

TRIPLE THREAD

#milano2030

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+20

new parks

+12.000

old people (over 85 y.o.)

+20%

green areas

MILANO 2030

c i t y
connections | green | living | culture | resources

+3.000.000

plants and trees

+50.000

young people

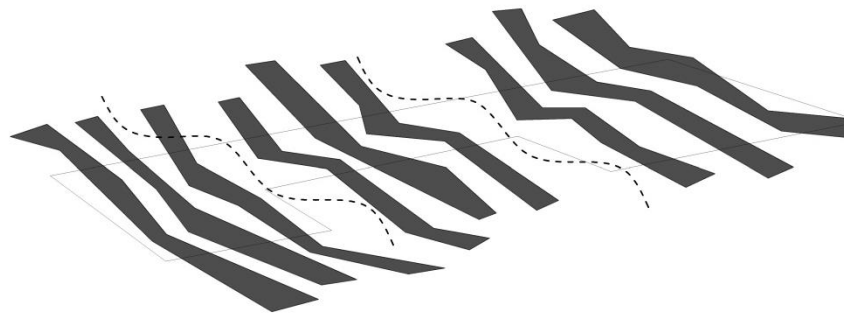
(19-34 y.o.)

3.160.000

people

MAIN ROADS | GREEN AREAS





residential zone

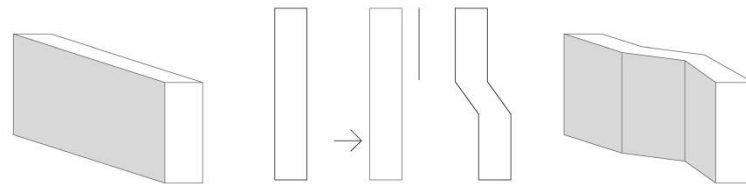
public zone

residential zone

individual space
flexible layout
home

common space
green space
connections

individual space
flexible layout
home



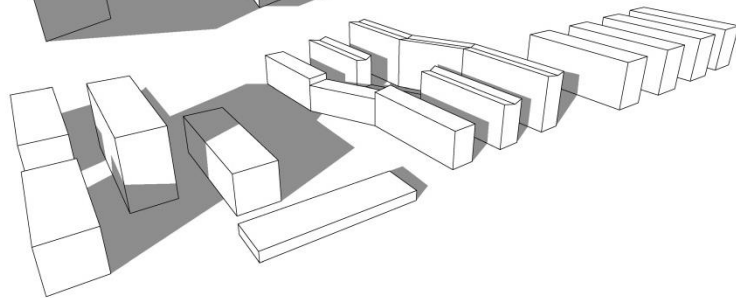
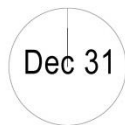
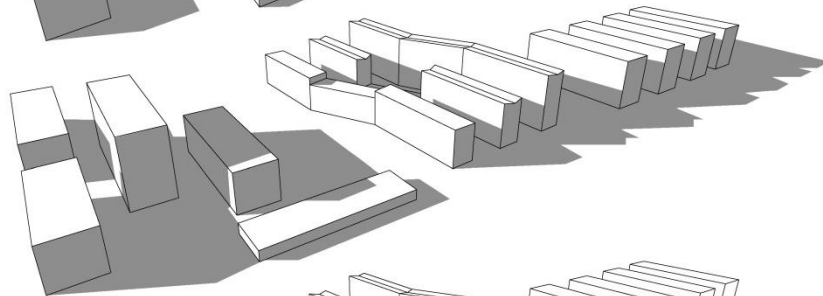
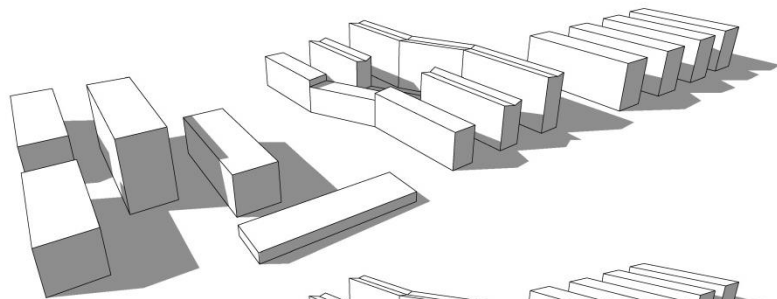
CONNECTION

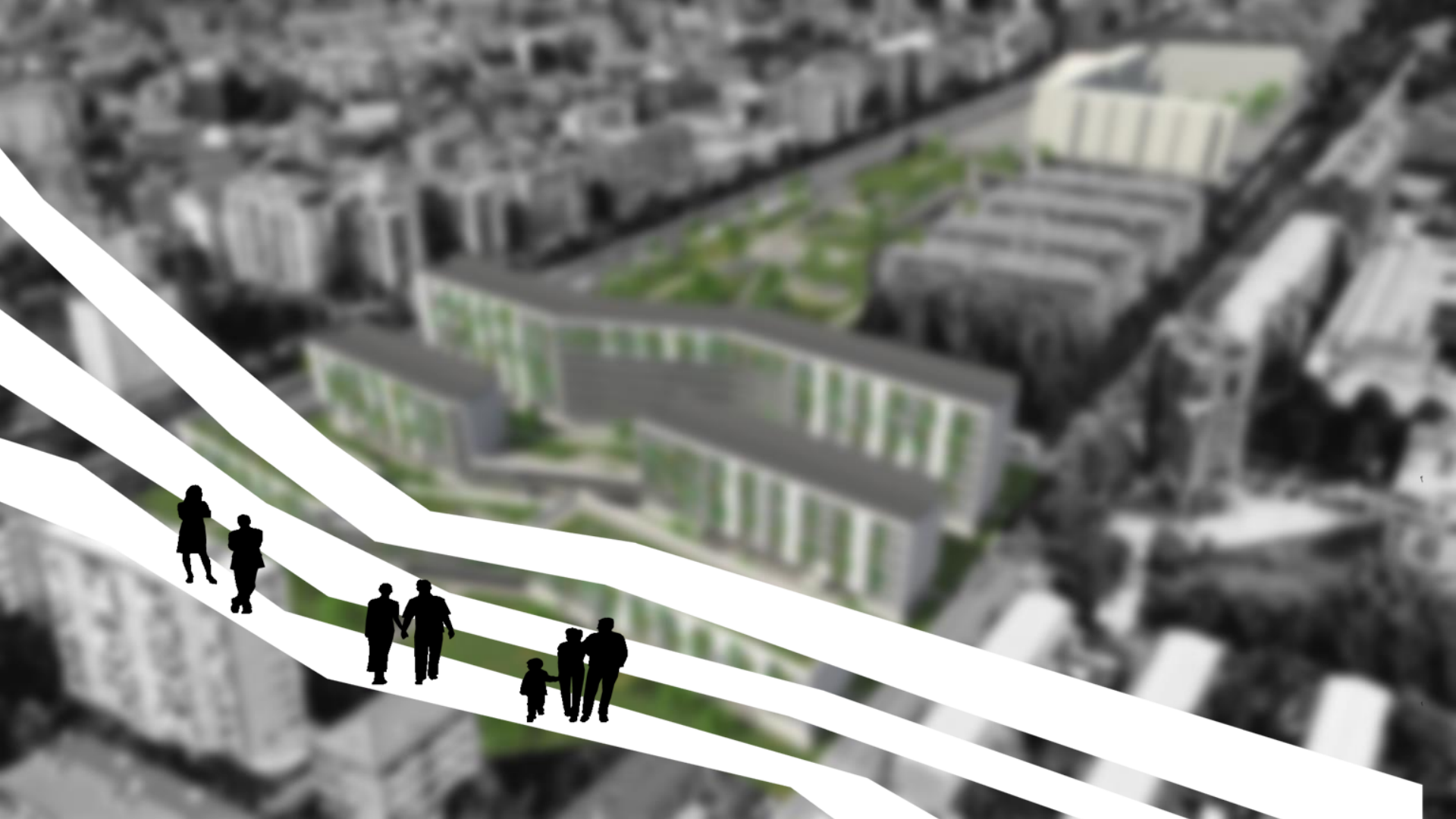
TRANSFORMATION

MOTION

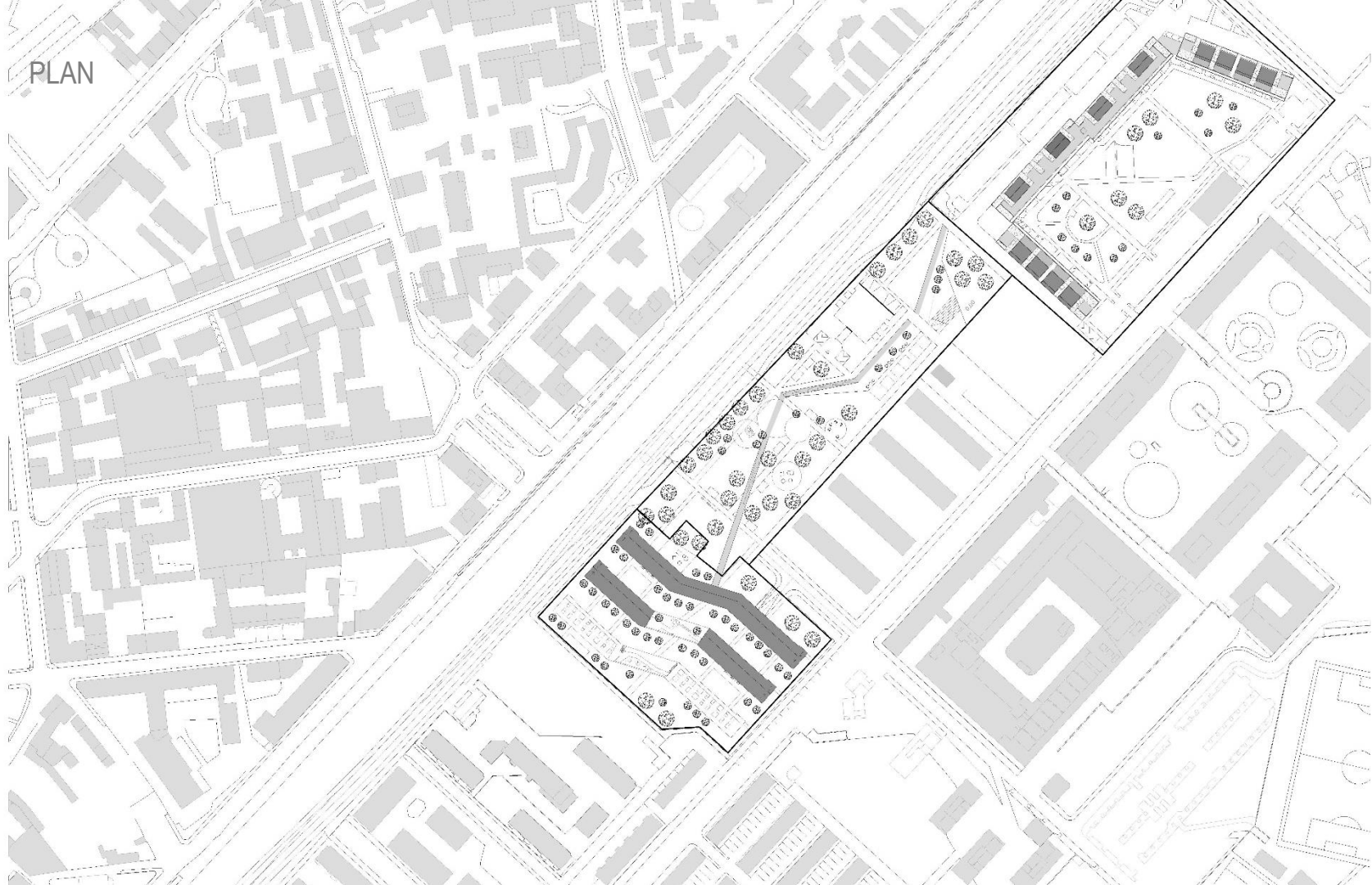
FUTURE MILANO COMES IN THREE

SHADOW ANALYSIS





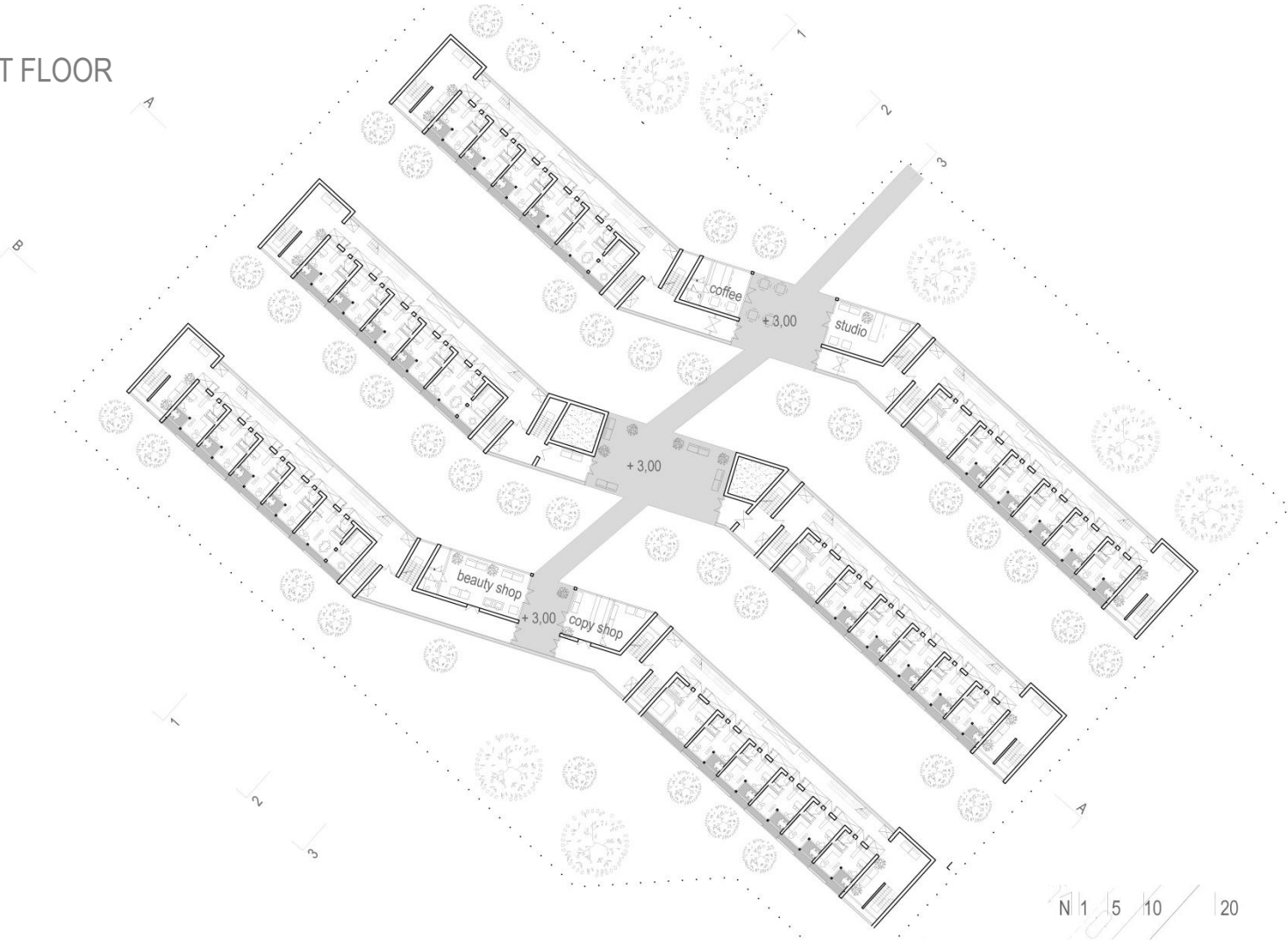
PLAN



GROUND FLOOR

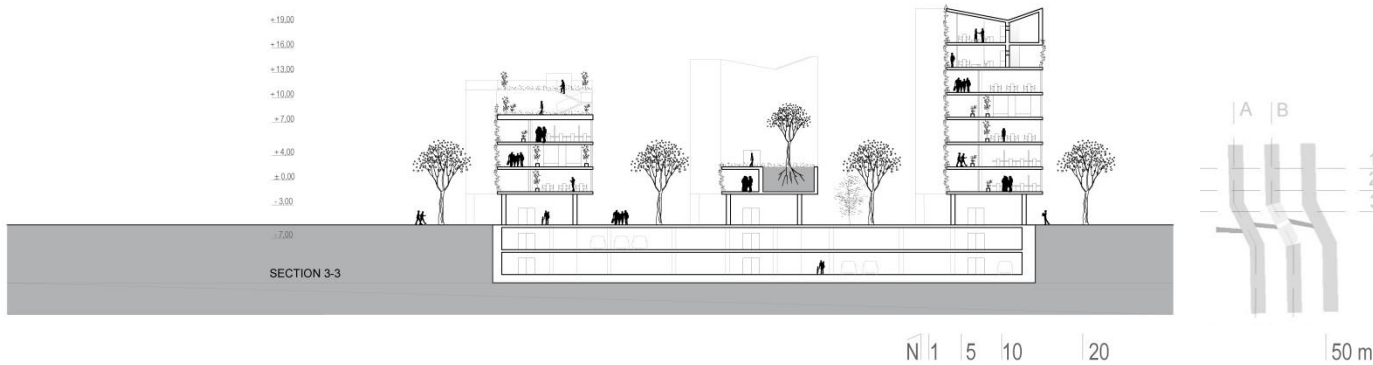
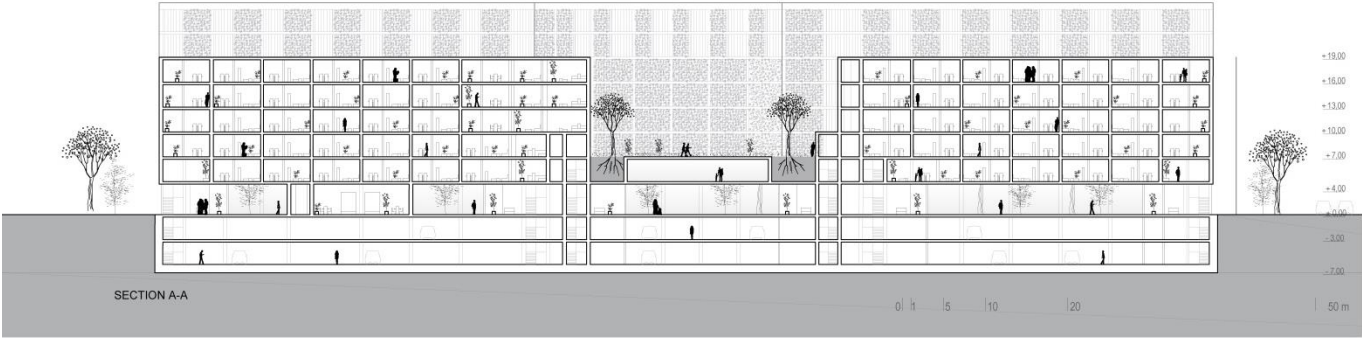


FIRST FLOOR

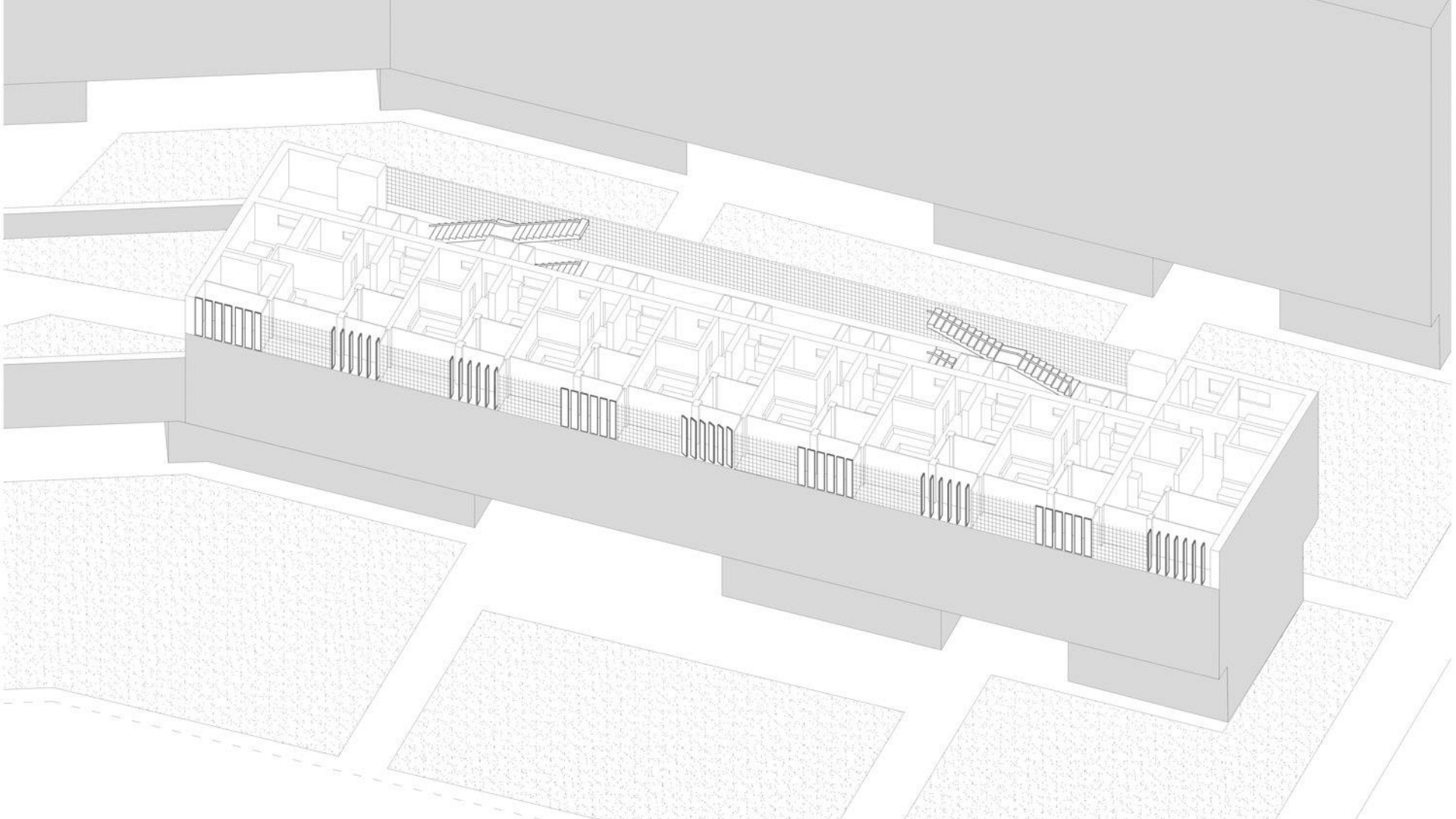




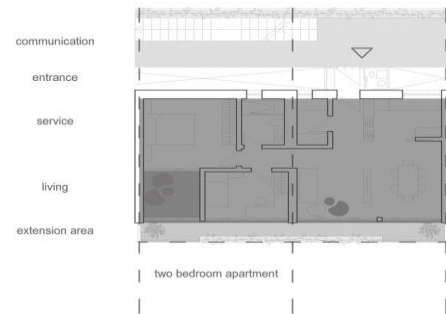
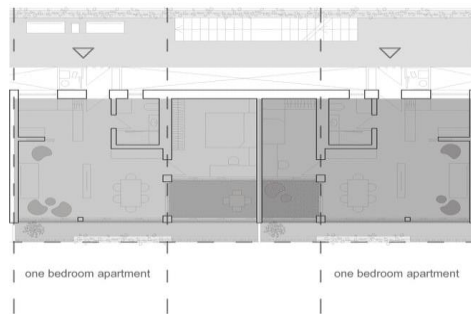
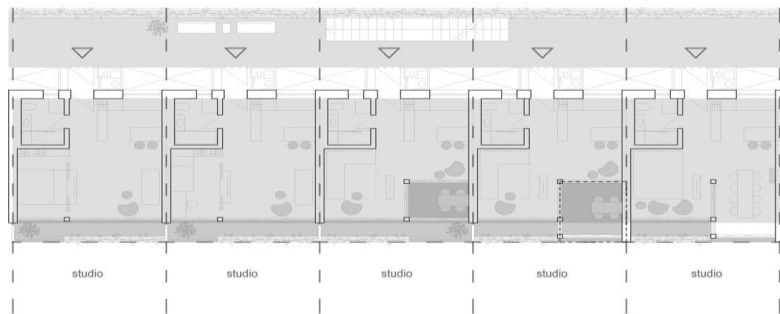
SECTIONS





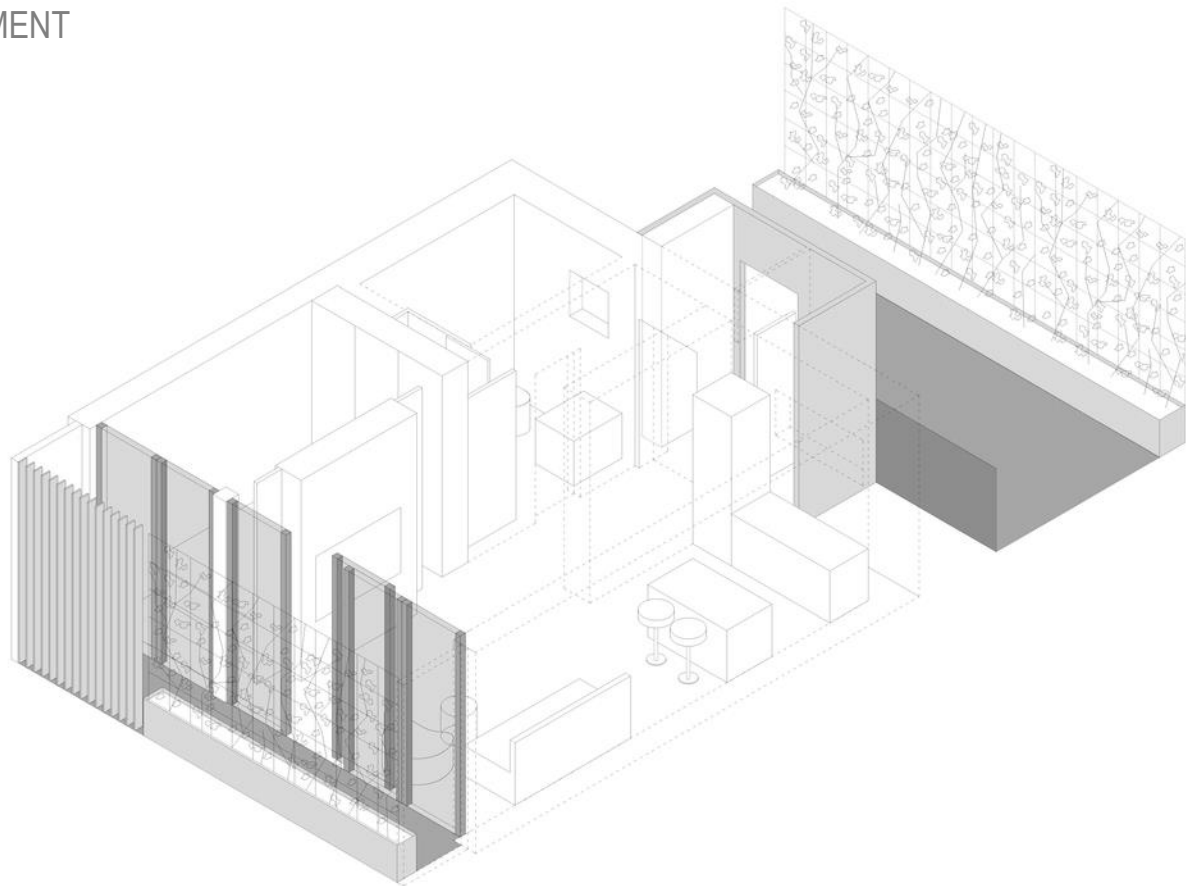


APARTMENTS

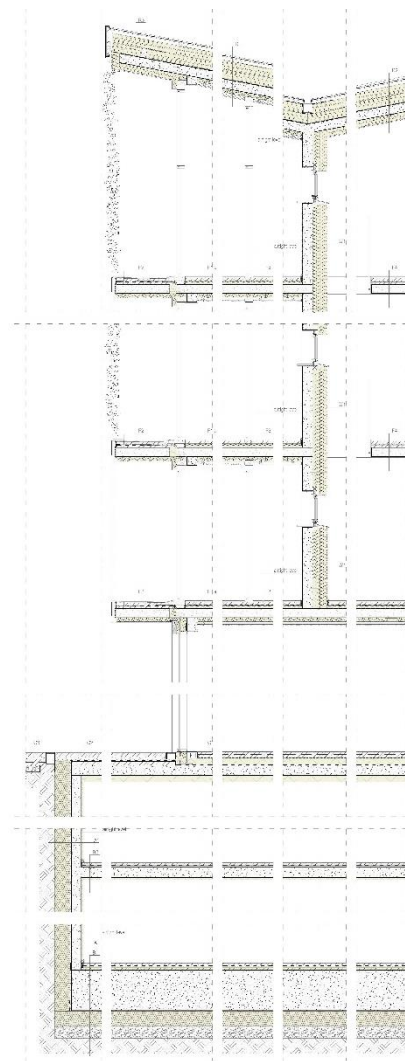
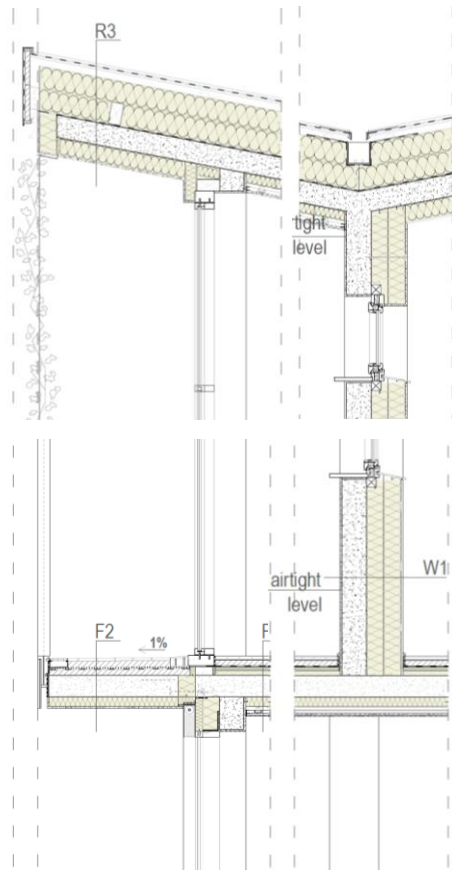
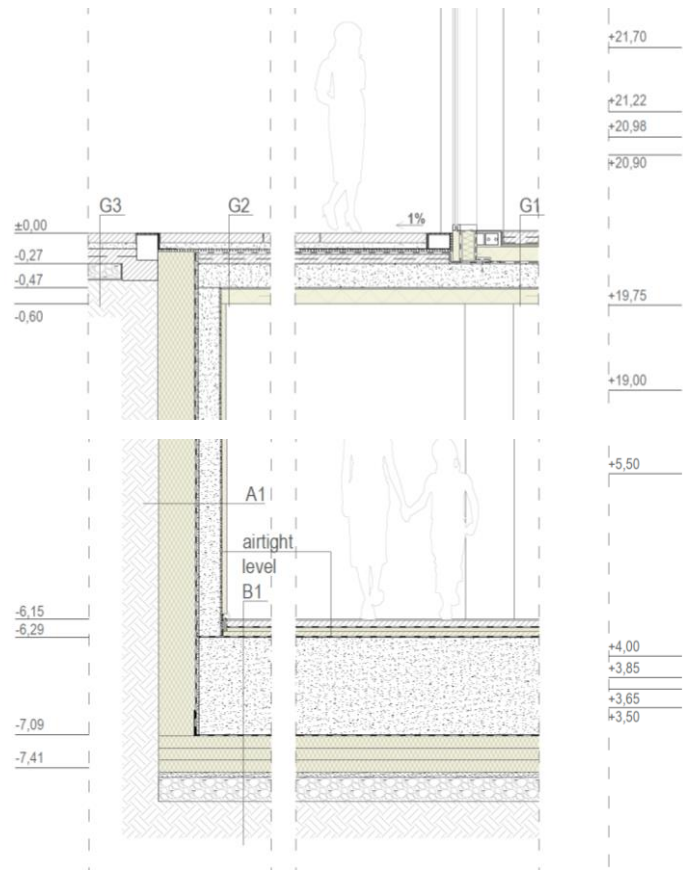


communication
entrance
service
living
extension area

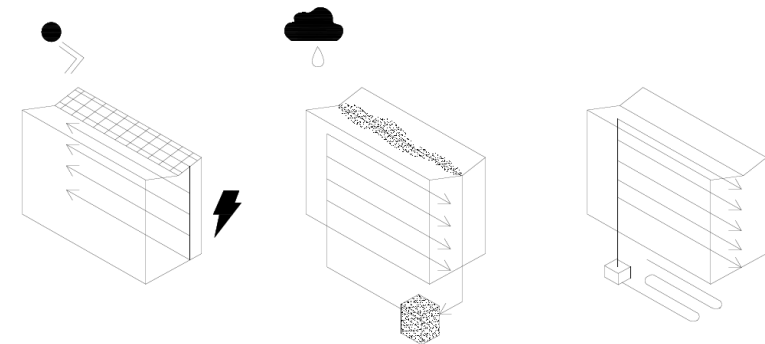
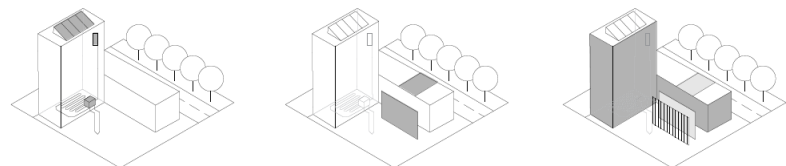
STUDIO APARTMENT



CONSTRUCTION DETAIL



ENERGY CONCEPT



sunčani pretvornici | dizalice topline | rekuperacija otpadne topline | skupljanje kišnice |

ENERGY EFFICIENCY

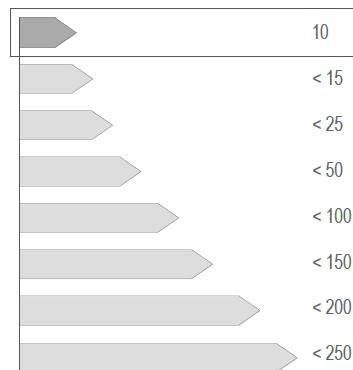
Specific Heat Demand

Transmission Heat Losses:	61 250,35 kWh/a
Ventilation Heat Losses:	15 107,58 kWh/a
Total Heat Losses:	76 357,93 kWh/a
Solar Heat Gains:	48 558,28 kWh/a
Total Heat Gains:	21 617,54 kWh/a
Annual Heat Demand:	60 803,11 kWh/a
Specific Heat Demand:	15 554081 kWh/a
	5,49 kWh/(m ² a)

Overheating

Exterior Thermal Transmittance:	709,93 W/K
Ground Thermal Transmittance:	38,02 W/K
Ventilation Transmittion Ambient:	508,94 W/K
Ventilation Transmission Ground:	0,00 W/K
Solar Aperture:	23,76 m ²
Frequency of Overheating:	0,00 %

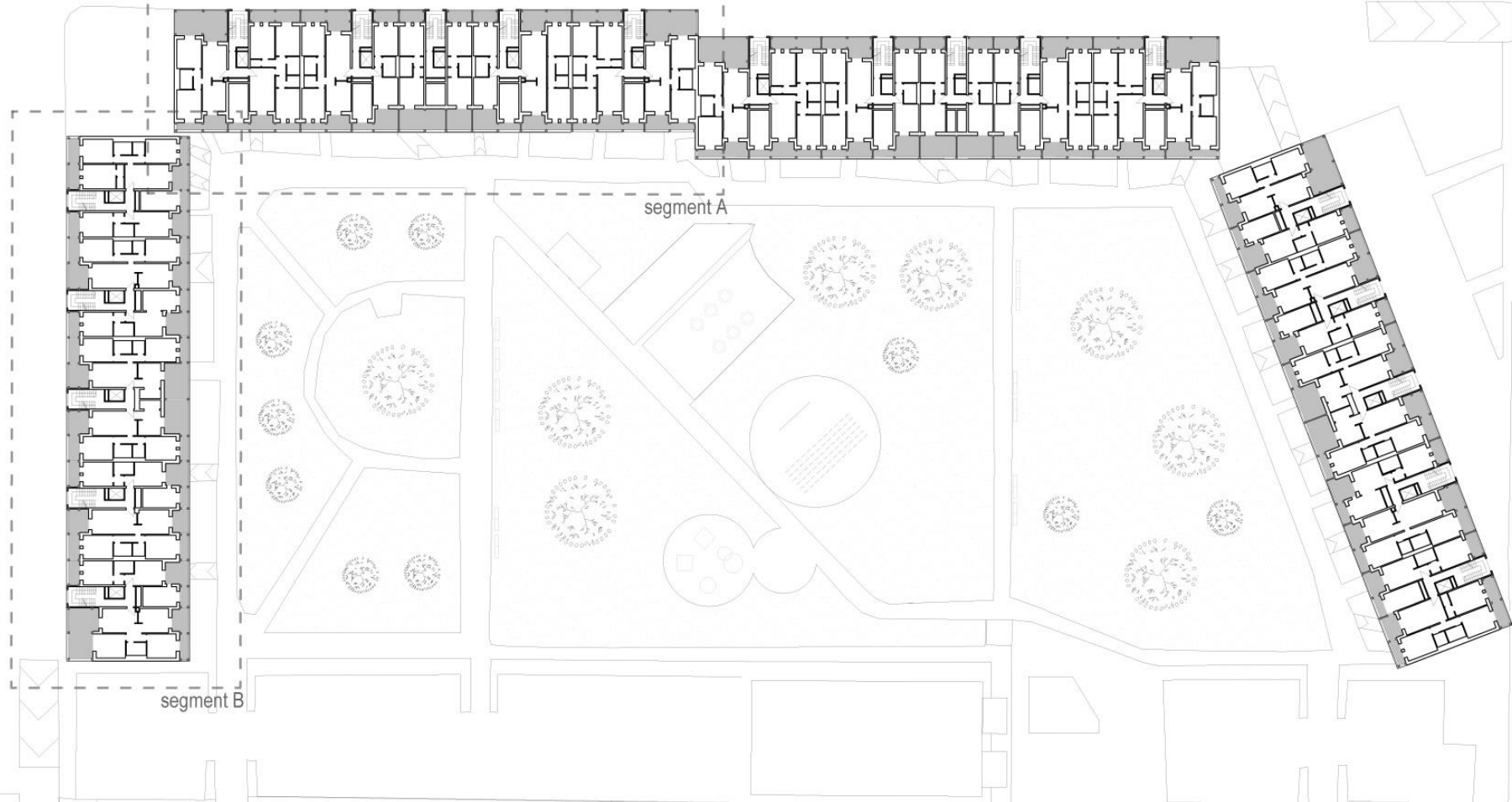
Energy efficiency classes



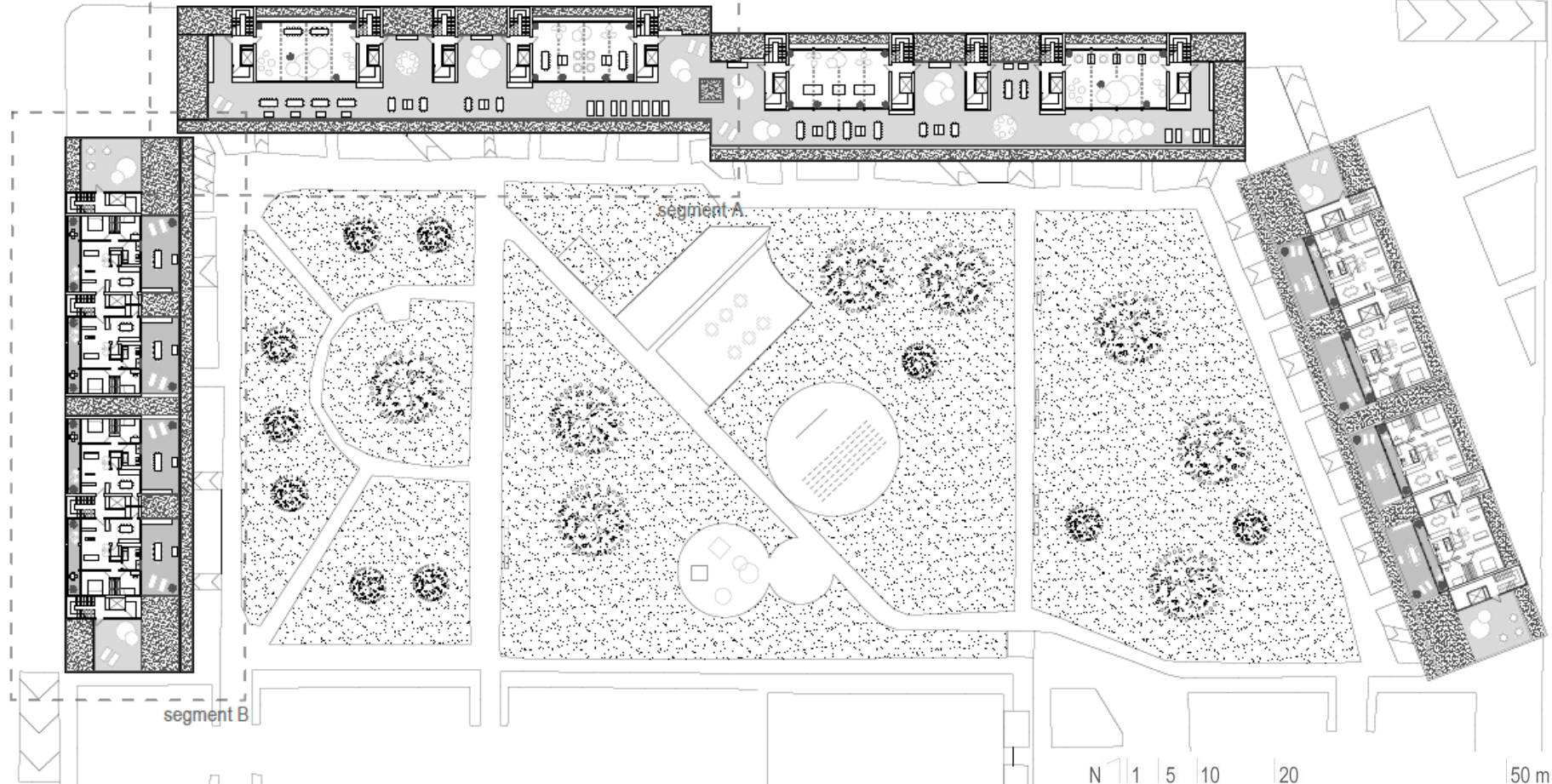
standard pasivne kuće



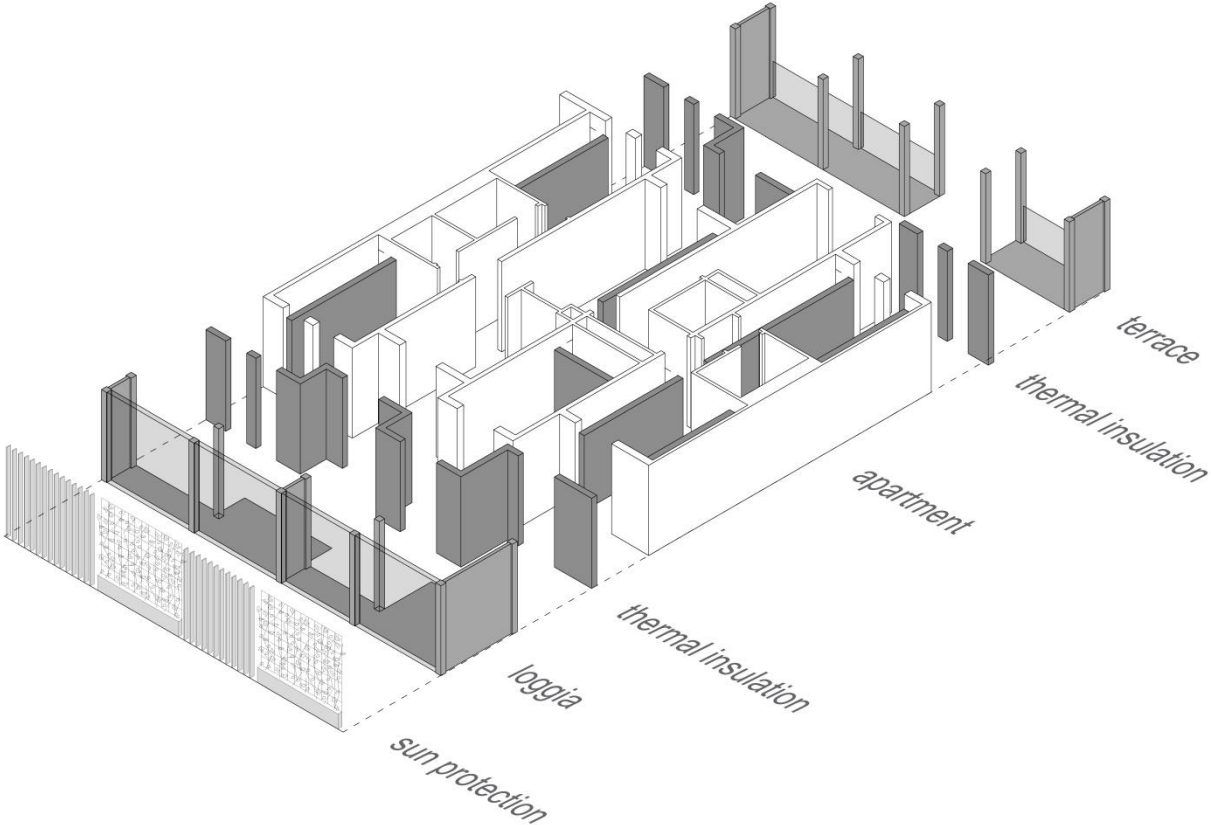
EXISTING DEVELOPMENT



EXISTING DEVELOPMENT

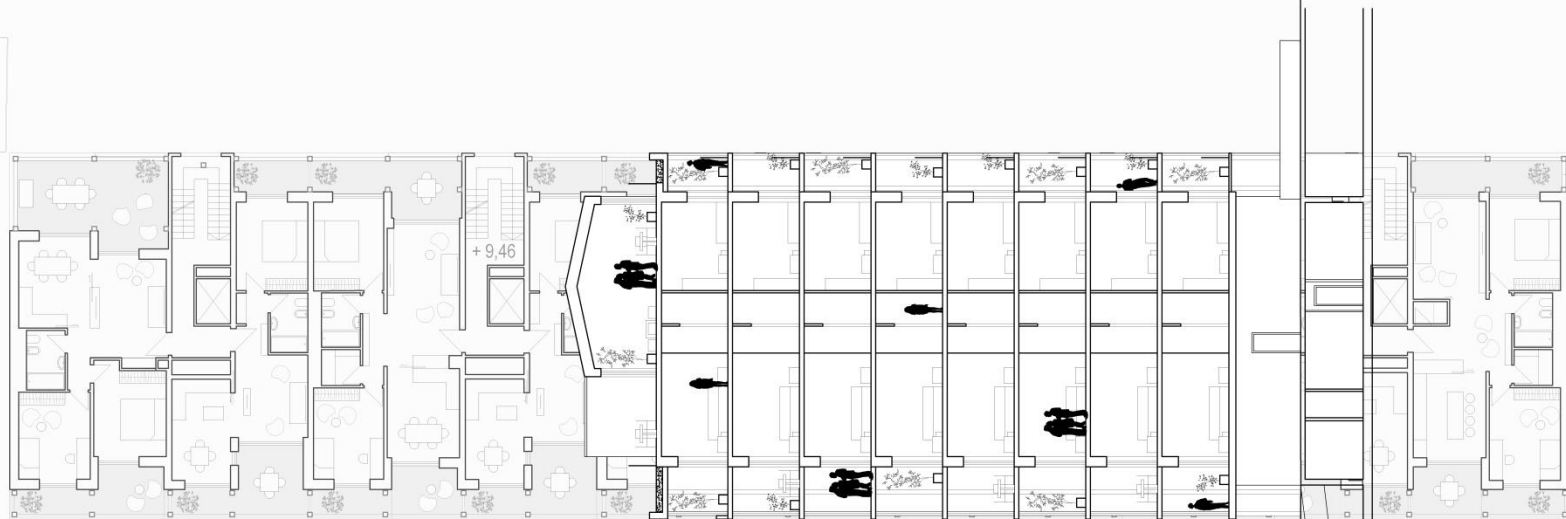


RENEWAL SCHEME



SECTION

+ 31,50
+ 28,35
+ 25,20
+ 22,05
+ 18,91
+ 15,76
+ 12,62
+ 9,46
+ 6,30
+ 3,20
± 0,00
+ 2,75



N 0 1 2

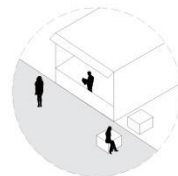
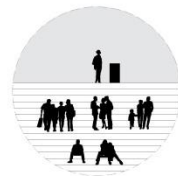
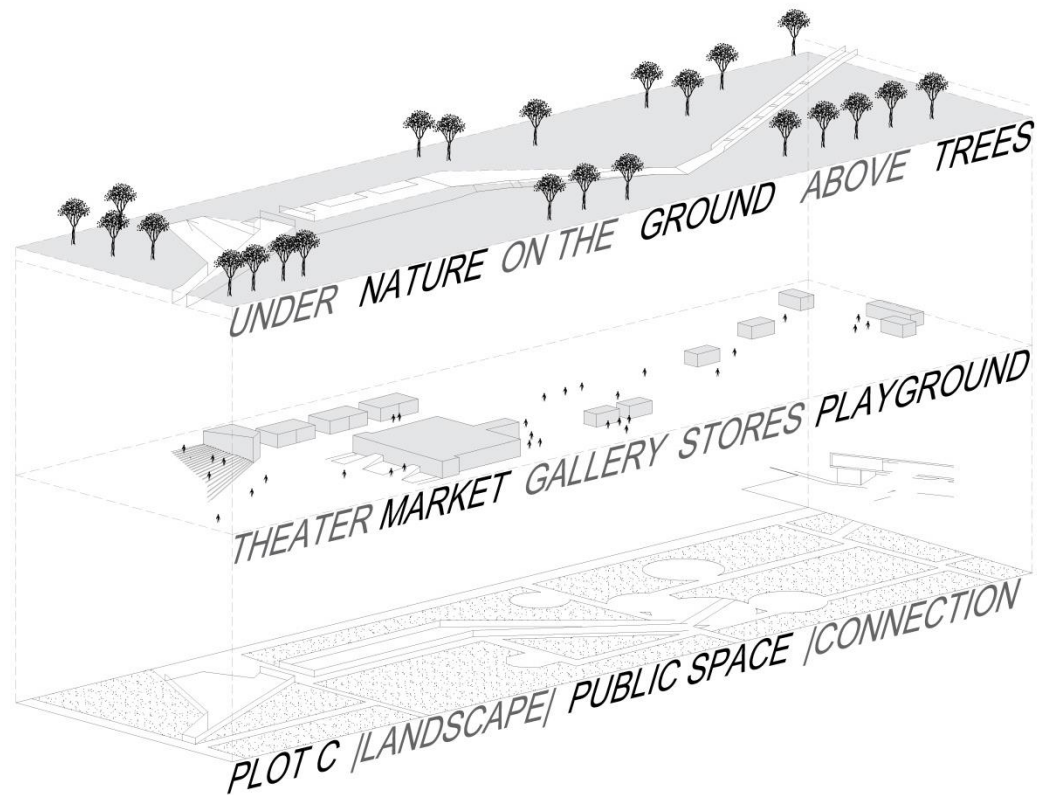
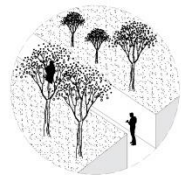
5

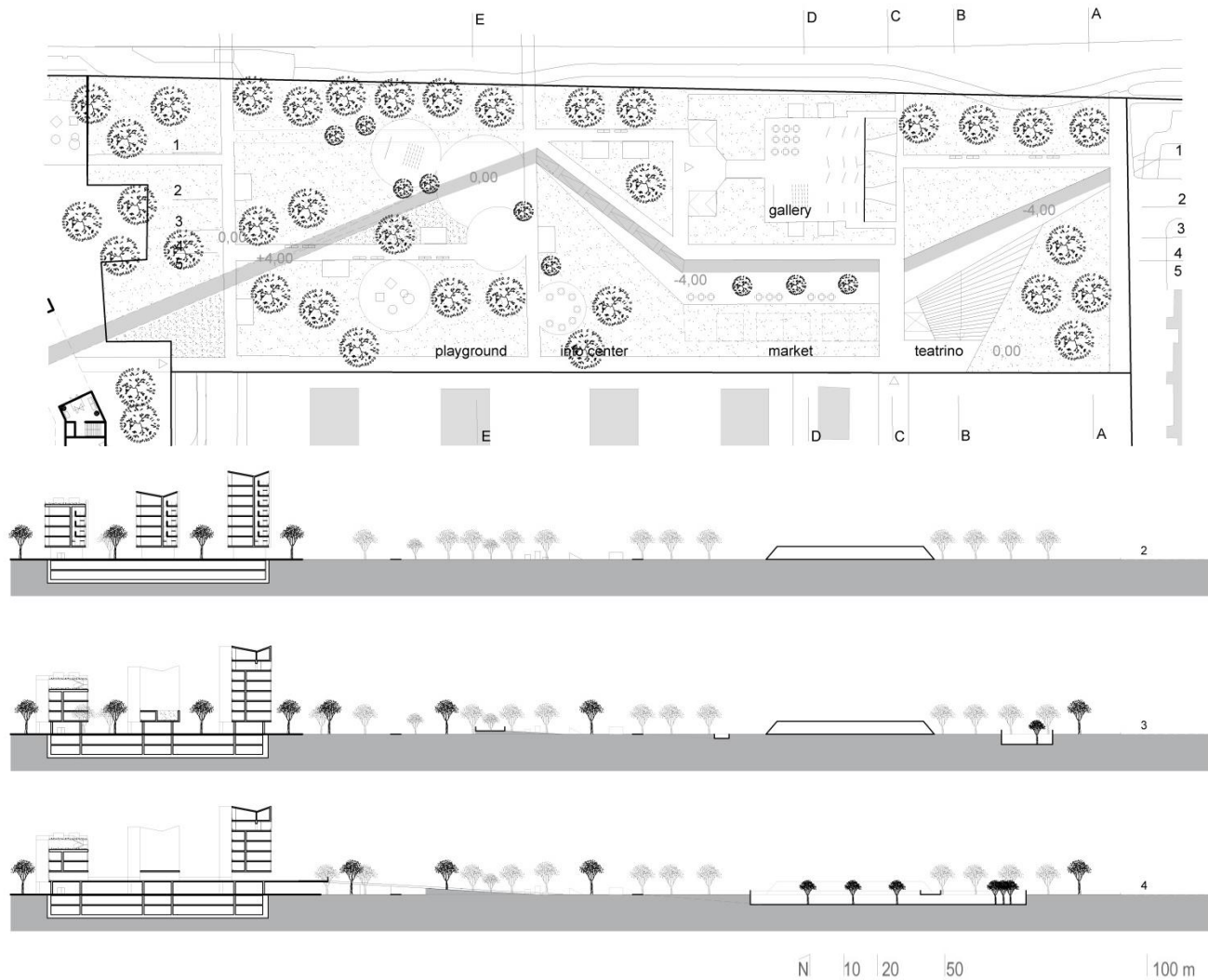
10

20 m



LANDSCAPE







THANK YOU!

Ivana Marić | Rea Mihelko

Croatia | University of Zagreb | Faculty of Architecture
mentor: prof. Alenka Delić, PhD.



Zagrebački
energetski tjedan
13.-19.05.2019.



SAINT-GOBAIN

Af

