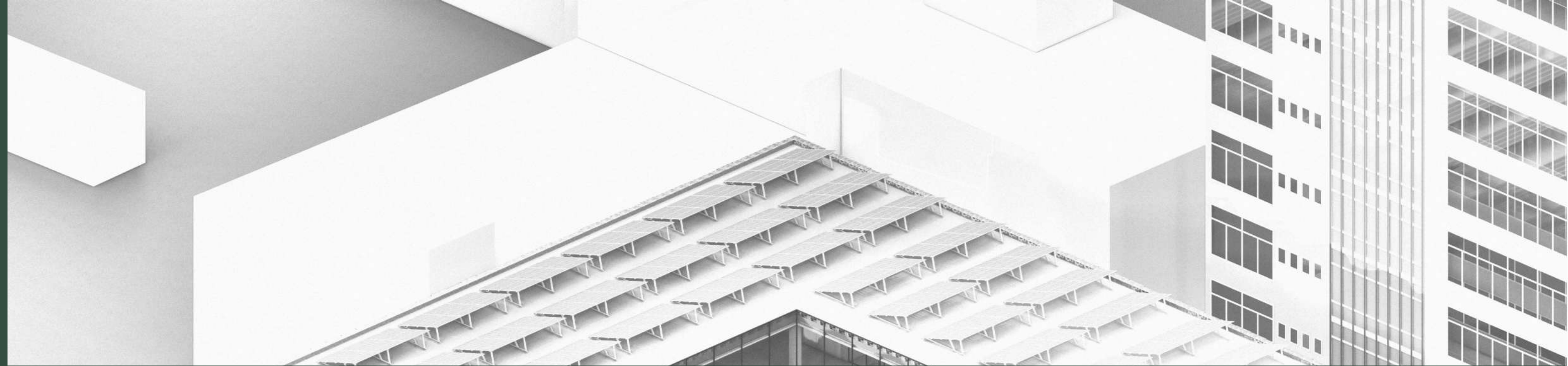
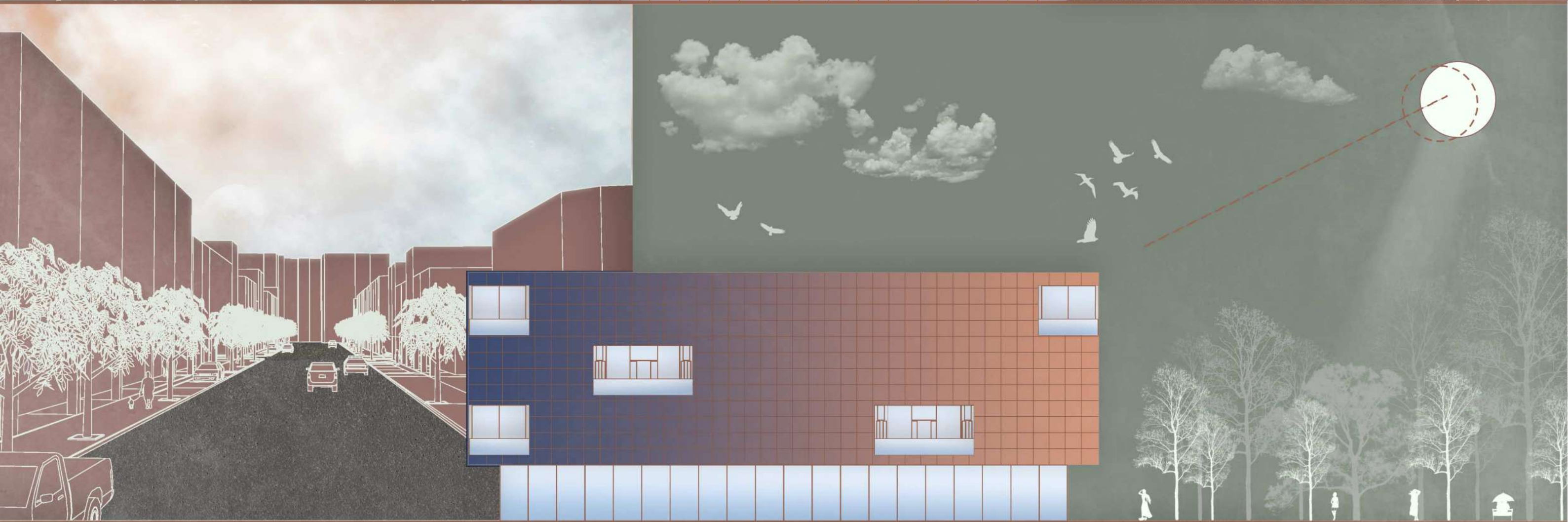
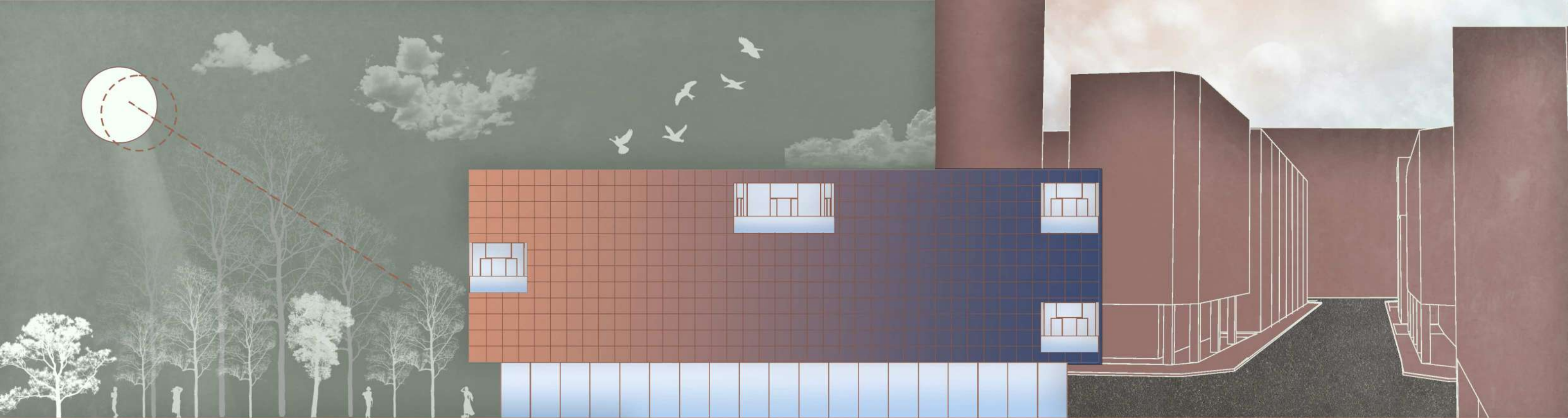


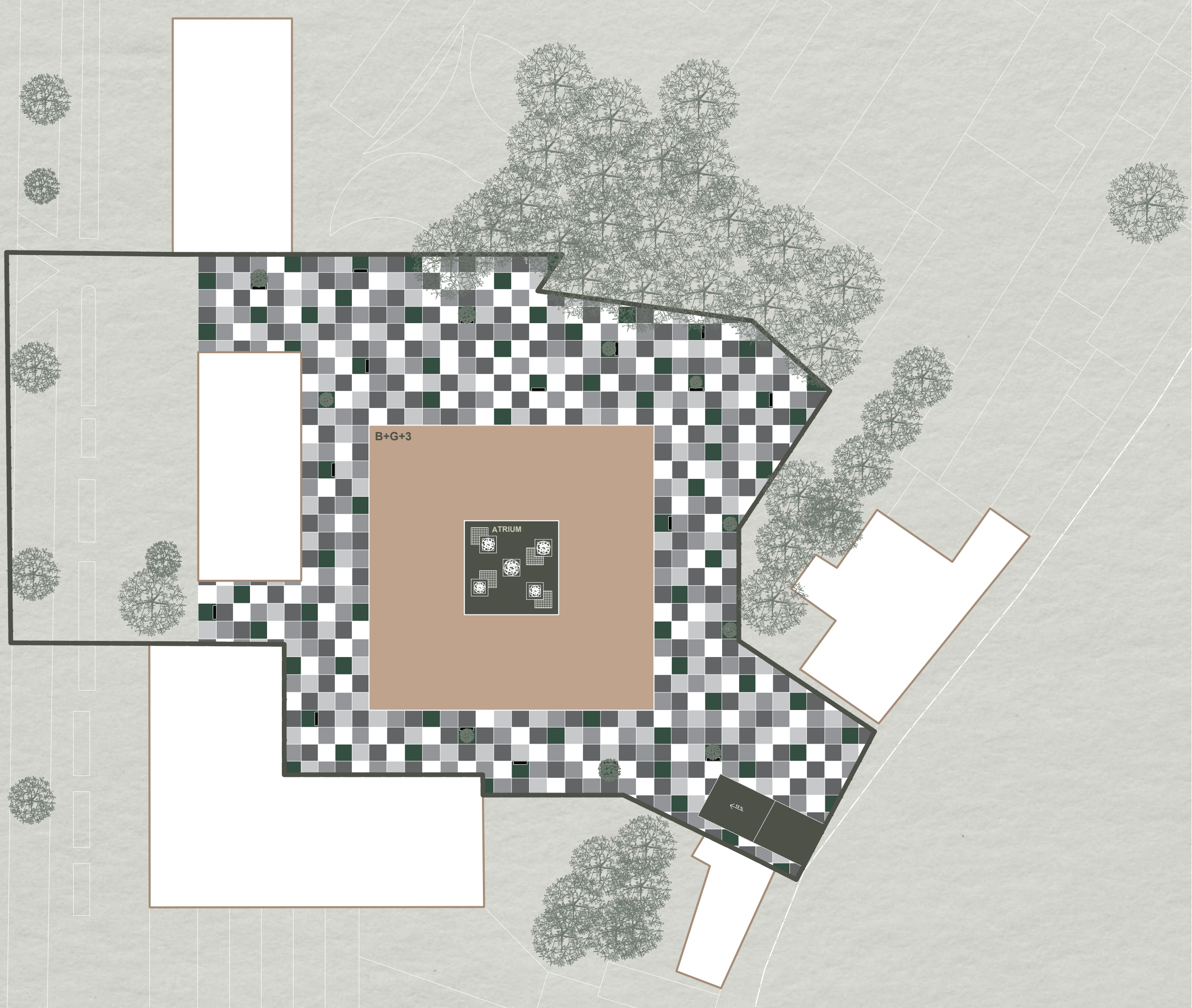


ECO FISCAL HEADQUARTERS

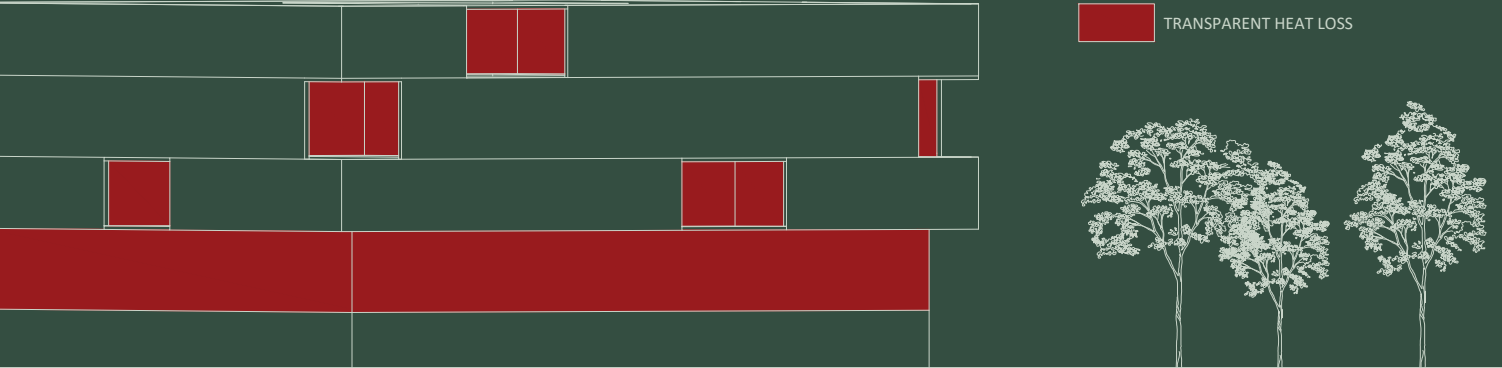
"Future-Proof Finance, Built to Last."





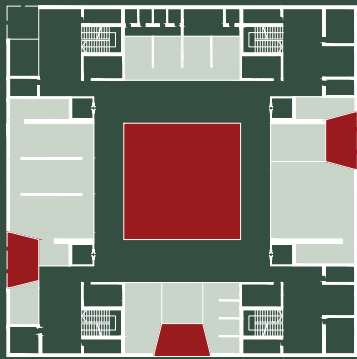


SUSTAINABILITY

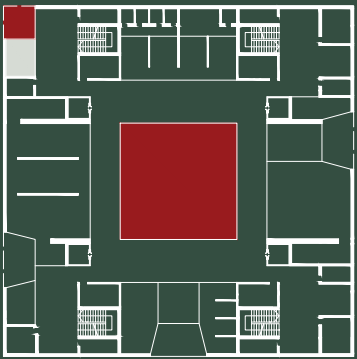


The facade is designed to provide an adequate amount of natural light for spaces that require it, while technical rooms, such as the data center and security zones, are placed in isolated areas to minimize energy losses. Openings are positioned to allow light from multiple directions in rooms that need it, while spaces with specific privacy requirements are protected from excessive light loss. This analysis leads to the final facade concept.

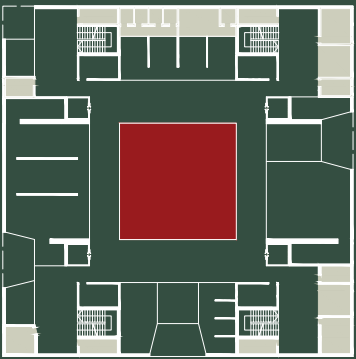
LIGHTING ANALYSIS DIAGRAMS



AREAS WITH THE HIGHEST ILLUMINATION
offices



AREAS WITH LOWER LIGHT INTENSITY
rooms for occasional stay



AREAS WITHOUT NATURAL LIGHT
technical and security rooms

The difference between **Total Energy Needs** (total energy required) and **Total Energy Consumption** in **public buildings** should be:

- In the case of energy-efficient buildings, the difference should be **10-20%**
- In the case of buildings with outdated systems or poor insulation, the difference can be up to **30-50%**

Taking into account lighting, computer equipment, heating and cooling systems, as well as the intensive use of space during the working day with a large number of employees and users, a difference of 13% indicates very good energy efficiency. Any slight difference would mean an almost ideal level of efficiency, which is difficult to achieve in public and administrative buildings of this type.

FACTORS CONTRIBUTING TO THE SUSTAINABILITY OF THE BUILDING:

VENTILATED FACADE

ADDITIONAL XPS INSULATION

AVAILABILITY OF CONCRETE

DURABILITY OF STEEL

BMS

TRIPLE GLASS



13%
difference

"Balance, Efficiency, Future."

DESCRIPTION				
Basic info				
	Periphery length (m)	170.00	Number of heated levels	5
	Gross floor area (m²)	7,410.00	Gross heated volume (m³)	29,910.00
	Net heated area (m²)	5,485.00	Net wall area	4,340.00
	Net heated volume (m³)	21,910.00	Town	Novi Sad
	Thermal envelope (m²)	6,875.00		
	Gross wall area (m²)	4,750.00		
	Basement depth (m)	3.50		

External design temperature	-14.8	for town
Indoor design temperature	20	for building type
Delta indoor/external design temperature	34.8	
Number of heated days	181	for town
Degree - days	2679	for town
Coef. temperature e _t	0.85	
Coef. exploitation e _b	0.90	
Coef. γ	0.58	
	TOTAL	0.4437
Actual degree days:		1189

THEORETICAL CONSUMPTION FOR HEATING					
Energy losses calculation		(current)			
		AREA	TAU	U - COEFFICIENT	LOSSES
		m²	Coefficient	W/°C.m ²	W/°C
FR	Flat roof	1,570.00	1.00	0.20	314.00
WL	Walls	2,515.00	1.00	0.40	1,006.00
GCWL	Glass curtain walls	1,825.00	1.00	0.60	1,095.00
W	Alu windows	365.00	1.00	1.50	547.50
D	Alu doors	45.00	1.00	1.50	67.50
BWLH	Basement walls	555.00	0.60	0.40	133.20
	TOTAL	6,875.00			3,163.20

Energy loss from envelope without TB: (kWh/year)	90,240.20
Actual degree - days:	1,188.67
Heated area: (m²)	5,485.00
HTB: (W/°C)	687.50
Total transmission energy losses: (kWh/year)	109,853.29
Total ventilation energy losses: (kWh/year)	99,420.55
Total transmission losses: (W/°C)	3,850.70
Total ventilation losses: (W/°C)	3,485.00

Percentage of envelope losses:	52%
Thermal envelope area: A ₀ (m²)	6,875.00
Thermal bridges - TB:	0.1
Energy loss from thermal bridges: (kWh/year)	19,613
Percentage of air losses:	48%

Total losses: (W/°C)	7,336
Total energy needs: (kWh/year)	209,274

Total losses per m²/year : (W/°C.m²)	1.34
Energy needed: (kWh/m².year)	38.15
Thermal envelope area: A ₀ (m²)	6,875.00
Building coefficient: f ₀ =A ₀ /V	0.24
Avarage transmission "U" coef. (W/°C.m²)	0.56
Transmission heat demand: Q _t (W/K)	3,850.70
Specific transmission losses: (W/Km²)	0.70

Specific heat demand (total): (W/m³)	12
Specific heat demand (total): (W/m³)	47
Specific heat demand (transmission): (W/m³)	6
Specific heat demand (ventilation): (W/m³)	6
Specific heat demand (transmission): (W/m³)	24
Specific heat demand (ventilation): (W/m³)	22

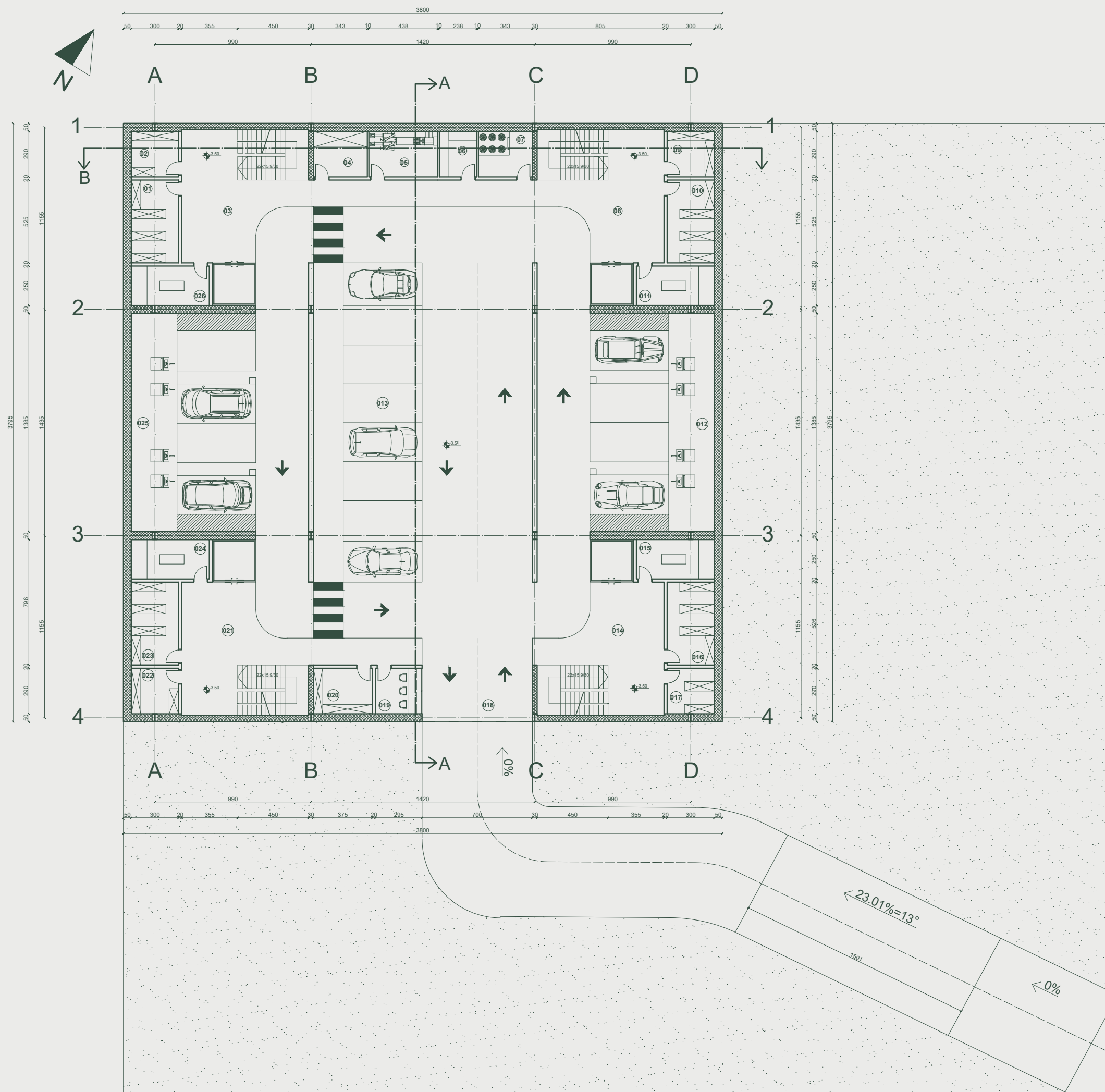
Allowed specific heat demand (transmission): q _t (W/m³)	10.3
Allowed specific heat demand (ventilation): q _t (W/m³)	8.7

Global heating system efficiency (heat pipes losses, control efficiency, bioler efficiency):	88.46%
ENERGY CONSUMPTION kWh/year:	236,483

Consumption per square meter: (kWh/yr.m ^²)	46
Consumption per degree day: (kWh/DD)	210

Boiler generation efficiency	0.92
Transmission heat demand: Q _t (W/K)	0.95
Specific transmission losses: (W/Km²)	0.98
TOTAL	0.84

BASEMENT GARAGE

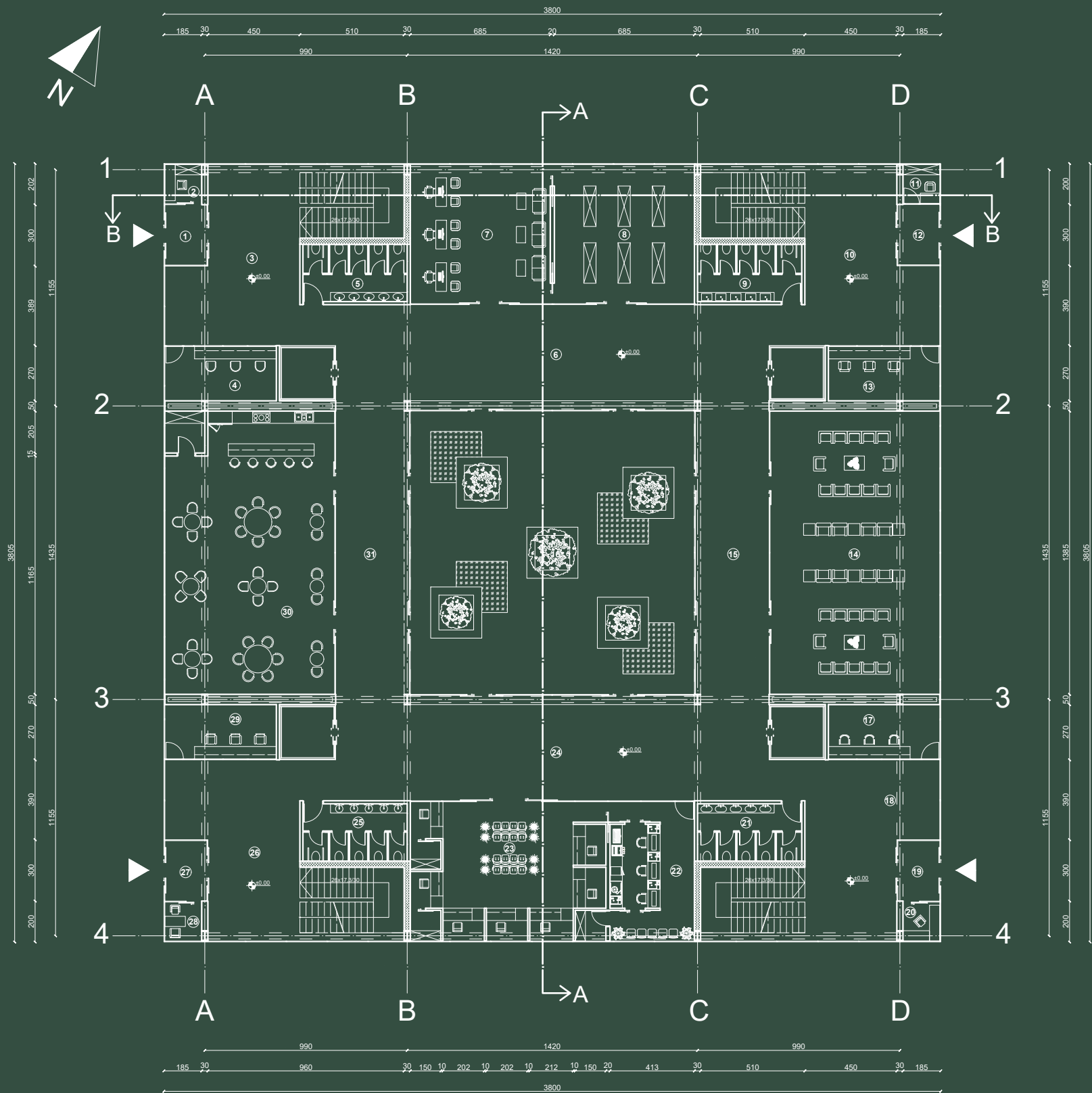


01	MAIN ARCHIVE 1
02	STORAGE SPACE
03	PASSAGE
04	SPACE FOR THE MAIN ELECTRICAL PANEL
05	SPACE FOR THE THERMAL SUBSTATION
06	SPACE FOR THE WATER SISTEM
07	SPACE FOR THE VENTILATION SISTEM
08	PASSAGE
09	STORAGE SPACE
010	MAIN ARCHIVE 2
011	TECHNICAL ROOM FOR ELEVATOR MAINTENANCE
012	PARKING SPACES FOR EMPLOYEES WITH ELECTRIC VEHICLE CHARGERS
013	PARKING SPACES FOR EMPLOYEES
014	PASSAGE
015	TECHNICAL ROOM FOR ELEVATOR MAINTENANCE
016	MAIN ARCHIVE 3
017	STORAGE SPACE
018	ENTRANCE TO THE GARAGE
019	GARAGE ENTRANCE CONTROL
020	STORAGE SPACE
021	PASSAGE
022	STORAGE SPACE
023	MAIN ARCHIVE 4
024	TECHNICAL ROOM FOR ELEVATOR MAINTENANCE
025	PARKING SPACES FOR EMPLOYEES WITH ELECTRIC VEHICLE CHARGERS
026	TECHNICAL ROOM FOR ELEVATOR MAINTENANCE



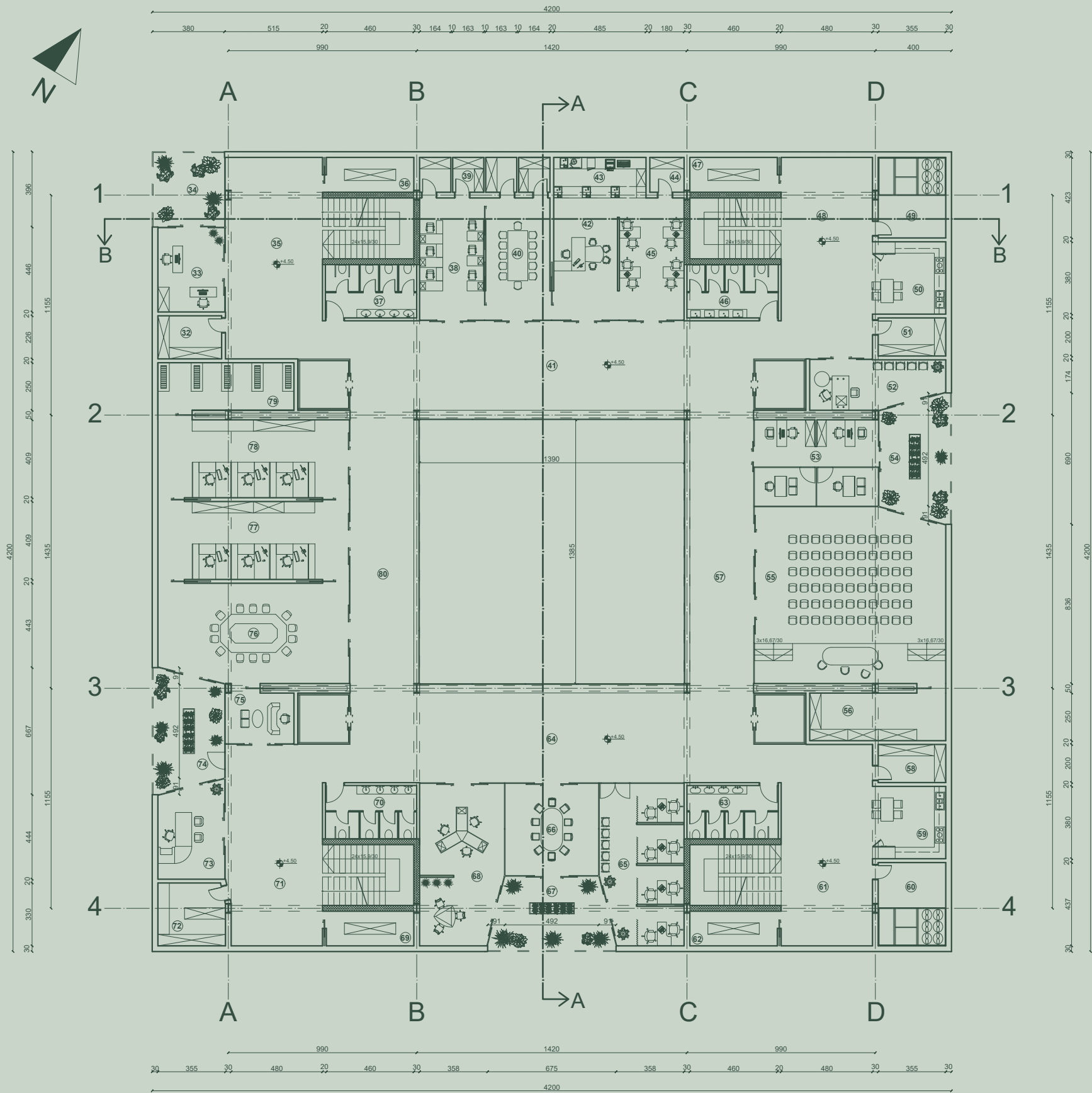
HEB 500

GROUND FLOOR



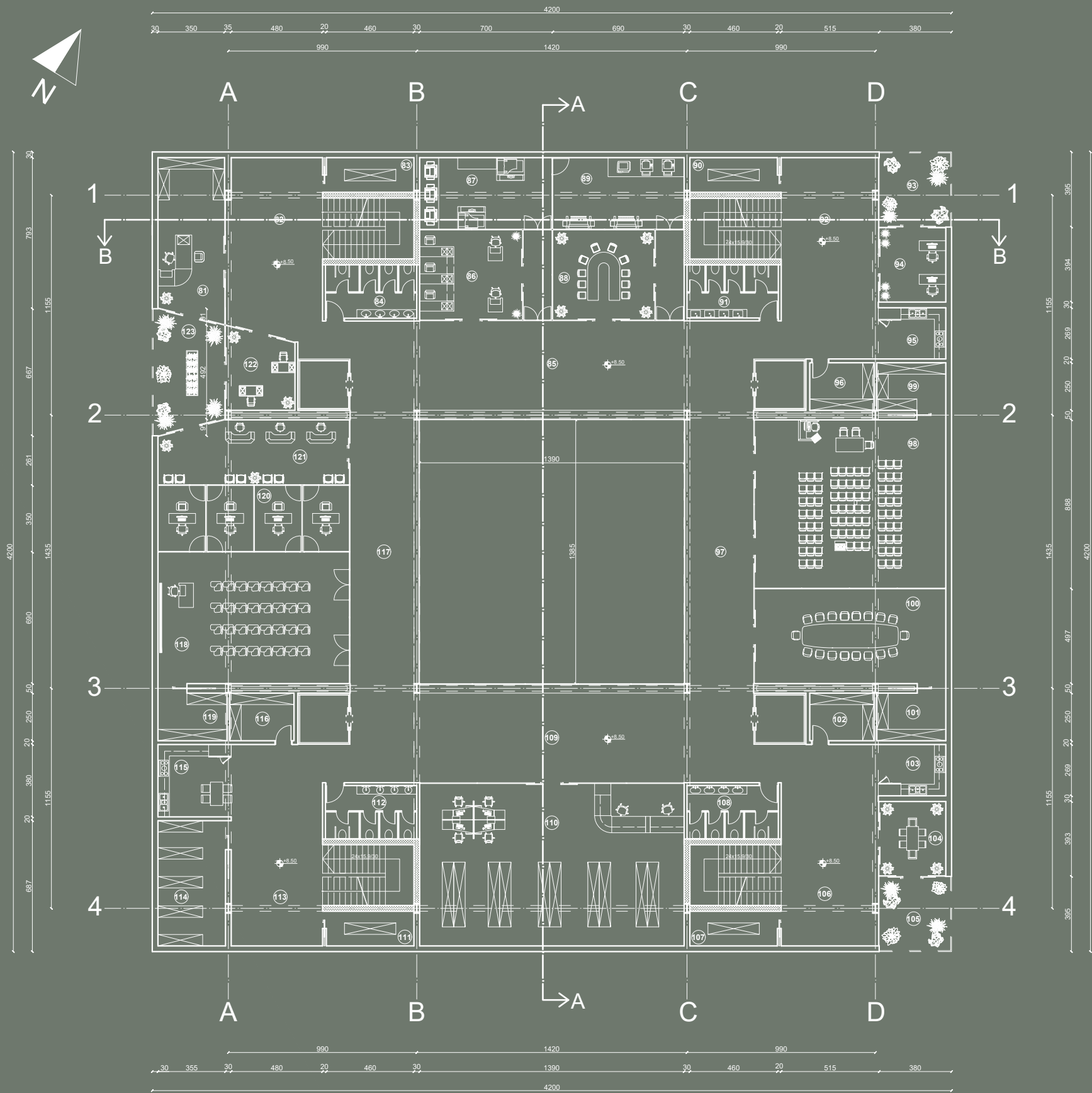
1	WIND LOBBY 1
2	SECURITY BOOTH 1
3	ENTRANCE 1
4	INFO DESK 1
5	WC
6	HALLWAY
7	RECEIPT/SUBMISSION OF COMPLEX DOCUMENTATION + PERSONS WITH DISABILITIES
8	ARCHIVE
9	WC
10	ENTRANCE 2
11	SECURITY BOOTH 2
12	WIND LOBBY 2
13	INFO DESK 2
14	WAITING ROOM
15	HALLWAY
16	THE CENTRAL ATRIUM
17	INFO DESK 3
18	ENTRANCE 3
19	WIND LOBBY 3
20	SECURITY BOOTH 3
21	WC
22	CASH REGISTER
23	COUNTER ROOM FOR ORDINARY DOCUMENTATION
24	HALLWAY
25	WC
26	ENTRANCE 4
27	WIND LOBBY 4
28	SECURITY BOOTH 4
29	INFO DESK 4
30	CAFFE
31	HALLWAY

FIRST FLOOR



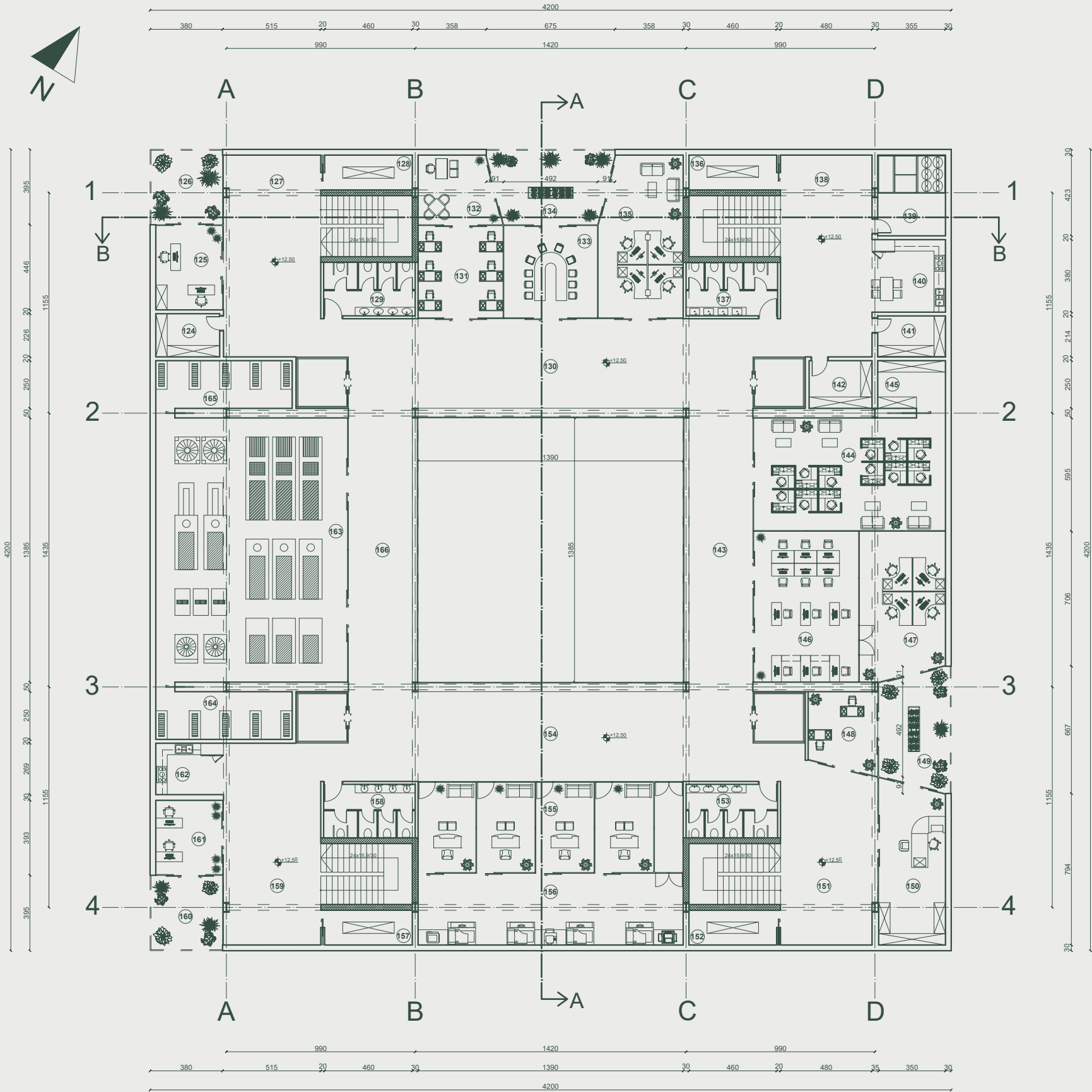
32	SECURITY ROOM
33	SECTOR FOR MAINTENANCE OF THE AIR HANDLING UNIT 1
34	GARDEN
35	COMMON SPACE
36	STORAGE ROOM - cleaners
37	WC
38	DEPARTMENT FOR TAX ASSESSMENT AND COLLECTION - TAX ASSESSMENT DEPARTMENT - space for analysts
39	ARCHIVES FOR THE STORAGE OF DOCUMENTATION
40	DEPARTMENT FOR TAX ASSESSMENT AND COLLECTION - TAX ASSESSMENT DEPARTMENT - teamwork room
41	HALLWAY
42	DEPARTMENT FOR TAX ASSESSMENT AND COLLECTION - TAX COLLECTION DEPARTMENT - office for financial operations
43	CASH REGISTER
44	SPACE FOR STORING DOCUMENTATION
45	DEPARTMENT FOR TAX ASSESSMENT AND COLLECTION - TAX COLLECTION DEPARTMENT - financial operations area
46	WC
47	STORAGE ROOM - cleaners
48	COMMON SPACE
49	AIR HANDLING UNIT ROOM 1
50	COMMON KITCHEN
51	SPACE FOR STORING GROCERIES - shared kitchen
52	MARKETING AND SALES - office for the main person
53	MARKETING AND SALES - INFORMATION DEPARTMENT - citizen information offices
54	GARDEN
55	MARKETING AND SALES - EDUCATION DEPARTMENT - conference room
56	EQUIPMENT STORAGE AREA - conference room
57	HALLWAY
58	SPACE FOR STORING GROCERIES - shared kitchen
59	COMMON KITCHEN
60	AIR HANDLING UNIT ROOM 2
61	COMMON SPACE
62	STORAGE ROOM - cleaners
63	WC
64	HALLWAY
65	LEGAL DEPARTMENT - SECTOR FOR LEGAL ADVICE - offices for information with citizens
66	LEGAL DEPARTMENT - meeting room
67	GARDEN
68	LEGAL DEPARTMENT - space for case preparation
69	STORAGE ROOM - cleaners
70	WC
71	COMMON SPACE
72	LEGAL DEPARTMENT - archive with space for case preparation
73	SECTOR FOR MAINTENANCE OF THE AIR HANDLING UNIT 2
74	GARDEN
75	RISK ANALYSIS DEPARTMENT - office for the main person
76	RISK ANALYSIS DEPARTMENT - space for team meetings
77	RISK ANALYSIS DEPARTMENT - space for employees
78	IT SUPPORT FOR TECHNICAL ISSUES
79	SERVER ROOM
80	HALLWAY

SECOND FLOOR



81	MAINTENANCE DEPARTMENT - problem reception office
82	COMMON SPACE
83	STORAGE ROOM - cleaners
84	WC
85	HALLWAY
86	DEPARTMENT FOR OFFICE CONTROL - space for employees
87	SHARED COPIER/PRINTING SPACE
88	DEPARTMENT FOR OFFICE CONTROLS - office for analyses
89	SHARED COPIER/PRINTING SPACE
90	STORAGE ROOM - cleaners
91	WC
92	COMMON SPACE
93	GARDEN
94	DEPARTMENT OF MAINTENANCE - office
95	COMMON KITCHEN
96	FOOD STORAGE ROOM - shared kitchen
97	HALLWAY
98	DEPARTMENT OF HUMAN RESOURCES - large conference hall
99	EQUIPMENT STORAGE AREA - large conference room
100	DEPARTMENT OF HUMAN RESOURCES - small conference room
101	EQUIPMENT STORAGE AREA - small conference room
102	FOOD STORAGE ROOM - shared kitchen
103	COMMON KITCHEN
104	MAINTENANCE DEPARTMENT - meeting office
105	GARDEN
106	COMMON SPACE
107	STORAGE ROOM - cleaners
108	WC
109	HALLWAY
110	LIBRARY
111	STORAGE ROOM - cleaners
112	WC
113	COMMON SPACE
114	ARCHIEVE
115	COMMON KITCHEN
116	FOOD STORAGE ROOM - shared kitchen
117	HALLWAY
118	DEPARTMAN ZA LJUDSKE RESURSE - SEKTOR ZA EDUKACIJU - učionica
119	EQUIPMENT STORAGE AREA - classroom
120	DEPARTMENT OF HUMAN RESOURCES - individual offices for HR interviews
121	DEPARTMENT OF HUMAN RESOURCES - reception and waiting room
122	DEPARTMENT OF MAINTENANCE - office
123	GARDEN

THIRD FLOOR



124	SECURITY ROOM
125	SECTOR FOR MAINTENANCE OF THE AIR HANDLING UNIT 3
126	GARDEN
127	COMMON SPACE
128	STORAGE ROOM - cleaners
129	WC
130	HALLWAY
131	FINANCE DEPARTMENT - DEPARTMENT FOR INTERNAL FINANCE - space for accountants
132	FINANCE DEPARTMENT - INTERNAL FINANCE DEPARTMENT - office for the main person
133	FINANCIAL DEPARTMENT - INTERNAL FINANCE DEPARTMENT - meeting office
134	GARDEN
135	FINANCIAL DEPARTMENT - INTERNAL FINANCE DEPARTMENT - office for joint analyses
136	STORAGE ROOM - cleaners
137	WC
138	COMMON SPACE
139	AIR HANDLING UNIT ROOM 3
140	COMMON KITCHEN
141	FOOD STORAGE ROOM - shared kitchen
142	SECURITY ROOM
143	HALLWAY
144	SPACE FOR ELECTRONIC SERVICES - call center
145	ROOM FOR STORING DOCUMENTATION
146	IT SECTOR - space for programmers
147	IT SECTOR - office for joint analyses
148	DEPARTMENT OF MAINTENANCE - office
149	GARDEN
150	MAINTENANCE DEPARTMENT - problem reception office
151	COMMON SPACE
152	STORAGE ROOM - cleaners
153	WC
154	COMMON SPACE
155	INDIVIDUAL OFFICES FOR CONFIDENTIAL MEETINGS
156	SHARED COPIER/PRINTING SPACE
157	STORAGE ROOM - cleaners
158	WC
159	COMMON SPACE
160	GARDEN
161	DATA CENTER MAINTENANCE DEPARTMENT
162	COMMON KITCHEN
163	DATA CENTER
164	SERVER ROOM NEXT TO THE DATA CENTER
165	SERVER ROOM NEXT TO THE DATA CENTER
166	HALLWAY

FLAT ROOF PLAN

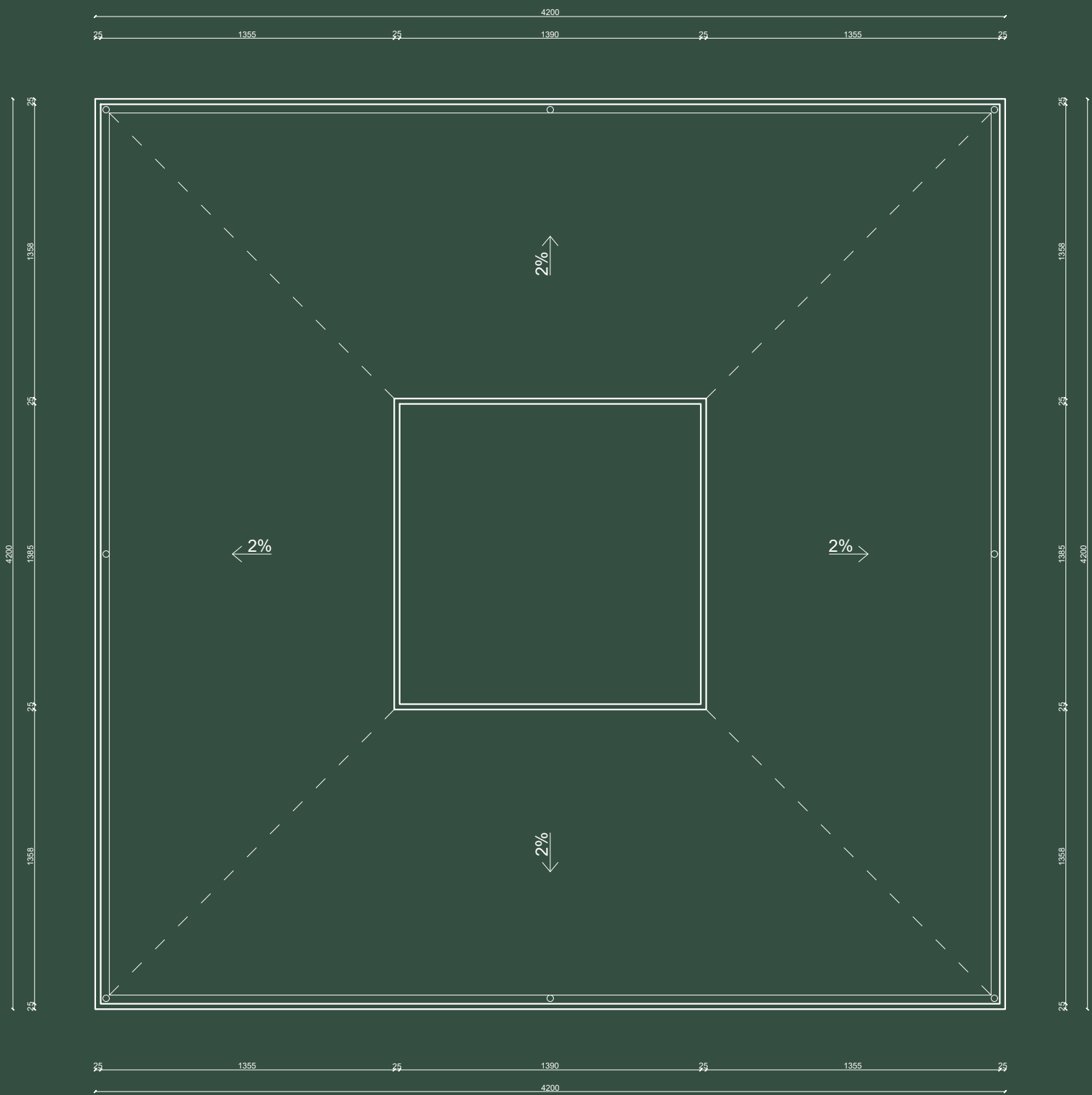
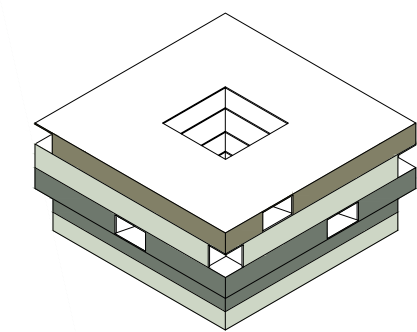


DIAGRAM 1

(PUBLIC-PRIVATE RATIO PER FLOOR)

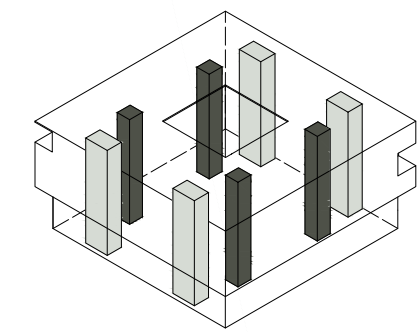


- PUBLIC ZONES
- SEMI-PUBLIC ZONES
- PRIVATE ZONES

The basement and the second floor predominantly contain semi-public zones, while the ground floor and the first floor primarily consist of public areas accessible to visitors. The third floor is fully privatized, housing the IT sector, a data center, and offices for confidential meetings.

DIAGRAM 2

(COMMUNICATION PLAN)

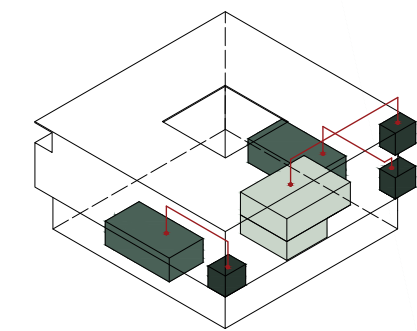


- ELEVATORS
- STAIRS

The vertical circulation elements in the building are positioned within all four zones of the floor plan, ensuring easy access and communication between employees.

DIAGRAM 3

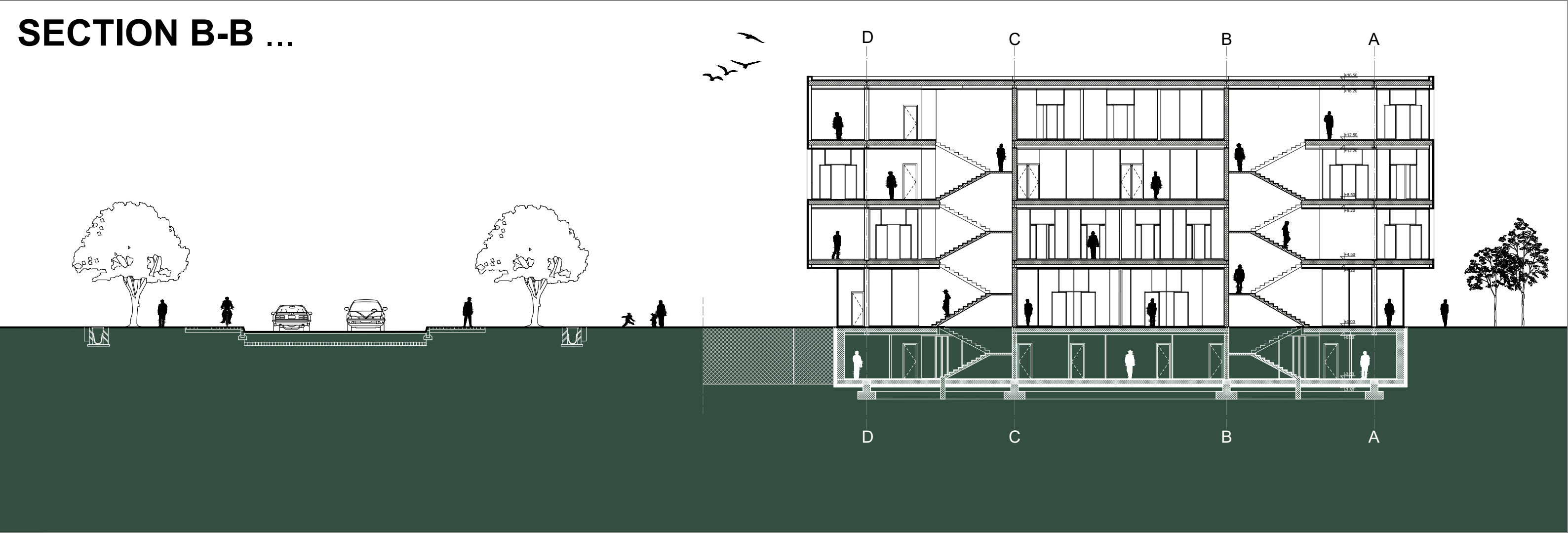
(AIR HANDLING UNITS)



- AIR HANDLING UNITS
- VENTILATED CONFERENCE AND MULTIMEDIA ROOM
- VENTILATION OF THE COUNTER ROOMS

Since the listed rooms are large and host many visitors, three smaller air handling units (AHUs) were implemented instead of one for easier management and better efficiency. AHUs control temperature, humidity, and air quality in building ventilation systems.

SECTION B-B ...



... SECTION A-A

