

The image is a composite architectural rendering. The background shows a multi-story brick building with a prominent, angular, cantilevered section. In the foreground, there are various public seating areas: a long wooden bench, a brick wall with built-in steps, and a paved plaza. White silhouettes of people are placed throughout the scene to show how the space would be used. The overall atmosphere is one of a modern, community-oriented public space.

# From Third to Fourth Place

*Rethinking Social Infrastructure in the Hybrid Society*

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<b>Index</b>	
<b>Introduction</b>	<b>4</b>
<i>Problem statement</i>	<i>4</i>
<i>Relevance</i>	<i>11</i>
<i>Objective and motivation</i>	<i>12</i>
<i>Research and design questions</i>	<i>13</i>
<i>Scope</i>	<i>14</i>
<b>Approach</b>	<b>16</b>
<i>Methodology</i>	<i>16</i>
<i>Theoretical framework</i>	<i>17</i>
<b>Results</b>	<b>27</b>
<i>Sub question I</i>	<i>28</i>
<i>Sub question II</i>	<i>40</i>
<i>Sub question III</i>	<i>55</i>
<b>Conclusion and discussion</b>	<b>66</b>
<i>Conclusion</i>	<i>67</i>
<i>Implications and recommendations</i>	<i>94</i>
<i>Reflection</i>	<i>95</i>
<b>References</b>	<b>96</b>

**Abstract**

Madrid's Programas de Actuación Urbanística (PAU) were designed for the car-centric, 20th-century commuter workforce that no longer exists. We now live in a hybrid society where the daily life of our home and work are blending. The result is a repopulation of these neighborhoods, while the urban grid is still dominated by massive, isolated blocks and oversized infrastructure, focused on vehicles and pedestrian transience. This research argues that these overdimensioned layouts create a socio-spatial mismatch, generating non-places where a localized population is physically contained by an inward-looking architecture built for temporary daytime absence. While prioritizing car efficiency and absolute privacy, this closed morphology eliminates the intermediate human-scale street life required for community building.

Utilizing a Research-by-Design methodology focused on Sanchinarro, the study deconstructs these defensive, car-dominated boundaries through Actor-Network Theory. Now our lives are hyperconnected, this research argues we should be looking differently at Third Places. It proposes the vital social infrastructure as a Fourth Place: a system of porous thresholds inhabiting the sidewalk edge. Proposing a network of architectural micro-interventions, this project reclaims the oversized urban voids, shifting the PAU from isolated architecture towards a series of open, collaborative urban commons.

Figure 1: Urban expansion of Madrid.

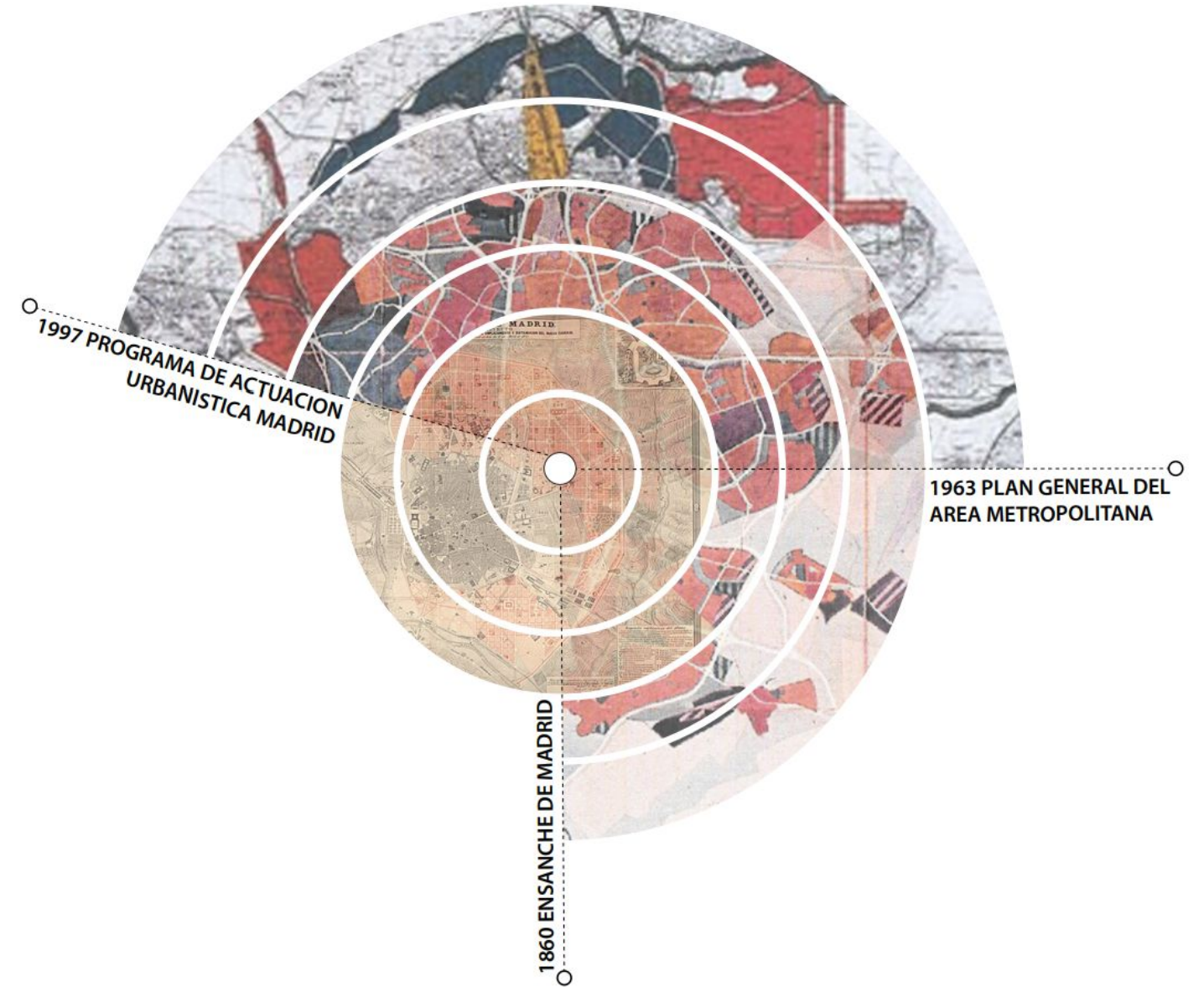


Figure 2: Evolution of the workforce.

**Problem Statement**

We are building cities for a society that no longer exists. Madrid's PAUs represent the physical manifestation of the 20th-century urban logic where the vehicular efficiency prioritized over human presence (Blasco, 2013). This model is designed for the commuter: workers would leave the suburb by their car in the morning and return at night to the complete privacy of their homes. This would mean the suburbs are less absent during the day. To accommodate this lifestyle, the scale of the neighborhood was radically expanded. In Sanchinarro, residential density has plummeted to just 34 dwellings per hectare, while the residential blocks themselves have expanded into massive perimeters wrapped around vast, internal gardens (Iñigo & Mace, 2018).

This overscaled layout creates what Sennett (2018) identifies as the closed city: the structural segregation where the inhabitant is either locked inside their private block or completely exposed on a car-dominated street. Today, this socio-spatial friction is in direct conflict with the daily reality of a hybrid society (Gratton, 2021). As of 2025, 73% of Spanish employees explicitly reject a full return to the traditional office (Alonso, 2025). This massive shift has effectively re-anchored daily professional, domestic, and social life back within the local neighborhood (Eurofound, 2025; Trevor & Holweg, 2022). However, the PAU is still stuck within the 20th-century commuter based logic.



*Traditional worklife*



*Hybrid Society*

Crucially, these building blocks are engineered to act as self-contained communities. By incorporating all private necessities and recreational amenities, including swimming pools, paddle courts, playgrounds, and parking garages, directly inside their secured walls. This results in all daily domestic and leisure activities happening strictly from within.

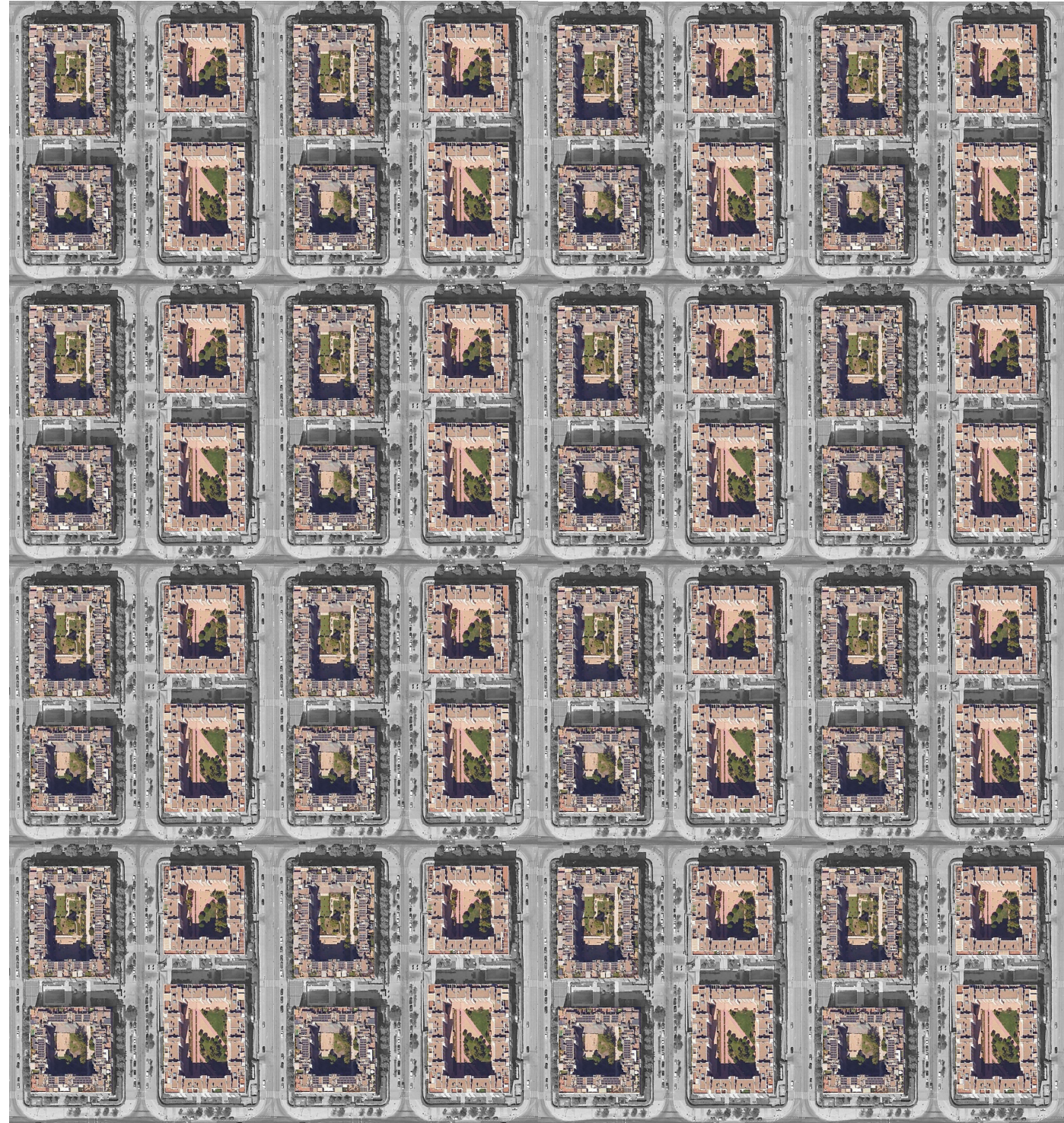
**Figure 3:** *The closed block typology in the PAU.*



*Note.* Adapted from Google Earth.

*What happens if we keep building like this?*

**Figure 4:** *The monolithic repetition of Sanchinarro's closed block typology.*



*Note.* Adapted from Google Earth.

Furthermore, the overdimensioned municipal voids between these blocks create a psychological failure of what psychologists call prospect-refuge (Appleton, 1975). The architectural block provides absolute refuge without prospect because it is visually and physically blind to its surroundings. Conversely, the street provides infinite prospect without refuge because it is an overexposed, empty landscape. This spatial mismatch completely eliminates the intermediate territory necessary for the cultivation of weak ties, the low-intensity, casual connections that bridge social groups and foster community resilience (Granovetter, 1973; Aelbrecht, 2016). Consequently, the car-centric landscape dissolves into what Marc Augé (1995) defines as non-places: landscapes of pure transition space. These non-places suppress the spontaneous social friction required for communal bonding (Hajer & Reijndorp, 2001). As a result, the resident is relegated to the role of a mere passenger, not an active participant of the urban space (Gehl, 2011; Sennet, 2018).



A primary driver of this oversized morphology is the Dotacional Reserve, a legal mandate requiring that for every square meter of housing, a specific percentage of land must be ceded to the City Council for public use (Ayuntamiento de Madrid, 1997; Blasco, 2013). Because Sanchinarro was designed for a projected workforce that took decades to arrive, these plots were sized for massive facilities, such as hospitals, sports complexes and schools, rather than the organic growth and local amenities the neighborhood actually requires (Iñigo & Mace, 2018).



Madrid Centro  
Pre 19th Century



Barrio de Salamanca  
End 19th Century



Ciudad Lineal  
Beginning 20th Century



San Blas  
'60 & '70



Sanchinarro & Las Tablas  
Beginning 21th Century

This has resulted in oversized urban voids that remain empty because the city lacks the budget for large-scale development, while the private sector finds no profit in the small-scale retail interfaces that would foster local social life (Blasco, 2013). The gaps were originally intended by modernist planners to serve as visual lungs to offset high-density growth (Rodrigues, 2007), however in the current state, it makes pedestrian transit feel like crossing a desert. This is further enhanced by the constant repetition of the building blocks. From a bird's-eye view, the urban plan seems cohesive, while from the street-level, the pedestrian might feel disorientated.



**Figure 7:** Resident walking his dog in an urban void in Sanchinarro.

Figure 8: Private entity in Sanchinarro.



In the current 2025/2026 period, the city has attempted to fill these holes through Concesiones Demaniales, granting 75-year concessions to private entities as authorized under public property law (Ley 33/2003). However, this trend often fills the public voids with massive, closed institutions, such as private foundations or specialized clinics.

Figure 9: Evolution of the third place.

### Relevance

In an era where hybrid work has permanently decentralized the population, society faces an immediate shortage of local, non-commercial public infrastructure, leaving remote workers isolated within their fragmented neighborhoods. For the architectural profession, this study offers a critical, repeatable strategy for reclaiming underutilized public space. By shifting the role of the architect from a designer of isolated residential blocks to a curator of a distributed network of micro-interventions, the project establishes a new benchmark for how the profession can treat overscaled, urban voids as active community assets. It provides a concrete, physical design method to transform municipal liabilities into vibrant urban commons that directly restore a neighborhood's social cohesion. Socio-theoretically, this study utilizes an Actor-Network Theory (ANT) lens (Fallan, 2008; Latour, 2005; Law, 1992) to deconstruct how car-centric infrastructure actively repels community interaction. By analyzing the physical streetscape as an active participant in human behavior, the research contributes to the academic evolution of the Fourth Place (Aelbrecht, 2016; Morisson, 2019), facilitating a clearer spatial understanding of how hybrid societies utilize the physical environment. This framework marks a fundamental shift away from the traditional Third Place (Oldenburg, 1989) and introduces non-commodified thresholds that weaves together architecture, infrastructure, and landscape into a hybrid morphology (Angélil & Klingmann, 1999). Ultimately, the research advances architectural scholarship by expanding Gibson's (1979) theory of spatial affordances, proving how low-cost, high-density physical hardware can be systematically deployed to convert dead infrastructural non-places (Augé, 1995) into urban commons (Akbil et al., 2022; Borch & Kornberger, 2015).

### 1903 GEORG SIMMEL

Argued that the sensory overload of the city forces individuals to adopt a protective emotional detachment, establishing the modern paradox where physical proximity leads to social isolation.

### 1989 RAY OLDENBURG

Defined the "third place" as the neutral social ground distinct from home and work, arguing that these informal gathering spots serve as essential infrastructure for community building, personal well-being, and democracy.



### 1961 JANE JACOBS

Laid the foundation for urban vitality by arguing that successful public spaces rely on diverse pedestrian interactions and the self-regulating social order of "eyes on the street." She demonstrated that a neighborhood's safety and liveliness are fundamentally rooted in its architectural and social complexity.



○ **2009 MOORE ET AL.**

Views MMOs as public spaces, analogous to those in the physical world, because they simulate 3D spaces and contain thousands of people who do not know each other, and they take face-to-face conversation as their primary metaphor for user interaction.

○ **2008 EDWARD SOJA**

Defined "Thirdspace" as a comprehensive way of looking at the world that merges the physical environment we see with the abstract ideas we have about it, creating a "real-and-imagined" whole that is more than the sum of its parts.

○ **2021 MINA AKHAVAN**

Sees "third spaces" as new coworking spaces and maker spaces, that serve as alternative solutions for work within the context of the digital revolution and the rise of the sharing economy.

**Objective and Motivation**

The motivation for this research originates from a globally visible widening gap between top-down architectural design intent and social reality. This mismatch is heavily visible within Madrid's PAUs, but it represents a systemic failure found throughout modern urban planning worldwide. The vibrant street life that historically characterized traditional city centers are systematically missing from modern residential developments. Contemporary life operates within a hybrid society where the boundaries between production and domesticity have blurred, leaving a significant amount of residents present in their neighborhoods throughout the day. Because of the rise in remote and flexible work, the demand for active, lively public infrastructure within local neighborhoods is higher than ever. Yet, the physical built environment remains static in a car-centric past, leaving residents stranded in empty, dead streetscapes. The ultimate goal is to adapt the physical reality of the city to the fluid, daily needs of contemporary hybrid society. To achieve this goal, the project's objective is to design a multi-scalar network of public pavilions along the overscaled boulevard grid, transforming a municipal liability into a vibrant, self-governed urban common. Urban isolation and loneliness cannot be solved by simply adding more residential units. Instead, architectural intervention must reclaim the underutilized, empty urban voids. Technically, the project aims to integrate a dual-layered technical and social ecosystem. This includes deploying a circular construction framework using locally extracted thermo-clay materiality for optimized thermal mass, while structurally managing internal metabolic resource loops, such as solar energy, water management, and organic waste recycling, optimized to operate continuously across shifting 24-hour hybrid work cycles.

## **Research and Design Questions**

### **Main Question:**

*To what extent can a network of architectural interventions be designed as a distributed fourth place to mediate the scalar mismatch between Madrid's car-centric PAU perimeters and its oversized urban voids?*

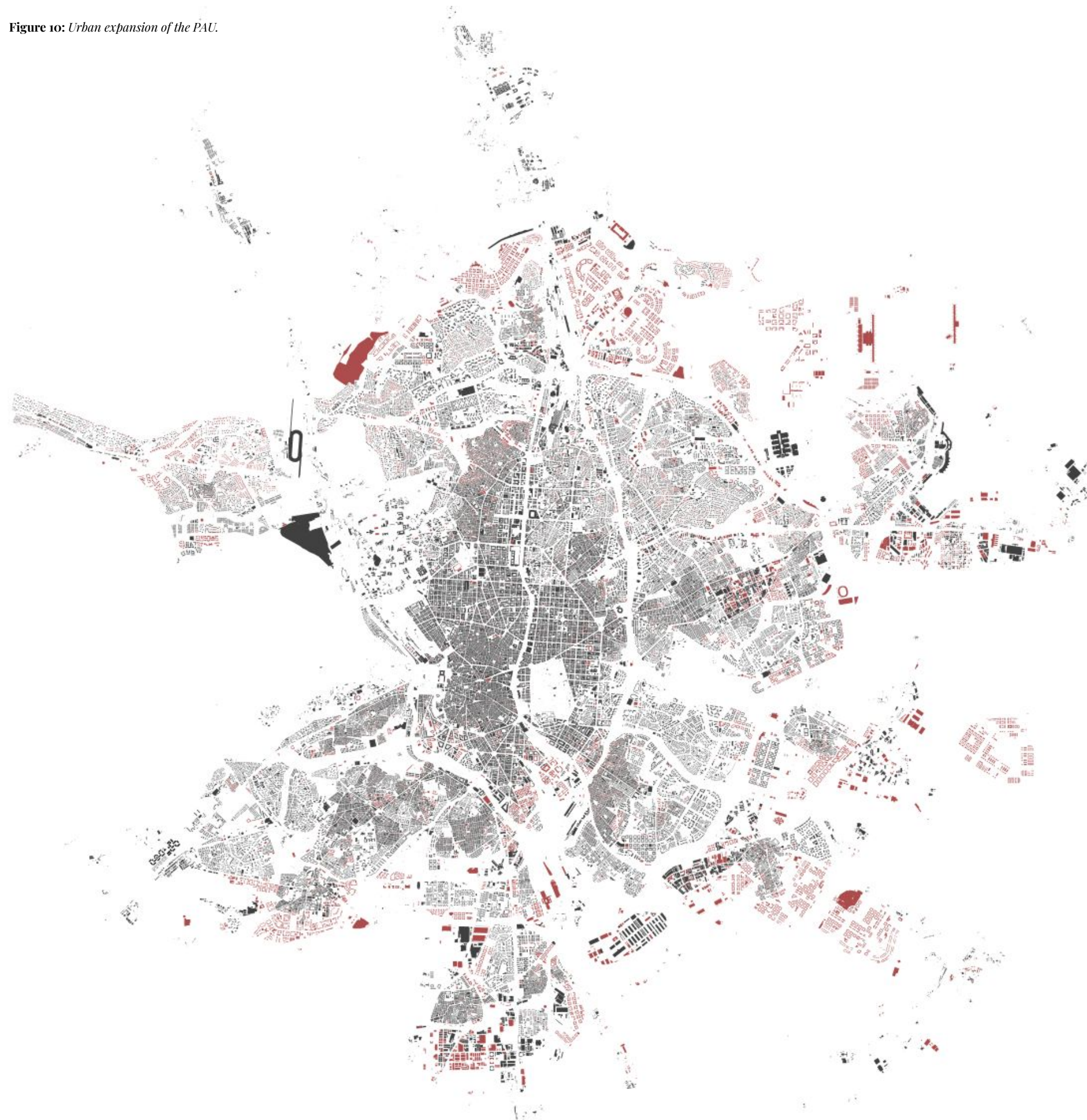
### **Sub-Questions:**

*Which material and infrastructural actants within Sanchinarro's car-centric grid enforce pedestrian transience, and where do they produce the specific socio-spatial gaps between the closed block and the oversized urban voids?*

*What critical lessons can be extracted from a comparative analysis of historical and contemporary precedents to unveil why certain urban interventions failed while others succeeded in fostering community vitality?*

*How must these strategies be programmatically layered, multi-scalarly deployed, and structurally managed, integrating tectonic materiality and socio-metabolic resource loops, to transition a municipal liability into a self-governed urban common?*

Figure 10: Urban expansion of the PAU.



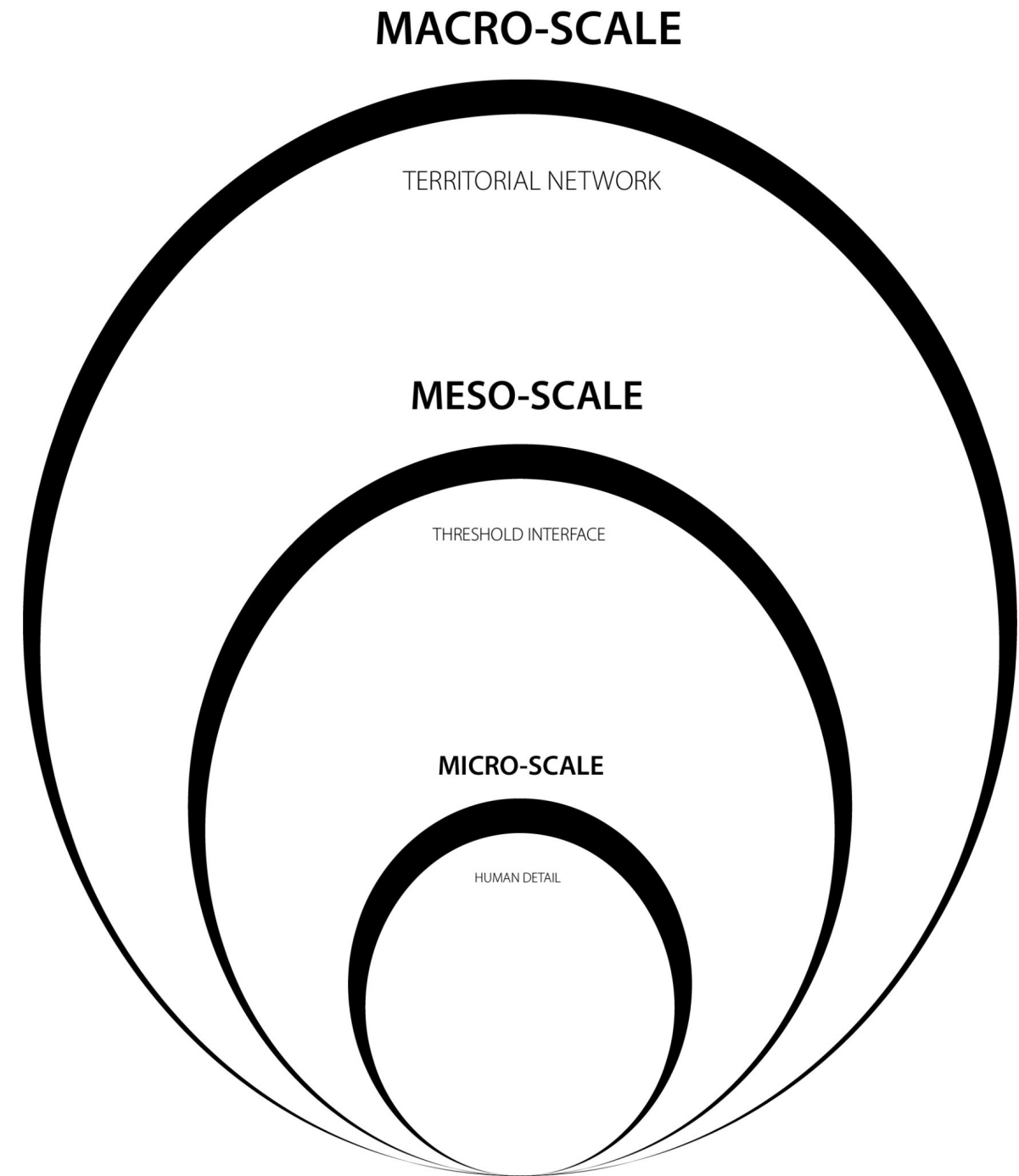
Note. Red highlights the post 2000 expansion.

### Scope

The spatial and theoretical boundary of this research is strictly situated within the oversized urban voids, empty sidewalks, and unmaintained public spaces of Sanchinarro, a PAU (Programa de Actuación Urbanística) in northern Madrid. While the PAU's high-density residential blocks provide eyes on the street (Jacobs, 1961), the closed city characteristics (Sennett, 2018) force all daily activity inward. This results in a critical failure of prospect-refuge theory (Appleton, 1975) directly along the central avenue: the residential blocks provide absolute refuge without prospect to their surroundings, while the overscaled voids of the Bulevar offer infinite prospect without refuge, leaving pedestrians entirely exposed within a hostile, car-dominated streetscape. The core design and research challenge is to break this binary without modifying the private interior courtyards or altering the residential blocks themselves. Instead, this project operates exclusively within the public ground-plane voids of this central corridor (Augé, 1995). To establish a targeted and overseeable field, the architectural intervention concentrates on Sanchinarro's main boulevard. Within this physical field, the programmatic scope introduces a network of hybrid Fourth Place pavilions. This specific programme combines digital co-working spaces, flexible workstations for the remote workforce, makerspaces, material repair shops, community event rooms, and integrated shared-mobility hubs. Institutionally and legally, the scope is framed by the current 2025/2026 wave of Concesiones Demaniales authorized under Spanish public property law (Ley 33/2003). This positions the architect not as a builder of closed private blocks, but as a strategist who utilizes legal frameworks and material hardware to deploy a porous, self-governed urban common.

Figure 11: Scales of intervention.

Architecturally, the scope is defined by a multi-scalar network of distributed interventions. At the macro-scale, the research focuses on the oversized urban voids running alongside the boulevard. At the meso-scale, the project looks at the threshold interface between the building and the street. Within this boundary, the programmatic scope introduces the fourth place. At the micro-scale, the intervention focuses on the tectonics, affordances, and physical joints of the plug-in components using locally excavated thermo-clay blocks with optimized thermal mass. Temporally, the scope addresses the shifting rhythms of the hybrid workday. Over a shifting 24-hour cycle, the network adapts to temporalities of the hybrid society. By ensuring a continuous, multi-layered presence on the ground plane across the entire day, the architecture provides shared occupation for the actants of the space.





**Theoretical Framework**

The Madrid PAU model is the manifestation of 20th-century functionalist planning, which prioritizes vehicular efficiency and strict land-use segregation (Blasco, 2013). In Sanchinarro, this zoning logic has produced what Sennett (2018) terms a closed city. On one side are massive, isolated residential blocks built for a traditional commuter lifestyle, on the other is a contemporary hybrid society of remote and flexible workers whose daily lives are localized yet digitally interconnected (Gratton, 2021; Alonso, 2025). This phenomenon is deeply rooted in the structural friction between the planned and the lived city (Helleman, 2015). This framework exposes the fundamental disconnect between how city environments are envisioned and constructed by professional planning institutions, and how those same spaces are actually navigated, experienced, and physically populated by their everyday users (Helleman, 2015). In the context of Sanchinarro, the planned city enforces empty landscapes designed for the car, completely ignoring the contemporary needs of the lived city. While currently, hybrid workers actively seek localized sites for community and social infrastructure (Alonso, 2025).

Figure 12: The tension and mutual interaction between the 'planned' and 'lived' city.

Planned city	Lived city
Top-down	Bottom-up
Streets, squares, buildings	Social structures
Governments, politicians, directors, policymakers	Residents and users
Visions, ideals	Reality
Problem- and supply-oriented	Solution-oriented and demand-driven
Thematic knowledge	Area knowledge
Statistics	Stories
Striving for urban averages	Neighborhood identity as a starting point
Vertically bureaucracies, hierarchically	Horizontal corporation, network
Making a city	Being the city
Structure, organized	Spontaneous
City level	Individual level
Organizing, blueprint	Organic, cyclic process
House	Home

Note. From Helleman (2015).

Figure 13: Mapping of Sanchinarro from birds eye and street view.

To understand why this environment fails to support daily community life, this research utilizes Actor-Network Theory (ANT) (Latour, 2005; Law, 1992). Within an ANT framework, physical elements like a blind concrete plinth or a steel security fence are not passive, neutral boundaries. Instead, they operate as non-human actants that actively enforce social isolation, scripting the hostile terms of the city by blocking pedestrian movement and preventing visual connection with the street (Fallan, 2008).

Rather than accepting these spaces as empty non-places of pure transition (Augé, 1995), the project applies the principles of Hybrid Morphologies (Angélil & Klingmann, 1999). Instead of building a singular, monumental object, the project deploys a network of smaller, porous elements. By weaving a coordinated system of pavilions and street pockets into the oversized urban voids, the architecture dissolves the hard boundaries of the PAU.

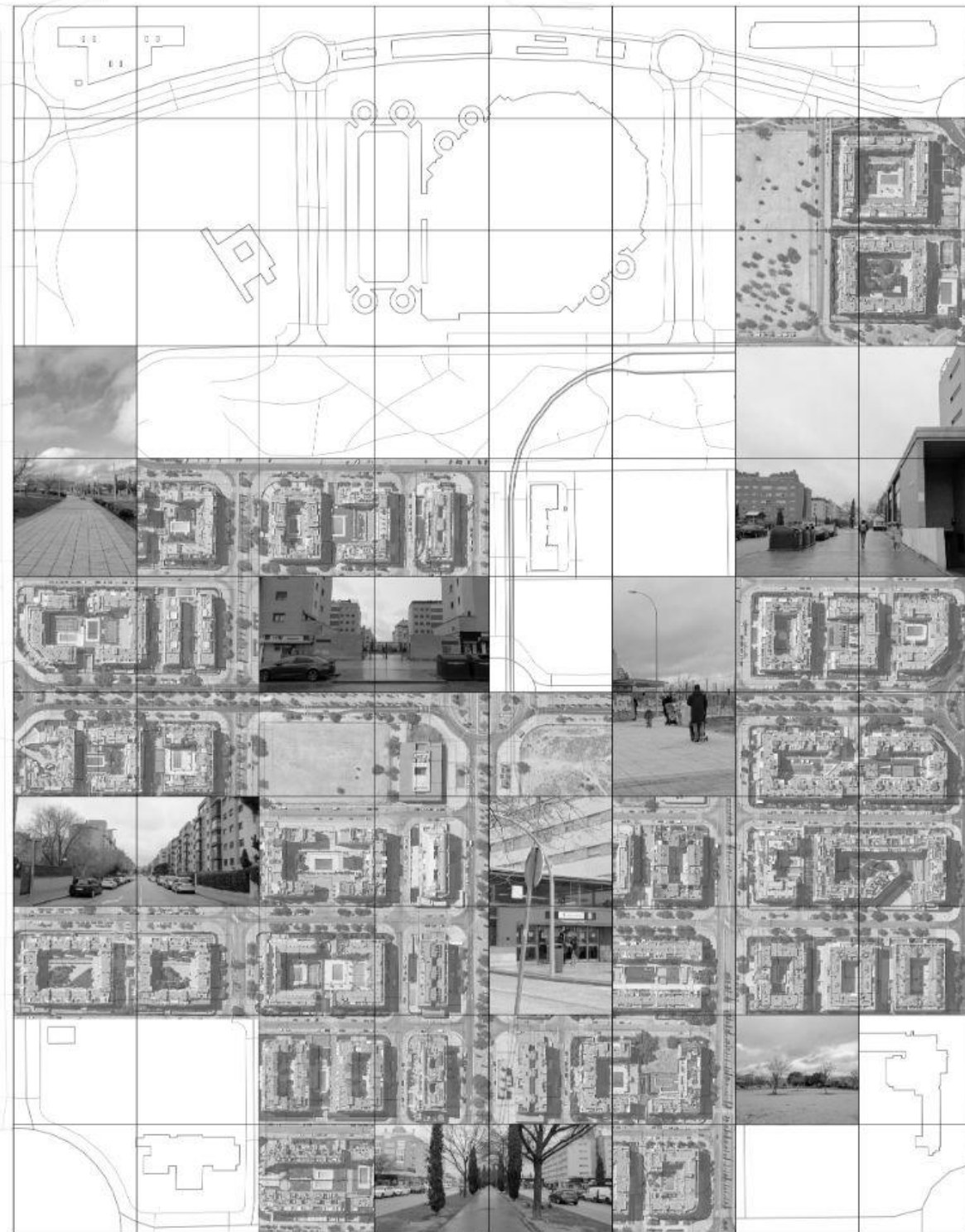


Figure 14: Actants of the commuter workforce.

This disconnect is further enhanced by the transformation of labor within the Spanish urban context. While the PAU was engineered for the 9-to-5 commuter, the contemporary reality has shifted toward a state of permanent fluidity. According to Eurofound (2025), remote work has stabilized as a core pillar of the European economy, but the local data is even more striking: as of 2025, 73% of Spanish employees explicitly reject a full return to the office (Alonso, 2025), prioritizing hybrid models that allow for localized professional life.

This shift has resulted in a radical inversion of daytime presence within Sanchinarro. Before the hybrid society, the PAU was a dormitory suburb, functionally deserted during the day. Today, it is inhabited by hybrid workers, digital nomads, remote workers and entrepreneurs who are physically present but socially isolated (Chile et al., 2014; Bower et al., 2023). This demographic represents a massive, untapped pool of eyes on the street (Jacobs, 1961). The neighborhood is full of people, yet it remains empty of public life.



For decades, urban sociology used Oldenburg's (1989) concept of the Third Place, a dedicated social realm separate from the distinct environments of the home (the first place) and the workplace (the second place). Oldenburg argued that these spaces, such as traditional cafés, pubs, and public libraries, were essential for community cohesion because they operated as neutral grounds where individuals could gather. However, the traditional Third Place framework dictates a separated, stable routine: a worker leaves their home (first place), commutes to a centralized corporate or manufacturing workplace (second place), and visits a social hub (third place) during dedicated leisure hours.

In the contemporary urban landscape, this model has fundamentally collapsed. The rise of a digitally mediated, hyper-connected hybrid society has thoroughly blurred the boundaries between labor, domesticity, and leisure (Gratton, 2021; Alonso, 2025). The modern remote professional, flexible freelancer, and digital worker no longer operate within fixed geographical or temporal constraints. Instead, their workspace routinely bleeds into the domestic sphere, while their professional obligations are carried out across shifting, unconventional hours of the day. This dissolution of spatial and temporal boundaries means that urban citizens can no longer rely on social hubs that assume a strict separation between work and life.

Figure 15: Conceptualization of the fourth place.

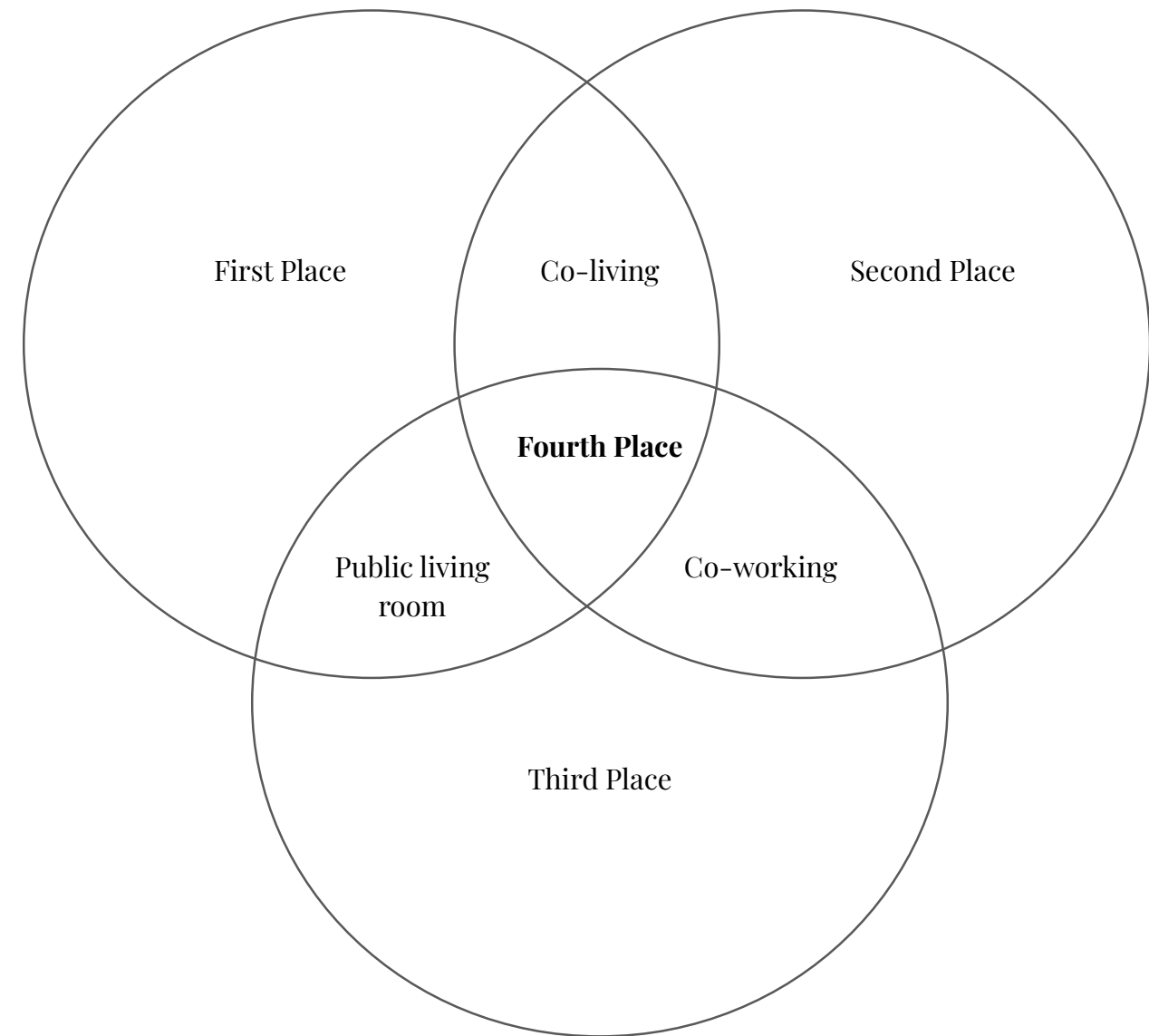
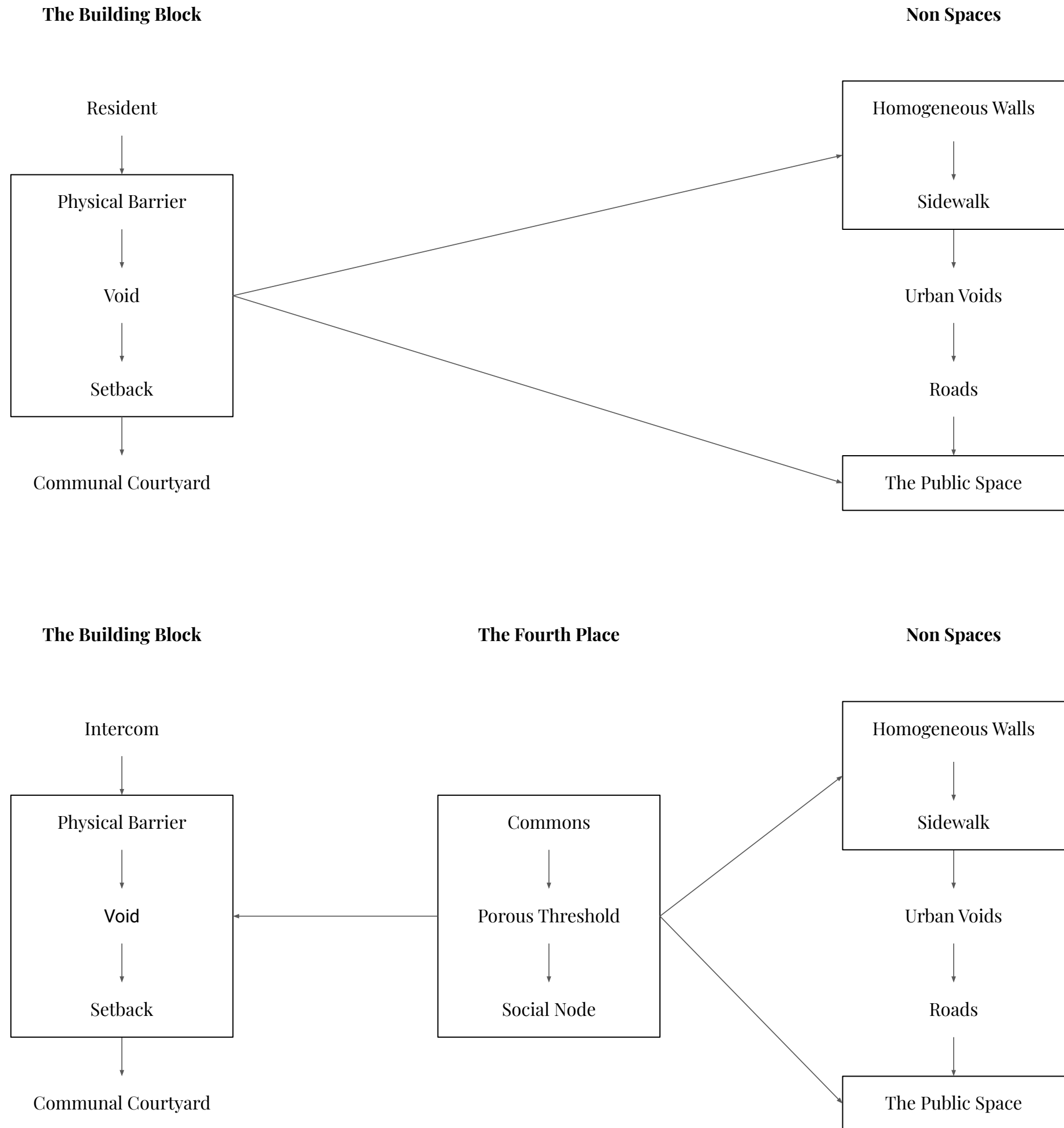


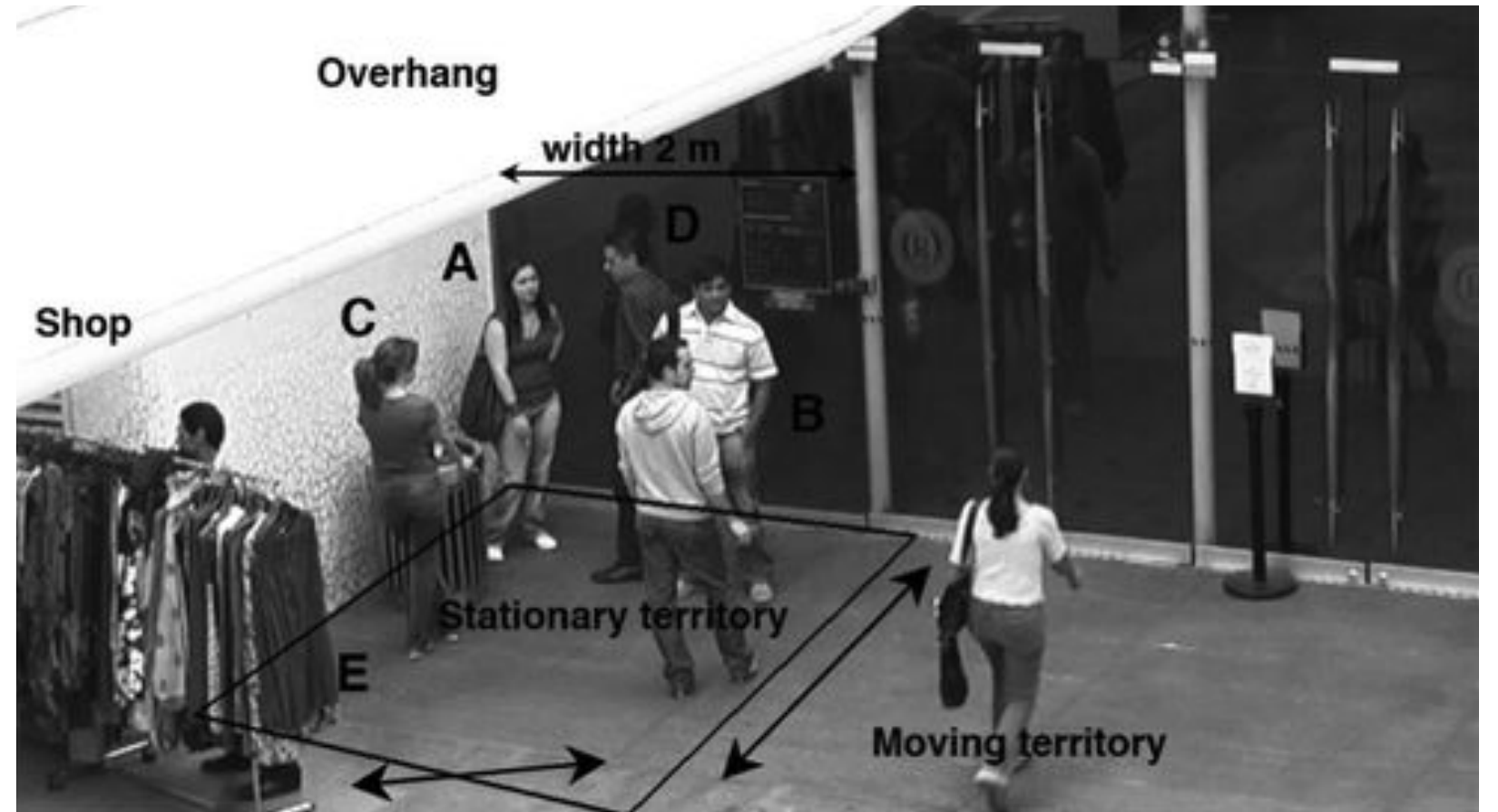
Figure 16: Intersection of the fourth place.

Because our lives are structurally blurred by the rise of a hyper-connected hybrid society, architecture must think differently about the places where strangers meet and communities form. This research fills that socio-spatial void by transitioning conceptually to the Fourth Place (Aelbrecht, 2016; Morisson, 2019), a spatial typology designed for an era of dissolved boundaries. While the traditional city relied on a strict functional segregation of life, where the intersection of home and work (1st + 2nd) manifests as co-living, and work and leisure (2nd + 3rd) manifests as co-working, the Fourth Place represents an intentional merging, hybridization, and extension of these realms. Crucially, it captures the often-missing intersection of the home and the social sphere (1st + 3rd), pulling the psychological safety, comfort, and reproductive ease of the domestic living room out into the public domain.



To operationalize the architectural deployment of the proposed network along the Bulevar, the design relies on an understanding of the micro-spatial and behavioral attributes of urban edges. While classic urban theory often conceptualizes the threshold merely as a neutral buffer or a strict line separating public and private domains, contemporary spatial analysis reveals these zones to be active contact spaces with significant behavioral and social potential (Aelbrecht, 2016). When a public threshold is enriched with physical amenities and affordances (Gibson, 1979), it creates spatial in-betweenness that provides high levels of psychological and physical comfort for everyday city users (Aelbrecht, 2016).

Figure 17: Thresholds for short 'time-out' breaks; annotated in map.



Note. From Aelbrecht (2016).

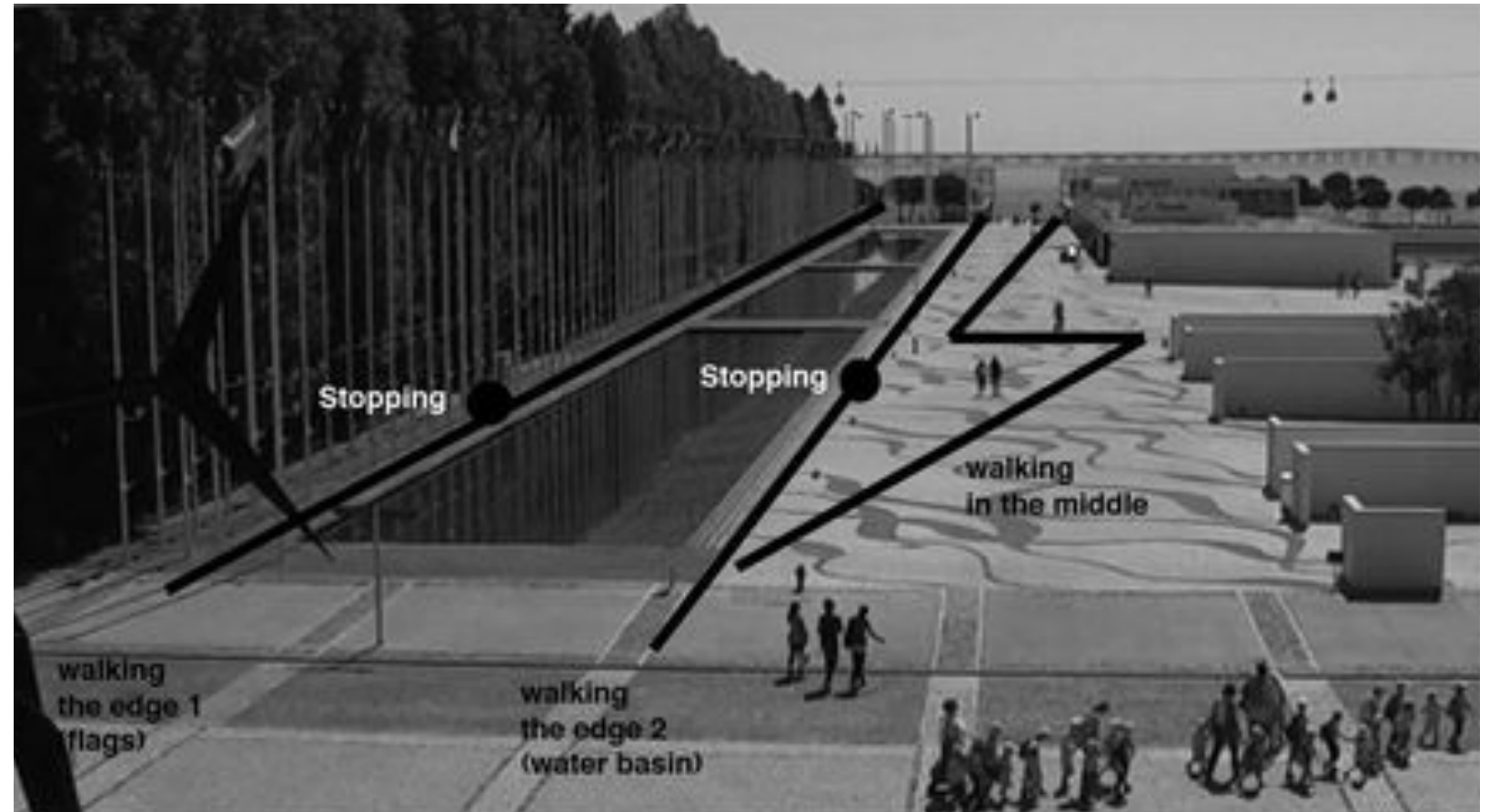
Figure 18: Thresholds for longer 'time-out' breaks; annotated in map.



Note. From Aelbrecht (2016).

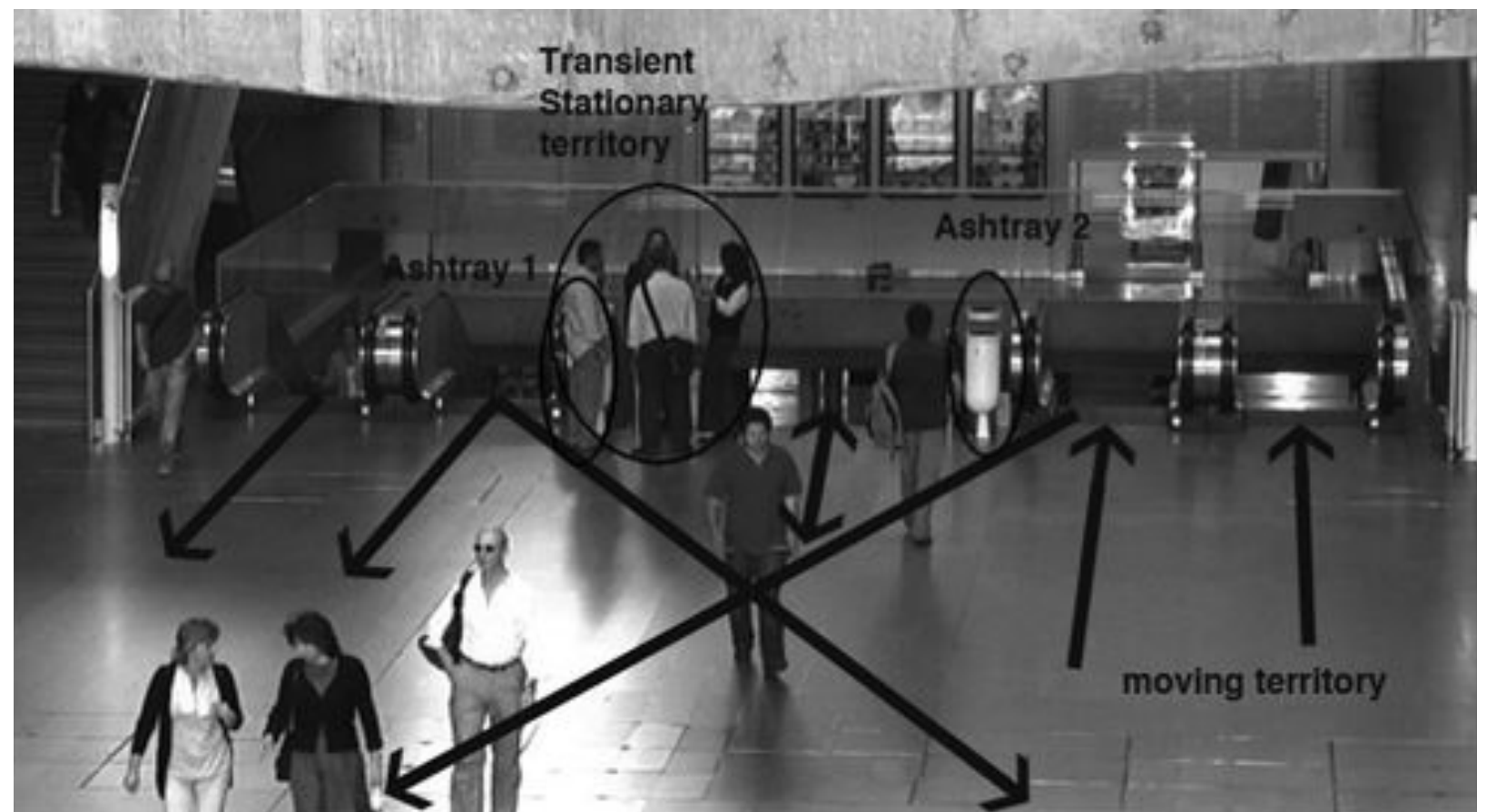
The physical blueprint of this network moves away from the top-down spatial scripting found in the standard PAU building block, where human movement is strictly regulated by hard boundaries and physical barriers. Instead, the network operates by introducing visual transparency in all directions (Aelbrecht, 2016). By maintaining clear lines of sight, the architecture provides a profound sense of safety and mutual awareness among users, while territorial indeterminacy lowers the social friction required to spark or comfortably conclude informal interactions (Jacobs, 1961). Ultimately, embedding these spatial principles into the pavilions and street pockets transform Sanchinarro's empty, car-dominated streetscapes into an open network of social nodes that naturally bridges the gap between the built environment and the lived city.

Figure 19: *Rossio Promenade; annotated in map.*



.Note. From Aelbrecht (2016).

Figure 20: *Props with thresholds; annotated in map.*



.Note. From Aelbrecht (2016).

**Figure 21:** *Weak vs strong ties.*

To fully understand how an architectural network revitalizes the neighborhood's social life, the research applies Granovetter's (1973) foundational theory regarding the value of casual social connections, known as weak ties. Granovetter (1973) demonstrates that while close relationships, such as immediate family bonds and lifelong friendships, create deep local loyalty, they also tend to isolate communities into separate, divided pockets. Neighborhood groups that rely only on these intense, private bonds share deeply entrenched habits and expectations, meaning members understand each other naturally within their private circles. However, this inward focus cuts residents off from the broader public. Because these closed networks rarely interact with outsiders, it becomes very difficult for different social groups to connect with one another, share ideas, or collaborate on a neighborhood-wide scale. Conversely, individuals who possess a rich network of weak ties enjoy significantly greater opportunities for social mobility and collective agency.

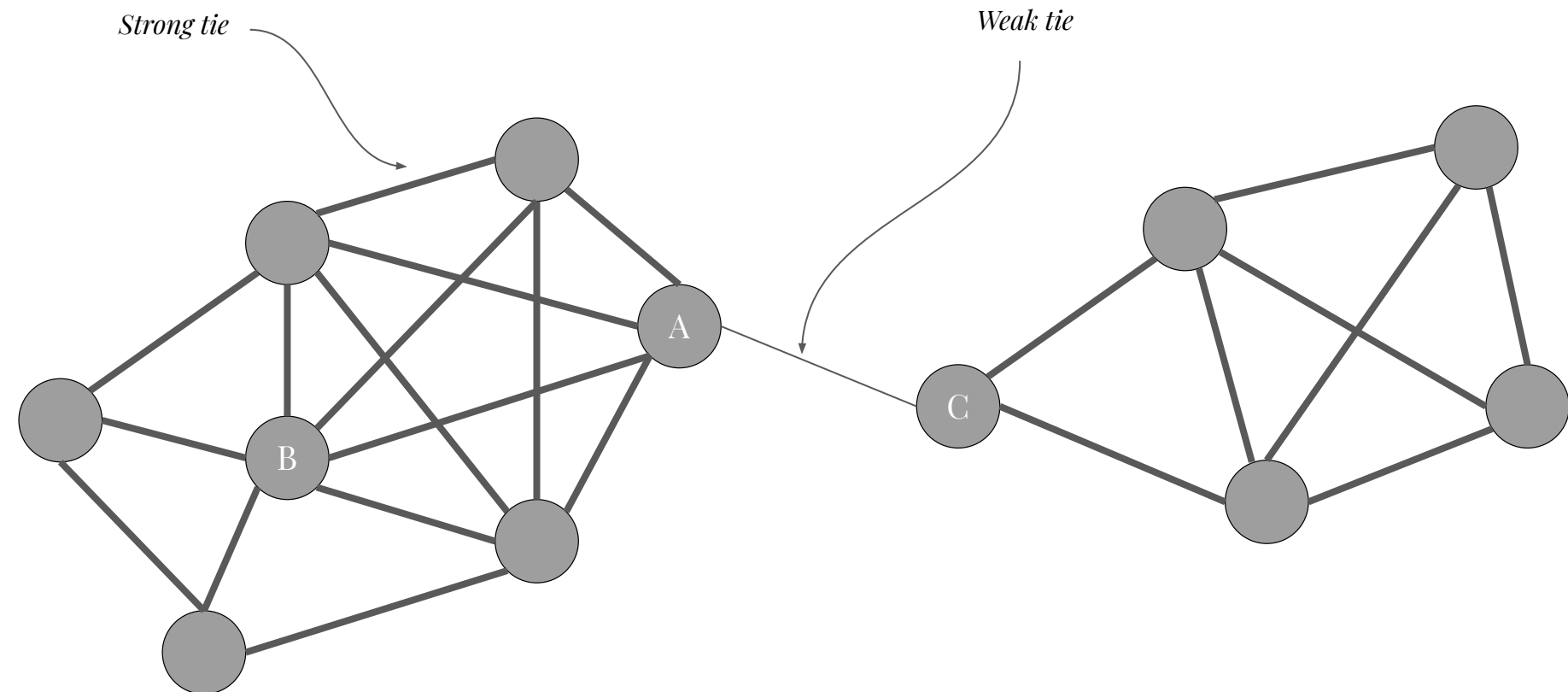


Figure 22: Commoning in the fourth place.

To counter the spatial isolation, the project proposes a shift away from rigid public and private divisions, investigating the potential of small-scale interventions to serve as a shared urban common (Akbi et al., 2022; Borch & Kornberger, 2015). Unlike the oversized municipal voids of the Bulevar, which are legally public but psychologically and physically abandoned, the common is defined by shared, active agency. It is a collective territory that exists exclusively through the continuous performance of commoning as care (Akbi et al., 2022). This reframing is critical because standard public space management under the PAU model reduces urban maintenance to a top-down, bureaucratic administrative chore or outsourced municipal landscaping (Di Marino & Lapintie, 2017). In contrast, commoning functions as an active, relational practice performed directly by the citizens rather than a top-down bureaucratic service (Akbi et al., 2022). It asserts that an urban common cannot exist as a spatial vacuum, it does not simply materialize because an architect installs physical hardware. Instead, a common is continuously reproduced because a community maintains it through everyday acts of collective stewardship and localized neighborhood sharing (Belfield & Petrescu, 2024)

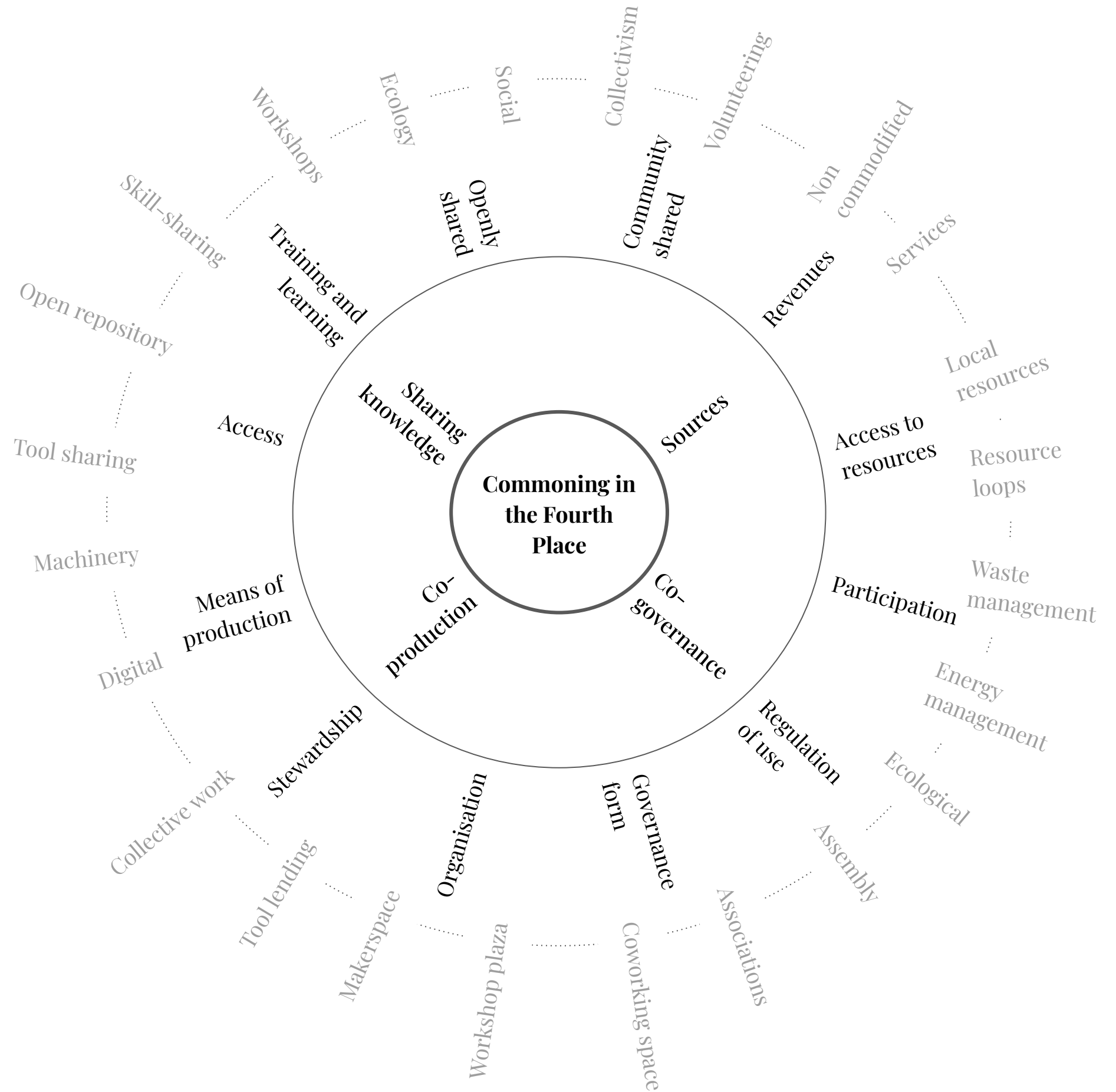
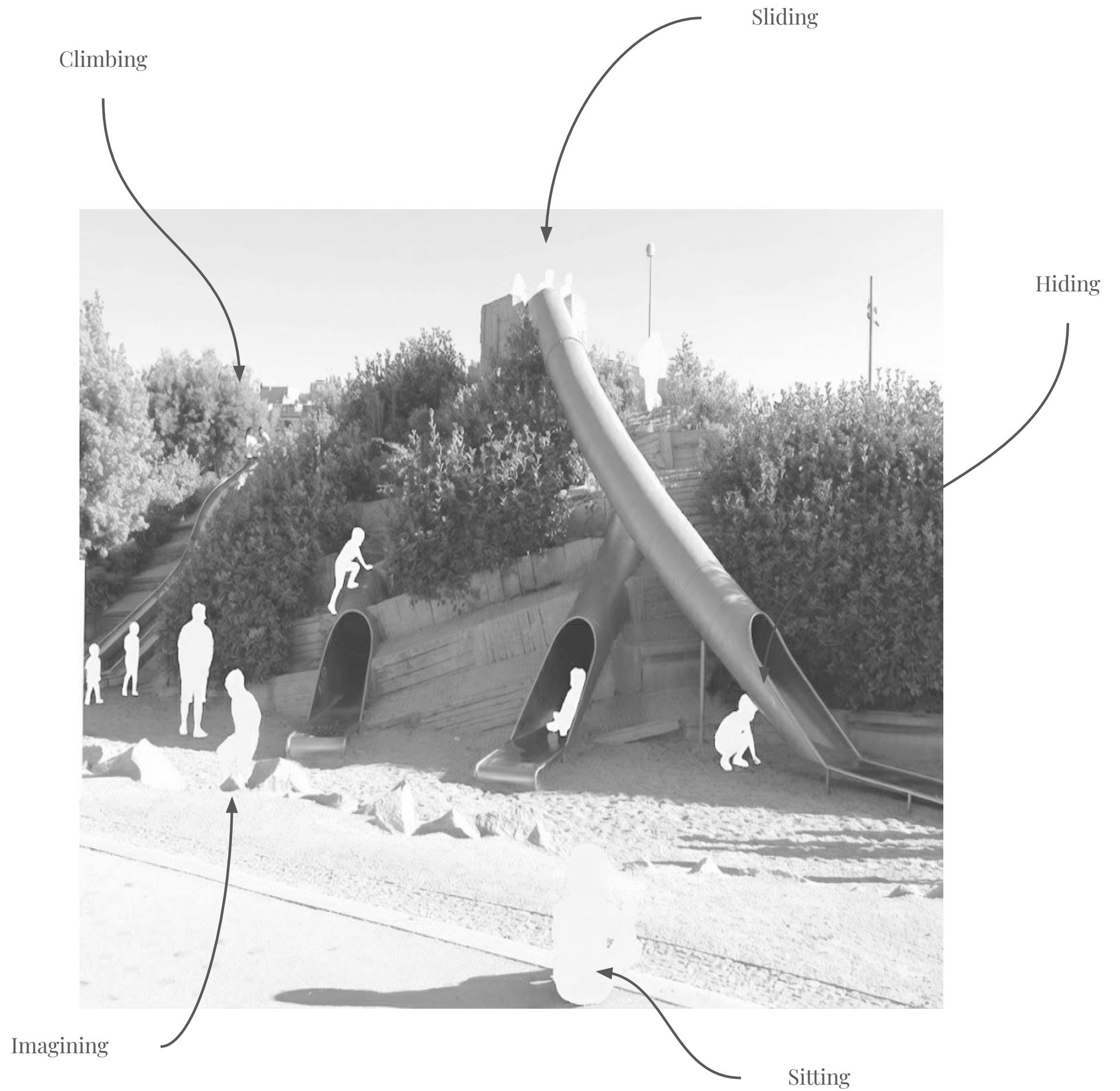


Figure 23: Affordances for children on a playground.

Finally, this research utilizes Affordance Theory (Gibson, 1979; Widmer & Rérat, 2025) to move beyond fixed, deterministic programming. Affordances act as the physical hardware that facilitates unprogrammed co-presence. These elements function as spatial and temporal in-betweenness and occupy the thresholds, edges, and transit nodes, transforming them into sites of spontaneous social friction where the routines of home, work, and public life overlap.



## Research and Design Questions

### Main Question:

*To what extent can a network of architectural interventions be designed as a distributed fourth place to mediate the scalar mismatch between Madrid's car-centric PAU perimeters and its oversized urban voids?*

### Sub-Questions:

*Which material and infrastructural actants within Sanchinarro's car-centric grid enforce pedestrian transience, and where do they produce the specific socio-spatial gaps between the closed block and the oversized urban voids?*

*What critical lessons can be extracted from a comparative analysis of historical and contemporary precedents to unveil why certain urban interventions failed while others succeeded in fostering community vitality?*

*How must these strategies be programmatically layered, multi-scalarly deployed, and structurally managed, integrating tectonic materiality and socio-metabolic resource loops, to transition a municipal liability into a self-governed urban common?*

Figure 24: Madrid's infrastructure.

As illustrated by the infrastructure mapping, the neighborhoods are sliced and severed by a heavy infrastructure grid of railways and highways. These transit lines function as severe physical barriers. At the local scale, the spatial dimensions of the PAU grid are drastically overscaled compared to those of the traditional city center. Consisting of multiple wide vehicular lanes, the PAU avenues act as a barrier between the residential blocks. The resulting streetscape is so excessively wide that the immense distance between the blocks collapses into an urban void.

**Railway**  
High-speed infrastructure for  
long-distance commuting



**Highway**  
Designed for the daily flow  
between home and work



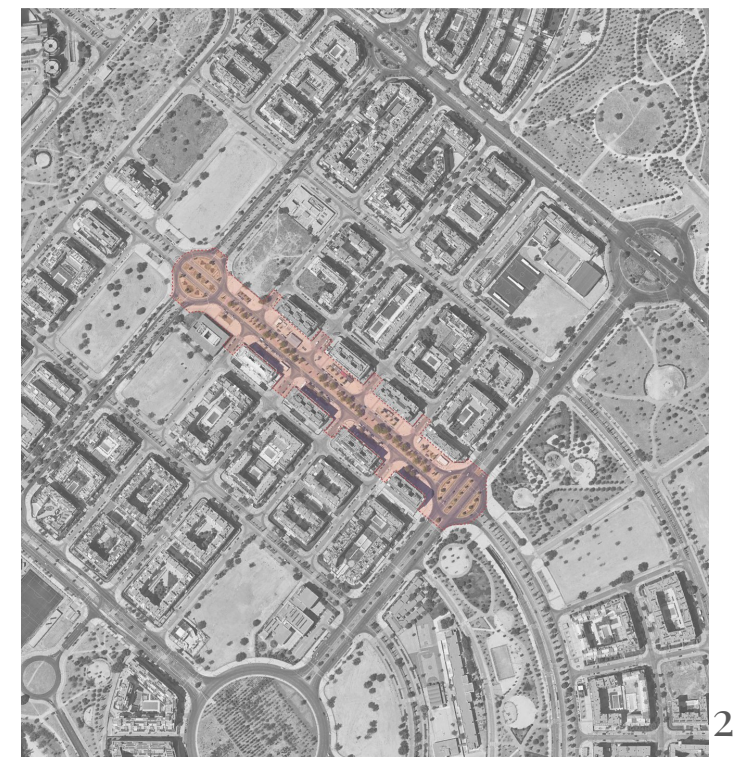
**Local streets**  
Oversized blocks and  
car-dependent grids in the suburbs



Figure 25: Site location.

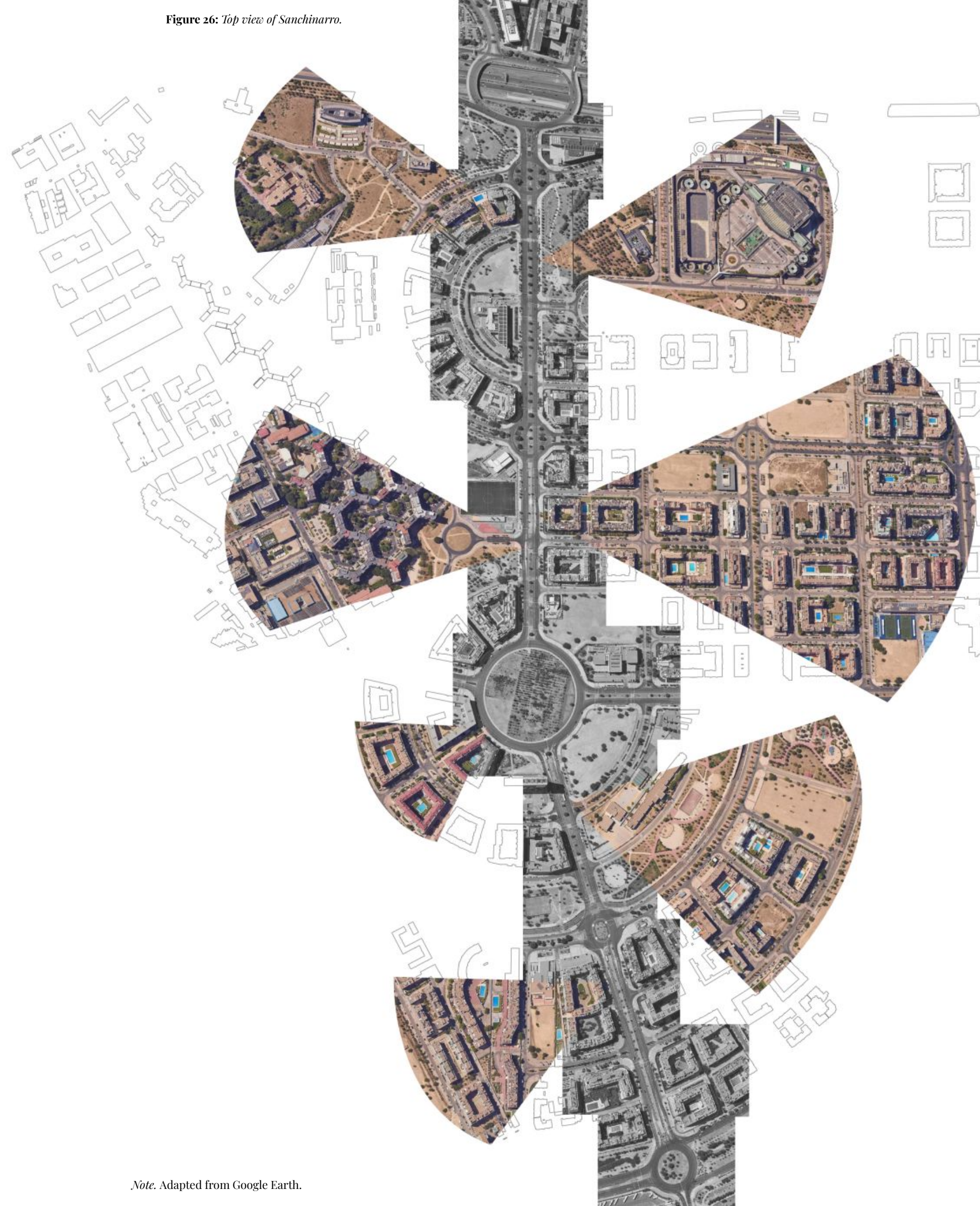


When we look closer at the neighborhood, we can see the urban planners designed the layout to prioritize for cars. The streets are dominated by oversized roads, giant roundabouts, and direct traffic lanes designed to push drivers onto the highways as fast as possible.



.Note. Adapted from Google Earth.

Figure 26: Top view of Sanchinarro.



Sanchinarro is structured around a dominant central spine that defines its urban organization. Central to this car-oriented layout is the massive roundabout, which functions as a high-capacity node designed to push vehicular traffic onto the surrounding regional highways as efficiently as possible.

Figure 27: Figure ground Sanchinarro.

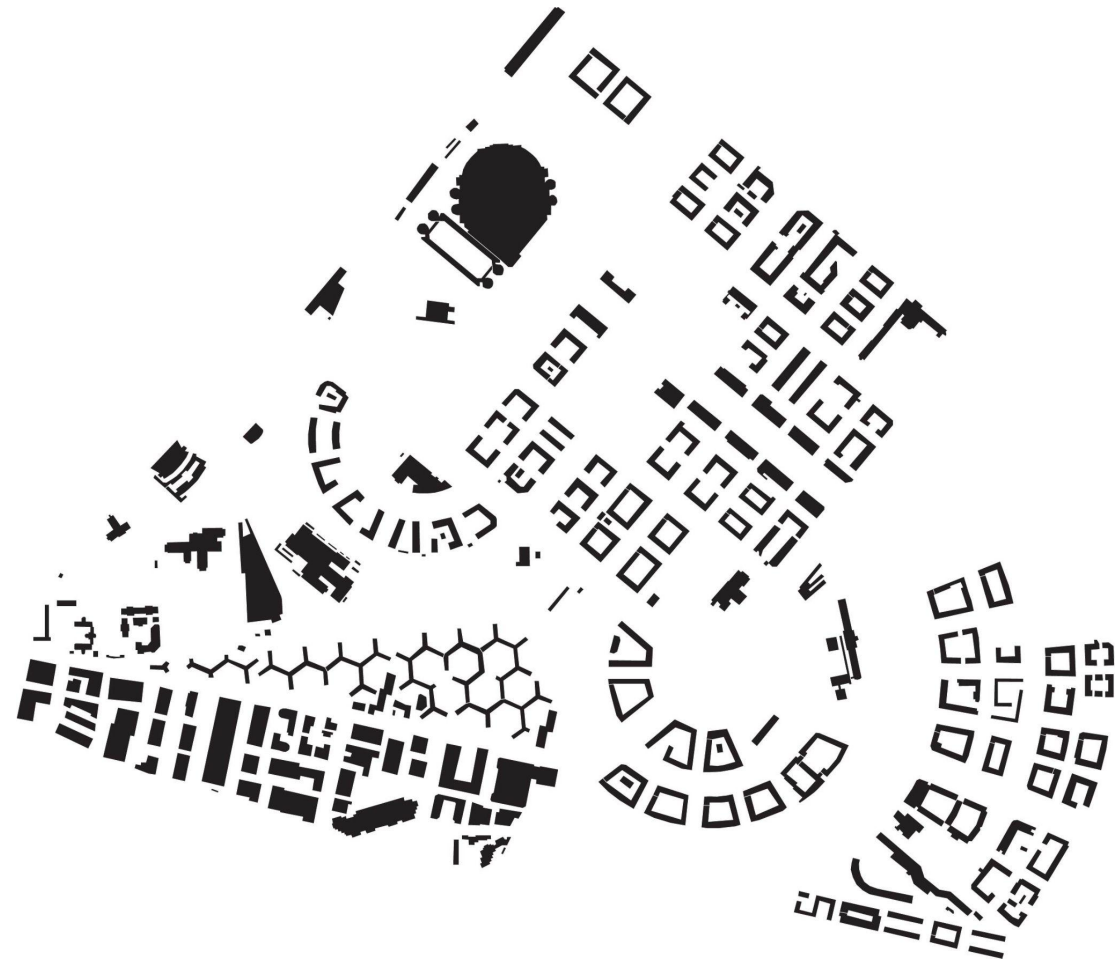
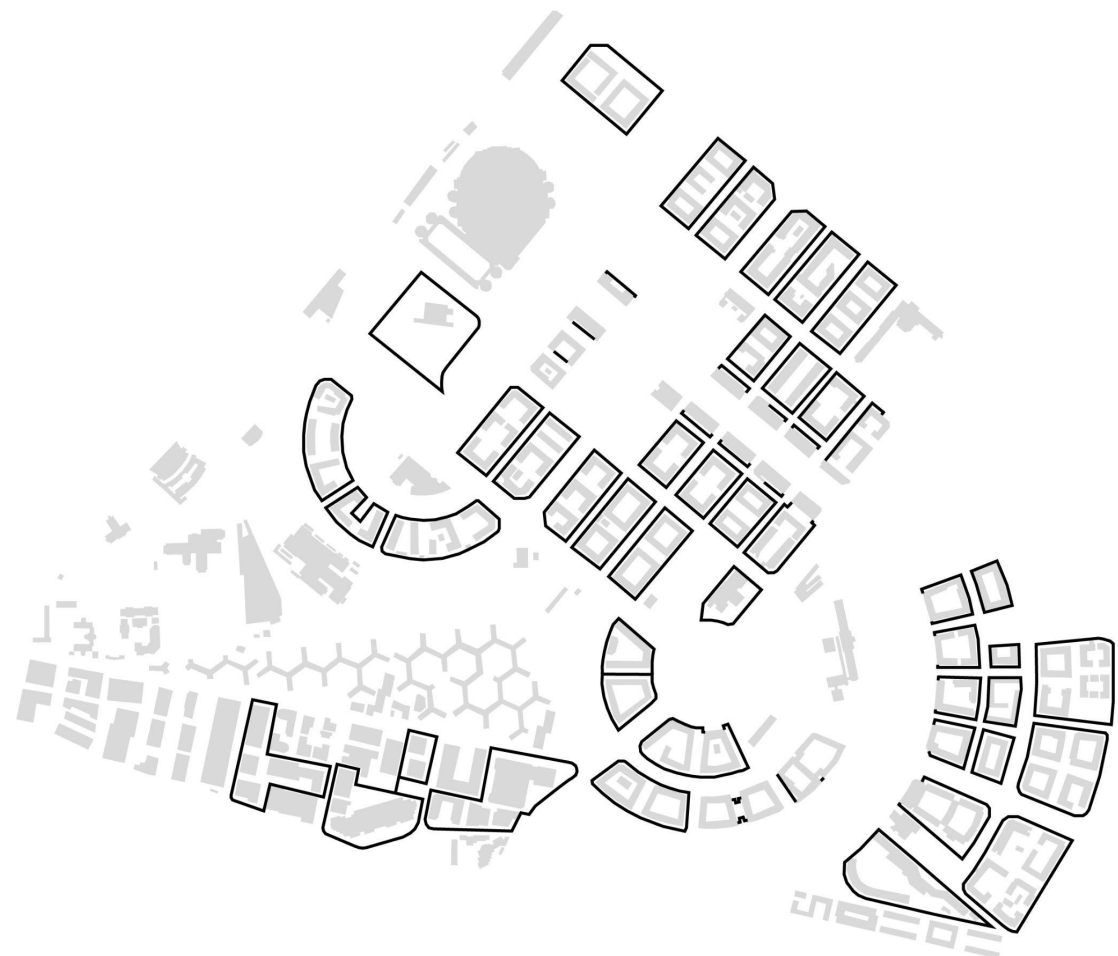
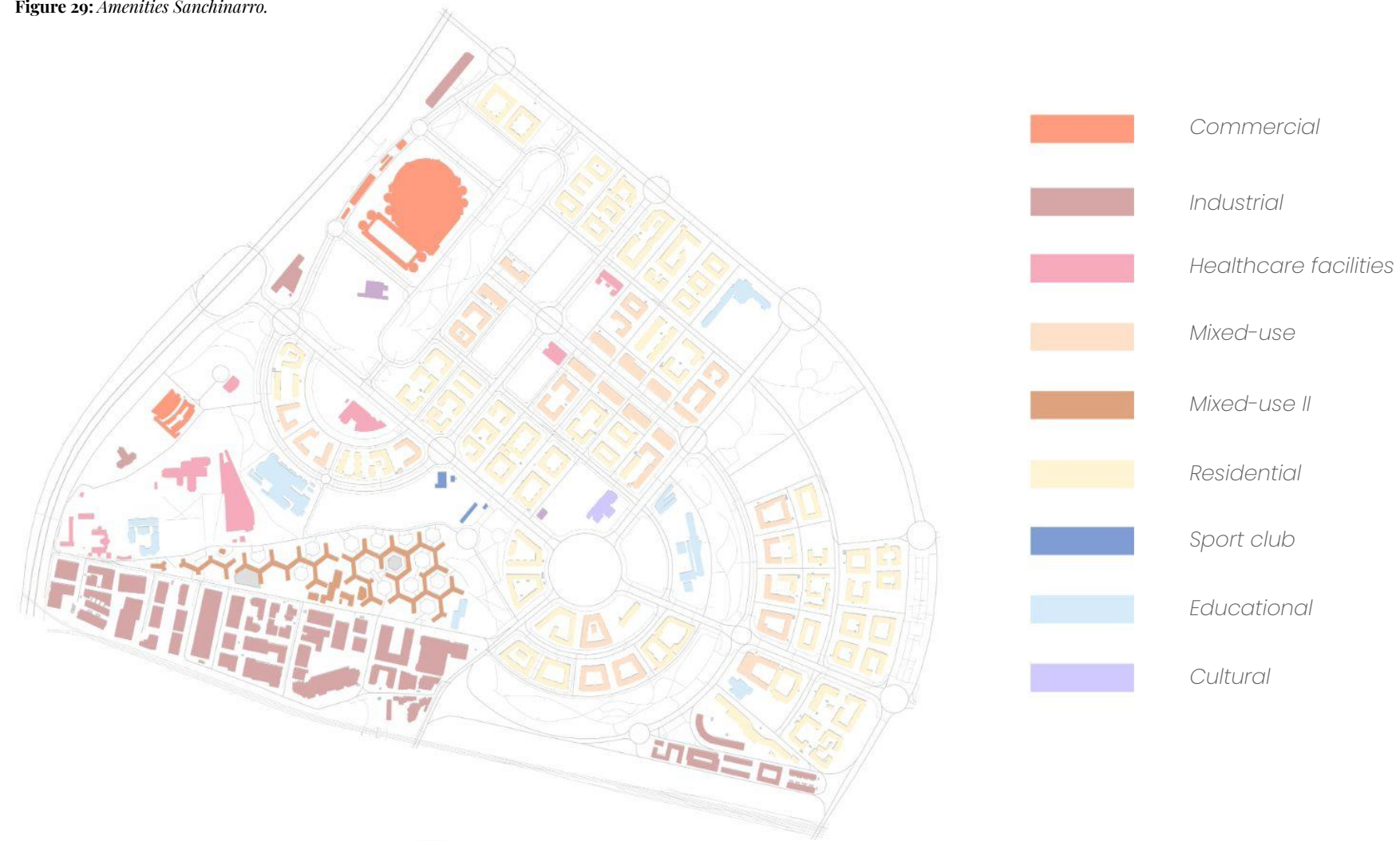


Figure 28: Mapping of barriers Sanchinarro.



The figure-ground map of Sanchinarro provides a stark visual confirmation of the scalar mismatch and spatial fragmentation. The diagram shows an urban fabric defined by discrete, massive residential blocks, floating within large open spaces. The vastness of the white space in this map highlights the oversized urban voids, representing a total failure of the prospect-refuge. These areas offer infinite prospect (visibility) but zero refuge (shelter), as the hard edges of the perimeter blocks do not interact with the void. This lack of interaction confirms the existence of the non-place, where the urban ground is not a functional third place for the community but a structural gap prioritizing vehicular flow over human-scale social friction. Most critically, the figure-ground map reveals the absence of an intermediate scale, the missing middle of small pavilions or porous thresholds that should bridge the gap between the private block and the public street.

Figure 29: Amenities Sanchinarro.



The design strategy begins with an analysis of the existing programmatic landscape and mobility infrastructure. By mapping the current distribution of residential, commercial, and industrial zones, we identify the missing links that keep residents confined within their private blocks. The analysis of Sanchinarro's current fabric reveals a neighborhood characterized by functional segregation. Large residential blocks are often separated from educational and cultural facilities by wide, car-centric boulevards. This map of requirements highlights the need for collision points, intermediate spaces like ours that act as social nodes. To pull people outside of their buildings, the plan identifies the untapped potential of new community and workspaces for the residents.

Figure 30: Public transport Sanchinarro.

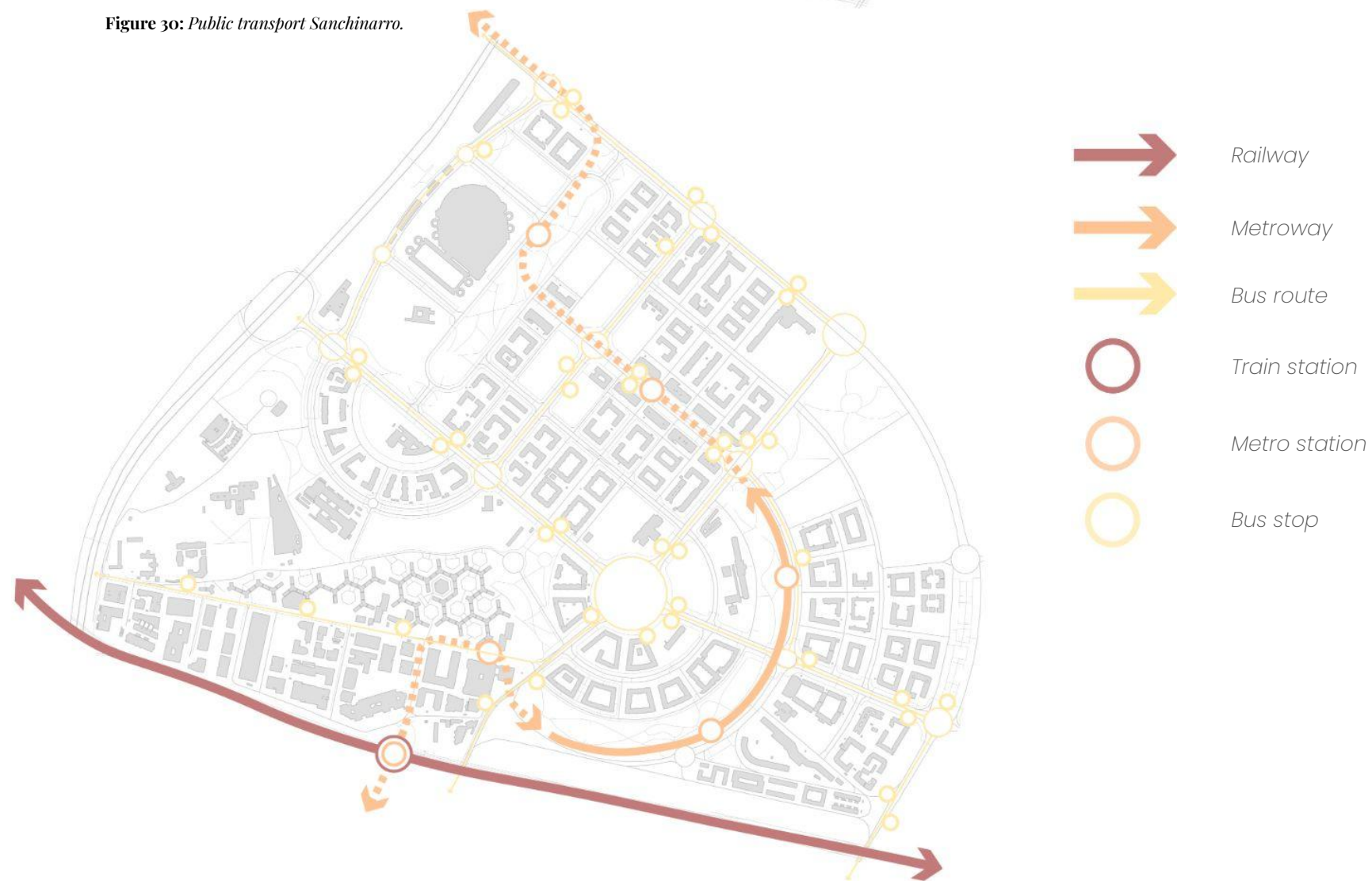
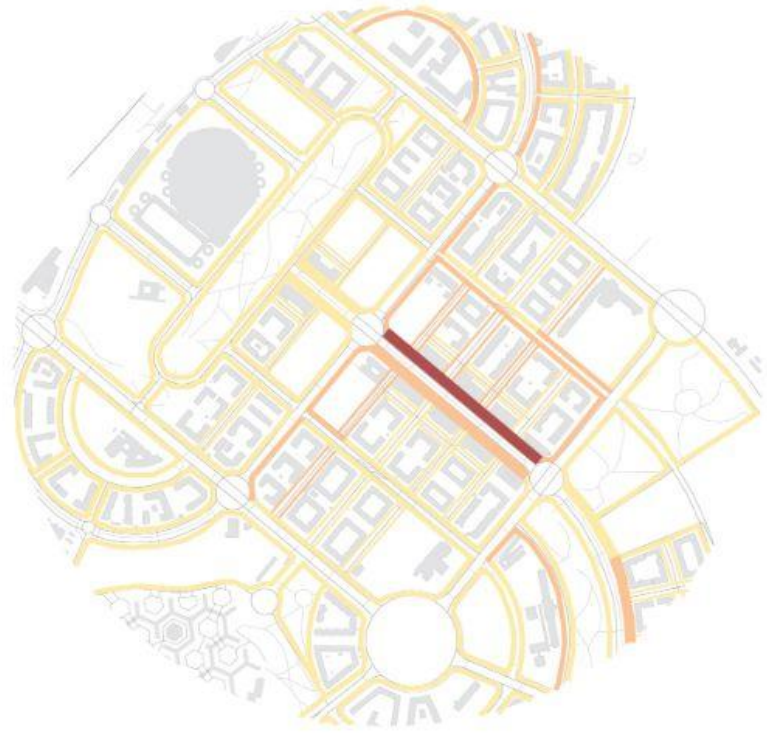
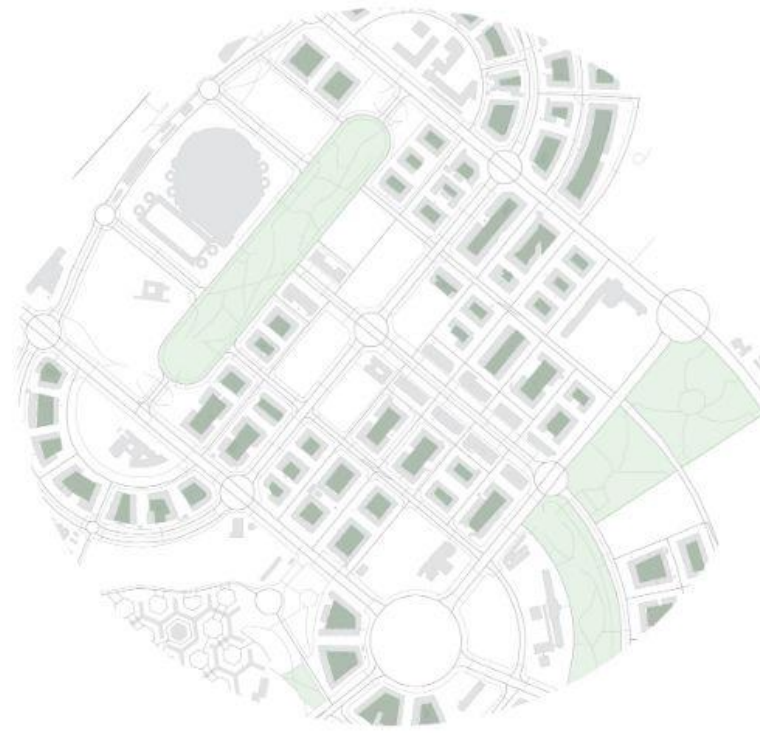


Figure 31: Site analysis Sanchinarro.



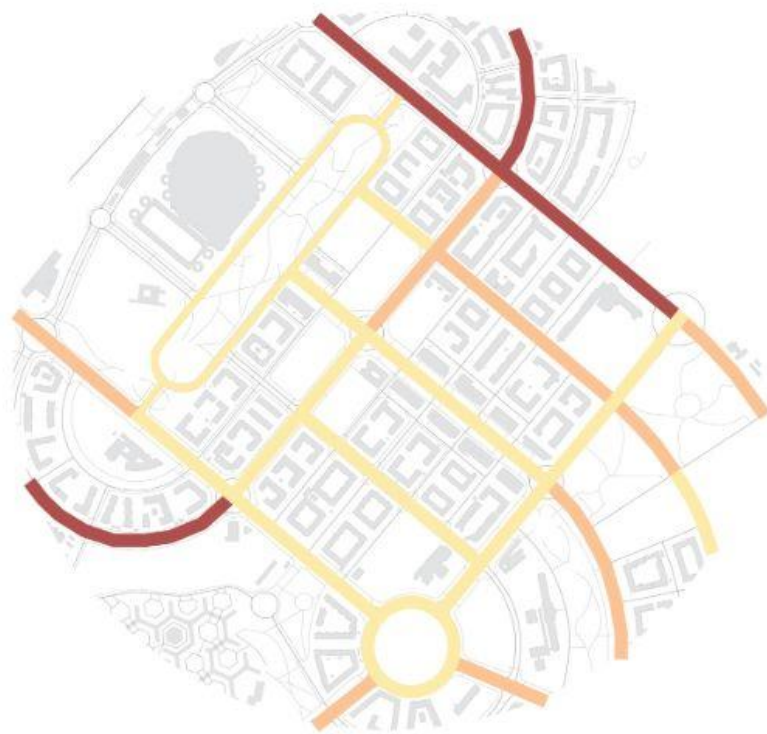
*Pedestrian activity*



*Green spaces*



*Visual permeability*



*Vehicular activity*



*Entrances block and garage*



*Walking routes actants*

Figure 32: Site visit Sanchinarro.

The site visit to Sanchinarro reveals how the current fabric is dominated by monolithic, fortress-like residential blocks, massive, inward-facing structures that foster a sense of visual repetition and deep social isolation. This monolithic character is enforced by a hard perimeter of fences, gated entrances, and long, blank facades that dominate the street level. These elements create a physical and psychological barrier between the resident and the city, resulting in a total lack of active frontages.



Figure 33: Section analysis Sanchinarro.

What is noticeable when looking at the streetscapes, is that Sanchinarro consists of two extremes. First, while the high density is able to provide eyes on the street (Jacobs, 1961), the architecture systematically disrupts this connection through setbacks, heavy security gates, and blank ground-plane parking walls. The building blocks provide absolute refuge but zero prospect to their surroundings. The second extreme is indicative of massive, low-density urban voids. Here, the space suffers from a failure of prospect-refuge theory (Appleton, 1975). These wide-open zones offer infinite, exposed prospect with absolutely no physical or climatic refuge.

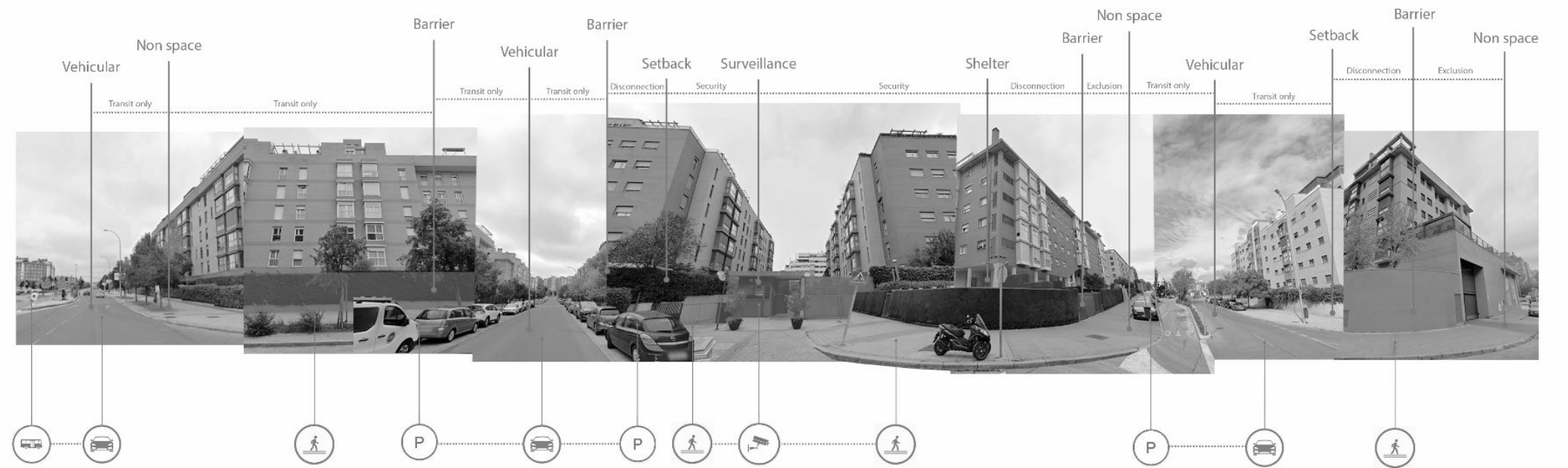
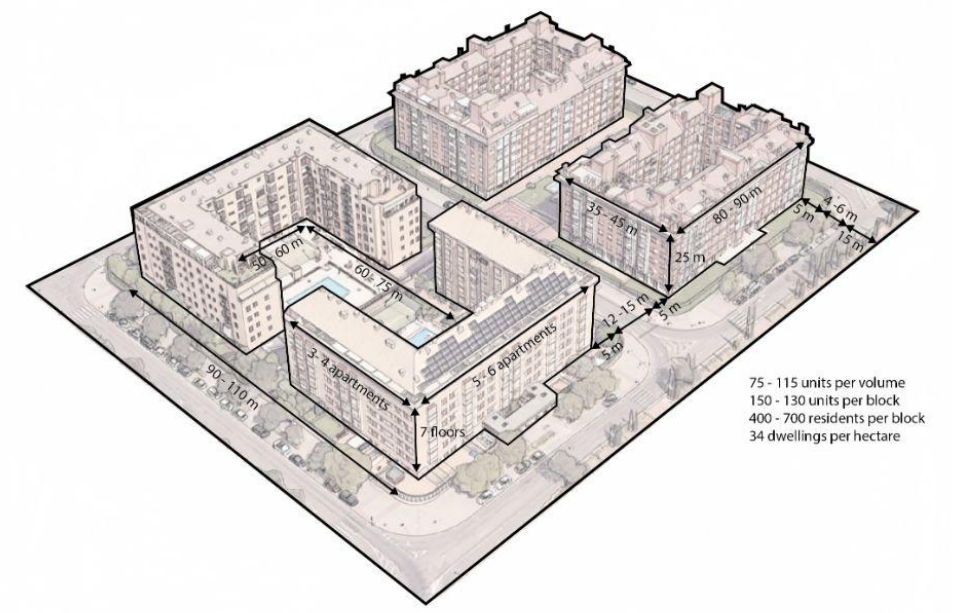
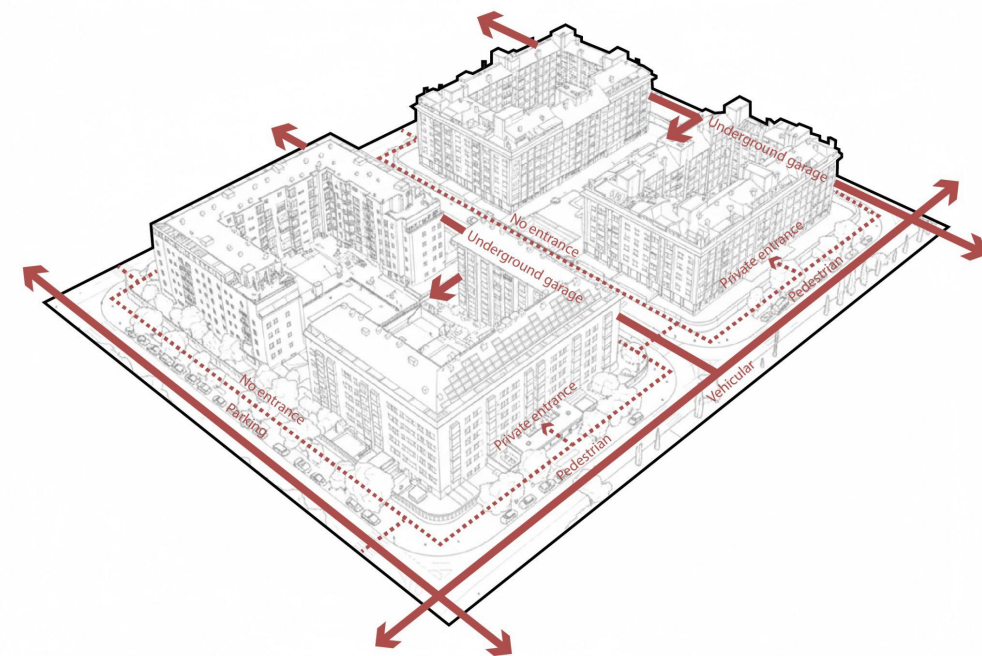
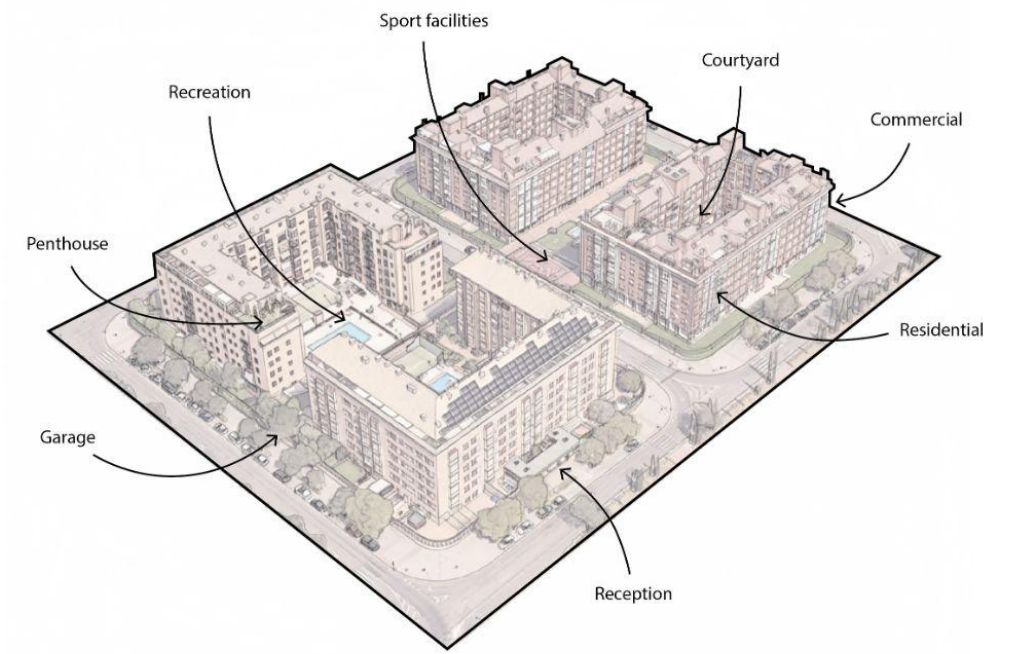
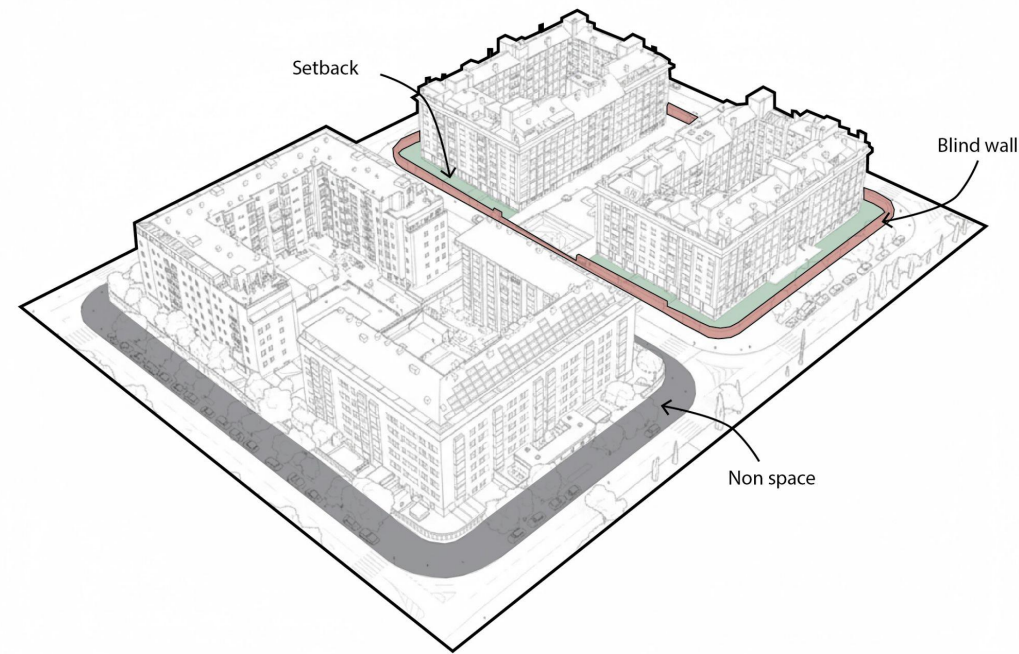


Figure 34: Building block analysis Sanchinarro.

The current design enforces isolation by concentrating all communal activities, gardens, playgrounds, and pools, within the building blocks. The residents have no functional reason to engage with the surrounding urban fabric. Consequently, the street is stripped of its role as a social catalyst, leaving the inhabitant either locked within or exposed on a car-dominated avenue. The residents have exclusive access to different amenities, including swimming pools, sport facilities, community gardens, and private recreation zones, all managed behind a wall and gated setbacks. Because the residents' daily needs for leisure and community are met within the confines of their specific building volume, the street is stripped of its traditional role as a place of exchange.



Note. Adapted from Google Earth.

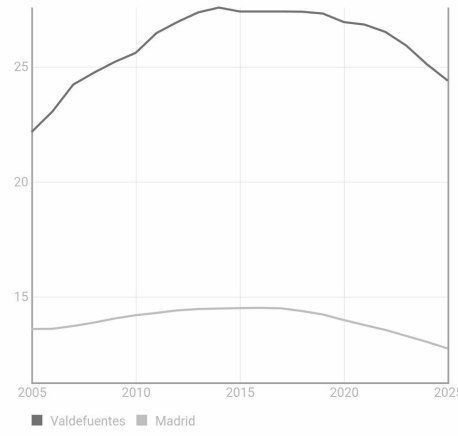
Figure 35: Section analysis bulevar Sanchinarro.

Looking at the sections of the boulevard, the physical proportions of the street grid explain exactly why this space feels so dead. The horizontal distance between the buildings is out of proportion with the height, making it feel like a giant wall. This massive width-to-height ratio means the buildings cannot create a comfortable enclosure. Furthermore, the ground plane is heavily broken up by multiple car lanes, tram tracks, and parking buffers, rather than a continuous, walkable promenade.

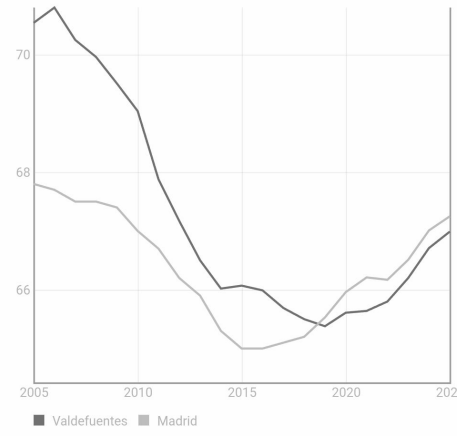


**Figure 36: Valdefuentes municipal district indicators: Municipio en Cifras.**

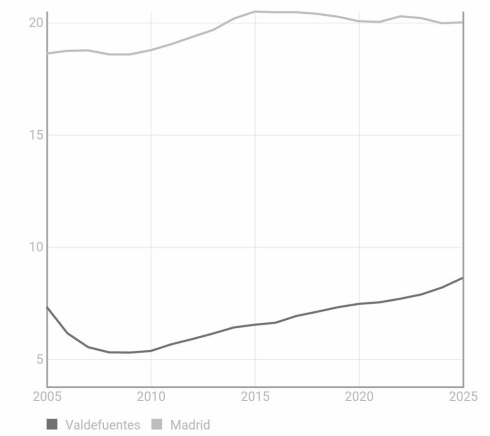
According to data provided by the Ayuntamiento de Madrid (2026), Sanchinarro is characterized by a significantly younger demographic profile with a high density of children under 16 and a remarkably small elderly population. Crucially, economic indicators confirm an accelerating structural shift toward flexible and remote labor, seen by a dramatic upward trend in self-employment and autonomous workplace registration within the district.



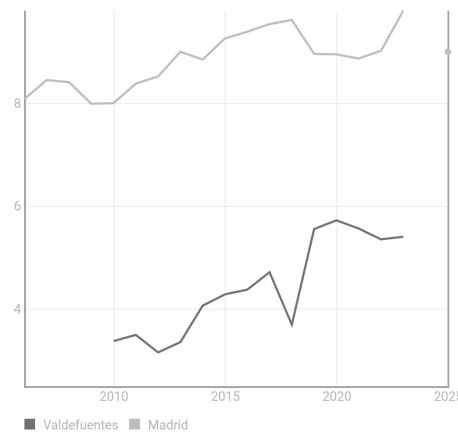
Percentage of population below 16 years



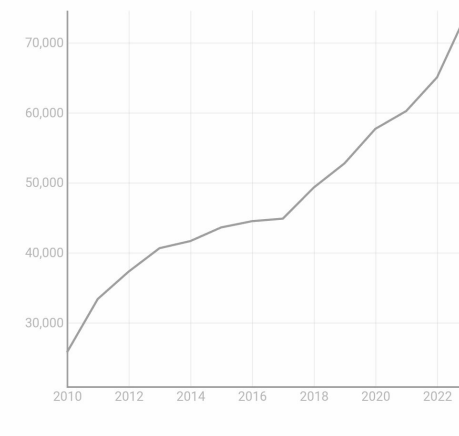
Percentage of population between 16 and 64 years



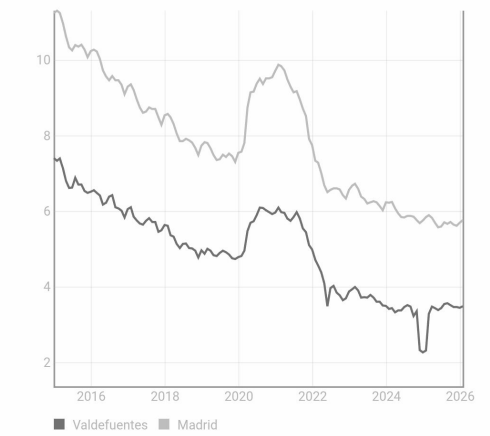
Percentage of population over 65 years



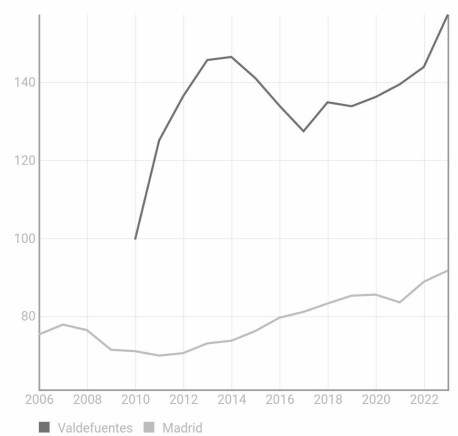
Self-employed by place of work over the population aged 16 to 64 (%)



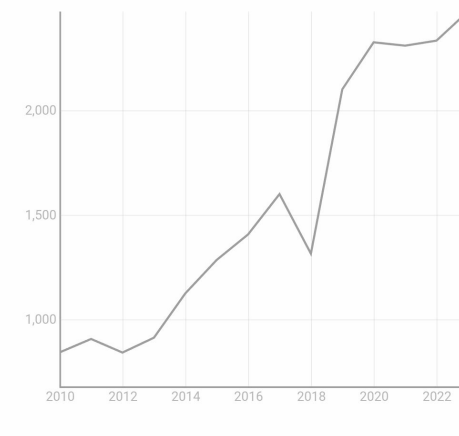
Social Security Affiliations by place of work



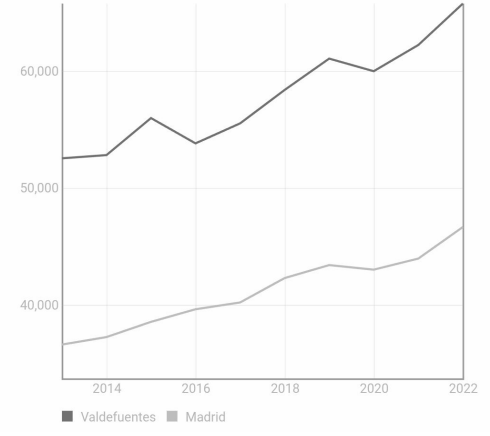
Unemployment rate (%) (unemployed out of the population aged 16 to 64)



Affiliations by place of work to the general regime for the population aged 16 to 64 (%)



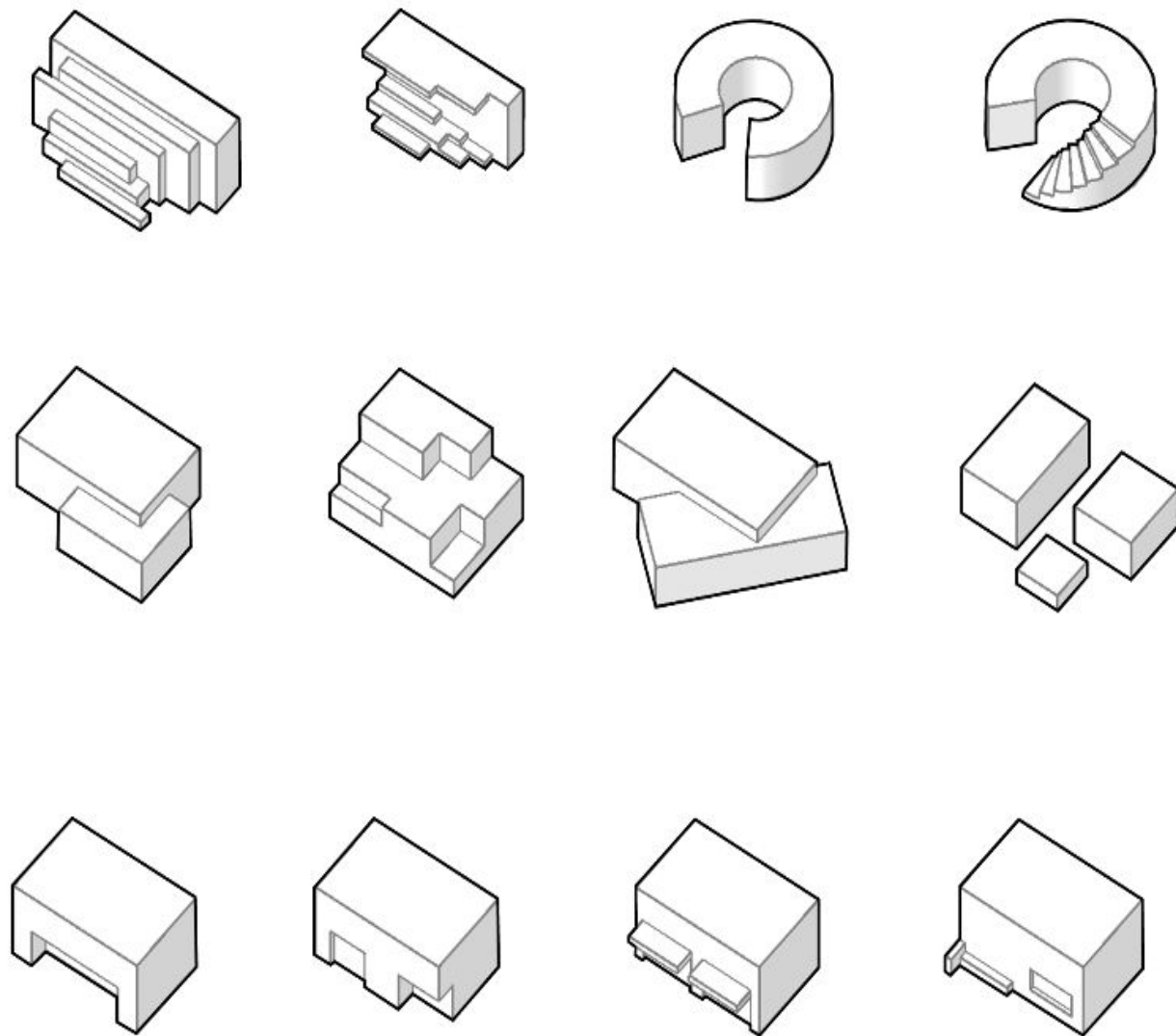
Affiliations by workplace to the special regime for self-employed workers



Average net income per household (€)

*Note.* Adapted from Ayuntamiento de Madrid (2026).

Figure 37: Volume exploration of the fourth place.



The varied formal iterations focus on the active creation of thresholds and edges. The exploration of stepped, carved, and shifted volumes creates interfaces that dissolve hard boundaries between the building and the street.

## Research and Design Questions

### Main Question:

*To what extent can a network of architectural interventions be designed as a distributed fourth place to mediate the scalar mismatch between Madrid's car-centric PAU perimeters and its oversized urban voids?*

### Sub-Questions:

*Which material and infrastructural actants within Sanchinarro's car-centric grid enforce pedestrian transience, and where do they produce the specific socio-spatial gaps between the closed block and the oversized urban voids?*

*What critical lessons can be extracted from a comparative analysis of historical and contemporary precedents to unveil why certain urban interventions failed while others succeeded in fostering community vitality?*

*How must these strategies be programmatically layered, multi-scalarly deployed, and structurally managed, integrating tectonic materiality and socio-metabolic resource loops, to transition a municipal liability into a self-governed urban common?*

Figure 38: *Mirador Sanchinarro, Spain, by MVRDV.*



Mirador by MVRDV (2005) in Sanchinarro is their response to the closed blocks of the PAU. In this context, MVRDV's strategy was to reject the horizontal containment of the courtyard. By rotating the typology 90 degrees and stacking distinct mini-neighborhoods vertically, they introduced a rupture in the skyline. Their mechanism for social cohesion, the elevated, semi-public sky-plaza, was a radical attempt to export the courtyard to the 13th floor, theoretically providing residents with communal outdoor space and expansive views of the mountains. However, while the Mirador succeeds in creating a distinct vertical landmark, it arguably perpetuates the urban isolation of the PAU rather than solving it. By moving the communal space to a lifted platform, the design risks bypassing the ground-level threshold. Urban vitality is rarely generated in isolation at 40 meters, it is produced at the interface where the domestic realm meets the public street.

Totem Arquitectos Asociados directly challenges the typical internal monotony of Madrid's expansion blocks (TAA, 2022). By splitting the dense municipal housing program into a low, three-story base topped by four separate six-story towers, the architects physically fracture the building volume. This allows natural light and air to slice through the site, while generating thresholds at different levels. Connected by wide open tiers, steps, and seating platforms, these spaces successfully pull the domestic comfort of a living room out into the open courtyard plane. Furthermore, the project uses the natural weather to keep the building comfortable. The architecture faces south to catch the warm winter sun, and the open gaps between the towers are specifically designed to trap cool northern breezes during hot summer nights, providing natural cooling for the homes inside.

Figure 39: 159 social housing units in Madrid.



Note. Adapted from Totem Arquitectos Asociados (2022).

However, despite these accomplishments, the project ultimately fails to break the barrier when viewed from the street. From the outside, the architecture continues to perform as an isolated fortress block that completely cuts itself off from the wider neighborhood. The concrete building drops abruptly to the sidewalk with a completely blind plinth. This boundary erases any possibility of active frontages. The single pedestrian entrance operates as a highly secured, controlled gate, which clearly signals exclusion to the wider public.

Figure 40: 159 social housing units in Madrid.



Note. Adapted from Totem Arquitectos Asociados (2022).

Figure 41: Ecoboulevard in Vallecas, Madrid.

The Ecobulevar de Vallecas, designed by Ecosistema Urbano and completed in 2007, was conceived as an innovative urban ecology and sociology experiment within an expansion district of Madrid. Characterized by an overscaled macro-grid, low residential density, and vast open spaces, Vallecas shares many similarities with Sanchinarro. Planners originally engineered the boulevard primarily as a high-speed vehicular corridor, creating a harsh streetscape with no shade, pedestrian life, or civic activity. In response, the project deployed three pavilion-scale, solar-powered air trees down the central median of the avenue. These lightweight, cylindrical structures combined passive and active climate engineering, creating sheltered microclimates intended to serve as public gathering points before the surrounding street trees could mature.



Note. Adapted from Ecosistema Urbano (2007).

Figure 42: Ecoboulevard in Vallecas, Madrid.

Despite receiving widespread international acclaim as a pioneering bioclimatic space, the Ecobulevar ultimately failed to achieve long-term viability, leaving behind defunct technical systems and hollow structural skeletons. Because the project was executed entirely via top-down municipal funding, the specialized, costly technical maintenance required to keep the misting systems and sensors operational was abandoned as soon as the local municipality faced fiscal constraints (Hernández Aja, 2009).

While the project successfully altered the middle of the avenue, it leaves the surrounding residential block completely unchanged. Consequently, the surrounding architecture continued to discourage street life, forcing residents to cross the corridor just to reach the central pavilion islands. This failure demonstrates that public vitality cannot be generated in isolated pockets stranded within wide streets. Instead, architectural interventions must target the ground-level boundaries to blend the buildings and street into a continuous, walkable community landscape.



Note. Adapted from Ecosistema Urbano (2007).

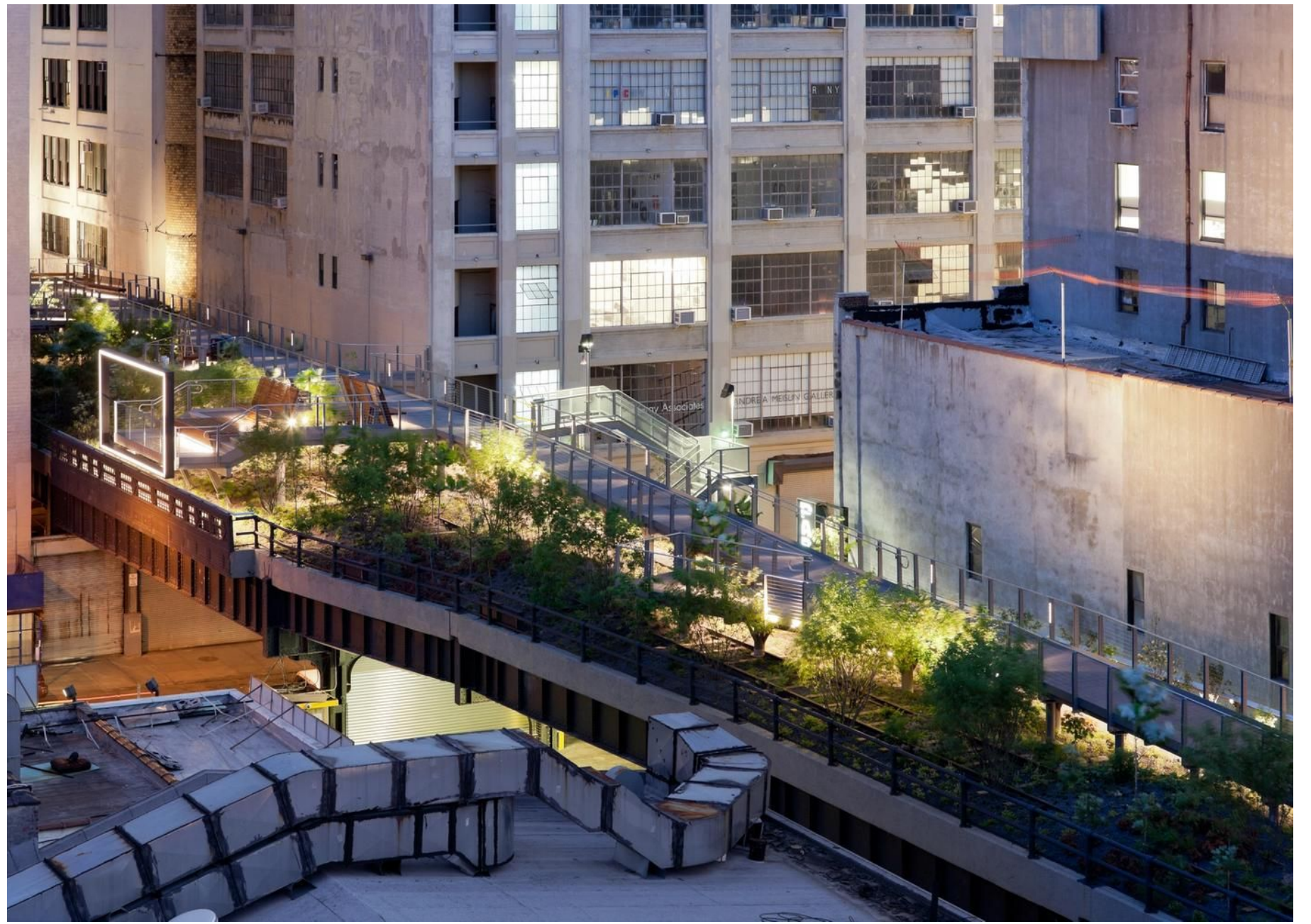
Figure 43: Successful precedents around the world.

While previous local experiments in the PAU struggled to bridge the gap between overscaled municipal planning and everyday street life, a series of international precedents offer proven strategies for reclaiming hostile urban landscapes. These projects demonstrate how architecture can serve as an active interface for community connection and shared space. This research maps and analyzes five distinct global precedents that operate across various urban scales:

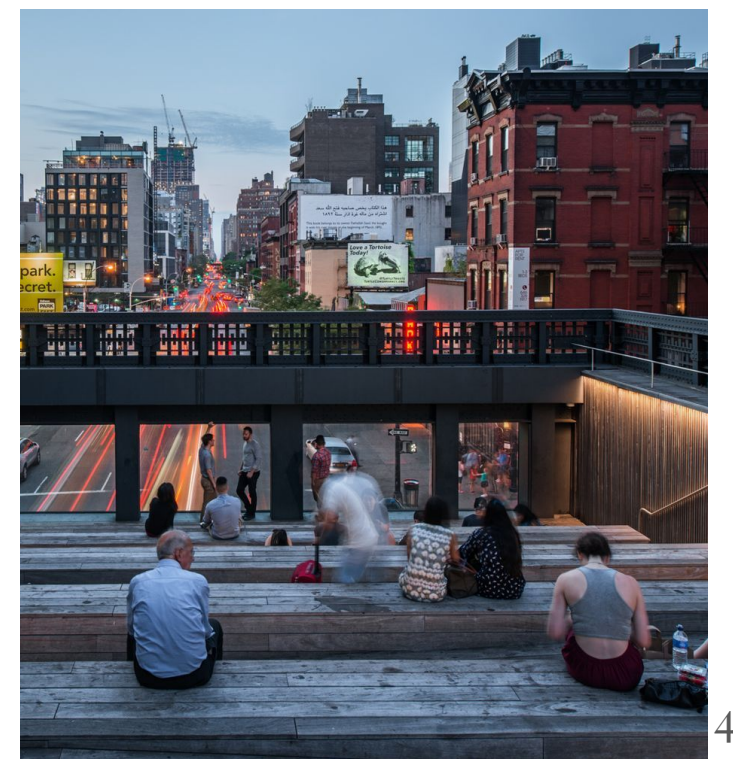
- The High Line (New York, USA): Teaches us how to use integrated landscapes blur the boundary between hard infrastructure and soft, social public space.
- Superkilen (Copenhagen, Denmark): Illustrates how the street can be repurposed as a playful, programmable interface that reclaims asphalt surfaces for pedestrian use.
- One Green Mile (Mumbai, India): Shows how to use strategic lighting, textured surfaces, and programmatic layering to turn the loud dead zones into vibrant urban rooms.
- Common-Unity (Mexico City, Mexico): Demonstrates how adding lightweight canopy structures can transform the residual spaces between large housing blocks into active sites for community management.
- The One-Minute City (Sweden): Teaches us how a modular, plug-in kit of parts can rapidly replace car-parking spaces with flexible furniture, adaptable outdoor workspaces and social hubs.



Figure 44: *The High Line, New York.*



The most important lesson from the High Line is that it is designed as a continuous chain of small interventions and micro-affordances (Widmer & Rérat, 2025). Rather than creating one massive, open walkway, the architecture introduces a rich variety of small elements like pocket lawns, sun decks and water features. The seating itself physically grows straight out of the peeling concrete planks, blending furniture and landscape. By packing the route with these small physical invitations to sit, rest, or look around, the design constantly is giving people a reason to stop, gather, and naturally interact without any commercial pressure (Corner & Diller Scofidio Renfro, 2009).



*Note.* Adapted from Diller Scofidio + Renfro (2009).

Figure 45: Superkilen, Copenhagen.



Superkilen uses bold surface graphics and textured paving to claim territory for pedestrians. Instead of leaving the ground plane as a boring, standard grey sidewalk, the design applies a striking vocabulary of sweeping lines, bright colors, and varied paving materials across a long, linear public corridor. The project thrives because it populates this graphic landscape with an intensive layer of small, diverse object affordances and everyday functions. Rather than prescribing strict, rigid rules for how the space should be used, the architects scattered playful elements throughout the site, such as bike lanes, outdoor fitness equipment, cafés, games, and varied seating types (BIG, 2012).

A valuable dimension of Superkilen is that it changes the program of the space based on shifting chronological cycles. For example, during weekdays, BIG (2012) shares how areas like the black market function as a quiet, low-intensity urban living room equipped with permanent tables and benches that anchor slow, localized activities like backgammon and chess. When the weekend arrives, this exact same physical infrastructure effortlessly shifts to handle a massive influx of visitors for a bustling, high-density neighborhood bazaar and public market.



Note. Adapted from BIG – Bjarke Ingels Group (2012).

Figure 46: One Green Mile, Mumbai.

One Green Mile (MVRDV, 2022) shows how it treats heavy infrastructure as a valuable asset rather than a problem. In a hot city like Mumbai, a massive concrete overpass acts as a ready-made umbrella that blocks out the intense sun, which can perfectly serve as a public outdoor rooms. The design uses winding blue floor graphics and a playful, hilly landscape to break up the flat concrete ground plane. Furthermore, the lighting works directly with the landscape to keep the park safe and usable by night. Instead of closing down at dusk like standard city parks, the integrated lighting along the green arches and walkways creates a glowing, highly visible environment at night.



Note. Adapted from from MVRDV (2022).

The most vital lesson from Common-Unity is how it reclaims public space by working with the community's existing habits instead of imposing top-down architectural rules. Before the intervention, the housing complex was heavily fractured by walls, fences, and private barriers that residents built to claim individual territory. The architects stepped in to permeate and democratize these borders, transforming a sectored housing unit into a unified public living room (Rozana Montiel, 2016). Their facades are active interfaces equipped with blackboards, climbing walls, handrails, and play nets. Additionally, a simple covered multipurpose room functions flexibly as a neighborhood library and meeting hall.

Figure 47: Common-unity.



Note. Adapted from from Rozana Montiel (2016).



The most vital technical lesson from Street Moves is its use of a modular, flexible wooden kit of parts designed to fit perfectly within the footprint of a standard car parking space. This project uses light, plug-in modules, including benches, picnic tables, planters, and e-scooter racks to replace parking spots with social spaces. (ArkDes, 2021). The design acts as an IKEA-style tool for the street. The pilots in Stockholm saw a 400% increase in pedestrian movement and 70% people surveyed about the Stockholm projects were positive (Arkdes, 2021).

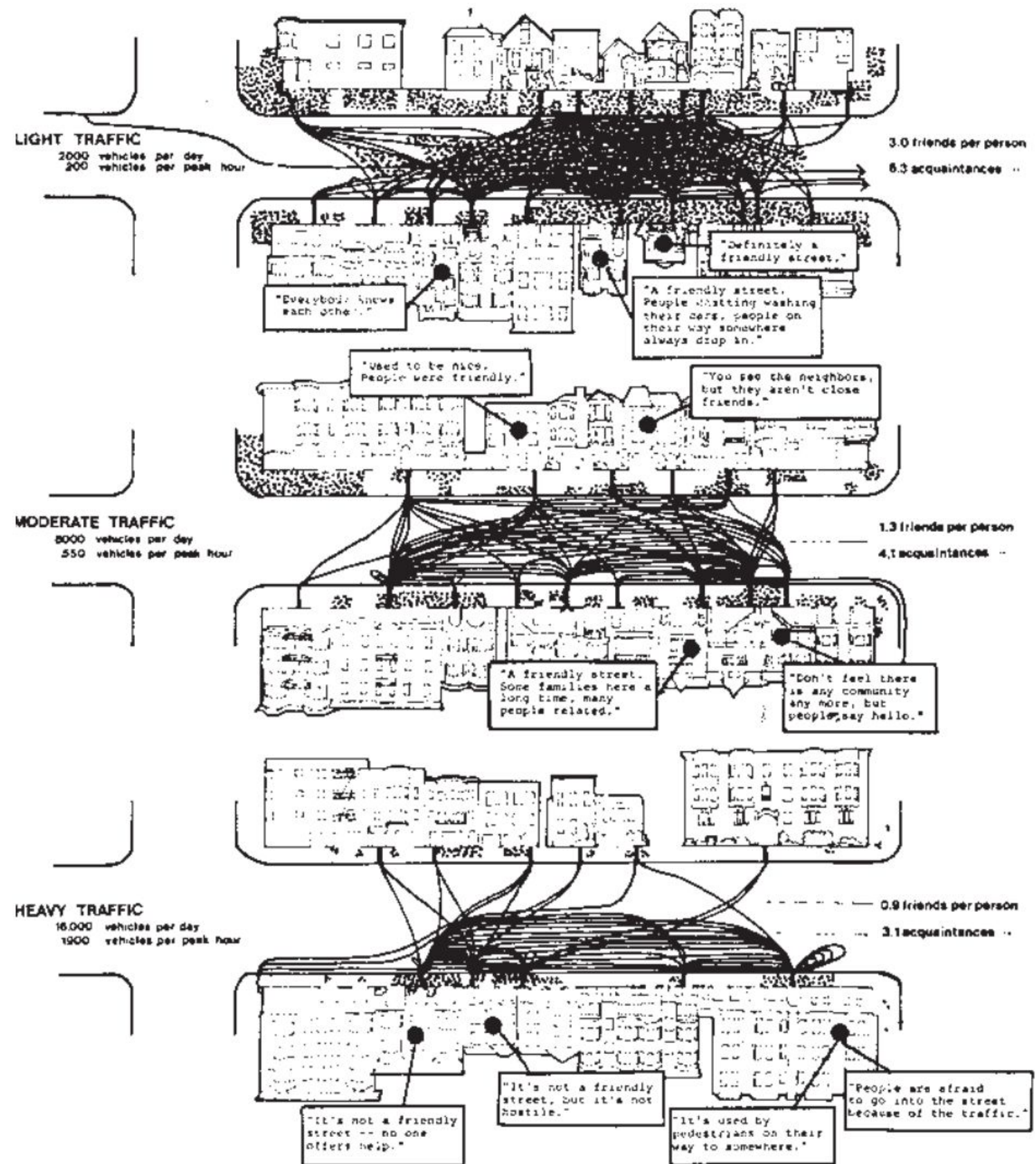
Figure 48: Street moves.



Note. Adapted from ArkDes (2021).

The study of San Francisco streets by Appleyard and Lintell (1972), as documented by Gehl (2011), underscores the inverse relationship between vehicular traffic and the health of the social web. The findings demonstrate that social networks do not erode gradually, rather, even moderate increases in traffic volume create a disproportionately severe negative effect on outdoor activity and neighborly contact (Gehl, 2011). This study confirms that modern urban grids often generate environments that push social life into private isolation (Gehl, 2011).

Figure 49: Inverse relationship between vehicular traffic and the health of the social web.

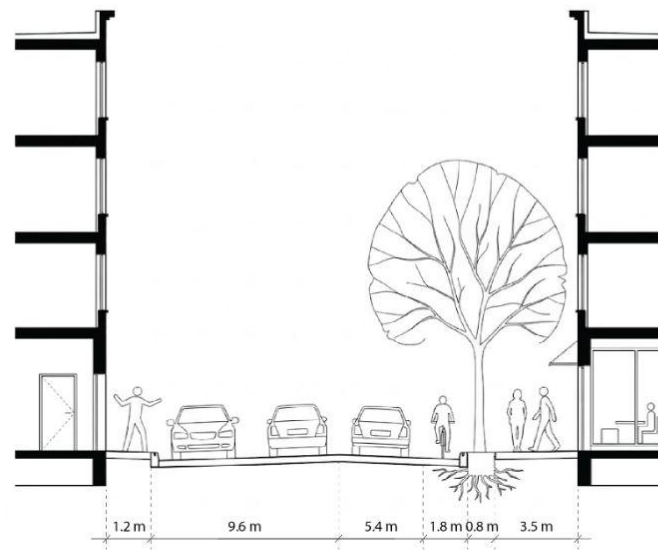


Note. Adapted from Appleyard and Lintell: "The Environmental Quality of City Streets" (1972).

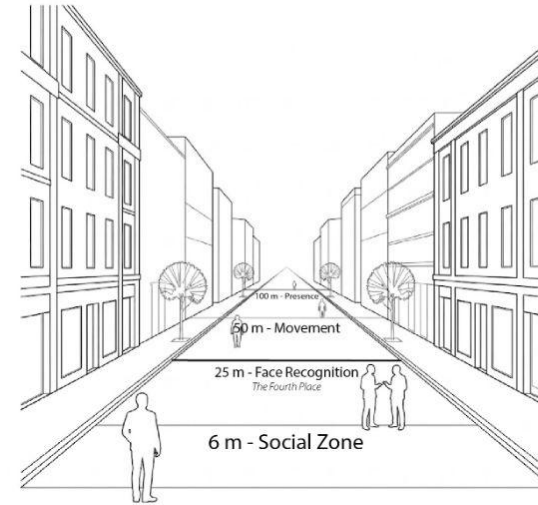
Figure 30: Analytical diagrams based on Jan Gehl's theory life between buildings.

These analytical diagrams translate Jan Gehl's (2011) human-scale design principles into architectural concept drawings. Pedestrian life requires physical safety and comfort. By separating vehicles from sidewalks through protective street elements, trees, and safe crossing widths, the street can be a secure pedestrian environment. Furthermore, human interaction is governed by our natural senses. While we can spot movement from 100 meters away, Gehl (2011) identifies 25 meters as the critical distance for face recognition. If a street is wider than 25 meters, strangers cannot read expressions or make eye contact.

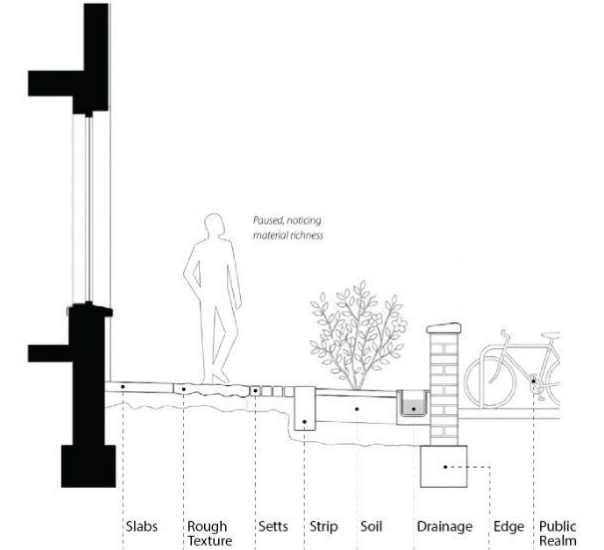
Repetitive, blank walls and closed security gates make walking feel boring and long. In contrast, breaking up the ground floor with frequent street entrances, large windows, and changing building depths creates a visually engaging, active walk that encourages people to explore on foot. People rarely pause next to flat, empty walls because they feel too exposed. A recessed ledge provides a psychological buffer. These small architectural niches give people a comfortable place to lean, stand, and linger. Finally, by changing the paving textures, adding steps, or introducing playful wooden structures, the architecture creates open-ended choices. These micro-features act as direct invitations for children to play.



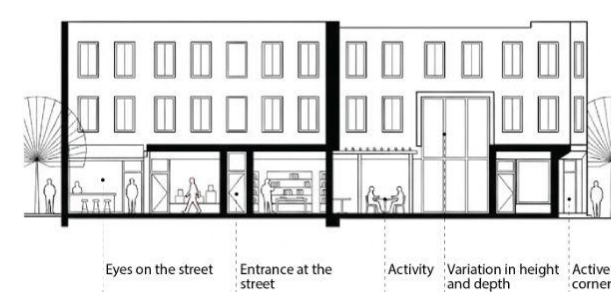
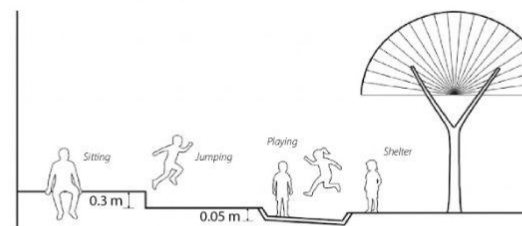
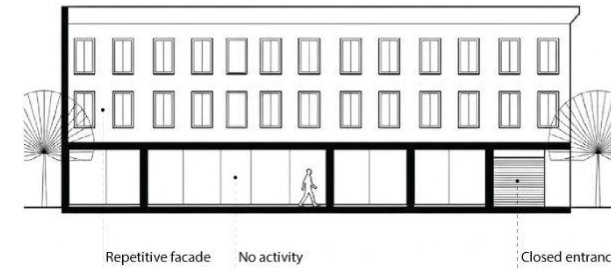
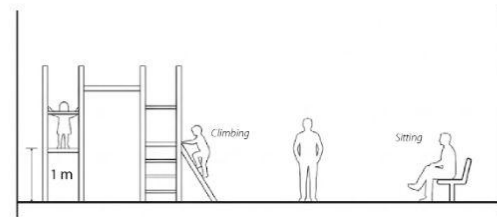
Protection from traffic



Opportunities to see

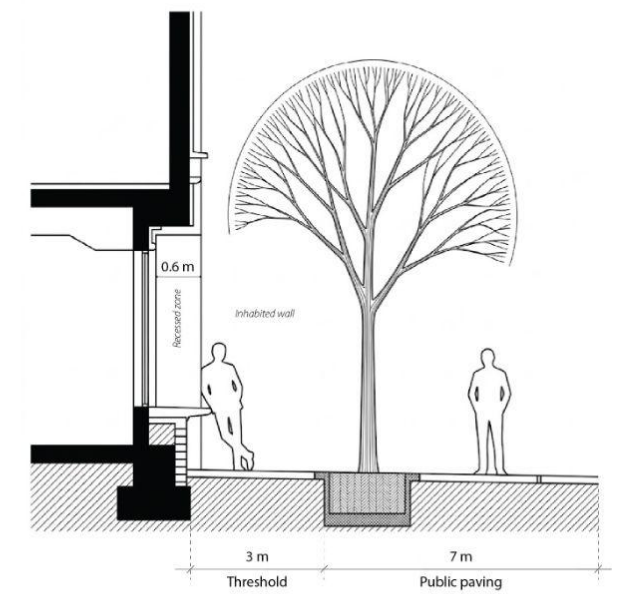


Aesthetic quality



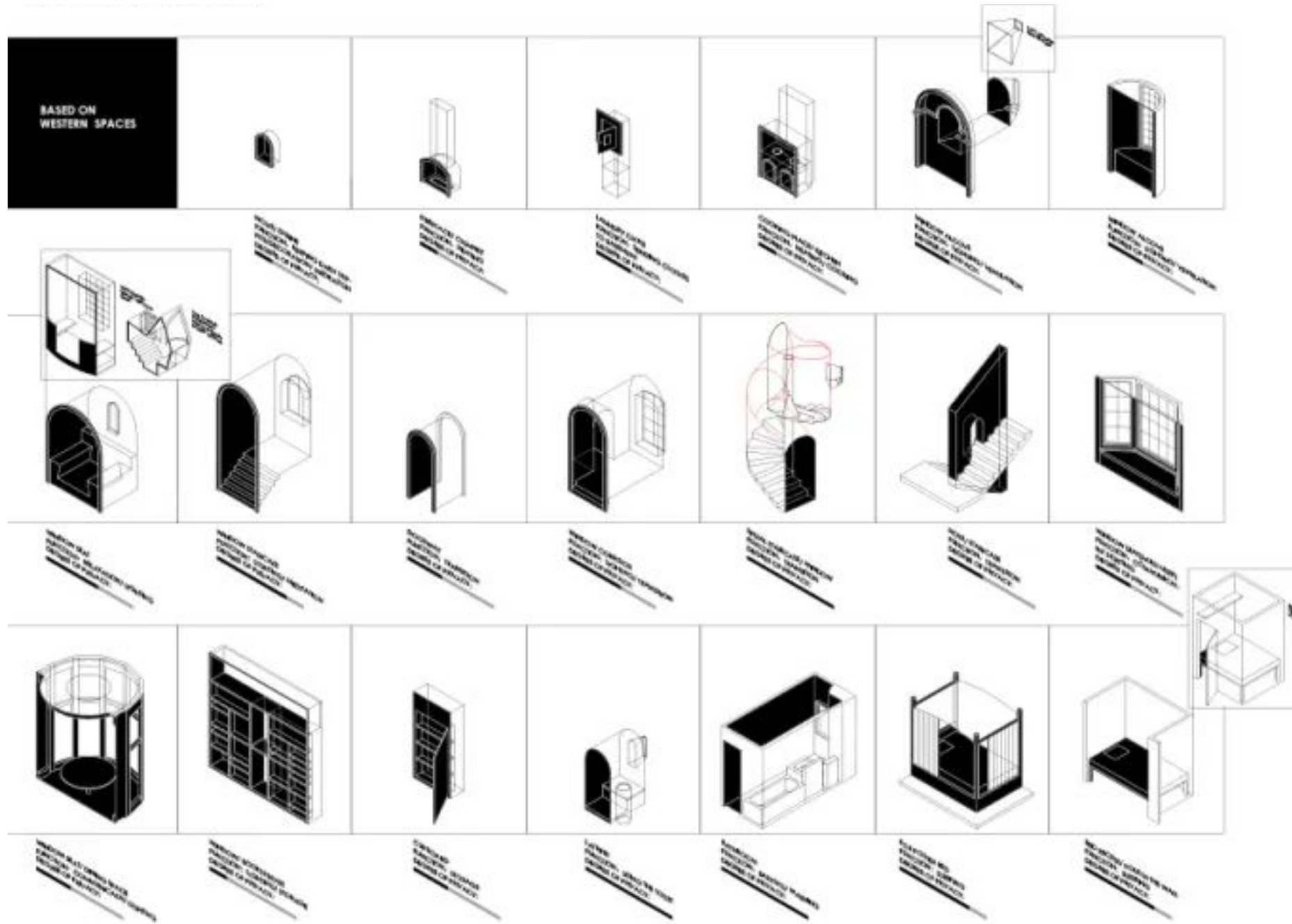
Affordances

Opportunities to walk



Opportunities to stop and stay

Figure 51: Typology of the poche.



Building on this, Martin Heidegger's philosophy posits that a boundary is not where something stops, but the site from which its essential unfolding begins (Heidegger, 1954/1971). By applying the theory of the poche as a conversational zone, the architecture adds depth to the facade, utilizing the hollow space between thick structural walls to host mural rooms, window alcoves, and sheltered seats (Yu, n.d.). This spatial organization is further refined by applying Louis Kahn's seminal distinction between served and servant spaces (Kahn, 1973). The poche functions strictly as the servant space, discreetly housing the technical infrastructures of the hybrid society, while leaving the major served spaces completely open and unobstructed for flexible communal use.

Note. Adapted from IDG Architecture (2020).

## Research and Design Questions

### Main Question:

*To what extent can a network of architectural interventions be designed as a distributed fourth place to mediate the scalar mismatch between Madrid's car-centric PAU perimeters and its oversized urban voids?*

### Sub-Questions:

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*What critical lessons can be extracted from a comparative analysis of historical and contemporary precedents to unveil why certain urban interventions failed while others succeeded in fostering community vitality?*

*How must these strategies be programmatically layered, multi-scalarly deployed, and structurally managed, integrating tectonic materiality and socio-metabolic resource loops, to transition a municipal liability into a self-governed urban common?*

Figure 52: Management form urban initiative redevelopment boulevard Sanchinarro.

The management form is structured around a decentralized governance model that prioritizes space-commoning and collaborative participation. The core-figuration of sharing integrates a diverse network of stakeholders, including residents, newcomers, and both public and private actors. This structure allows for a meta-figuration of knowledge practices, ensuring that the development is not a top-down imposition but an established urban initiative rooted in the city district's needs.

The operational management is further divided into specialized sectors to maintain the programmatic layering of the site. Key nodes such as the community centre and maker hub are governed by cooperatives and elected residents, while commercial zones like the food hall and cafe are managed by entrepreneurs and B corporations to balance local affordability with shared infrastructure. Public zones, including the mixed-use plaza and event square, are overseen by neighborhood assemblies and specific committees.

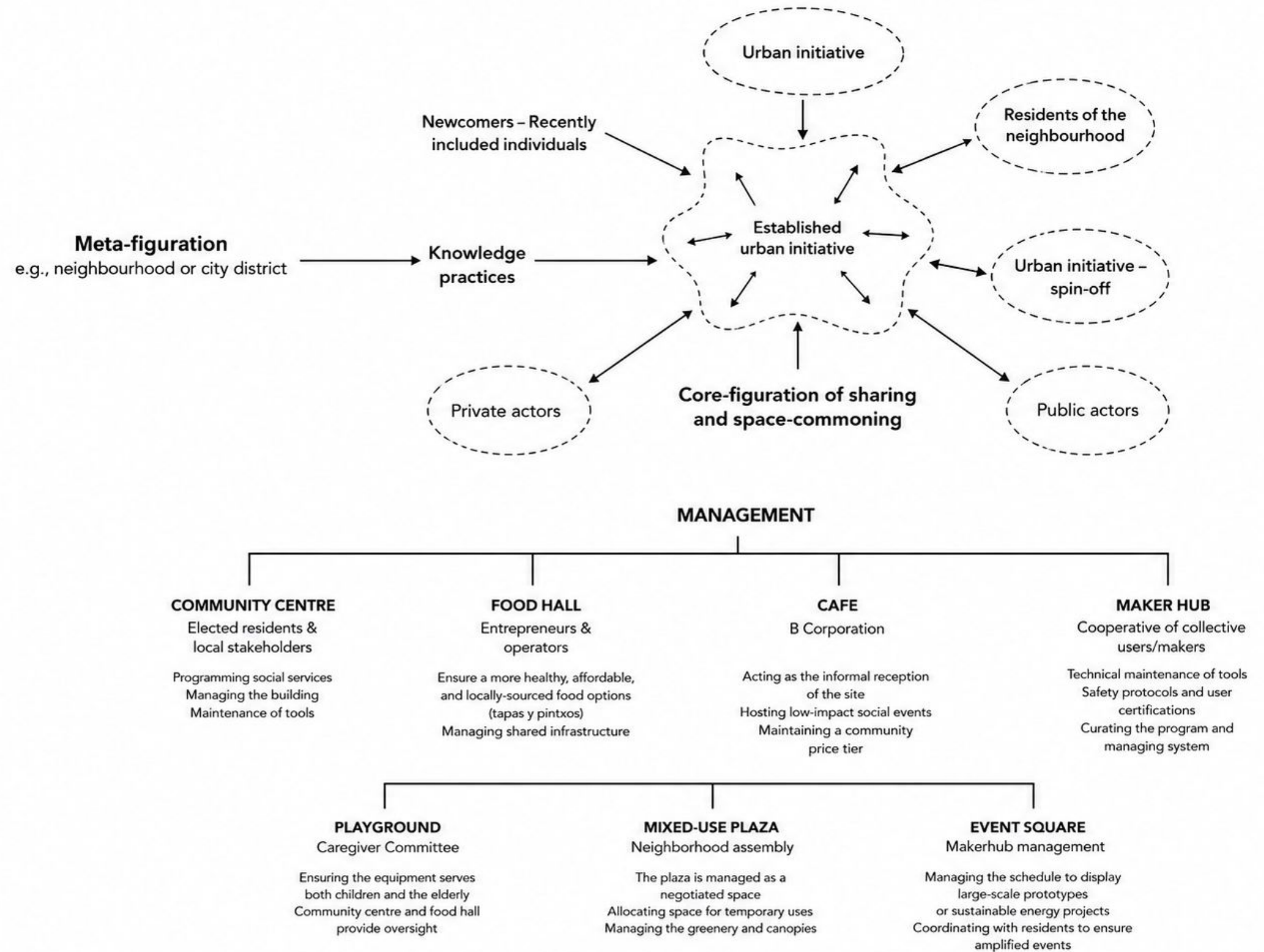


Figure 53: Circular metabolic flows and social exchange networks.

The diagrams illustrate the project's commitment to a circular urban metabolism by mapping the exchange of physical and social resources across the site. The upper section details a material-driven loop where technical and organic flows, such as upcycled goods, compost, nutrients, and raw 3D printing materials, are redistributed between the residential blocks and the new interventions.

The lower section shifts the focus to a social metabolism, charting how the physical interventions catalyze community-led cycles. Through solar energy systems and the local production of goods, the project facilitates a network of events, workshops, and community gatherings.

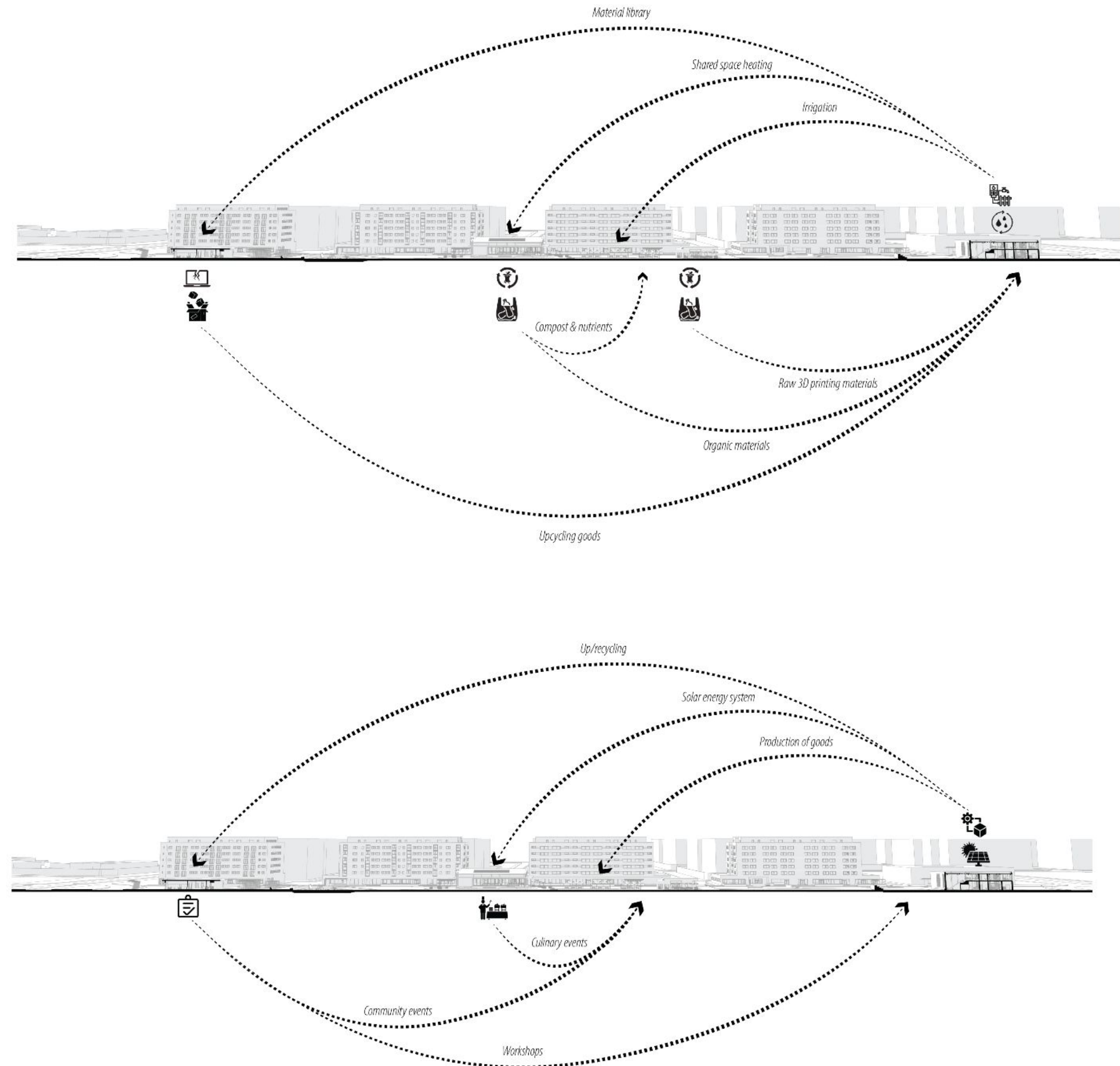
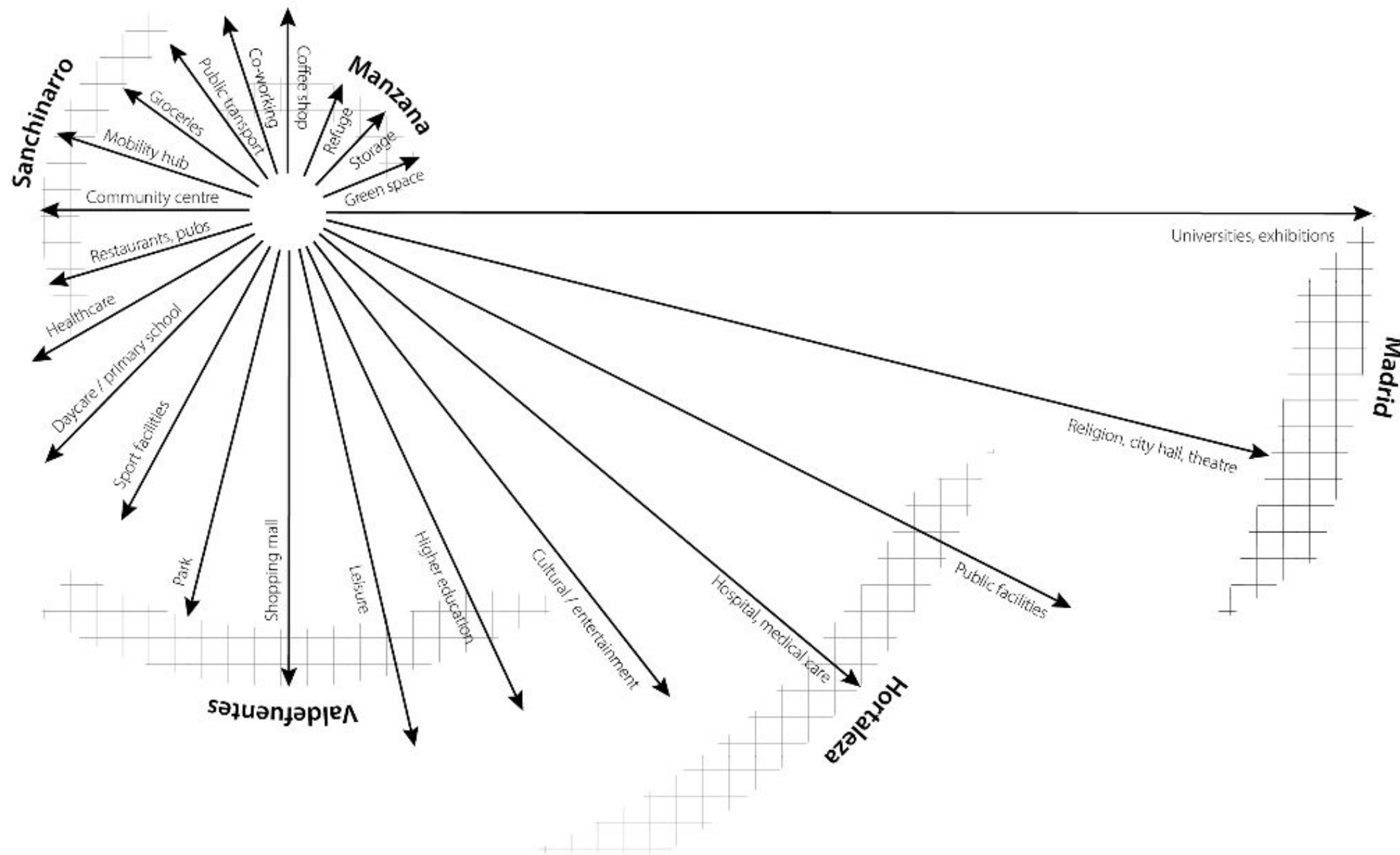


Figure 54: Temporal use of the cite.

The programmatic layering allows spaces like the maker hub and the food hall to evolve throughout the day, serving as functional nodes for production and logistics during work hours before transforming into centers for culinary events and social gatherings. This flexible use ensures that the boulevard remains active and populated across various chronological cycles.

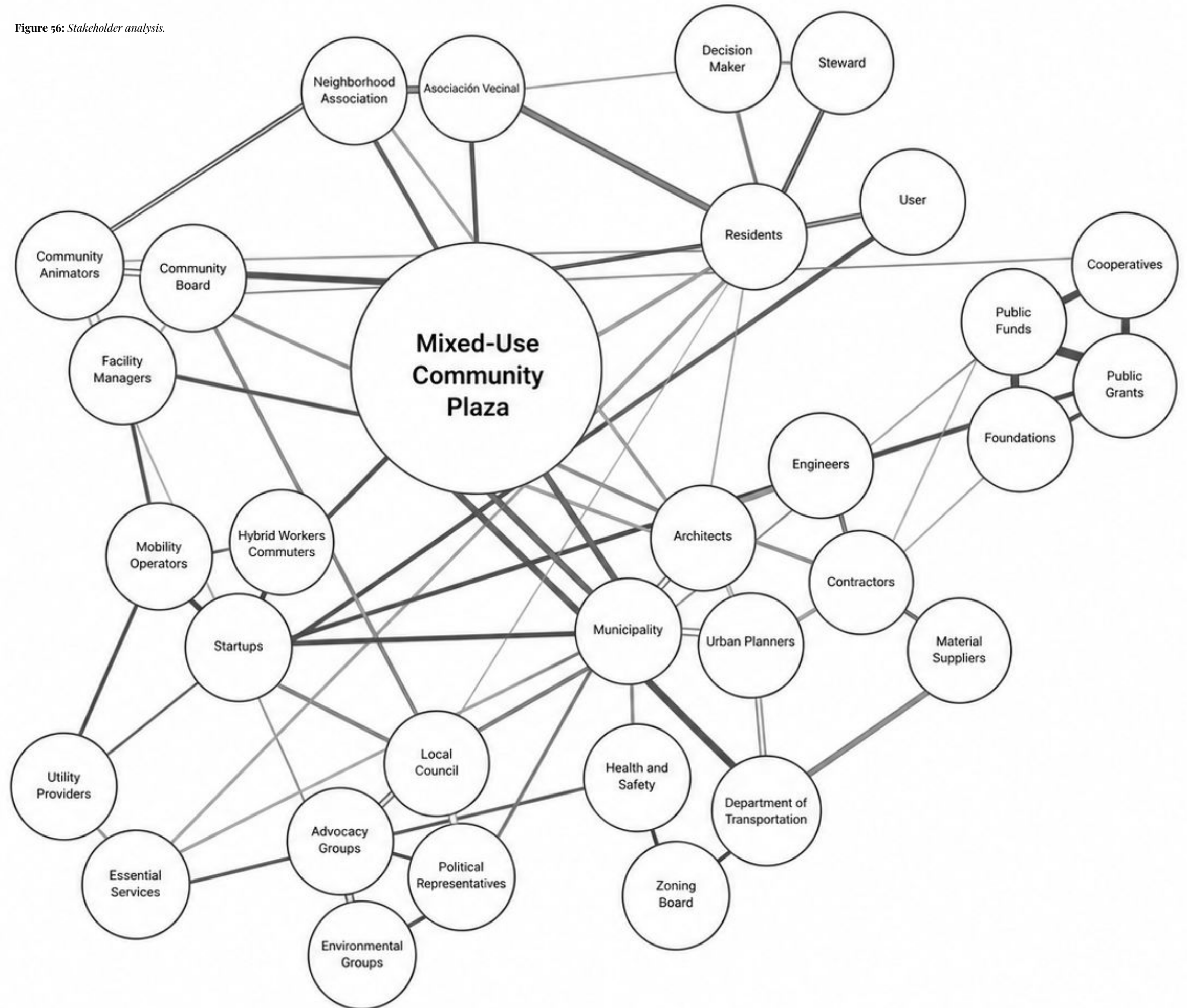


Figure 55: Accessibility urban planning.



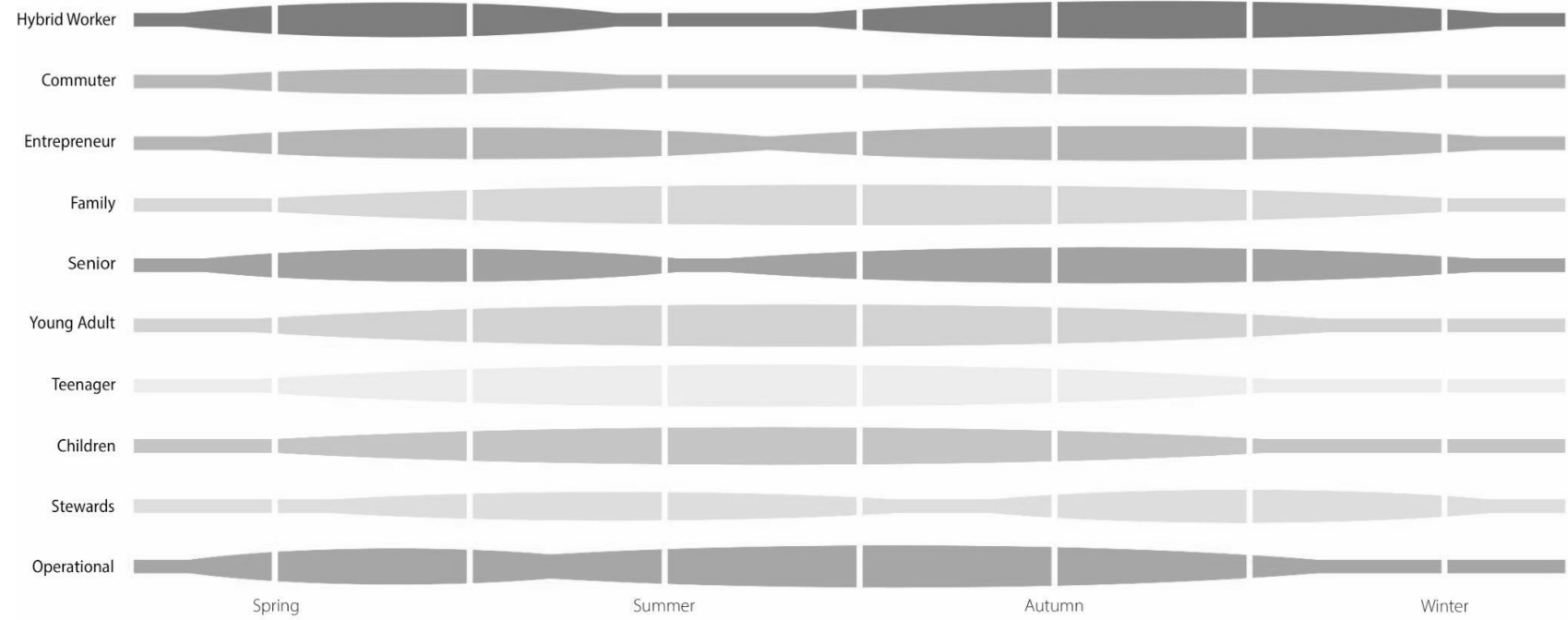
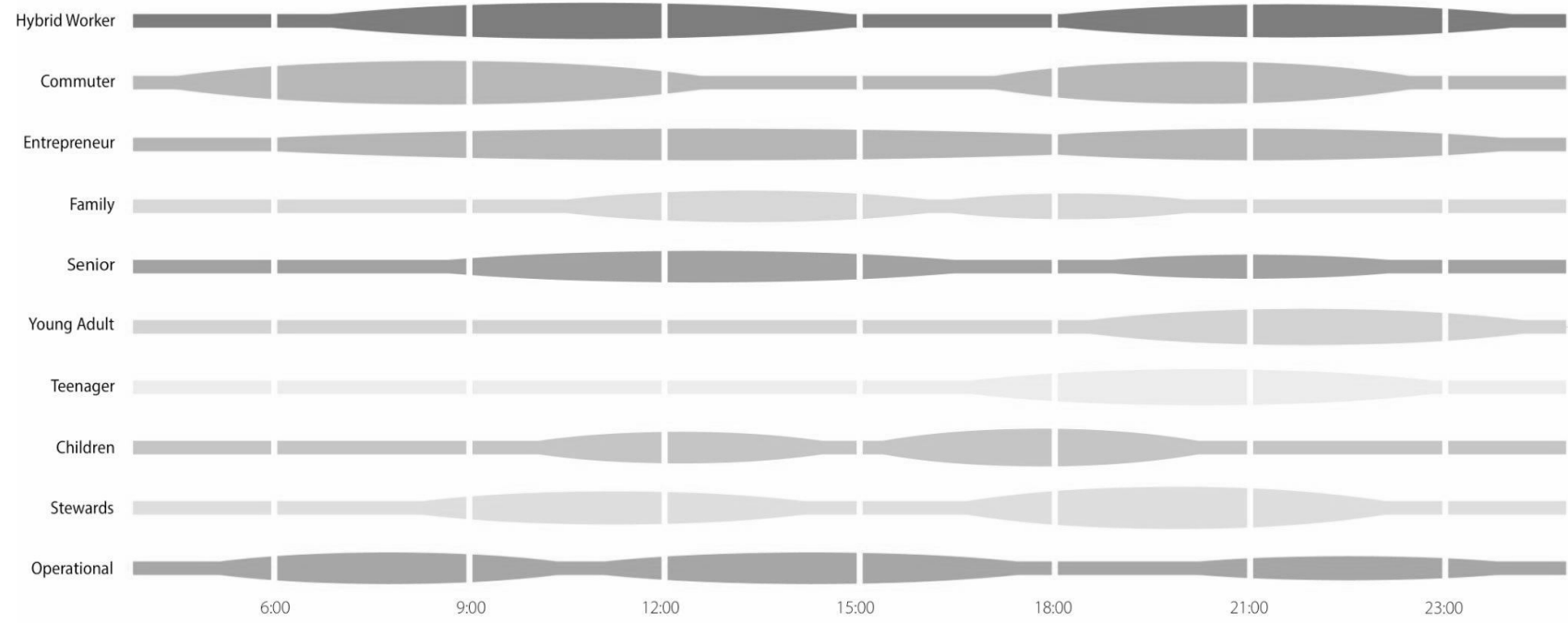
Accessibility serves as the primary design principle for enabling local communities to reclaim their spatial agency (Aelbrecht, 2016). Effective urban planning promotes active mobility, such as walking and cycling, as a means to reduce carbon emissions while simultaneously improving the mental and physical health of the population (Gehl, 2011; Giles-Corti et al., 2016). This necessitates a built environment that facilitates sustainable daily trips by placing the majority of residents and functional opportunities within a short, accessible distance (Di Marino & Lapintie, 2017; Koszowski et al., 2019; Widmer & Rérat, 2025).

Figure 56: Stakeholder analysis.



To ensure the long-term success and social sustainability of the mixed-use community plaza, the project moves beyond a top-down design approach by identifying a complex web of multidisciplinary stakeholders. This mapping recognizes that a vibrant urban space is not just built by architects, but is co-authored by the people who fund, manage, inhabit, and regulate it.

Figure 57: Temporal rhythm actants Sanchinarro.

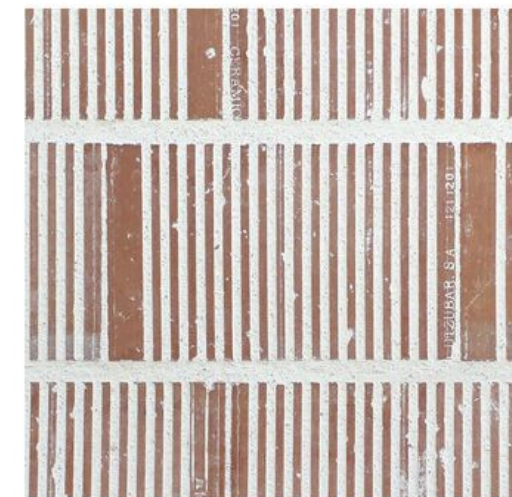
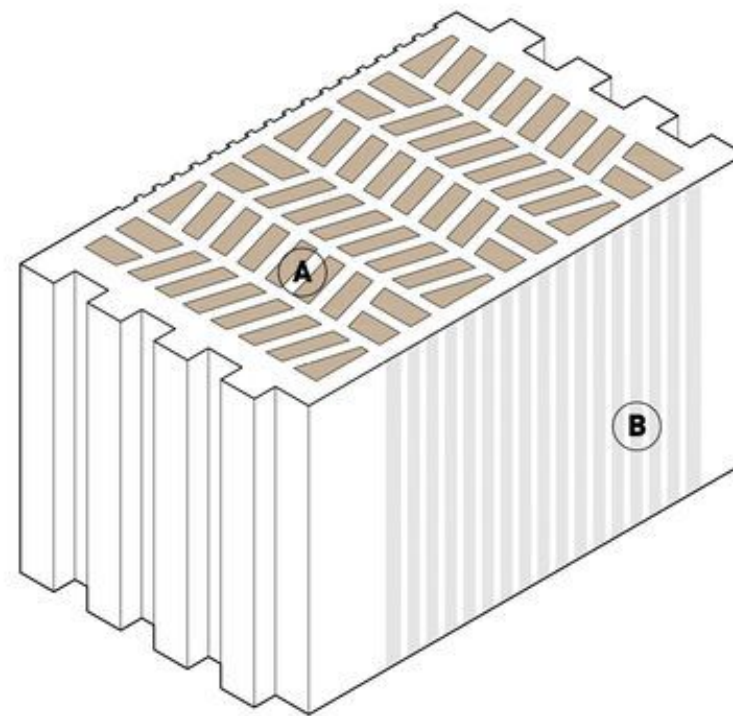
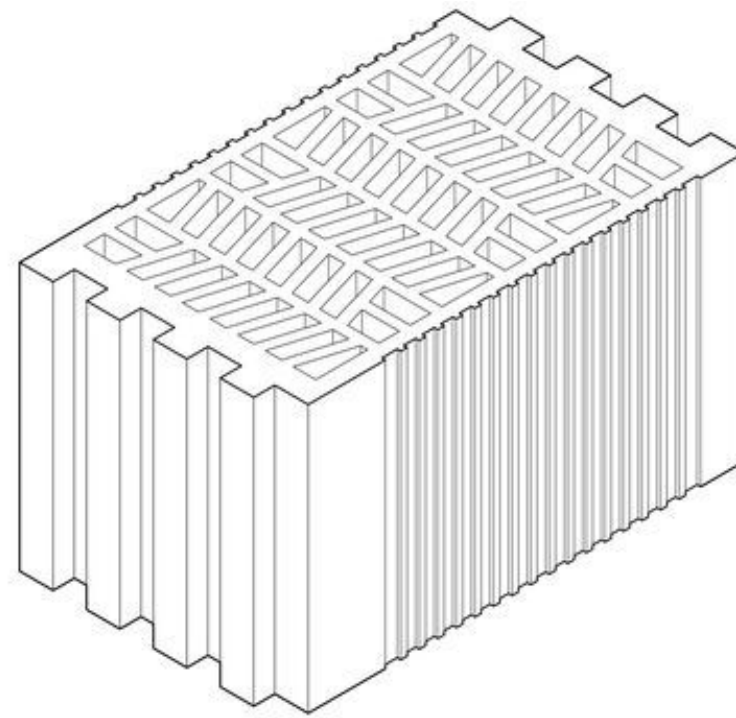


These diagrams illustrate a chronotopic approach to urban design, where the activity rhythms of diverse actants serve as the primary blueprint for the space. By mapping the intensity of use throughout both a 24-hour cycle and the four seasons, we move beyond static zoning toward a model of temporal resilience. This data dictates the project's spatial needs, identifying peak overlaps where the site must accommodate maximum social density, and low-flow periods where the space must remain intimate and safe.

Figure 58: Thermal clay block filled with local soil.

The urban redevelopment of Sanchinarro provides a unique opportunity to bridge the gap between traditional Spanish ceramic craftsmanship and contemporary bioclimatic demands through the use of the thermal clay block (termoarcilla). Localizing this material within Madrid minimizes contemporary transport emissions while providing a monolithic wall system specifically engineered for the region's extreme temperature swings (Estudio de Arquitectura Sostenible, 2020).

The thermal clay block is a low-density ceramic unit designed to maximize both structural efficiency and thermal performance. During its manufacture, clay is finely ground and mixed with lightweight additives, such as expanded polystyrene spheres or granular organic waste (Ai ESTUDIO, 2020). The mixture is extruded and fired in kilns at temperatures exceeding 850°C. During this process, the additives combust without leaving residues, resulting in a uniform, micro-porous network distributed throughout the ceramic mass (Ai ESTUDIO, 2020). This porosity lowers density and dramatically reduces thermal conductivity.



**FACADE DETAIL**

1 interior structural leaf of 19cm thermo-clay 2 exterior leaf of 14cm thermo clay 3 29 thermo-clay block to join both leaves 4 half a block of 14cm thermo-clay A thermo-clay block filled with excavation solid to increase its thermal inertia B thermo-clay block plastered with lime mortar for the chamber waterproofing

Note. Adapted from Archello (2022).

**Figure 59:** Thermal clay block filled with local soil.



*Note.* Adapted from Archello (2022).

The construction logic of the thermal clay block centers on the efficiency of the monolithic wall. The assembly utilizes a tongue-and-groove system for vertical joints. Furthermore, this project utilizes the internal cavities of the block to fill with excavation solids sourced directly from the Sanchinarro site. This innovative application of local soil increases the wall's thermal inertia to mitigate the harsh Madrid climate while simultaneously providing enhanced acoustic insulation. By repurposing the site's own excavated earth, the project transforms a typical construction waste product into a critical functional asset for thermal regulation. (Anderson, 2023).

**Figure 60:** Construction of thermal clay block wall.



*Note.* Adapted from Slow Studio (2021).

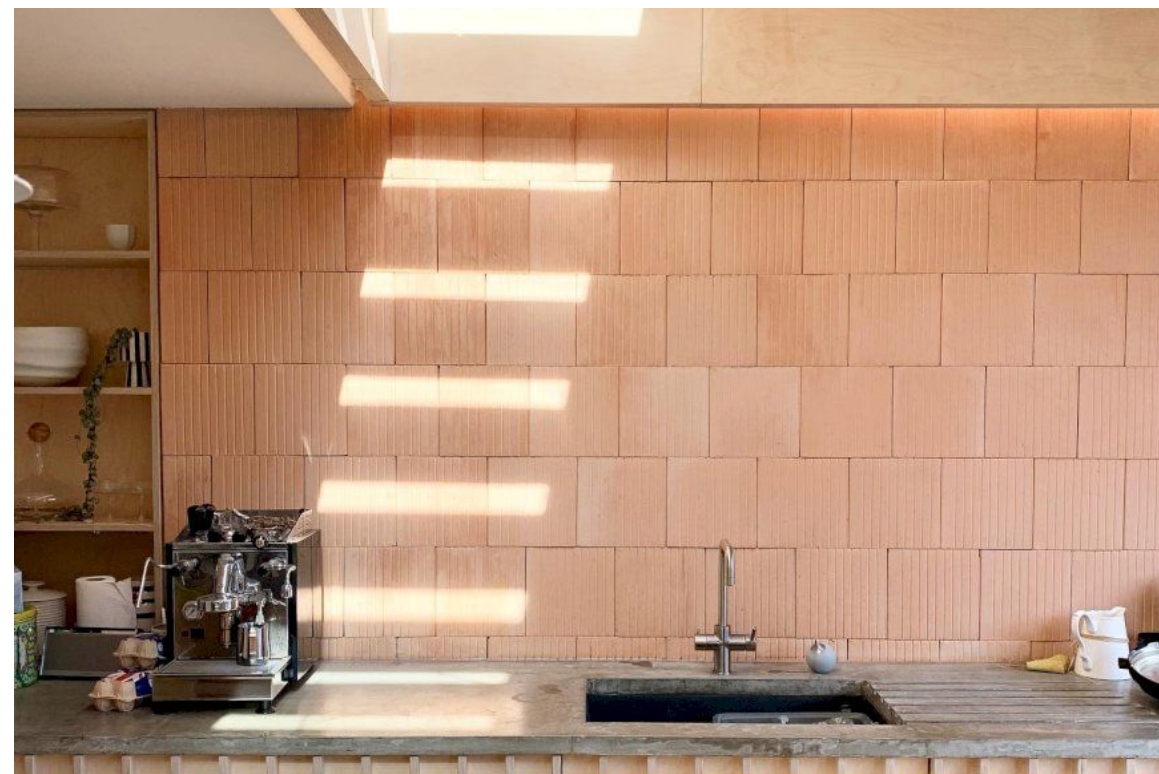
The proposal explores the tectonics of structural honesty by leaving the thermal clay block exposed as both the interior and exterior finish. This approach celebrates the material's raw, rhythmic texture and warm earthy tones. Exposing the block allows for a direct interaction between the inhabitant and the building's mass. The inherent texture of the clay provides a high-quality finish that eliminates the need for additional plastering or paints, thereby reducing the chemical load and CO<sub>2</sub> footprint of the interior. From a bioclimatic perspective, an exposed interior wall maximizes the benefits of thermal inertia. The clay and earth-filled core can directly absorb internal heat gains during the day and radiate warmth back at night, maintaining stable indoor conditions without mechanical intervention.

**Figure 61:** Thermal clay block filled with local soil.



*Note.* Adapted from Archello (2022).

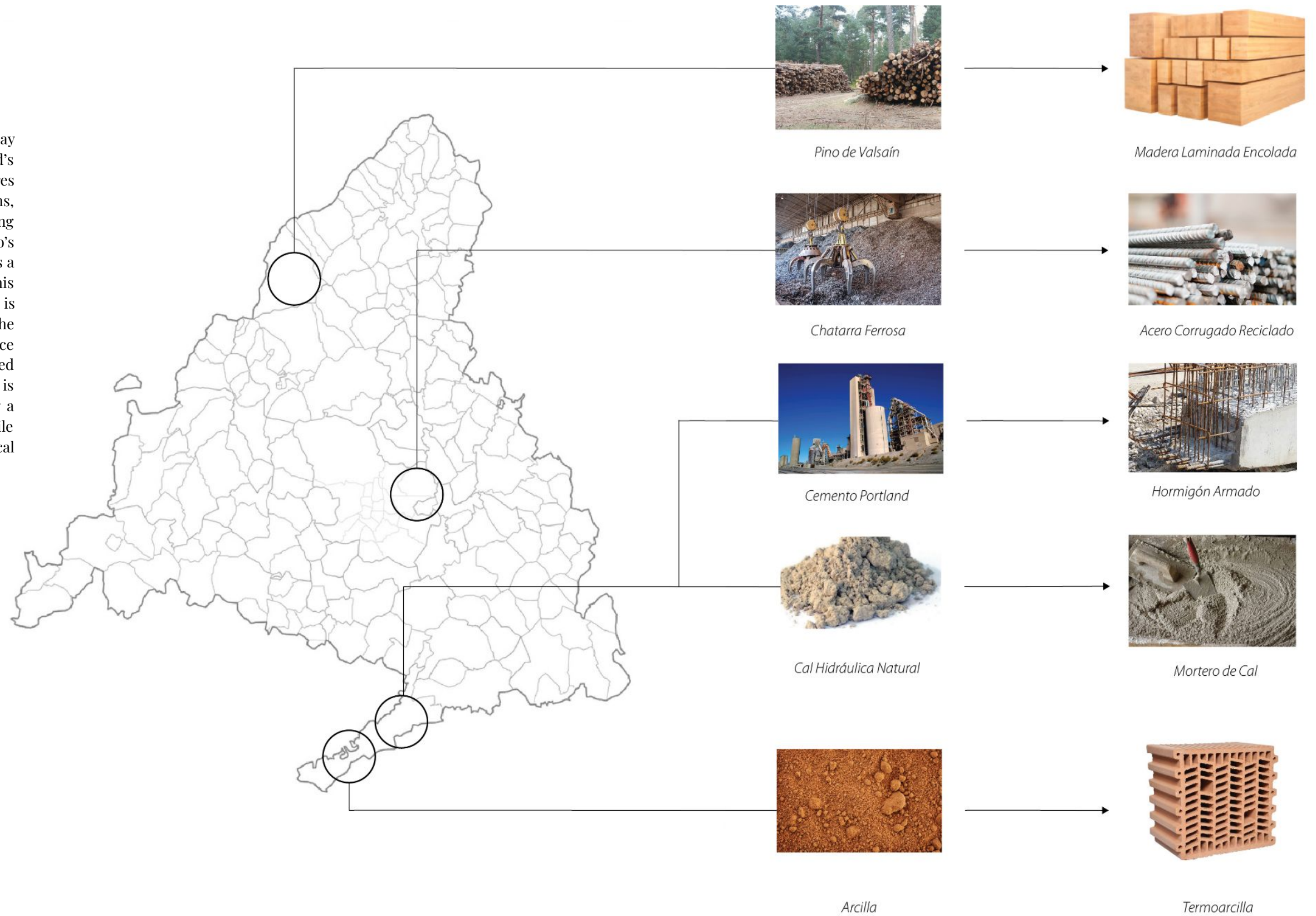
**Figure 62:** Material texture and tectonic expression in clay brickwork.



*Note.* Adapted from EH Smith Clay Products (n.d.).

Figure 63: Material origin.

The strategic decision to use the thermal clay block is rooted in regional circularity. Madrid's historical affinity for ceramic production ensures the primary material is sourced from local kilns, significantly reducing embodied energy. By pairing local manufacturing with the use of Sanchinarro's own soil as an internal filler, the project achieves a high degree of sustainability. Ultimately, this earth-to-earth cycle means the building's mass is literally composed of its own site. This treats the building envelope as a single, high-performance leaf rather than a complex assembly of imported synthetic layers. The resulting architecture is durable, fire-resistant, and breathable, offering a resilient solution to urban heat islands while remaining deeply connected to its geological origin.



## **Research and Design Questions**

### **Main Question:**

*To what extent can a network of architectural interventions be designed as a distributed fourth place to mediate the scalar mismatch between Madrid's car-centric PAU perimeters and its oversized urban voids?*

### **Sub-Questions:**

*Which material and infrastructural actants within Sanchinarro's car-centric grid enforce pedestrian transience, and where do they produce the specific socio-spatial gaps between the closed block and the oversized urban voids?*

*What critical lessons can be extracted from a comparative analysis of historical and contemporary precedents to unveil why certain urban interventions failed while others succeeded in fostering community vitality?*

*How must these strategies be programmatically layered, multi-scalarly deployed, and structurally managed, integrating tectonic materiality and socio-metabolic resource loops, to transition a municipal liability into a self-governed urban common?*

Figure 64: Urban Strategy.

The masterplan reconfigures the Sanchinarro spine into a coordinated network of social anchors and local initiatives. This strategy actively integrates educational partnerships with the Escuela Infantil Ana de Austria and Colegio CEU, while fostering civic engagement through community initiatives with the Asociación Vecinal Sanchinarro. Furthermore, the masterplan promotes economic and social integration by relocating the local market to the community plaza and establishing a green corridor that links various social anchors.

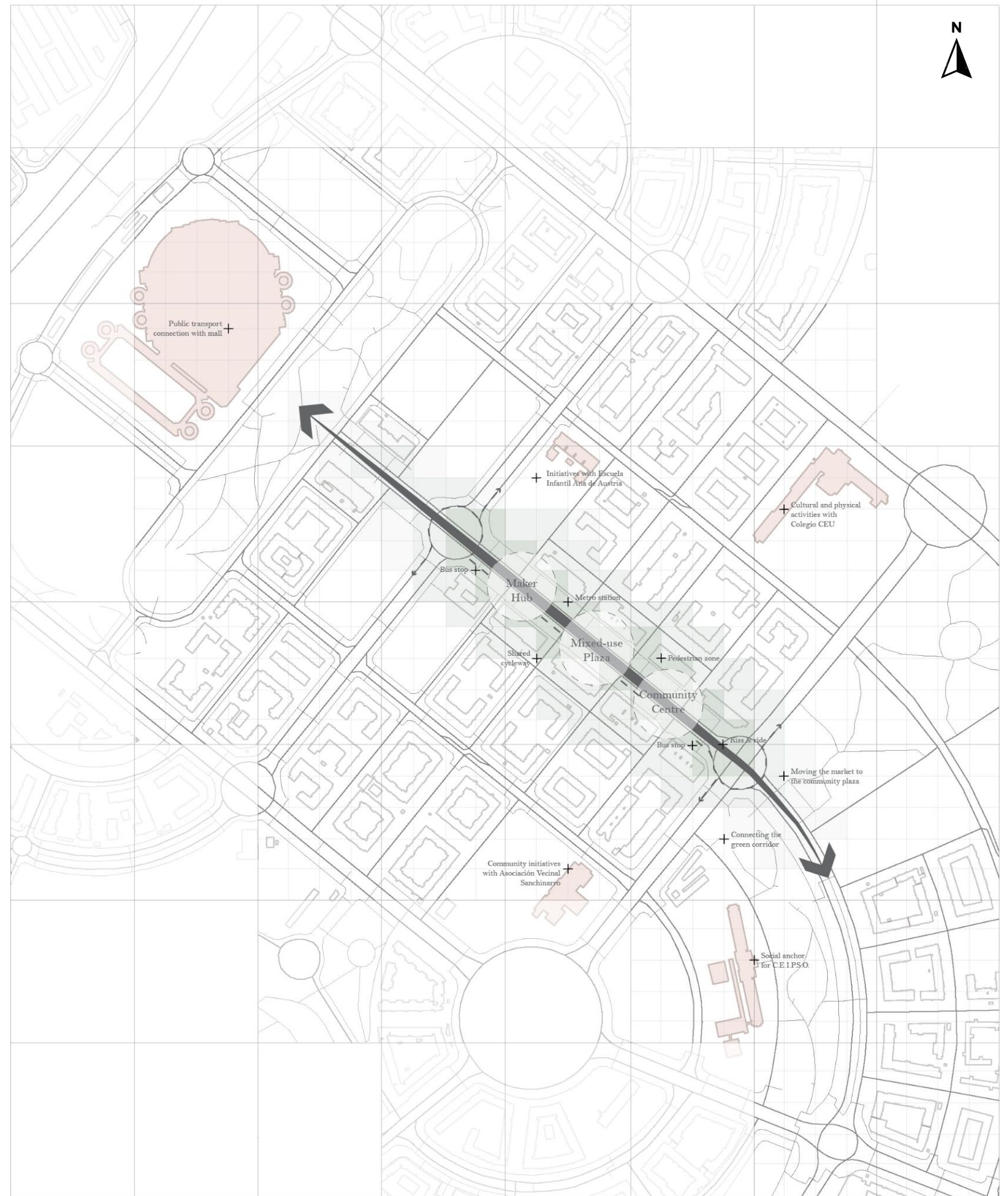


Figure 66: Urban strategy.

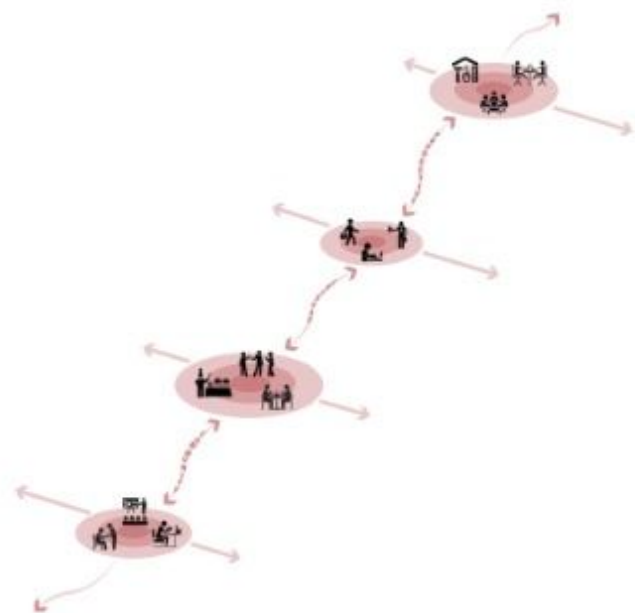
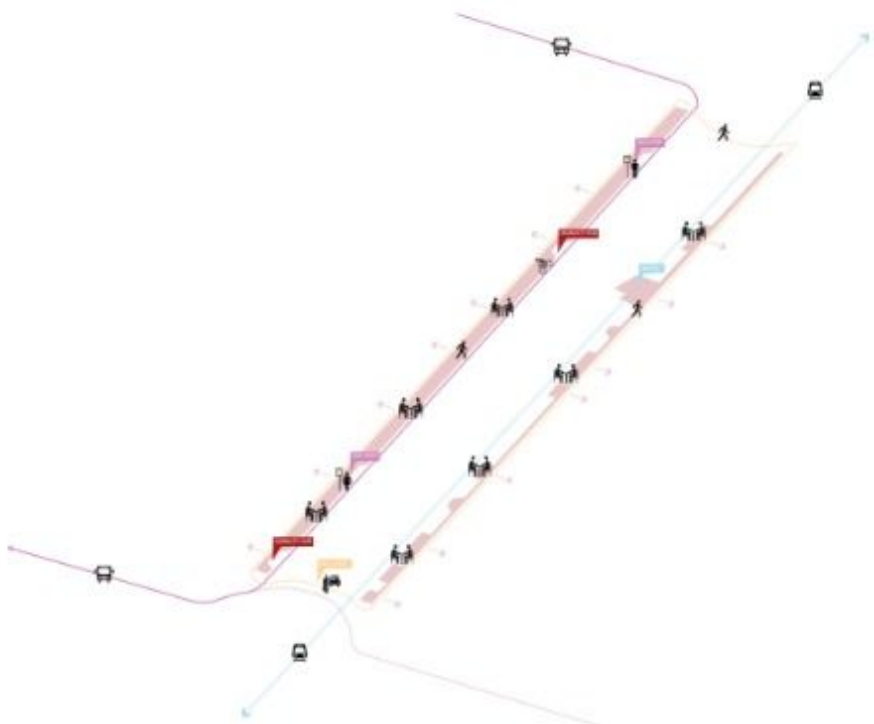
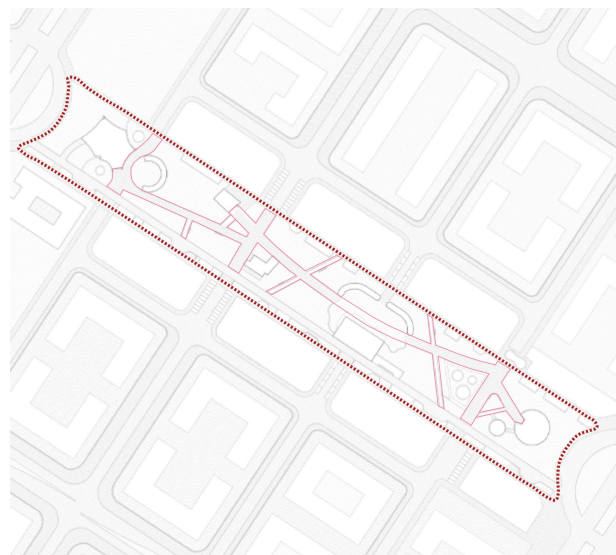


Figure 67: Masterplan 1:2000.



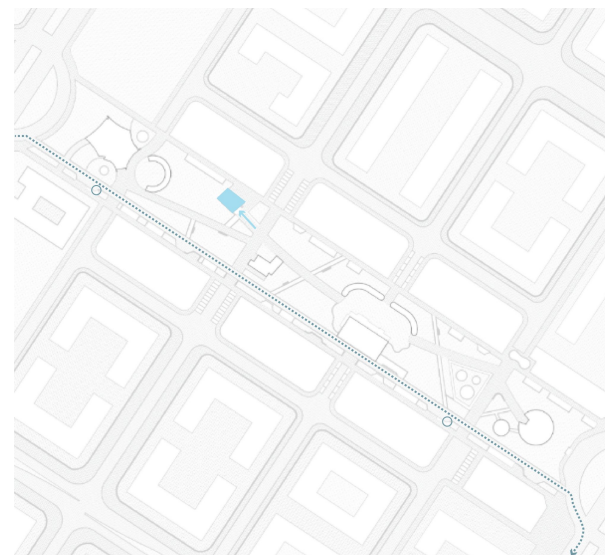
- 1 COMMUNITY CENTRE (403 m2)**  
**Program:** Social Hub, coffee corner, reception, flexible event rooms, shared library, reading veranda, WiFi pavilion, storage, wardrobe, package service, toilets  
**Target Group:** Hybrid workers, families, seniors, young adults, teenagers, children, neighborhood associations, local NGOs, municipal social services  
**Capacity:** 100 - 150
- 2 FOOD HALL (482 m2 inside, 1355 m2 outside)**  
**Program:** Pinchos y tapas stands, central bar, indoor communal seating, gastro plaza, outdoor shaded seating, standing places, toilets, BOH (preparation area, cold & dry storage, washing area, waste management, service entry, staff lockers, staff room, cleaning facilities)  
**Target Group:** Sanchinarro residents and visitors, local gastronomy cooperatives, urban agriculture initiatives, cultural associations  
**Capacity:** 70 - 100 inside, 300 - 400 outside
- 3 CAFE (173 m2 inside, 108 m2 outside)**  
**Program:** Street-side counter, indoor seating area, outdoor seating area, open kitchen, order counter, preparation counter, barista station, toilets, BOH (cold & dry storage, washing area, waste management, service entry, staff lockers, staff room)  
**Target Group:** Hybrid workers, commuters, entrepreneurs, seniors, young adults, families,  
**Capacity:** 40 - 50 inside, 60 - 70 outside
- 4 MAKER HUB (1034 m2)**  
**Program:** "Dirty zone" (heavy working machines, assembly & finishing zone, eyewash station, first aid, PPE storage, repair, maintenance & circularity), "Clean zone" (3D printing, laser cutting, printing), BOH (material library, storage, loading dock, lift, waste storage), workstations, co-working hub, meeting room, private offices, coffee corner, cafe, exhibition zone, package wall, reading wall, tribune staircase, toilets, wardrobe & lockers  
**Target Group:** Hybrid worker, commuter, entrepreneur, startups, young adult, local craftsmen, students, local colleges/universities  
**Capacity:** 100 - 350



Pedestrian zones



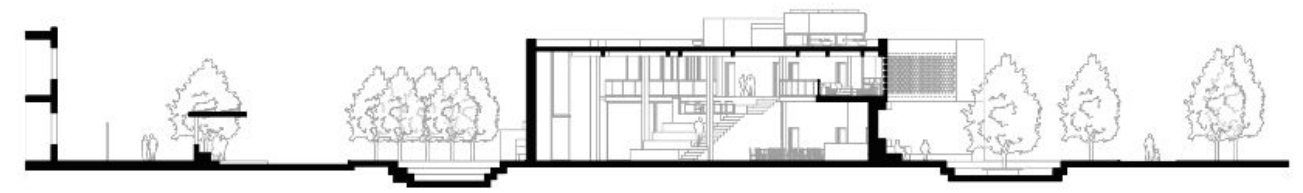
Green spaces



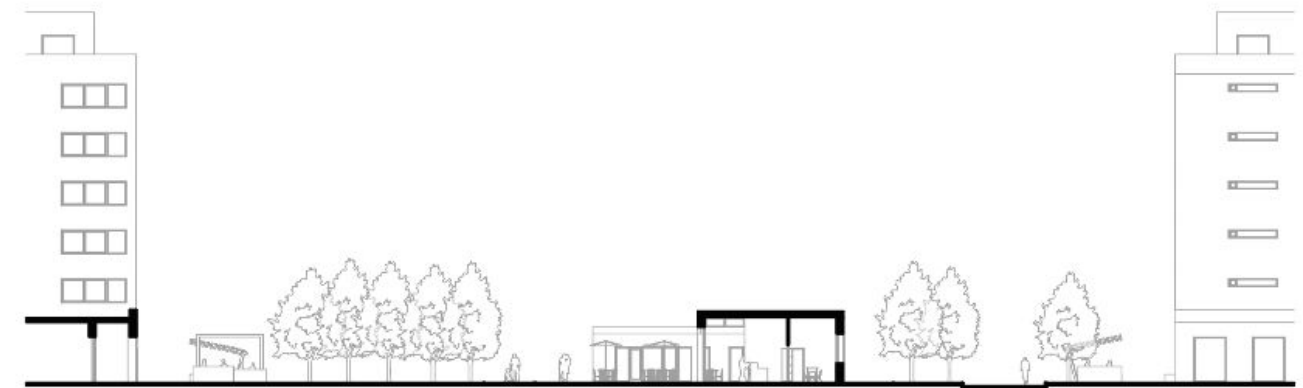
Public transport

Figure 68: Sections 1:500.

These sections demonstrate how the project deconstructs the oversized, car-centric boulevard into a series of intimate, human-scale environments. By introducing lower-profile architectural volumes and dense tree canopies into the center of the broad avenue, the interventions break the visual and physical distance between opposing residential blocks. This transition creates new possibilities for interaction by populating the previously empty void with varied programmatic affordances.



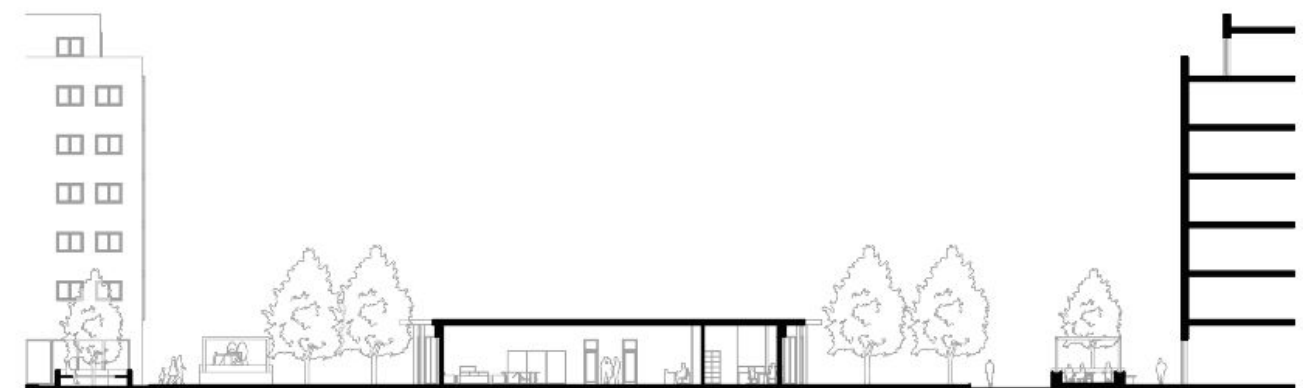
*Maker Hub*



*Cafe*



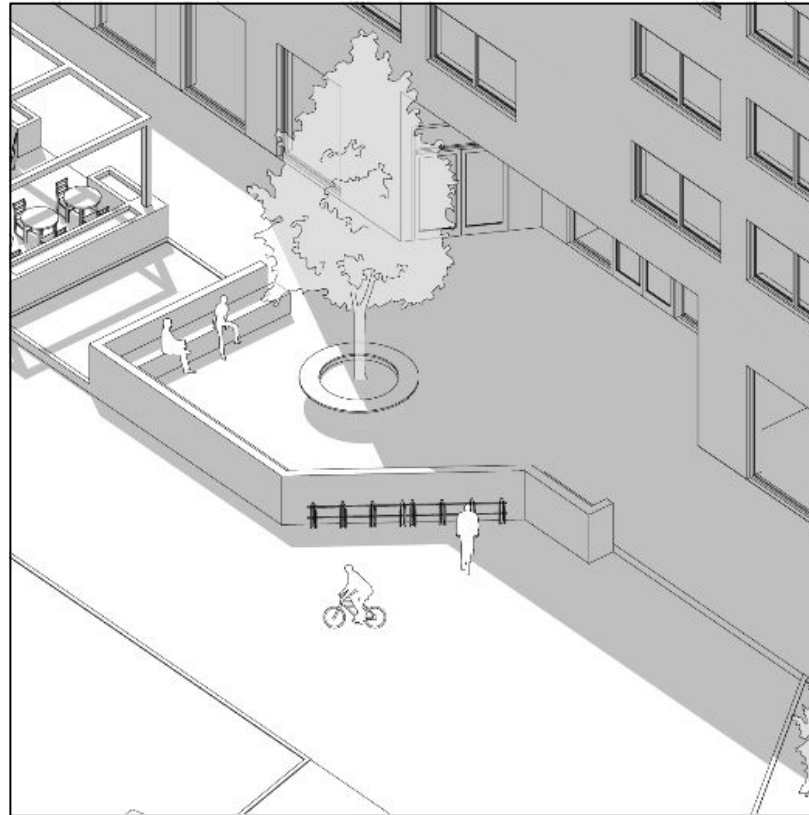
*Food Hall*



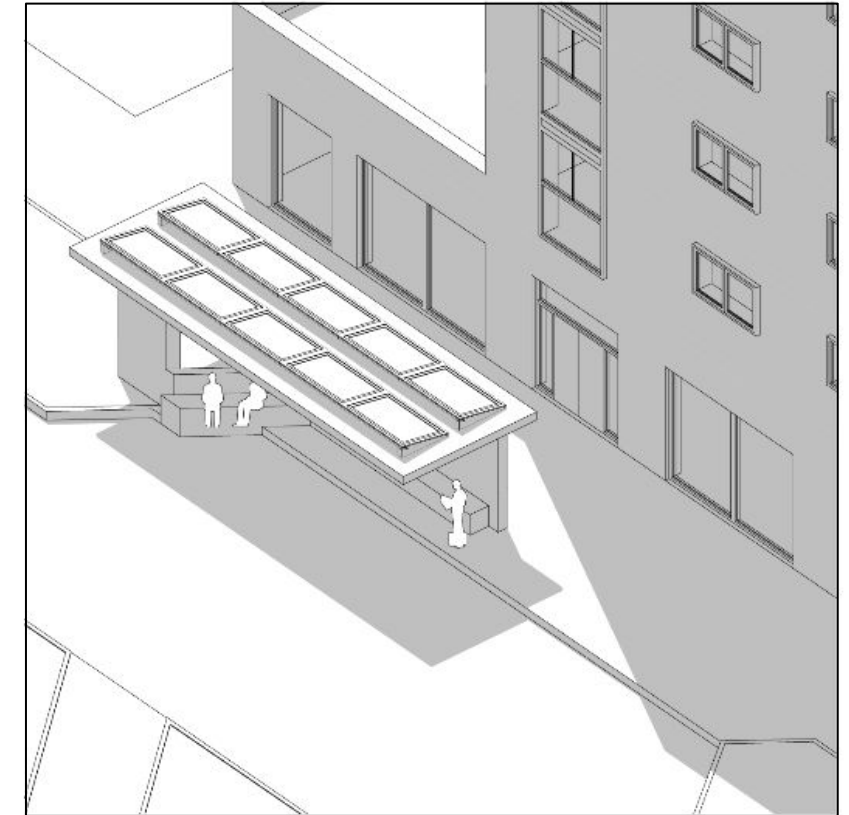
*Community Centre*

**Figure 69:** *Street level interventions.*

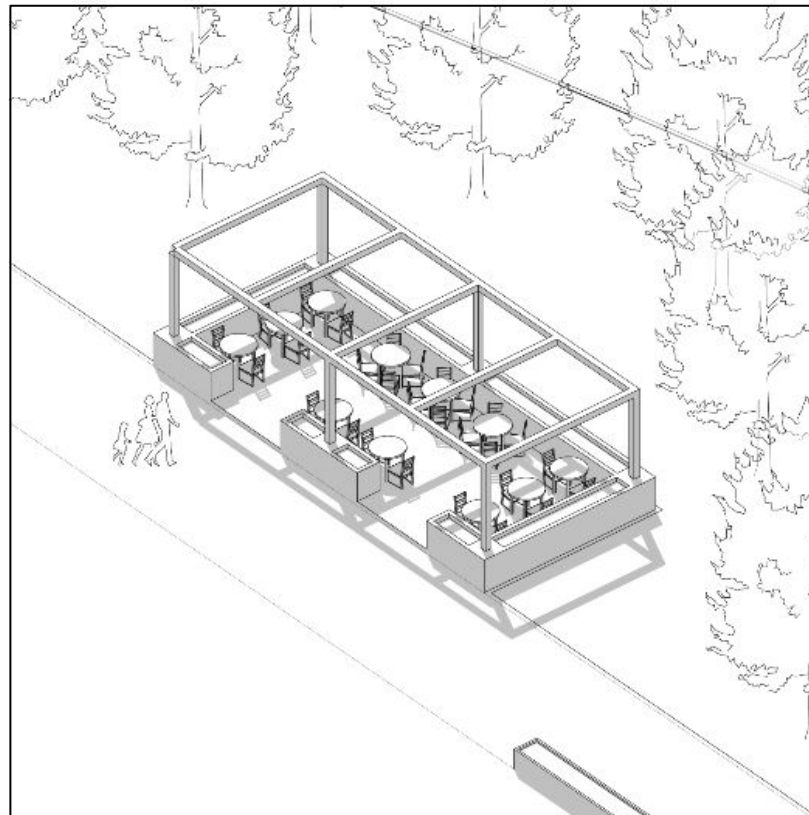
The street-level interventions function as a kit of parts designed to activate the public realm through specific micro-affordances. These small-scale additions, transform the pavement from a transit-only surface into a social landscape. The interventions also address environmental comfort through light-weight canopies and shaded seating areas that soften the vastness of the boulevard.



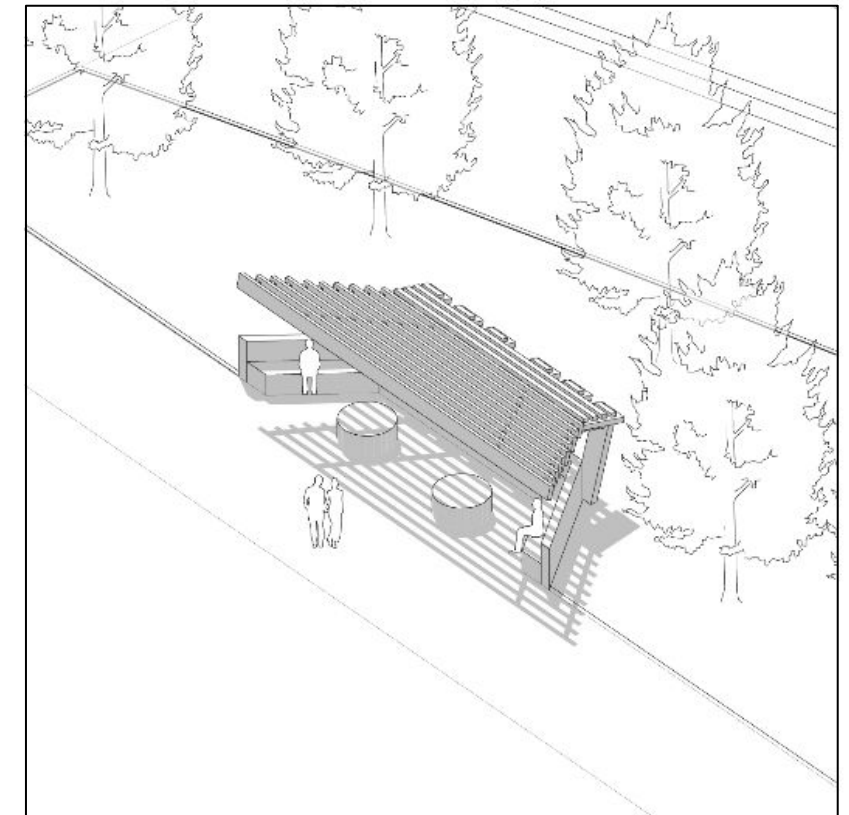
*Bike sharing*



*Bus stop with phone charging*



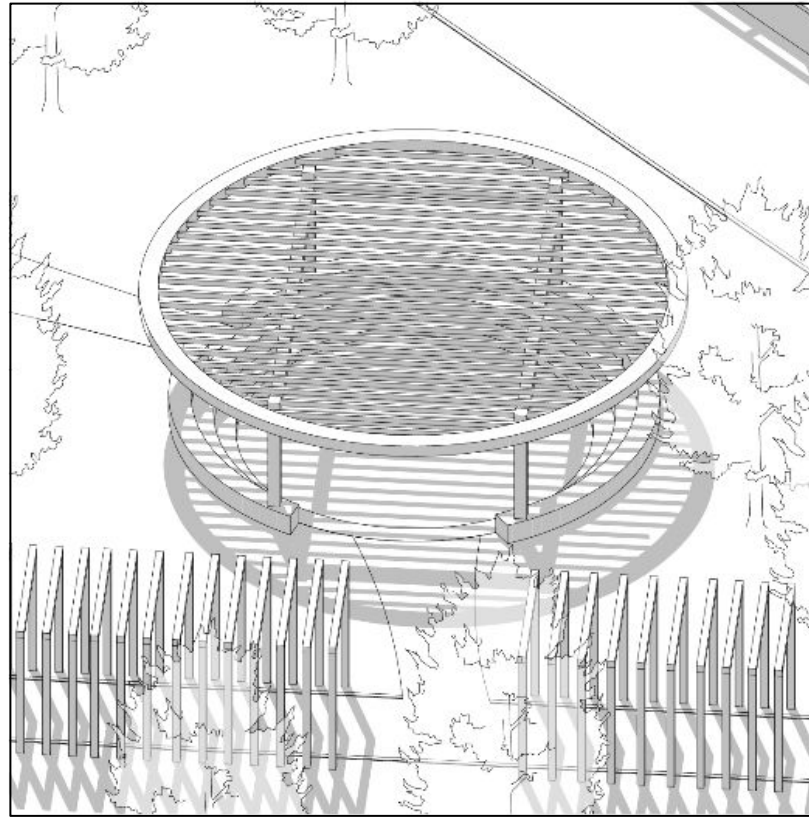
*Modular terraces*



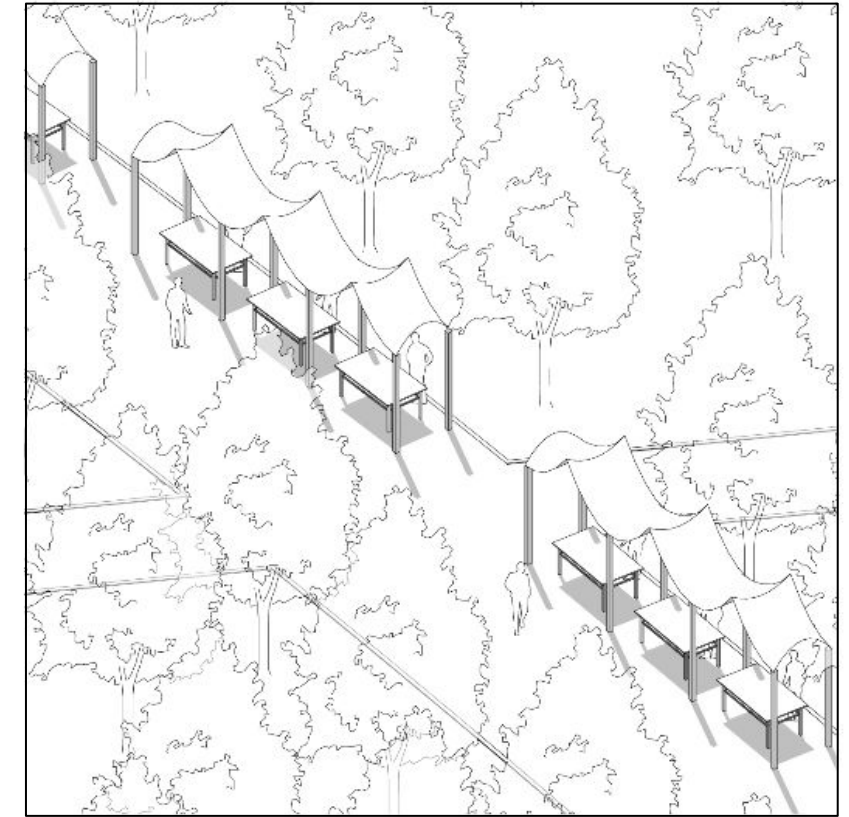
*Shaded seating*

Figure 70: Park interventions.

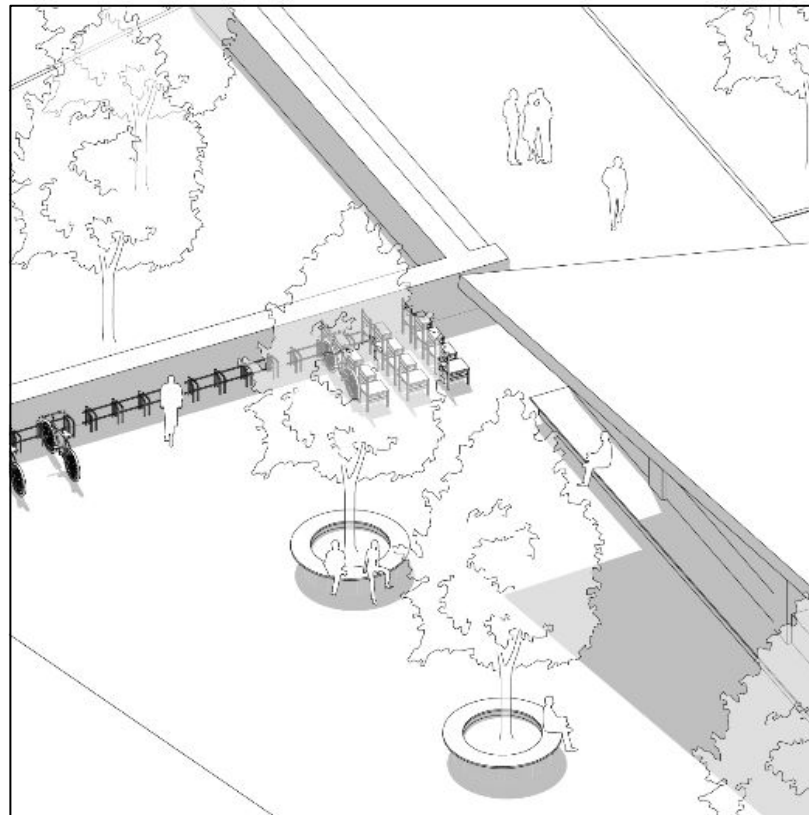
The park interventions expand the project's kit of parts into an immersive landscape that prioritizes communal utility and environmental comfort. By integrating diverse functional nodes, the park is transformed into a series of high-resolution social spaces that facilitate both active transit and stationary leisure.



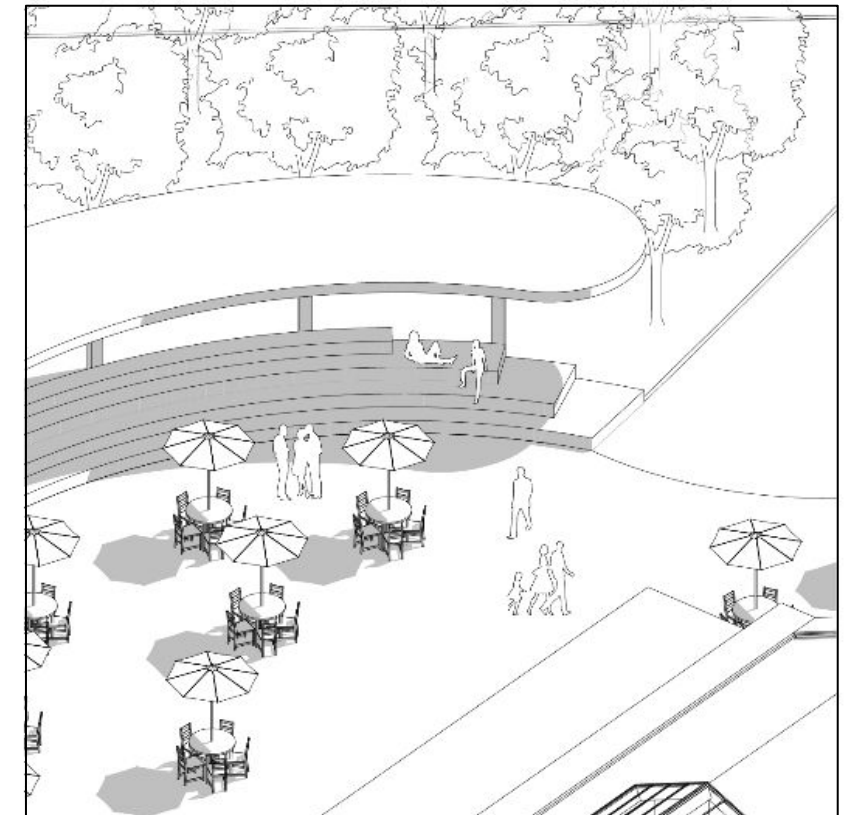
Wi-Fi zones



Mixed-use streets



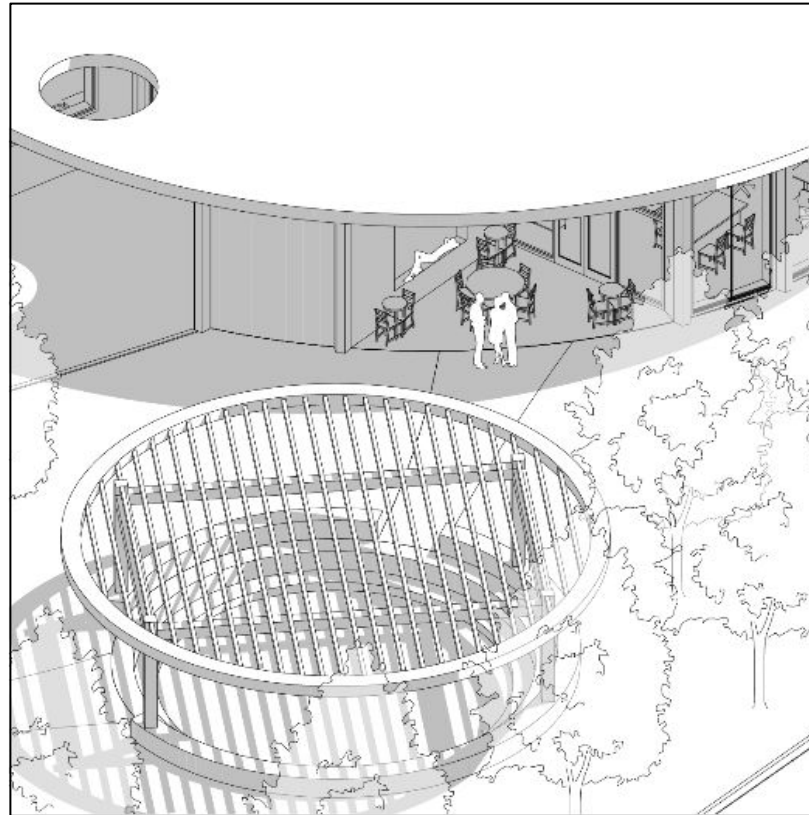
Metro station



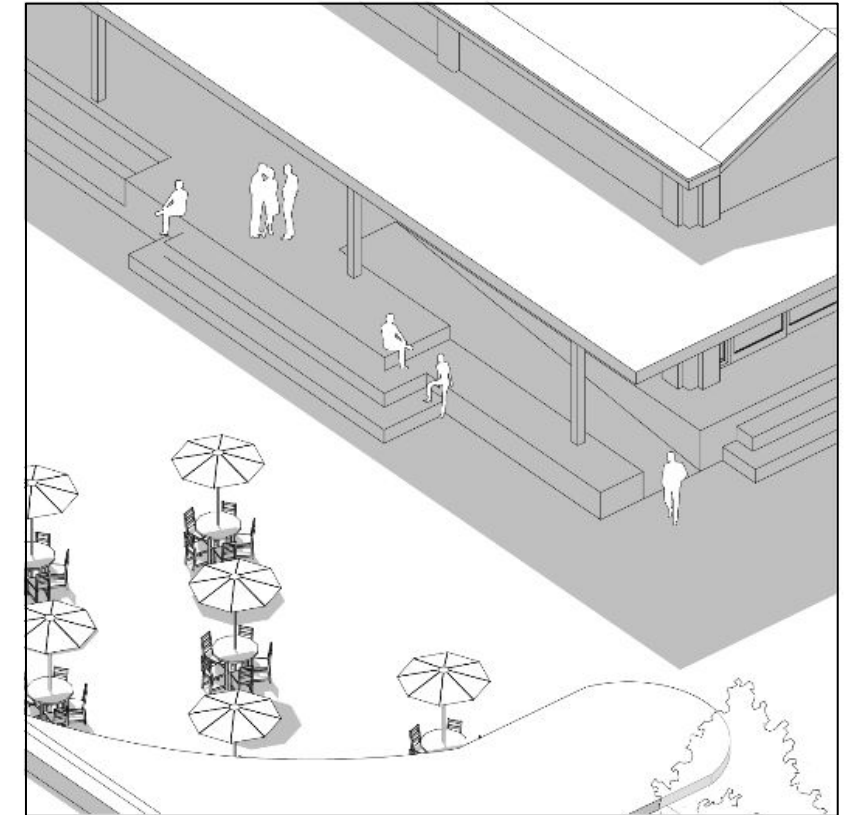
Shaded seating

Figure 71: Facade interventions.

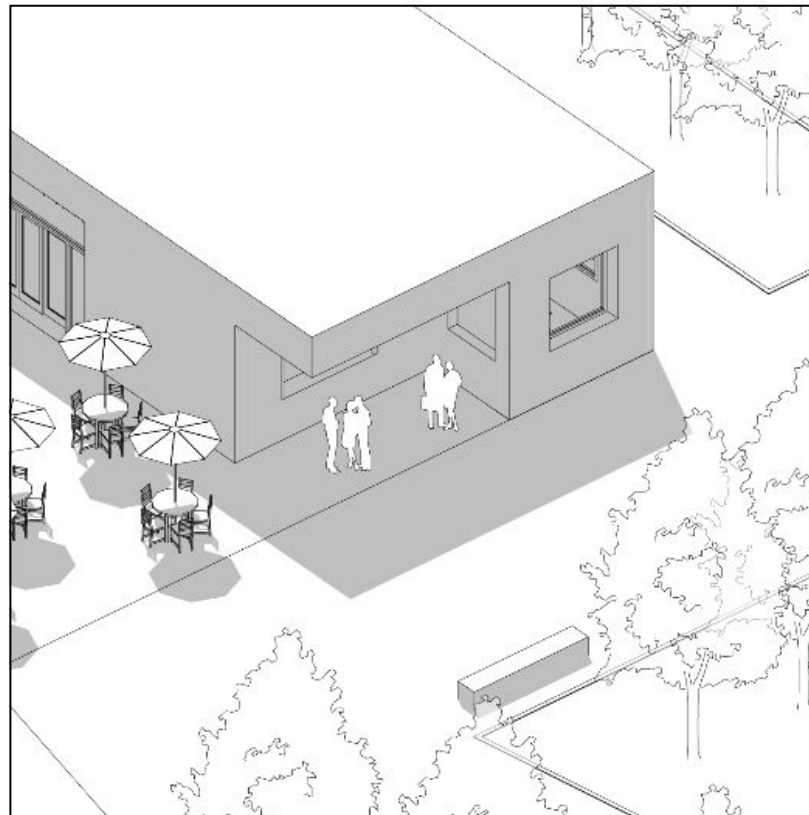
The building plinths are treated as active social surfaces rather than static walls, featuring deep carvings and stepped geometries that provide immediate affordances and relations with the public space.



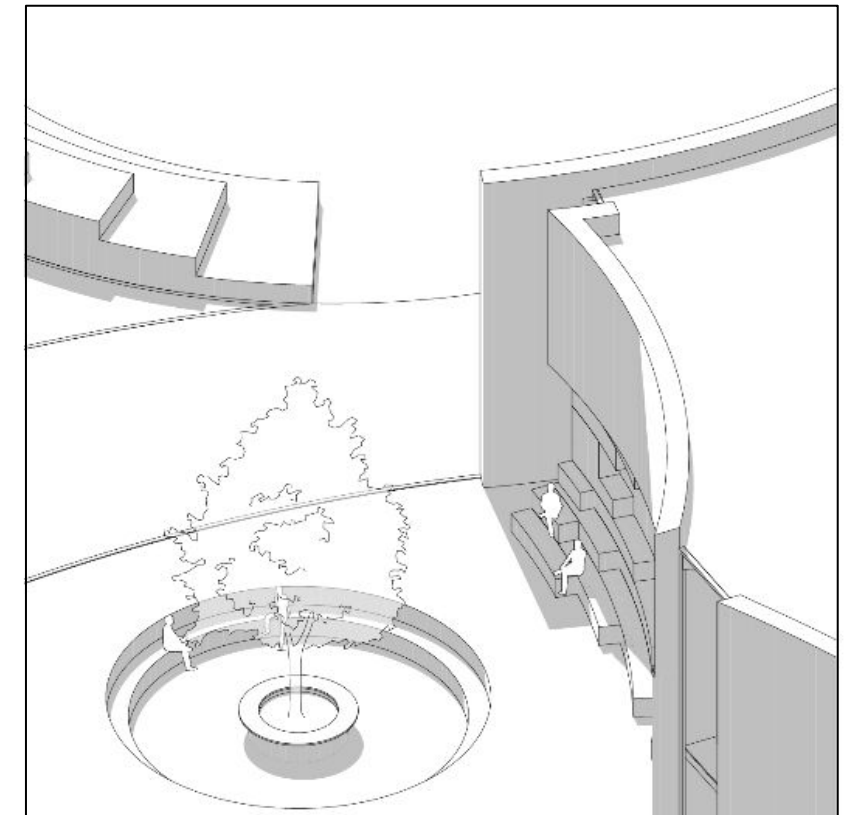
Connected landscapes



Affordances



Recessed facades



Flowing landscape

Figure 72: Axonometric view community centre 1:500.

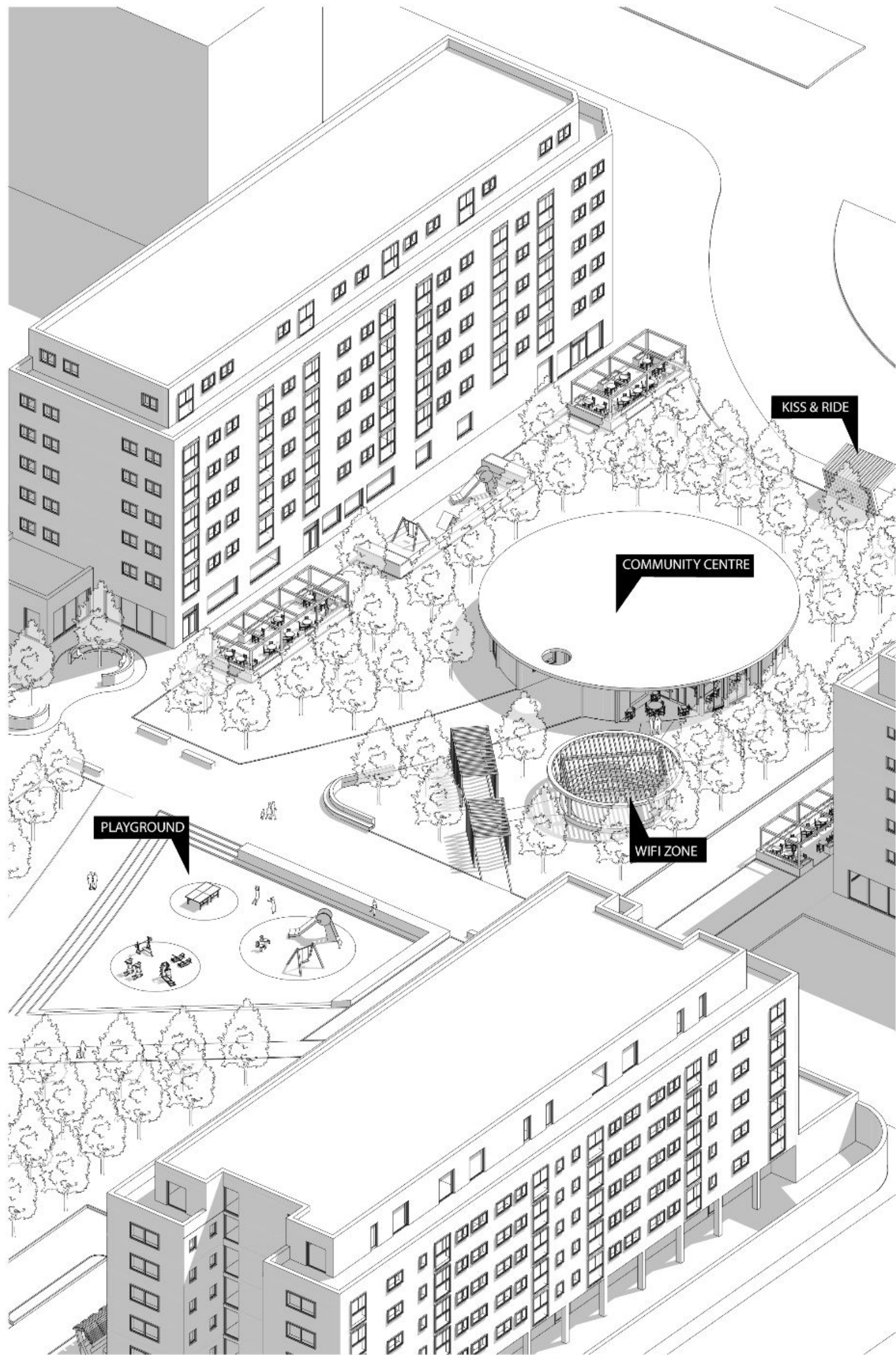


Figure 73: Floor plan community centre 1:200.

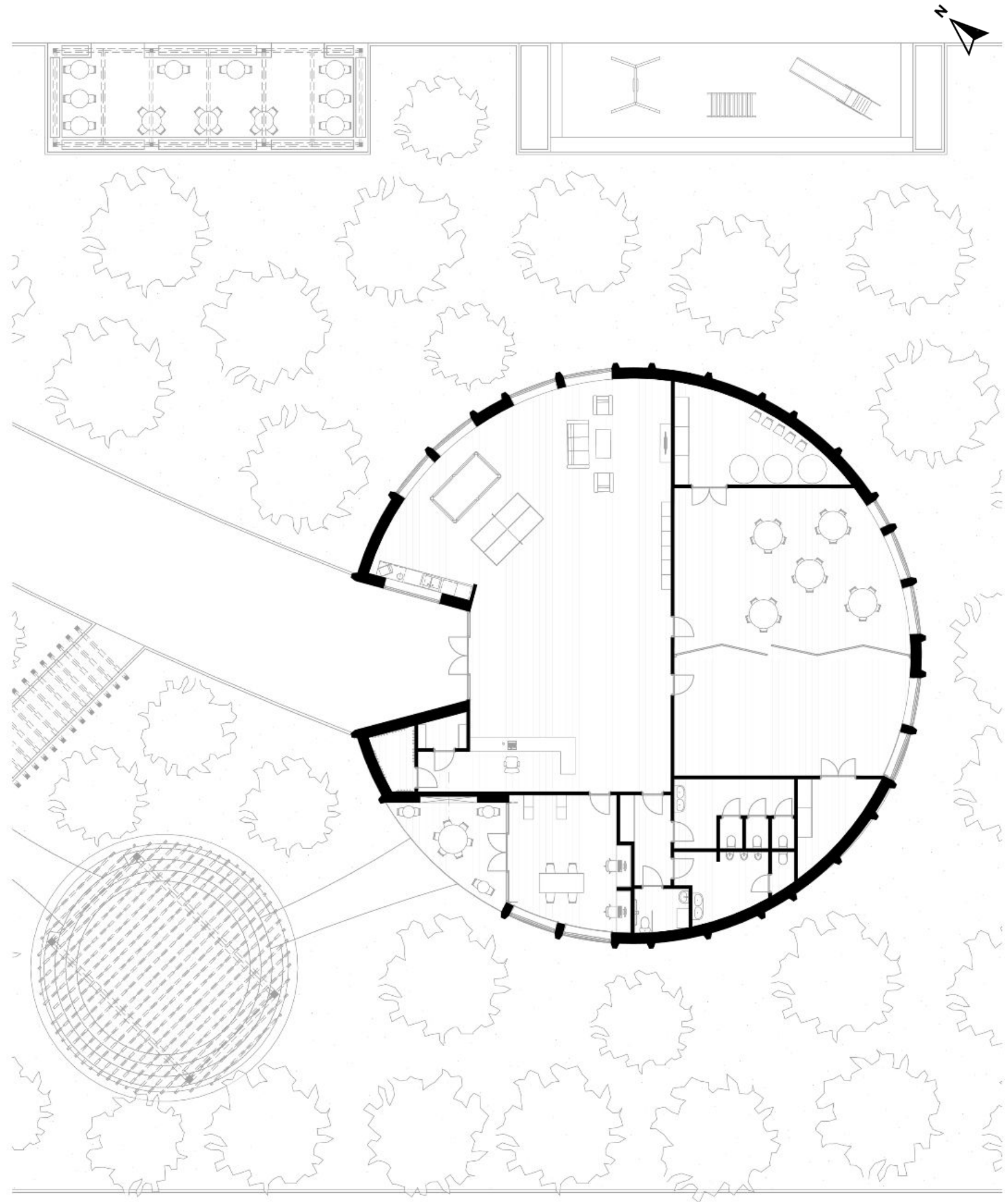


Figure 74: Fourth place community centre.



Figure 75: Section 1:50 (scaled) fourth place community centre.

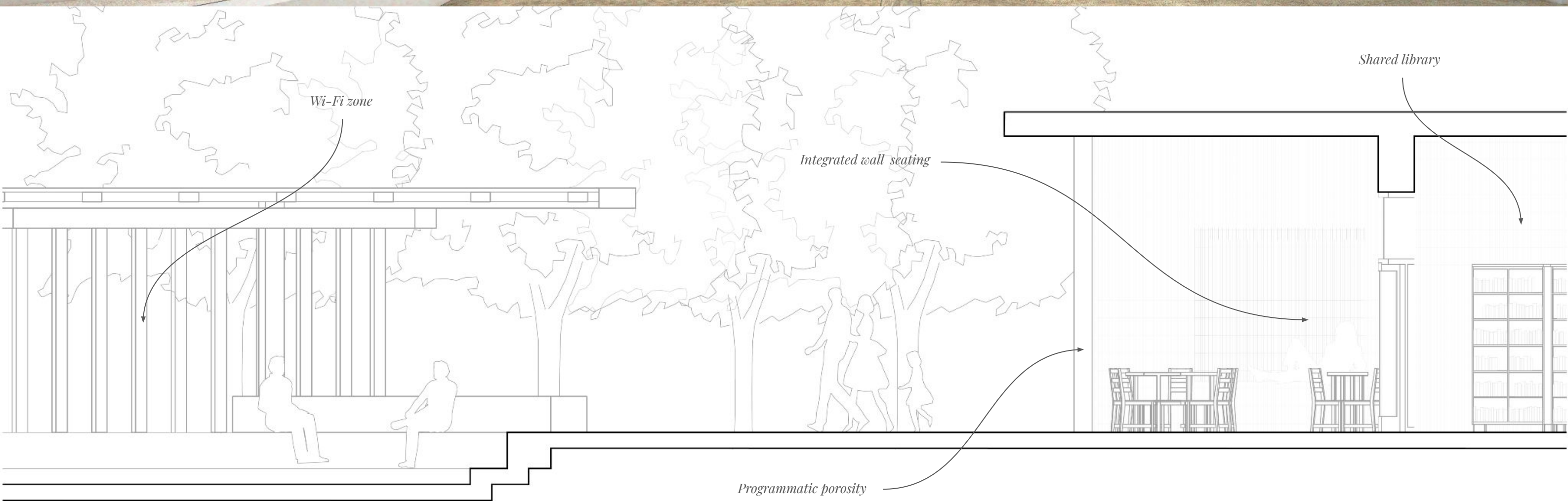


Figure 76: Axonometric view food hall 1:500.

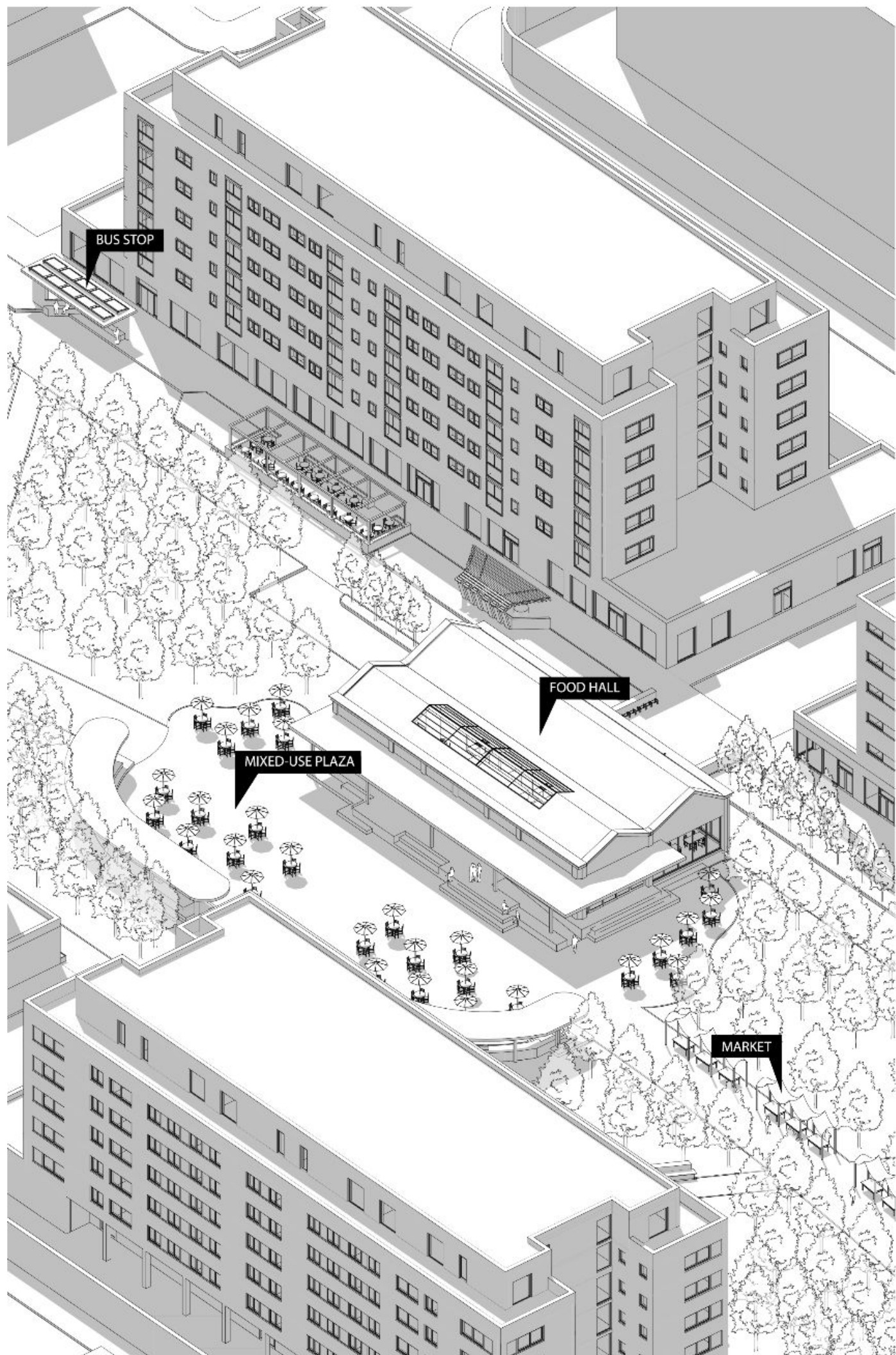


Figure 77: Floor plan food hall 1:200.

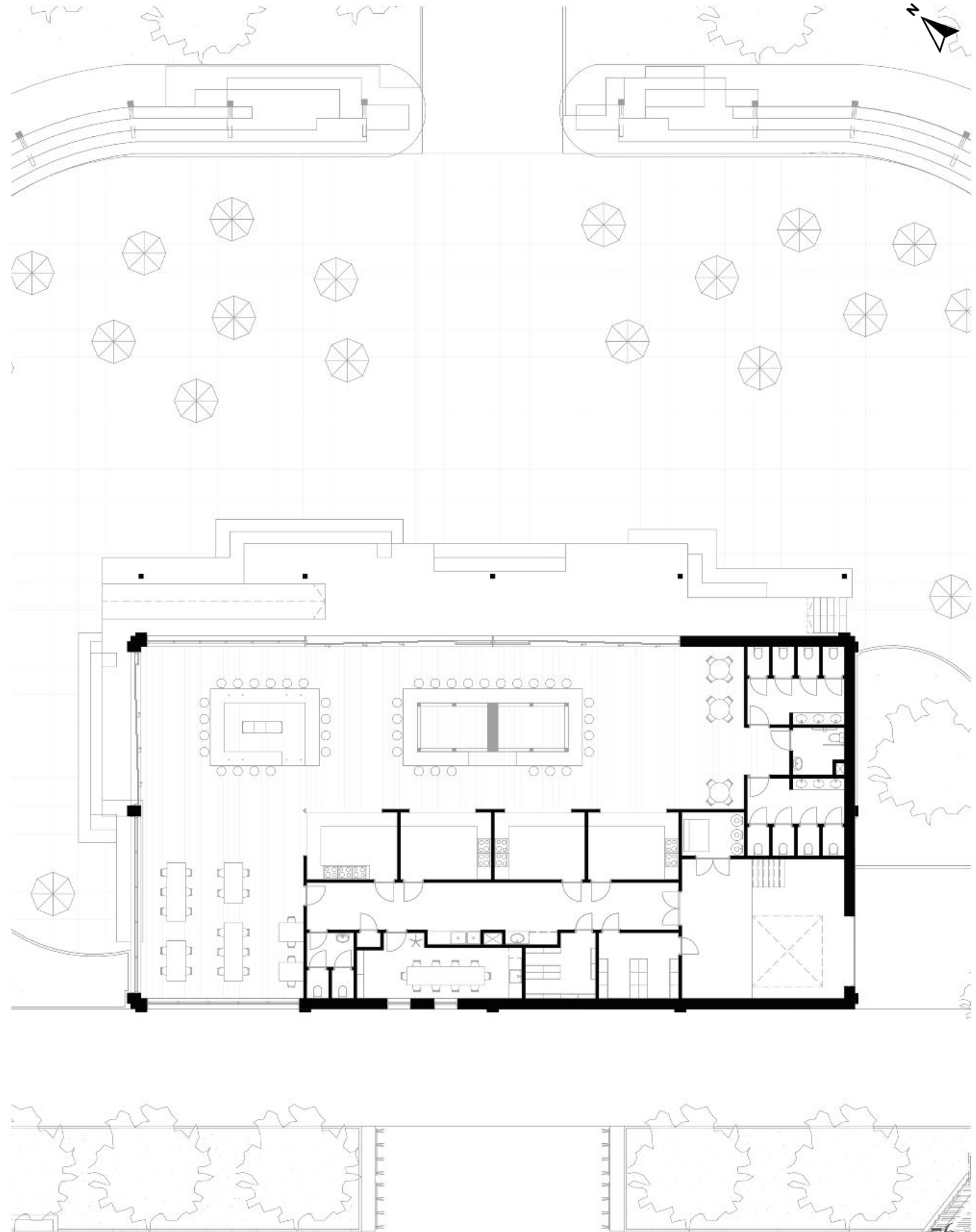




Figure 79: Section 1:50 (scaled) fourth place food hall.

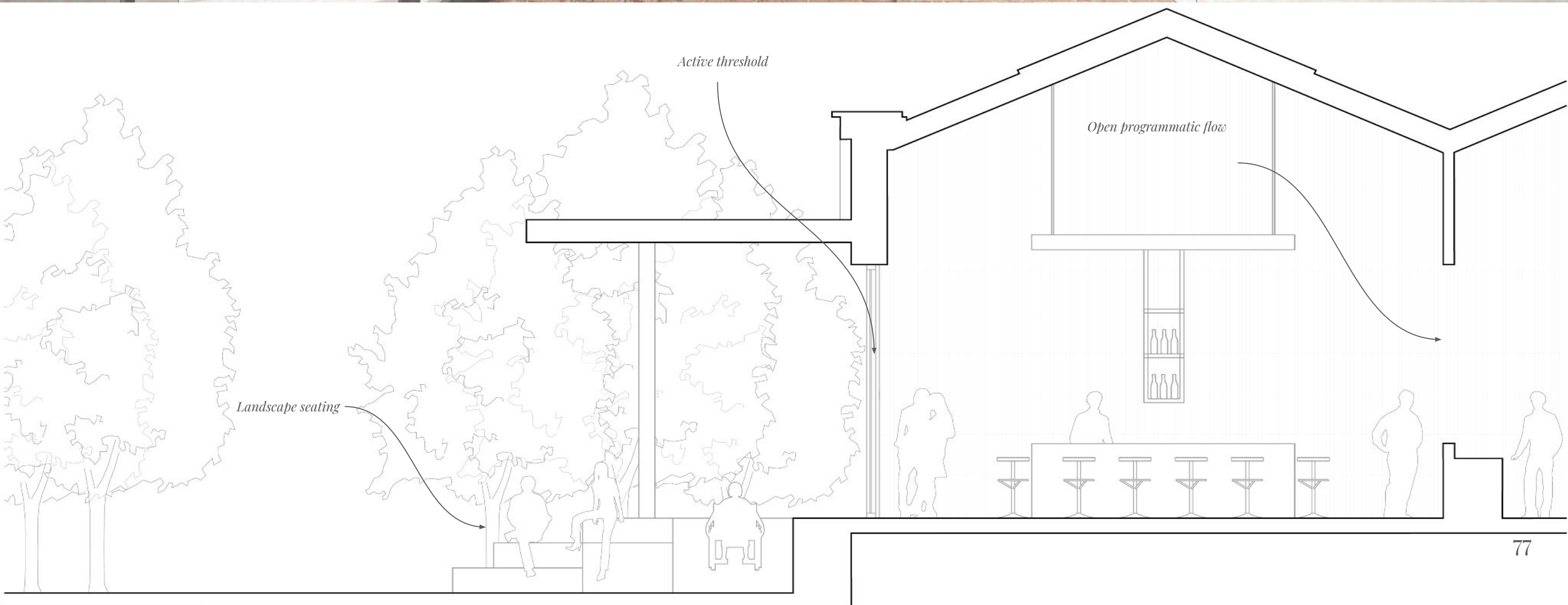


Figure 80: Axonometric view cafe 1:500.

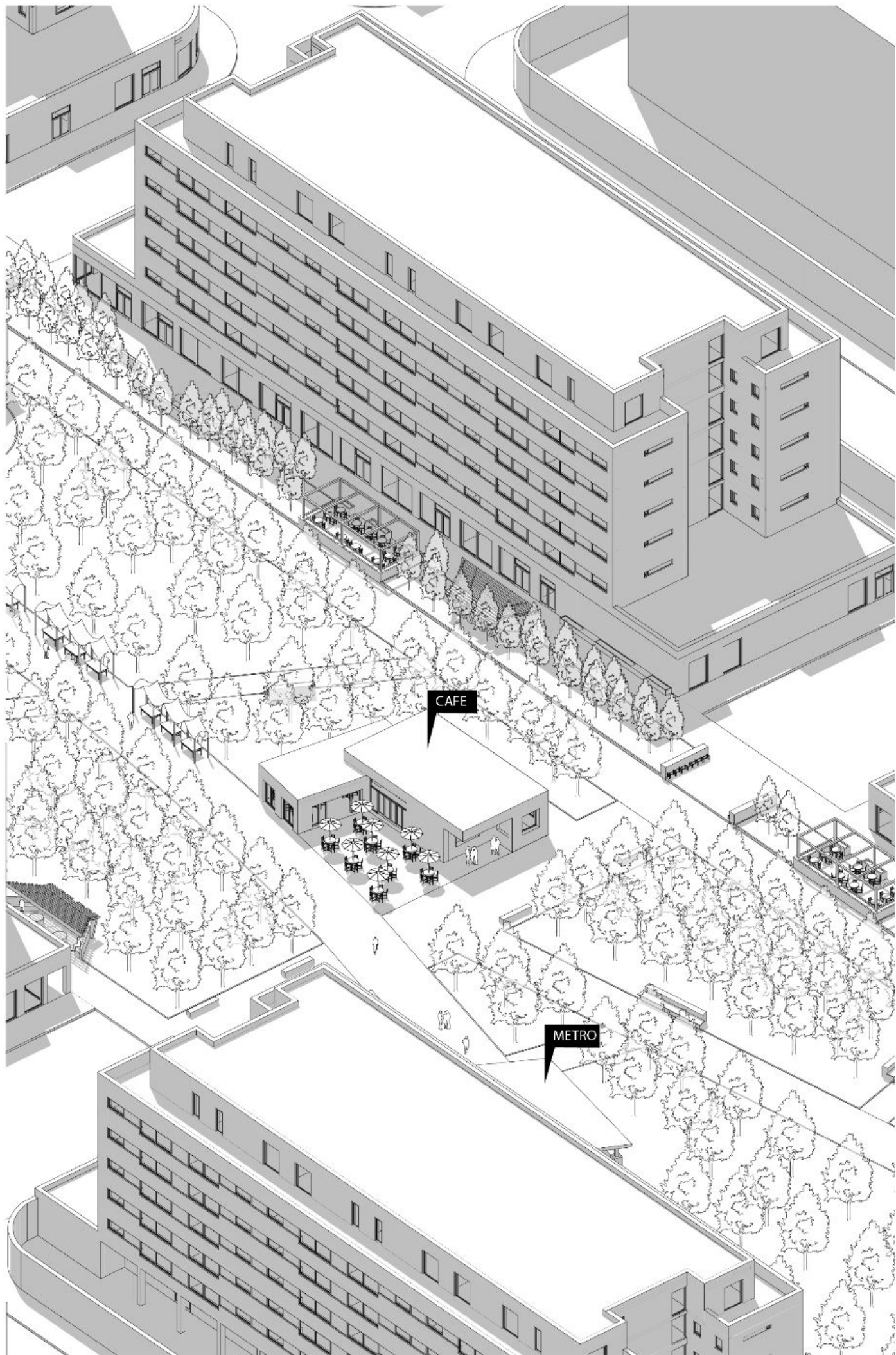


Figure 81: Floor plan cafe 1:200.

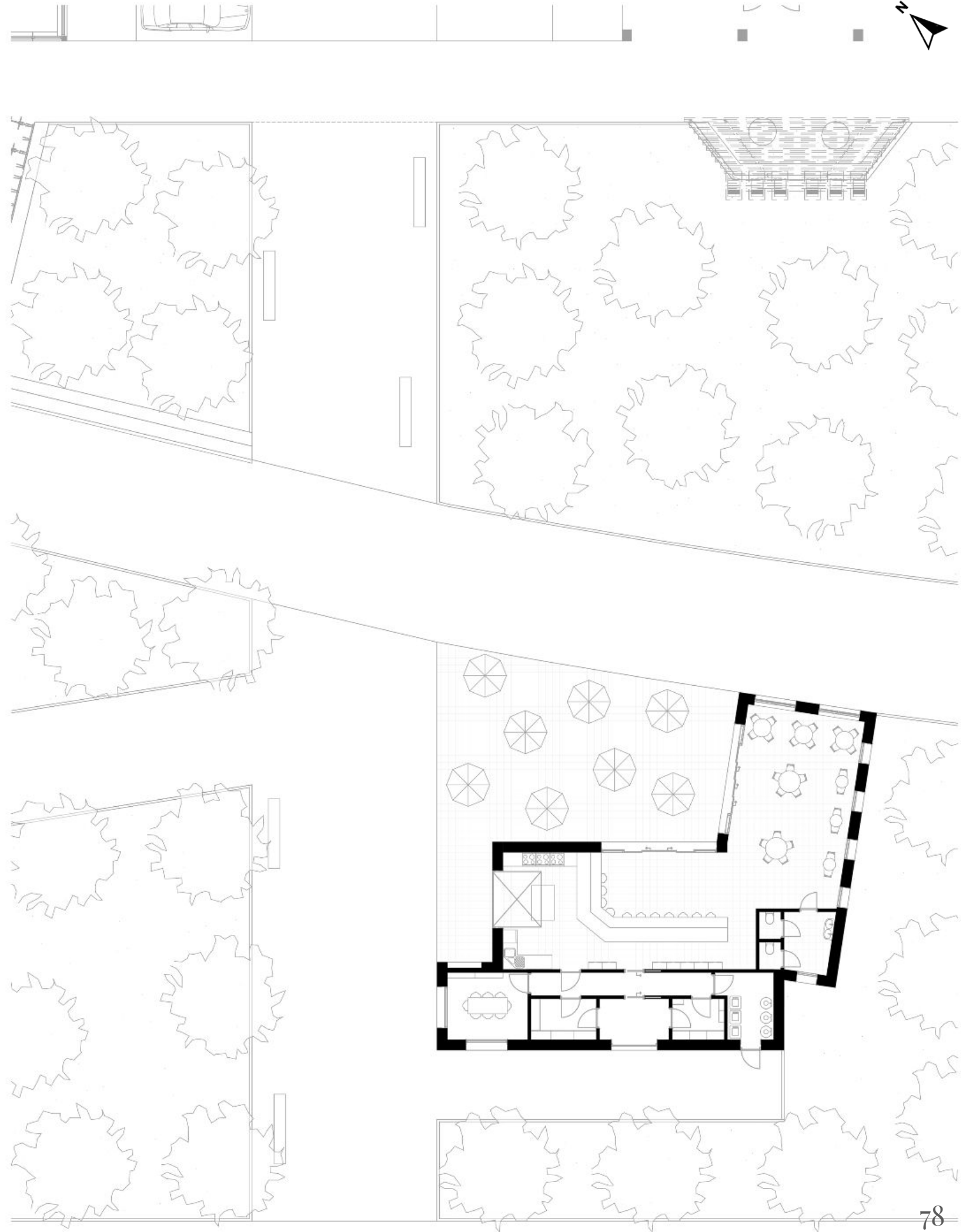


Figure 82: Fourth place cafe.

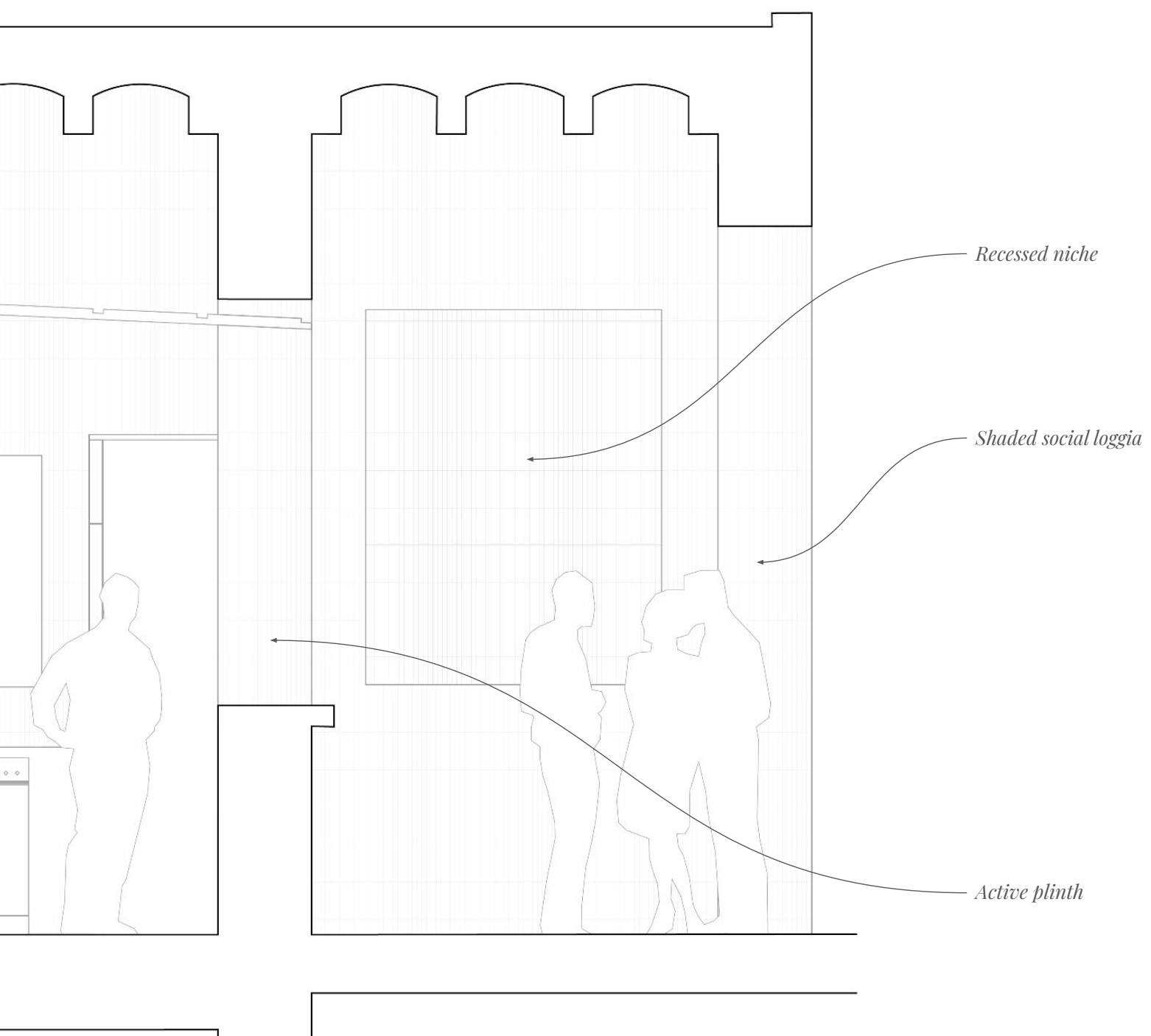


Figure 83: Section 1:50 (scaled) fourth place cafe.



Figure 84: Site plan maker hub 1:500.

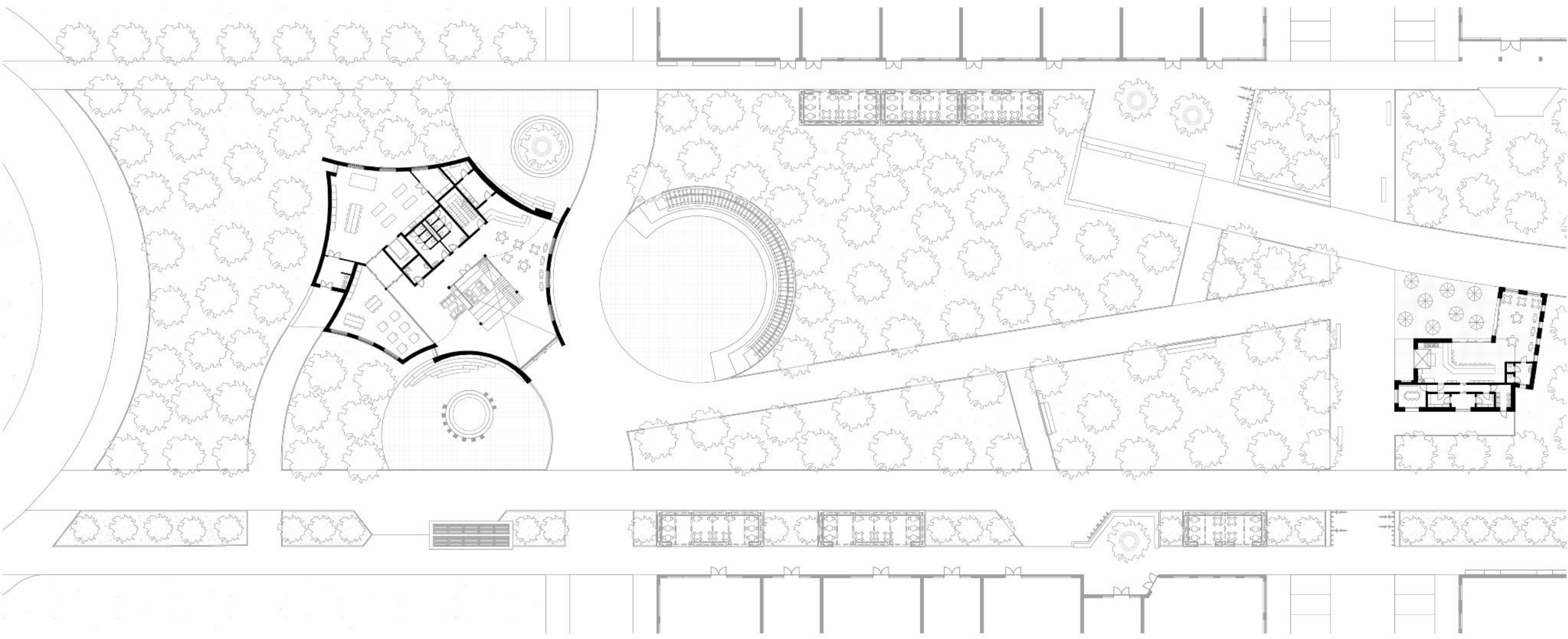


Figure 85: Section maker hub 1:500.

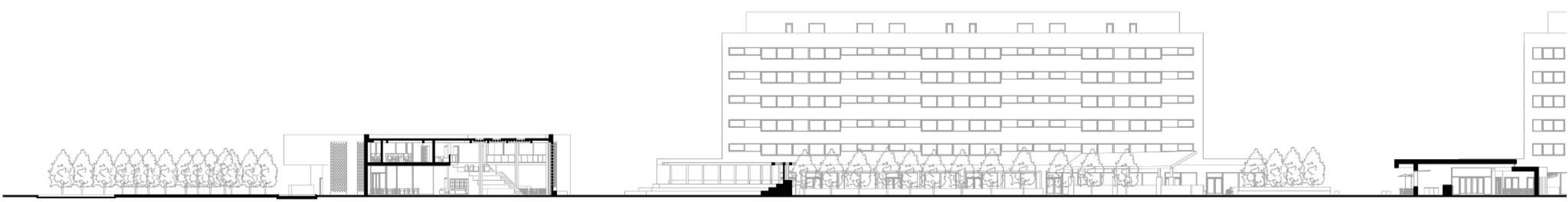


Figure 86: Axonometric view maker hub 1:500.

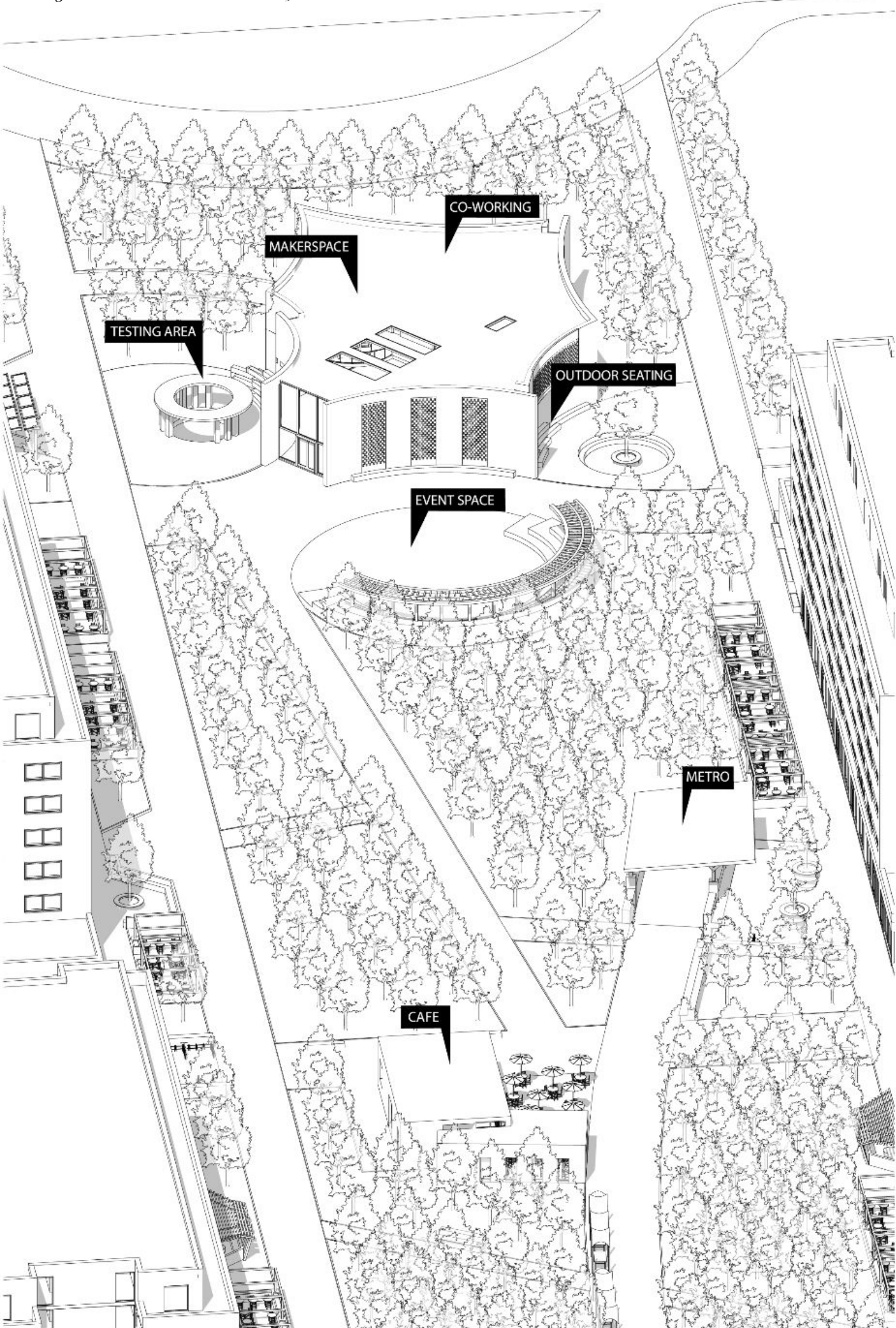


Figure 87: Floor plan maker hub 1:200.

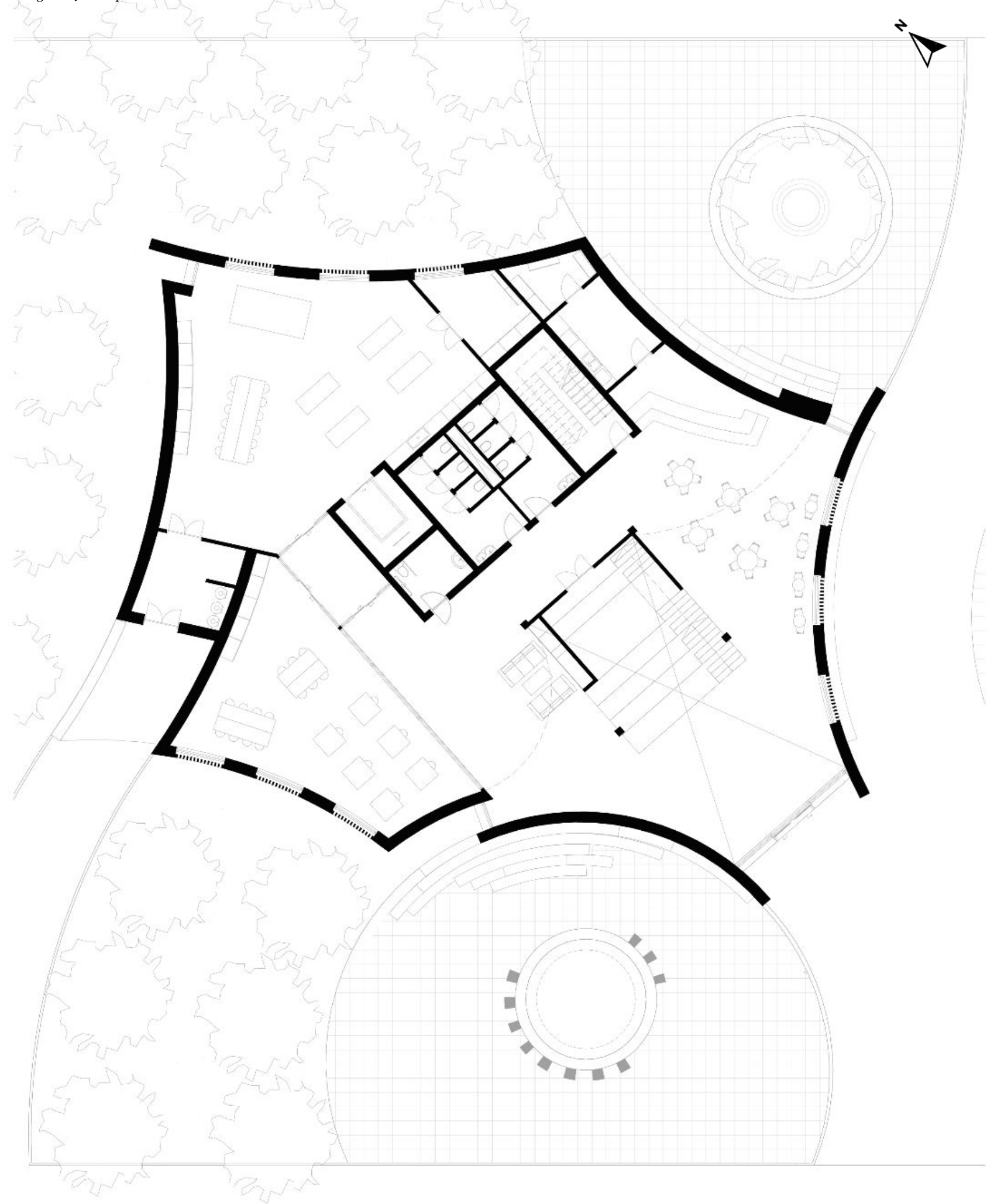
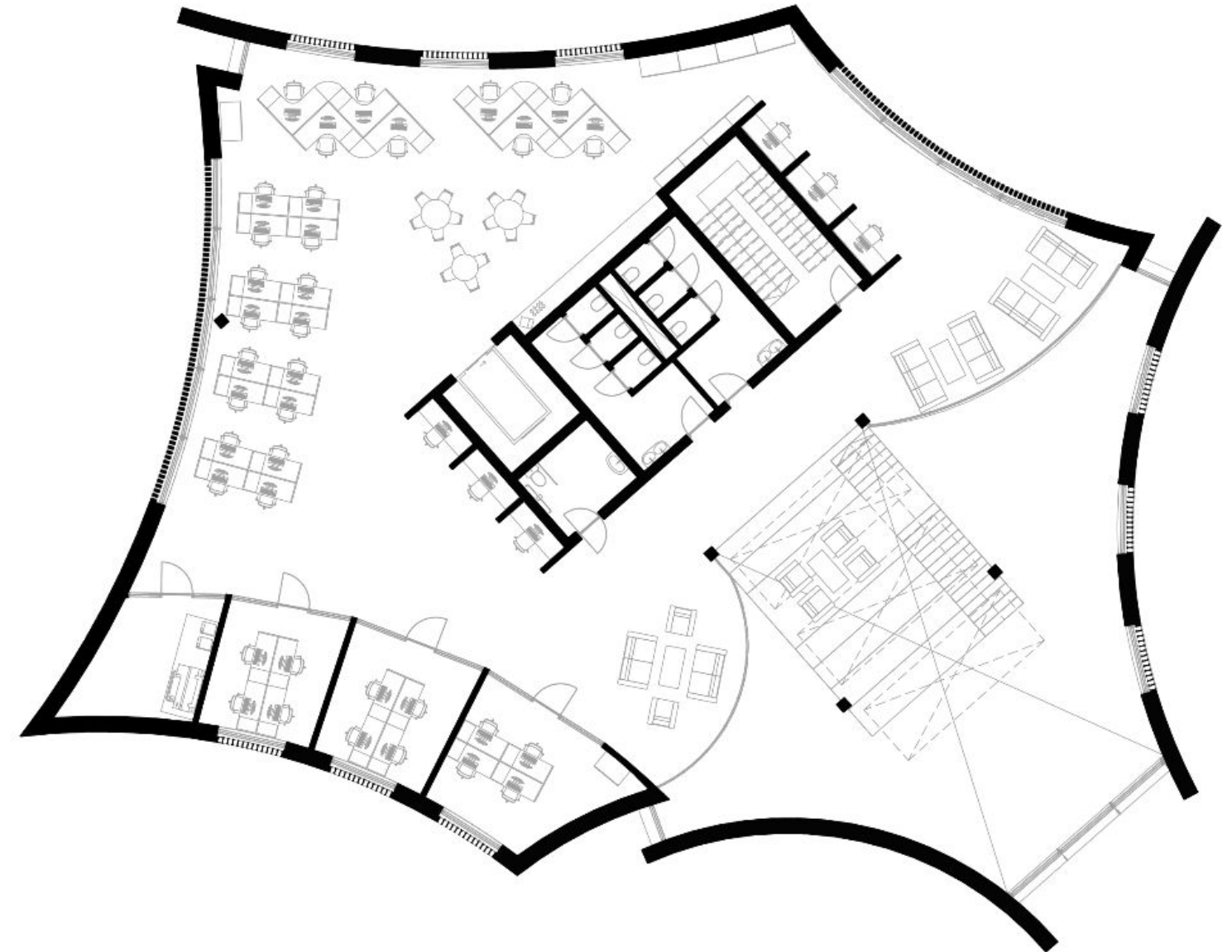


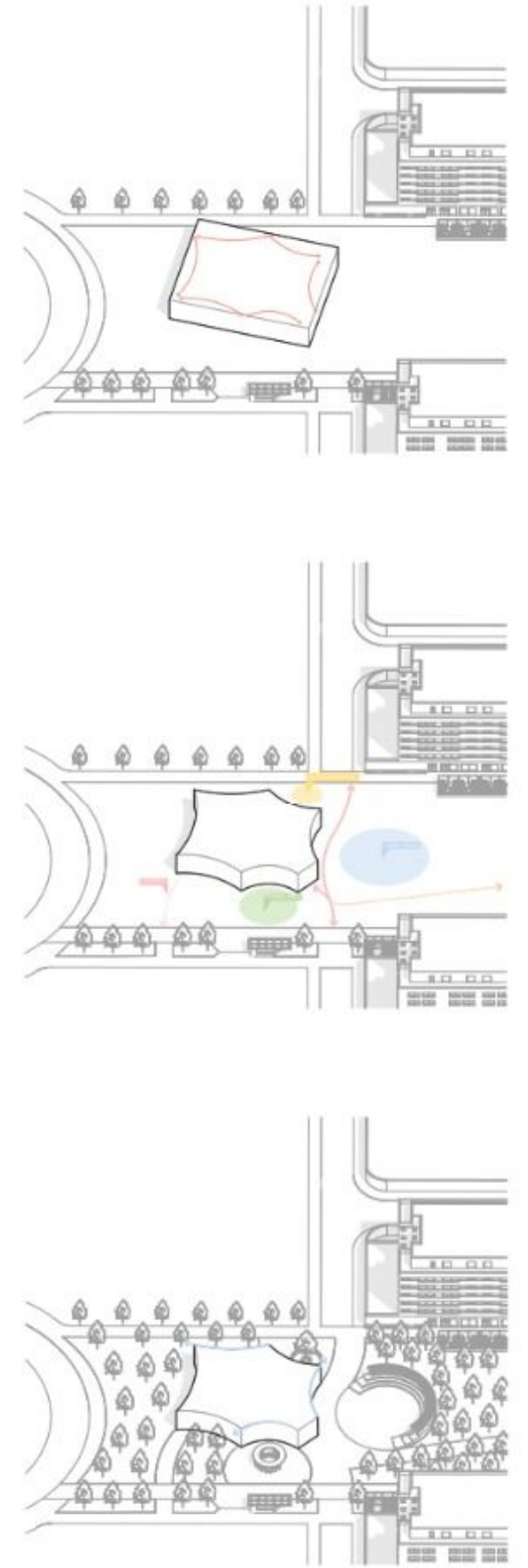
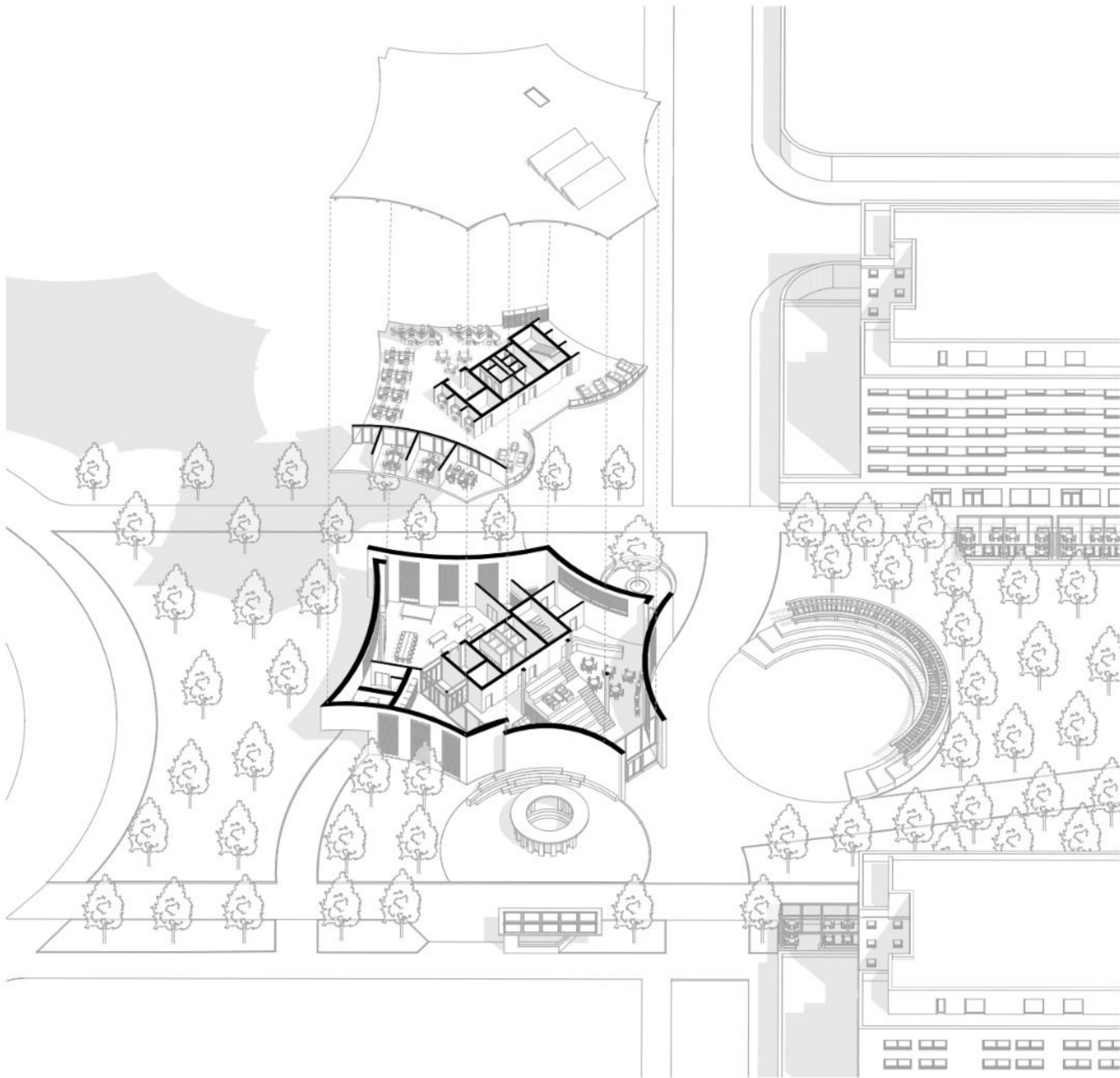


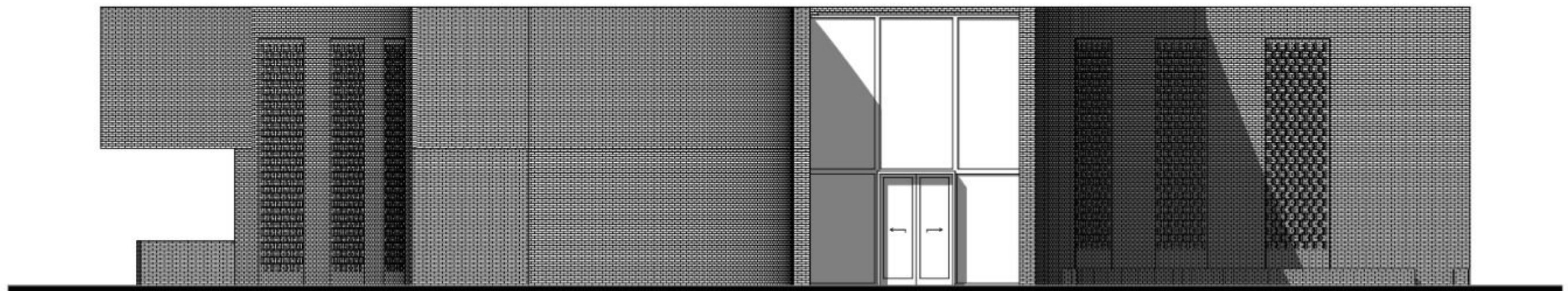
Figure 88: First floor maker hub 1:200.

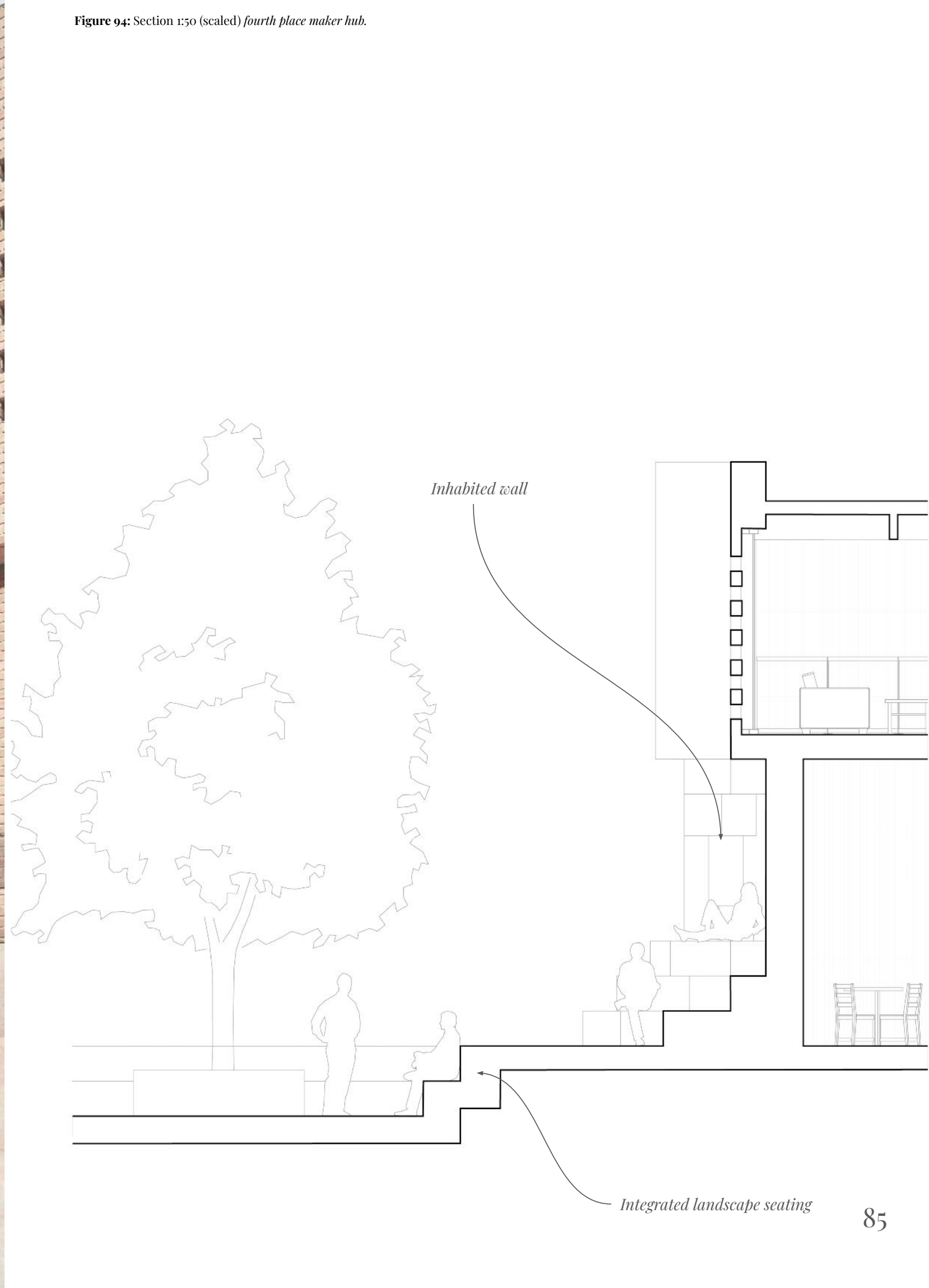
The maker hub functions as a primary social and productive anchor within the Sanchinarro boulevard, designed to foster local agency and a circular urban metabolism. Managed by a cooperative of collective users and makers, the hub is responsible for the technical maintenance of tools, safety protocols, and the curation of programs that integrate with the neighborhood's daily life.

The first floor of the maker hub is dedicated to co-working spaces, serving as critical infrastructure for the contemporary hybrid society. This programmatic choice ensures that residents have access to a workplace near their home, reducing the need for long commutes and fostering a sense of professional community.









*Integrated landscape seating*

Figure 95: Fragment 1:20 (scaled) maker hub.

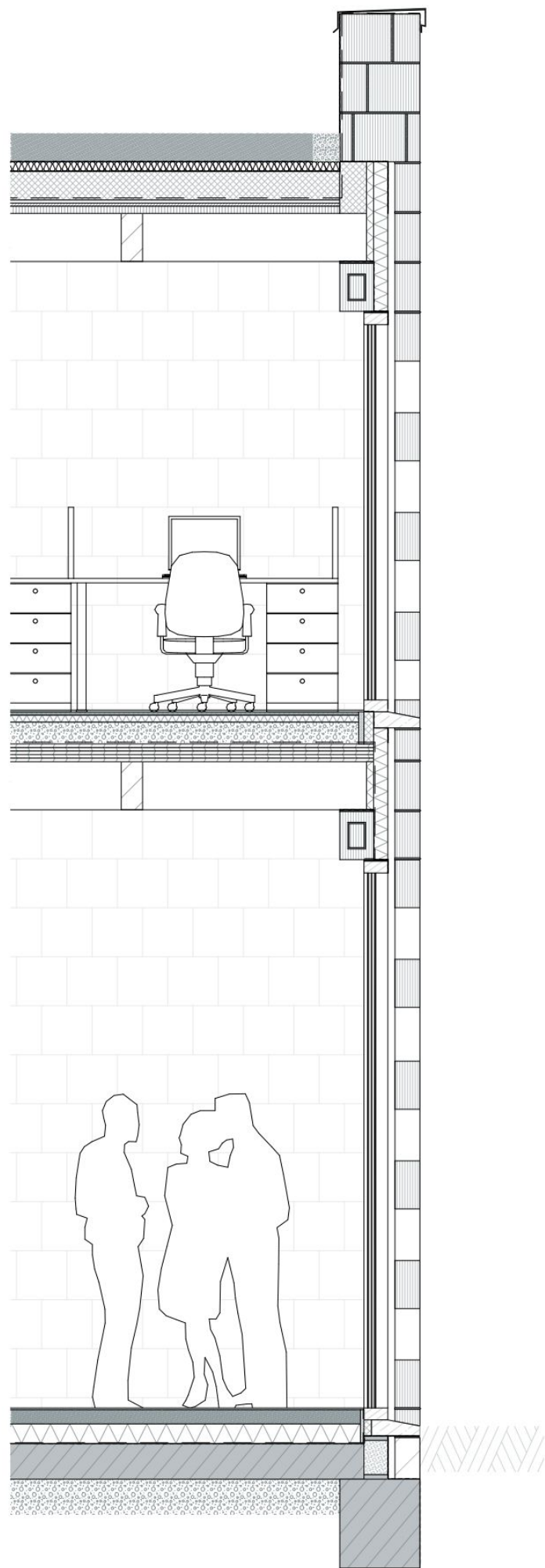


Figure 96: Facade maker hub.

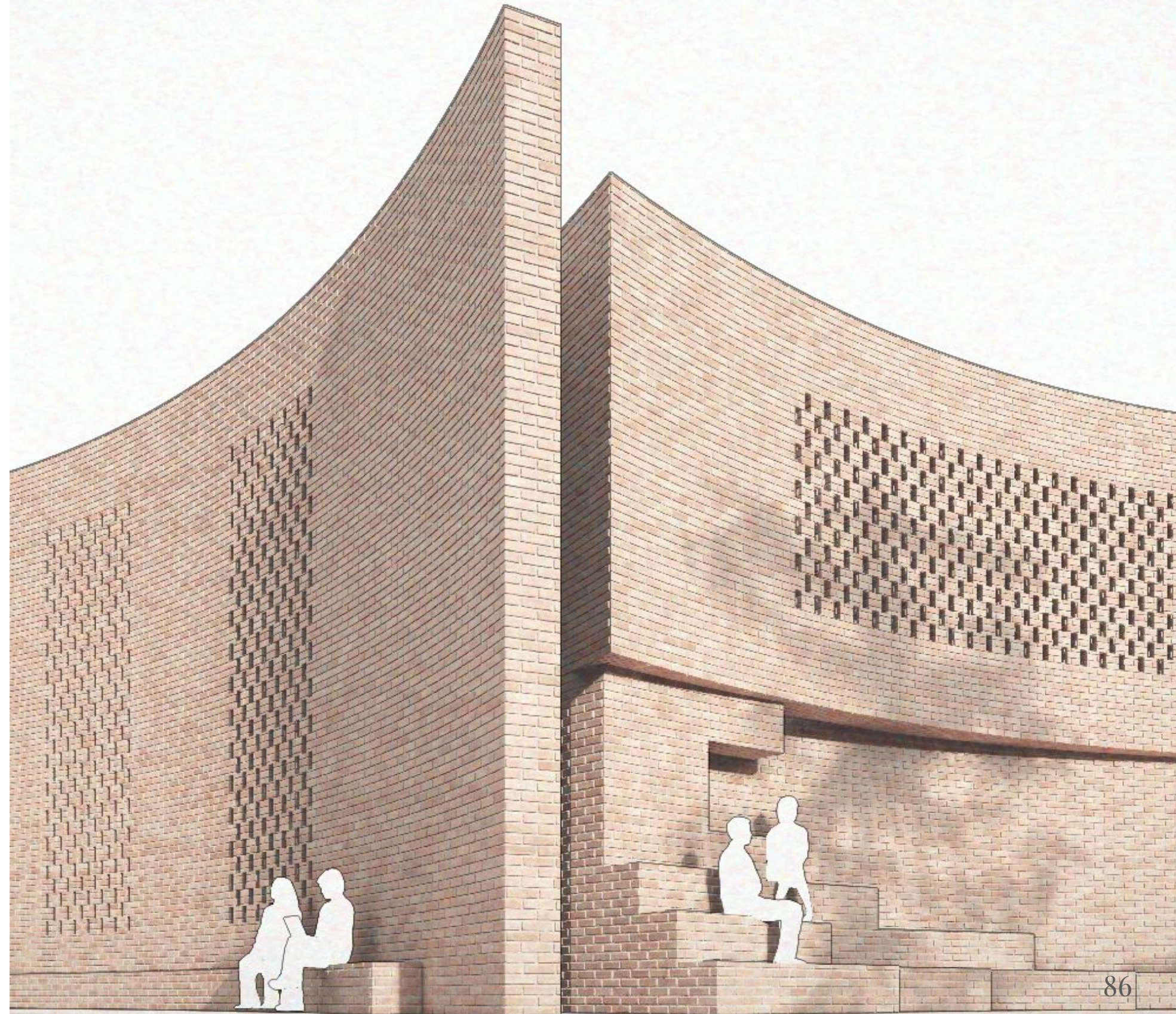


Figure 97: Facade maker hub.

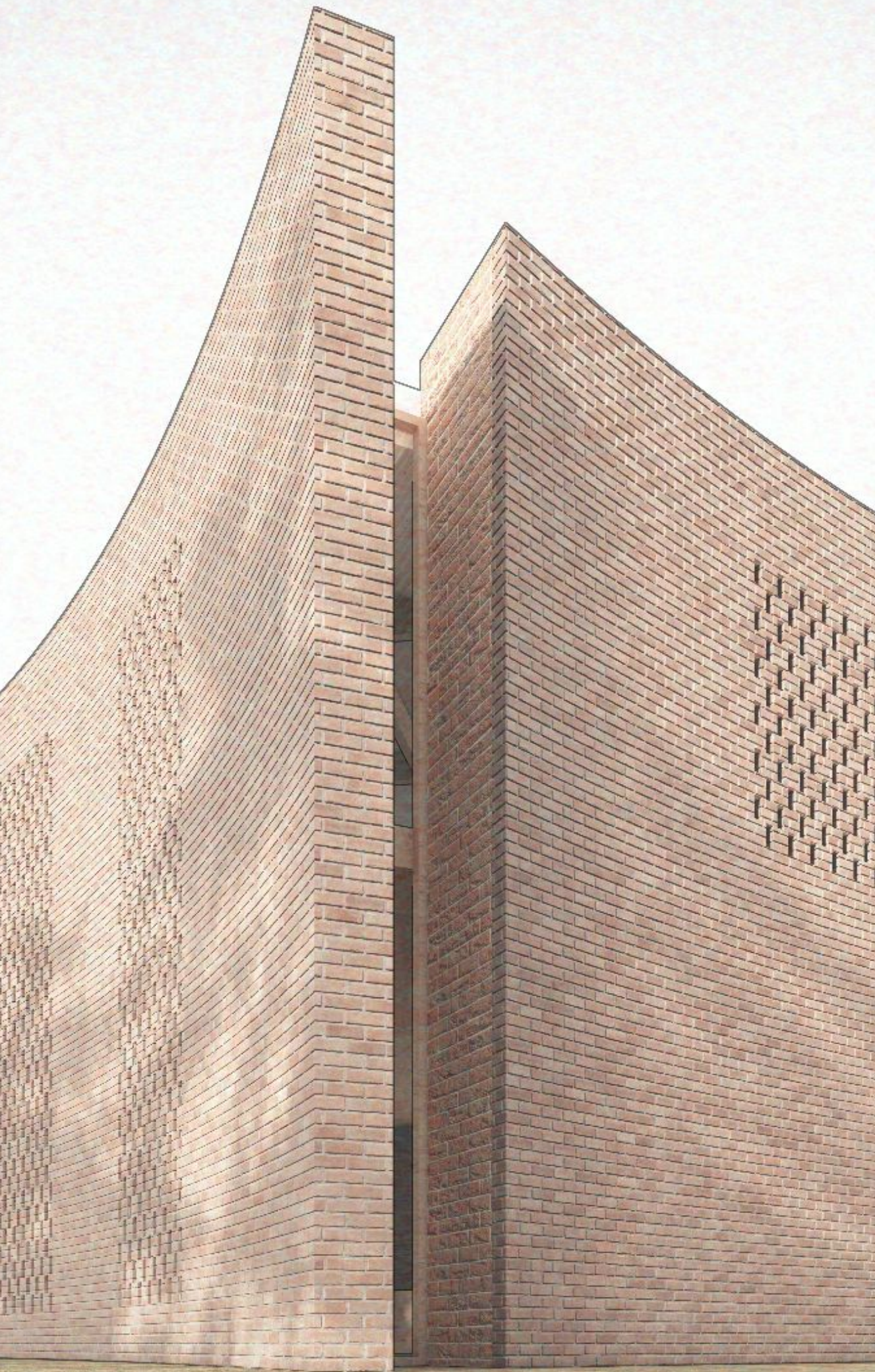


Figure 98: Roof detail 1:5 (scaled) maker hub.

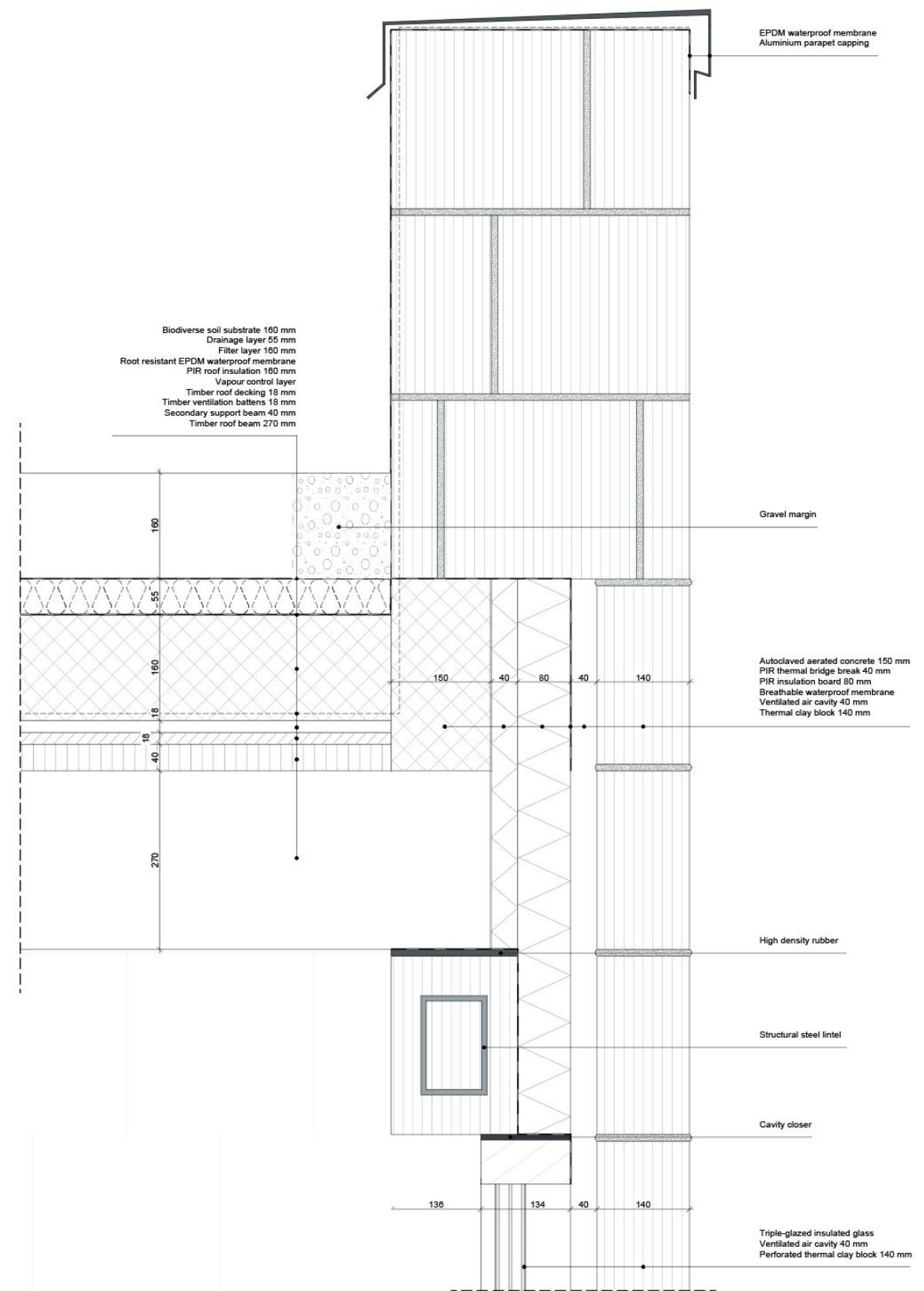


Figure 99: Detail 1:5 (scaled) maker hub.

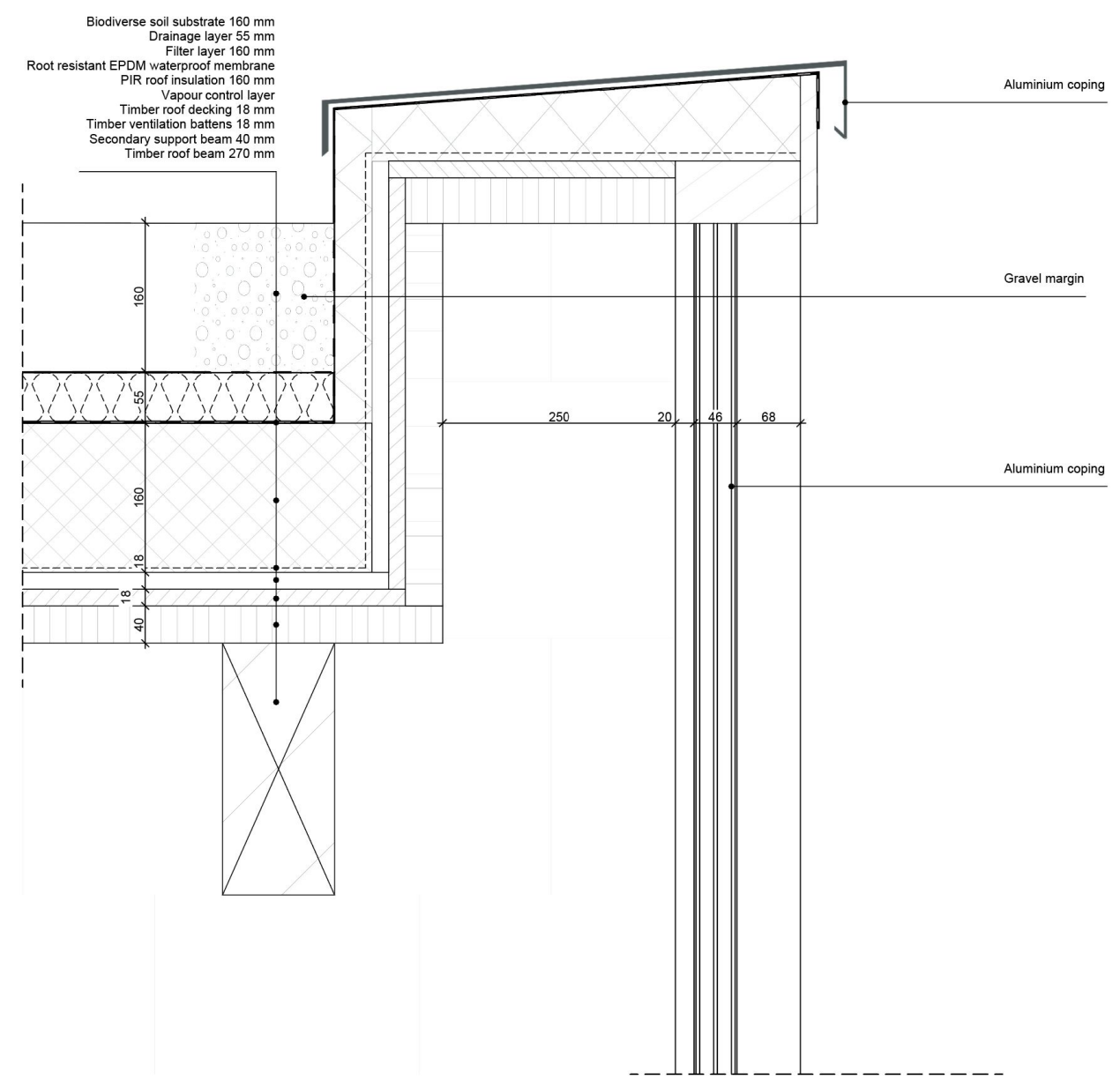


Figure 100: Facade maker hub.

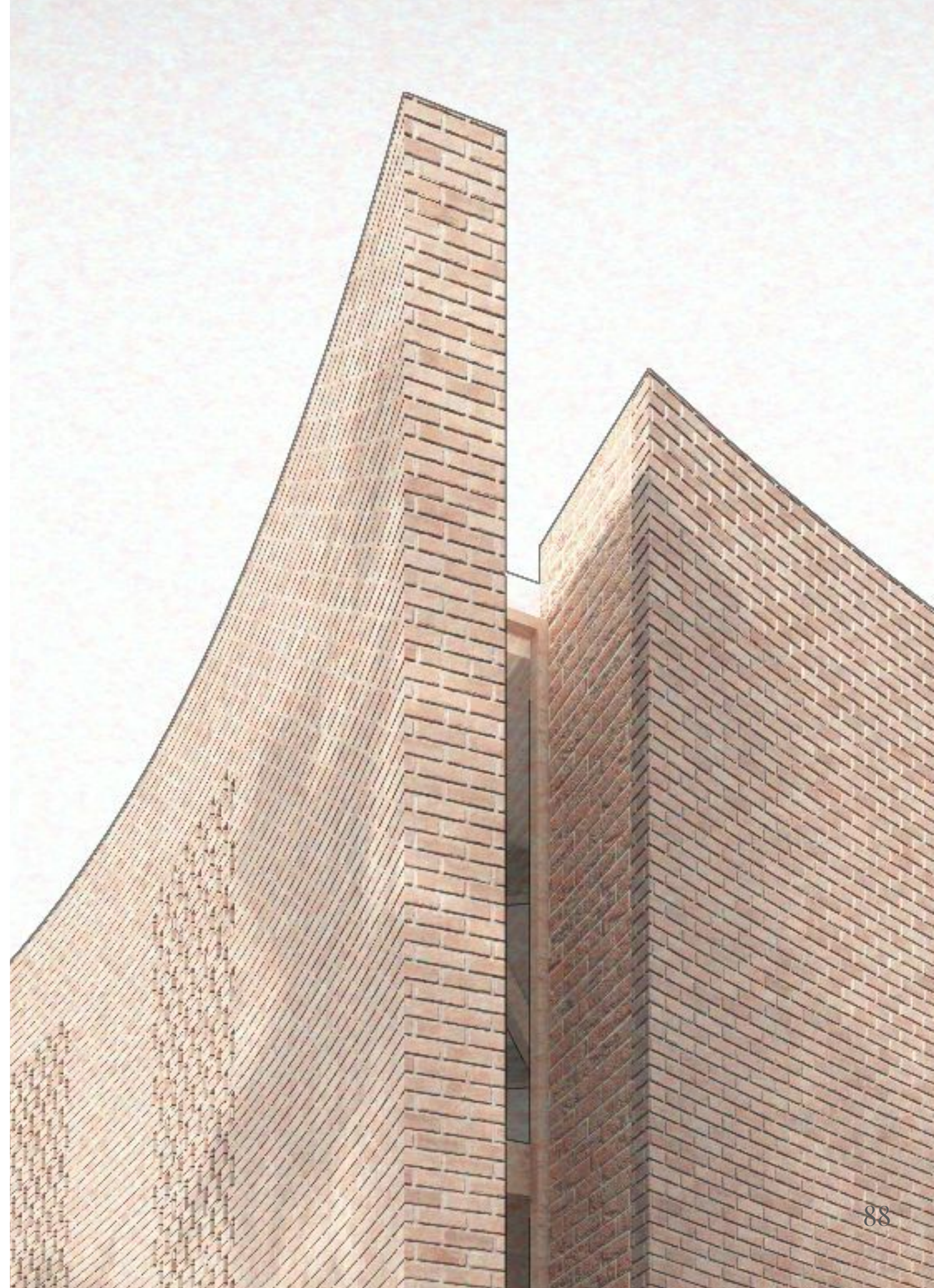


Figure 101: Details 1:5 (scaled) maker hub.

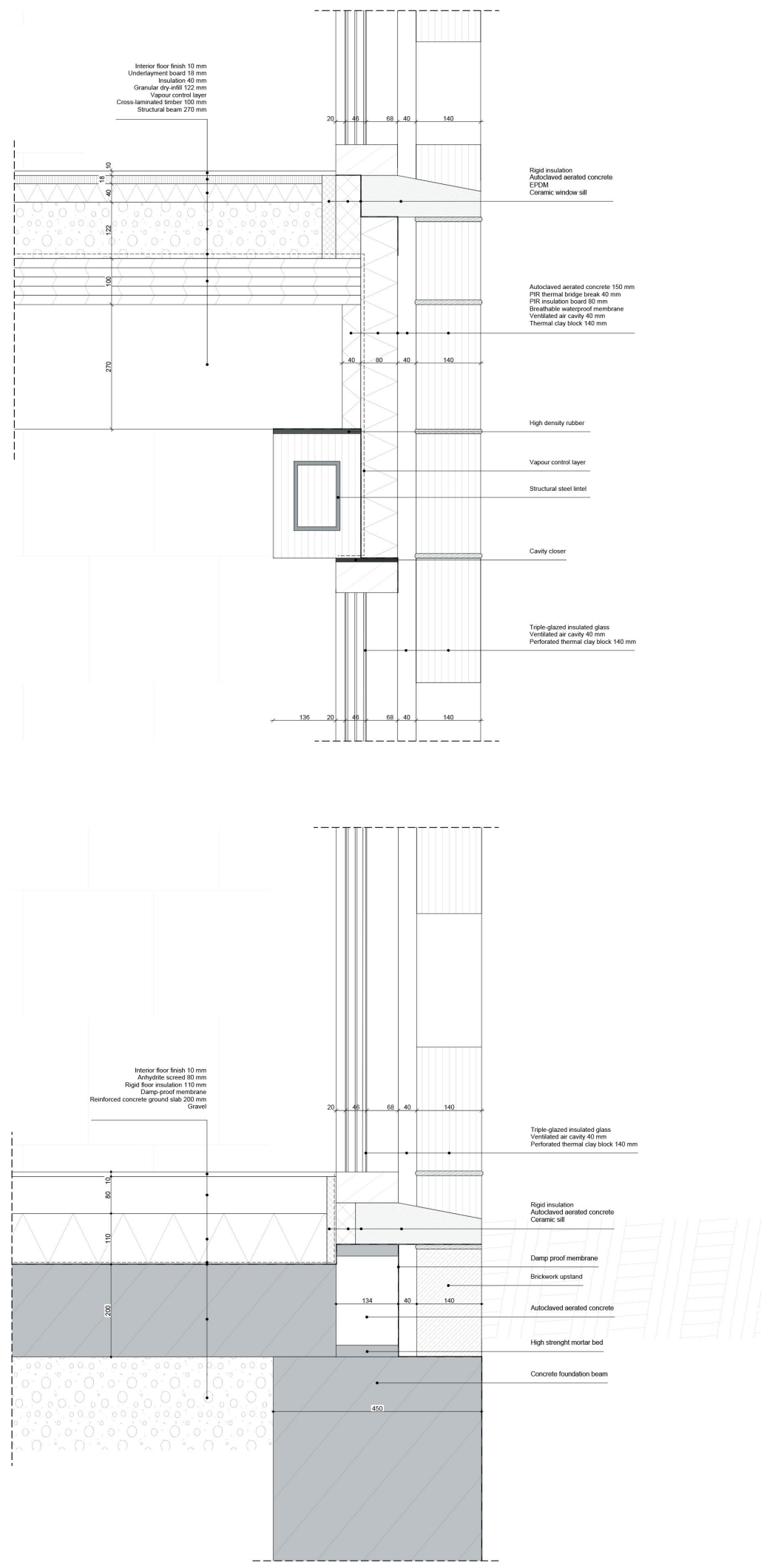


Figure 102: Co-working spaces.

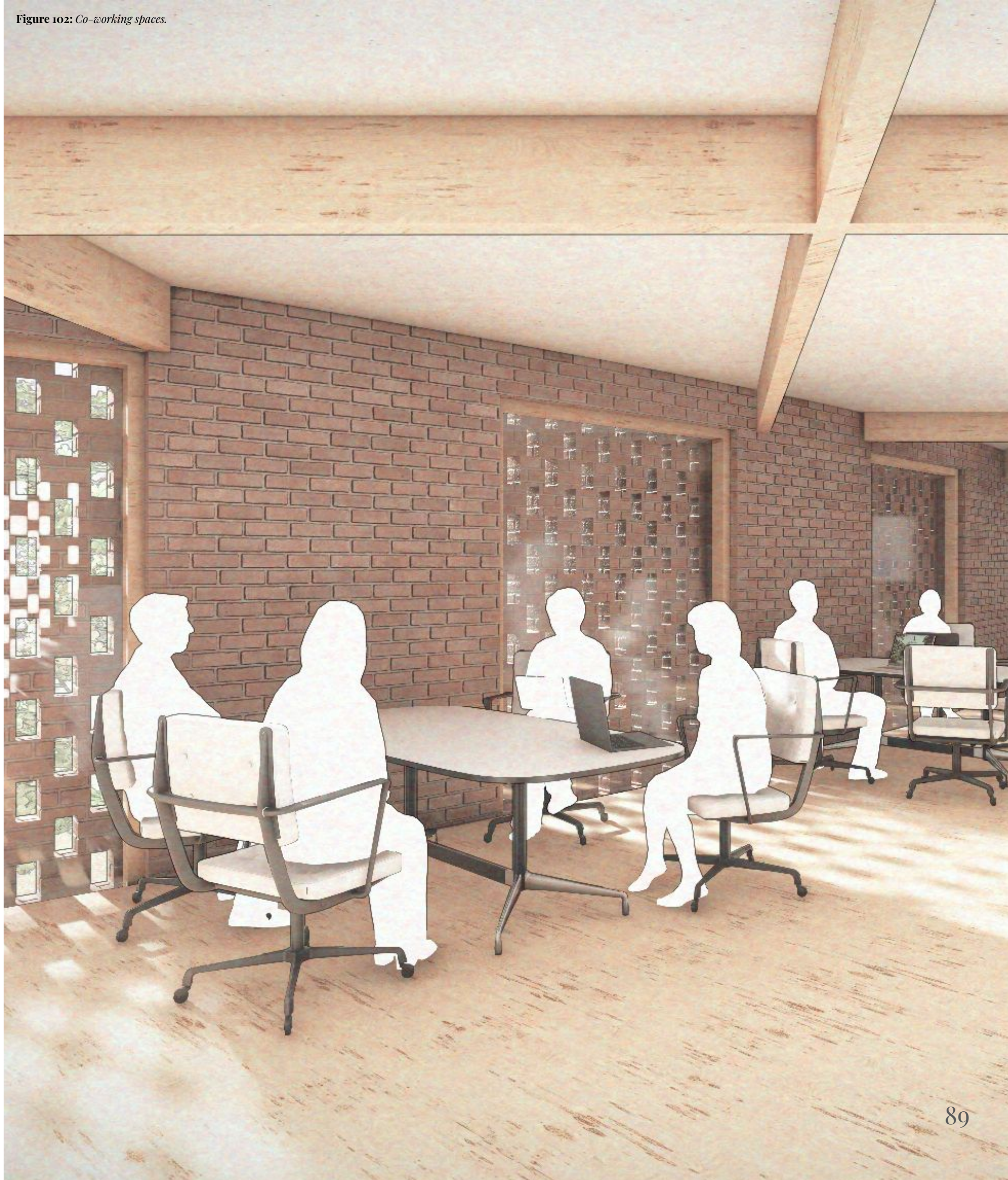
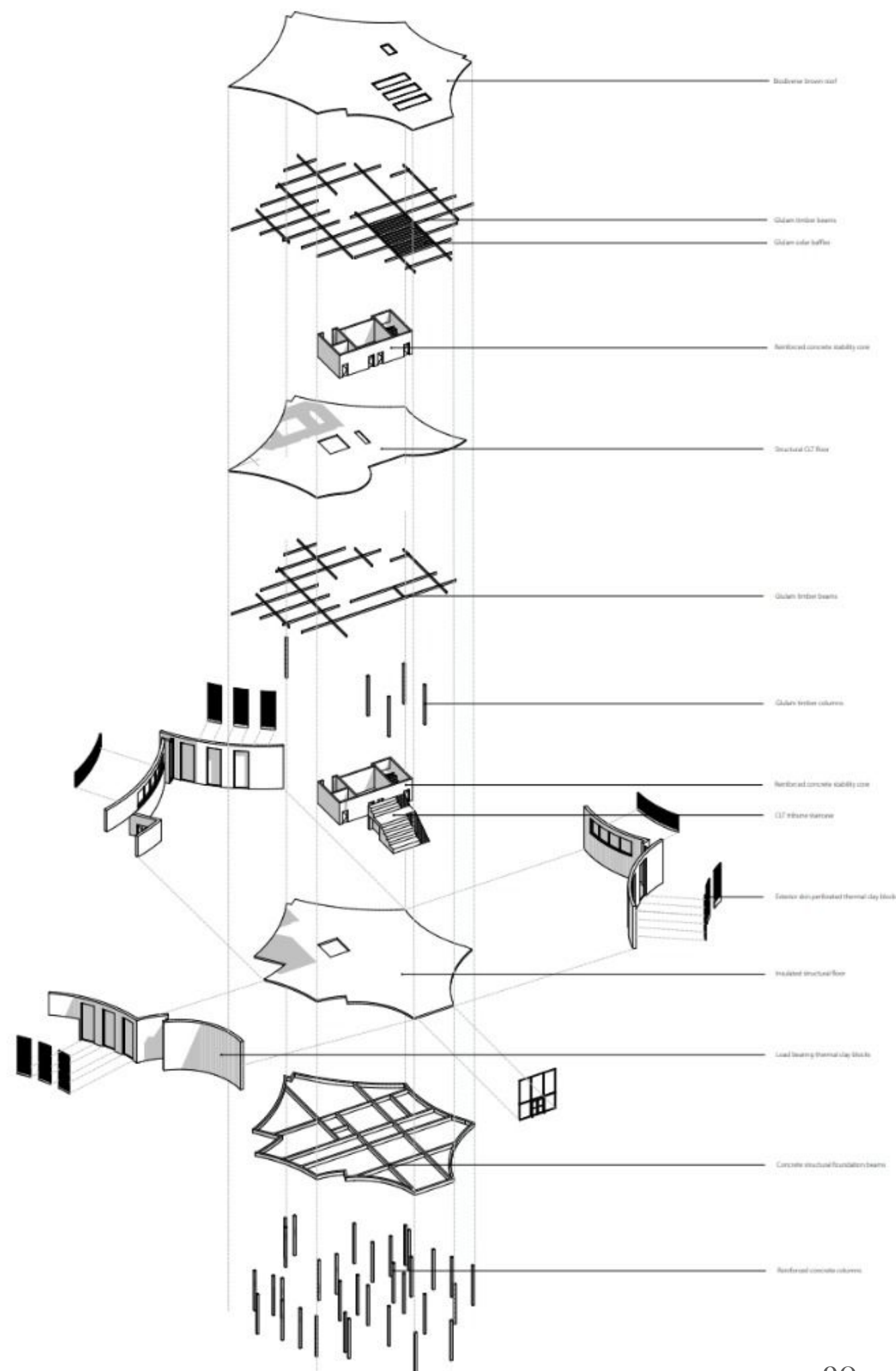


Figure 102: Construction diagram.



The thermal clay blocks provide significant thermal mass to naturally stabilize the interior climate by absorbing daytime heat. This mass is supported by a perforated facade that funnels solar heat upward and out while allowing filtered natural light to permeate the workspace. Above, a biodiverse brown roof provides natural insulation and mitigates the urban heat island effect through the use of local, arid-climate flora. The building regulates its internal atmosphere through automated natural ventilation, where sensor-controlled skylights release heat and pull fresh air from the ground level to refresh the interior naturally. Sunlight is further managed by timber baffles that provide passive solar filtering, blocking direct glare while illuminating the co-working and maker areas. Internally, the hub is organized into specific climatic and acoustic zones, utilizing a heavy central core to regulate heat load and a thermal transition zone to protect deeper work areas from external temperature fluctuations.

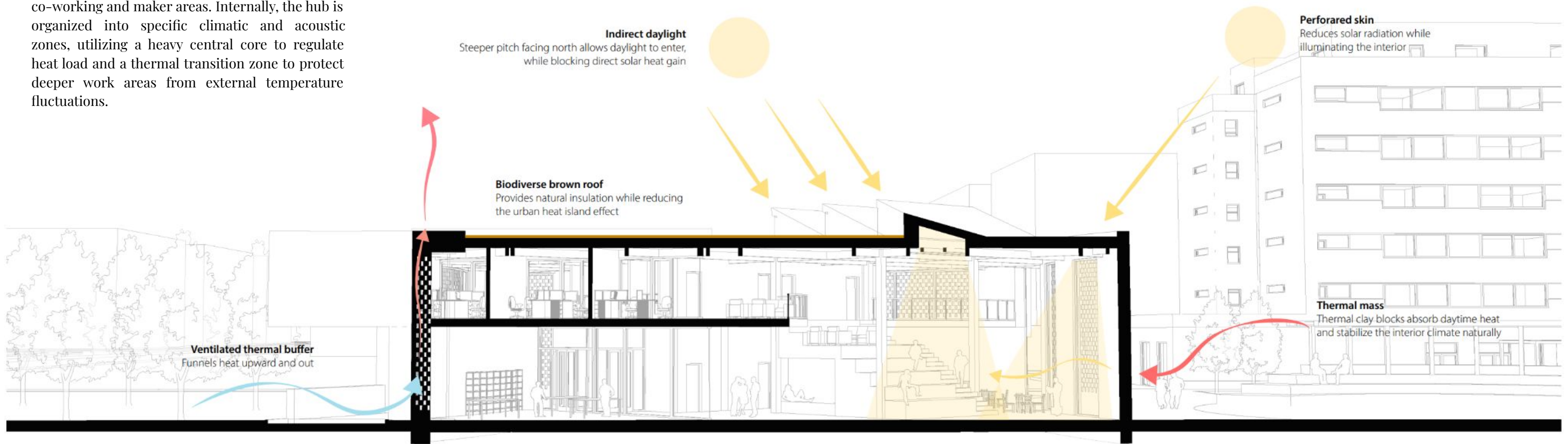


Figure 103: Climate section.





Figure 106: Bird eye view design proposal boulevard sanchinarro.



Figure 107: Bird eye view current situation boulevard sanchinarro.



Note. Adapted from Google Earth.

## Discussion

The core objective of this research was to determine how architectural interventions could effectively mediate the scalar mismatch between Madrid's car-centric PAU and its oversized urban voids. The findings demonstrate that rather than constructing monolithic, self-contained residential blocks, the implementation of a network of architectural micro-interventions effectively improves pedestrian quality at the human scale. By prioritizing flexible, multi-layered programming over the rigid repetition found in the PAU, this project establishes a new, porous relationship with the street. The design proves that an open-ended approach, where architecture is not a fixed, top-down mandate but a bottom-up collaboration with the community is essential for a changing society.

This study reveals a socio-spatial friction between what Helleman (2015) identifies as the planned and the lived city. While Sanchinarro consists of residential density, it suffers from a critical lack of eyes on the street (Jacobs, 1961) because the closed morphology of the PAU blocks acts as a non-human actant that forces communal life inward. This structural segregation aligns with Sennett's (2018) theory of the closed city, where the environment is engineered for the 20th-century commuter, making the daily life of the contemporary hybrid society invisible. The results highlight two extremes: high density without visual connection caused by inward-looking architecture, and ultimate exposure with no refuge. While precedents such as the Mirador (MVRDV, 2005) attempted to solve these issues vertically, they failed to address the ground-level threshold where the domestic realm meets the street.

This research introduces the fourth place as a new concept necessitated by the structural blurring of the first, second, and third places in a hybrid society. Historically, urban sociology relied on Oldenburg's (1989) Third Place, a neutral social ground distinct from home and work. However, as digital connectivity and remote work have re-anchored professional life within the neighborhood, these boundaries have fundamentally collapsed. The fourth place represents the hybridization that pulls the comfort and safety of the domestic living room into the public domain. Beyond social interaction, these interventions operate as a socio-metabolic ecosystem.

By integrating resource loops such as solar energy, water management, and organic waste recycling, the architecture shifts from a static object to an active, productive actant. The use of local thermo-clay blocks (termoarcilla) filled with site-excavated soil is central to this metabolic strategy, providing thermal inertia to mitigate Madrid's extreme climate while embracing structural honesty.

The implications of this study are both institutional and professional, suggesting a radical shift in how we approach urban expansion. Ultimately, this study offers a critical strategy for the architectural profession: the architect must shift from a designer of isolated residential blocks to a curator of urban interfaces. This research provides a multi-scalar methodology to deconstruct car-dominated boundaries and restore the collective urban life required for community building.

To further this work, several recommendations for future research and practice are proposed. First, a primary shortcoming of this research is a lack of personal interviews with Sanchinarro residents, which limits the understanding of their specific daily domestic rhythms. Future studies should prioritize qualitative narratives to deepen the understanding of the lived city in the PAU. Second, while the thermo-clay strategy is robust, further research into tectonics could enhance the cultural and emotional connection between the community and the local landscape. Most importantly, future efforts should investigate the blank ground-plane parking walls of existing blocks, physically breaking the defensive boundaries.

By shifting the focus from isolated volumes to a network of porous thresholds at the sidewalk edge, architecture can effectively reclaim the non-places of the PAU. The fourth place is a new approach where previous experiments failed, that matches the fluid, hyperconnected reality of the current society. The PAU was built for a society that no longer exists, the fourth place the Fourth Place provides the essential, porous infrastructure for the hybrid society that does.

## Reflection

The adoption of Actor-Network Theory fundamentally reshaped my understanding of the urban fabric. By prioritizing the small scale and viewing residents as the primary actants, I transitioned from a focus on architecture first to human experience first. This shift, while enlightening, introduced a significant challenge because of the realization that a single building cannot serve as a definitive solution to a systemic urban problem. I struggled with the sheer volume of interpretations and possible interventions that emerge when one designs for the human scale. This complexity made the initial transition from micro-observations to macro-strategies difficult, as I grappled with where to anchor my intervention in a landscape of infinite possibilities.

My initial hypothesis, a singular, porous building, was challenged by the analysis of precedents, which revealed that Sanchinarro's problems could only be addressed through a network of micro-interventions. This realization led to a significant shift in my research and design questions late in the process. I discovered that my early designs had neglected the true potential of the fourth place. Through an iterative redesign process, I refined my definition of the fourth place. I would describe it as the spatial manifestation of the blending of work and life. It exists at the threshold, the open facade where a person orders coffee, the outward-spilling architecture where materials flow into the landscape, or the in-between moments at a bus stop. It is the recognition that in a hybrid society, meeting places are no longer fixed, like a traditional pub (third place), but are found in the fluid, spontaneous in-between moments of daily life.

The decision to leave the thermo-clay bricks exposed was a deliberate philosophical response to the closed, inward-looking nature of the PAU blocks. Where the existing architecture retreats, my intervention reaches out, seeking a raw, outward-looking structural honesty. However, my reflection on the socio-metabolic resource loops has become more pragmatic. In a society characterized by low attention spans and rapid distraction, I have concluded that these loops cannot yet function entirely through collective stewardship without some level of professional maintenance. While commoning as care is the goal, the reality of contemporary social behavior requires a hybrid management model to ensure long-term resilience.

This research has fundamentally altered my architectural approach. I have learned that a building is nothing without its landscape. An isolated object, no matter how beautiful, fails if it lacks a proper relation to the street. I now find myself constantly analyzing thresholds and human moments, where people wait, talk, and linger. I am excited to apply this human-scale-first approach to future projects, as I believe it is the key to fundamentally changing how people experience space. If granted more time, I would have pivoted from the broad network to an in-depth, step-by-step walkthrough in a single building. I envision a granular walkthrough that maps the sensory experience, the specific acoustics, the play of light, and the precise lines of sight that foster connection. The most vital lesson for urban planners and architects is that the relation to the street is as important as the building itself. We must stop designing isolated buildings and start designing the environments that surround them.

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