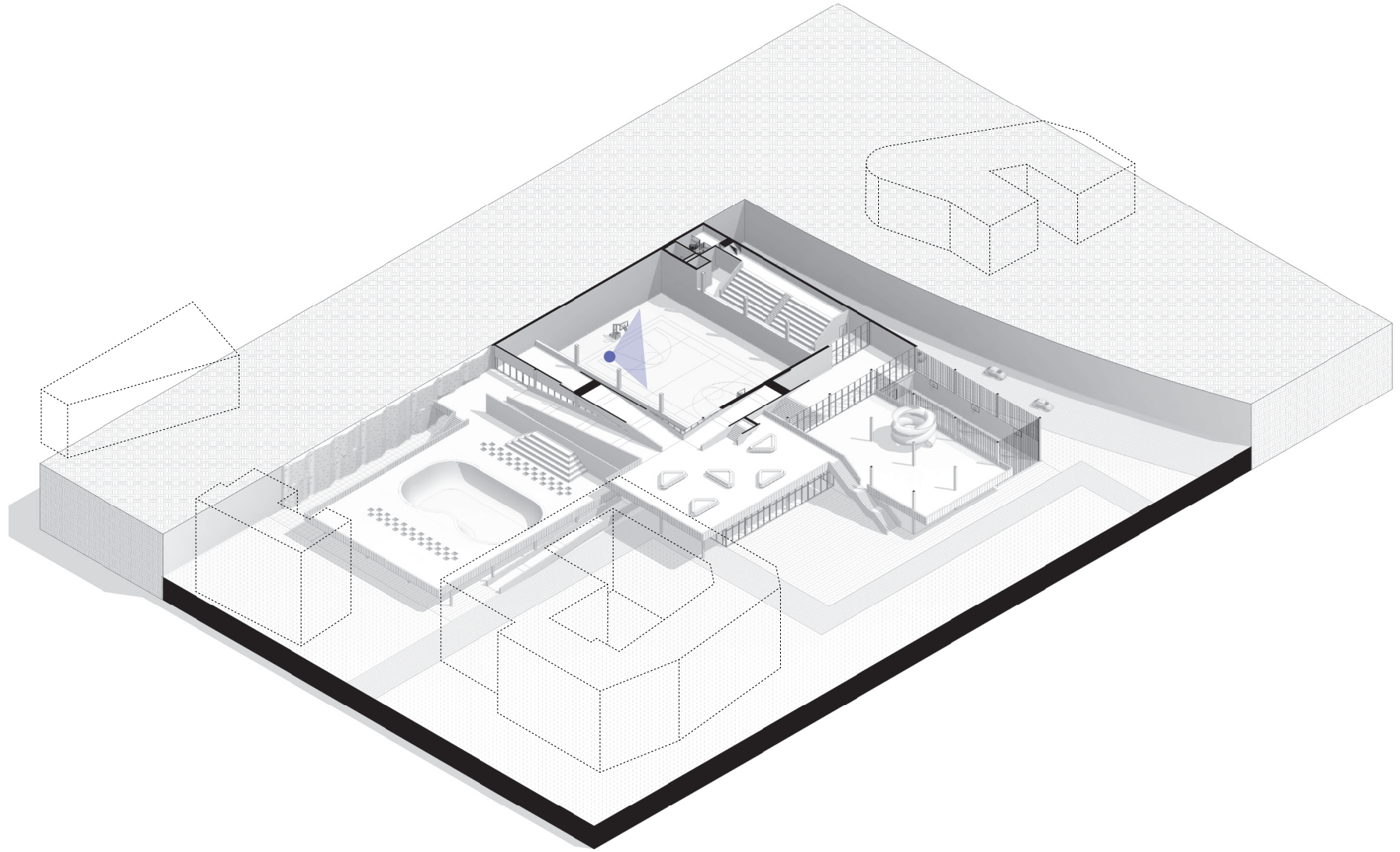
impression green heart



implementation
sports hall



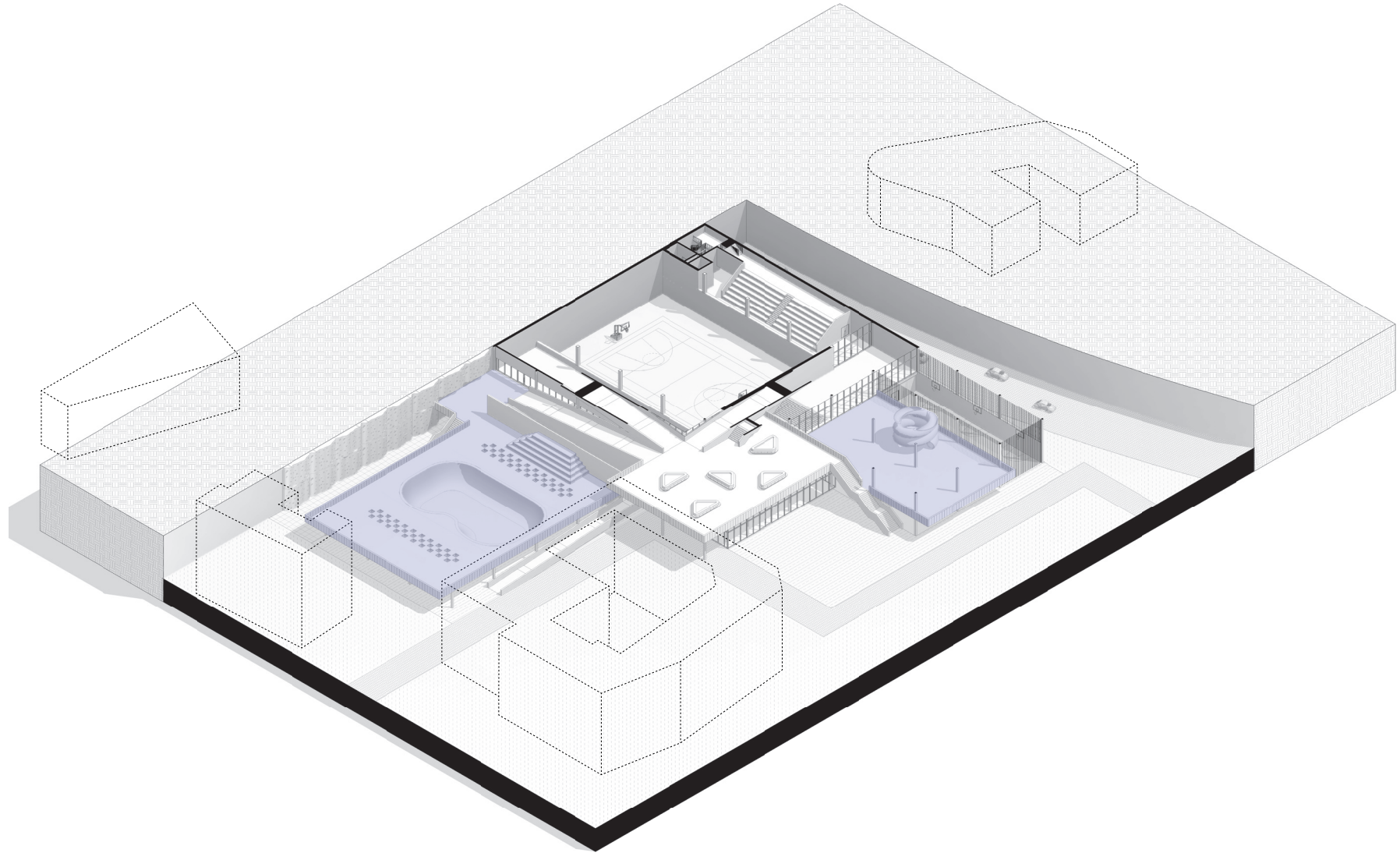
implementation
sports hall



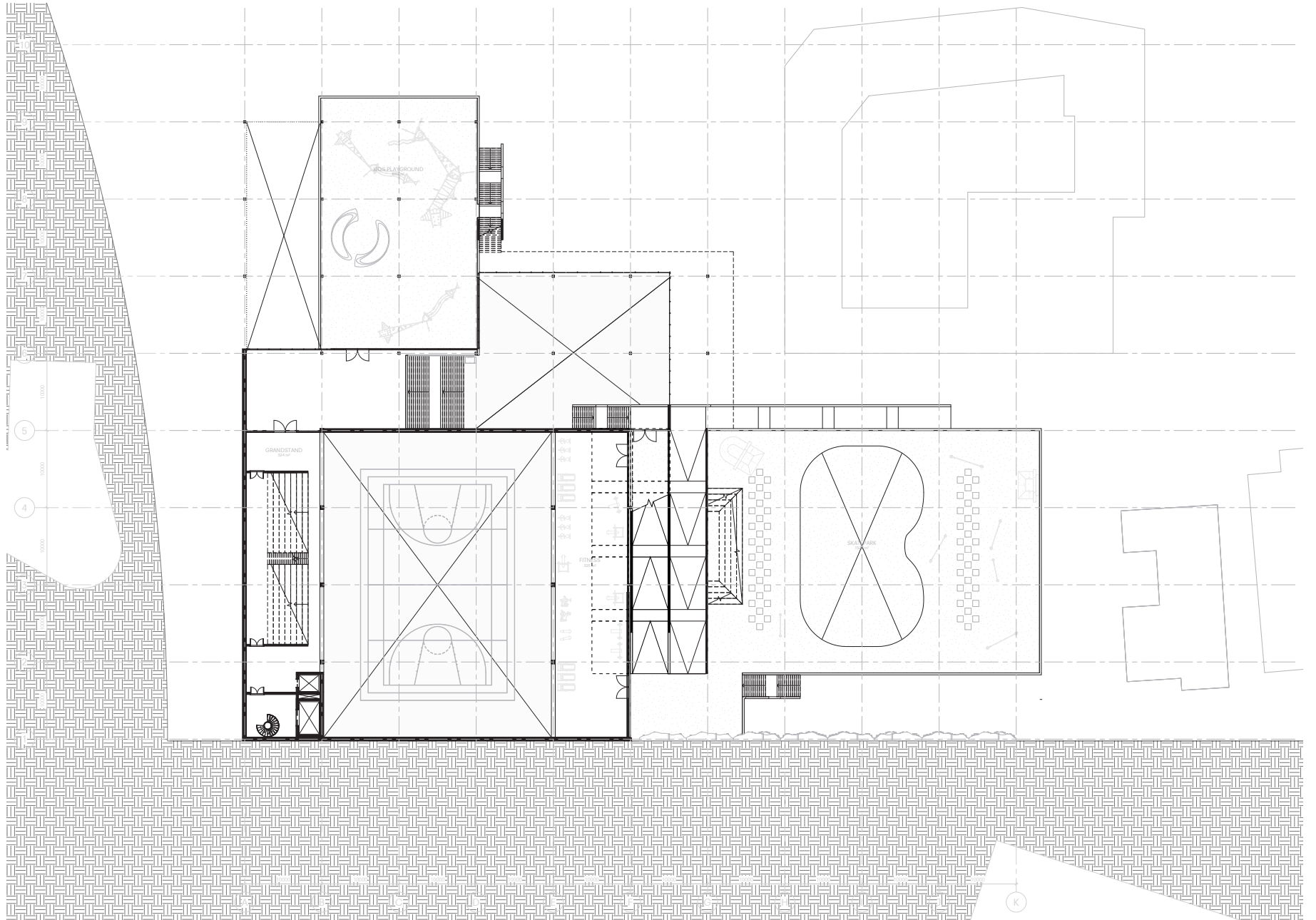
implementation
impression sports hall



implementation
floor +4000

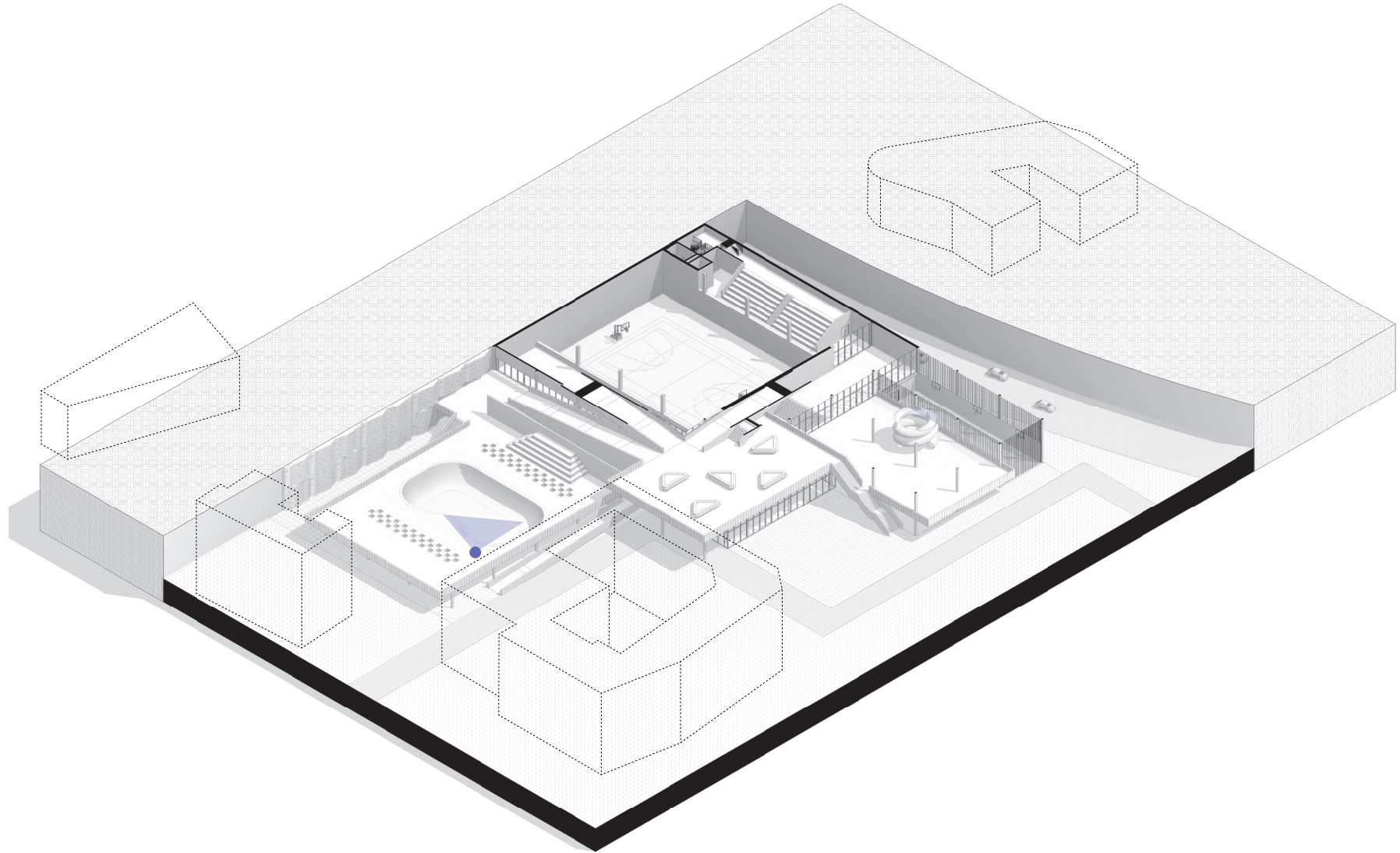


implementation
floor +4000



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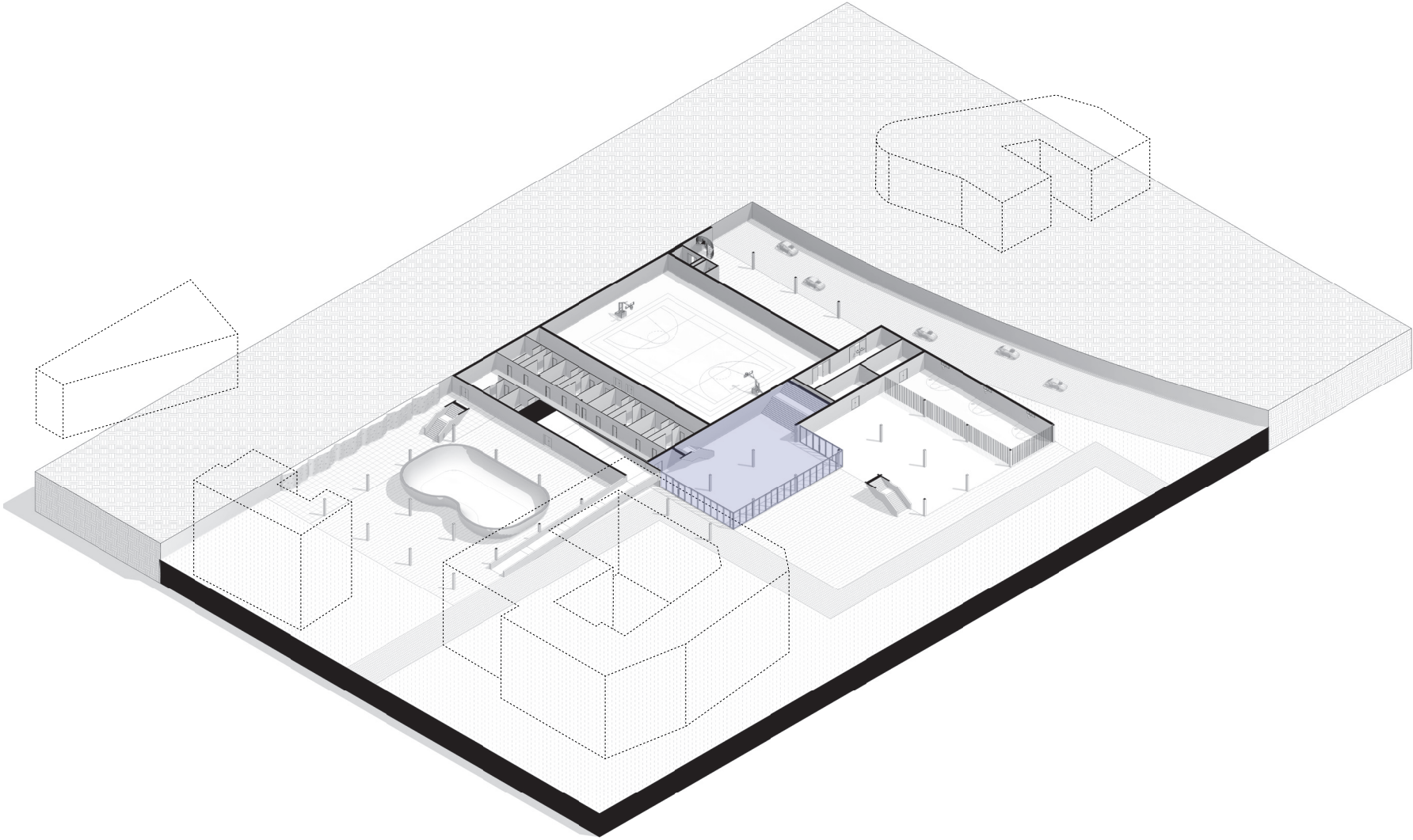
implementation
skate park



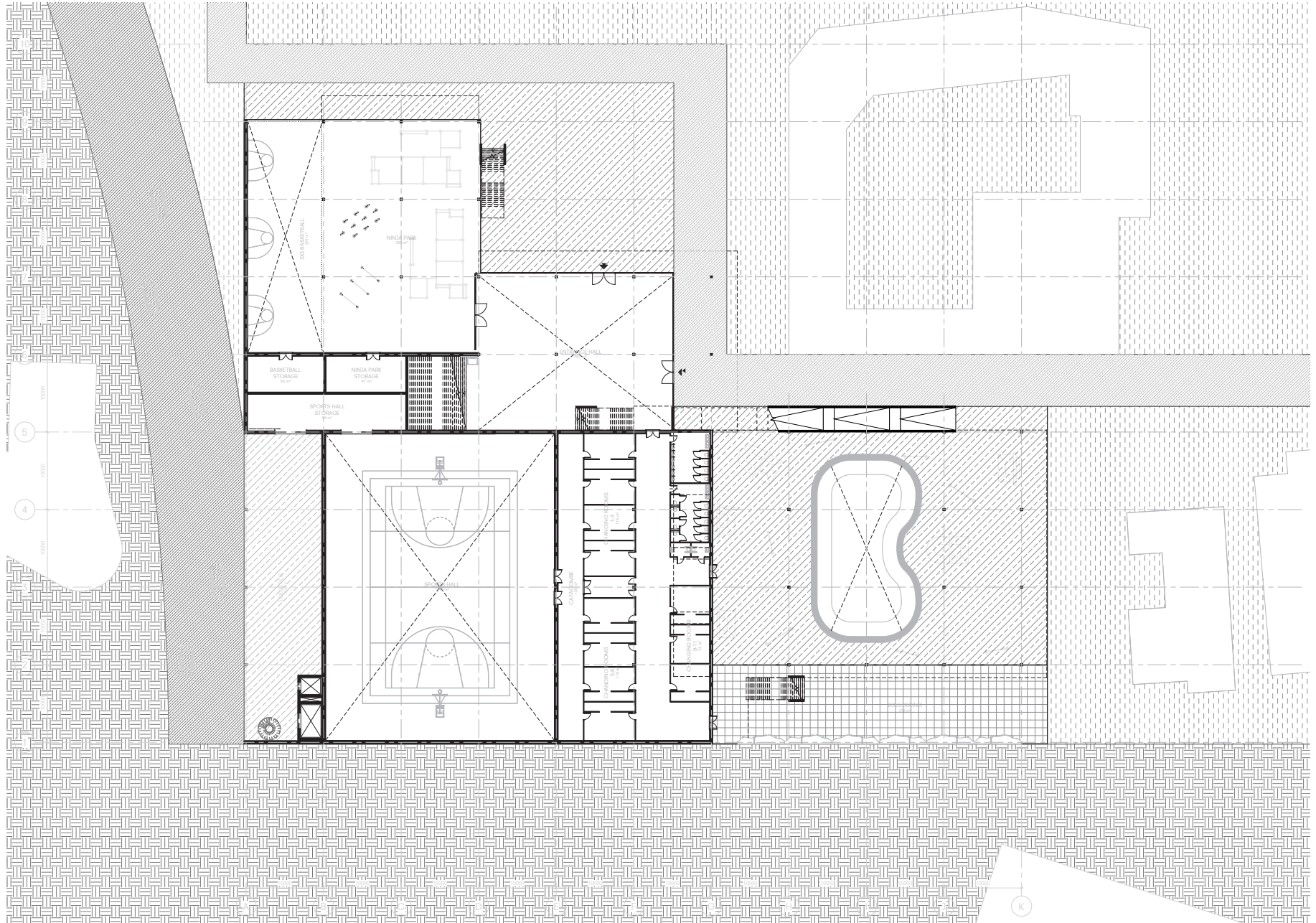
implementation
impression skate park



implementation
ground floor +0

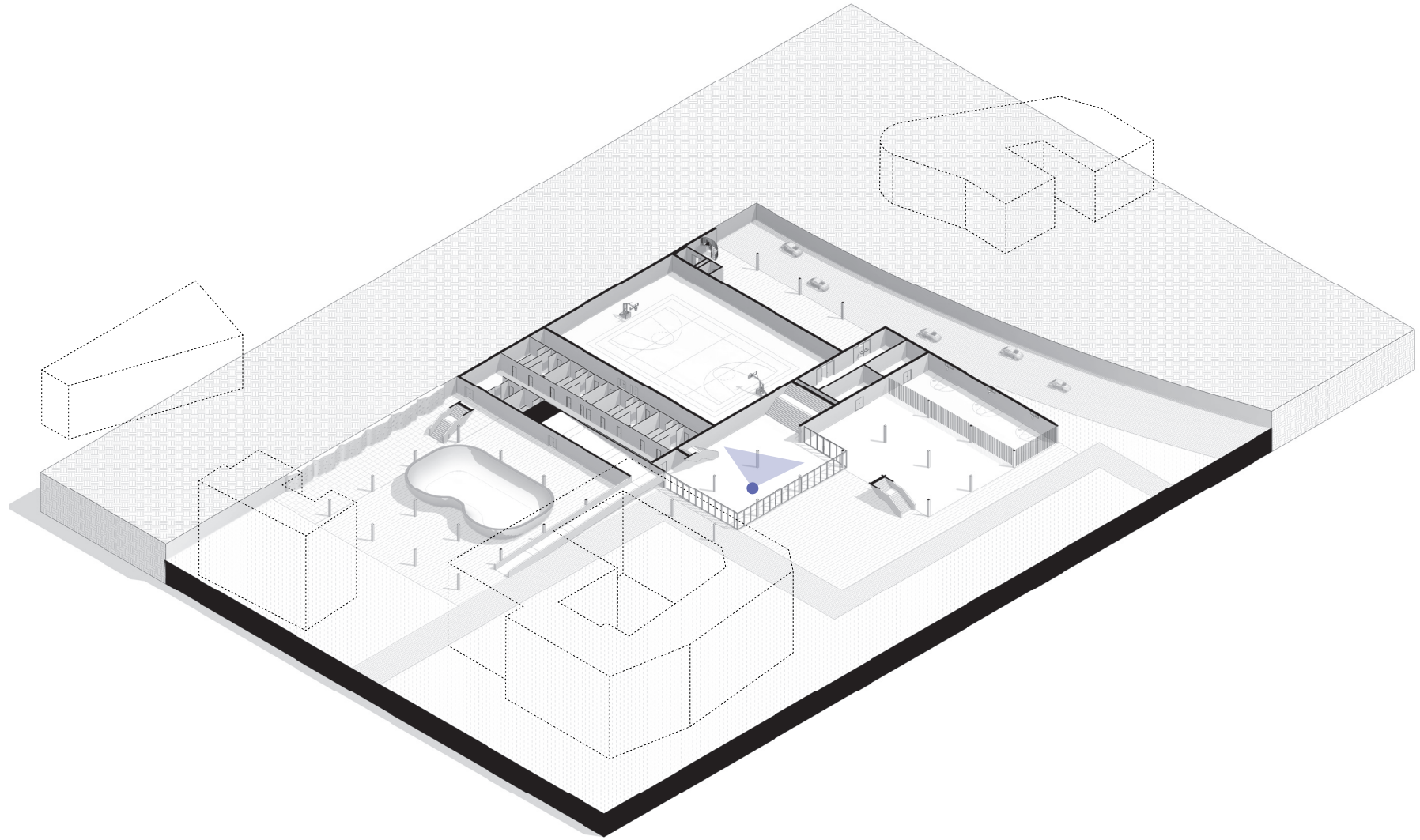


implementation
ground floor +0



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implementation
entrance hall



implementation
impression entrance hall

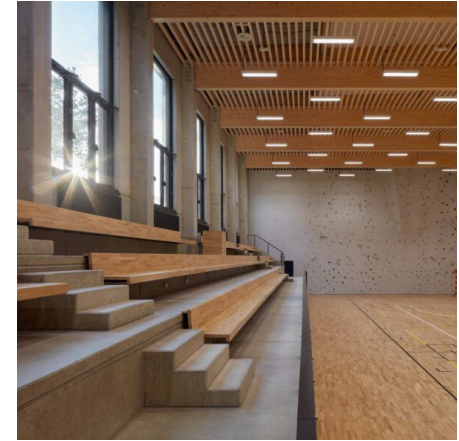
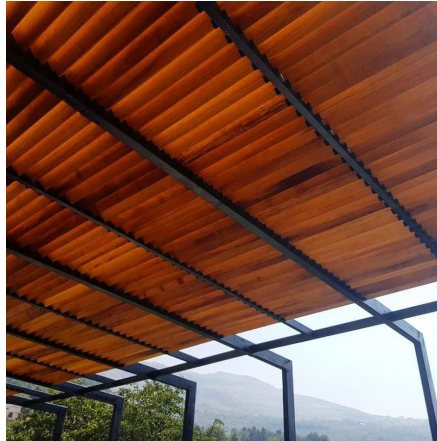


implementation

urban concrete materials



implementation
wooden materials

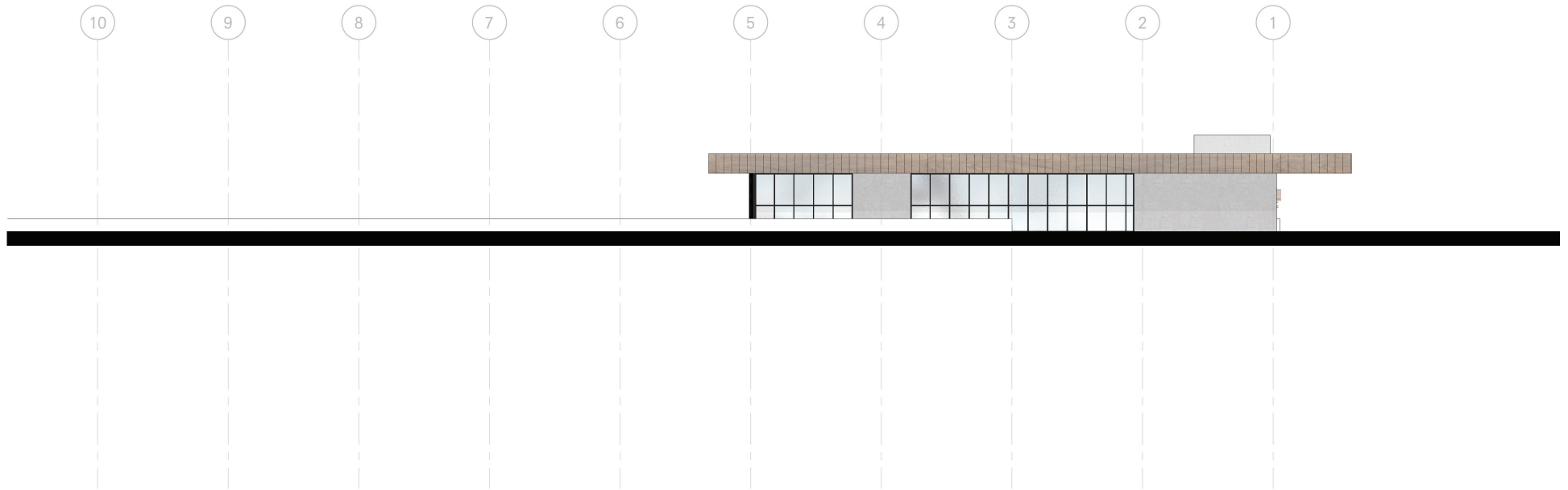
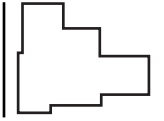


implementation

recycled plastic materials

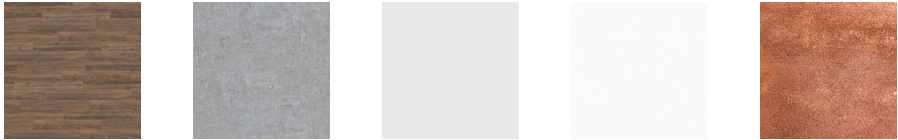
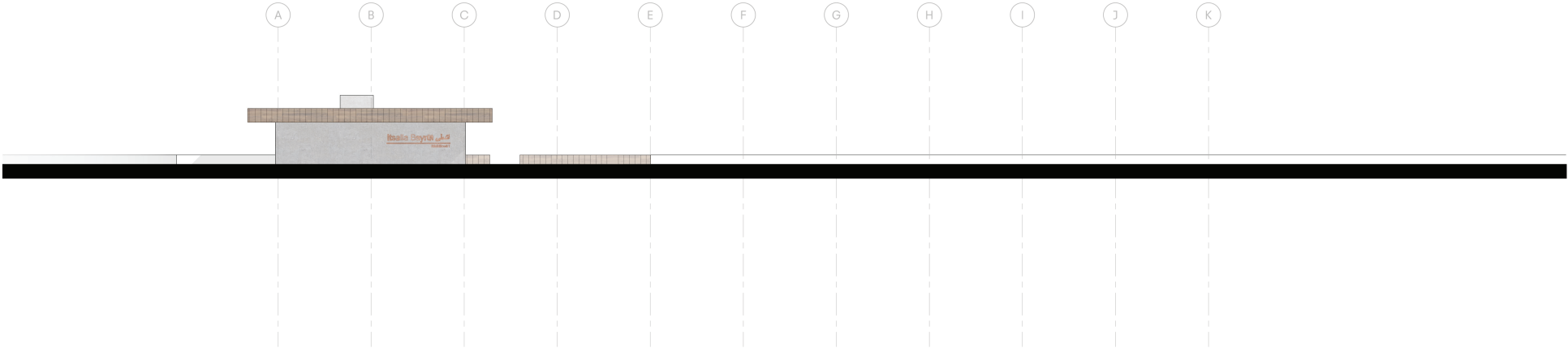
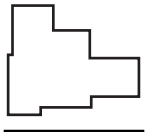


implementation
west elevation



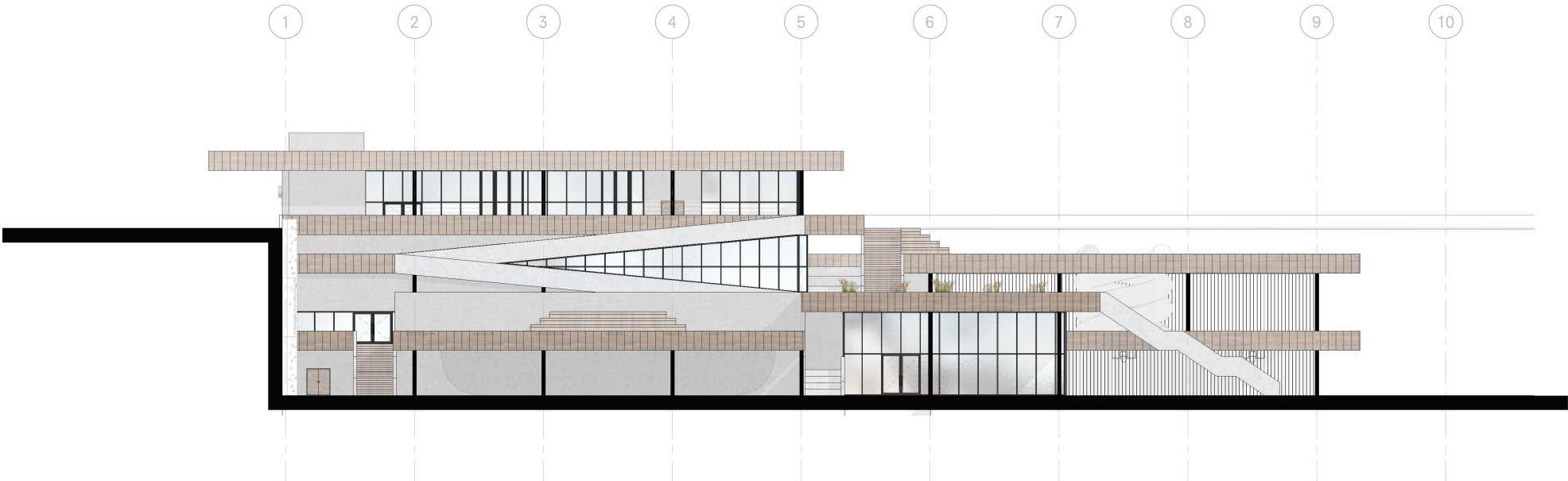
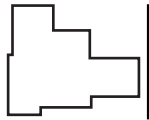
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implementation
south elevation



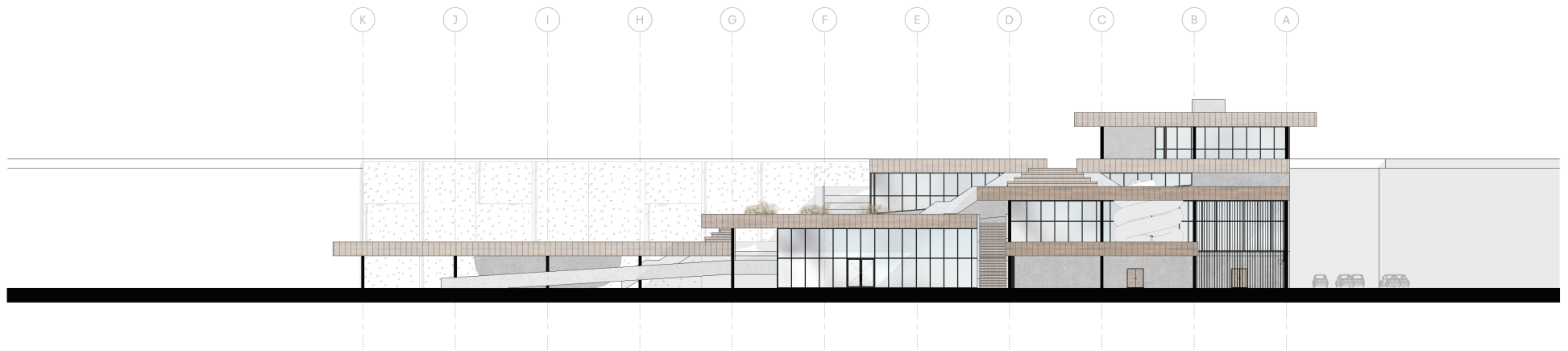
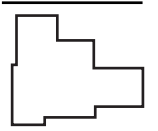
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implementation
east elevation



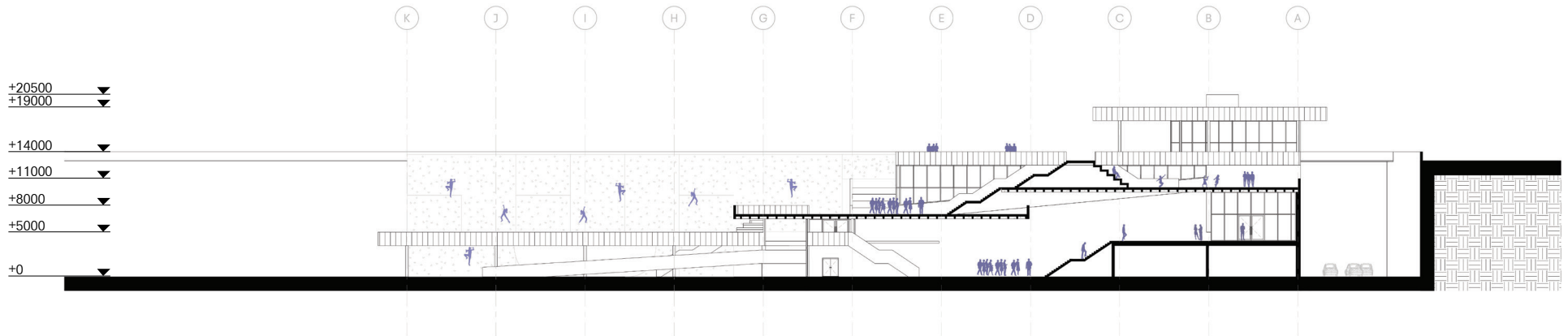
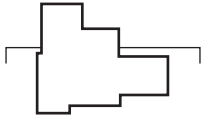
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implementation
north elevation



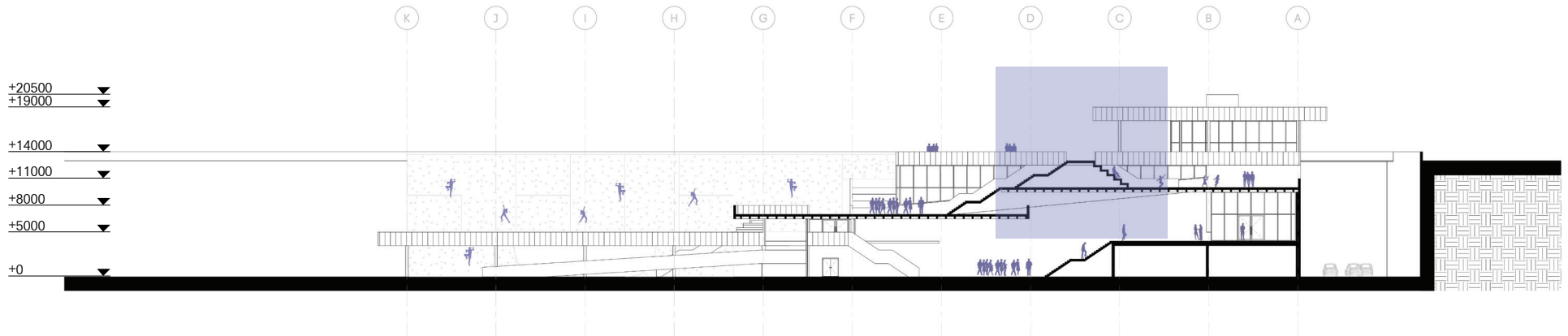
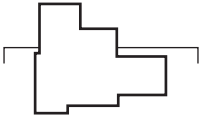
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implementation section aa'



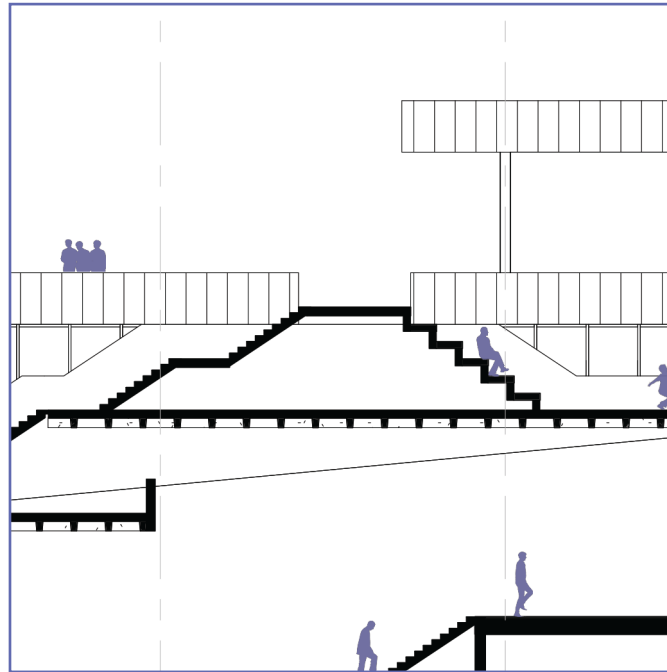
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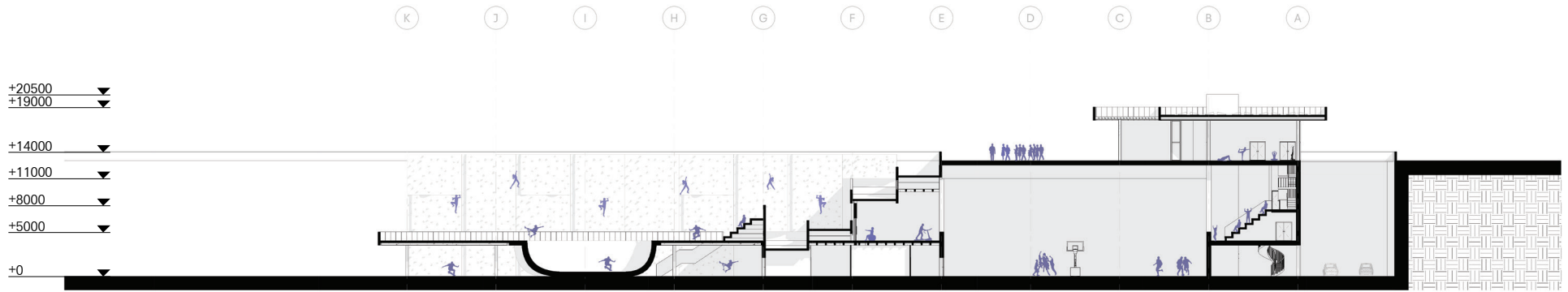
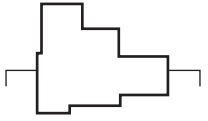


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section aa'

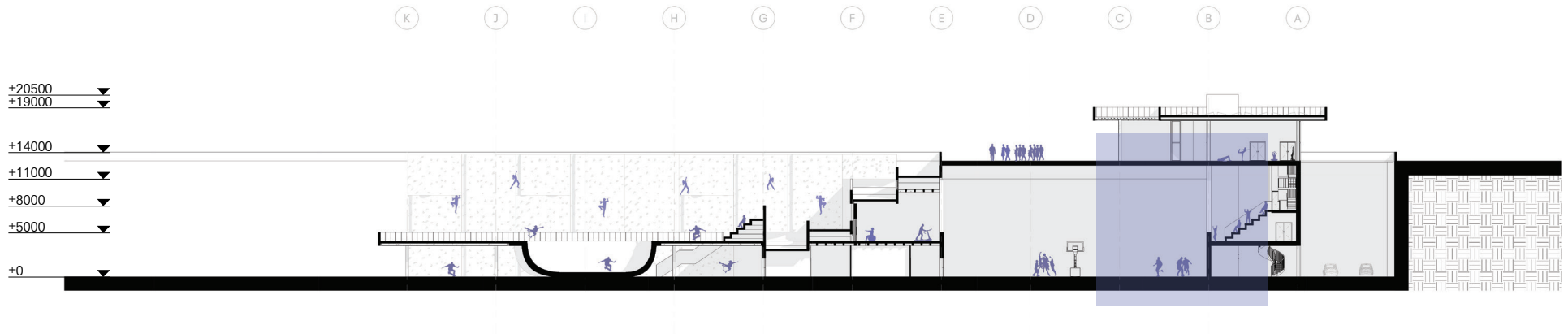
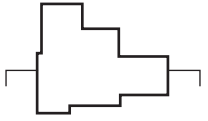


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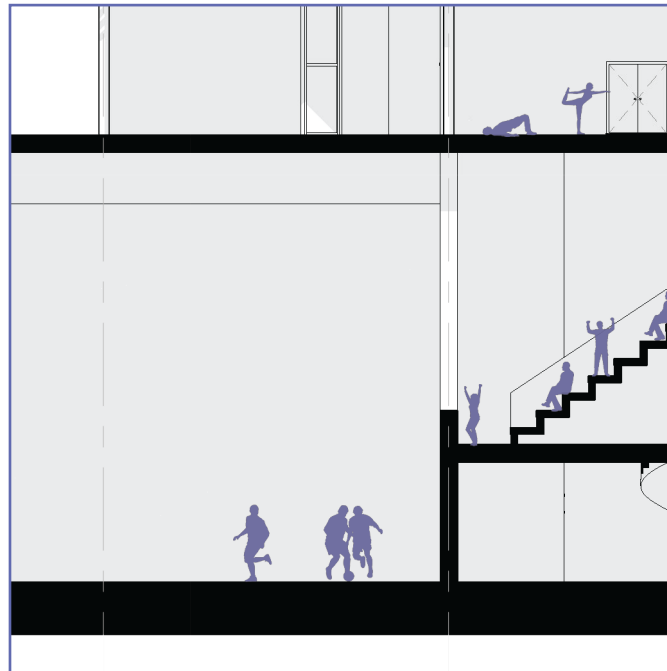
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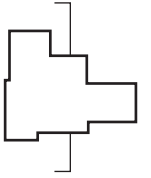


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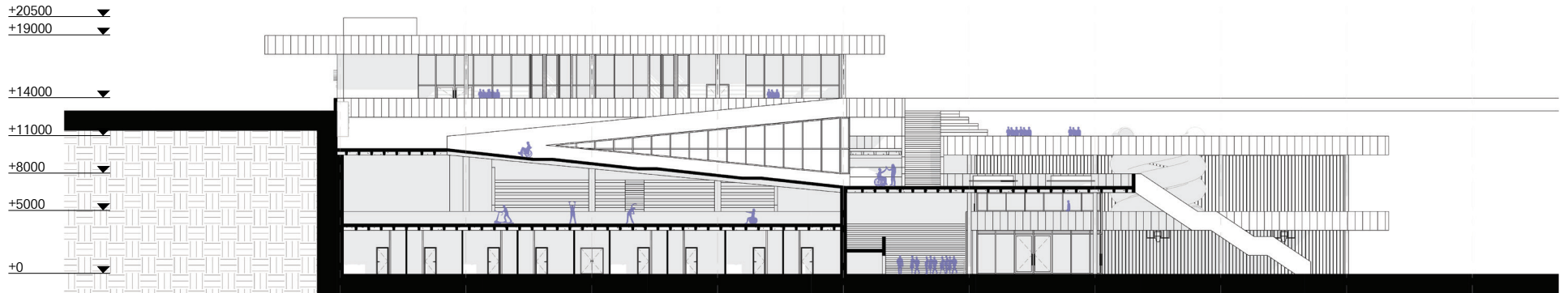
implementation
section bb'



implementation section cc'

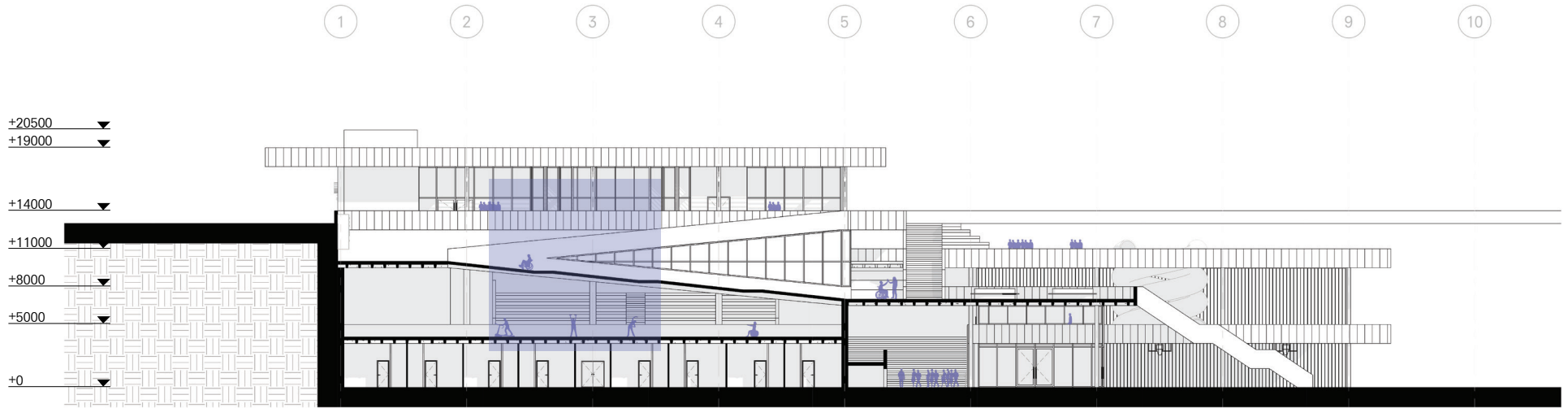
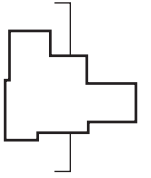


1 2 3 4 5 6 7 8 9 10



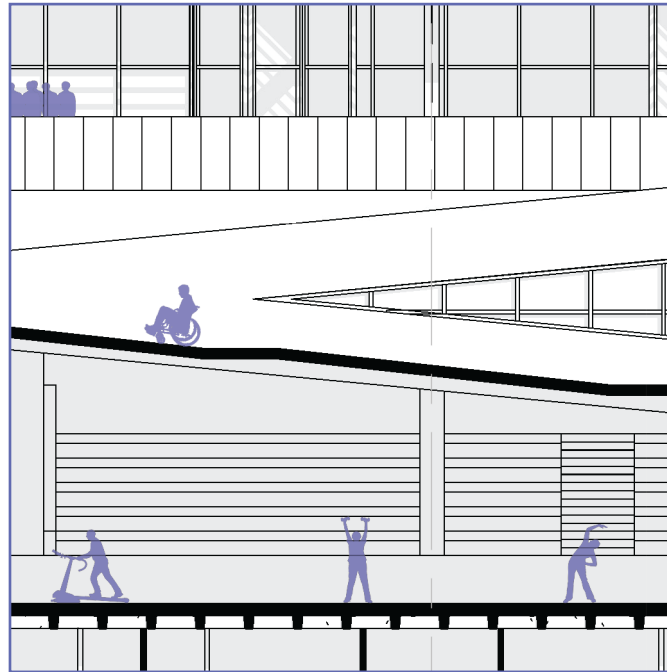
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implementation section cc'

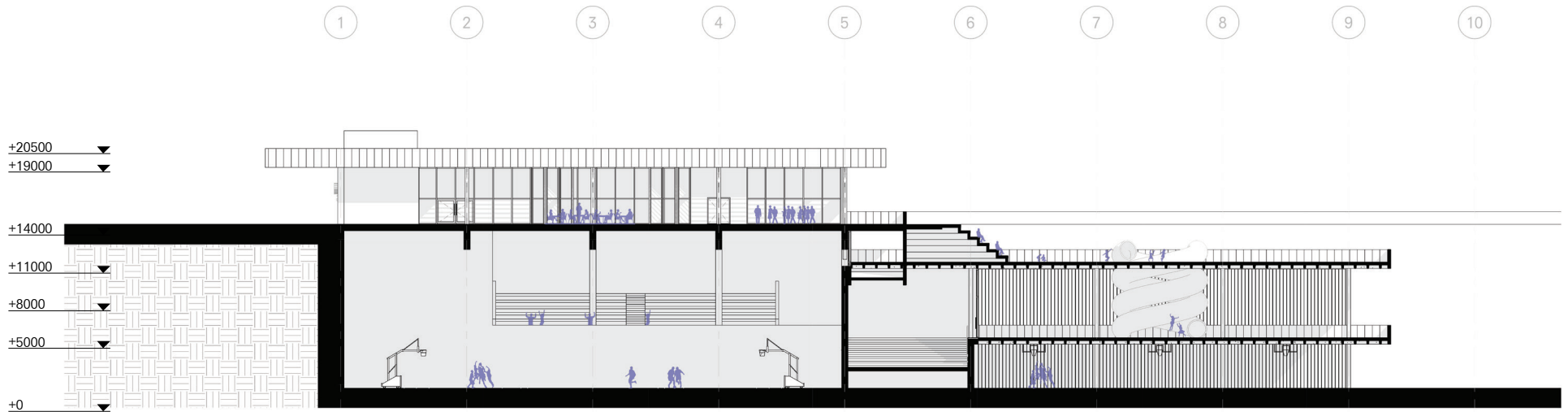
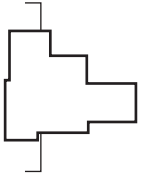


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implementation
section cc'

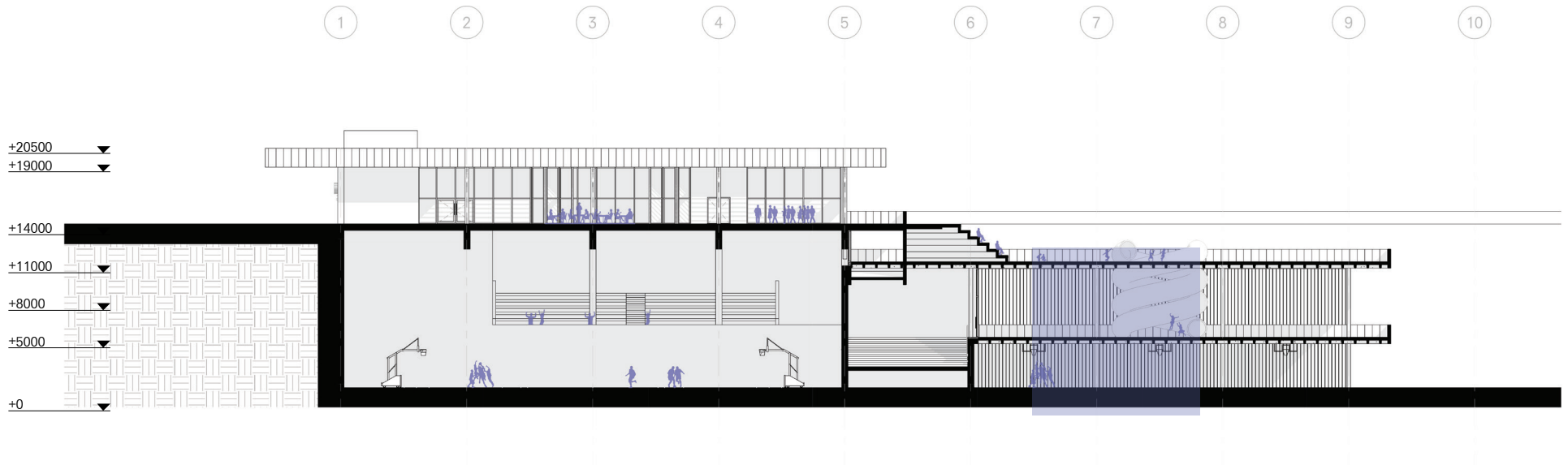
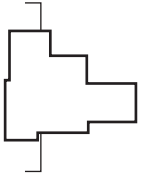


implementation section dd'

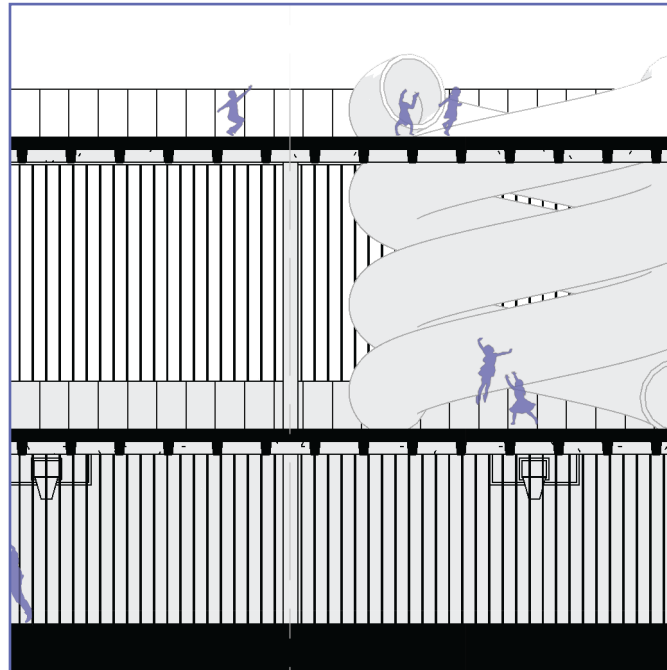


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implementation section dd'



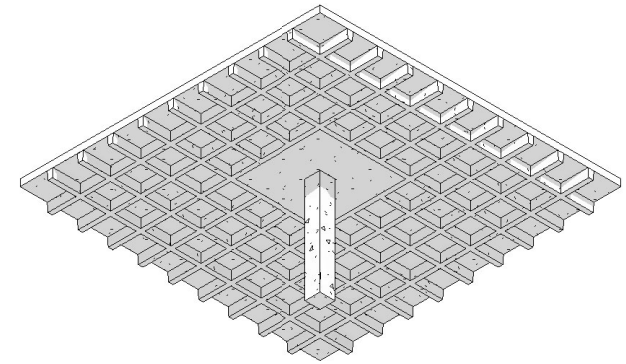
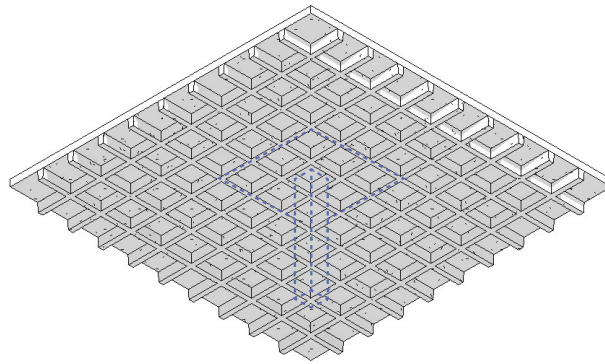
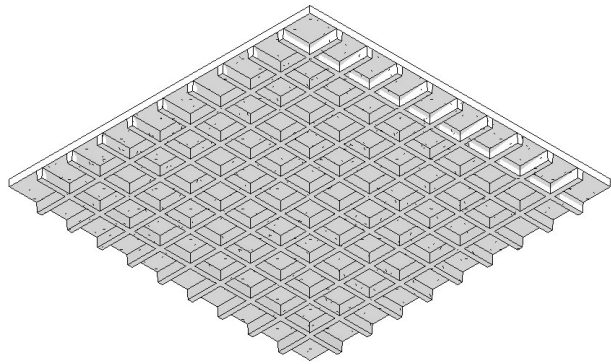
implementation
section dd'



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development
waffle slab 1000x1000x500



development

why waffle slab



artist: gomma.png

development

why waffle slab

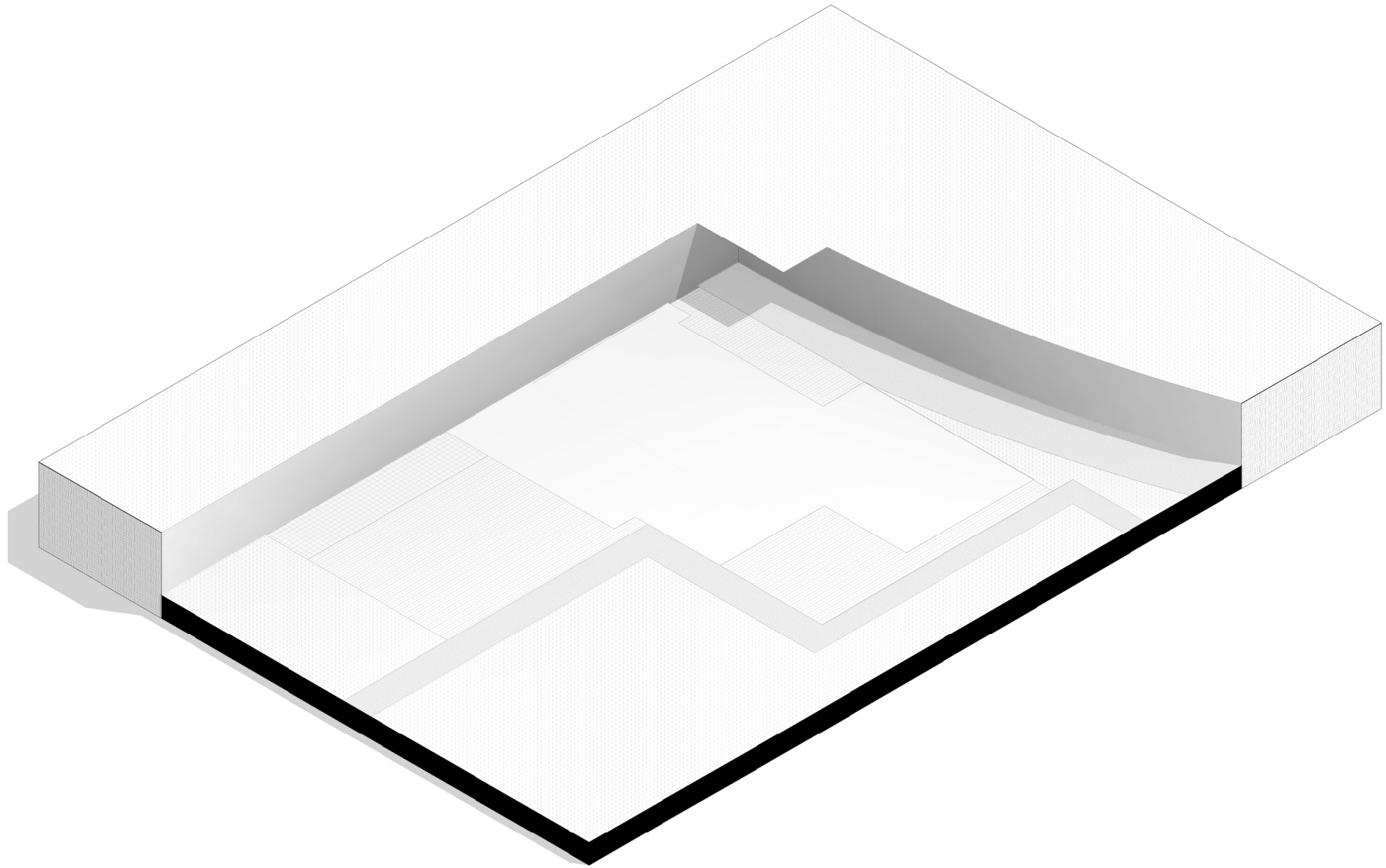


development map soil



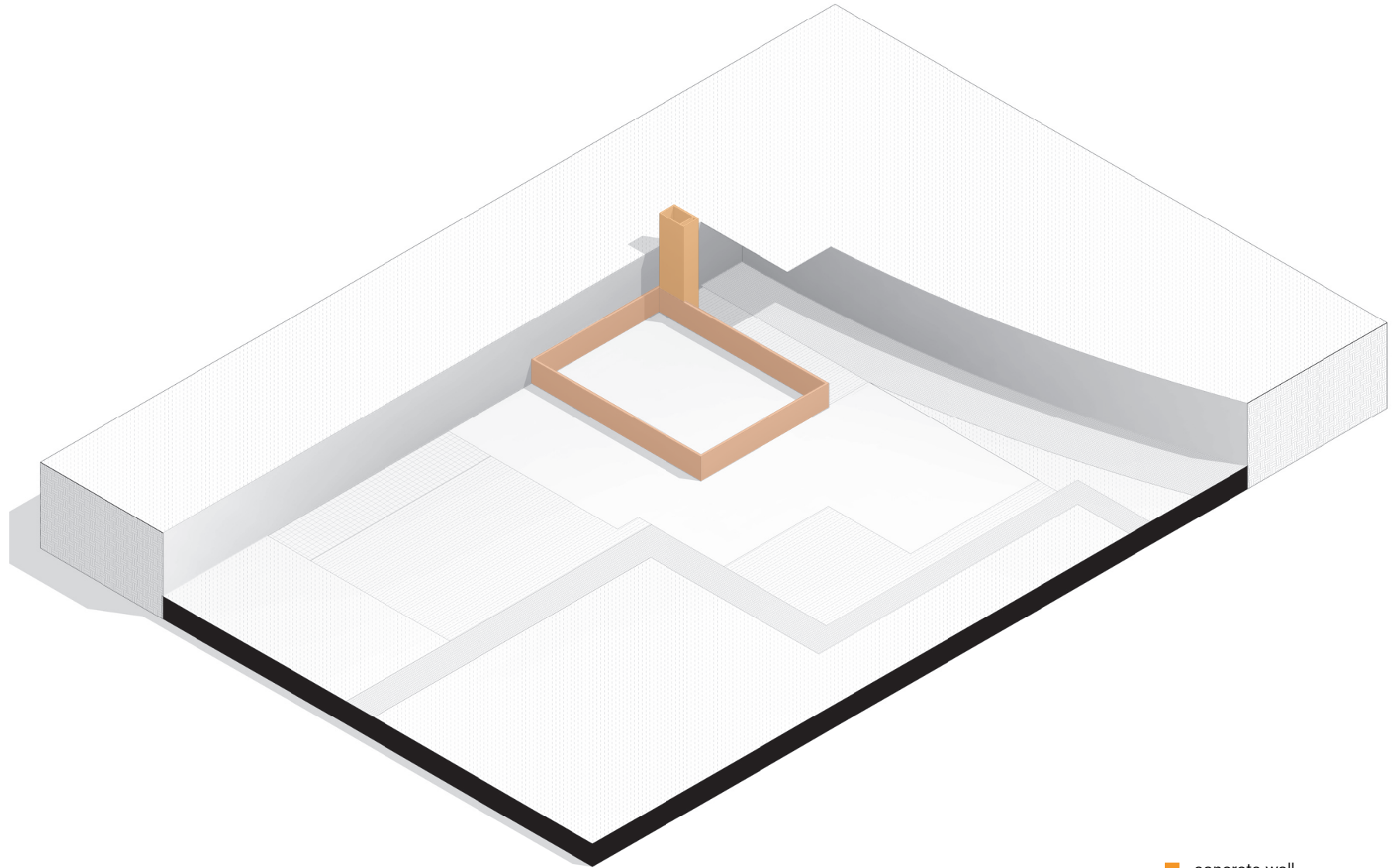
development

main load bearing structure



development

main load bearing structure

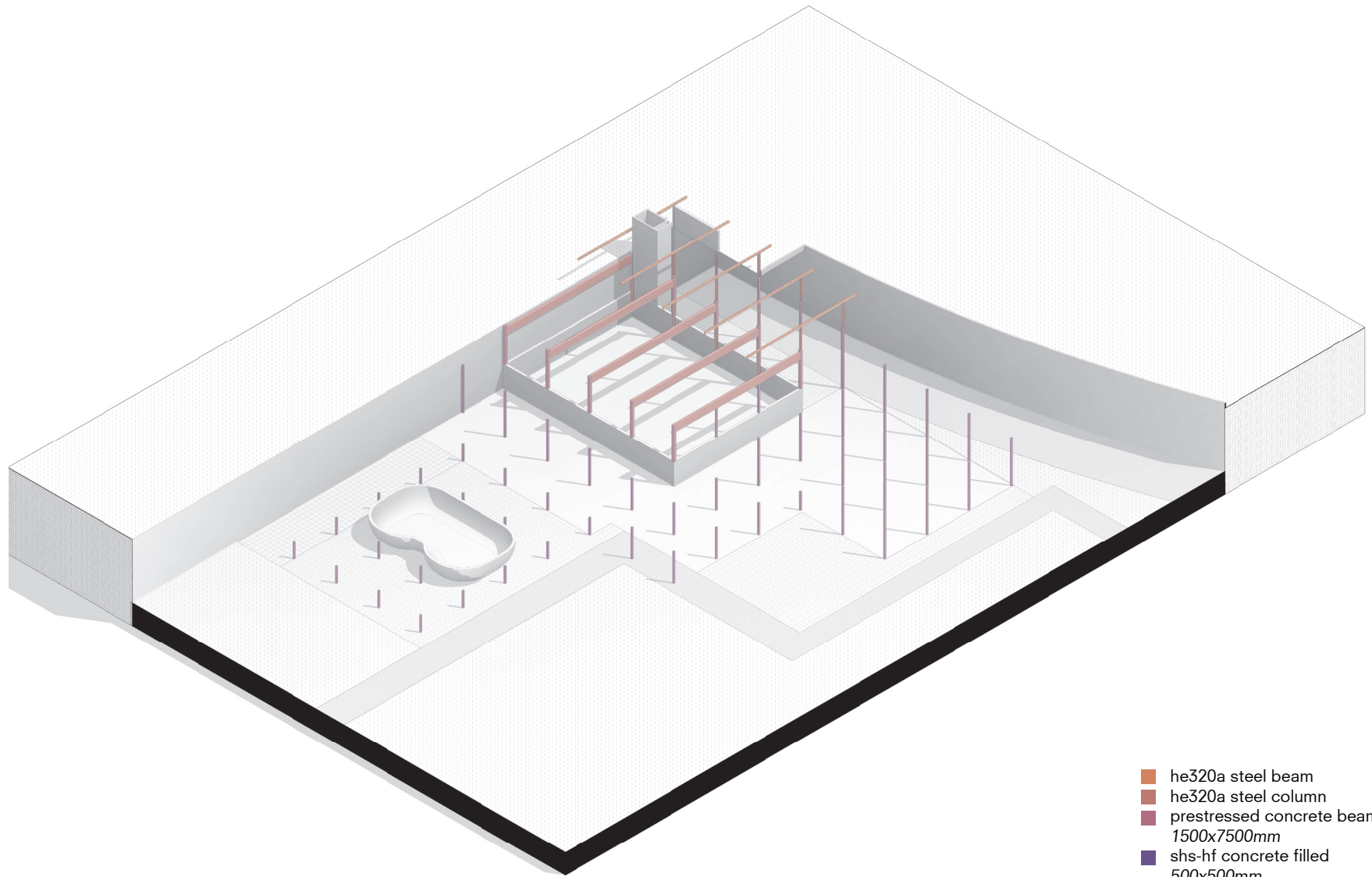


- concrete wall
500mm
- elevator core



development

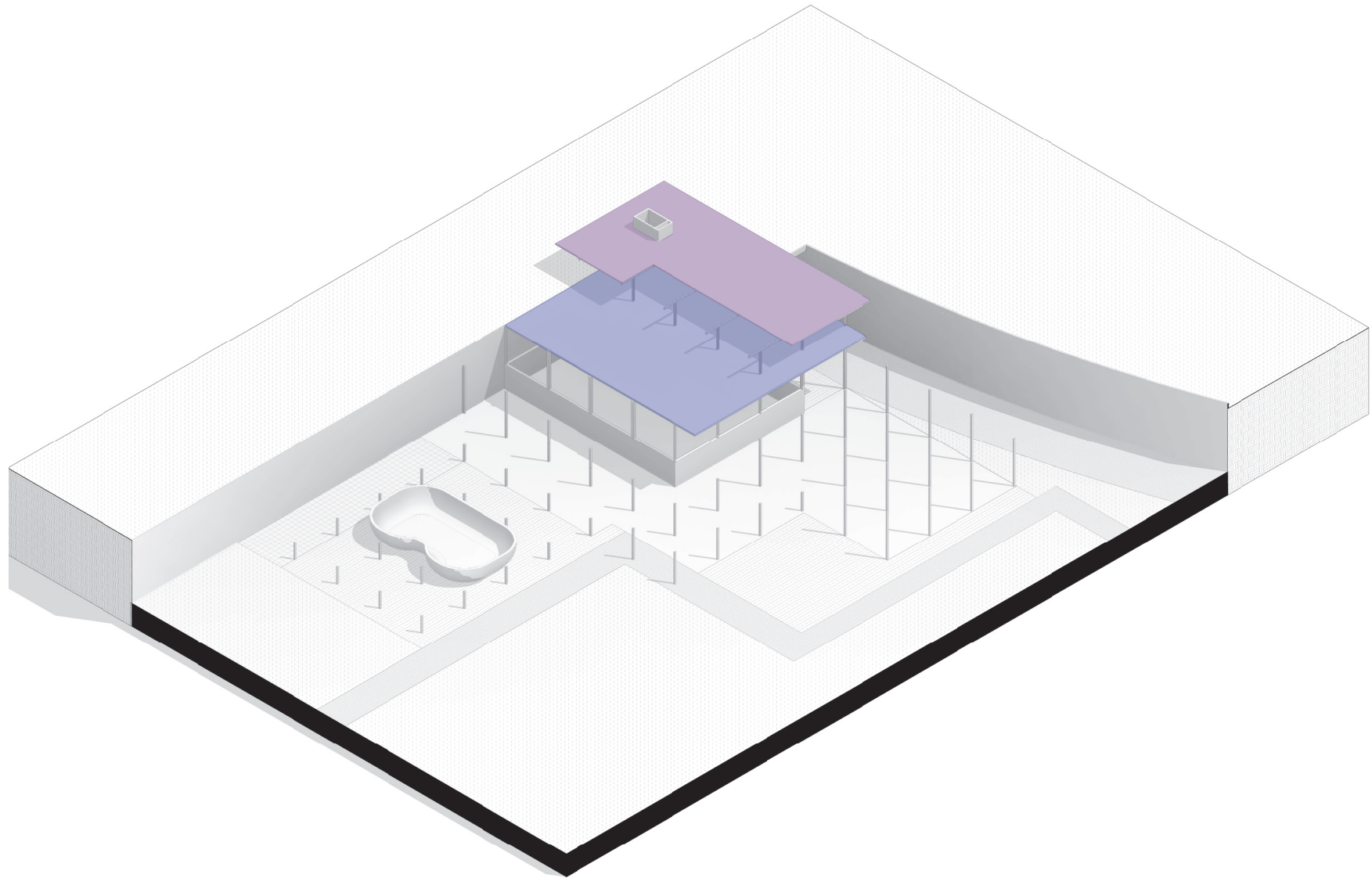
main load bearing structure



- he320a steel beam
- he320a steel column
- prestressed concrete beam
1500x750mm
- shs-hf concrete filled
500x500mm
- shs-hf concrete filled
300x300mm

development

main load bearing structure

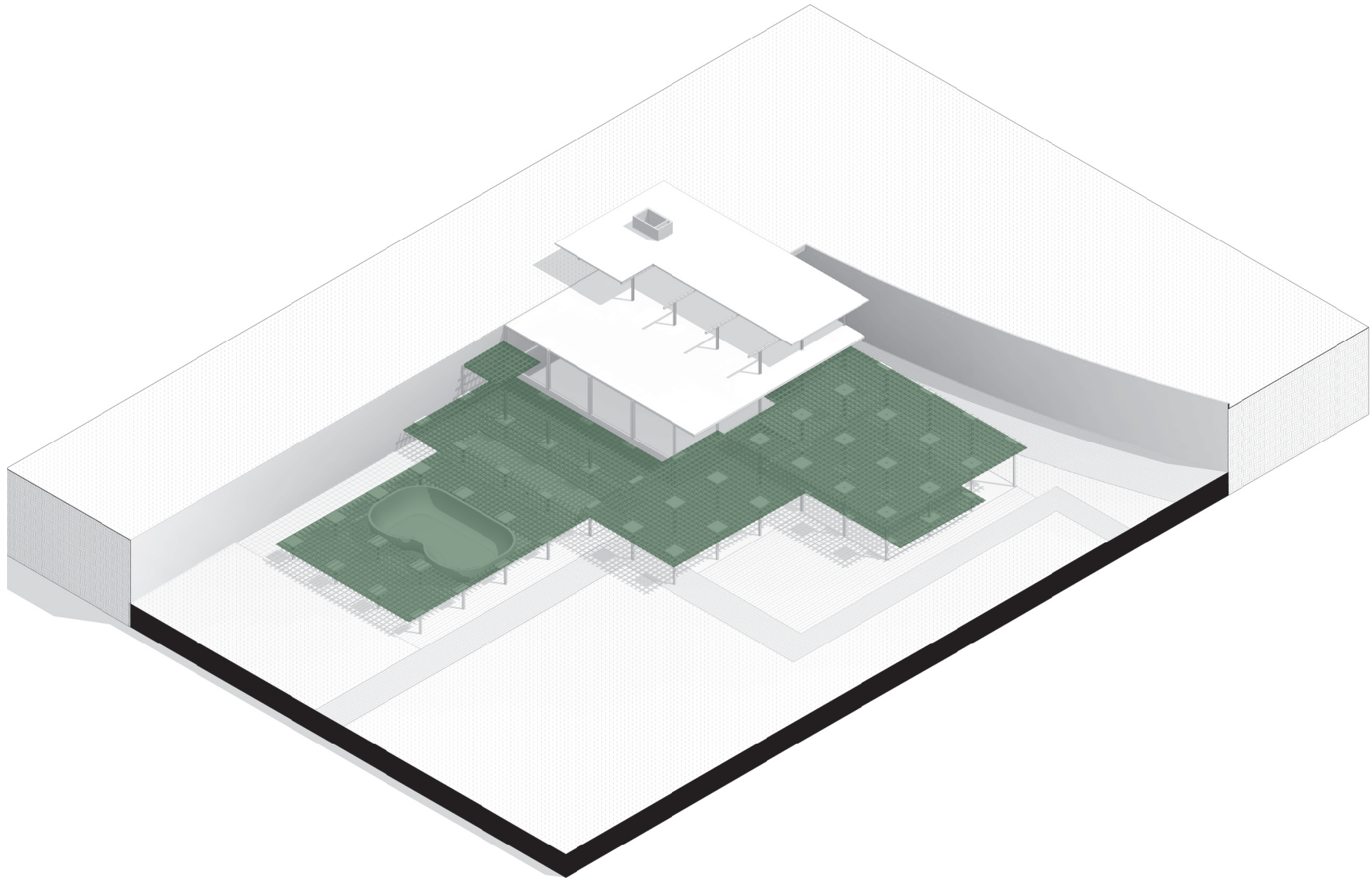


- precast concrete slab
- t255 hollow core slab



development

main load bearing structure

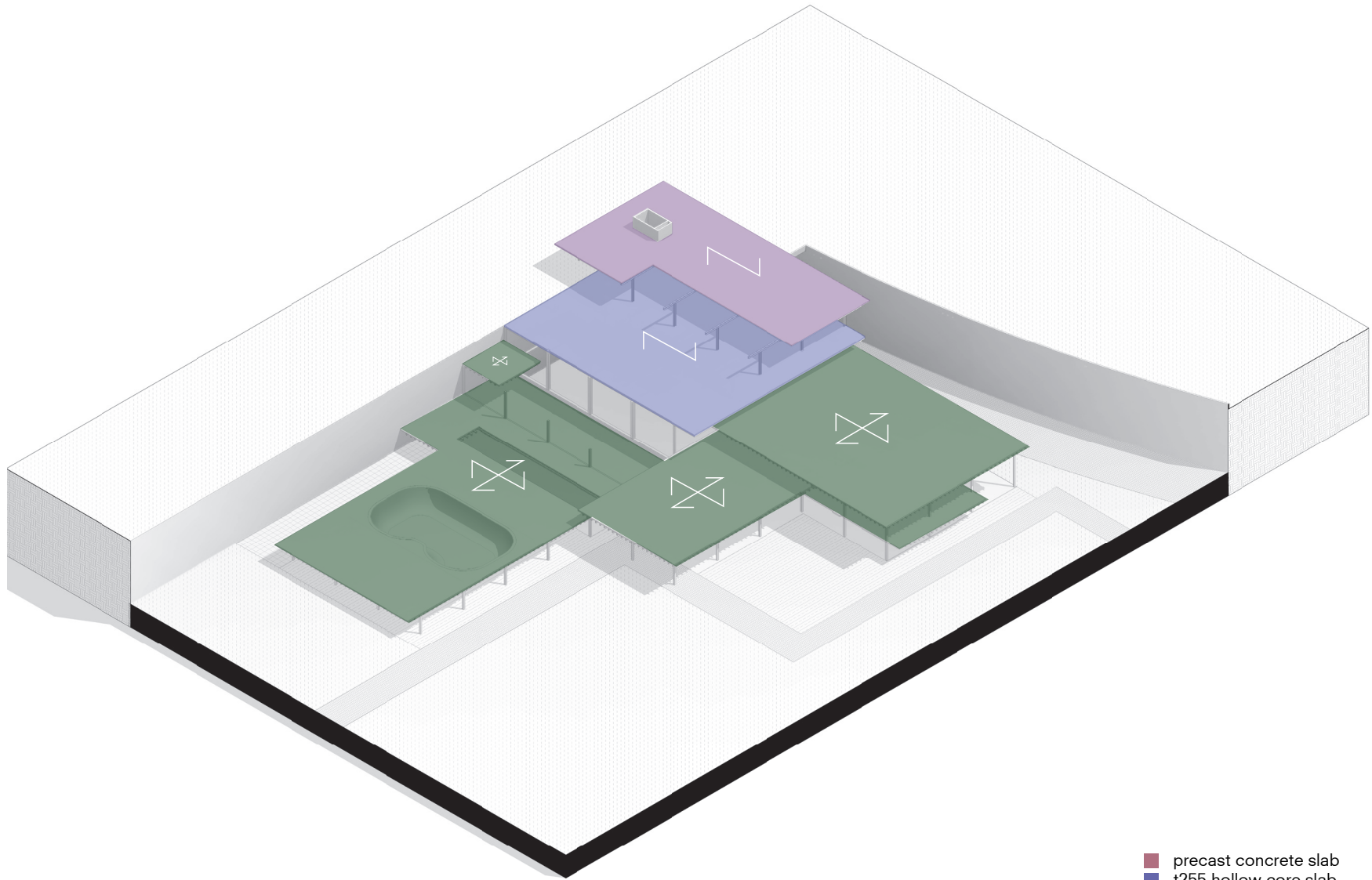


■ waffle slab
1000x1000x400mm



development

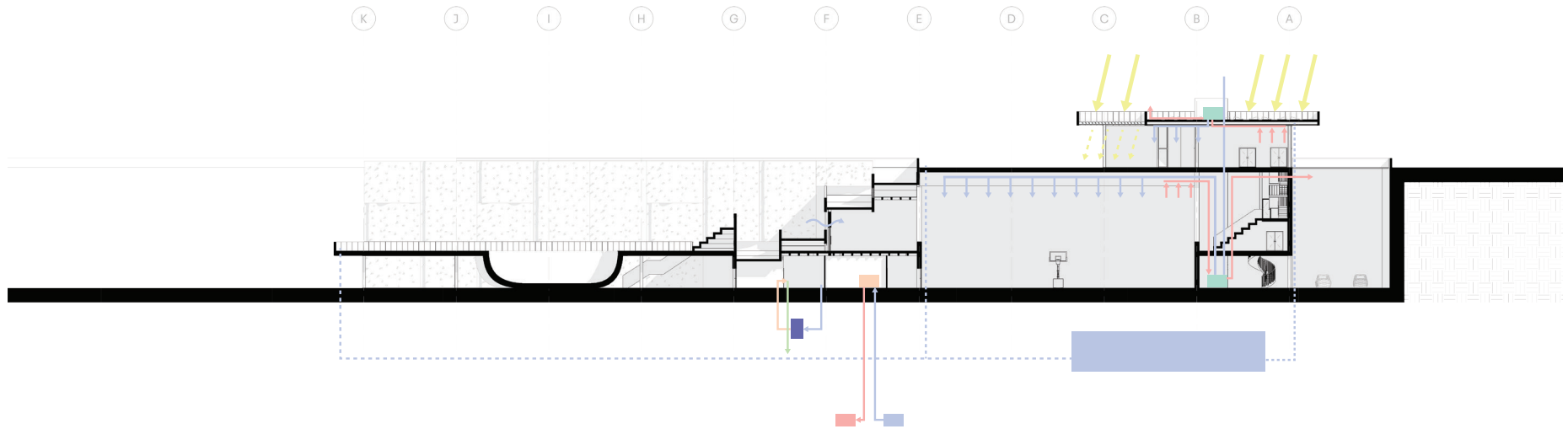
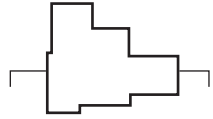
main load bearing structure



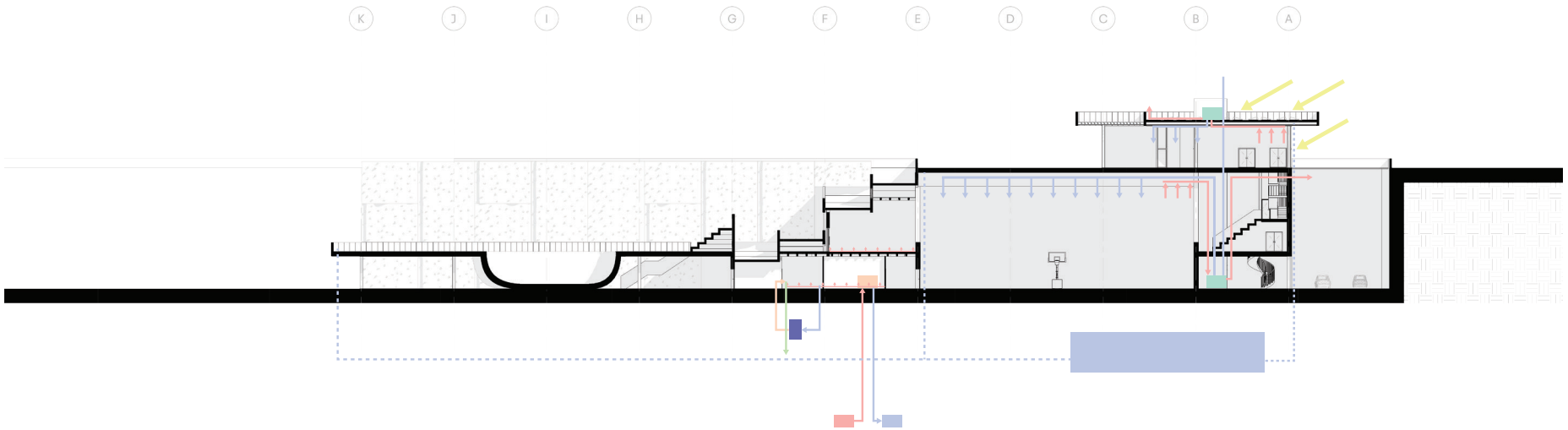
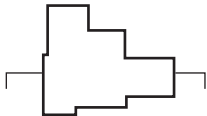
- precast concrete slab
- t255 hollow core slab
- waffle slab
1000x1000x400mm



development summer situation

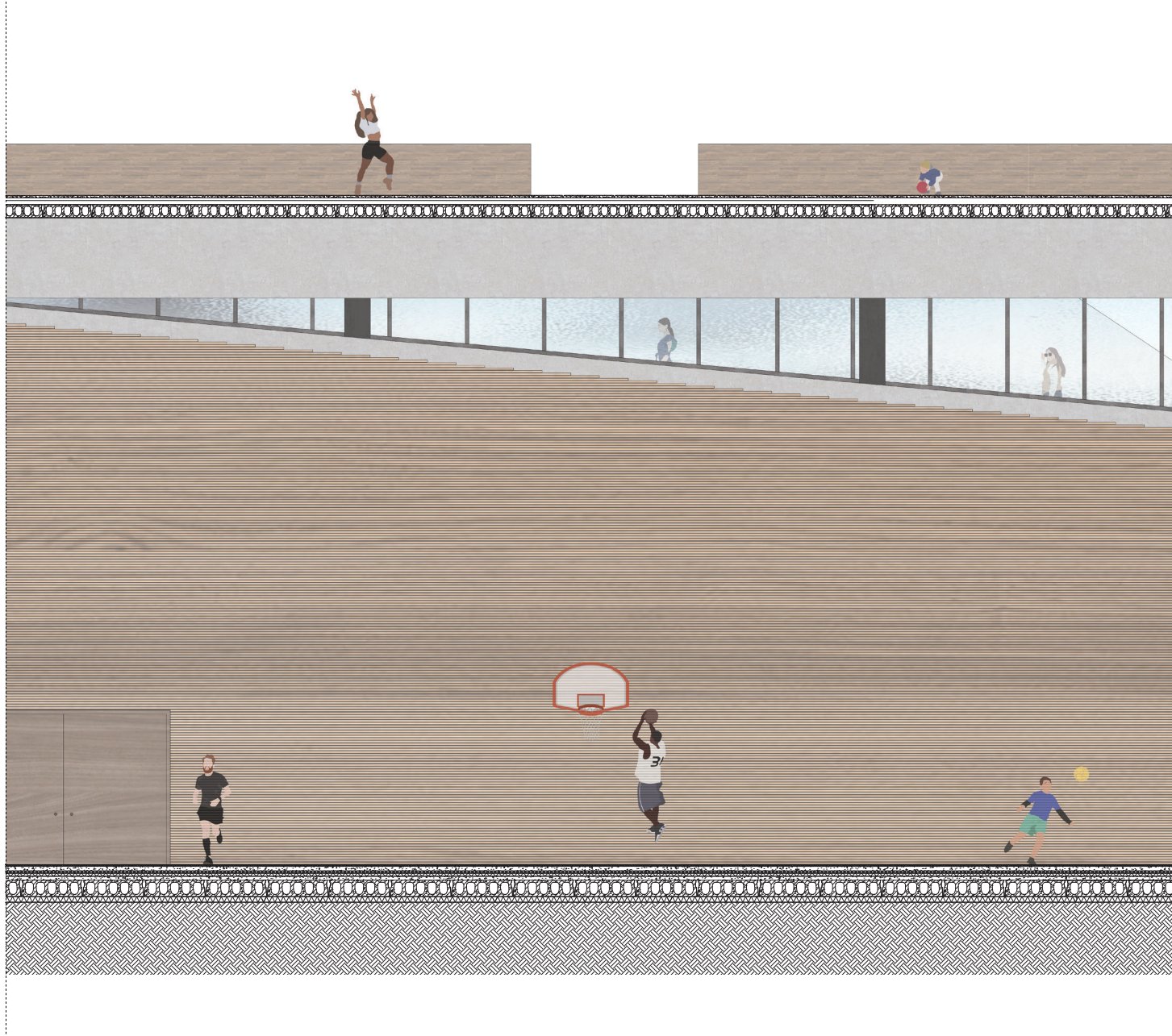


development
winter situation



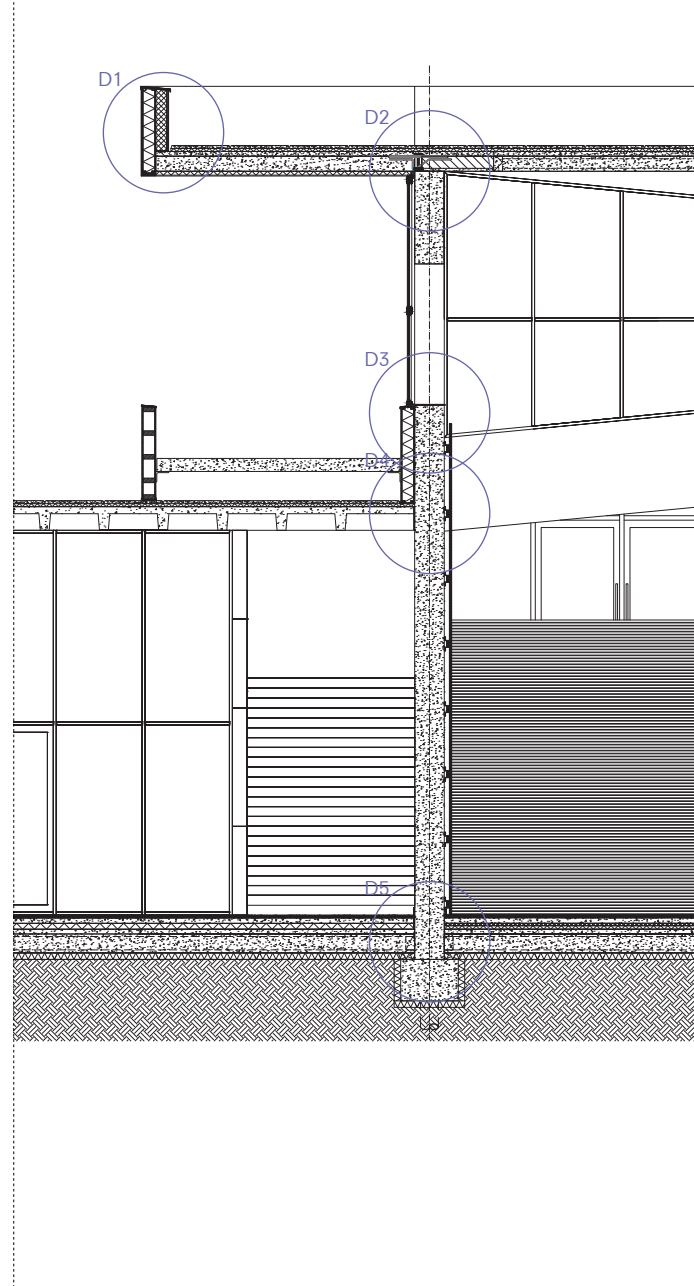
development

interior fragment sports hall



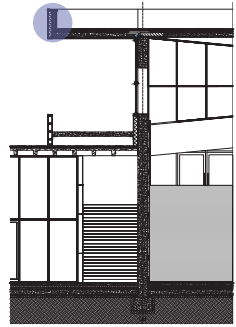
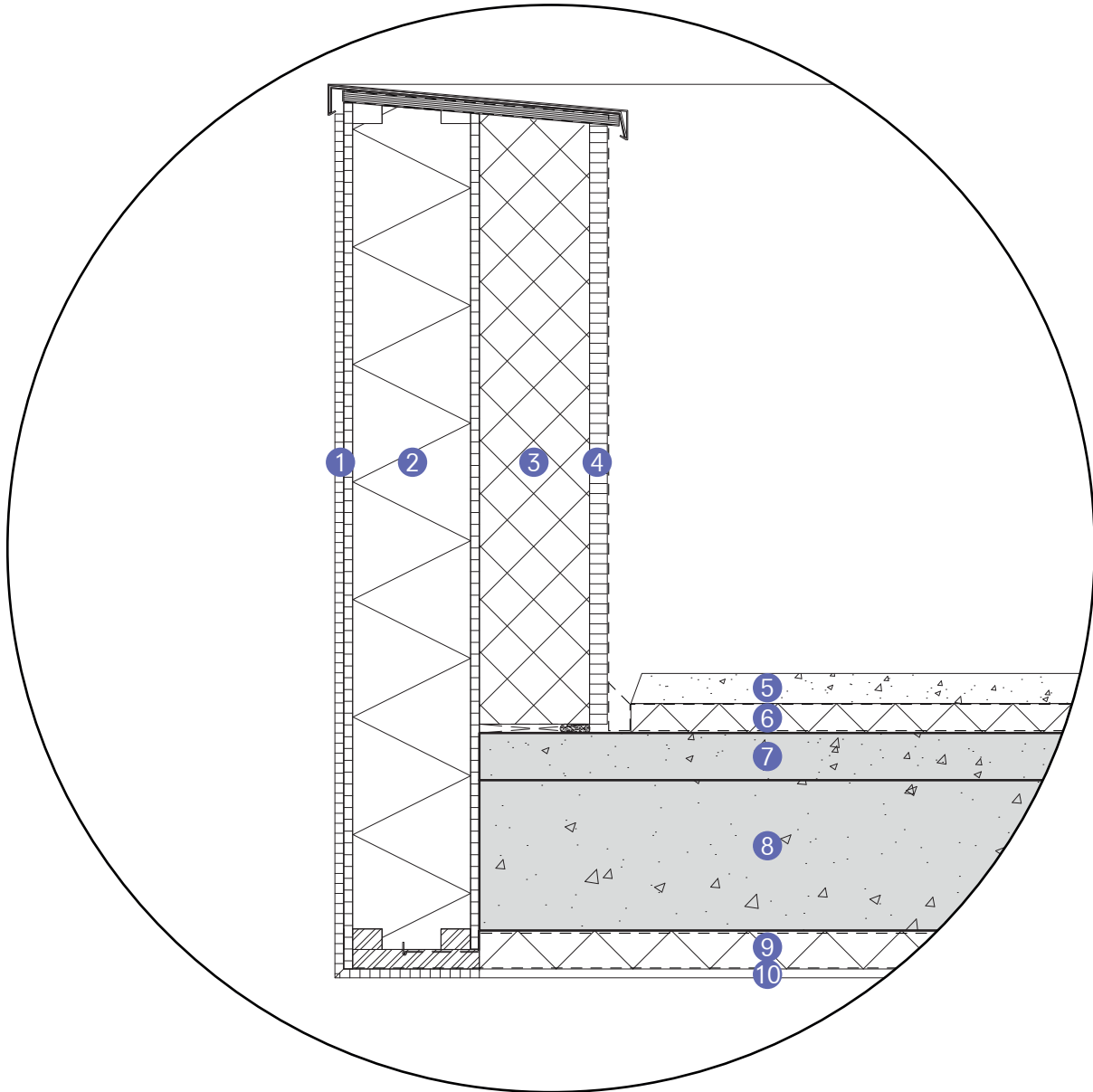
drawn scale 1:50
rescaled to fit page

development
envelope fragment



drawn scale 1:20
rescaled to fit page

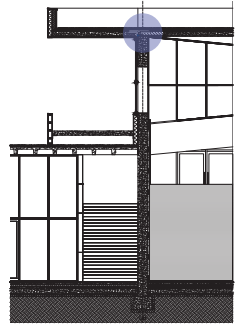
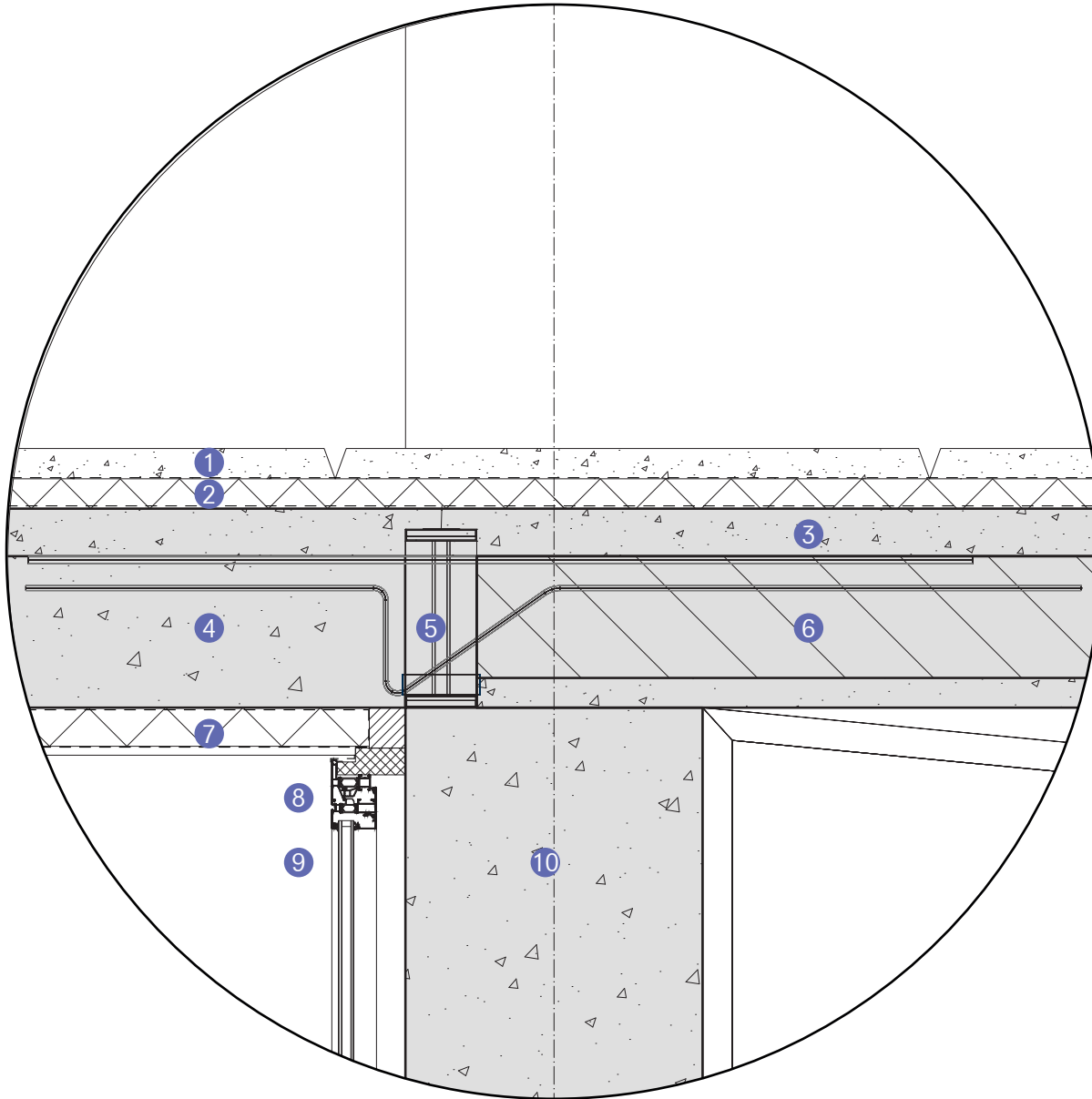
development detail 1



- ① mdf dark wood finish (15mm)
- ② sandwich panel (230mm)
- ③ aerated concrete (187mm)
- ④ mdf dark wood finish (30mm)
- ⑤ 1000x1000x50 cement lightweight tiles (50mm)
- ⑥ xps insulation (50mm)
- ⑦ pressure layer (80mm)
- ⑧ precast concrete slab (255mm)
- ⑨ pirs insulation (65mm)
- ⑩ plastered finish (15mm)

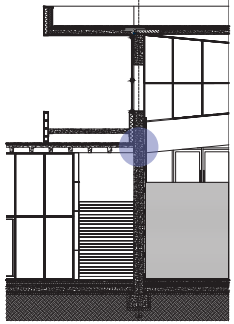
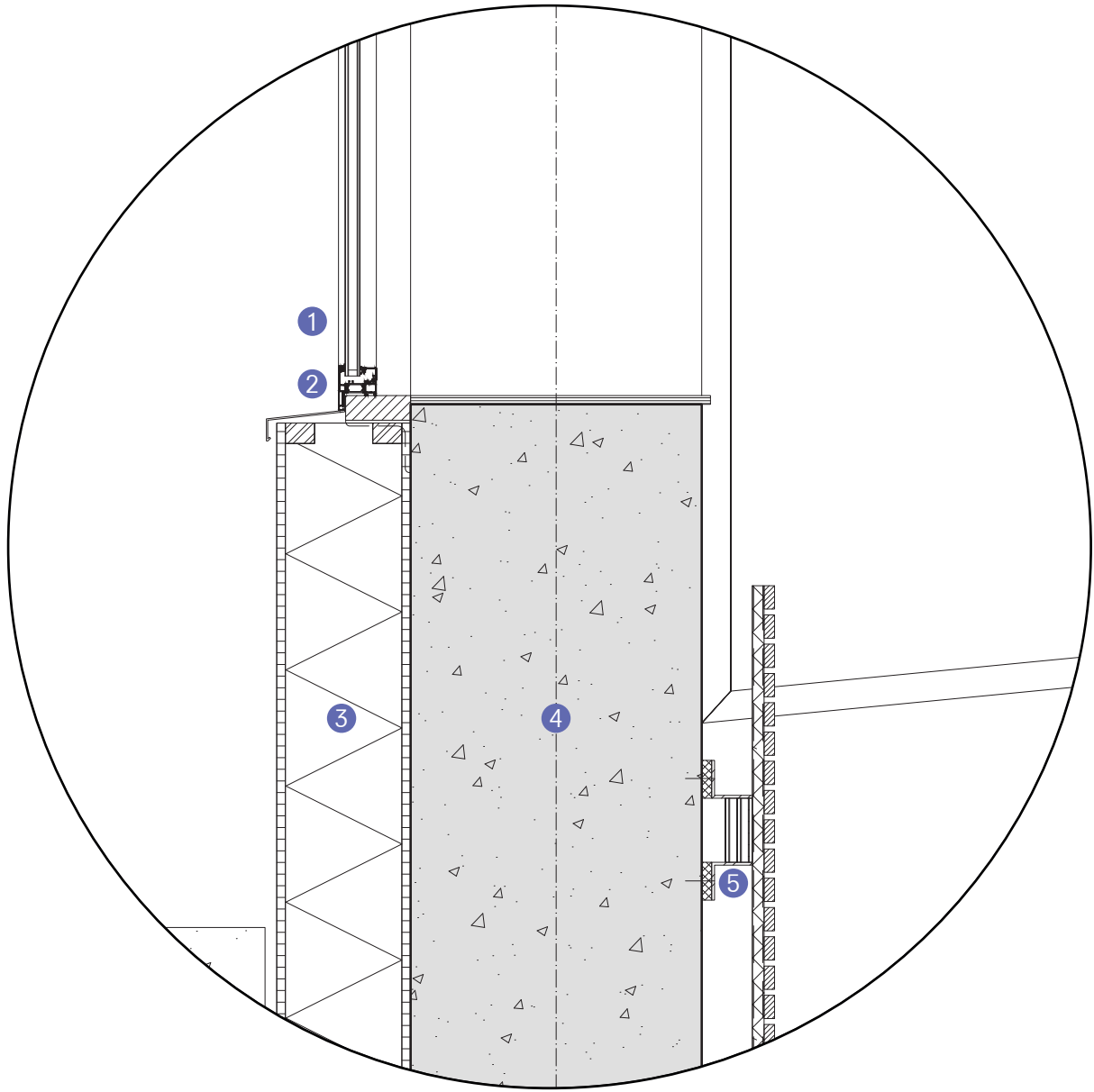
drawn scale 1:5
rescaled to fit page

development
detail 2



- ① 1000x1000x50
cement lightweight tiles
(50mm)
 - ② xps insulation
(50mm)
 - ③ pressure layer
(80mm)
 - ④ prefab balcony slab
(255mm)
 - ⑤ schöck isokorf CXT
 - ⑥ precast concrete slab
(255mm)
 - ⑦ pir insulation
(65mm)
 - ⑧ aluminium window-frame
ra19005
 - ⑨ hr+++ glass
 - ⑩ 1500x500
prestressed concrete beam
(500mm)
- drawn scale 1:5
rescaled to fit page

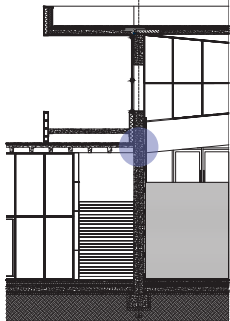
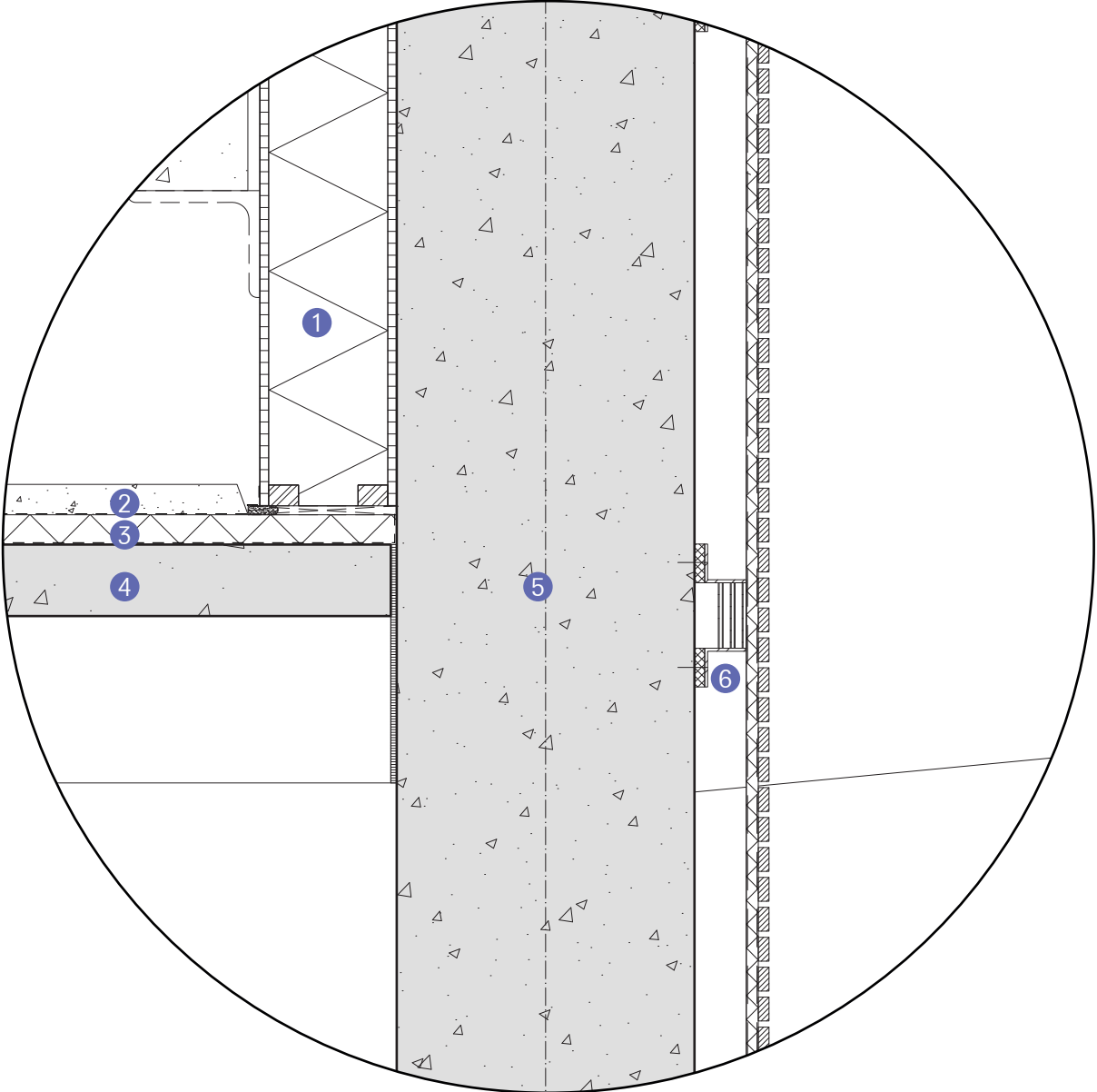
detail 3



- 1 hr+++ glass
- 2 aluminium window-frame
ra19005
- 3 sandwich panel
(230mm)
- 4 concrete wall
(500mm)
- 5 acoustic wall panel
(125mm)

drawn scale 1:5
rescaled to fit page

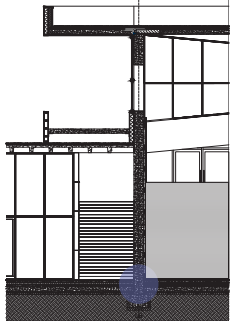
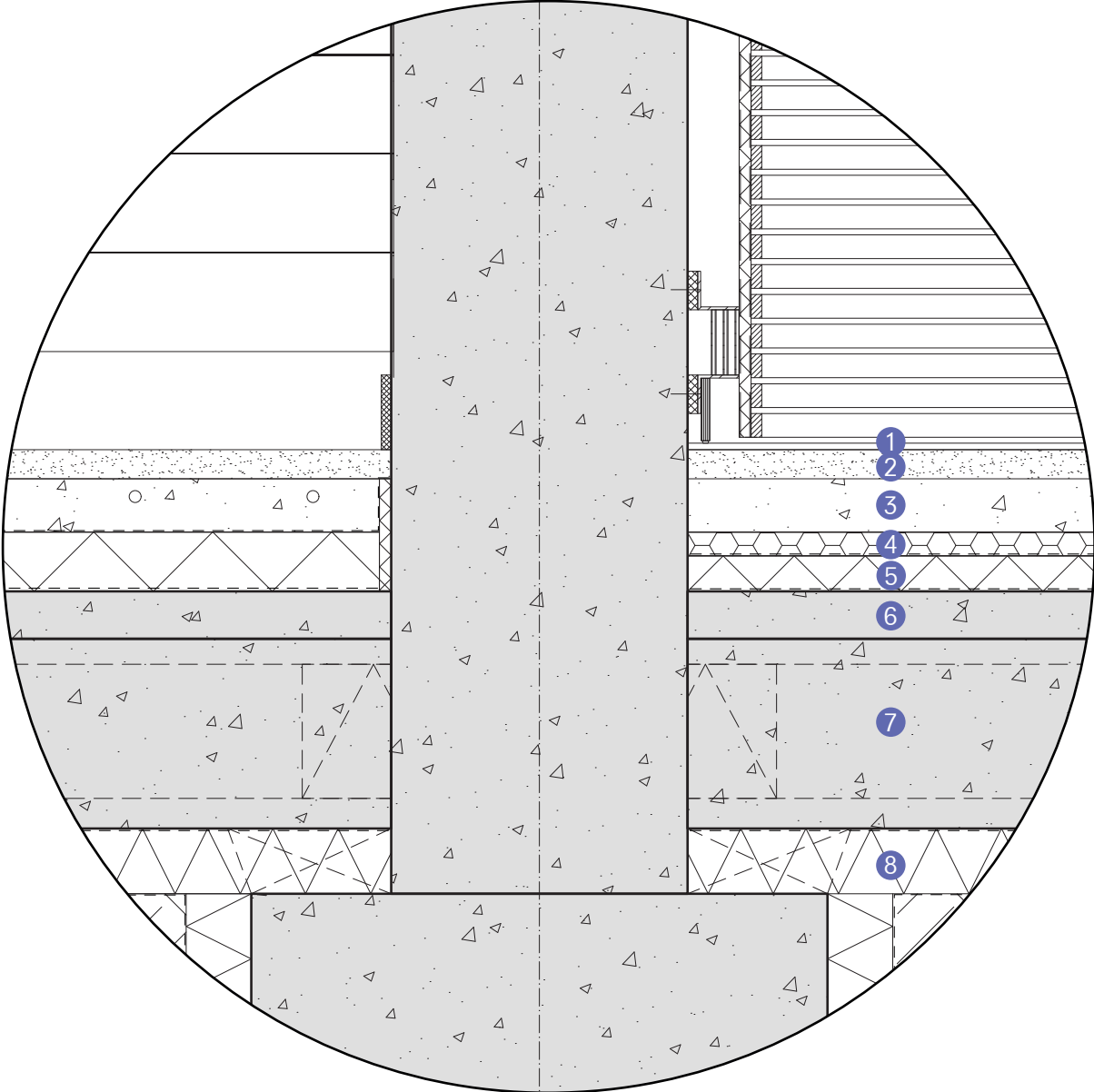
detail 4



- 1 1000x1000x50
cement lightweight tiles
(50mm)
- 2 1000x1000x50
cement lightweight tiles
(50mm)
- 3 xps insulation
(50mm)
- 4 1000x1000x400
concrete waffle slab
(400mm)
- 5 concrete wall
(500mm)
- 6 acoustic wall panel
(125mm)

drawn scale 1:5
rescaled to fit page

detail 5



- ① sports floor (11mm)
- ② anhydrite floor (49mm)
- ③ dovetailed sheeting + concrete (90mm)
- ④ steel suspension profiles (40mm)
- ⑤ pir insulation (60mm)
- ⑥ pressure layer (80mm)
- ⑦ h320 hollow core slab (320mm)
- ⑧ eps insulation (110mm)

drawn scale 1:5
rescaled to fit page

introduction
research
design brief
concept
implementation
development
conclusion



conclusion

research question

How can a sports facility influence the socio- spatial development of Beirut's city centre?

conclusion

research question



conclusion

research question



conclusion

research question



conclusion
research question



conclusion

research question



conclusion

itsalla bayrut

itsalla - ىلستى - to pass the time

thank you

