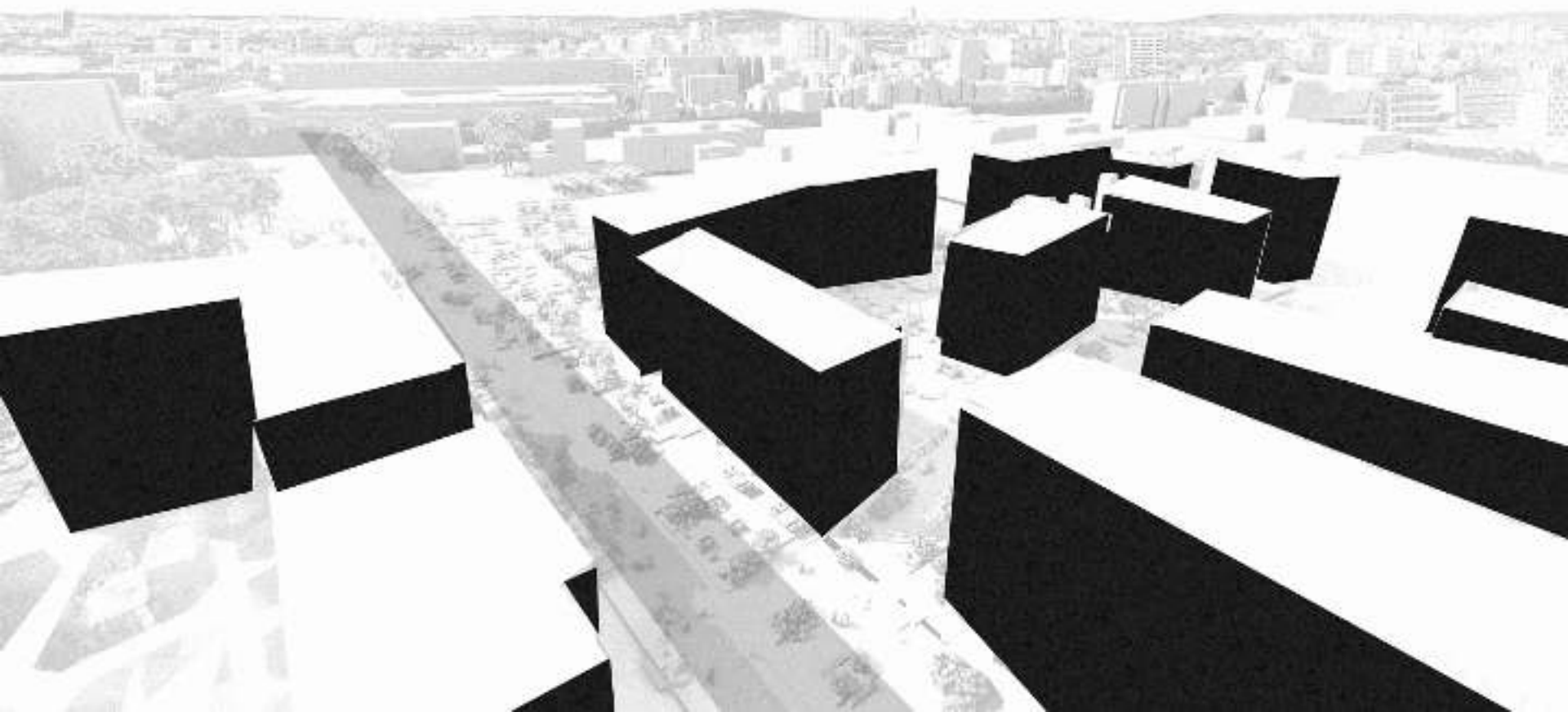


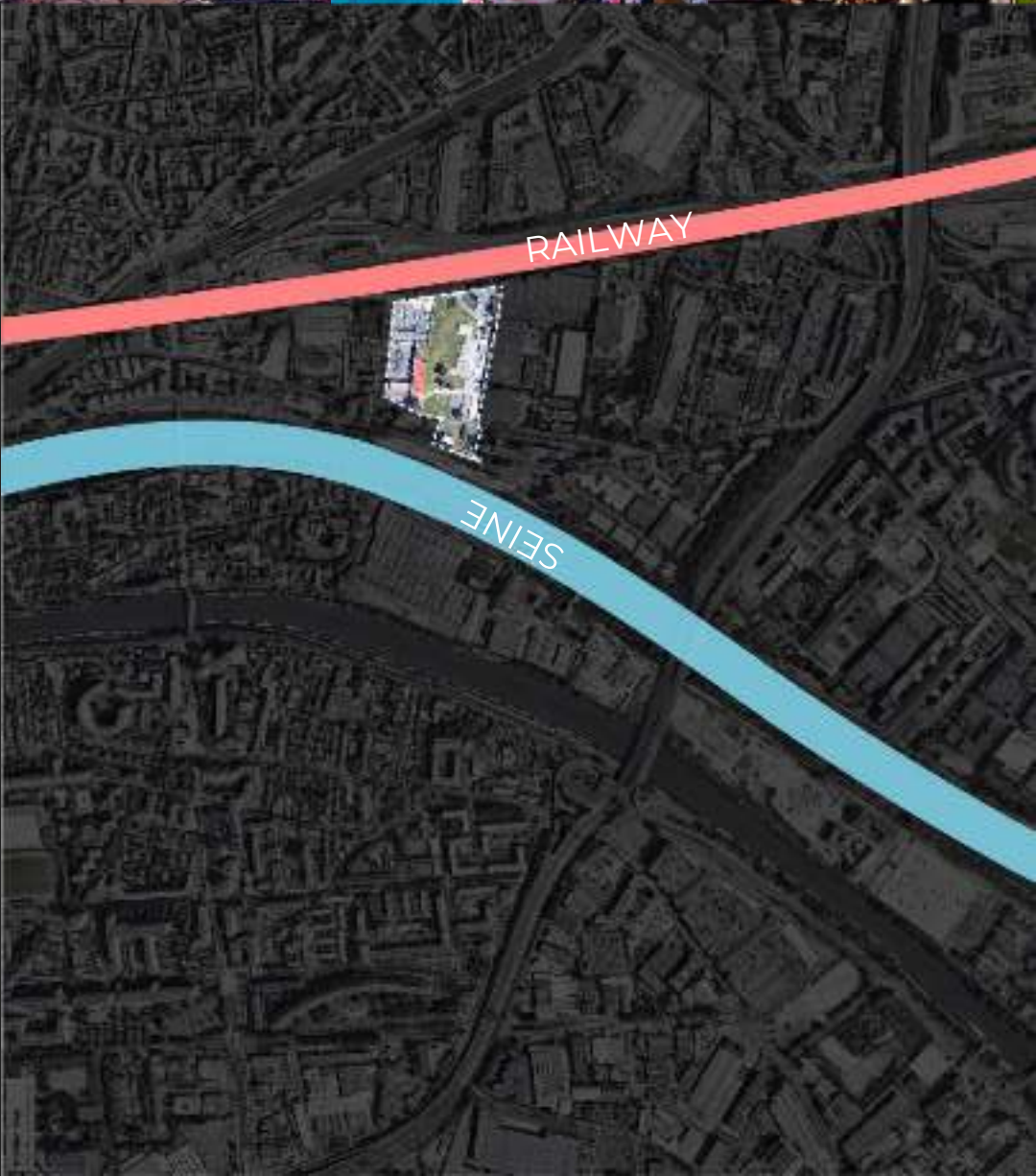
# LA COMMUNE SAINT-DENIS

AREGAKS AVETJANS  
KLĀVS GALENIEKS



# COMMUNITY

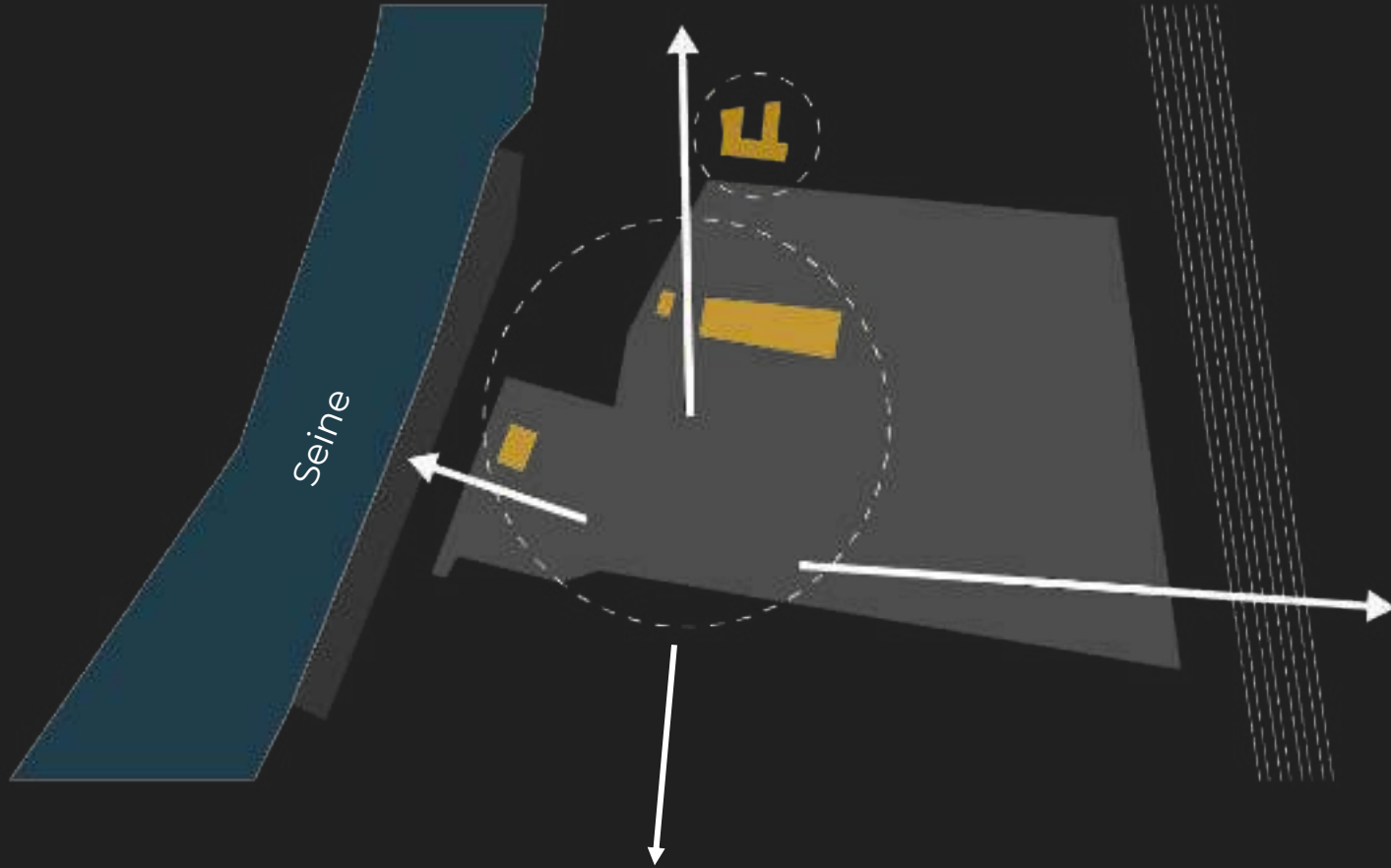




# 01



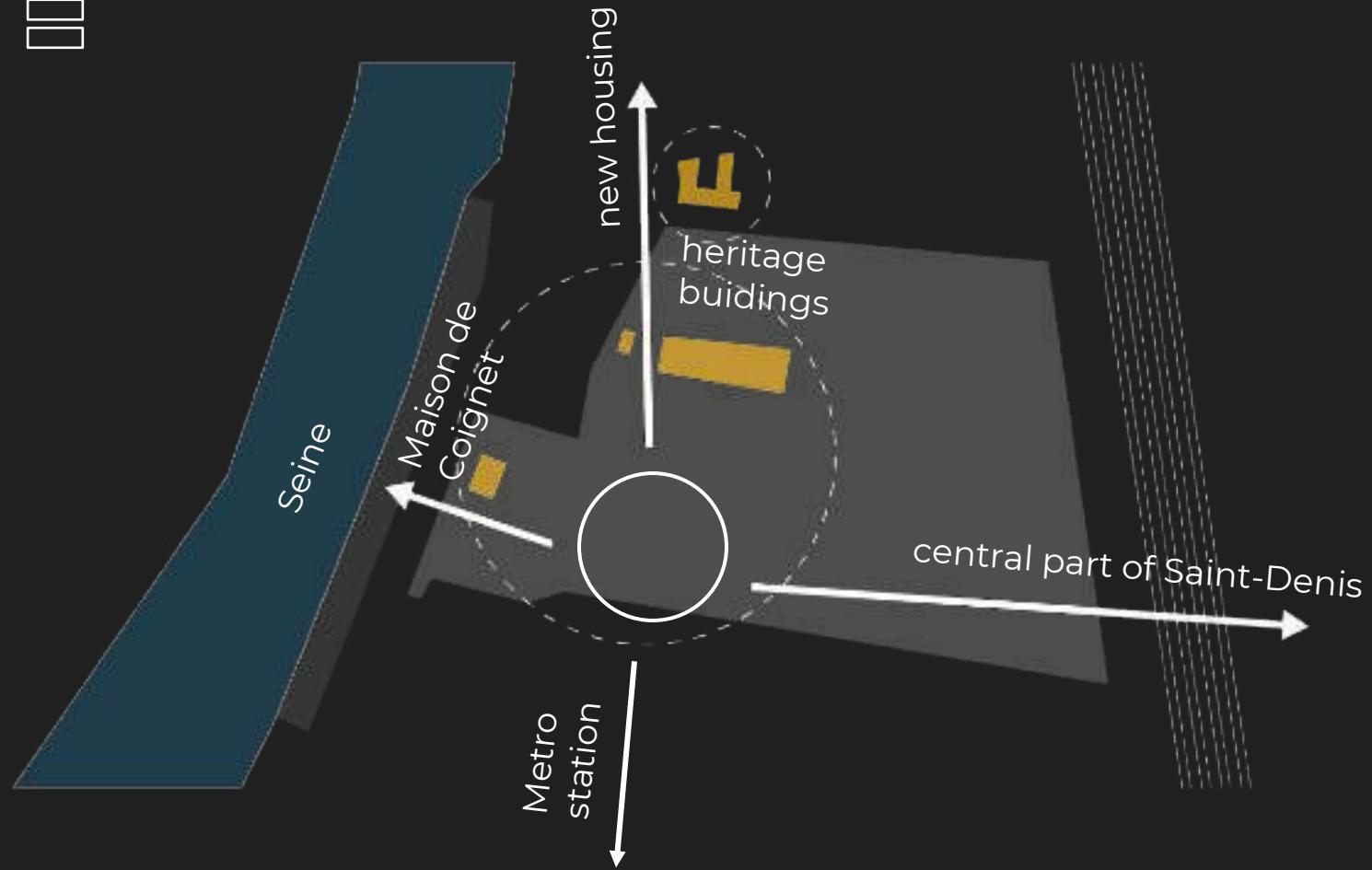
MASTERPLAN CONCEPT



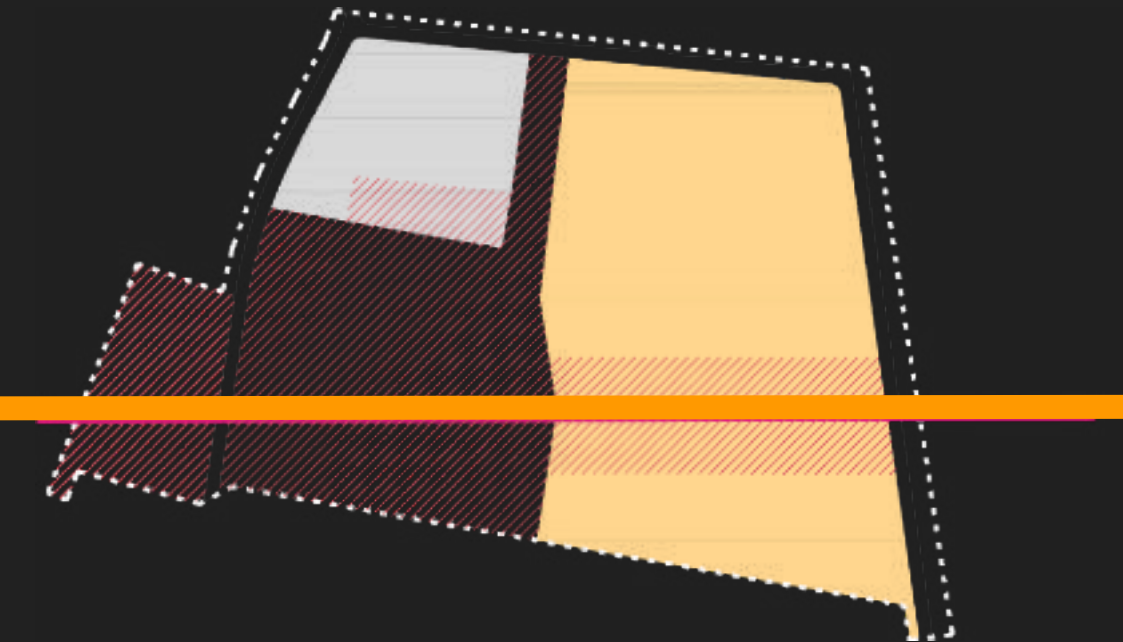
01



MASTERPLAN CONCEPT



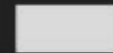
# 01 MASTERPLAN CONCEPT



LEISURE



LIVING



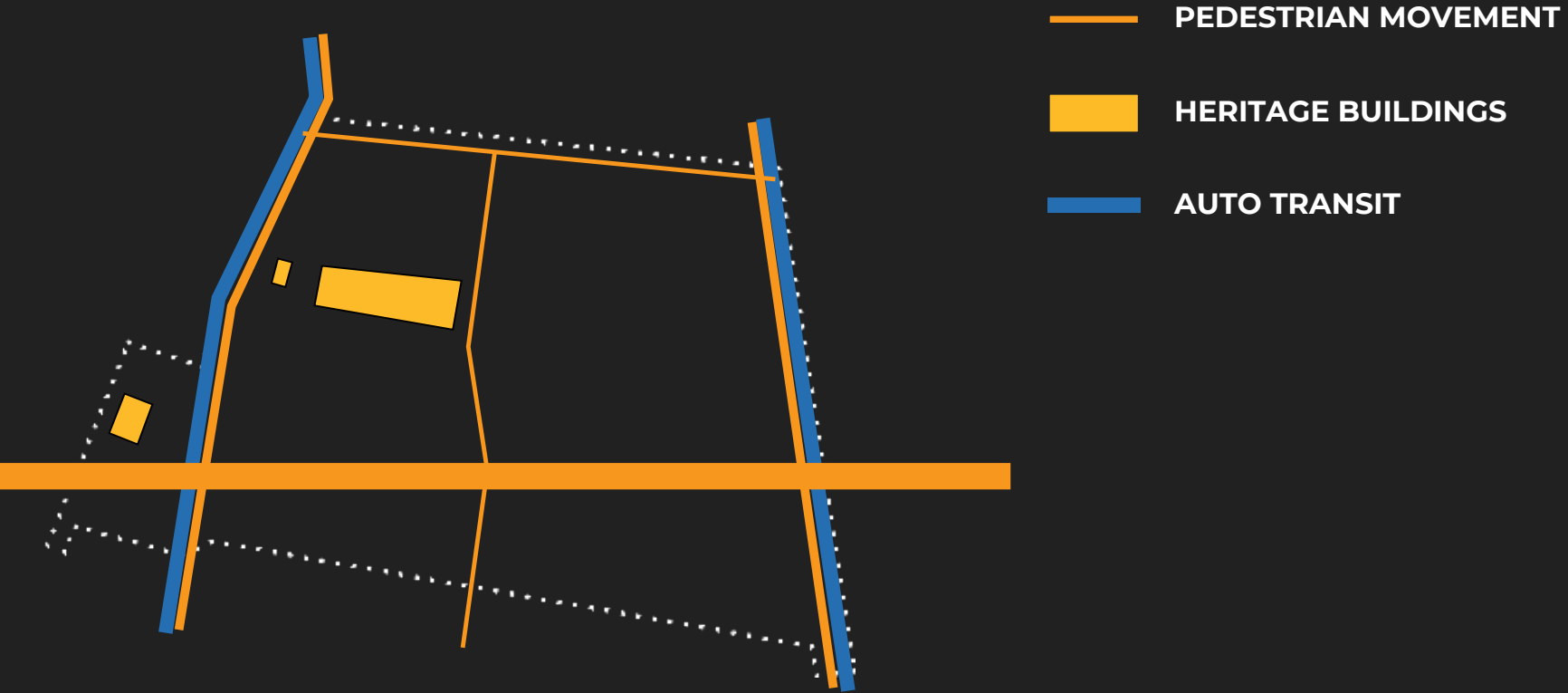
EDUCATION



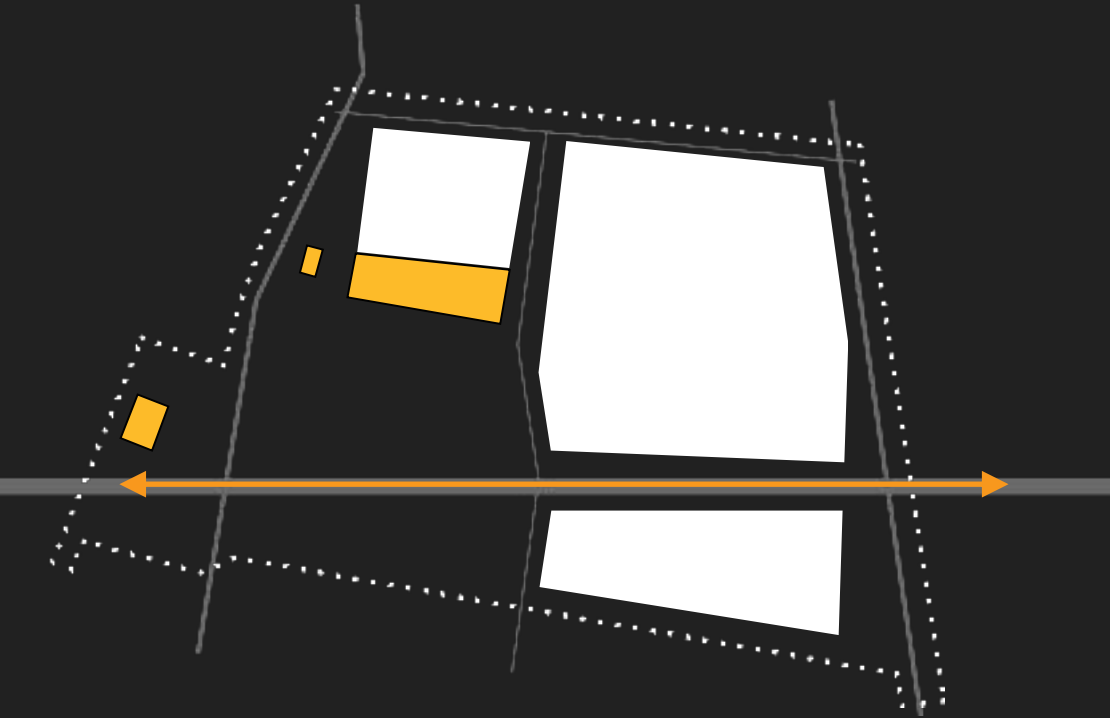
PEDESTRIAN MAIN CIRCULATION



# 01 MASTERPLAN CONCEPT



# 01 MASTERPLAN CONCEPT



**VIEW DIRECTIONS**



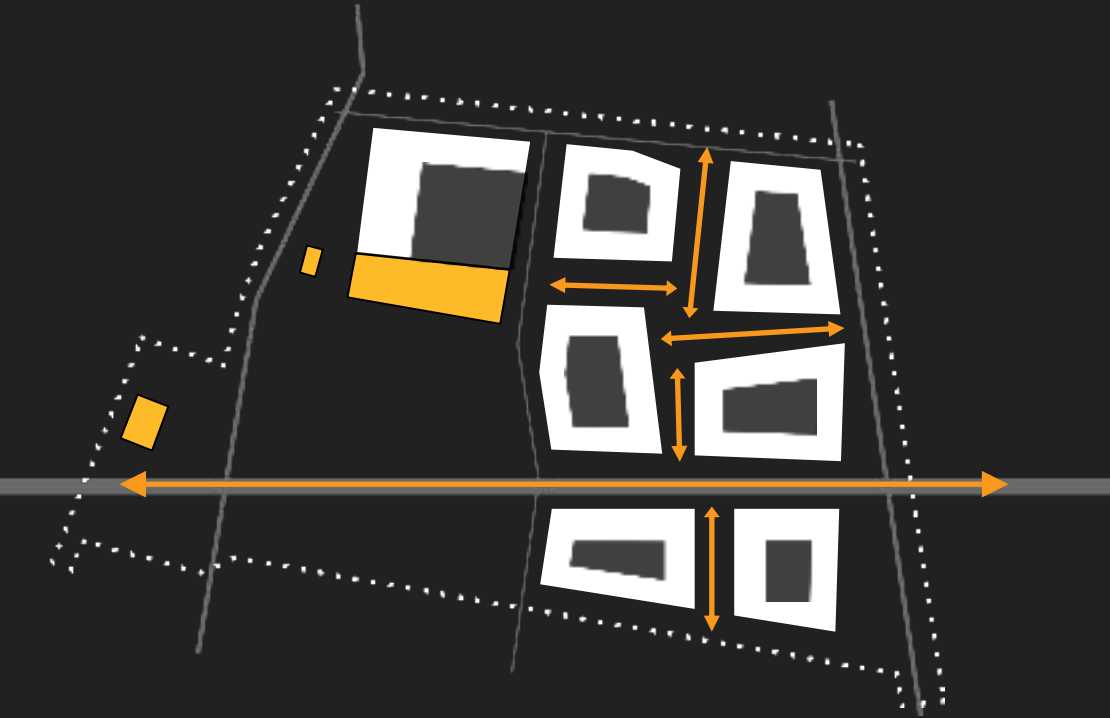
**HERITAGE BUILDINGS**



**AREAS FOR NEW BUILDINGS**



# 01 MASTERPLAN CONCEPT



**VIEW DIRECTIONS**



**HERITAGE BUILDINGS**



**NEW BUILDINGS**

# 01 MASTERPLAN CONCEPT



**VIEW DIRECTIONS**



**HERITAGE BUILDINGS**

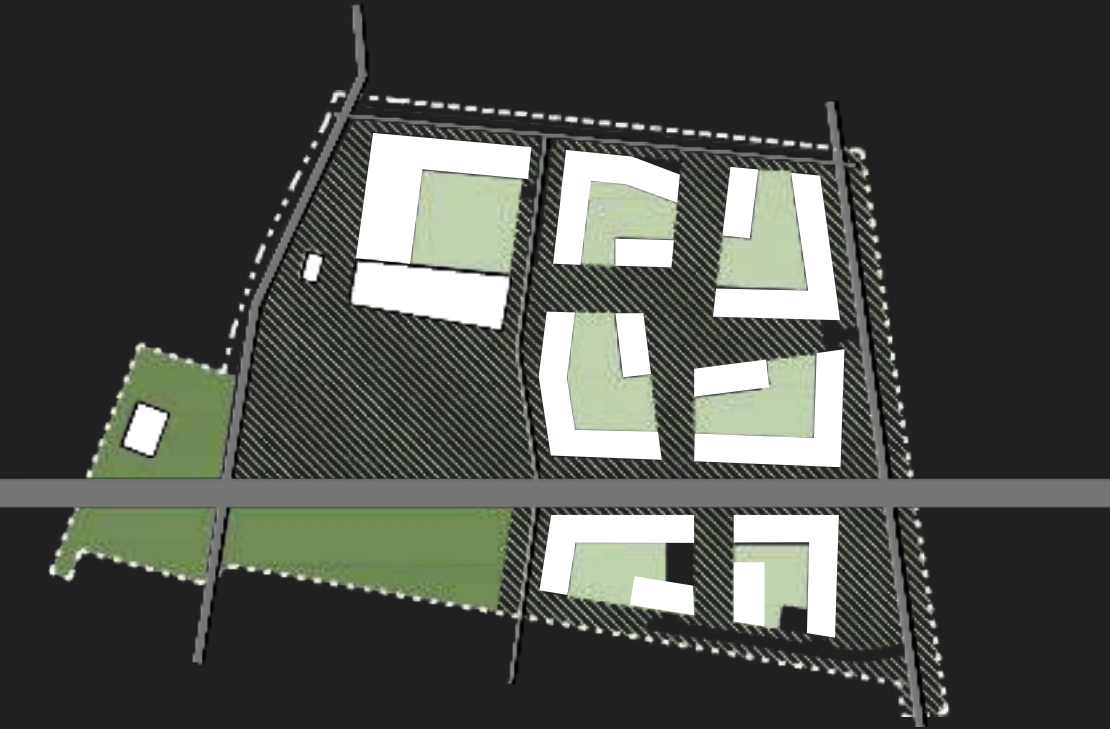


**NEW BUILDINGS**

# 01



## MASTERPLAN CONCEPT



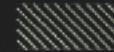
GREEN COURTYARDS



PARK

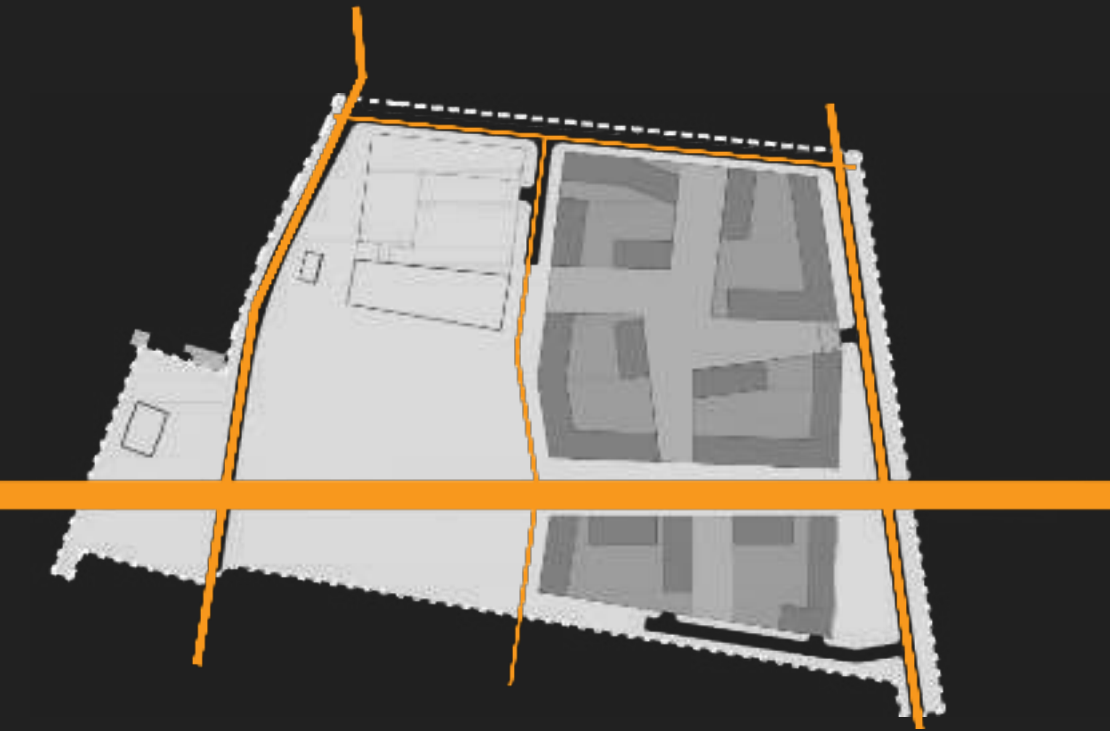


BUILDINGS



LOWER INTESITY GREENERY

# 01 MASTERPLAN CONCEPT



PUBLIC

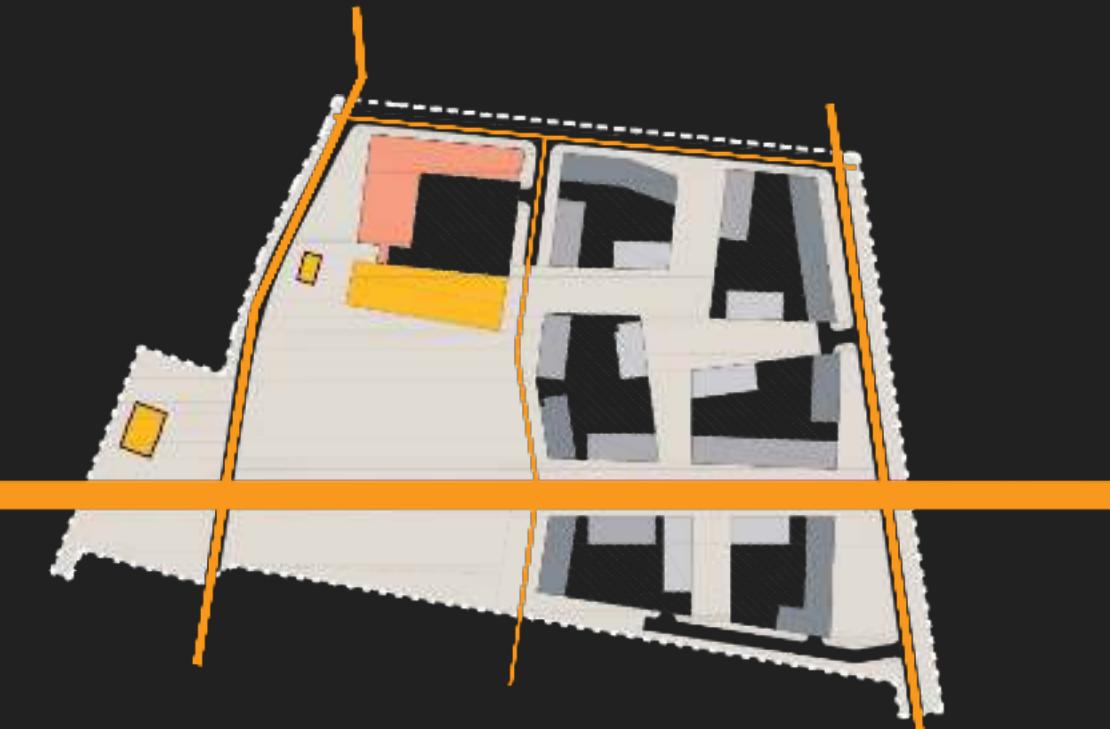


PRIVATE

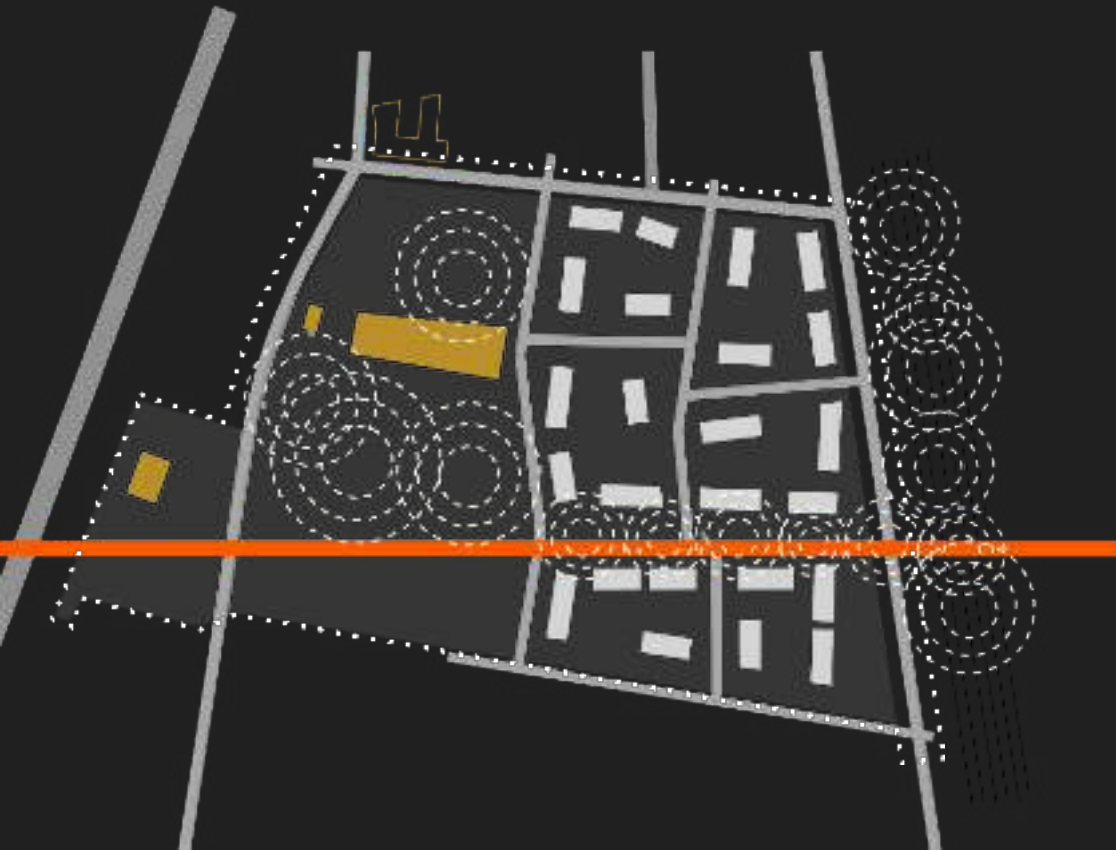


PEDESTRIAN MAIN CIRCULATION

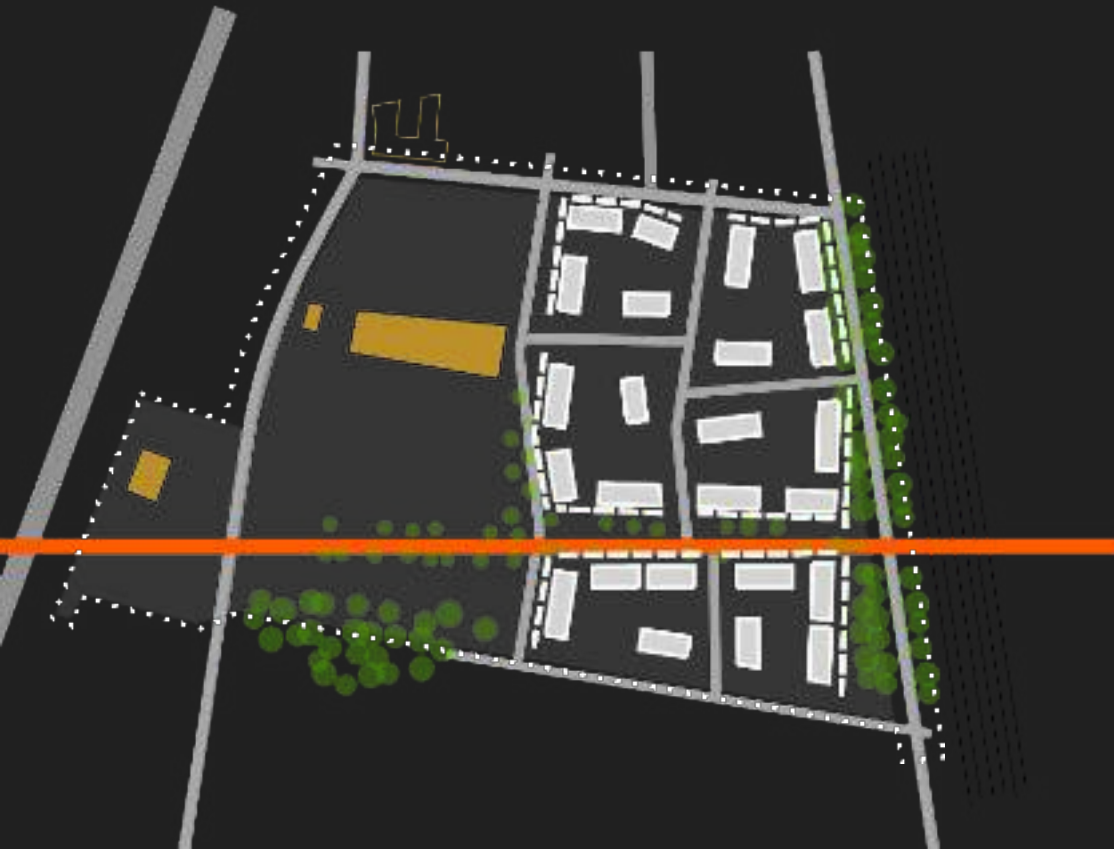
# 01 MASTERPLAN CONCEPT



- PROJECT TERRITORY
- EDUCATION
- HISTORICAL BUILDINGS
- RESIDENTIAL BUILDINGS
- BUILDINGS AND FLOOR COUN'
- BUILDING BLOCKS



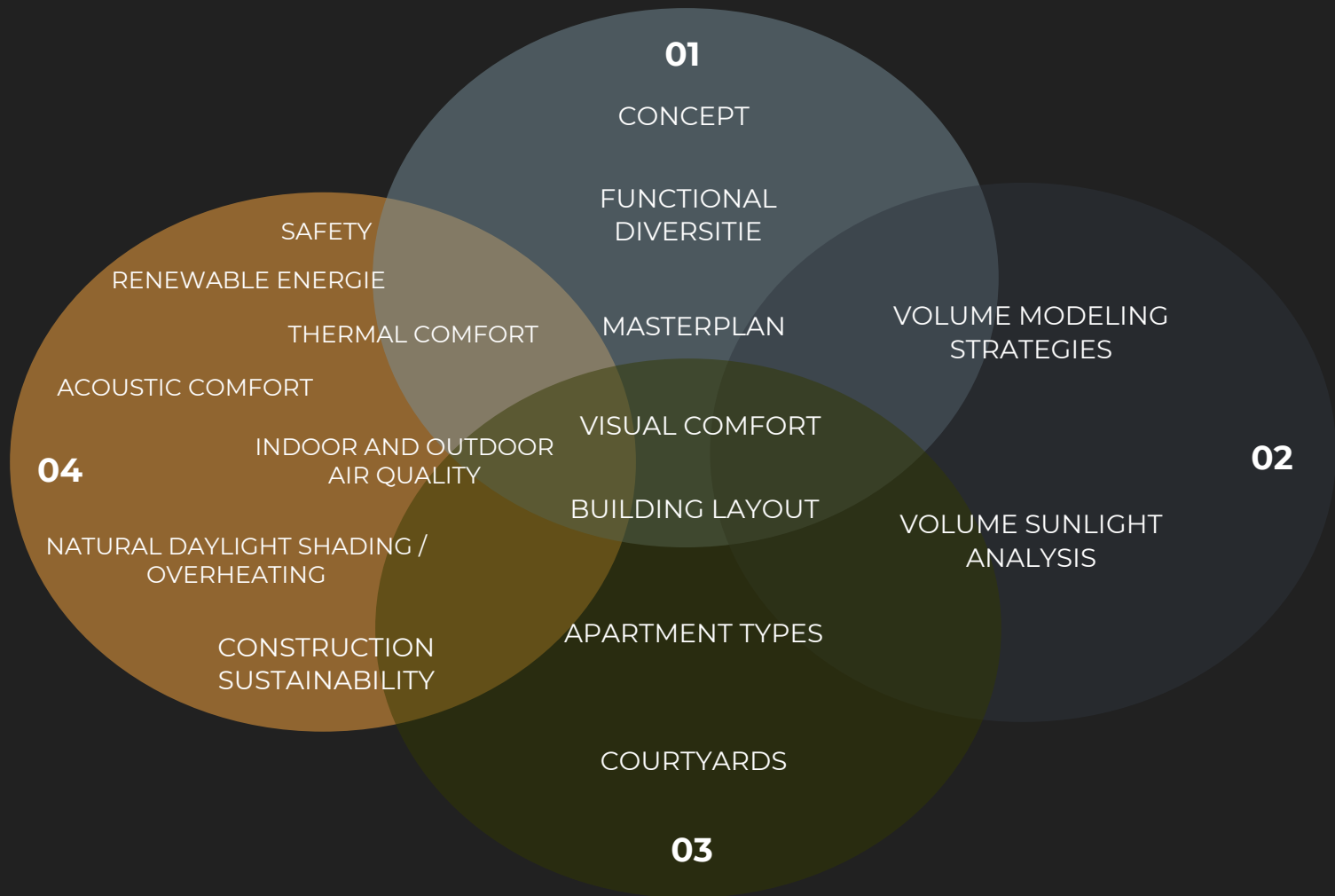
**NOISE SOURCES**



## ACOUSTIC COMFORT

Trees  
Blinds  
Galleries  
CLT walls





# 01



MASTERPLAN CONCEPT



# 01

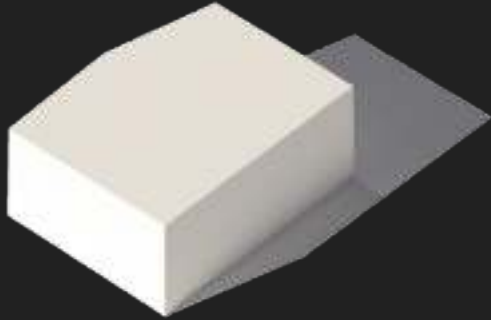


## MASTERPLAN CONCEPT



# 02 VOLUME MODELING STRATEGIE

1

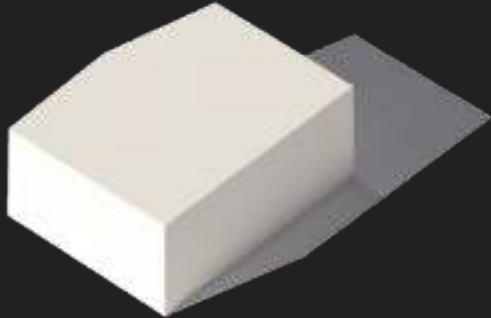


# 02

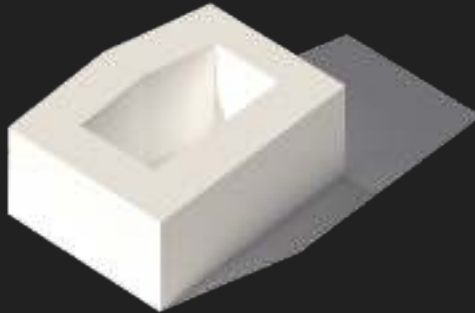


## VOLUME MODELING STRATEGIE

1



2

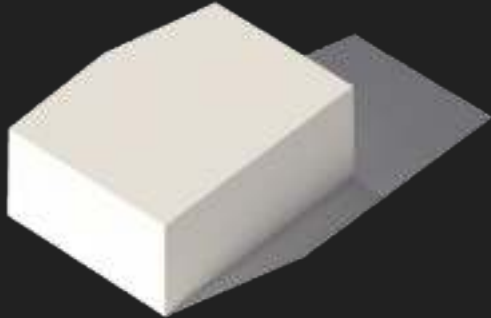


# 02



## VOLUME MODELING STRATEGIE

1



2



3

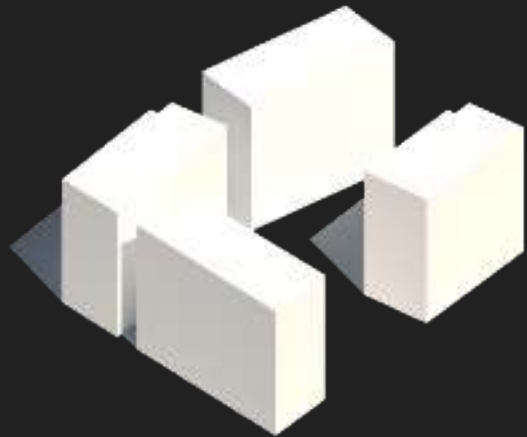


# 02




## VOLUME SUN ANALYSIS

MORNING



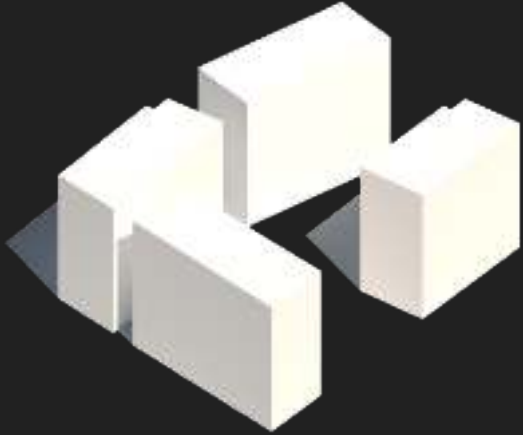


# 02

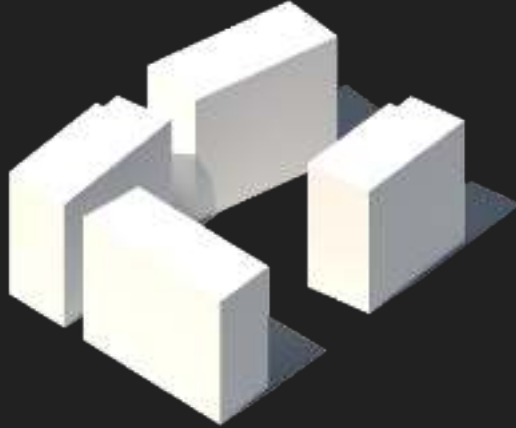


## VOLUME SUN ANALYSIS


MORNING



NOON

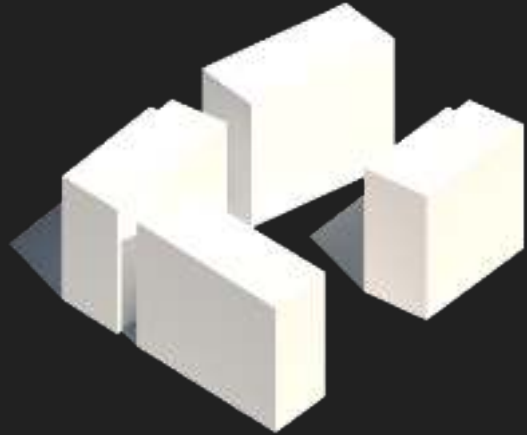


# 02

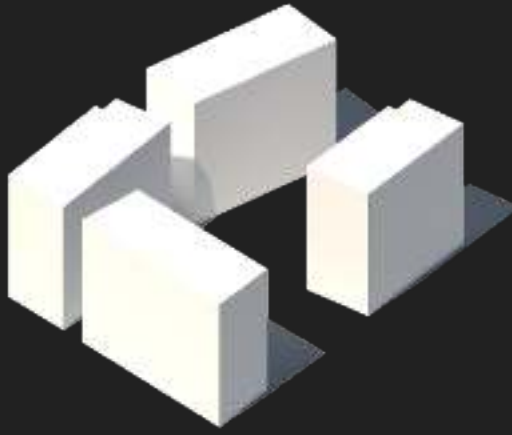


## VOLUME SUN ANALYSIS

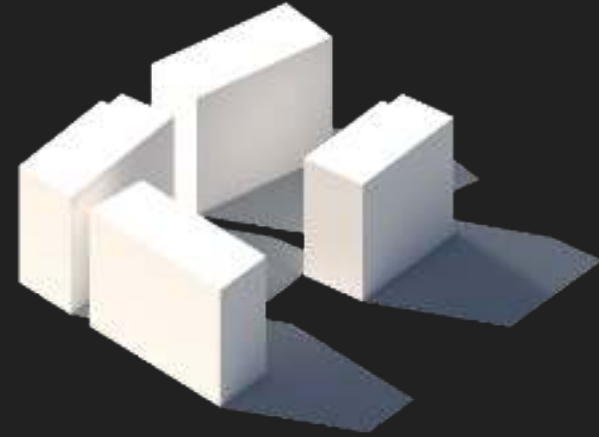
MORNING



NOON



EVENING



# 02 VOLUME MODELING

















## APARTMENT TYPES

T1 T1+ T2

T3 T4

T5 T6 T7

# 03 BUILDING LAYOUT - APARTMENTS



# 03 BUILDING LAYOUT - APARTMENTS







04



BUILDING SUSTAINABILITY STRATEGIES – VISUAL COMFORT

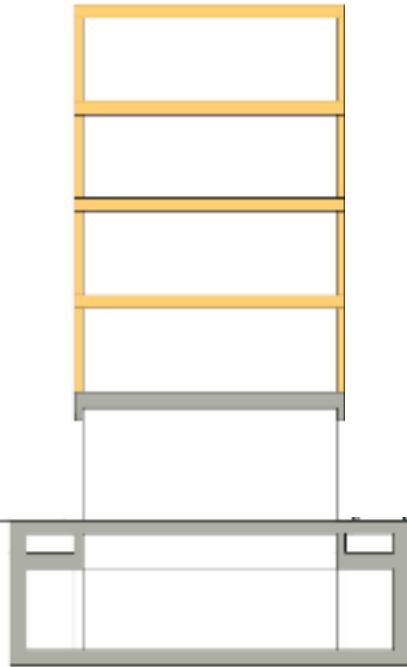
# 04 BUILDING SUSTAINABILITY STRATEGIES - CONSTRUCTION

CONCRETE BASE



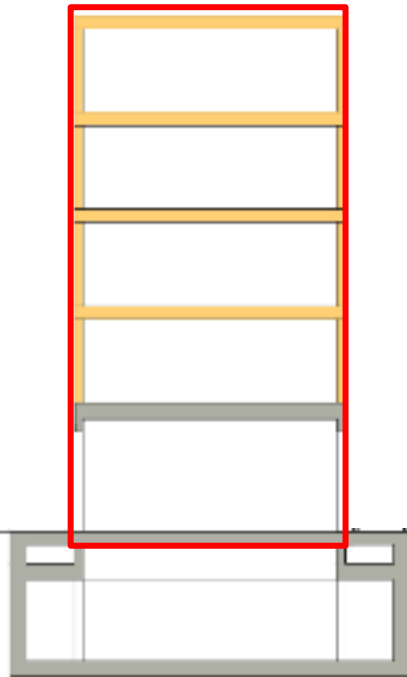
# 04 BUILDING SUSTAINABILITY STRATEGIES - CONSTRUCTION

CONCRETE BASE/ CROSS LAMINATED TIMBER STRUCTURE



# 04 BUILDING SUSTAINABILITY STRATEGIES - CONSTRUCTION

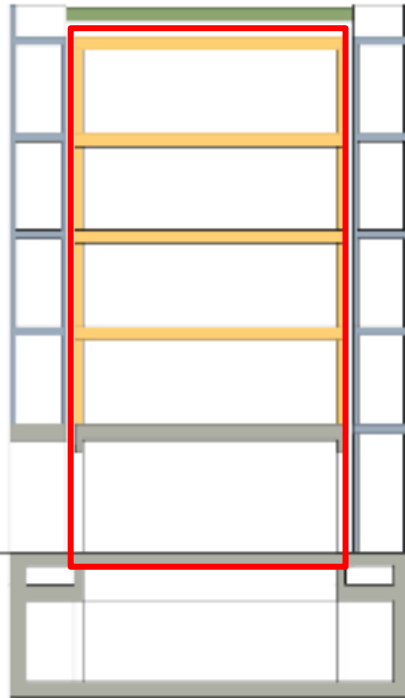
CONCRETE BASE/ CROSS LAMINATED TIMBER STRUCTURE/ INSULATION





# 04 BUILDING SUSTAINABILITY STRATEGIES - CONSTRUCTION

CROSS LAMINATED TIMBER STRUCTURE/ INSULATIC  
ON



# 04



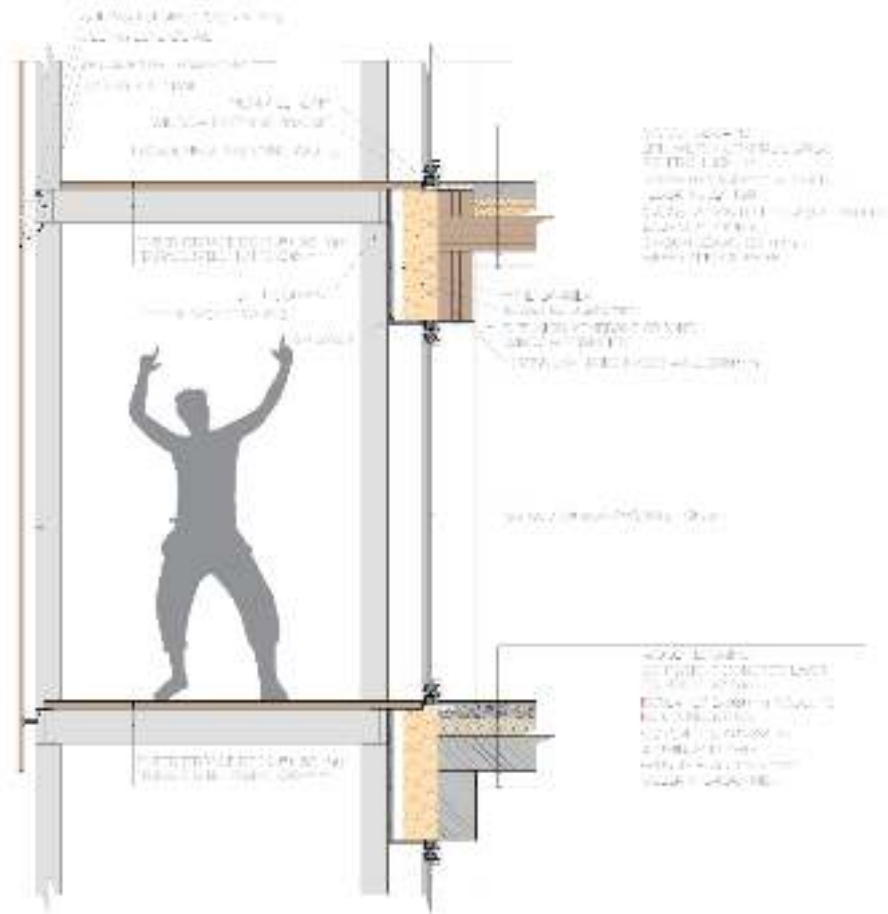
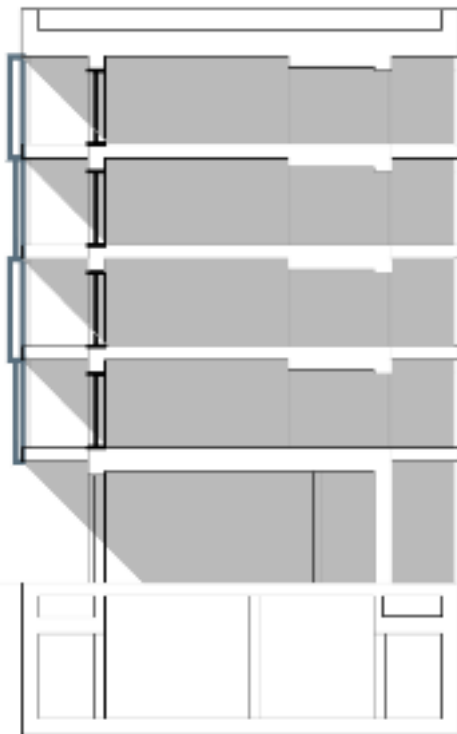
## BUILDING SUSTAINABILITY STRATEGIES - SHADING

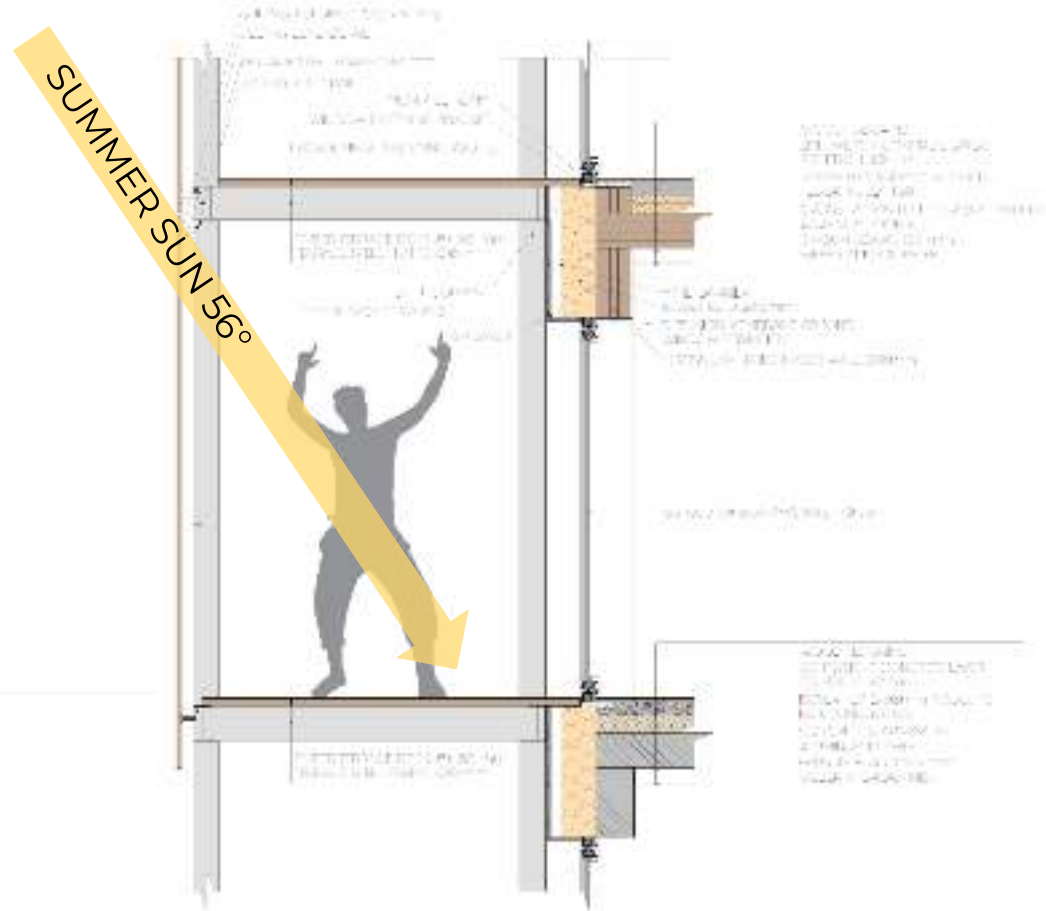
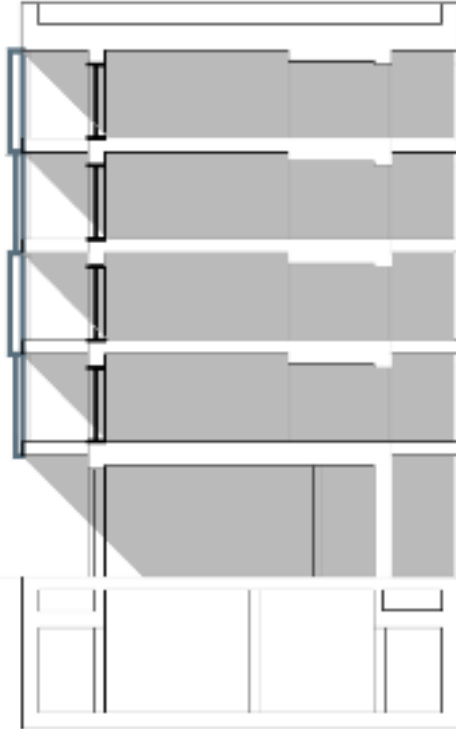


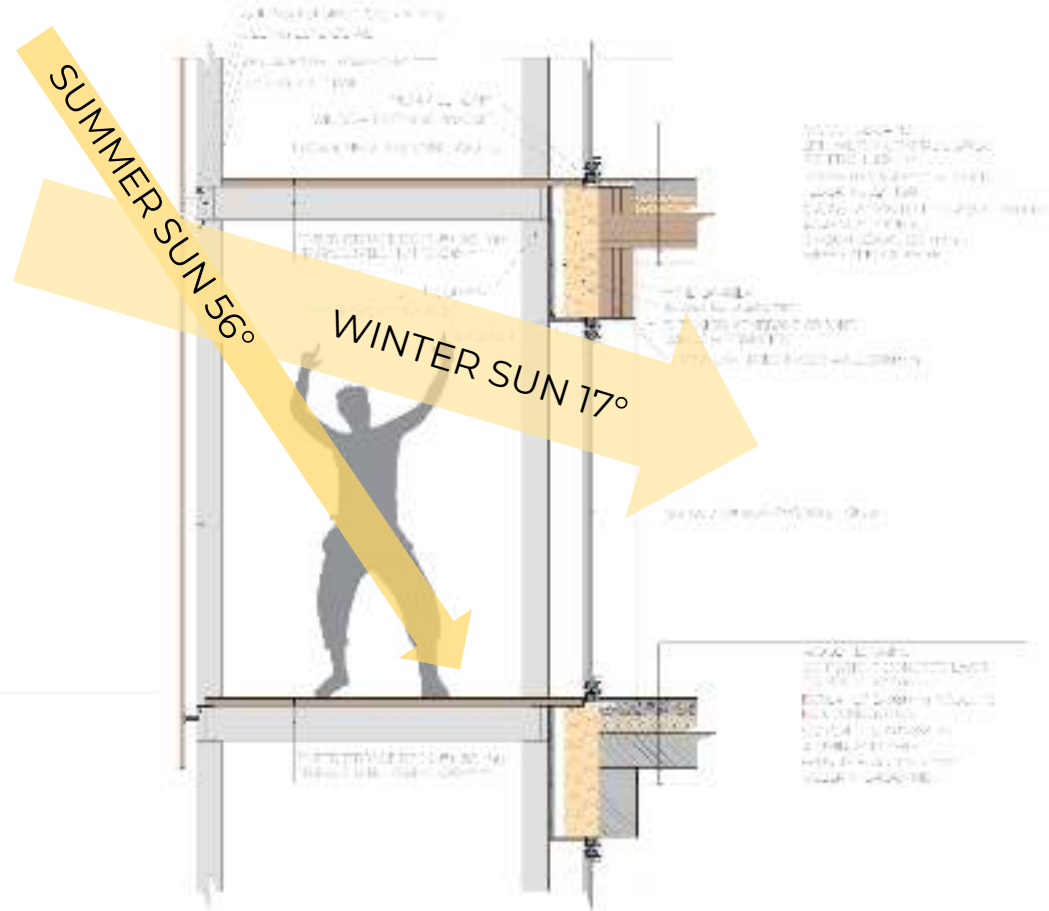
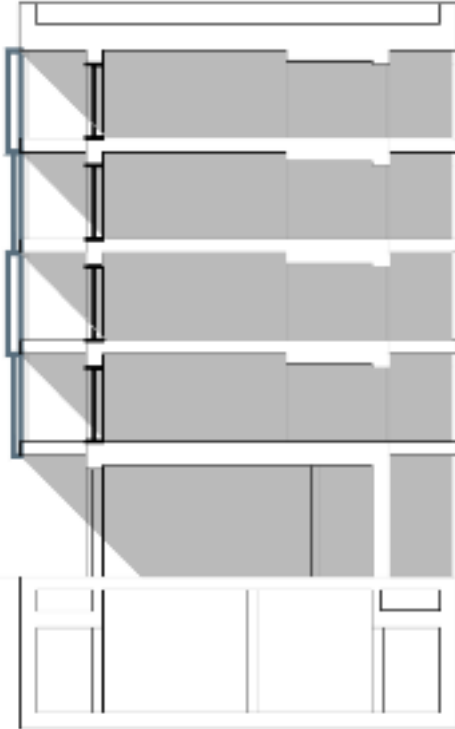
BLINDS

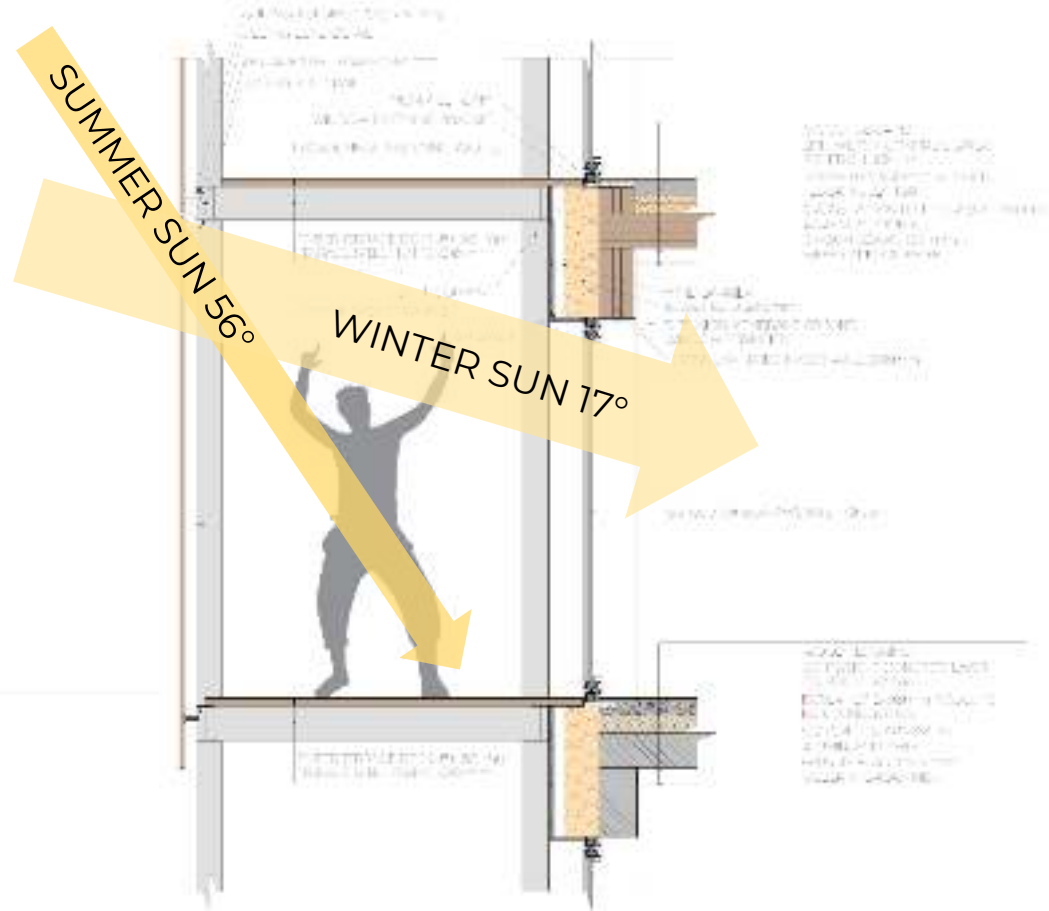
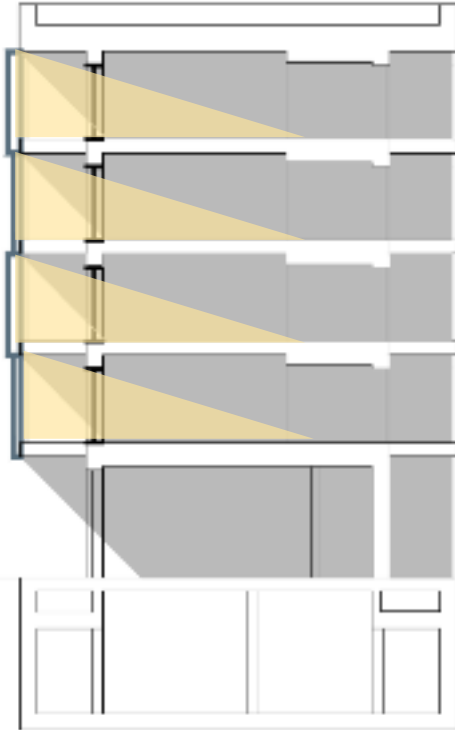
DOUBLE FACADE

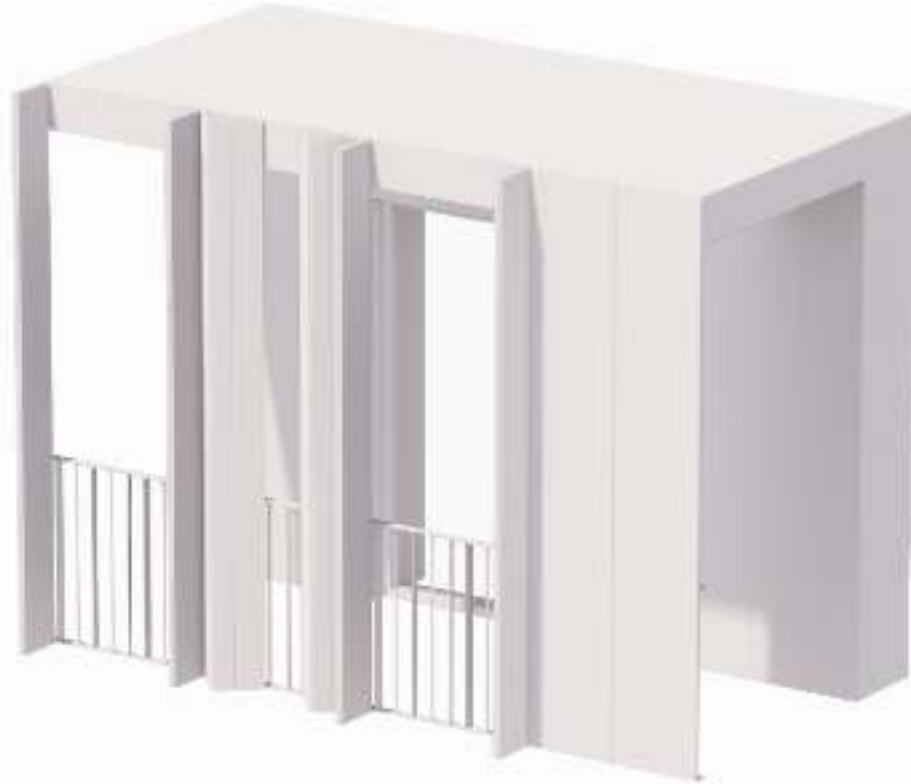








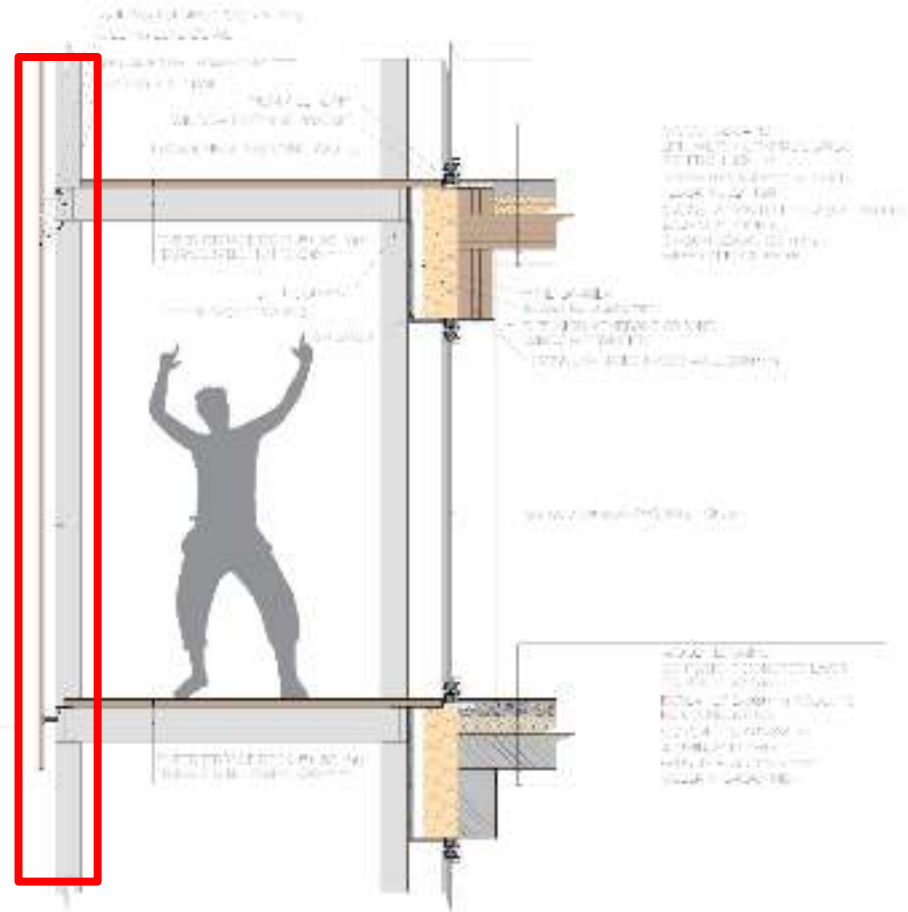
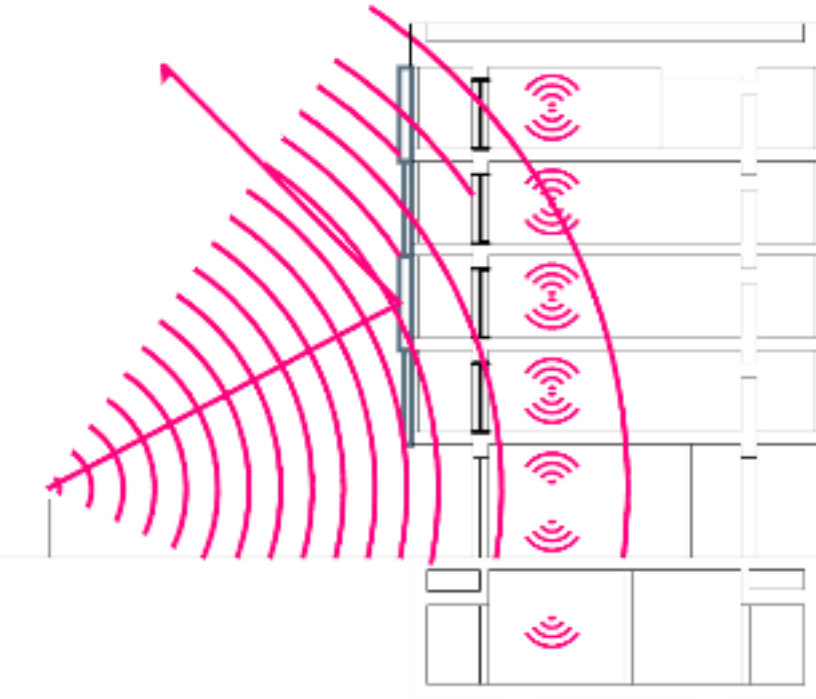






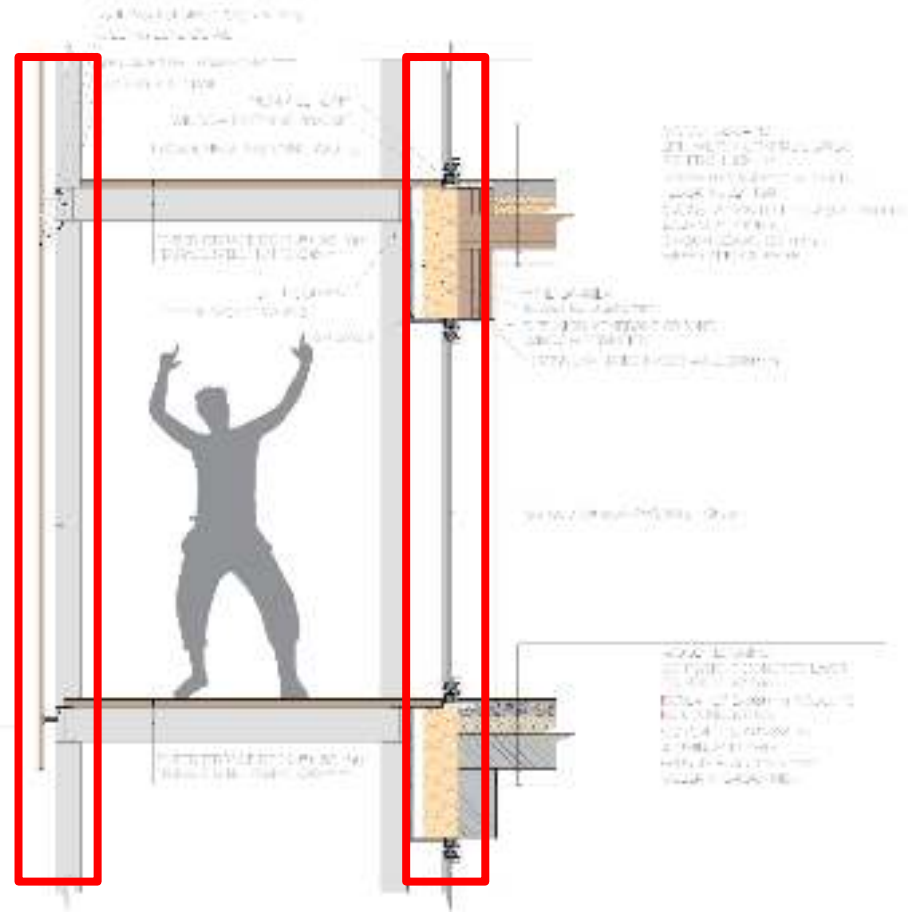
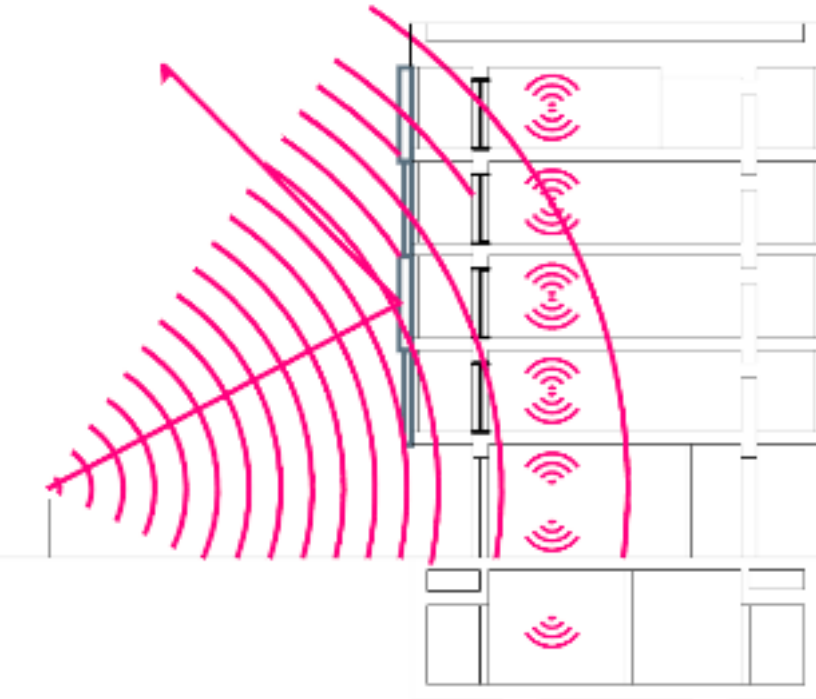
# 04 BUILDING SUSTAINABILITY STRATEGIES – ACOUSTIC COMFORT

DOUBLE FACADE/TIMBER/ISOVER ACOUSTIC INSULATION MATERIALS



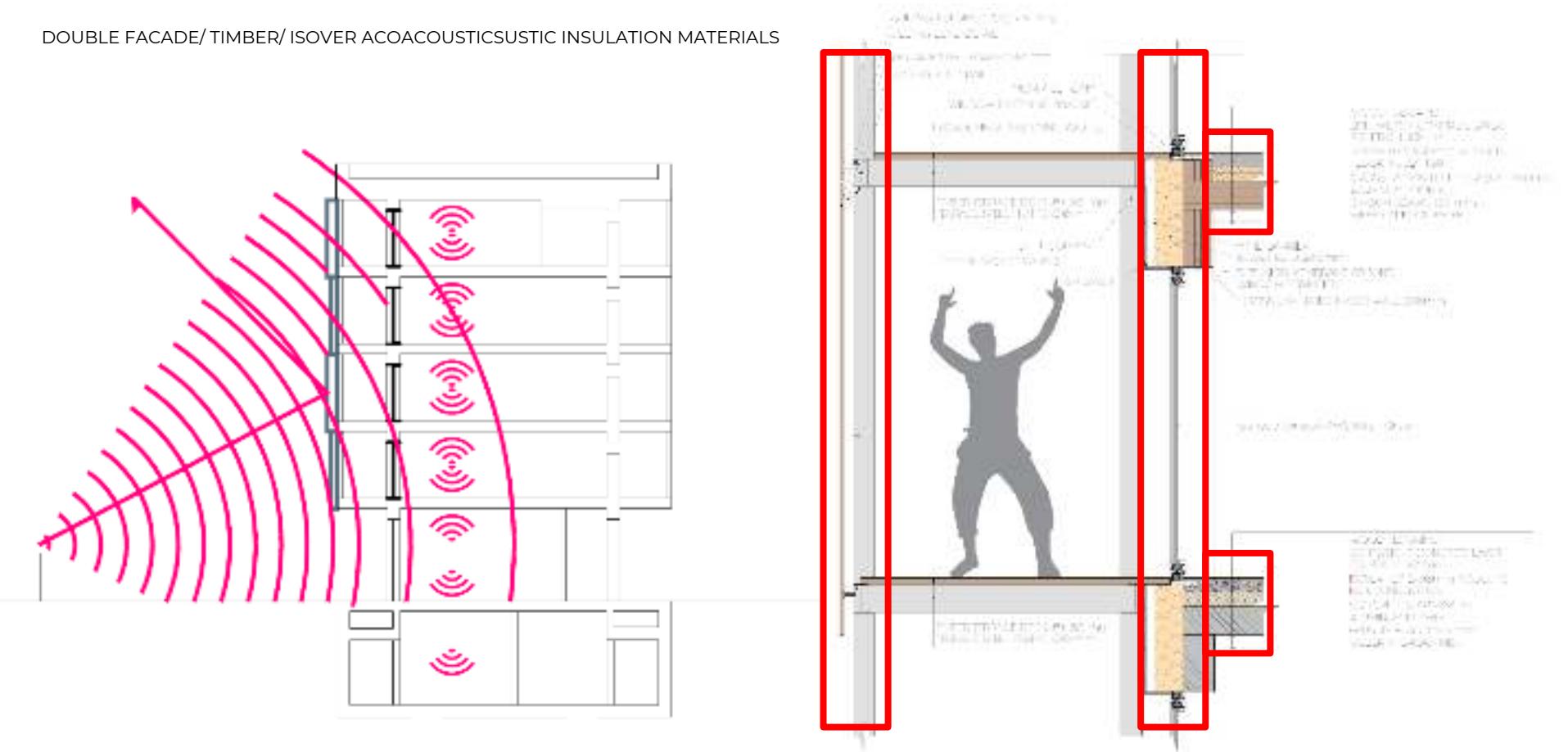
# 04 BUILDING SUSTAINABILITY STRATEGIES – ACOUSTIC COMFORT

DOUBLE FACADE/TIMBER/ISOVER ACOACOUSTICSUSTIC INSULATION MATERIALS



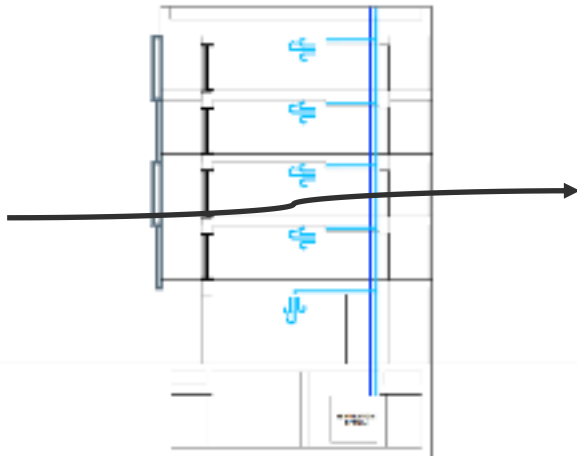
# 04 BUILDING SUSTAINABILITY STRATEGIES – ACOUSTIC COMFORT

DOUBLE FACADE/TIMBER/ISOVER ACOACOUSTICSUSTIC INSULATION MATERIALS

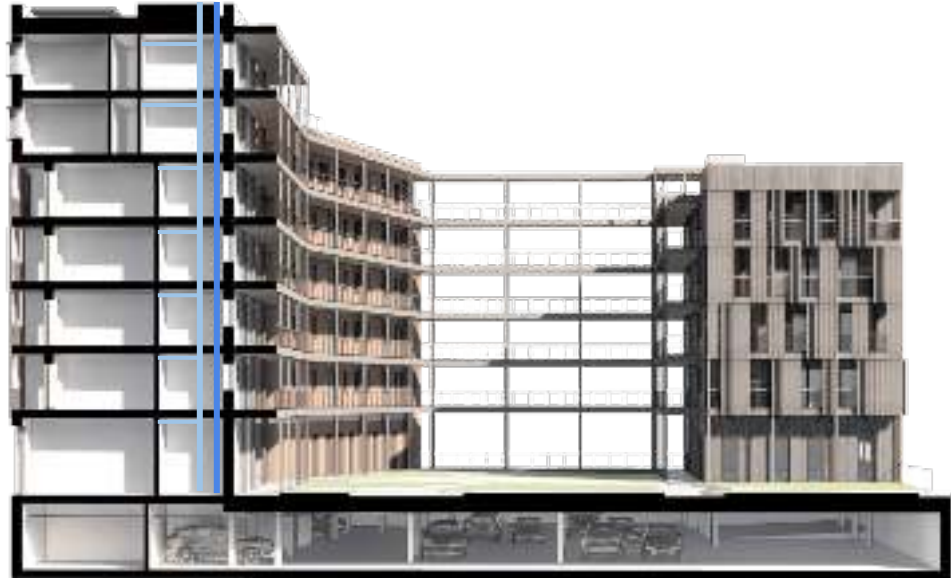




CROSS VENTILATION



MECHANICAL VENTILATION





OVERHEATING PROTECTION

SEALED ENVELOPE

CONTINUOUS INSULATION

HIGH THERMAL MASS





OVERHEATING PROTECTION

SEALED ENVELOPE

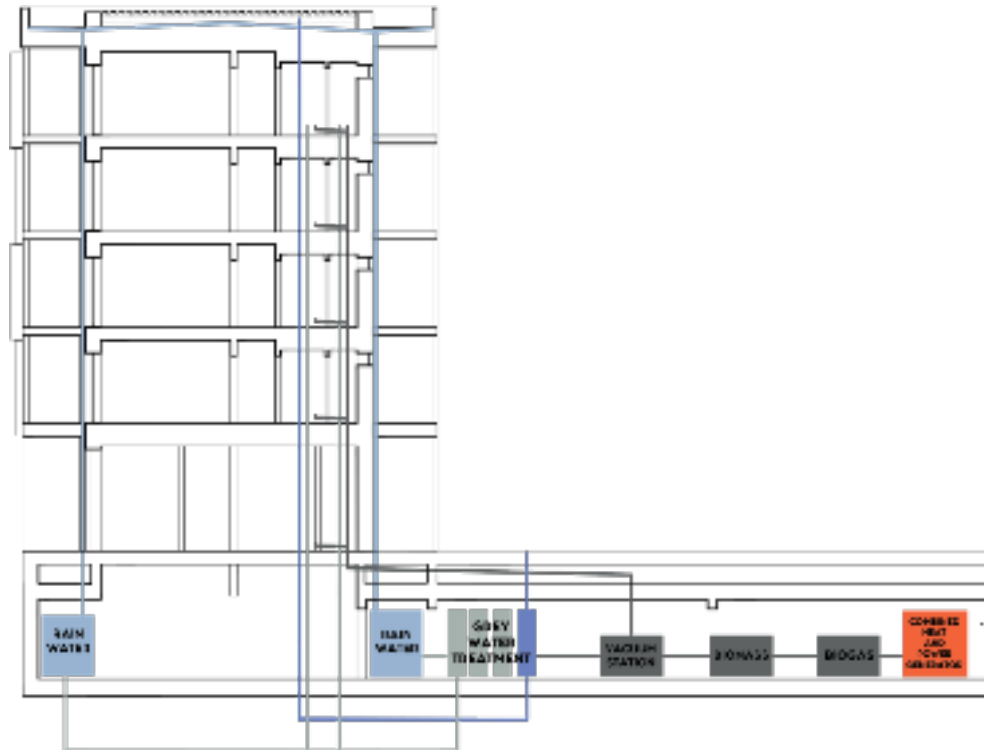
CONTINUOUS INSULATION

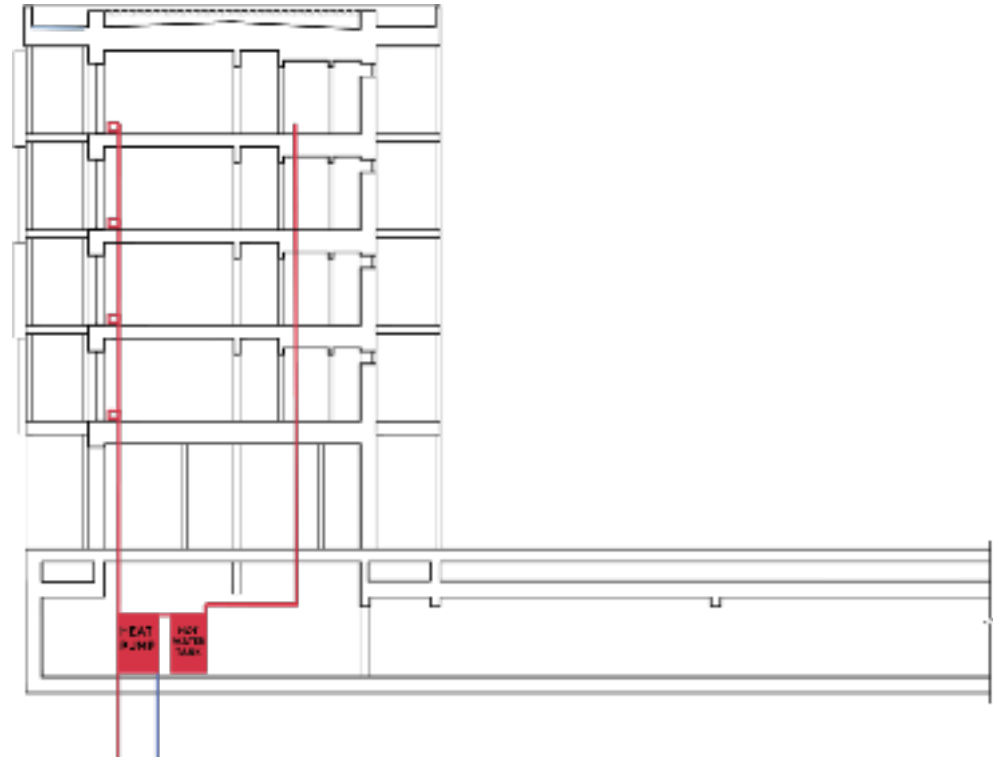
HIGH THERMAL MASS





RAINWATER COLLECTION  
GREY/ BLACK WATER TREATMENT

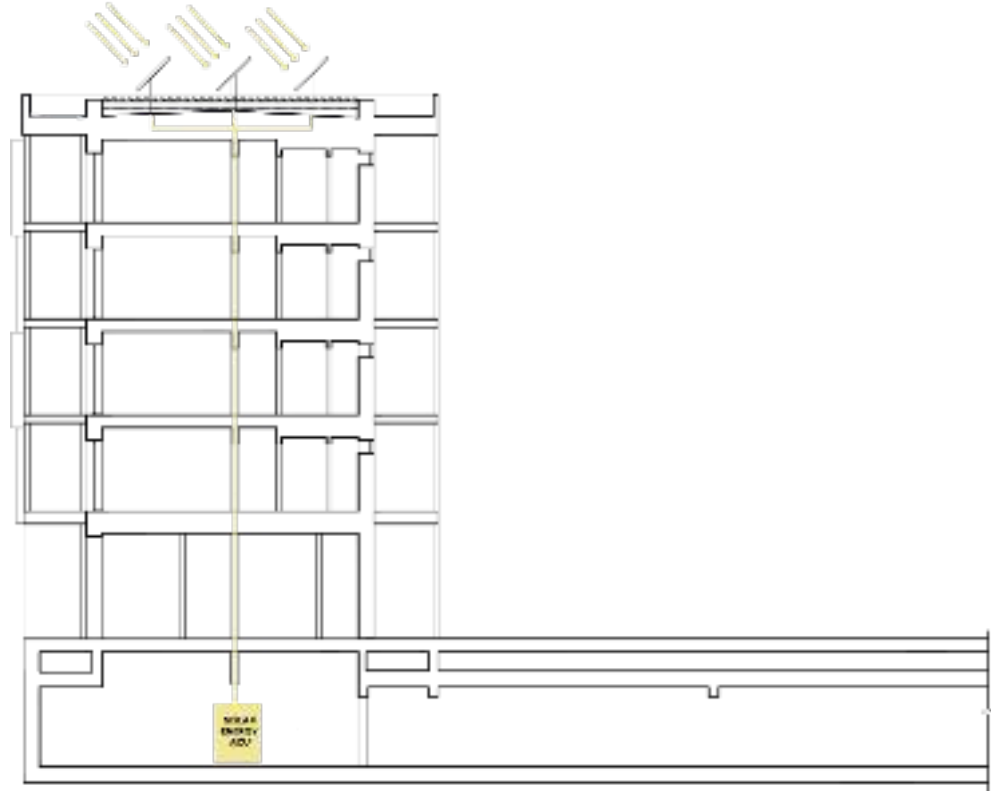




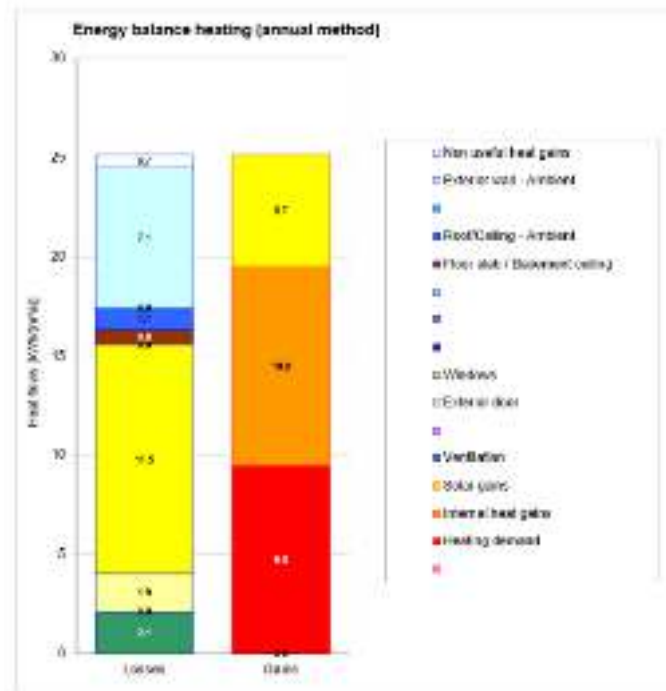
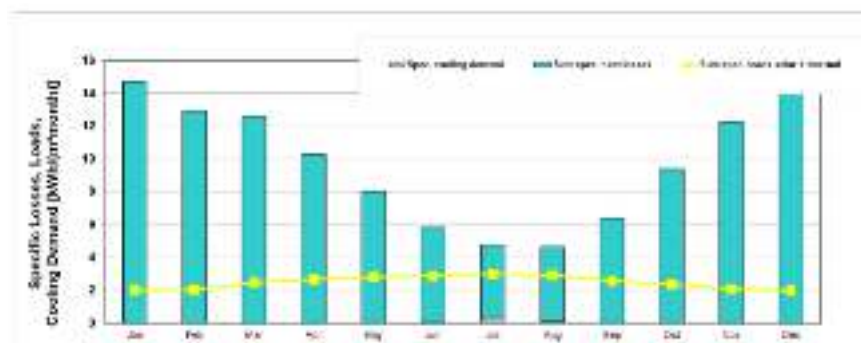


# 04 BUILDING SUSTAINABILITY STRATEGIES – SOLAR ENERGIE

SUN ENERGY



Space heating and cooling and ventilation loads of the house				
		4543.8 m <sup>2</sup>	Requirements	Fulfilled
Space heating	Heating demand	9 kWh/(m <sup>2</sup> a)	18 kWh/(m <sup>2</sup> a)	yes
	Heating load	6 kWh/m <sup>2</sup>	18 kWh/m <sup>2</sup>	yes
Space cooling	Overall space cooling demand	kWh/(m <sup>2</sup> a)	-	-
	Cooling load	kWh/m <sup>2</sup>	-	-
	Frequency of overheating (>25 °C)	1.3 %	-	-
Primary energy	Fuel, cooling, electric heating, ventilation, DHW, space heating and auxiliary electricity	kWh/(m <sup>2</sup> a)	128 kWh/(m <sup>2</sup> a)	-
	DHW, space heating and auxiliary electricity	kWh/(m <sup>2</sup> a)	-	-
	Specific primary energy related to the useful heat output	kWh/(m <sup>2</sup> a)	-	-
Airtightness	Pressure loss at 50 Pa	0.6 sh	0.8 sh	yes



# LA COMMUNE SAINT-DENIS

AREGAKS AVETJANS  
KLĀVS GALENIEKS

