



GRADUATION PROJECT

'ministry of urban living conditions'

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Graduation Studio

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Radical Institutions
**A Civic Framework for Urban Knowledge
Production and Participation**
Design Data and Society

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I would like to begin by acknowledging the personal effort behind this graduation project. This graduation project marks the end of a long and demanding path, one filled with moments of doubt, pressure, discovery, and growth. It has been a process of continuous questioning, learning, and persistence, and I am grateful to arrive at this point with a meaningful project that I am proud to share with others.

I would like to express my deepest gratitude to my parents, who gave me the opportunity to pursue my studies at one of the most prestigious architecture schools in the world. Since childhood, studying at TU Delft was one of my dreams, and many decisions throughout my life have gradually led me here. Their trust and support made this journey possible.

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pushed the project further, challenging my ideas to become more radical, precise, and architecturally meaningful. Their responsiveness and commitment played an important role in transforming the initial research and conceptual ambitions into a developed architectural proposal.

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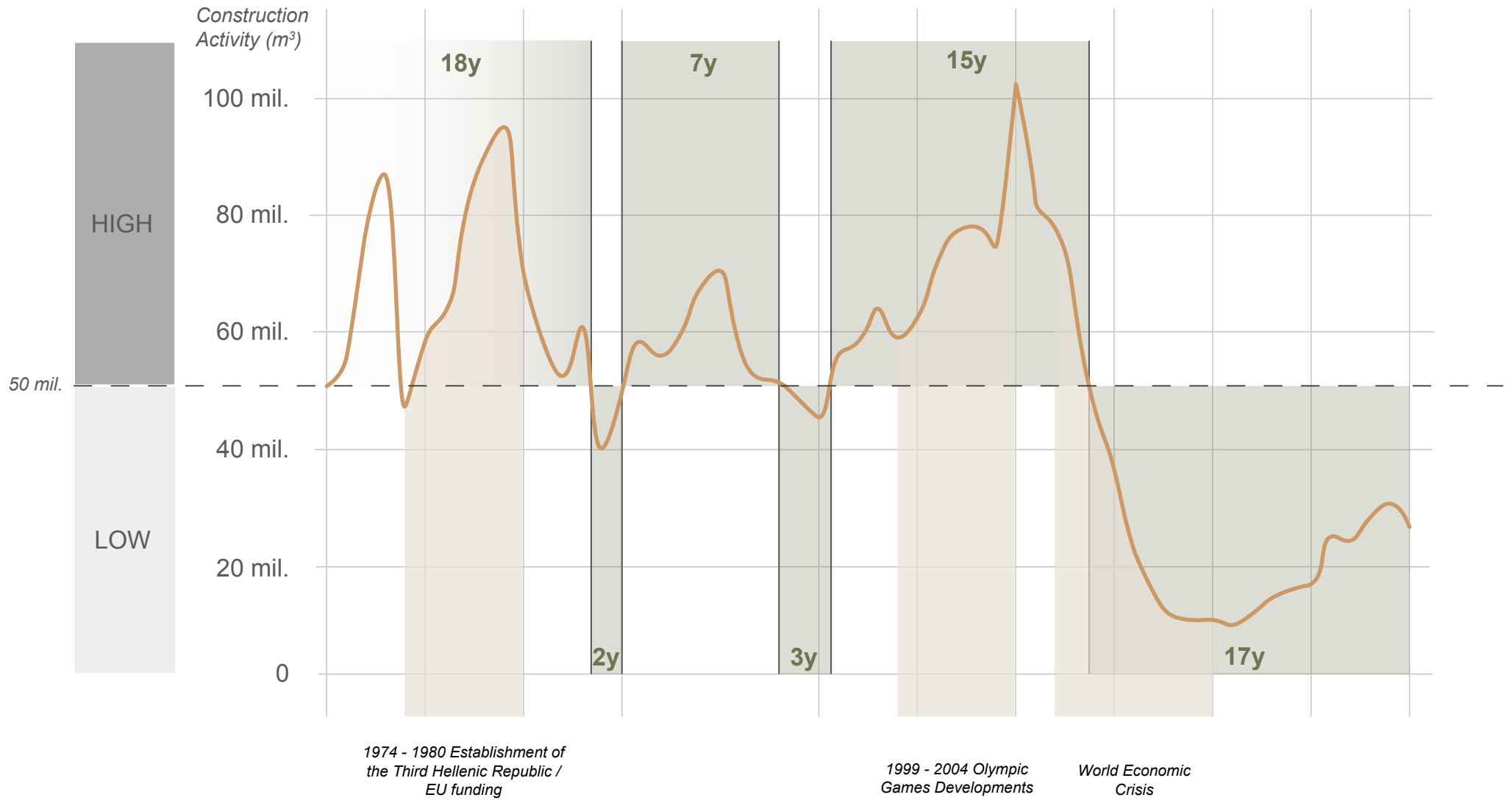




INTRODUCTION

$\mu \approx 10.3y$

1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 2020 2025



Athens as an Unstable City

Athens is not a stable urban object. It is a city shaped by continuous cycles of construction, vacancy, decline, reuse, tourism pressure, housing transformation, crisis, and renewal. These cycles do not happen separately from one another. They overlap, accelerate, slow down, and leave visible traces in the built environment. As a result, Athens can be understood as an unstable city: a city whose urban form is constantly being renegotiated by economic shifts, political decisions, social needs, private development, and everyday informal adaptation.

This instability is not only a problem. It is also one of the defining characteristics of Athens. The city has repeatedly absorbed pressure through transformation. Apartment blocks have changed use, vacant buildings have been reoccupied, neighbourhoods have been redefined by tourism, infrastructure projects have produced new centralities, and moments of crisis have opened spaces for alternative forms of living and working. Athens is therefore not

fixed through one dominant urban image. It is a city of fragments, exceptions, temporary conditions, and unfinished processes.

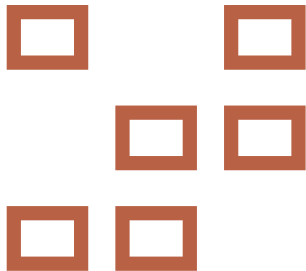
The graph shown in this chapter visualises these development cycles as a recurring pattern rather than a linear progression. Athens does not simply move from old to new, or from decline to improvement. Instead, it moves through repeated phases of growth, abandonment, pressure, adaptation, and reinvestment. This makes the city difficult to govern through conventional planning tools alone. By the time one condition is identified and addressed, another one may already have emerged. The urban reality changes faster than the institutional mechanisms that are supposed to respond to it.

The photographs of the Athenian urban context support this reading. They show a city where different conditions exist side by side: dense housing blocks, leftover plots, archaeological fragments, new developments, informal additions, touristic transformations, infrastructural edges, and everyday public spaces.





SLOW



FRAGMENTED

Athens is not experienced as a single coherent system, but as a layered urban field. Its complexity comes precisely from the way these layers coexist without always being fully coordinated.

This raises an important question for the project: who is responsible for understanding these transformations? Athens produces a vast amount of urban evidence every day, through its buildings, neighbourhoods, infrastructures, public spaces, and citizens. However, this evidence is often not collected, interpreted, or translated into public knowledge in a systematic way. The city is changing, but the mechanisms for reading and responding to that change remain fragmented.

The Institutional Gap

At the governmental level, responsibility for the urban condition is dispersed across many different ministries, agencies, municipalities, departments, and administrative bodies. Housing, tourism, infrastructure, culture,

environment, economy, migration, education, energy, and public works all influence the way Athens develops. However, these responsibilities are not gathered within one institution that specifically focuses on the quality of urban living conditions.

The image of the twenty ministries of the Hellenic Government makes this fragmentation visible. Each ministry addresses a part of the urban system, but no single body is dedicated to observing the city as a whole living environment. Urban problems are therefore often treated through separate administrative categories: as housing issues, transport issues, heritage issues, environmental issues, economic issues, or social issues. In reality, these problems are deeply connected. A change in tourism affects housing. A change in infrastructure affects neighbourhood life. A change in public space affects social inclusion. A change in climate conditions affects architecture, mobility, and everyday comfort.

This fragmentation creates an institutional gap. The existing ministries may have authority over specific sectors, but they are often too slow, too separated, or too bureaucratically limited to respond to the speed and complexity of urban transformation. The city operates as an interconnected system, while governance often remains divided into disconnected responsibilities.

The problem is therefore not only that Athens is unstable. The deeper problem is that the instability of the city is not matched by an equally adaptive institution. There is a lack of a public body that can continuously study the city, collect urban evidence, connect different stakeholders, test possible futures, and make urban knowledge accessible to both government and citizens.

This gap becomes the starting point of the project.

current hellenic ministries



HELLENIC REPUBLIC
Ministry of Economy
and Finance

economical stability



HELLENIC REPUBLIC
MINISTRY OF FOREIGN AFFAIRS

foreign relations



national defence



HELLENIC REPUBLIC
Ministry of Interior

domestic governance



HELLENIC REPUBLIC
Ministry of Education,
Religious Affairs and Sports

education, religion, sports



ΥΠΟΥΡΓΕΙΟ ΥΓΕΙΑΣ
&
ΚΟΙΝΩΝΙΚΗΣ ΑΛΛΗΛΕΓΓΥΗΣ

public health



HELLENIC REPUBLIC
Ministry of Citizen Protection

public security



HELLENIC REPUBLIC
MINISTRY OF INFRASTRUCTURE
AND TRANSPORT

mobility and infrastructure



energy and environment management



HELLENIC REPUBLIC
MINISTRY OF
DEVELOPMENT AND INVESTMENTS

economic development



HELLENIC REPUBLIC
Ministry of Social Cohesion
and Family Affairs

social cohesion management



HELLENIC REPUBLIC
Ministry of Migration & Asylum

immigration and asylum



HELLENIC REPUBLIC
Ministry of Culture

culture and heritage



HELLENIC REPUBLIC
MINISTRY OF JUSTICE

justice system



ΥΠΟΥΡΓΕΙΟ ΕΡΕΥΝΑΣ
ΚΟΙΝΩΝΙΚΗΣ ΑΣΦΑΛΕΙΑΣ
& ΚΟΙΝΩΝΙΚΗΣ ΑΝΑΜΕΤΗΣΗΣ

management of welfare



HELLENIC REPUBLIC
Ministry of Rural Development
and Food

agriculture



Ministry of Maritime
Affairs and Insular Policy

island and sea governance



HELLENIC REPUBLIC
MINISTRY OF TOURISM

tourism management



HELLENIC REPUBLIC
Ministry of Digital Governance

digital conditions



HELLENIC REPUBLIC
Ministry for Climate Crisis
and Civil Protection

climate resilience



ΥΠΟΥΡΓΕΙΟ ΑΣΤΙΚΩΝ ΣΥΝΘΗΚΩΝ ΖΩΗΣ

MINISTRY OF URBAN LIVING CONDITIONS

A New Ministry

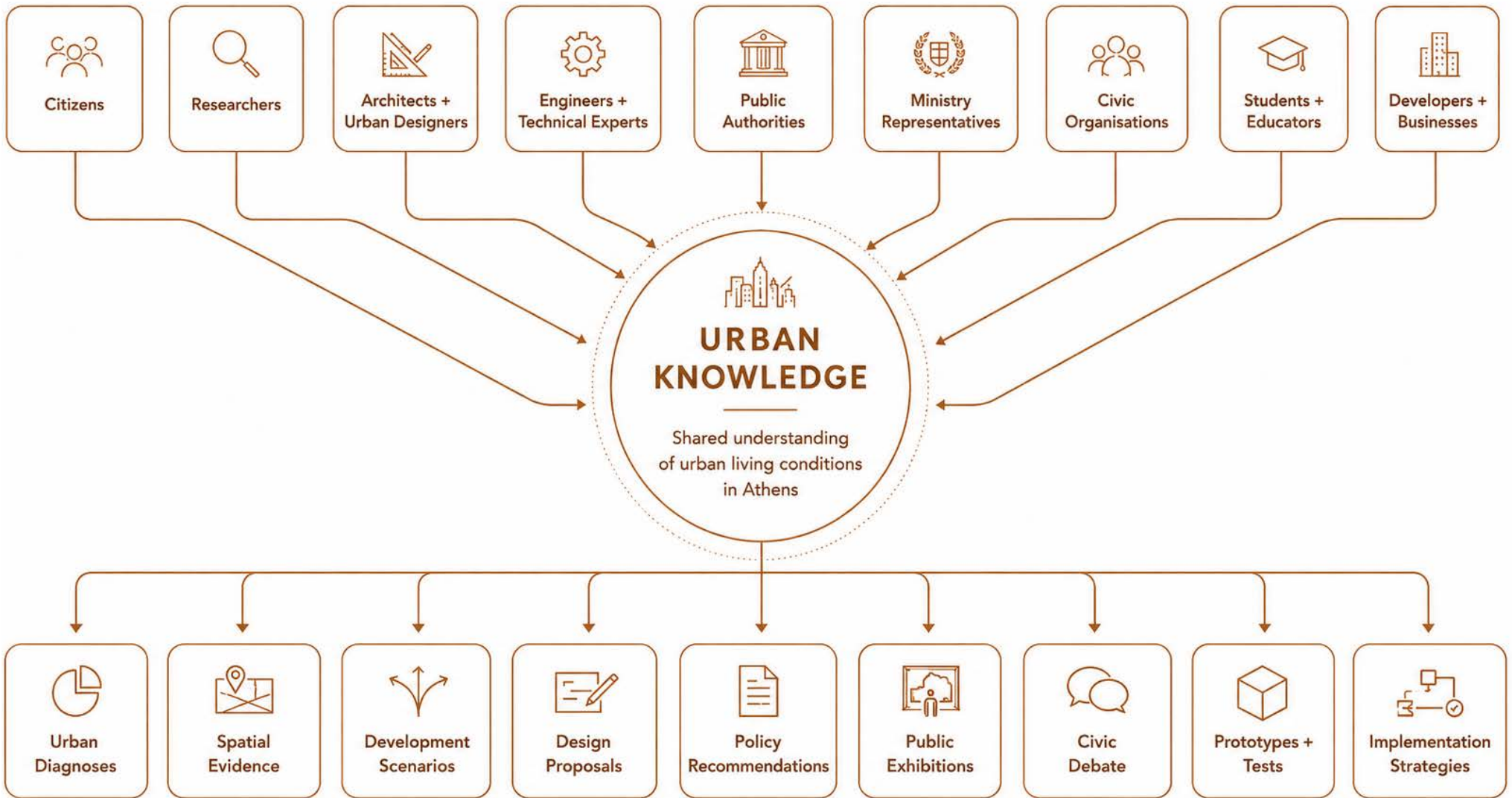
The project proposes a new civic institution for Athens: the Ministry of Urban Living Conditions. This ministry is not imagined as a conventional administrative office building. It is proposed as a new institutional type: part research centre, part public forum, part archive, part exhibition space, part workshop, and part civic laboratory.

Its purpose is to produce urban knowledge in various forms. This knowledge is not limited to reports or policy documents. It can be produced through maps, models, datasets, drawings, exhibitions, public debates, material tests, prototypes, simulations, publications, and design research. The ministry becomes a place where the city is continuously observed, represented, discussed, and transformed into shared public understanding.

The institution brings together different actors who are usually separated: researchers, architects, urbanists, policy makers, municipal representatives, students,

residents, craftsmen, activists, and visitors. Instead of treating urban transformation as a purely technical or bureaucratic matter, the ministry makes it visible and collective. It creates a space where the living conditions of Athens can be studied not only from above, but also through the everyday experiences of the people who inhabit the city.

The main functions of the ministry are organised around the production and exchange of urban knowledge. Exhibition spaces present the changing conditions of Athens to the public. The Athens urban model acts as a physical and analytical tool for understanding the city at different scales. Research areas support the collection and interpretation of urban data. Workshops and fabrication spaces allow ideas to be tested through models, prototypes, and material experiments. Archives preserve documents, maps, and urban evidence. Debate spaces, meeting rooms, and shared areas allow different stakeholders to discuss future scenarios for the city.



In this sense, the ministry does not only administer urban policy. It creates the spatial and institutional conditions for urban knowledge to be produced. It is designed as a place where analysis, making, discussion, exhibition, and governance can meet.

The choice of Plato's Academy as the site reinforces this ambition. Historically, the Academy was a place of learning, dialogue, and collective thought. The project reinterprets this legacy for contemporary Athens. It does not attempt to reconstruct the ancient Academy, but uses its deeper

meaning as a foundation for a new civic institution. Where the ancient Academy produced philosophical knowledge, the new ministry produces urban knowledge.

The project therefore begins with a simple argument: if Athens is an unstable city, then it requires an institution capable of working with instability. The Ministry of Urban Living Conditions is proposed as such an institution. It is a place where the city can study itself, represent itself, debate itself, and imagine its future.

HOW CAN ARCHITECTURE MEDIATE BETWEEN GOVERNANCE, URBAN KNOWLEDGE PRODUCTION, AND CIVIC PARTICIPATION WHILE ENABLING A GOVERNMENTAL INSTITUTION TO ADAPT TO CYCLICAL CHANGES IN URBAN DEVELOPMENT?

Institutional Development of Athens

The institutional history of Athens is not a linear progression, but a sequence of shifts between different centres of power, knowledge, culture, economy, religion, and public life. Across its long history, the city repeatedly reorganised the spaces through which it governed, educated, healed, traded, worshipped, and represented itself. From the Mycenaean palace on the Acropolis to the Agora, from Byzantine churches to Ottoman bazaars, and from the modern Parliament to contemporary cultural foundations, Athens has always been shaped through institutions.

In antiquity, the institutional field of Athens was strongly connected to public space. The Agora, the Acropolis, the Pnyx, the theatres, gymnasia, sanctuaries, and marketplaces were not isolated buildings, but part of a wider civic landscape. Political debate, trade, ritual, education, performance, and social exchange often overlapped within the same urban territory. Plato's Academy was already part of this institutional field. As one of the earliest educational institutions, it introduced a spatial model where knowledge was

produced through dialogue, teaching, walking, and collective thought. It was not only a school, but a place where intellectual life became part of the city.

Over time, the institutional centre of Athens changed. During the Hellenistic and Roman periods, Athens lost much of its political autonomy but remained an important cultural and intellectual centre. In the Byzantine and Ottoman periods, religious institutions became dominant, and many civic functions were reorganised around churches, monasteries, mosques, bazaars, and local communities. After Greek independence, Athens was transformed into the capital of the modern nation-state. New ministries, banks, museums, universities, hospitals, theatres, and administrative buildings gave the city a more formal institutional structure.

Today, Athens contains a dense and fragmented institutional landscape. Its responsibilities are divided across ministries, municipalities, cultural bodies, universities, public services, private foundations, and European frameworks. This history shows that the city has always depended on

institutions to organise collective life. However, it also reveals a gap: while Athens has institutions for politics, culture, health, religion, economy, and education, it lacks a dedicated institution that studies and coordinates the urban living conditions of the city as a whole.



DESIGN BRIEF







Site: Plato's Academy Park

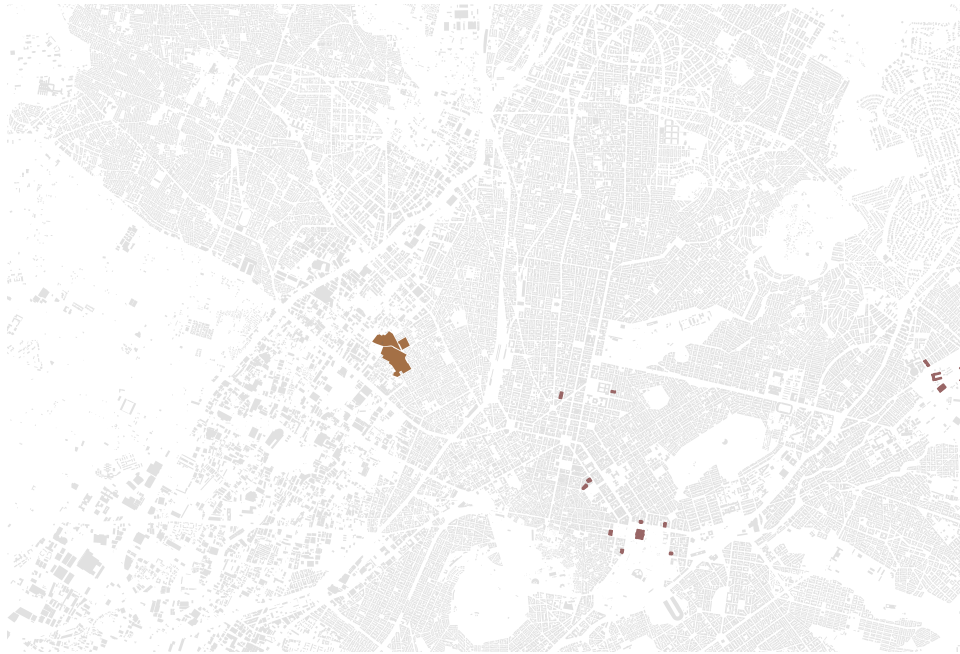
Plato's Academy is a very historically charged site in Athens. Located northwest of the ancient city centre, the area is known today as Akadimia Platonos, a neighbourhood where archaeological remains, public green space, everyday housing, local streets, and urban life coexist. Unlike the monumental centre of Athens, where antiquity is often presented as a clear and protected image, Plato's Academy is more fragmented, quiet, and embedded within the contemporary park. This makes the site especially interesting for an architectural project: it is not just a historical place, but also an active urban condition. The history of the site begins before Plato. In antiquity, the area was a sacred grove associated with the hero Akademos, from whom the name "Academy" comes. It was located outside the city walls and formed part of a larger landscape of trees, paths, shrines, and open grounds. In the 6th century BCE, one of the main gymnasia of ancient Athens was established there. The gymnasium was not only a place for physical training, but also a social and intellectual environment. In

ancient Greek culture, education was connected to the body, public life, discussion, and civic formation. This means that the Academy was already a space of learning and gathering before it became associated with Plato. Around 387 BCE, Plato founded his philosophical school in this area. This moment gave the site its lasting significance. The Academy became one of the most important places in the history of philosophy, education, and intellectual exchange. It was here that Plato taught, discussed, and developed ideas that would influence Western thought for centuries. Aristotle also studied at the Academy before later founding his own school, the Lyceum. For this reason, Plato's Academy is often described as one of the earliest models of higher learning: not a university in the modern institutional sense, but a place where knowledge was produced through dialogue, teaching, argument, and collective inquiry. Over time, the Academy became more than a specific school. The word itself gradually changed meaning. Today, "academy" is used internationally to describe institutions of education, research, science, art, and intellectual



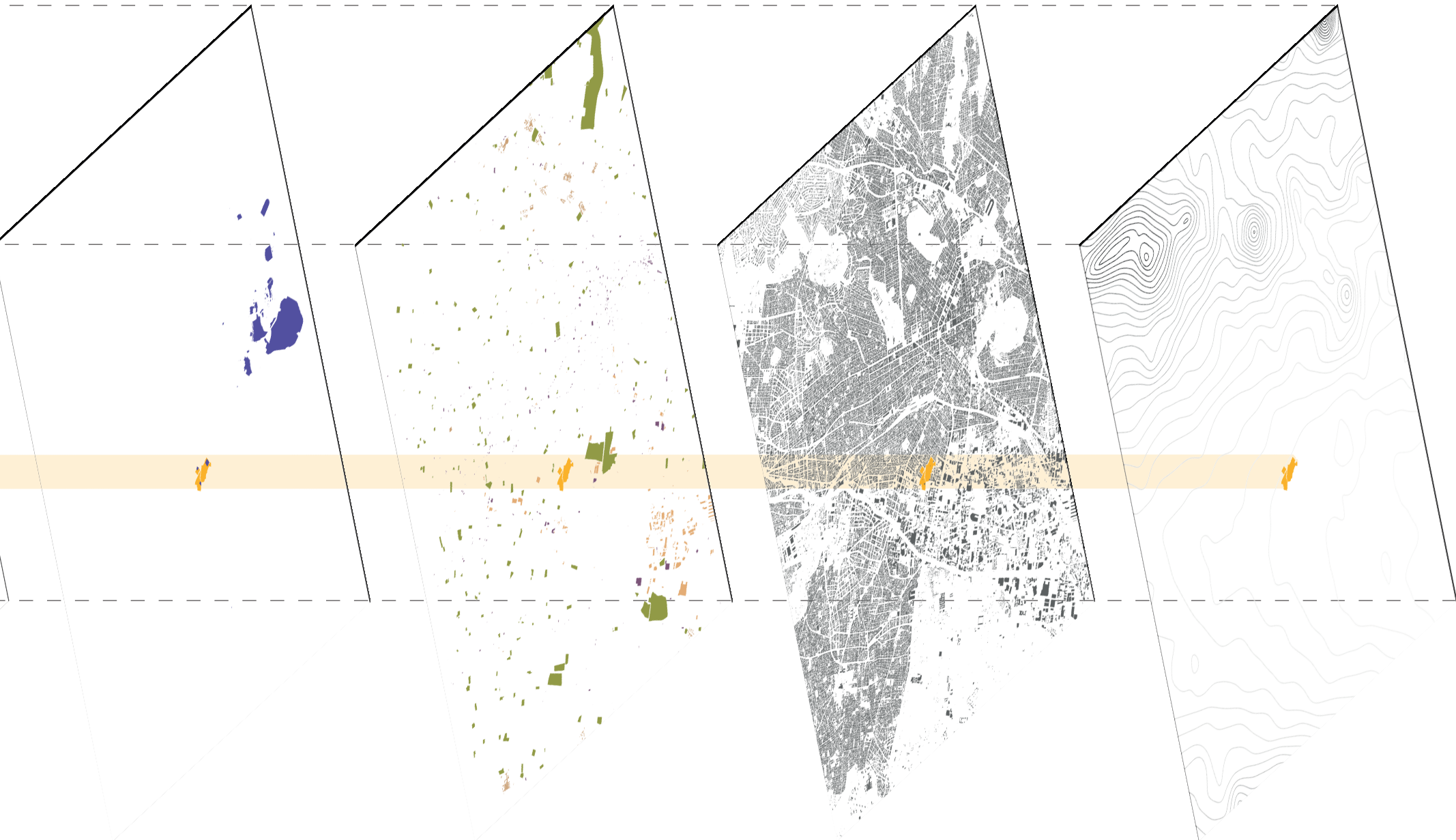


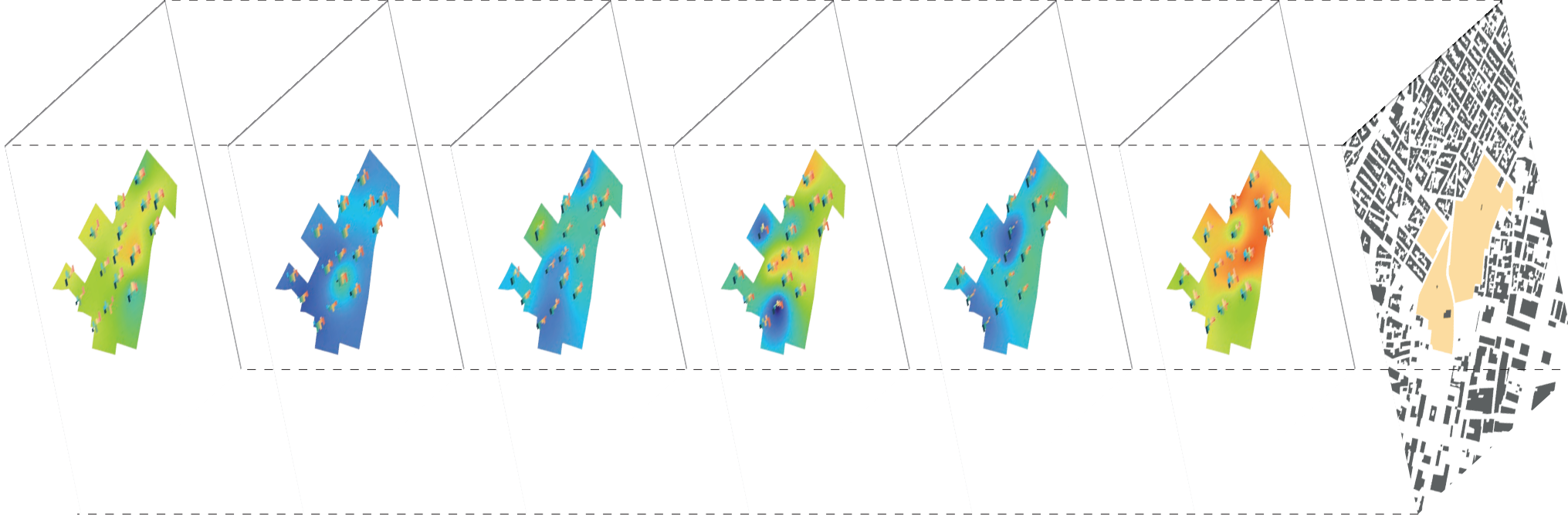




authority. In this sense, the site has produced not only philosophical history, but also an institutional idea. It represents the origin of a certain relationship between space, knowledge, and public culture. This is important for this project, because the proposal also deals with the question of how knowledge about the city can be produced, shared, and transformed into civic action. Today, Plato's Academy functions as both an archaeological site and a public park. It is used by residents for walking, resting, meeting, playing, and passing through. At the same time, it carries a symbolic weight that belongs not only to the neighbourhood, but to the whole city of Athens. It is a place where the idea of education, public discussion, and civic culture is rooted in the ground of the city. However, compared to other archaeological areas in Athens, it remains less monumental and less tourist-oriented. This gives the site a different atmosphere: more local, more open, and more available for reinterpretation. For Athens, Plato's Academy represents an important but underused civic potential. It is a historical site, but it is also a place

where the city can ask what kind of public institutions it needs today. The Academy was once a landscape of learning, debate, and collective thought. In the contemporary city, these questions return in a different form: how can Athens understand its own urban transformations? Where can citizens, researchers, architects, public bodies, and communities meet to discuss the future of the city? How can urban knowledge become public, visible, and useful? The site is therefore not treated in this project as a passive historical background. It becomes an active starting point. Plato's Academy allows the project to connect the ancient idea of the Academy with a new civic institution for contemporary Athens. The proposal does not try to reconstruct the past or imitate ancient forms. Instead, it uses the deeper meaning of the site, such as learning, dialogue, public space, and collective knowledge, as a foundation for a new architectural type.





Thermal

Thermal perception registers the lowest priority across most measurement points. Conditions are relatively constant, reflecting a dry climate, stable weather patterns, and limited microclimatic variation within the site.

Descriptors



Kinetic

Kinetic perception is primarily influenced by vehicular movement along surrounding streets and internal pedestrian circulation. Kinetic intensity varies in some areas, but overall remains low due to physical obstructions. Kinetic intensity varies in some areas, but overall perceived movement remains low while aural intensity remains high, caused by blocked sightlines despite ongoing traffic flow.

Descriptors



Aural

The aural sense scores the highest priority across the site. This is due to the surrounding dense urban fabric and road network, which contribute to aural intensity deep into the park, including its central areas, with limited acoustic buffering.

Descriptors



Priority (applicable for all maps)



*The dataset for this sensory map was collected collaboratively with 15 students from the studio group. Data visualization and maps by Delia and Marlene.

Visual

Visual descriptors vary significantly across the site, with the highest priority in the southern and northern overall trends. Despite this variation, the overall visual priority remains moderate, indicating a generally stable and calm visual environment with limited rapid change or dynamic visual stimuli.

Descriptors



Tactile

The tactile sense remains low in priority and largely static across the site. Few tactile stimuli are present, and surface conditions offer limited variation, resulting in minimal sensory engagement.

Descriptors



Chemical

The chemical sense remains weak and low in priority across most of the site, with relatively uniform low scores. The highest scores are observed in the southern entrance, likely influenced by stagnant odors from nearby urban activities and traffic-related emissions.

Descriptors



Urban Morphology

The site is bordered to the east and south by a highly dense urban fabric, composed by rectangular polytechnika housing blocks typical of Athens. This continuous grid contrasts with the western and northern edges, where larger-scale industrial buildings from the 1960s to the early 2000s interrupt the dense fabric. A major thoroughfare, the Athens Ring Road, itself forms a clear void within the surrounding city, large, unbuilt open area in stark contrast to the compact urban blocks. Apart from archaeological remains, the site remains free of permanent construction.



Site location



Opportunity

Based on the desired architectural & design intentions, an area for the building location is chosen. Further studies and conceptual mapping will specify the exact placement of the project.

Project location

Road Network

The site is surrounded by an extremely dense road network that primarily prioritizes car traffic. Two major highways run nearby, providing direct connections to the city center. The site is bordered by the Platón Academy park, dividing it into two distinct halves. Within the park, movement is supported by an informal network of unmarked pedestrian paths.

Primary roads
Secondary roads
Walking pathways

Archaeological Site

The site contains the archaeological remains of Plato's Academy, founded in 387 BCE as one of the earliest universities in the world. The site has historically functioned as a center for philosophy, mathematics, and scientific inquiry and is widely regarded as a precursor to the modern university. Although the remaining ruins define the symbolic and cultural identity of the area, the site is legally protected, with a focus on its historical and educational significance rather than as a heritage landscape rather than a buildable plot.

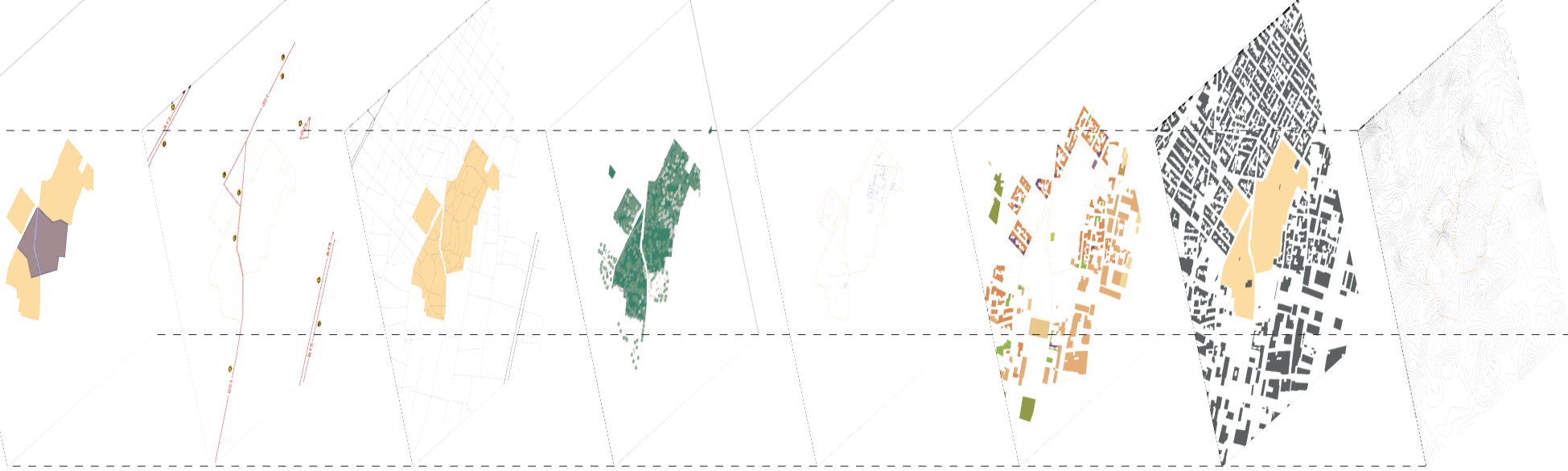
Remaining ruins

Urban Morphology

The site is bordered to the east and south by a highly dense urban fabric, dominated by post-war polykatoika housing blocks typical of Athens. This urban form is characterized by large-scale buildings from the 1950s to the early 2000s interrupt the dense fabric. The site is bordered to the north by a large, unbuilt open area in stark contrast to the compact urban blocks. Apart from archaeological remains, the site remains free of permanent construction.

Site location

S = 12ha



Public Transport

Four bus lanes are riding nearby. Several bus stops are within walking distance. There is a bus stop located at the geometrical center of the plot. The site is bordered to the north by the city center and to the north-south. There are more metro stations within the walking distance.

Bus lane
Bus stop

Nature

The park hosts a relatively rich natural environment, characterized by a limited but dominant range of tree species. The vegetation provides significant shade, mitigates urban heat, and creates a microclimate distinct from the surrounding dense city fabric. Its uncut condition supports a diverse range of seasonal and annual seasonal variation uncommon in the surrounding neighborhoods.

Leisure park
Aleppo pine (pinus halepensis)
Stone pine (pinus pinea)
Olive (olea europaea)
Cypress (cupressus sempervirens)

Building Function

The site is surrounded by the residential buildings on the site. The surrounding urban fabric is dominated by a mix of building types. A football field and a playground are found on site, which are used by the locals. Greek traditional architecture is present in the surrounding functional religious space. A significant amount of buildings nearby are abandoned.

Industrial
Commercial
Abandoned
Retail on Ground Floor
Playground
Residential
Religious
Education
Sport

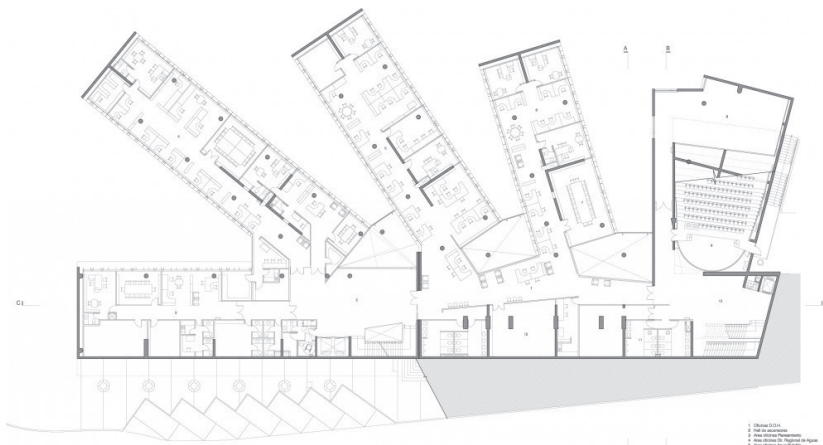
Topography

Contour lines indicate elevation changes of 1 m across the whole site. Uneven topography with gradual changes in the lower part than its surrounding neighborhoods.

35m
40m
45m
50m
55m
60m

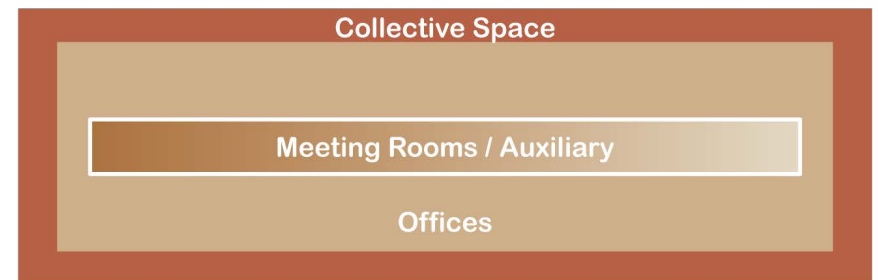
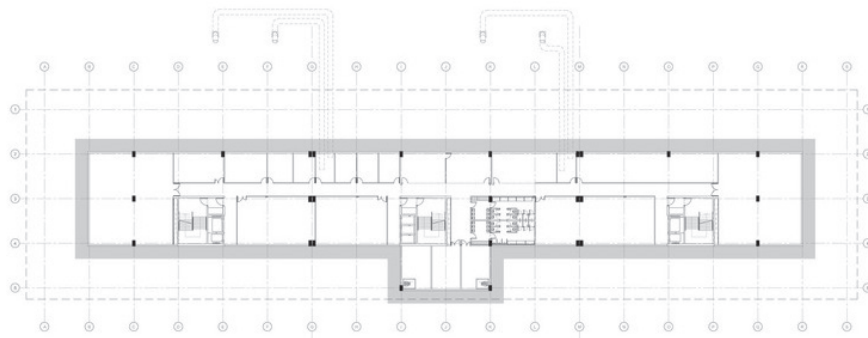
MINISTRY OF PUBLIC WORKS

Location: La Serena, Chile
 Coordinates: -29.89705, -71.25281
 Architect: Teodoro Fernandez Arquitectos
 Completed: 2011
 GFA: ≈18,000m²
 Floors: 4 (+3 underground)
 Typology: Ministry



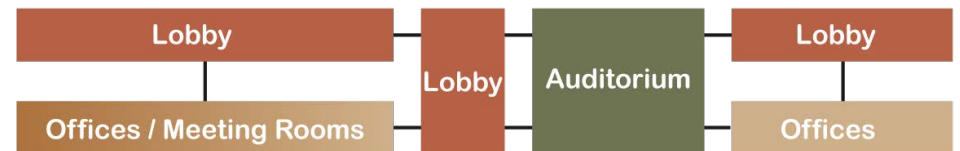
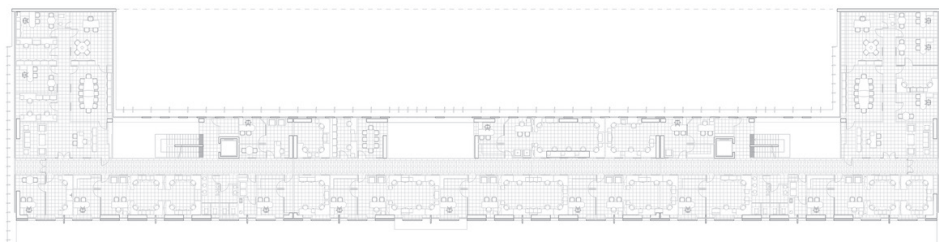
HUMAN DEVELOPMENT AND HABITAT MINISTRY

Location: Buenos Aires, Argentina
Coordinates: -34.672039, -58.493718
Architect: Direccion General de Arquitectura
Completed: 2019
GFA: ≈21,000m²
Floors: 5 (+1 underground)
Typology: Ministry



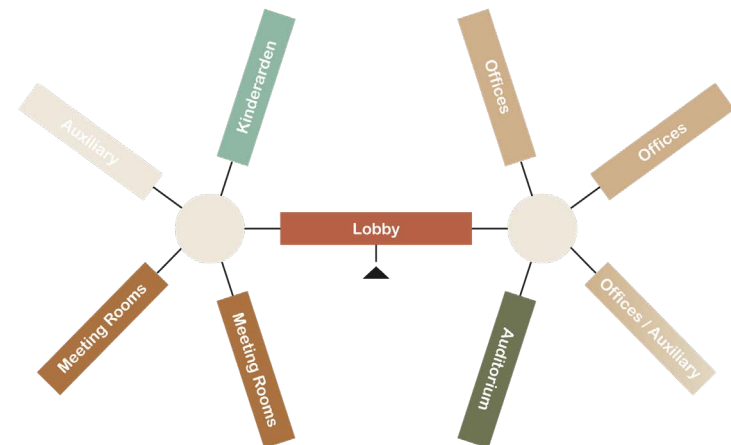
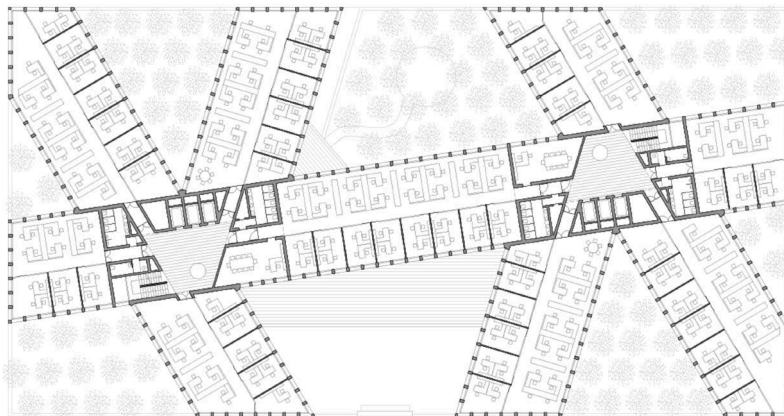
MINISTRY OF HOUSING AND URBAN DEVELOPMENT

Location: Rancagua, Chile
Coordinates: -34.169530, -70.747460
Architect: Carreño Sartori Arquitectos
Completed: 2015
GFA: ≈5,500m²
Floors: 3 (+1 underground)
Typology: Ministry



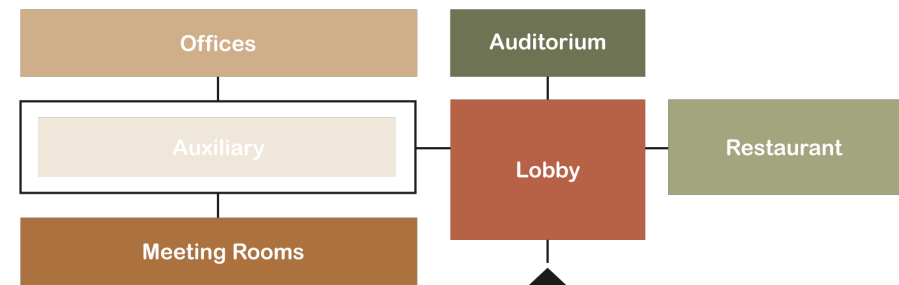
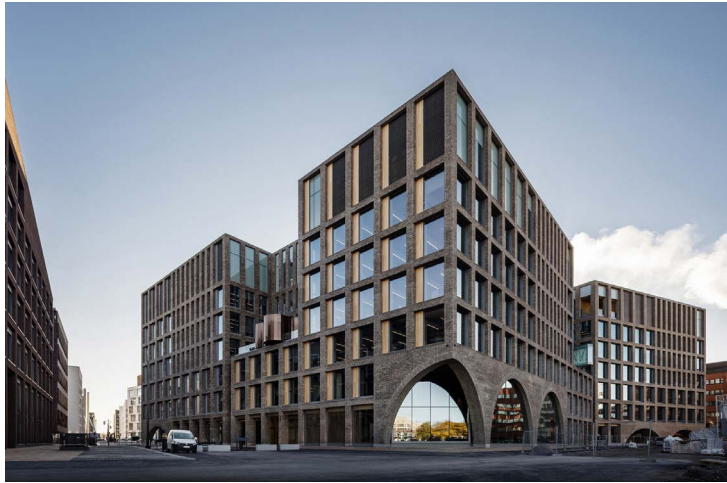
MINISTRY OF DEVELOPMENT AND HOUSING

Location: Seville, Spain
Coordinates: 37.391900, -5.974300
Architect: Cruz y Ortiz Arquitectos
Completed: 2015
GFA: ≈41,400m²
Floors: 8 (+4 underground)
Typology: Ministry



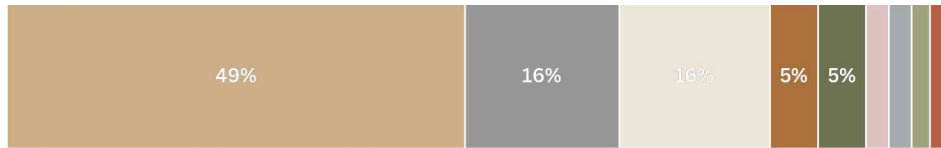
URBAN ENVIRONMENT HOUSE

Location: Helsinki, Finland
Coordinates: 60.190200, 24.978300
Architect: Lahdelma & Mahlamäki architects
Completed: 2020
GFA: ≈40,900m²
Floors: 7 (+1 underground)
Typology: Ministry



Workspace Auxiliary Garden Restaurant Lobby Meeting Space Auditorium Archive Circulation

MINISTRY OF PUBLIC WORKS



MINISTRY OF HOUSING AND URBAN DEVELOPMENT



HUMAN DEVELOPMENT AND HABITAT MINISTRY



MINISTRY OF DEVELOPMENT AND HOUSING



URBAN ENVIRONMENT HOUSE



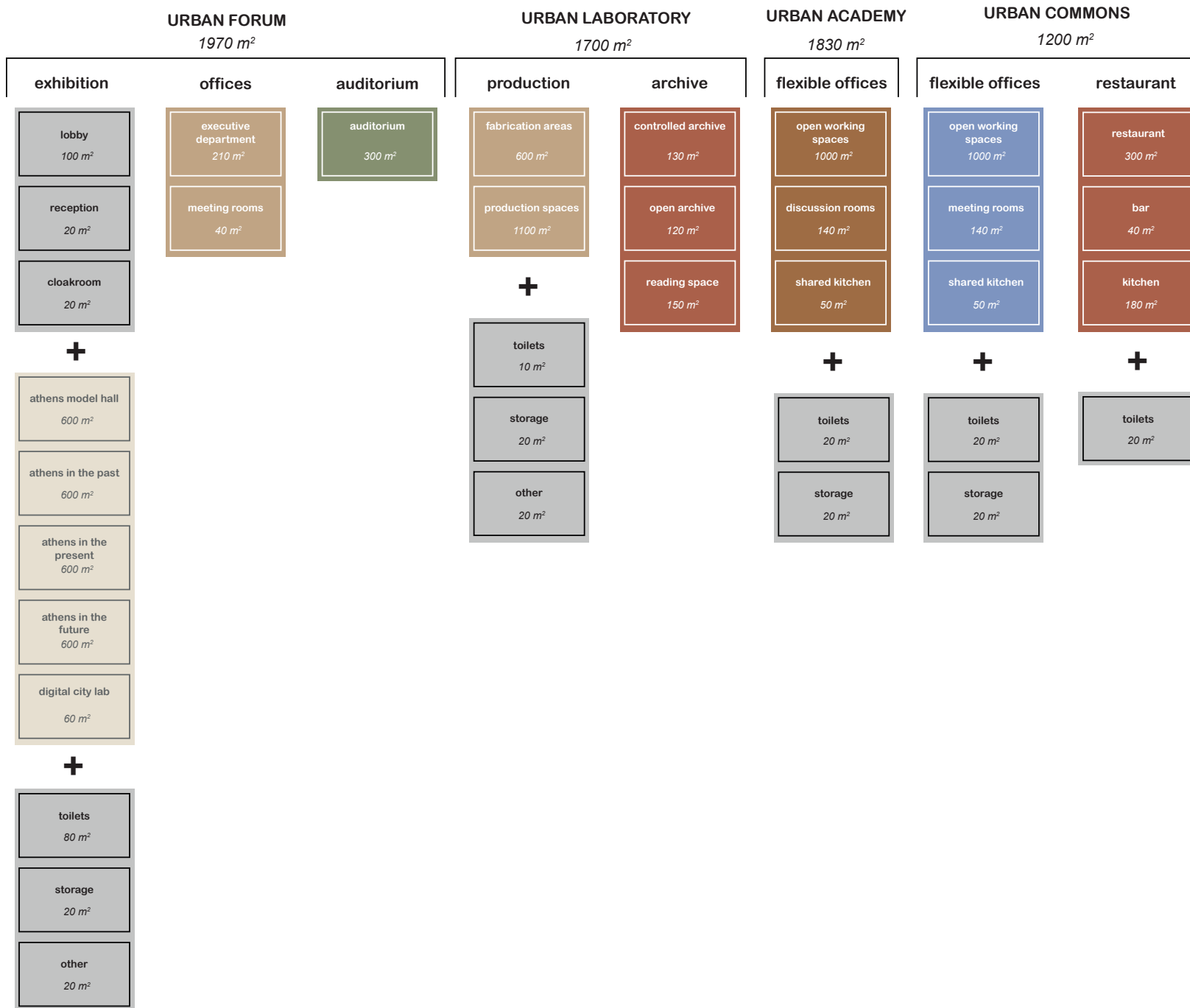
Precedent analysis

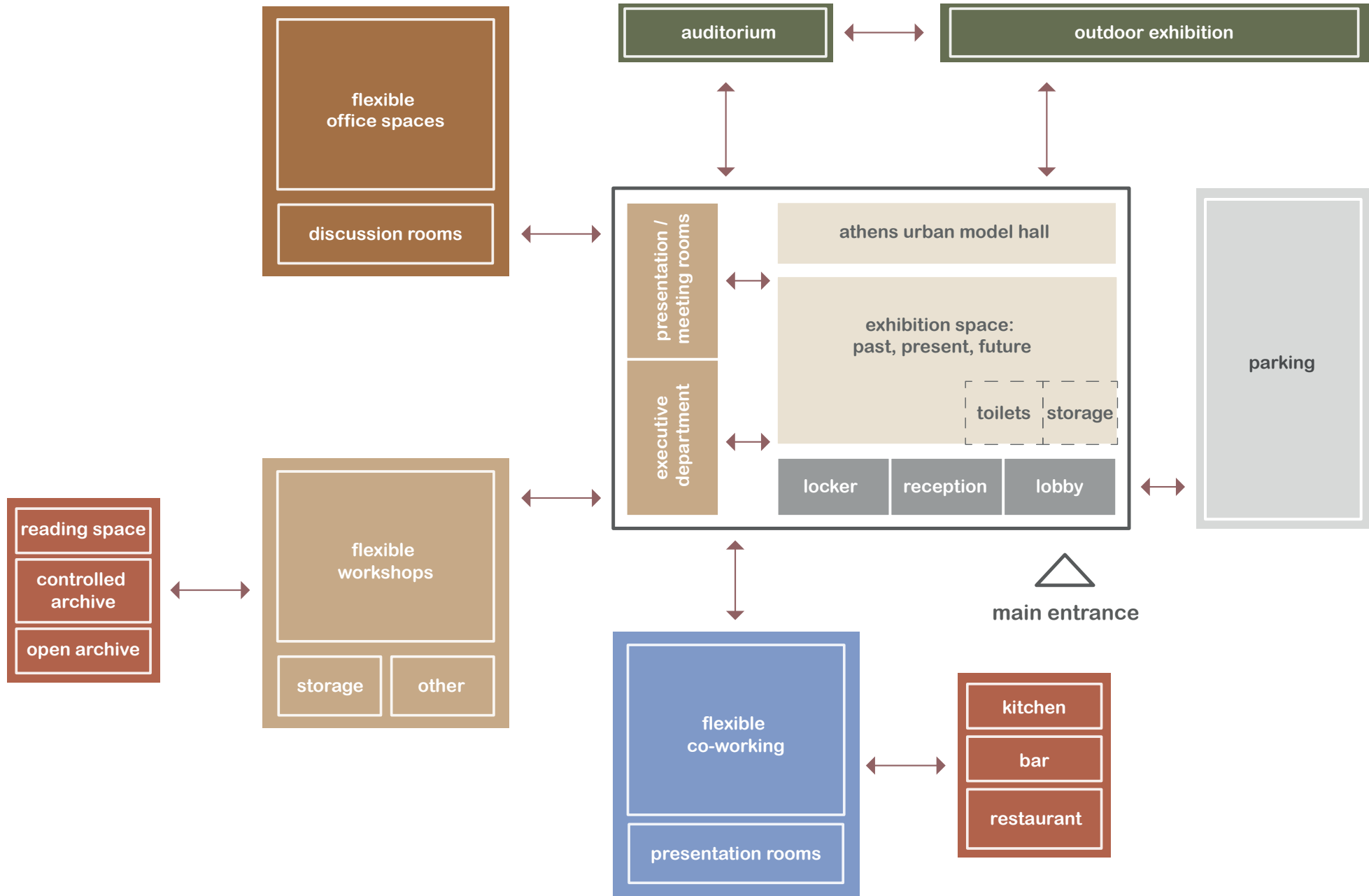
The precedent studies were used to understand how contemporary ministry buildings organise programme, public access, circulation, and institutional presence. The selected cases vary in size, from the smaller Ministry of Housing and Urban Development Building in Rancagua to larger examples like the Urban Environment House in Helsinki and the Ministry of Development and Housing Offices in Seville. Most of these precedents are larger than the proposed Ministry of Urban Living Conditions and are strongly dominated by office space.

This comparison clarified the position of the project. Rather than repeating the conventional ministry model as a large administrative block, the proposal shifts the institution toward a more public, mixed, and spatially open typology. Offices remain important, but they are no longer the only driver of the building. Exhibition, research, fabrication, education, public debate, and informal exchange become equally important parts of the programme.

The precedents also informed the spatial organisation of the project. Several cases use a central lobby, courtyard, or collective space to organise different departments around a shared core. This supported the idea of the Urban Forum as the central parent fractal of the ministry, with other clusters branching from it. Other precedents showed wing-based or distributed arrangements, which helped confirm the value of organising the programme into separate but connected clusters.

The main conclusion from the precedent studies is that a ministry does not have to be understood only as an office building. It can also become a civic platform. In this project, the lessons from the precedents are transformed into a low, permeable, and distributed institution, where administrative work is connected to public knowledge production, collective space, and the landscape of Plato's Academy.





The design brief defines the ministry as an institution that must operate differently from a conventional governmental building. Because it is located within Plato's Academy Park, the project must first respond to the site by remaining permeable and accessible. The building should not block movement through the park, but allow pedestrians to pass through, enter from different directions, and use parts of the institution as an extension of the public realm.

At the same time, the project must maintain a clear institutional presence. The ministry has to be recognisable as a civic body,

capable of representing public authority, decision-making, and urban responsibility. However, this presence should not be expressed through monumentality or separation. Instead, it should be open, low-lying, and tied to the ground of the city.

The programme must support informal dialogue and distributed activities. Urban knowledge is not produced only in offices or official meetings, but also through exhibitions, workshops, public conversations, shared workspaces, and everyday encounters. For this reason, the building needs to create spaces where different actors can

meet, exchange, learn, and test ideas together.

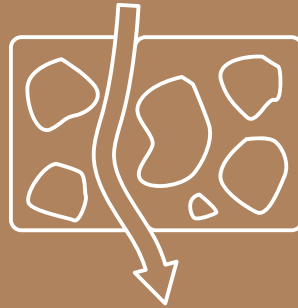
Finally, the ministry must be adaptable to urban cycles. Since Athens is shaped by changing conditions of growth, decline, reuse, crisis, and renewal, the building cannot be fixed to one mode of operation. It must be able to shift between administration, research, education, exhibition, and public use. These ambitions form the basis for the spatial concept of the project: a permeable, accessible, adaptable, and distributed institution for producing urban knowledge.

«PEOPLE LIVE IN CITIES.

PEOPLE SHOULD HAVE A STAKE IN SHAPING THEIR LIVING CONDITIONS.»

PROJECT AMBITIONS

SITE



permeability

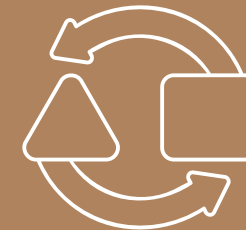


accessibility

INSTITUTION



maintain institutional
presence



adaptability
to cycles

PROGRAMME



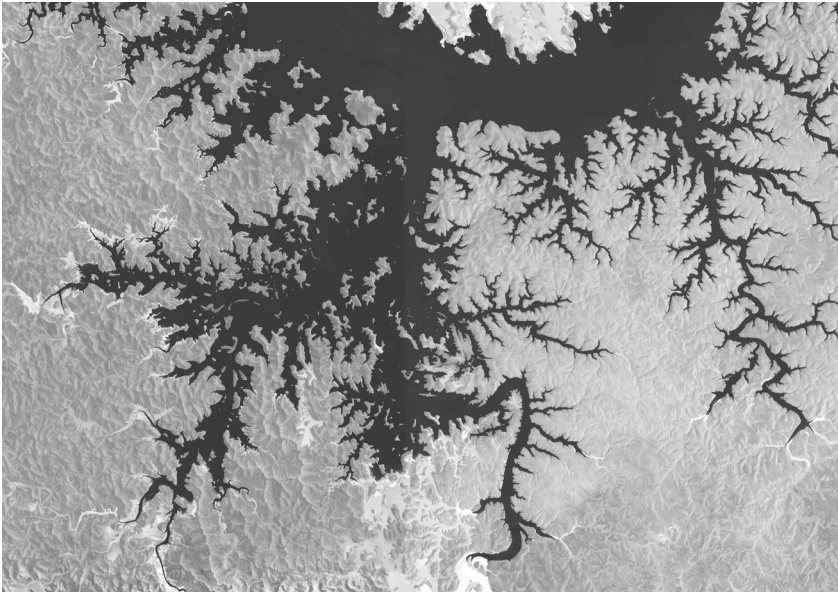
prioritise informal
dialogue



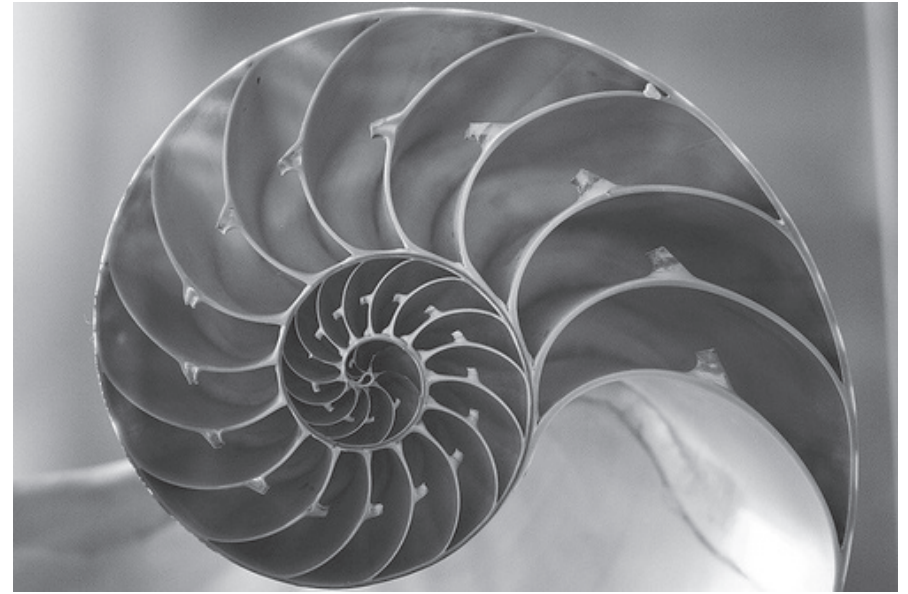
distributed activities



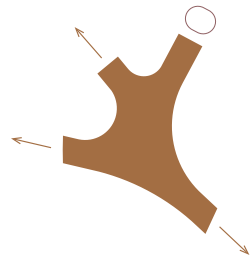
CONCEPT



The fractal as the organisational logic is chosen to enable the building operate as an interconnected network rather than as a conventional administrative building. Since the institution brings together many different forms of urban knowledge production, these activities need to be connected, but not merged into one uniform space. The fractal organisation allows the building to emerge from its central core and grow into a series of smaller, related clusters, each with its own programme, atmosphere, and level of openness.

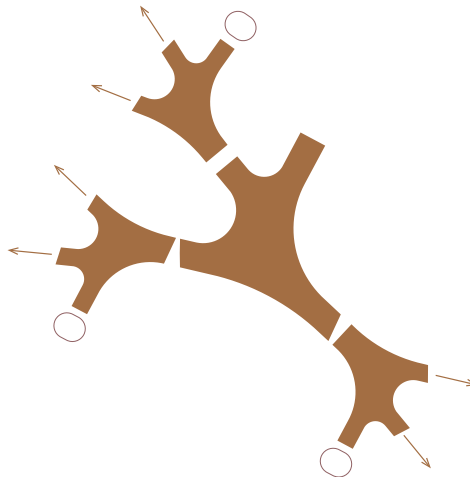


The scaling factor of 0.618 is introduced to give the fractal system a clear proportional rule. Each new branch is reduced in relation to the previous one, allowing the building to grow through repetition without becoming arbitrary. The factor refers to the golden ratio, often found in natural systems where growth happens through proportional reduction, branching, and self-similar organisation. The fractal system allows the institution to expand, contract, and operate in semi-independent clusters, matching the changing intensity of urban development cycles.



INITIAL CORE

The building begins from a central fractal unit, establishing the main spatial logic, primary orientation, and first points of expansion.



BRANCHING CLUSTERS

The core expands through smaller fractal branches, forming connected clusters that can host different programmes while remaining part of one system.



COMPLETE SYSTEM

Repeated fractal growth produces a distributed building form, where courtyards, circulation, and programme clusters create an open civic landscape.



building footprint



courtyard system

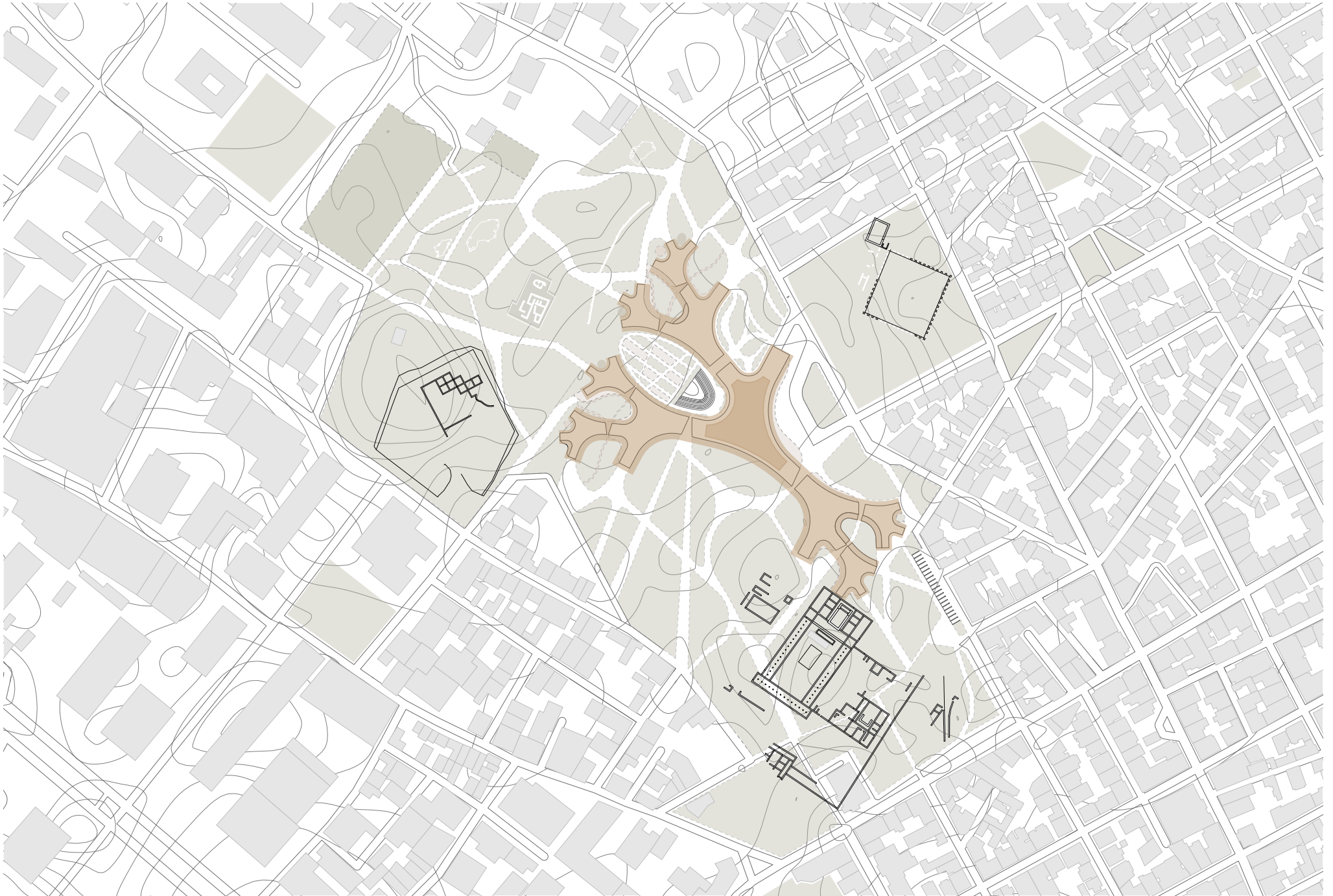


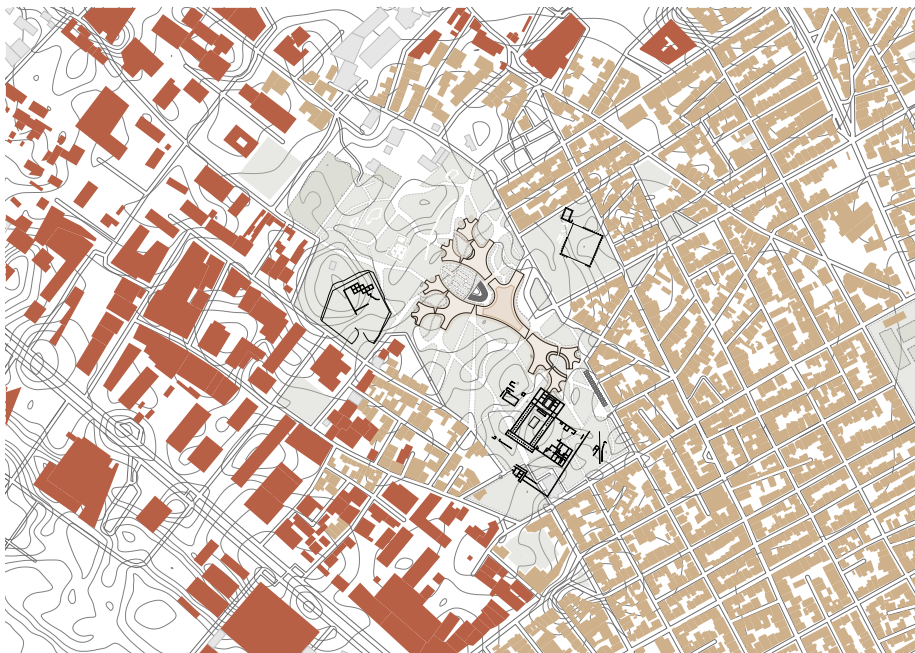
DESIGN IMPLEMENTATION











The building introduces a new typology to Athens and to its immediate surroundings. It is neither a conventional enclosed ministry nor a typical park pavilion. Instead, it is a low, open, and distributed institution. Its fractal form spreads through the landscape, creating a building that belongs to the park while remaining clearly identifiable as a public institution.

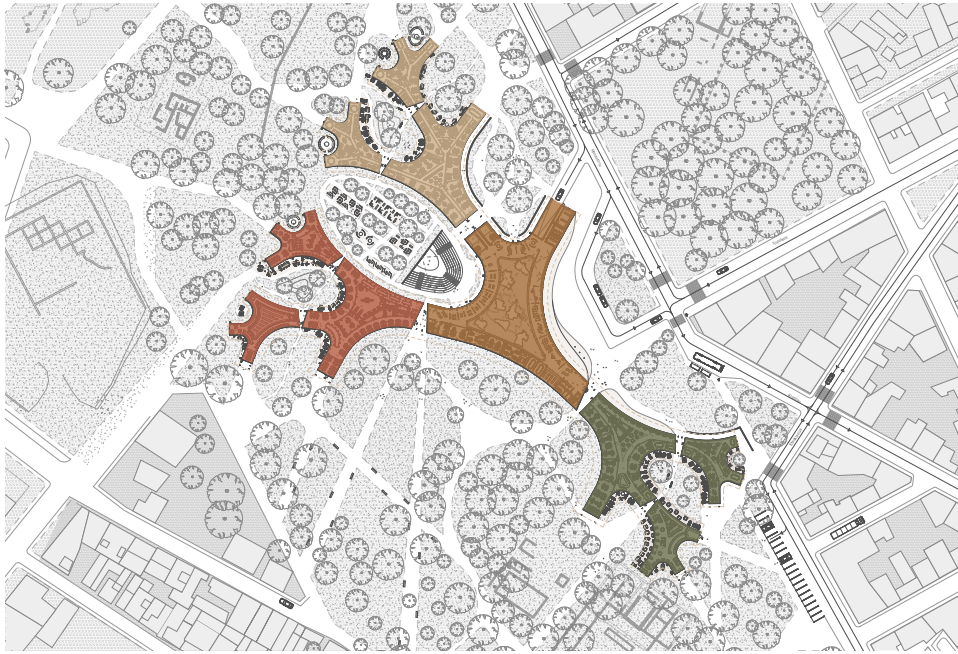
The proposal also rethinks the park itself. New trees are planted to strengthen the landscape, create shade, and improve the public realm. New pathways organise movement through the site, connecting the surrounding neighbourhoods, archaeological remains, ministry entrances, and public functions. These routes make the park more readable, replacing the sense of a loose continuous field with clear paths, thresholds, and moments of arrival.

The pathways support the internal logic of the building. They guide visitors towards the main public spaces, including the exhibition areas, Athens urban model, archive,

workshops, and civic programmes. In this way, the landscape becomes an extension of the institution, gradually introducing the public to the work of the ministry before they enter the building itself.

A key urban decision is the removal of the road that previously cut through the centre of the park. This reconnects the landscape and allows the archaeological remains to be experienced as part of a calmer and more continuous public space. At the same time, public transport is preserved: the bus lane is redirected around the park, with a new bus stop located near the ministry. Accessibility is maintained, while the centre of the park is returned to pedestrians, landscape, and civic use.





The building is understood through its spatial permeability and the organisation of its fractal clusters. Following the ambitions of the design brief, the Ministry of Urban Living Conditions is not designed as a closed institutional block, but as an open system of separate yet related compartments. Each fractal unit is positioned close to the others, but never fully attached. This creates continuous gaps, passages, and thresholds between them, allowing pedestrians to move freely through the building field without necessarily entering the ministry.

This permeability is essential to the civic character of the project. People using the park can pass between the fractals, cross the site, rest in the courtyards, or enter specific public functions without being forced into a single controlled route. The building therefore becomes part of the park's circulation system, rather than an obstacle within it. It supports both everyday pedestrian movement and more intentional visits to the ministry. The building is low-lying and predominantly one storey high. This is an important spatial and political

decision: the ministry is not elevated above the public realm, but placed on the same ground as the city it studies. Most activities happen on the ground level, making the processes of research, exhibition, debate, making, and decision-making more visible and accessible. The low profile supports the idea of transparency in ministerial work, while also keeping the building closely tied to the park, the public, and the archaeological context. Car parking is placed underground, so that mobility is accommodated without weakening the landscape potential of the park.

Visitors arriving by car or public transport are most likely to approach from the northwest, where the redirected bus stop and urban access points connect to the ministry. A second main entrance is located on the opposite side of the main compartment, receiving pedestrians coming from the city centre or moving through the park. Together, these entrances allow the building to operate from multiple directions, reinforcing its role as an accessible civic institution.

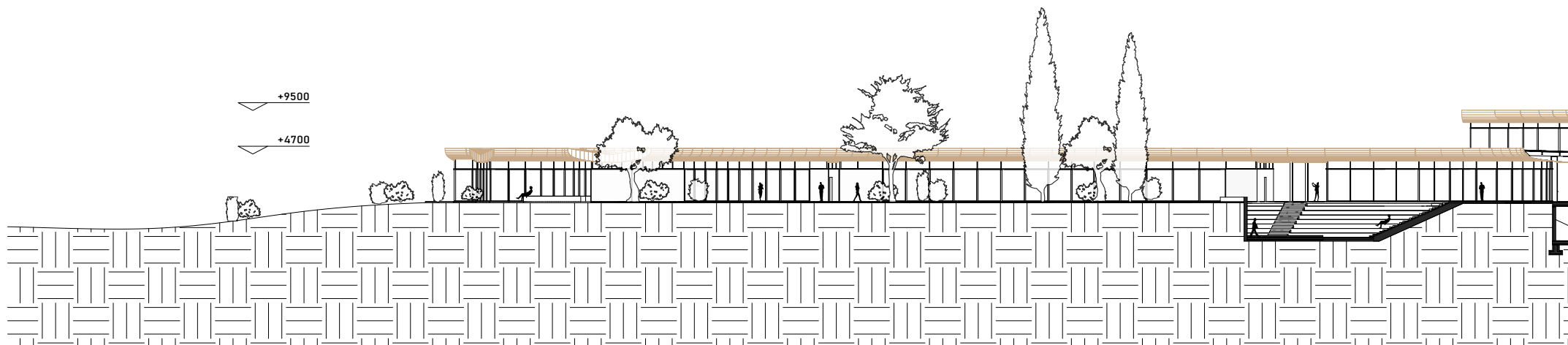
The fractal compartments form four main clusters. The Urban Forum acts as the core of the ministry, containing the most public and representative functions: the main exhibition area, the Athens urban model, spaces for debate, presentations, and public discussion. It is the place where the city is displayed, explained, and collectively discussed.

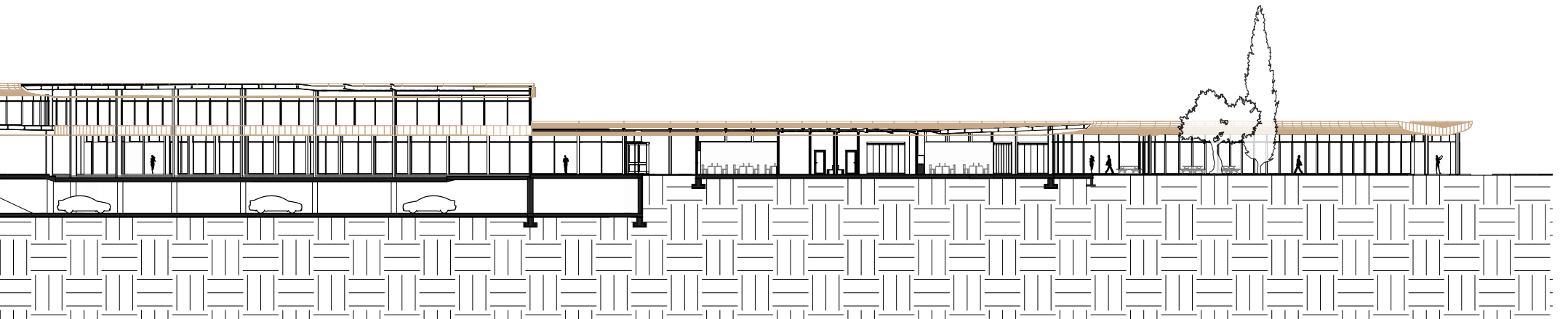
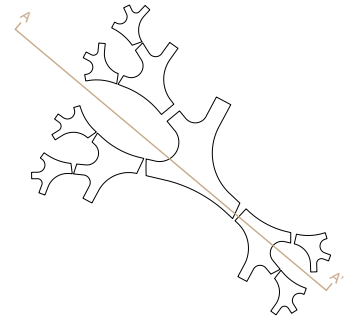
Around this core, three related clusters support different forms of urban knowledge production. The Urban Commons contains shared, open, and publicly accessible programmes, including

informal meeting spaces, collective working areas, public learning spaces, and the restaurant. The Urban Laboratory brings together fabrication, model-making, prototyping, material testing, and the archive, turning urban research into physical and experimental output. The Urban Academy provides spaces for research, teaching, workshops, offices, and focused collaboration, supporting the educational and institutional side of the ministry.

Each fractal compartment is autonomous, with its own entrance and internal organisation. At

the same time, each cluster is structured around a central courtyard. These courtyards are not leftover spaces, but active outdoor rooms related to the functions around them: a public gathering court for the Forum, shared social space for the Commons, a working and testing yard for the Laboratory, and a quieter learning courtyard for the Academy. Through this system, the building becomes a network of independent yet connected spaces, where architecture, landscape, circulation, and programme operate together.







- 1 transformable offices / classrooms with adaptive folding door systems
- 2 small meeting space
- 3 medium meeting space
- 4 large meeting space
- 5 kitchen / dining area
- 6 toilet
- 7 storage
- 8 courtyard workspace
- 9 informal exterior assembly space
- 10 exterior exhibition space





Urban Academy

This cluster contains the office spaces of the ministry, which operate according to the intensity of the city's urban cycles. During periods of high urban activity, they function as ministerial departments, supporting research, coordination, policy work, and collaboration between different actors. During quieter periods, they can be reconfigured for teaching, training, public learning sessions, and civic workshops.

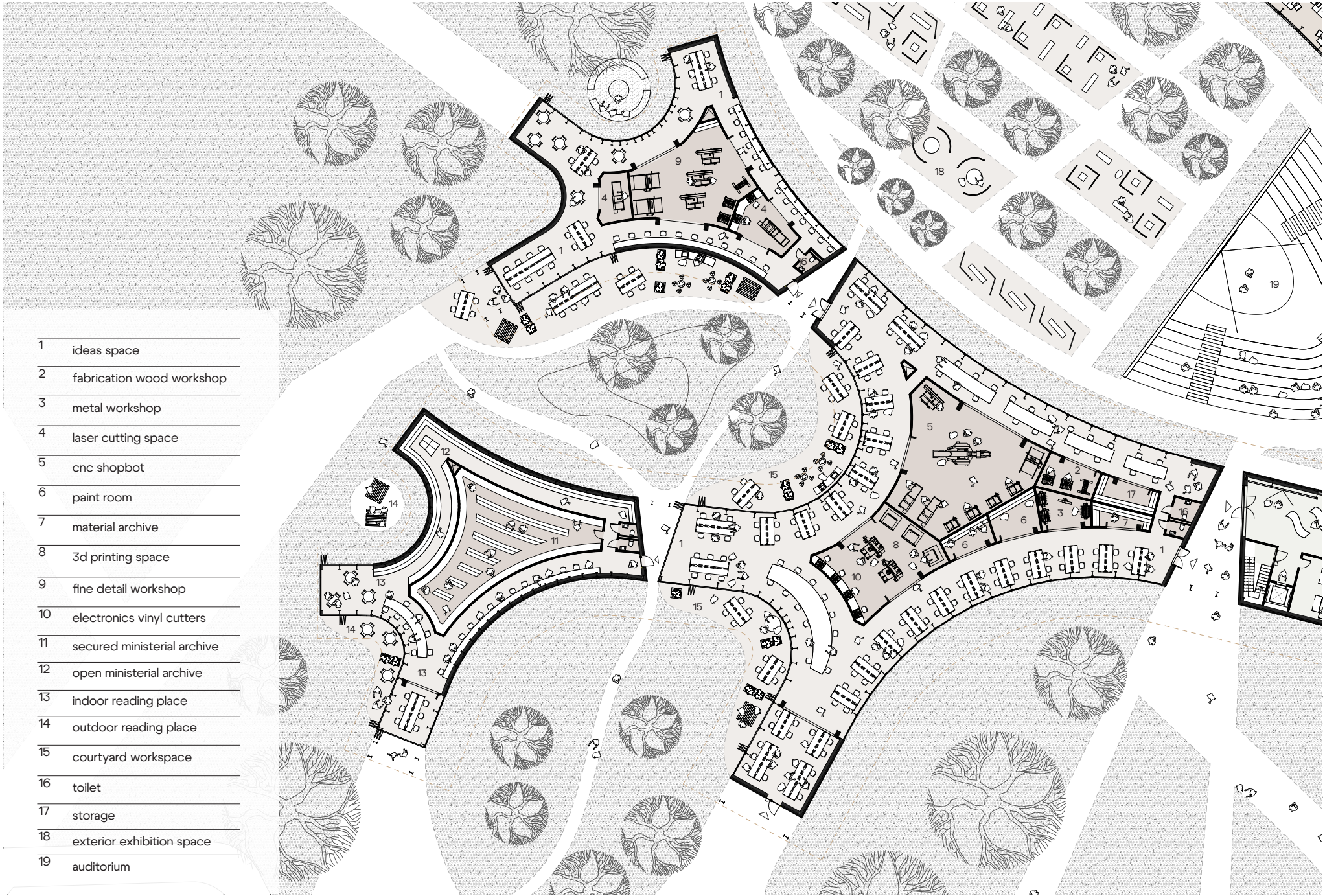
Flexibility is integrated through a system of folding doors, both along the façade and within the interior. These allow the offices to be opened, divided, or combined depending on the number of users and the activity taking place. Smaller rooms can support focused work, while larger spaces can host seminars, group discussions, or collaborative workshops.

Each fractal unit is autonomous, with its own entrance, storage, kitchen, and support spaces. This allows every compartment to function independently while still

belonging to the larger cluster. The central courtyard brings the units together as a shared outdoor room for informal meetings, pauses, and conversations. These encounters are important to the ministry, because urban knowledge is produced not only through official meetings, but also through everyday dialogue.

The folding door system strengthens the relationship between inside and outside. When opened, the façade becomes porous and the working spaces extend into the courtyards and surrounding landscape. This blurs the boundary between building and park, making the Urban Academy feel less like a closed office environment and more like an extension of the public ground. The Mediterranean climate supports this condition, allowing outdoor spaces to become active parts of the programme for much of the year.

The smaller courtyards create additional possibilities for outdoor use, including informal tutorials, small lectures, model discussions, reading sessions, or quiet individual work.



- 1 ideas space
- 2 fabrication wood workshop
- 3 metal workshop
- 4 laser cutting space
- 5 cnc shopbot
- 6 paint room
- 7 material archive
- 8 3d printing space
- 9 fine detail workshop
- 10 electronics vinyl cutters
- 11 secured ministerial archive
- 12 open ministerial archive
- 13 indoor reading place
- 14 outdoor reading place
- 15 courtyard workspace
- 16 toilet
- 17 storage
- 18 exterior exhibition space
- 19 auditorium



Urban Laboratory

The Urban Laboratory contains the spaces where urban knowledge is tested through making, material research, and physical experimentation. While the Urban Forum presents the city to the public and the Urban Academy supports research and teaching, the Laboratory turns ideas into models, prototypes, samples, and spatial tests. It is the most hands-on cluster of the ministry, connecting analysis with architectural production.

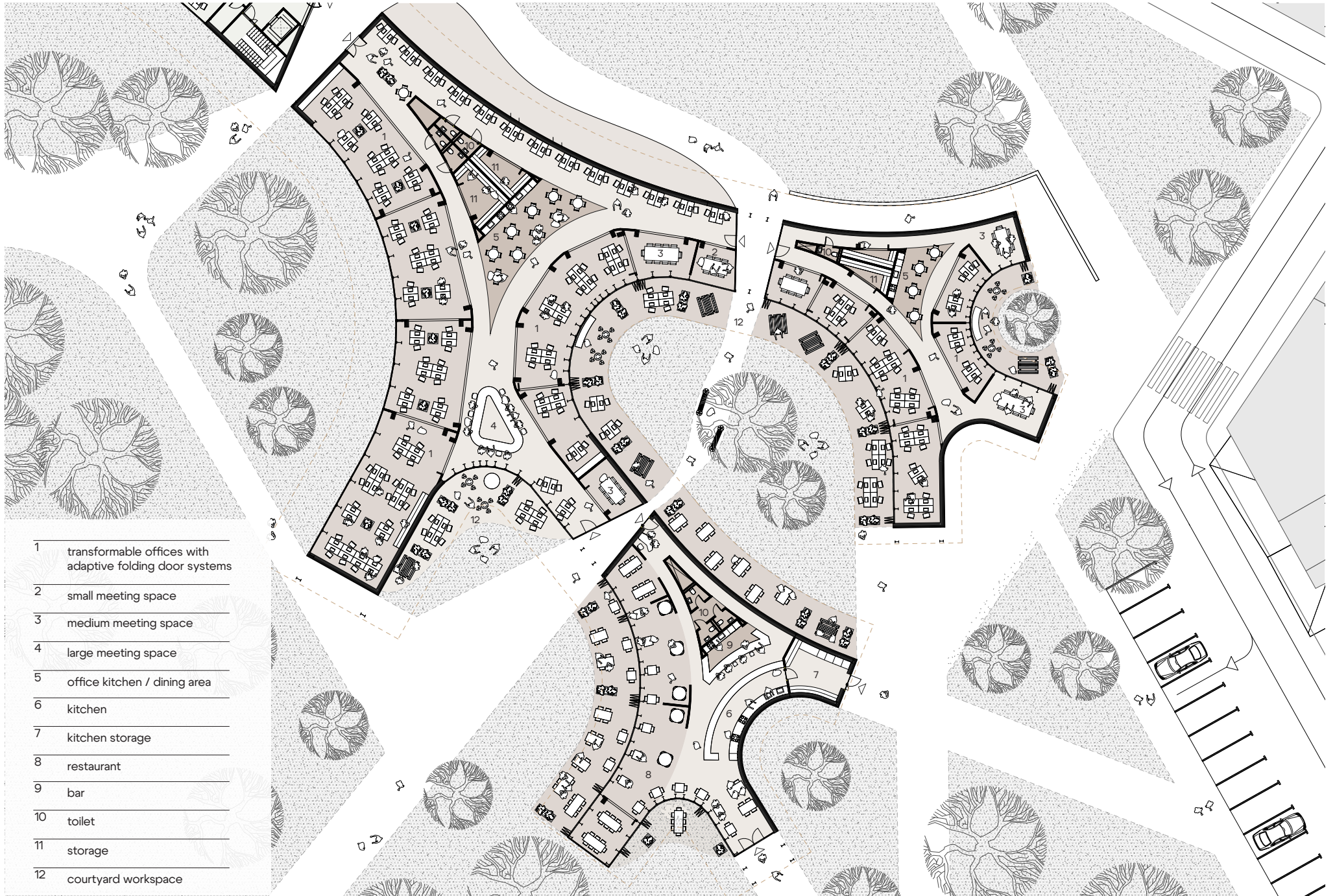
The cluster includes workshop areas, model-making spaces, material testing zones, and the archive. These

functions allow the ministry to work with the city not only through data and policy, but also through physical evidence. Urban conditions can be translated into models, construction fragments, material studies, façade tests, and temporary installations.

Each fractal unit is autonomous, with its own entrance, storage, service spaces, and working areas. This allows different activities to happen at the same time without disturbing one another. A workshop, archive room, or material testing space can operate independently, while still belonging to the larger laboratory cluster.

The central courtyard acts as a working yard for the cluster. It can be used for assembling larger models, testing prototypes outdoors, displaying material samples, or temporarily storing elements before they move into the exhibition spaces. It also makes the production process visible from the park, reinforcing the idea that the ministry is a place where the city is actively studied and made.

The smaller courtyards support more specific outdoor activities, such as testing, reviewing, or discussing work in progress.



Urban Commons

The Urban Commons contains the shared and publicly accessible spaces of the ministry. It supports the everyday civic life of the building, creating an informal environment between institutional work and the public life of the park. While other clusters focus on administration, research, exhibition, or fabrication, the Commons provides spaces for gathering, resting, eating, meeting, and exchange.

The cluster includes open working areas, shared meeting spaces, public learning rooms, flexible gathering spaces, and the restaurant. These programmes allow the ministry to be used not only by officials,

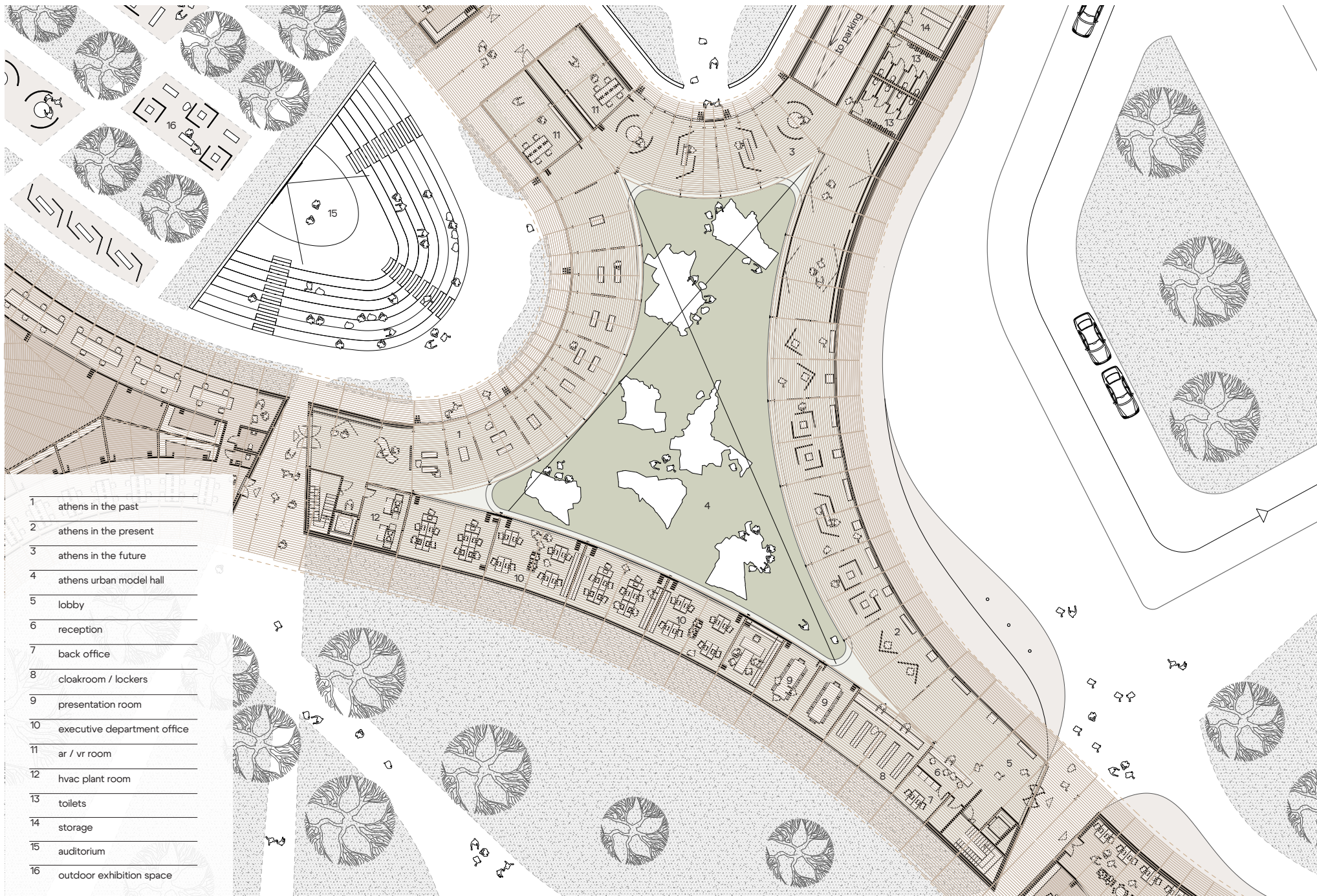
researchers, and invited participants, but also by residents, students, visitors, and people passing through the park.

Each fractal unit is autonomous, with its own entrance and support spaces, allowing different public activities to take place independently. A workshop, informal lecture, community meeting, or public lunch can happen without requiring the whole cluster to operate in the same way. This gives the Commons flexibility while keeping the spaces connected through the same architectural logic.

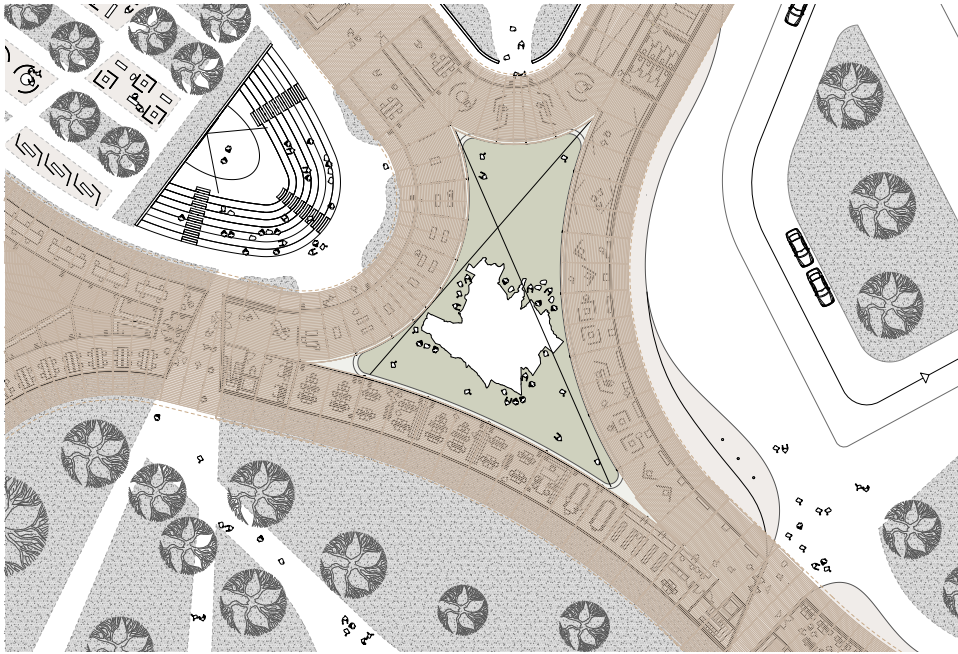
The central courtyard forms the social heart of the cluster. It becomes a shared outdoor room where people can meet before events, continue

conversations after exhibitions, work outside, or simply spend time in the park. These informal moments are important because the ministry is not only a place for official decision-making, but also for building relationships between citizens, professionals, and public institutions.

The folding façade and courtyard structure strengthen the connection between the Commons and the park. When opened, the interiors extend outward, allowing the restaurant, meeting spaces, and public programmes to spill into the landscape. The smaller courtyards create additional pockets for outdoor seating, reading, discussion, and small gatherings.



- 1 athens in the past
- 2 athens in the present
- 3 athens in the future
- 4 athens urban model hall
- 5 lobby
- 6 reception
- 7 back office
- 8 cloakroom / lockers
- 9 presentation room
- 10 executive department office
- 11 ar / vr room
- 12 hvac plant room
- 13 toilets
- 14 storage
- 15 auditorium
- 16 outdoor exhibition space



Urban Forum

The Urban Forum forms the heart of the Ministry of Urban Living Conditions. It is the most public and representative cluster of the building, where the city is displayed, discussed, and made understandable. While other parts of the ministry focus on research, teaching, fabrication, or administration, the Forum brings these processes into public view and acts as the main civic room of the institution.

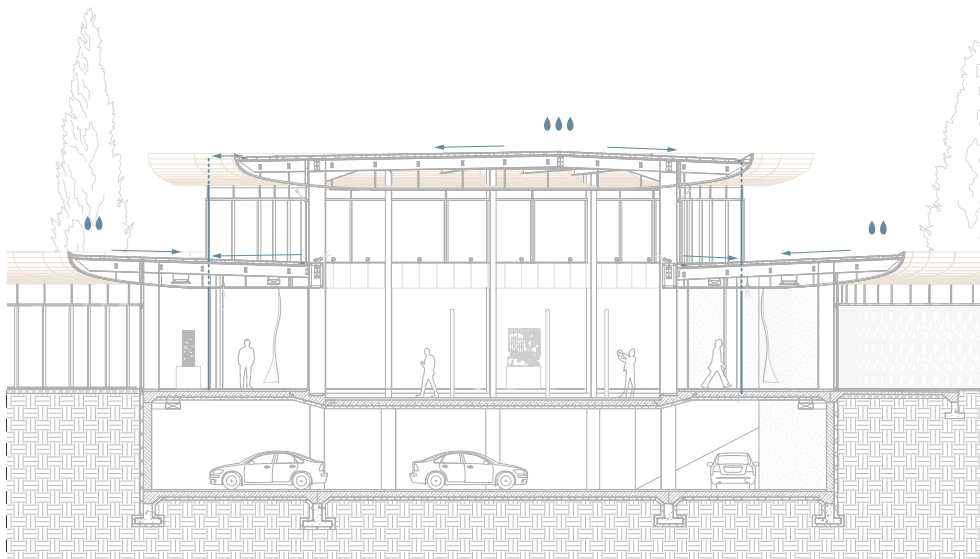
The central element of the Forum is the 1:500 model of Athens. The model is divided into seven movable parts, each based on the administrative boundaries of the city. This allows it to operate not only as a static representation, but as an active tool for analysis, discussion, and public engagement. The separate parts can be moved, opened, or rearranged, turning the model into a working instrument for studying Athens at the scale of its neighbourhoods and districts.

The main model space is double-height, giving the Forum a clear

institutional and public presence. Around it, the exhibitions are organised through three themes: Athens in the Past, Athens in the Present, and Athens in the Future. The Past exhibition presents historical maps, archival photographs, archaeological layers, and earlier urban conditions. The Present exhibition focuses on current transformations such as housing pressure, tourism, vacancy, infrastructure, public space, and everyday patterns of use. The Future exhibition becomes a space for scenarios, design proposals, policy simulations, public contributions, and possible futures for Athens.

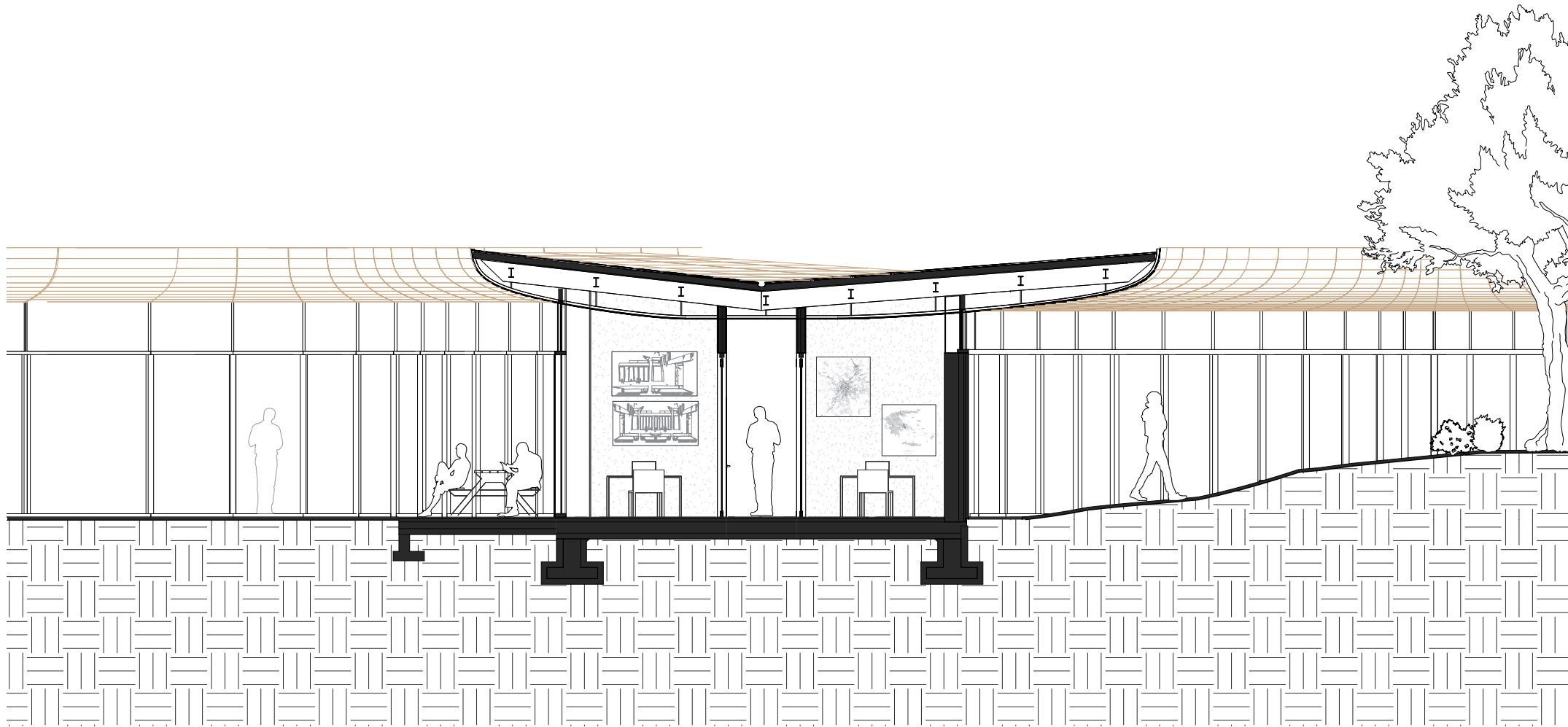
The offices of the executive department are also located within this compartment. This keeps the leadership of the ministry visually and spatially connected to the public areas of the Forum, rather than hidden in a separate administrative block. Processes of coordination, decision-making, and institutional work remain close to the spaces where the city is exhibited and debated.

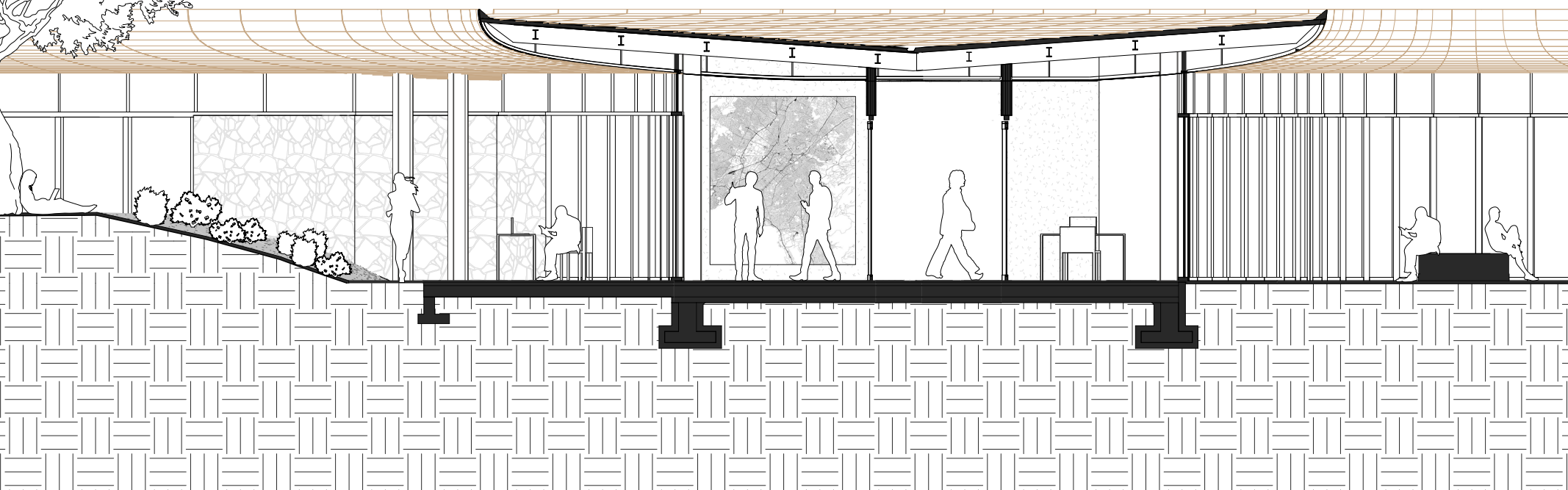
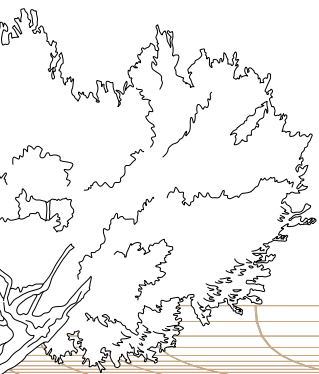
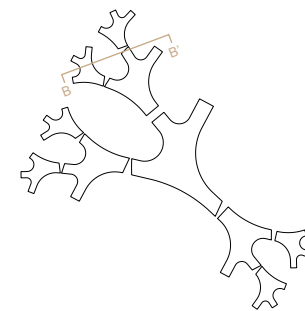


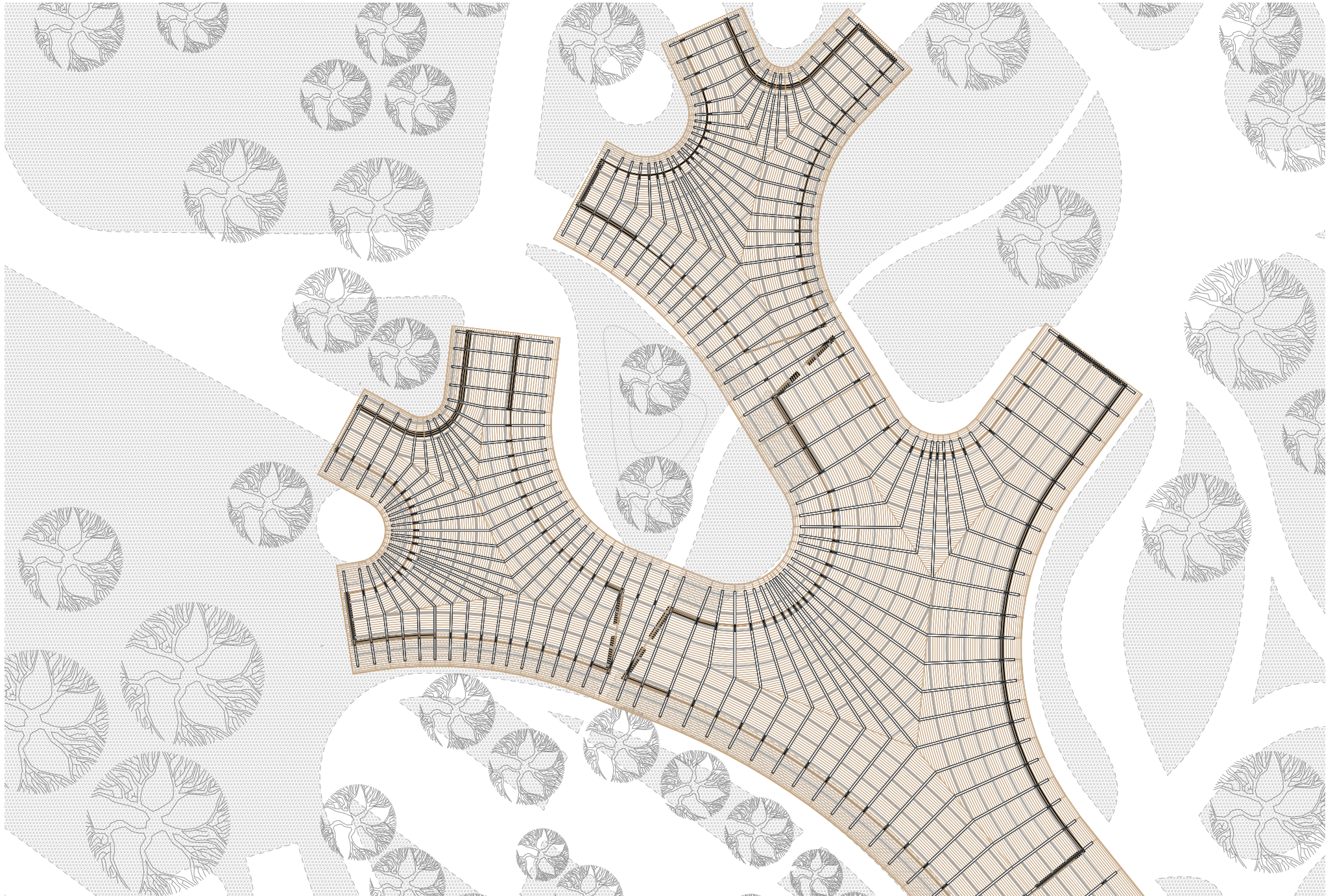


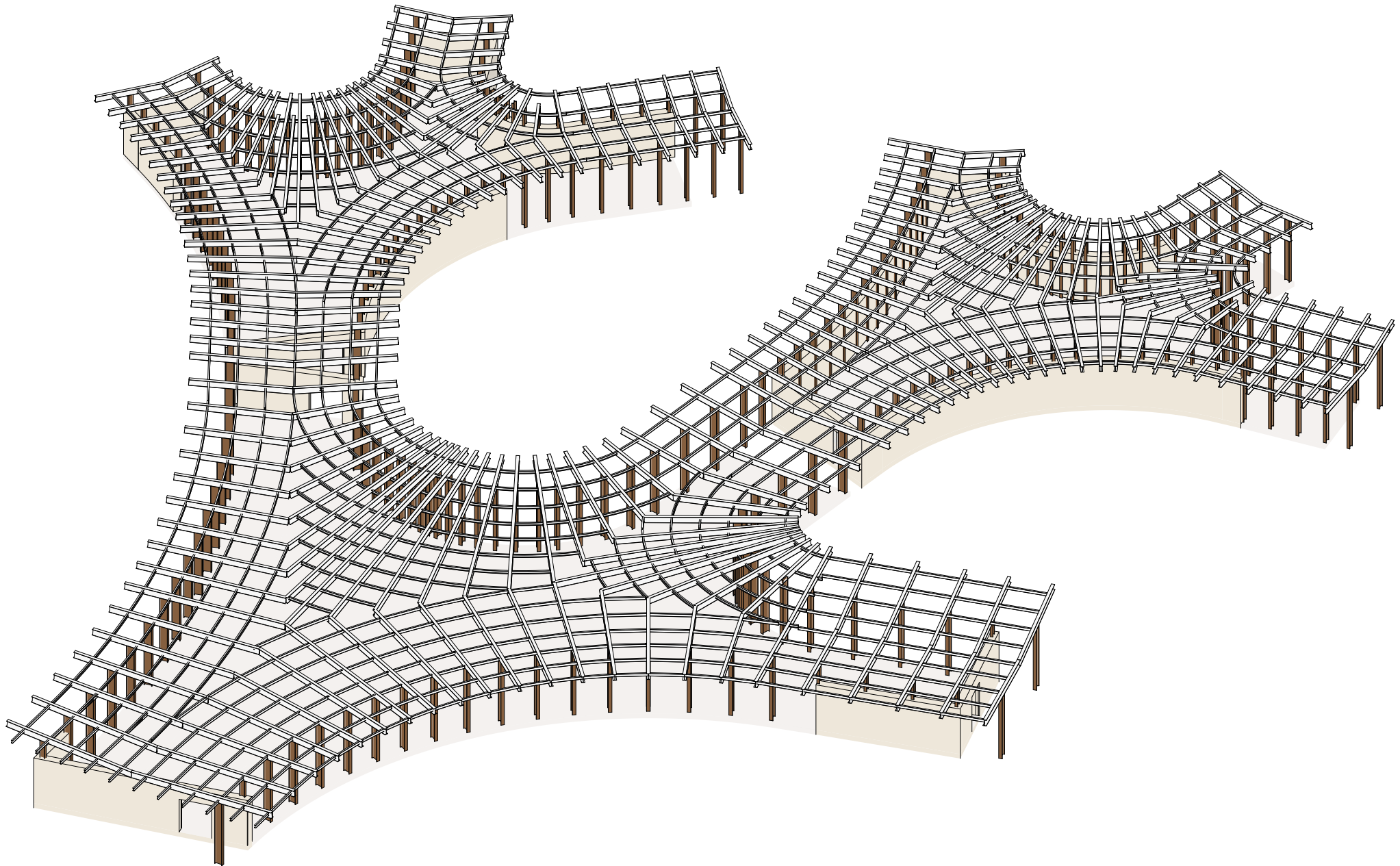
The double-height volume also supports the climatic performance of the Forum. It allows daylight to penetrate deeper into the building, with morning and evening sun entering the central space more directly. The higher volume also works as a thermal buffer: warm air rising from the exhibition and model areas can collect above the occupied zone and escape through openable window compartments at

the top. Cross ventilation further supports fresh air movement through the space, while mechanical ventilation is included to provide additional comfort during the hotter summer period. The roof geometry also supports rainwater management, directing water from the roof surfaces into gutters connected to vertical downpipes.









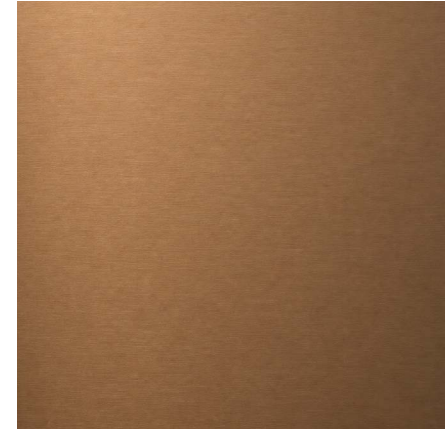
EXTERIOR



untreated limestone



coated steel structure



anodised aluminium

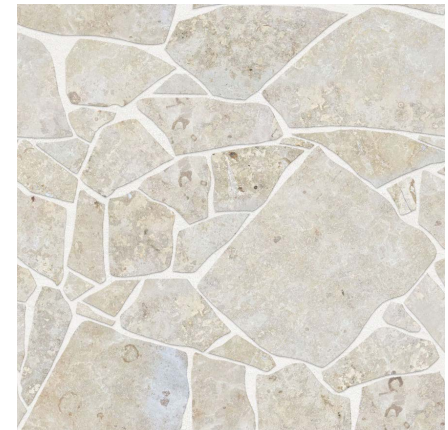
INTERIOR



polished terrazzo



limestone blocks



limestone crazy paving

exterior material studies



interior material studies



Material Studies

The final material strategy was developed through a series of exterior and interior render studies. These studies tested the balance between structure, roof cladding, façade expression, interior atmosphere, and the climatic conditions of Athens. The aim was not only aesthetic, but also to choose materials that support the public character, durability, and environmental performance of the ministry.

For the exterior, several material directions were tested before the final combination was defined. Exposed timber was considered, but it was not suitable as a main external material in this context. Under the strong Athenian sun, timber would weather quickly and require constant maintenance. A structural timber skeleton was also not the most appropriate choice, as Greece does not have the same local timber

production logic as regions where this material is more naturally sourced. For this reason, steel was chosen as a more realistic and durable solution for a low, open civic pavilion.

The roof material was also carefully tested. Timber would have created warmth, but would be difficult to maintain under the Mediterranean climate. Highly reflective metals were rejected because of glare, overheating, and the risk of creating an uncomfortable interior atmosphere. The final choice is satin anodised aluminium in a champagne-copper tone. It gives the building a warm civic presence without behaving like a fully reflective surface, while supporting the roof as the main architectural element.

The steel columns, mullions, and structural accents are coated in a corten-like finish rather than white or neutral paint. This gives the structure a stronger institutional presence

and creates clear vertical accents beneath the continuous roof. The darker metal elements help ground the building visually and reinforce the rhythm between structure, façade, and roof.

The interior floor finishes change between different fractal compartments according to use and atmosphere. Polished terrazzo is used in more public and representative areas, while rougher terrazzo supports active working spaces with heavier use. Limestone crazy paving appears in transitional and courtyard-related areas, strengthening the connection between the interior, the park, and the material character of Athens. Together, these finishes create variation without losing coherence. They are robust, civic, and suitable for a building that operates between public institution, workshop, academy, and urban landscape.

1 Exterior load-bearing wall construction:
 80mm Untreated limestone cladding irregularly cut
 30mm Air gap
 EPDM membrane
 90mm EPS insulation
 Waterproofing
 250mm Limestone ashlar blocks

2 Interior floor construction:
 25mm brown rough terrazzo
 60mm Leveling screed
 200mm Reinforced concrete
 Vapor retarder
 100mm XPS insulation

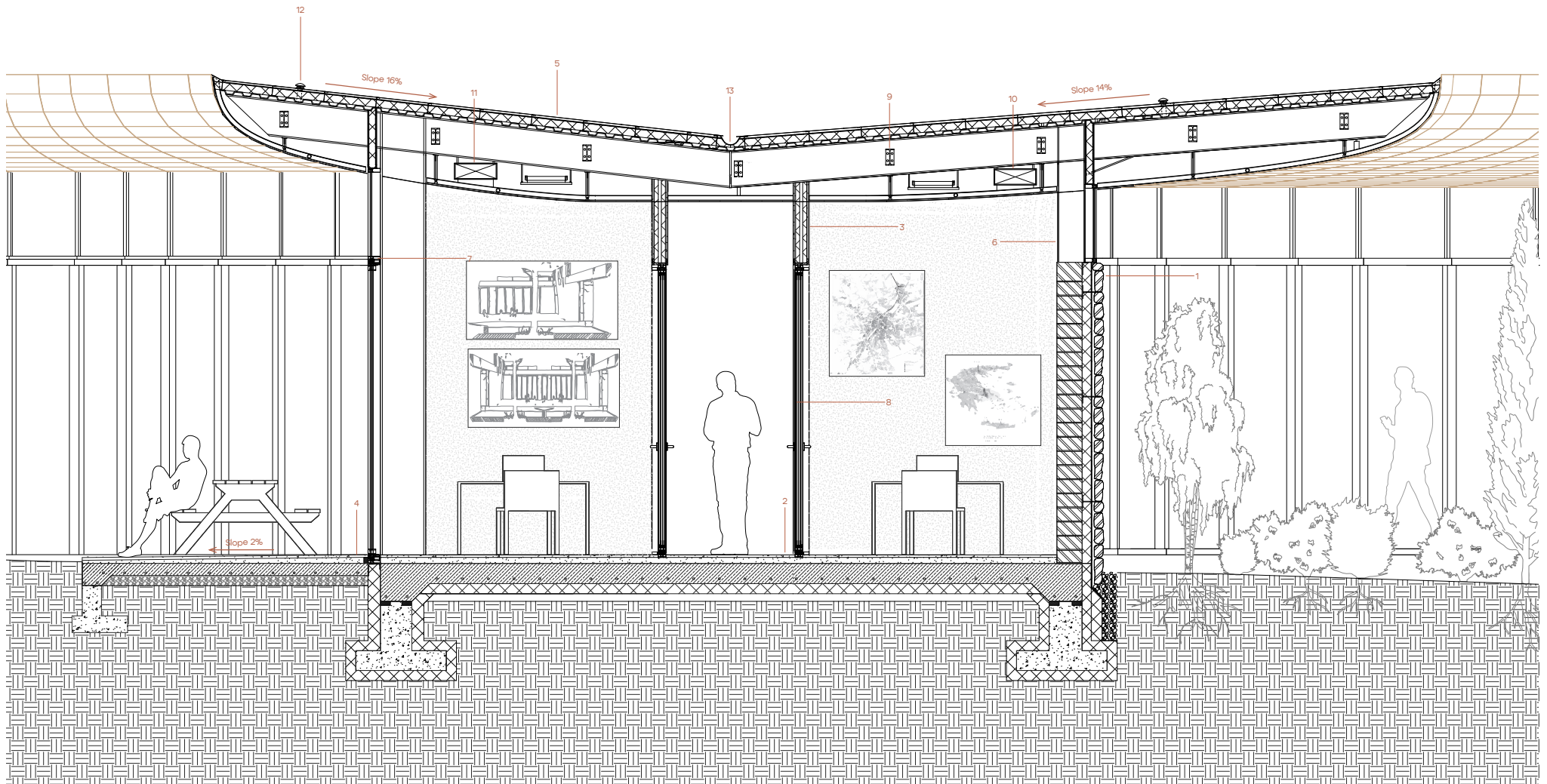
3 Interior wall construction:
 12.5mm two-layer gypsum plasterboard
 40mm EPS insulation layer
 30mm Air gap with Aluminium stud frame
 40mm EPS insulation layer
 12.5mm two-layer gypsum plasterboard

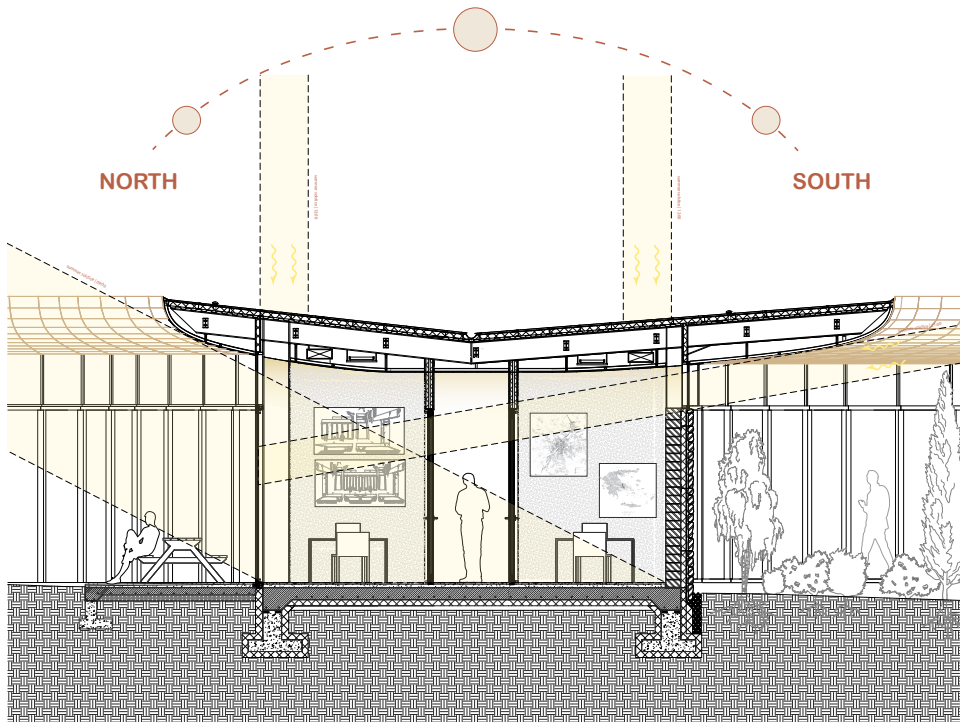
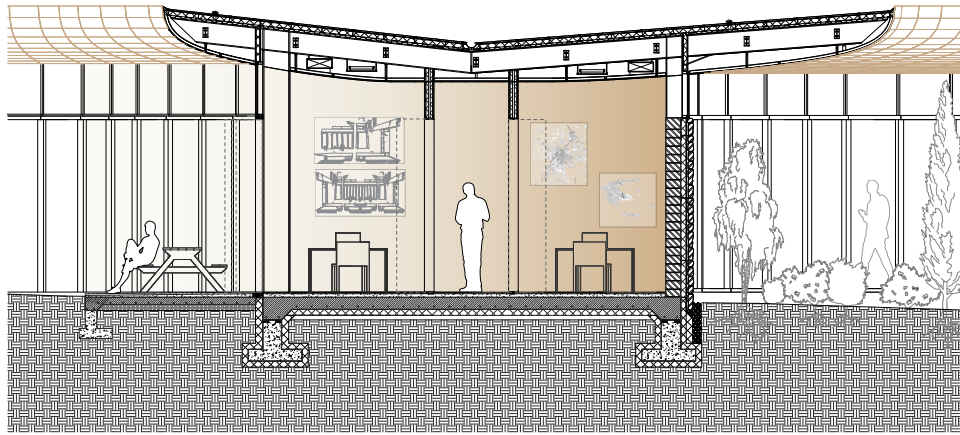
4 Exterior terrace floor construction:
 25mm brown rough terrazzo
 60mm - 30mm Leveling screed (2% inclination)
 120mm Reinforced concrete
 100mm compacted crushed stone sub-base

5 Roof construction:
 2mm Satin copper-bronze anodised aluminium panels with welded seam connection
 75mm EPS insulation
 40mm Corrugated steel roof sheeting
 IPE 360 steel structural beam
 50mm hanging C-profile
 1mm Satin copper-bronze anodised aluminium panels with welded seam connection

6 IPE 270 steel structural column
7 Triple glazed curtain wall with folding panels system
 125mmx90mm aluminium mullions
8 Nanawall Systems folding door
9 IPE 160 steel purlins
10 400x150 supply air vent

11 400x150 exhaust air vent
12 Roof vent ø60mm
13 Roof gutter





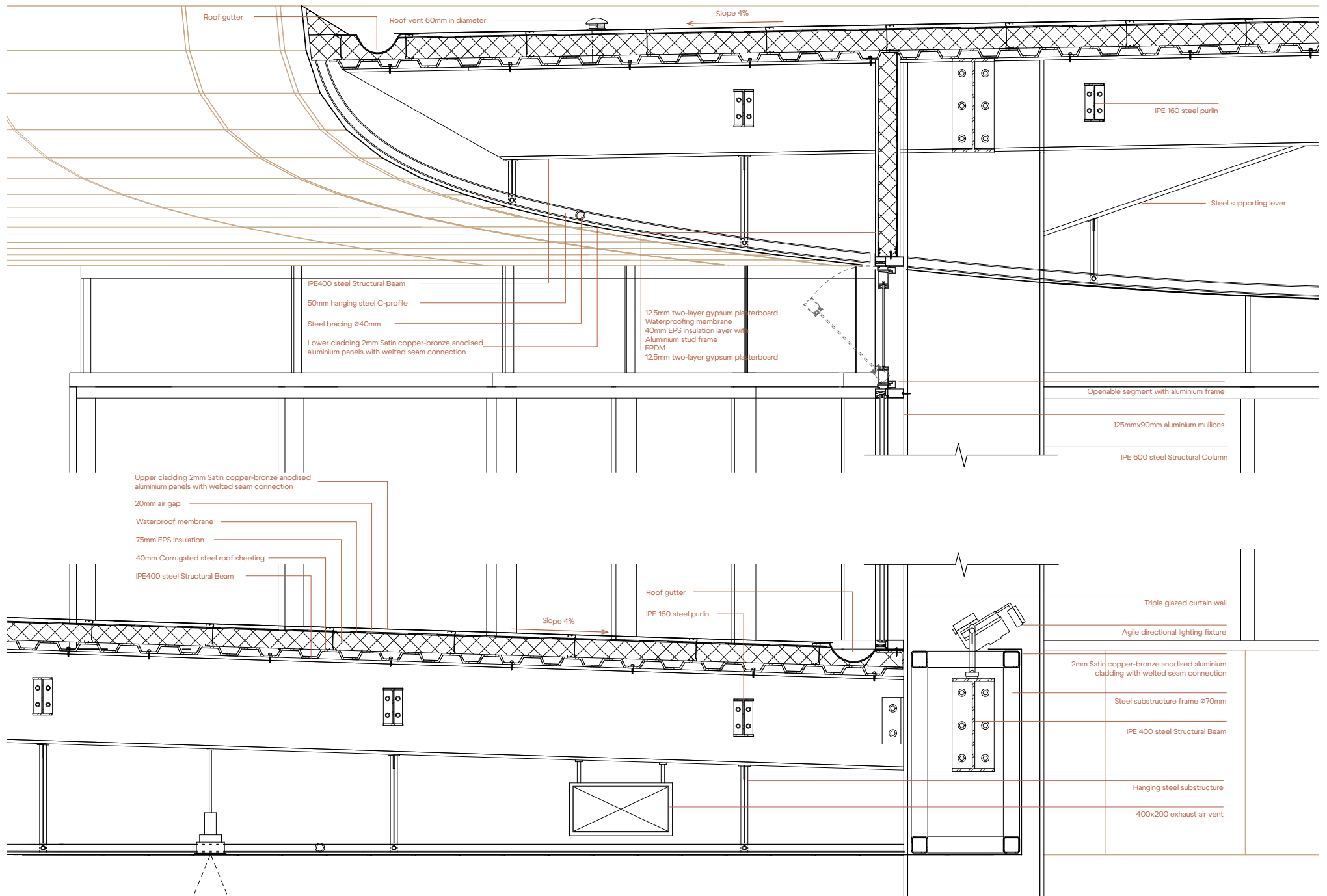
The technical realisation of the building is based on a clear combination of structural efficiency, climatic performance, material continuity, and adaptability. The primary structure is a steel frame with bracing, allowing the roof geometry and fractal organisation to remain lightweight and precise. The frame is supported by steel columns and structural wall elements finished in limestone. This combination gives the building both flexibility and mass: the steel structure supports the open spans and adaptable interiors, while the limestone walls provide stability, thermal mass, and a stronger connection to the material character of Athens.

The building meets the ground through a low and controlled foundation strategy, suitable for its position within the park and close to the archaeological context. The aim is not to dominate the ground, but to sit lightly within the landscape while still accommodating the necessary underground functions, including car parking. By placing parking below ground, the surface of the park remains available for pedestrians,

trees, courtyards, and public use.

The limestone walls contribute to the environmental performance of the building. Their thermal mass helps slow down temperature changes inside the interior spaces. During summer, the building warms up more gradually, reducing rapid overheating. During winter, the walls store heat and release it more slowly, supporting a more stable indoor climate. In this way, the material is not only used for atmosphere, but also as part of the building's passive climatic strategy.

Natural ventilation and daylight are integrated as well. Cross ventilation is possible across the offices, workshops, and public spaces, supported by the fragmented fractal layout, courtyards, and openable façade elements. Every office has access to daylight, reinforcing the idea that ministerial work should take place in open, healthy, and visually connected spaces. The curtain wall uses low-e glazing to balance transparency, daylight, and thermal performance. Mechanical ventilation is also present as a backup system,



especially during the hotter summer period when natural air movement is not sufficient.

The roof structure works as a lightweight steel system, with primary and secondary members supporting the ceiling and external cladding build-up. The roof is clad with anodised aluminium panels in a satin champagne-copper finish, giving the building a warm metallic surface that changes with light conditions. The roof is also ventilated, so that hot air collecting beneath the metal cladding can escape through the cavity instead of being trapped inside the construction.

Interior walls can be used as active surfaces for hanging maps, diagrams, drawings, research material, and project documentation. Folding doors and adaptable partitions allow rooms

to change size and use over time, supporting the shifting programmes of the ministry. Lighting is integrated into the seams of the ceiling panels, keeping the technical systems visually controlled while reinforcing the rhythm of the roof structure. Services such as ventilation, cabling, drainage, and lighting are integrated within the roof and ceiling zones, allowing the interior spaces to remain open and adaptable.

The material palette is kept consistent across the building. The interior combines limestone walls, terrazzo flooring, low-e curtain wall glazing, exposed structural columns, and mullions coated in corten steel.

The environmental strategy combines passive and active systems. Thermal mass, cross ventilation, daylight, shaded courtyards, roof ventilation,

and mechanical backup work together to respond to the Mediterranean climate. Rainwater is directed from the roof surfaces towards gutters and vertical downpipes. In this way, the roof geometry works both formally and technically.

Safety and accessibility are supported by the distributed organisation of the building. Because each fractal unit has its own entrance and direct relationship to the outside, escape routes remain short and clear. The open layout also allows different parts of the ministry to operate independently when required. Through this system, structure, climate, materiality, services, and public use are integrated into one coherent architectural strategy.







CONCLUSION



The project proposes the Ministry of Urban Living Conditions as a new civic institution for Athens: a place where the city can study itself, debate itself, and imagine its future. Starting from the instability of Athens and the fragmentation of existing institutional responsibilities, the proposal introduces a building that produces urban knowledge through research, exhibition, fabrication, education, public dialogue, and governance.

Located in Plato's Academy, the project connects the historical idea of learning and collective thought with the contemporary need for a more adaptive public institution. The building is not designed as a closed administrative object, but as a low, permeable, and distributed civic landscape. Its fractal organisation allows different programmes

to operate independently while remaining connected through courtyards, pathways, and shared public spaces.

The outcome is both institutional and architectural. It proposes a new form of ministry: transparent, open, and tied to the ground of the city. At the same time, it introduces a distinct building form for Athens, one that rethinks how public authority, urban research, and civic life can occupy the park together.

Ultimately, the project argues that an unstable city requires an institution capable of working with instability. The Ministry of Urban Living Conditions becomes a spatial framework for making Athens visible, understandable, and open to collective transformation.

Radical Institutions
**A Civic Framework for Urban Knowledge
Production and Participation**
Design Data and Society

Chair:
Prof. Georg Vrachliotis

Tutors:
Angela Rout
Marija Mateljan

AE+T:
Rufus van den Ban

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Radical Institutions Athens
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November 2025 – June 2026

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