The interactional High Street

How can the architectural composition of the High Street be repositioned to increase its performance being a resilient and social public space?

Studio: Architectural Design Crossovers (AR3DC100)

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Date: 21-05-2021

Word count: 5809

-**Abstract:**

London is the product of hundreds of big and smaller cities and villages that collided, merged and blended during the course of time. Each of these places used to have its own Highstreet, the commercial and social heart of the settlement. Contemporary London now has 600 former High streets; scattered all over London's perimeters. These Highstreets are without doubt diverse, but do share common characteristics, contemporary challenges and opportunities. Exploring these facets we might discover a new canvas for the London urbanist and architect to draw on; impacting London throughout.

Highstreets are divers and most certainly every single one is different from the others. But it is possible to distinguish types. The connected high street chains many historical settlements that now form London its outer boroughs and connects them which the center of the city. These high streets have a dual character being both mobile and social/commercial centers for the city its boroughs. However, as London has grown to become the metropole as we know it, mobility increases to impede the social functionality of the connected high street. Decreasing mobility does not seem a reasonable solution. Rather, the imperfect edges, transitional areas and left-over pockets that typify high streets like the Tottenham high street can be used to reposition the high street making it a interactional and social public space.

Methodology

–Problem statement and research questions

Highstreets are scattered across London its perimeters. They serve as retail, social and mobility centers for people living across the city (Lewis et al., 2017). Because of this multifunctional character, High streets are a complex and multifaceted location for intervention.

The general problem is that the social function of 'the' high street is in danger of impoverishment due to a complex set of contemporary influences. This has been addressed by multiple recent reports on specifically London its High streets.

Increasing rents and lack of governmental planning and protection have already impoverished some high streets. Declining local retail demand due to increased online retail has not affected London much until now due to its prominent position as capital (Lewis et al., 2017), but that might change.

From a spatial point of view, we are dealing with incredibly stretched and narrow spaces congesting social and mobile functions. This urban form is without a doubt very different from other social urban types like the square and the park. (Carmona, 2015; Lewis et al., 2017)

From this problem statement, this research generates the following main-question and sub-questions:

How can the architectural composition of the High Street be repositioned to increase its performance being a resilient and social public space?

How is the high street composed, what functional areas and ambiances shape the high street and how do they transition into on another?

How do people interact with and experience the high street area?

–Definition of theoretical framework

The high street is a well described phenomenon in the British built environment. Especially the London high street as a urban type has gotten attention from various research papers (Carmona, 2015; Lewis et al., 2017). These researches form a strong foundation upon which this research is built. Architectural composition of the high street is not a new topic (Carmona, 2015). However, its complex structure is not yet elaborated. This research will assess how this composition directly and indirectly interacts with the characteristics and challenges of the high street via various relational processes.

To elaborate on the architectural composition of the high street this research will built upon the theory of the "open" city by Richard Sennett (2018); The open city in this book is described as an un-finishable, uncertain ensemble of functionalities which are delimited by porous borders that promote interaction, negotiation and even conflict (Sennett, 2018). Although still mostly theoretical in "building and dwelling," the theory is connected to very practical designing methods in his next work "Designing disorder", which is a collaboration with urban planner Paul Sendra (2020). The theory is especially relevant for the High Street as an urban type because of its interest in borders, boundaries and transitional areas, which the high street is full of (Carmona, 2015).

–Methodological positioning and description of research methods

Starting with the high street as a guiding theme does fundamentally influence the framework of methods that can, should be used. Stating High street as a theme for a London based architectural

research immediately induces a large dataset. Almost 600 High streets are scattered across London (Lewis et al., 2017). Furthermore, the high street is not unique to London. Across the United Kingdom 5400 streets carry the name 'High street' (Carmona, 2015). With this information it is not only possibly to gain insight in methods that could be used for analysis of such a set of data. It is also possible to (carefully) state the relevance of any research done in relation to the broader phenomenon of the high street. However, In order to validate this broader relevance for the high street as a type this research must connect, compare and relate information gathered from its studies to both the broader set of high streets as well as to the theoretical framework described in the previous chapter.

Next to our frame of relevance, the theme of the high street also places any research done inside the realm of various epistemes. As an urban type, relating to other forms in the urban environment, the high street immediately operates within the field of morphology (Leite & Justo, 2017). The High street as an urban form is without a doubt part of a wider urban ensemble of forms. But furthermore, the high street in itself is a patched ensemble of forms and activities (Carmona, 2015).

As mentioned in reports by Carmona and Lewis, the social aspect of the high street is critical for its existence (Carmona, 2015; Lewis et al., 2017). So how to investigate: "social"? Social value as term is introduced by Lewis et al. in their assessment of the high street. However, their definition on what exactly is "social" does not extend beyond a brief *"Economists refer to it as non-economic impacts – public goods and externalities"* (Lewis et al., 2017). It is necessary expand on this definition in order to make it testable. This research will use Sennett and Sendra their definition of an "open" city. This definition will be further elaborated in the following chapters through brief systemic review; In the "open" city people are invited to activate, interact, negotiate and improvise with other people, organizations and the built environment (Sennett & Sendra, 2020). These criteria can be tested using methods in the domains of praxeology, phenomenology and morphology.

Longitudinal sections will be used to asses transition of activities, whereas cross-sections will serve to evaluate capability of the urban landscape to invite for activity and social interaction; does the urban landscape provide the necessary human scale for interaction (Sennett & Sendra, 2020)?

Photo analysis and sensory mapping provide valuable data on textures and perception, assessing attraction and visible relation between different points in space. This data will not only serve to assess ambiance of a place; it also shows how transitions work from one ambiance (or functional area) to another through their visible connection.

A functional categorization of the buildings on the high street and their facades will address not only the compositional elements of the high street, but also the tight relation between the private and the public. In that way the tension between façade, sidewalk and traffic can be explored.

However, before a precise assessment of the high street will be conducted, the different high streets of London will be categorized using cartographic, demographic and historical data. The research will assess transport infrastructures, historical development and deprivation in and around high street regions. This will be done firstly, to create foundation for selecting a site for case studying and intervention; Where do transit systems and social activity densely coexist? Which high streets face are most endangered by the influences described by reports (Carmona, 2015; Lewis et al., 2017)? Secondly, typological research on these topics is valuable in achieving a broader relevance for the conclusions drawn from a zoomed in case study. Information gathered from a case study can ultimately be connected to the other high streets that share characteristics. Through this inductive strategy this study aims to achieve greater relevance from the ultimate case study.

Especially the investigation of usage of the high street poses mayor challenges for this research.. First of all, this research is done without direct access to the site. Additionally, this research is done for a significant part in the middle of the COVID-19 pandemic. This does not only further impede access to the site; Regulations and personal perception will also fundamentally change usage of space. Any data on usage in the time of a pandemic should be treated with care.

For those and practical reasons praxeological study will mainly be done using interpret data like: probable routing, usage patterns based on opening hours and projected activity surrounding certain building types. In doing so, the praxeological data is for an important part intersecting with typological data from the plan analyses and categorizations.

With regards to phenomenological research similar constraints are encountered. No physical access to the site constrains this research to indirect perception of space. Photo analysis will therefore be an important tool to interpret architectural qualities of different spaces. However, photographic data does not cover the total experience of a place. Smell, sound, mood, speed, time and more factors all influence experience. Some of those factors can be determined by extended plan analysis; Speeds and moments of pause will for example be mapped and combined with photographic data to produce sensory maps; Time schedules (opening hours) can be used to generate a sense of activity and intensity. By connecting these types of data this research will construct an atlas for the High street; assessing the spatial qualities of the different physical actors that operate on the high street.

The categorization of the high street through these different techniques, will hopefully shed light on how the high street is experienced, both socially and individually and on the composition and transitions of the high street. This information then might help in finding ways to reposition of the high street.

–Argument on relevance

The characteristics and contemporary challenges of the high street are well described (Carmona, 2015; Lewis et al., 2017); rather than reconstructing the image already constructed by these previous researches, this research aims to develop upon the statements made by previous reports. This will be done from a architectural point of view.

On a very practical level this research can be relevant for architects, urban planners and institutions that seek to improve high street areas in London, but also across Great Britain and even (with some care) any composed main street area. High streets are a very common and impactful public space; any research done is potentially very potent.

For academical purposes this research serves as a bridge between theory on public space (such as by Richard Sennett and Paul Sendra) and critique on public space (such as by governmental reports). This research is a continuation of ongoing architectural discussion on how public space and people do or should interact.

The ‘extreme’ London High Street

The high street is a well-known and well-documented phenomenon, both for London as for the United Kingdom as a whole. Carmona describes the high street briefly in the following manner:

“In the United Kingdom the term ‘High Street’ is used as a metonym for the primary commercial street (or streets) of towns or cites, and for such spaces collectively. It is also the actual name of any such places across the UK where 5400 streets carry the name.” -Carmona, 2015

In itself the high street is an important part of urban fabric within any village or city; the high street embodies both social and economical activity which is often well accessible for pedestrians (Lewis et al., 2017). However, in the ‘greater’ London the high street has undergone some significant transformations which have created unique types of high streets with different contemporary challenges and opportunities.

Without going through the details of the origins of London its road network (I would like to direct the reader to the references, which are very elaborate); it should be mentioned that London and its network of high streets have a Roman origin. Being relatively land inward, while still connected to the sea via the Thames, London quickly became a commercial and political center for the island (Orengo & Livarda, 2016). This boosted the development of an elaborate road network connecting London (then Londinium) to its surrounding settlement; This created a radial network diverging out of (or rather converging to) London.

Along those radial (and their subsequent) roads new settlements began to appear as London grew in importance. A large list of former (mostly) independent settlements, like Tottenham, edgware, Edmonton, Ilford, bremford and many more find their origin along London its radial connections (Haringey council, 2017). All have nowadays been encapsulated by urban development to form the ‘Greater London’ region.

These encapsulated settlements in the greater London area do (in many cases) form the origin of streets that are now considered “High Street”. In Figure 1 it is shown that in many cases, High streets are located where settlements already existed around 1800. Due to the radiality of these settlements diverging from London its city center, Many High streets in Greater London are connected and diverging from the city center. Nowadays they serve as corridors to access the city center from London its outer boroughs.

Figure 1, composite map of high streets, road radials (black) and a historical map of London (1800), Red parts indicate highstreets where buildings were already present in 1800, blue ones were most likely added later

In Figure 2 you can see an example of settlements and high streets having evolved along a subsequent road with roman origin. The road connecting the high streets of Edmonton, Tottenham, Stamford Hill (and more) is a subsequent road of the roman Ermine street; a road that connected London to York and Lincoln via Bishopsgate (Haringey council, 2017).

It must be stated that this dual functionality of the high street, combining movement and (commercial and social) activity, is not unique for the London high streets. Carmona notes in his report on the London high streets: *"[High streets are] typified by their dual roles as attractors of activity – commercial, community and otherwise – and as 'routes' for through movement"*(Carmona, 2015). He even notes that it is argued that High Streets occur as central places of activity at places of optimized connectivity.

Figure 2, The subsequent Ermine street, left: a map from 1834 showing individual settlements. Right: a sattelite image of the now merged urban landscape.

Although the high street is dualistic in nature, combining movement and activity, these properties have developed to form some unique types in the case of London its high streets. One could say that the properties of movement have evolved to an extreme in the case of London its 'connected' high streets.

In this research the term "connected High street" will be used to describe a series of High streets that share the same road, often connecting them to the center of London. Connecting London its outer boroughs to the city center has put pressure on the infrastructural use of the connected high streets. In Figure 3 it can be seen how high streets are often closely woven together with public transit networks. In Figure 4 it is shown that the high street, especially in the case of connected high streets, also functions as TFL (main) road for London its infrastructure. In a 2017 report for London high streets Lewis et al. state that high streets provide vital access points for inhabitants of outer boroughs to public transit networks and bike routes (Lewis et al., 2017).

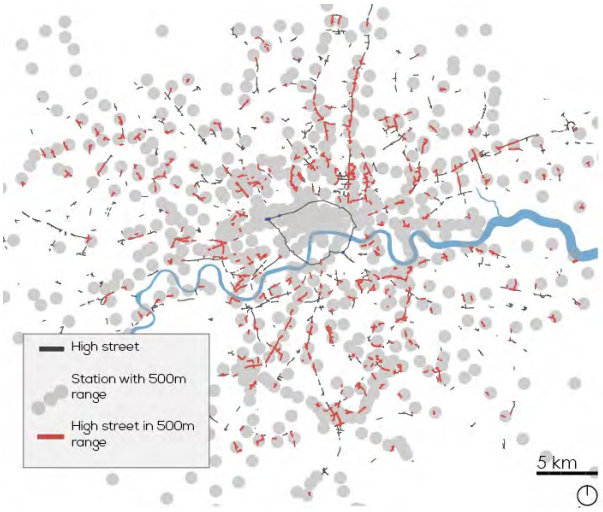

Figure 3, high streets and public transit station are often in close proximity

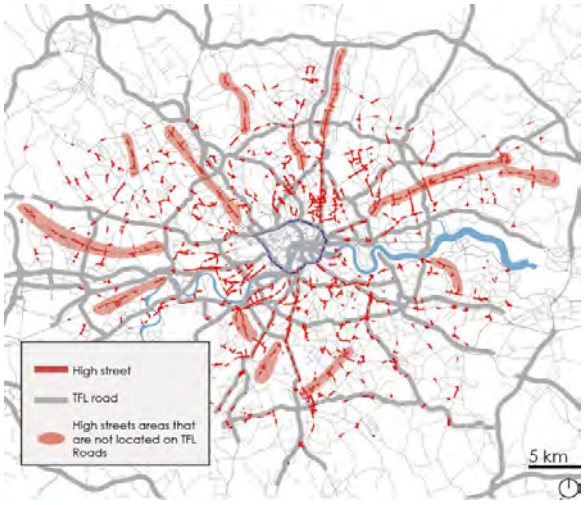

Figure 4, many high streets nowadays also function as TFL (main) road. although there are (highlighted) exceptions

The question that logically follows is the following: as London grows, is it possible for the high street to maintain its dual character, providing both economical and social activity as well as mobility?

This question is not as black and white as it may seem. The dual character of the high street is clearly not accidental. Mobility and activity in the cases of the high street are highly codependent. Repositioning the London high street for any purpose will thus probably be an act of balancing rather than choosing.

In the next chapter this research will give some insight into common challenges and characteristics of the high street relevant for this architectural research. These are often related to this dual character of this unique urban type.

What common characteristics, opportunities and challenges do the London high streets face?

The London High Street is a well-described phenomenon. Its impact on the city is described by multiple recent reports like the one from Carmona and the one from Lewis et al.(Lewis et al., 2017)(Carmona, 2015); Within urban planning reports from London the High street is a reoccurring theme. This chapter will, however briefly, mention common characteristics, opportunities and challenges that are found in these reports that have a connection to the architectural composition of the high street. It should be mentioned that this is a selection of common notations and not a complete list, as the reports also deal with issues that might require attention from outside the field of architecture and the built environment. However relevant, this research aims to create a set of challenges to be dealt with through architecture. Therefor, the list includes only issues that have connection to architecture.

1. **High streets are local, walkable destinations and important points of connectivity.**

The relation between connectivity and the high street is already introduced in the previous chapter. In the report by Lewis et al. it is mentioned that 63% of the people interviewed walk to access the high street (Lewis et al., 2017). People access public transport systems through the high street and many interchanges of public transport systems are found on the high street (Carmona, 2015). However, the pedestrian character of the high street and its connective character do in many cases also cause friction; high traffic amounts of traffic cause interruptions of, and pressure on the public space resulting in unsafe and unpleasant places (Carmona, 2015).

2. **High streets are social centers of the city**

Both Carmona and Lewis et al. mention in their reports that high streets in general (still) are social hearts within the city (Carmona, 2015; Lewis et al., 2017). ´Social center´ in this statement should be understood as a place where there is a high degree of community forming and social interaction between different segments of society. Lewis et al. mention that many social services are not only located on the high street, but also often go beyond their formal function. The same is mentioned about commercial locations on the high street. Many small stores on high streets perform some kind of social function(Lewis et al., 2017).

3. **High streets are flexible, ever changing and ´under´-planned.**

High streets often have a somewhat unplanned character, even though they are often located at very strategic point in the urban network of London (Carmona, 2015). They can even have a neglected appearance. Carmona states that the cities governmental institutions have, in general, not been looking after their high streets well enough. This most likely has to do with the fact that nearly 70 per cent of the London high streets do not fall within a town center planning and are thus vulnerable for development pressures (Lewis et al., 2017). However, there might be a positive side to this statement. Reports from both Carmona and Lewis et al. mention the high street its highly adaptive character. As Sennet mentions in his book `Building and Dwelling´, a adaptive character serves the changing needs of a community (Sennet, 2018).

Findings from site analyses:

The report of Carmona and Lewis et al. provide an excellent inside to some of the general issues of the high street. Through a case study of the Tottenham high street this research aims to relate the general issues of the high street to location specific findings.

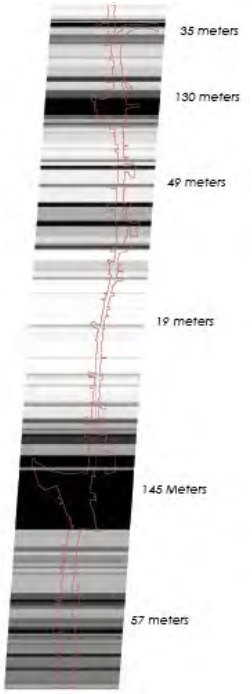

Figure 5, street width of 2,5 km high street (lined red) analyzed as barcode.

1. The Tottenham high street and its embedment in the city is a patchwork of various networks, sorts of real estate, functional areas and architectural ambiances. The high street seems a linear space, but when we take a closer look we soon find that the opposite is true. Just from analyzing the street width of the Tottenham high street (+-2,5 km of street) we find that the street width various from as narrow as 19 meters to as wide as 150 (Figure 5).

When examined further it is found that the Tottenham high street exists of many different patches separating functions and ambiances. These patches have cluttered over time, sometimes forming transitional areas, but more often then not resulting in rough edges, urban stitches and left over spaces indicated in Figure 6. In the figure it is apparent that when looking beyond the high street, the cityscape suddenly turns more monotonous. This is most likely also due to the surrounding areas being developed quickly during the 19th and 20th century. The Tottenham high street however, which already existed as various connected patches, and later coexisted with the overground railway, left many more 'inconvenient' pieces of land. These where often not suited for the popular garden housing system which we find all over the outer boroughs.

Figure 6, the Tottenham patchwork, Different colors indicate functional/ambiance zones

In these "odd corners" of the Tottenham patchwork we find a divers set of buildings serving different industries, often located just behind the high street. To name a few in the area: a Telephone exchange, a brewery, schools, stockrooms and industrial buildings.

Some structures in the Tottenham high street area have perhaps not always been odd, but have over time become more alienated from their surroundings. Mansions that were once located at the edges of settlements are now encapsulated by the city, still many have their exceptionally large area of land. When located on the high street this results in setbacks of the façade, changing the ambiance of the street (Figure 7).

Figure 7, Mansion located on the Tottenham high street

Because of these setbacks and the odd placement of buildings, leftover spaces are often a result. For the rest of the research

these will be named “pockets”. It could be said that the Tottenham high street (and possibly many London high streets alike) have had a natural tendency to generate pockets and other oddities at its edges and transitional areas.

The variety in the street scape in and surrounding the Tottenham high street should be seen as a quality. However, in their current state, many of these oddities and pockets are unused and deprived of quality; considering both public space and buildings (private space).

In the photo analyses below (Figure 8, Figure 9) it can be noted how, just one corner away from the high street itself, the street turns barren, walls arise and façades become monotonous. The place itself has become alienated and non communicative. The pedestrian thus finds himself in a perceptible desert (a useful exaggeration). The placement of this so named “desert” is often quite unfortunate. It is separating the “social” high street from the surrounding housing areas. Arguably it should rather be connecting the two.

Figure 9, Kenmare drive, Tottenham

Figure 9, Reform row, Tottenham

2. **High streets are dealing with various traffic systems that are both essential and ballast to its functioning as a public space.**

The high street is a dual system by nature, but this has evolved in extreme ways in the cases of many London high streets. The Tottenham high street is no exception to this.

As mentioned earlier in this paper, the high street of Tottenham has developed as a connected high street. As can be see on figure 4, the road on high street is partially a TFL road and thus is one of the main connections for people from the Haringey borough and beyond to access the city center. The high street is also paralleled by the Stoke Newington and Edmonton Railway. At Bruce Grove station (one of several stations connected with the high street) yearly 1.1 million people access the rail system (ORR, 2021). Furthermore, various bus lines use the Tottenham high street for their routes and even a cycling highway has been planned on the high street (Haringey council, 2017). What implications does all this movement have for the pedestrian usage of the space?

Firstly, let us simply look at area usage of the high street, to start valuing the urban type as a place. In Figure 10 the high street its unbuilt surface area from Bruce grove station north up to the new Tottenham stadium (roughly 1km) is subdivided into road and non-road surface. From the 30.850 m2, 49% is road (car dominated) area. 11% of the surface is non accessible, being private and/or fenced-off land. In most cases this 11% (which is 20% of the non-road area) are a result of imperfections in the urban patchwork which were described in the previous chapter.

	Area (m2)	Share (%)
Total area	30.850	100%
Road (grey)	15.200	49%
non-road	15.650	51%
accessable (white)	12.200	40%
non-accessable (red)	3.450	11%

Figure 10

Figure 11 section of Tottenham high street in between Dowsett road and Reform Row

In the section taken on the high street in between Dowsett road and Reform Row shown in Figure 11 it becomes possible to appreciate the effect this car dominance has in the more narrow parts of the high street. Here the high street is divided into six linear areas: two lines of pavement, two driving lanes, a bus stop and a loading area.

Especially in these narrower parts of the high street, retail and other commercial functions dominate the plinth (see attachments). It is these commercial areas that are linked to the social functioning of the high street(Carmona, 2015; Lewis et al., 2017). However the public street does not reflect this character.

In the photo analysis below it becomes apparent that the pavement often is not designed for other activities than walking; there is little urban furniture and the space is often narrow, resulting in uncomfortable places to stop. Furthermore it is often difficult to cross from one side of the high street to the other. The pavement has become equal in function to the car dominated spaces: a space for movement.

Figure 13

Figure 13

How can the architectural composition of the High Street be repositioned to increase its performance being a resilient and social public space?

So, now how can we reposition the high street? Clearly the dual character of the high street is both essential and a ballast to its functioning as a social public space. As London grows, movement takes up more and more space in the high street. This is in return pushing pressure on the pedestrian usage of the place. At the same time, the patchwork that is the high street leaves many odd, empty or unsolved edges and transitions; many of those are architecturally underdeveloped.

When repositioning the high street area the focus should be on creating a place that is better fitted for the activities that the inhabitants value when using the place. The term 'Social center' should be a driving factor in development. Meanwhile, designers should not try to erase the mobile character of the space. Surely some (vital) improvements can be made to ease the relationship of motorized movement and the pedestrian. But the high street is, and will probably stay, busy place full of movement; it should be.

Still the high street, when viewed as an area rather than just a street, is full of opportunity for creating social and pedestrian place. The high street as an area is a patchwork. All these transitional spaces, oddities, pockets and edges that form it leave many imperfect areas. Imperfect in this sense should not be read in a qualitative way. They are imperfect in a way that they are not *smooth*, *well fit*, *neat*, or *efficient for hermetic filling of every square millimeter of land*. Even though these imperfections in the current situation often do result in non-qualitative spaces, they possess some characteristics and qualities that could be used to reposition the high street as an area. It is the imperfection of these spaces that can cause them to become a qualitative and functional public space.

Unused: many of these spaces are unused or not fully used in current programs. This has negative effects in there current performance as public space. They can be unsafe, uninviting or unknown. They form barriers between adjacent areas impeding interaction between those areas. However, very simply put, unused areas can also be seen as "available". Available for new initiatives. Qualitative pedestrian places, which are lacking in the high street, can be created in these vacancies. These "available" areas are either on the high street or are very close and can be well connected to the street. In this way the high street can be repositioned to become a wider web of public spaces, giving room for the social character of the street.

Being an in-between area, pockets should become a place where different groups, individuals, activities and programs meet. The public space as well as private areas could achieve this through leaving room for interpretation, improvisation, negotiation and even conflict, in their design (Sennet & Sendra, 2020).

Character: Because these 'imperfect' areas were often less suited for more conventional projects such as large garden housing, we find all kinds of different structures. However sometimes poor in quality, all these places become rather unique a have natural character. This could be used to there advantage to attract activity.

Borders: each patch in the patchwork has its edges. Sometimes it is a rough edges, suddenly changing the character of the street. At other times it can be more transitional. Pockets are a different kind of edge. Rather than sudden or smooth they can be experienced as empty. Thus forming a boundary area between other areas. In his book "Designing Disorder", Sennet states the

difference between boundaries and borders. At a boundary things end, whereas at a border things interact (Sennet & Sendra, 2020).

The pocket in its current state often forms a boundary in between the high street and the surrounding (dwelling) areas. It provides for very little interaction. However, because of its unique location in between other functional zones, the pocket (in general) can be transformed to become a border. It is at the edge of these functional zones that we can create the interaction between them. The pocket can in this manner become a place of interaction. Interaction between the mixed, commercial and mobile high street and the homely dwelling areas surrounding it.

Just as the mobile character of the high street provides the necessary interaction between the boroughs and the city center. The pockets (and other edges) can provide the necessary interaction between the high street and the housing areas. In a bigger sense the newly formed 'extended high street' (The high street plus its pockets) can become the border in between the center of London and the outer borough, both connecting and separating the two.

It is this multi-sided interactional character of the 'extended high streets' that make the areas extremely fit to serve as the social hearts of London.

Discussion:

The hope for this research has always been to do an investigation that has relevance for many high streets in London. However, it would be irresponsible to conclude that the characteristics of the Tottenham high street are equal to those of all London its high streets and so my proposition for Tottenham would count as a general proposition for high street areas. However, I do not think it is absurd to suspect that many high street areas, especially those with longer histories, share some of these characteristics. I suspect many of the connected high streets are cluttered patchworks with many imperfect spaces. After individual examination, one could come to comparable strategies as the one I proposed for the Tottenham high street area in this research.

The above compromise is a reoccurring theme in this research. With this amount of different scale levels, alternating between the whole of Greater London and a part of a single street, it is impossible (for a relatively small research) to come to irrefutable conclusions at all scale levels. During the research I chose to gradually zoom in further as time passed. In doing so I was aiming to establish a retraceable connection between the different scale levels. I would argue that this has worked up to a functional degree. However, after having zoomed in as far as I have done, looking at individual pockets, it would have been very productive to return to a bigger scale. In that way I could analyze high streets across London for aspects that were previously unknown to me as a researcher. This could improve the relatability and relevance of the Tottenham case study.

The research reflection and research design project coherent with this research paper go into more detail as in how to reposition these pockets to become interactional, social and resilient borders for the high street. The conclusion from this research paper alone solemnly gives a first directional proposition as to where to find possibilities to reposition the high street. Many different design solutions may follow from this proposition. My own design is merely an interpretation aiming to address these findings.

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Reflection report

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Date: 21-05-2021

Word count: 1571

The research paper aims to investigate the composition of the High street and its surrounding areas. This investigation has concluded in a compact contextual strategy for repositioning the high street of Tottenham. This strategy has relevance for other high street areas across London and even the UK because of the similarities of characteristics and challenges many high street areas face. However, it would not be appropriate to conclude in a comprehensive strategy for the high streets of London. For the sake of creating an eventually architectural research and project, I chose to focus on more detailed study and design of the selected area instead of widening the view.

The area I chose for repositioning can be described as a cross section of the high street and the "pockets" (definition explained in the research report). In the research I soon found that the possibilities and necessity for architectural intervention lay 'behind' the high street rather than on the high street itself. I found that the connective tissue between the high street and the surrounding (often) housing areas was barren; There was little functional program, disconnected facades, monotonous streetscapes and vacancies. In order to improve the position of the high street in the area, this connective tissue needs to be improved.

Because of the lack of program, and vacancies in these areas the opportunity arose to create new program. With the goal of repositioning the high street in mind, a program that can connect the surrounding housing areas with the high street had to be found. I found that it was not appropriate to design a new center commercial or public center, as it would only compete and possibly decrease the value of the high street. However, these new areas could function as pedestrian spaces that offer qualities that both the high street and housing areas do not offer. The infrastructural role of the high street has proven vital for the boroughs, but has decreased the quality of

the high street as a pedestrian space. These “pockets” can be used, in communication with the high street, as pedestrian interactive areas. In this role, I found, they could serve as a membrane for pedestrian movement between housing areas and the comicalities of the high street. A membrane, where slow movement, spontaneous activities and social interaction increase the performance of the total area being a resilient and social public space.

One of the vacant buildings I encountered behind the high street was an old telephone exchange building. Just next to this building lay a former housing plot that now functioned as private parking area for surrounding buildings. These two plots (the parking and the telephone exchange) are marked green in the figure above. In front of them is a typical street that we encounter in these connective areas; it is barren, in a way that I just described. I chose to work with this location because it had a very rich set of challenges and opportunities that correspond in a very complete way with the challenges that I formulated during the research. Out of personal interest for my graduation and development as an architect I also very much preferred to work at least partly with existing structures and re-using them. With this plot I could design new structures (on the parking area), re-design a streetscape and transform an existing building.

Moving towards architectural program has been a difficult step during this project. To find what kind of program could benefit the area I did a small research. I used reports from the local municipality to extract what the area needs. I quickly encountered an interesting housing problem. The Haringey council states that there is a lack of family housing (Haringey council, 2017). Because of this, the council mentions, the area has problems with retaining growing households in the area. Growing should be seen both in a literal (bigger families) and financial way. People tend to leave Tottenham when there income raises and there families grow.

Because it was impossible to access the area in person (due to COVID-19) I was left with the struggle of getting in touch with locals to gain a more bottom up perspective on the needs and challenges of the area. Via a Tottenham locals Facebook community I managed to get in touch with people. With a survey in gained some insight in the needs of the local community. Though statistically not uncompromisingly (there 25 respondents), they did confirm findings from the report of the city council.

Together these two small investigations were a trigger for me to take the issue of changing needs of growing households into account in the development of my architectural project. Housing did seem fitting as a part of the to be designed area. However, from my own analysis as well as from the Totten area action plan (Haringey council, 2017), I found that dwelling facades in the Tottenham area were not at all communicative with the public street life, possibly contributing to a downwards spiral of social security in Tottenham it’s streets.

This is where I found a re-occurring theme in my research and design process. Just as the pocket areas between the high streets and the housing areas can function as a border/membrane where activity takes place, the façade can, when seen as a transitional space rather than a line, become a membrane. It can allow transition from public to private. Because of its transitional character it can host a diverse pallet of activity and social interaction. After all, borders are the place where different groups meet.

So how to tackle this design question of growing households? Taking this question I immediately chose to go into more experimental housing organizations. I have aimed to develop housing system that features both long term housing for growing and shrinking households and short term housing for temporary residents. Through relatively small renovations former independent studios can be adapted and appropriated to become part of the dwelling of a growing household (Figure 1). Similarly, these rooms can be dismissed when de households shrinks and return to function as independent studios.

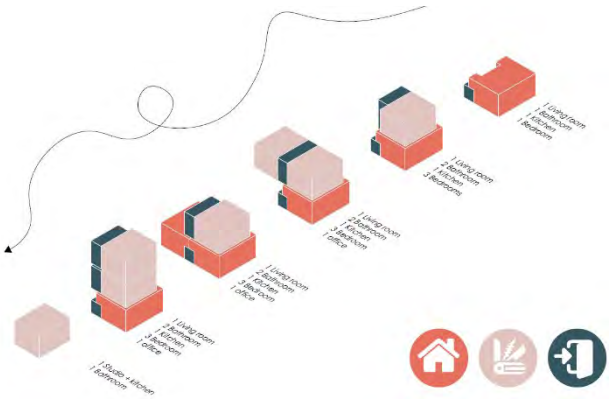


Figure 1

During the project I have tried to re-imagine what spaces can be rather than how we usually see them. A corridor can become a place for collectivity and rest rather than just a space to move though accessing your house. Similarly, when connected via a lift, a roof can become the place where your building grows and where residents express their own design and meet each other and the city.

However, from sessions with Roberto Cavallo and Florian Eckhardt I have learned concepts and re-imaginations should not always be literally translated into design. Concepts can become overdone and even kitsch, impractical and counterproductive when the design does not go more profound than the literal interpretation of the concept.

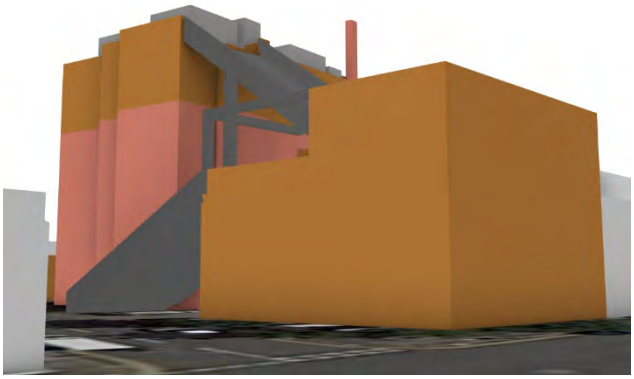


Figure 3, first interpretation

Figure 3, (almost) final interpretation

One of the struggles in designing a diverse set of interventions is how to keep all parts of the design from falling into individuality and fragmentation. In my sessions with Roberto Cavallo we discussed how to tackle this problem best. Ultimately I have aimed to maintain unity through simplicity in material and style. Simply put: all existing structures are in brick, new buildings and additions are in wood; attributes are erected in steel and glass. In general, greenery is added in abundance as is was lacking in the original situation.

Rather than elaborating on the design itself I would like to use these final paragraphs to reflect upon the decision to take a more experimental approach for my project. The choice has been very consciously taken. Personally I have preferred to use my (at least for now) last research and design

within the environment of the TU Delft to investigate new strategies and concepts rather than trying to appropriate and perfect existing ones. I try to state this without arrogance, as I do not at all wish to pretend that I am even close to knowing enough about the profession of architecture to get bored by investigating existing dogmas and practices. However, doing (and combining) research and design in the (however realistic) fictional setting of a TU project does create an excellent setting for investigating new ideas. The aim has been to add to the scientific debate on matters of the public realm, social housing and housing shortages by approaching the topics in an unconventional manner.

I do belief the project touches upon relevant contemporary issues that are at play. My investigation on the public realm in places where public design is a delicate science due to social safety can be relevant in many similar situations. All over the world we find gated communities, but many like Richard Sennett advocate other interventions; the debate on how to create a socially secure and a fruitful environment is still ongoing.

Social housing and housing shortage in general are as relevant as ever. My research and my design (and other unconventional strategies that are being developed) can provide new insights. This can be helpful in finding solutions for the problems that we encounter. It might be necessary to change our approach to design in order to surmount the challenges ahead.

PR5

The Extreme London High Street

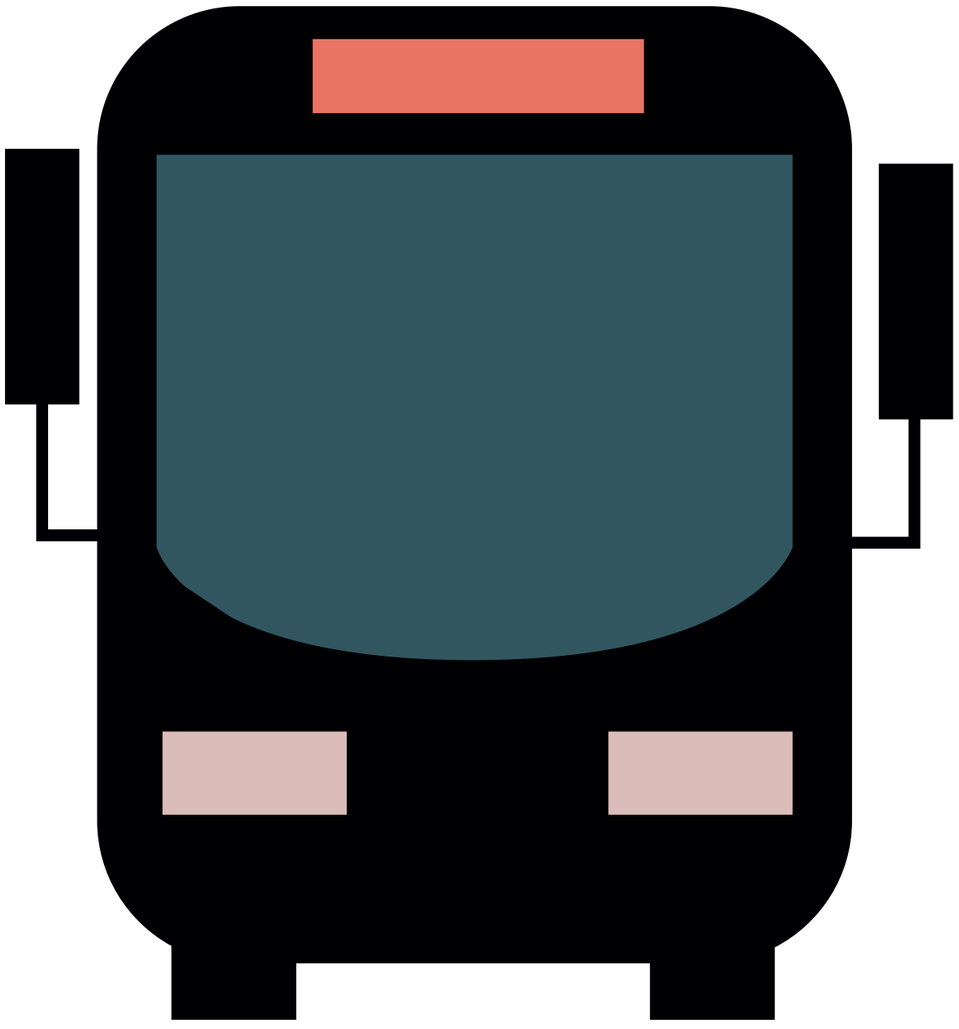
Teun van Knegsel

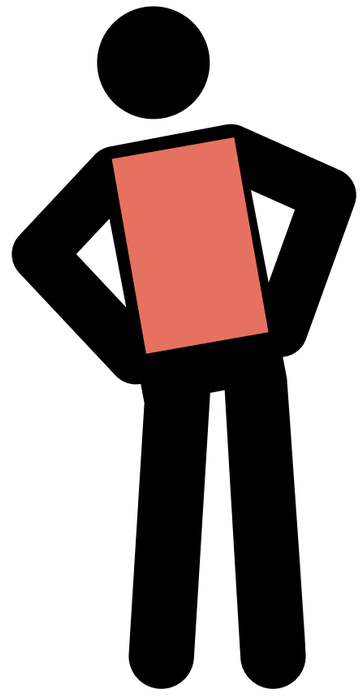
4-7-2021

What is a high street?

"In the United Kingdom the term 'High Street' is used as a metonym for the primary commercial street (or streets) of towns or cites, and for such spaces collectively. It is also the actual name of many such places across the UK where 5400 streets carry the name."

-Matthew Carmona (2015)





Traffic & Social

interaction = social

What is extreme about the London high street?

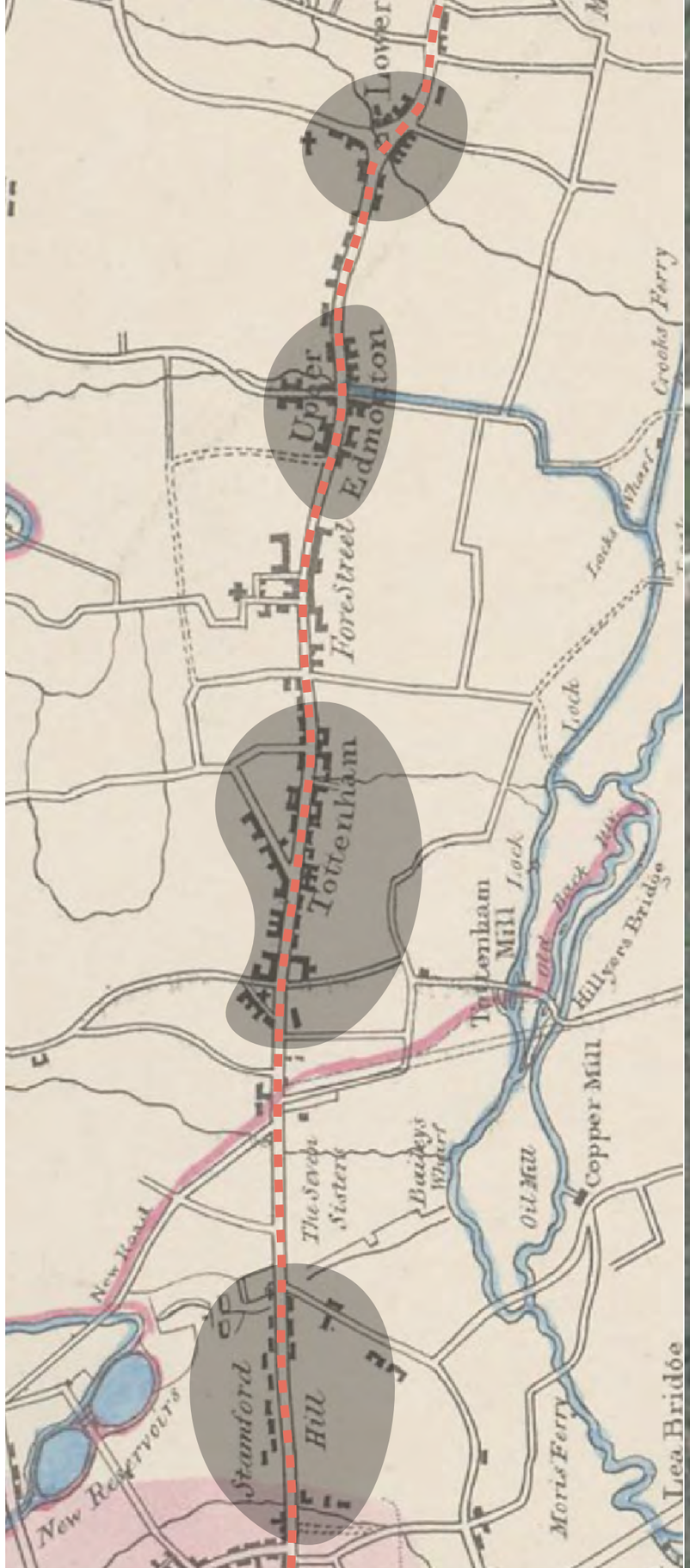
Connecting the city center

High streets 2020

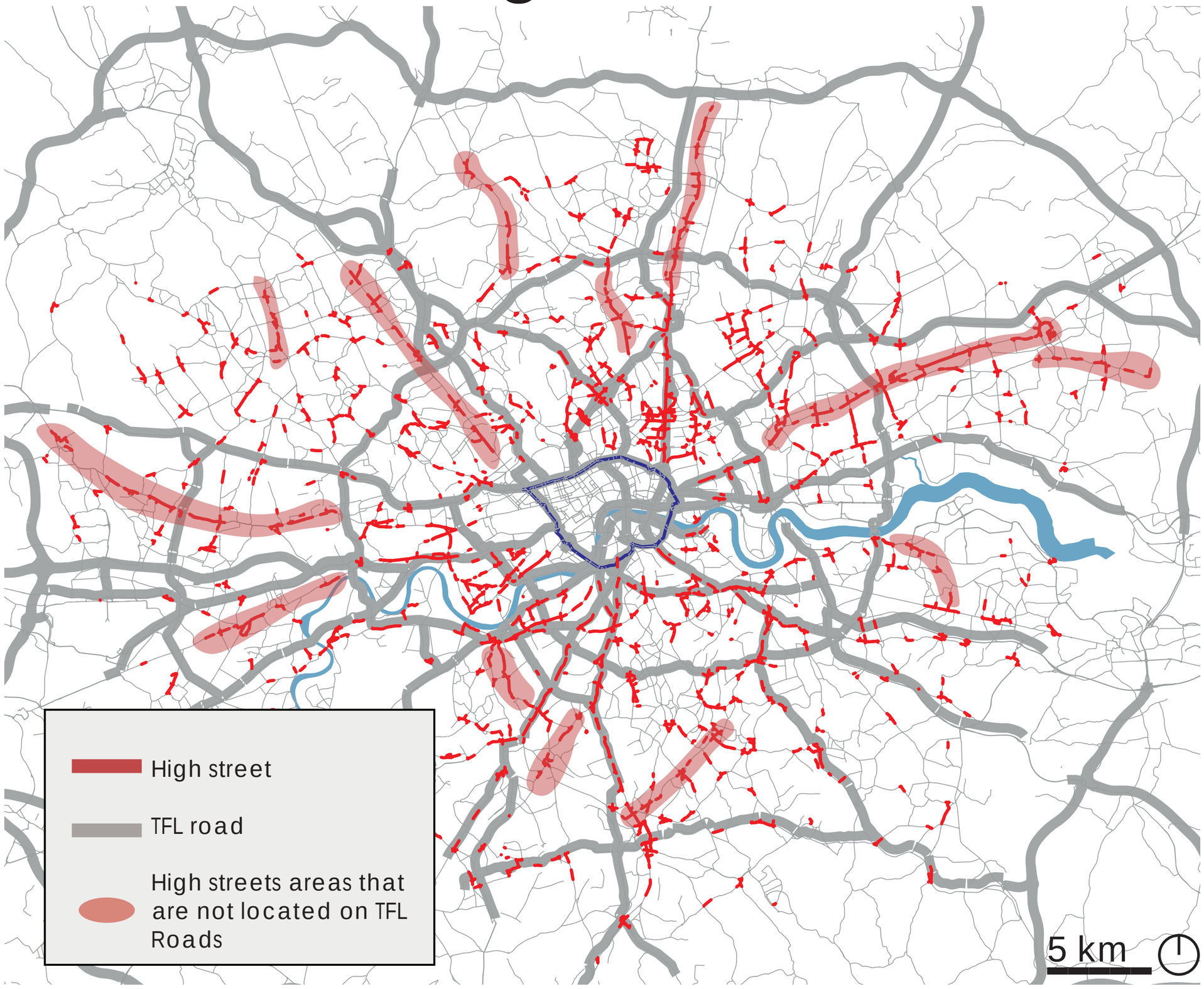
Historic radial roads

City center

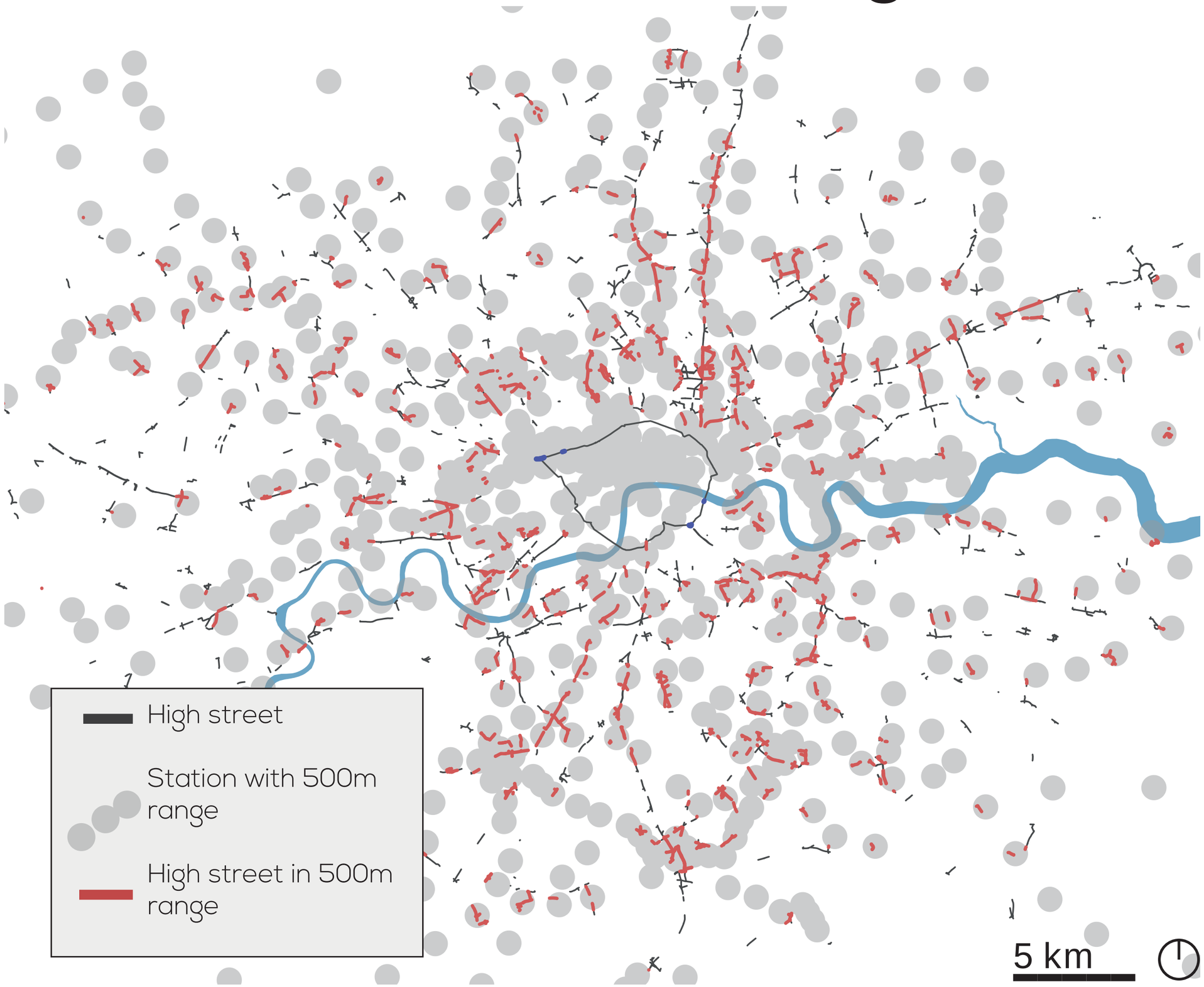
Sequential streets

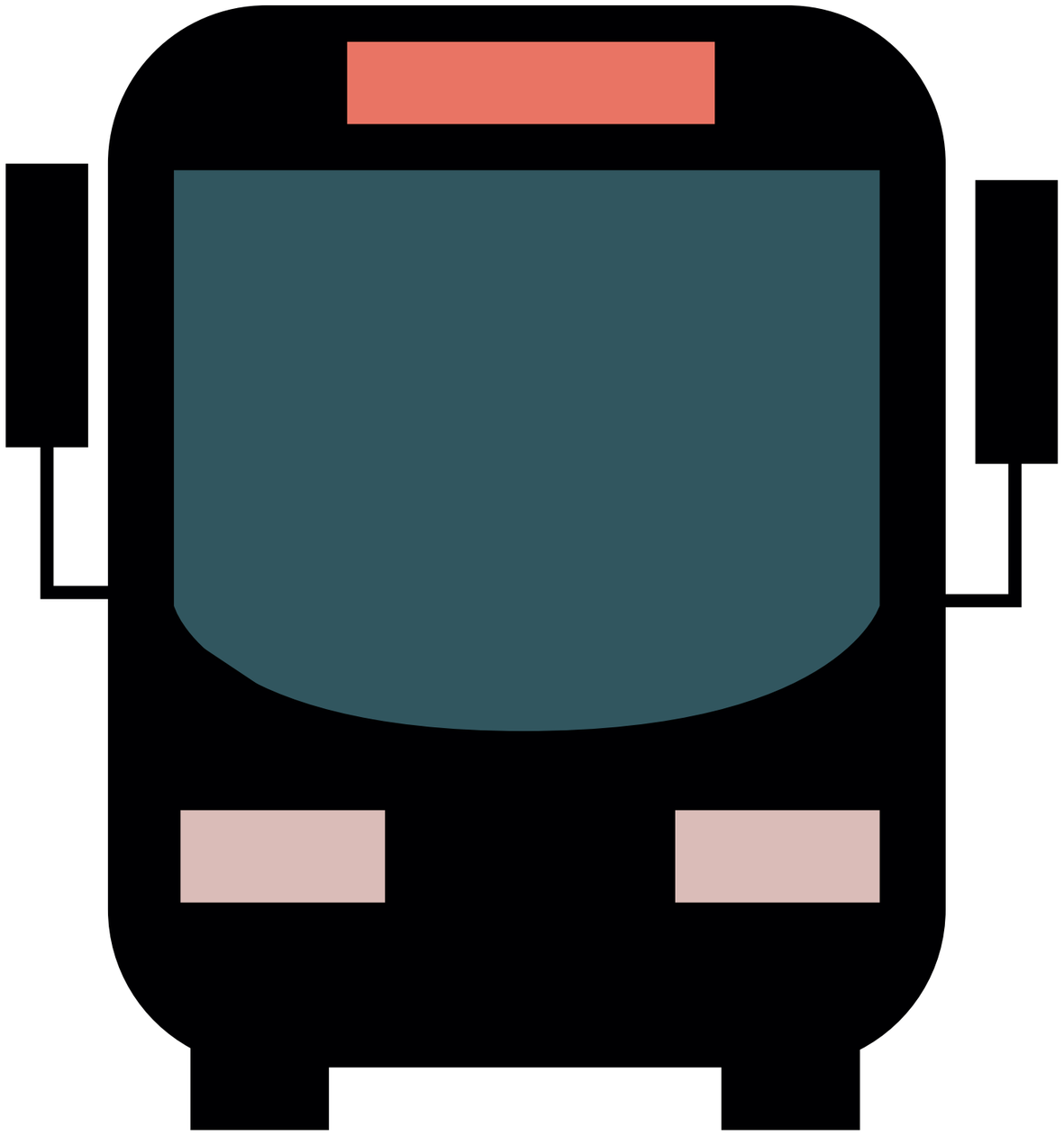


TFL Roads on high street



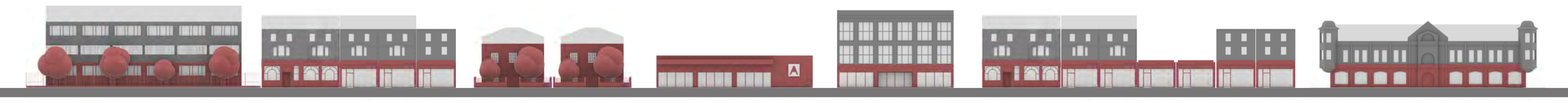
Public transit stations on high streets





Traffic > social

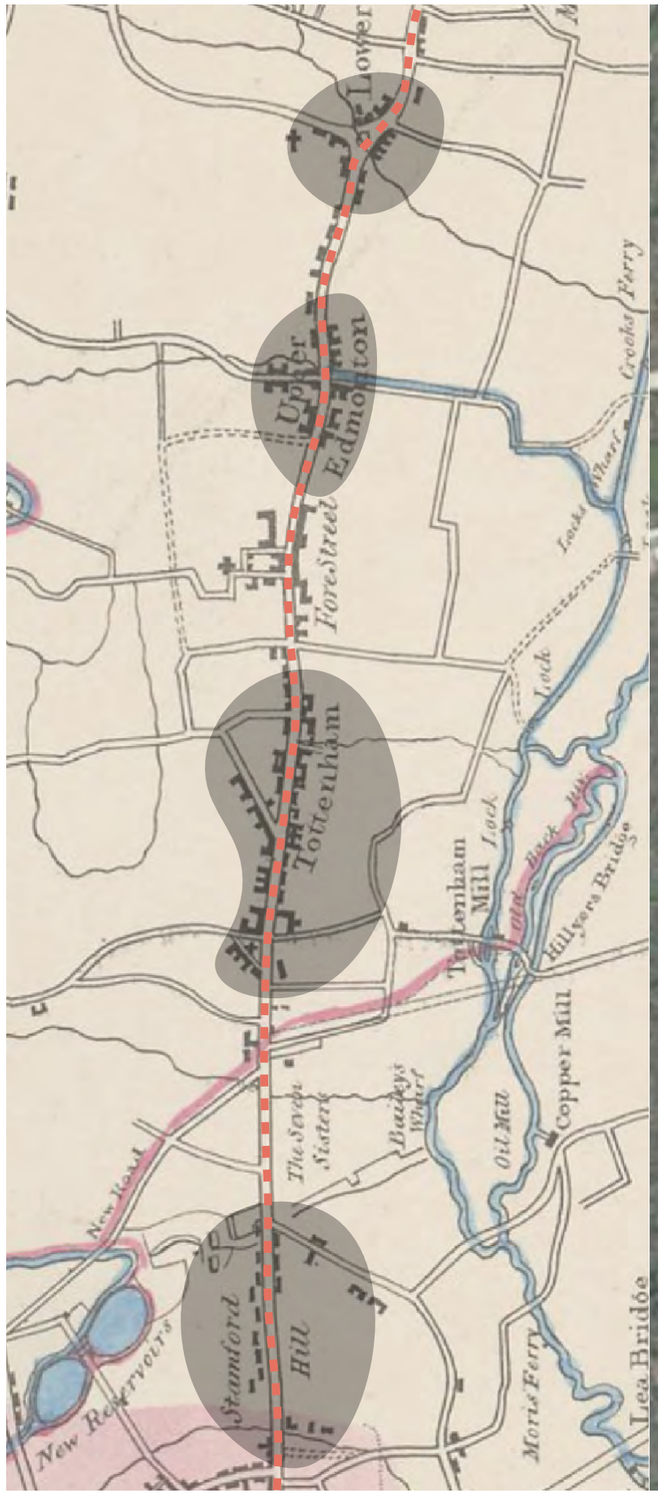
How can the architectural **composition** of the **high street** be **repositioned** to increase its performance being a resilient and social public space?



Erasing traffic = erasing the high street

The high street is a patchwork

1834



2020

Patched in a monotonous area

Tottenham high street

Tottenham pockets

1864


50
Blue School
Girls
Charity
SCOTLAND GREEN
Friends' Meeting House
Almshouses
Alpha
Hous

1913


HEMBURY ROAD
Home Place
HARTINGTON
Friends' Meeting Ho.
Schools
T O T T E N

2021

The Telephone Exchange

Pockets are deserts

center of activity

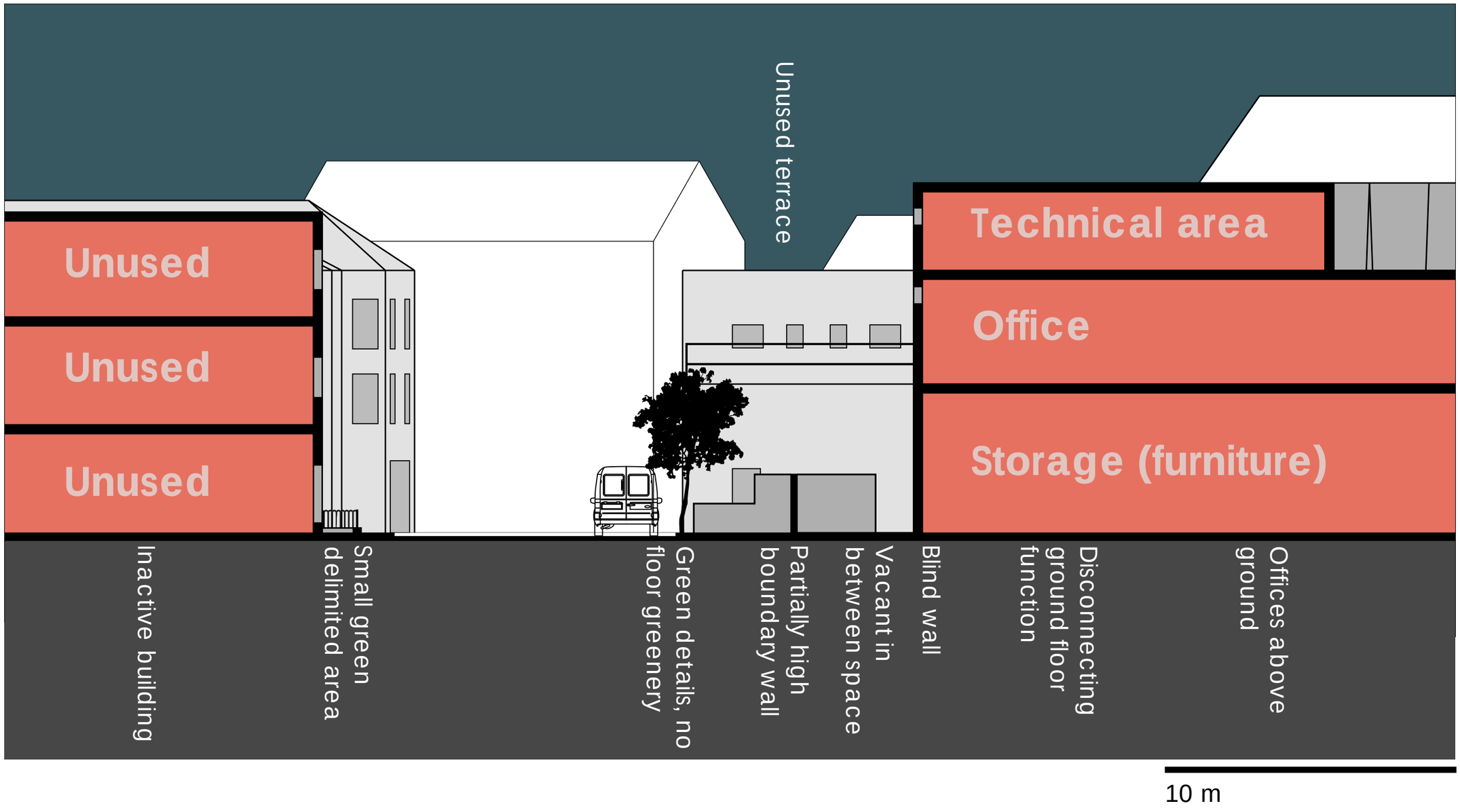
Mirrored architecture on both sides of street

monotonous closed walls

monotonous streetscape

Pocket in section

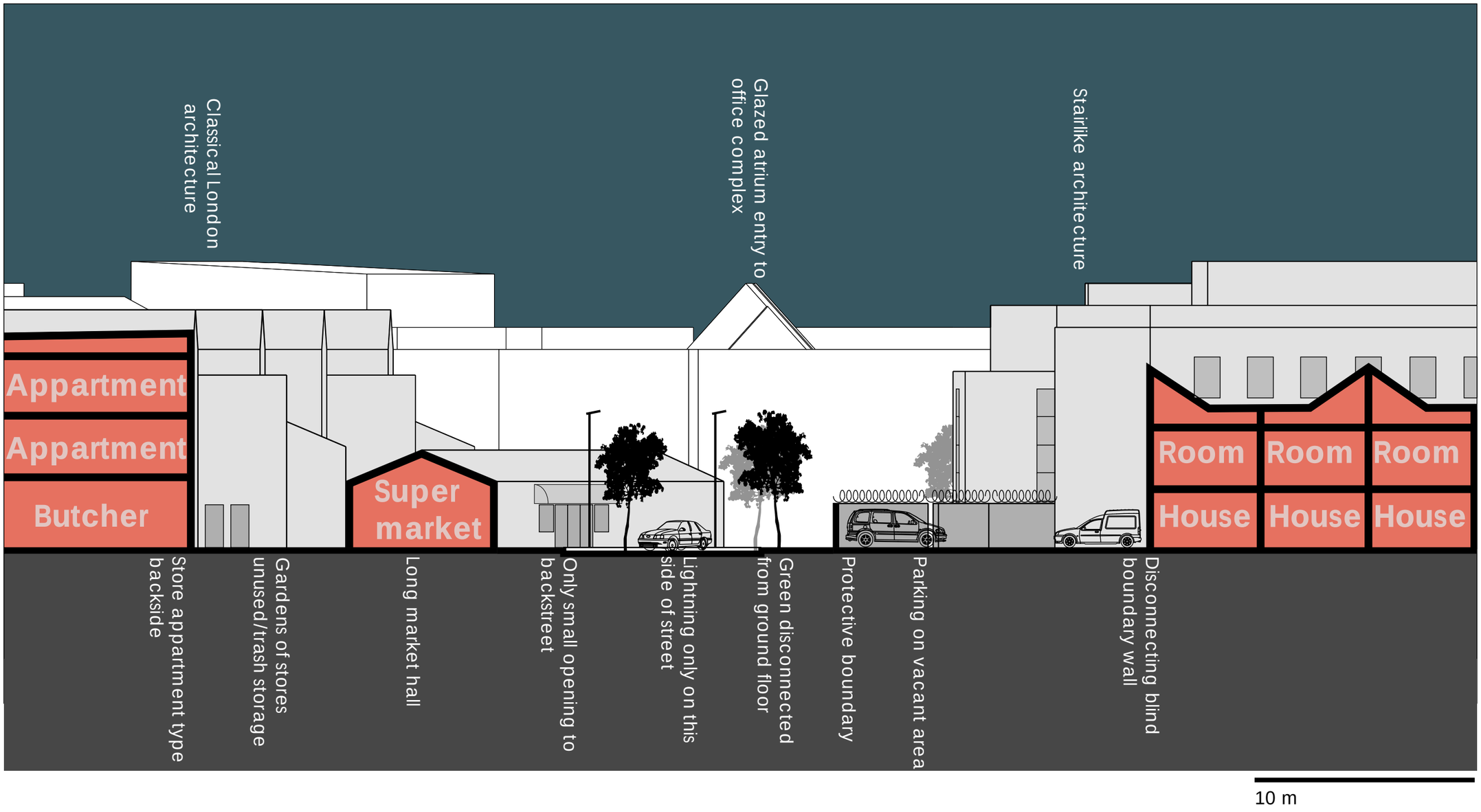
Telephone exchange



Pockets are deserts

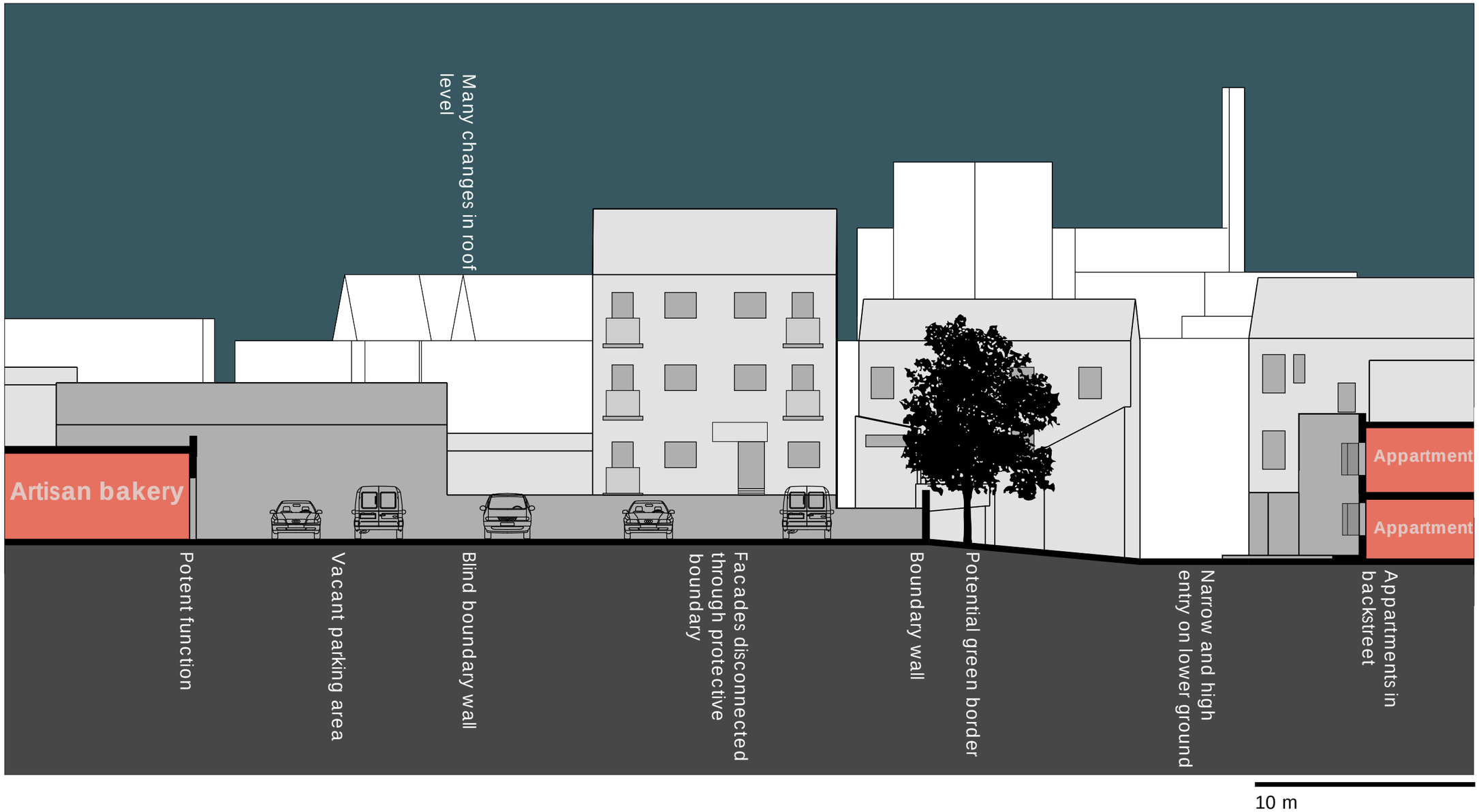
Pocket in section

Telephone exchange



Pocket in section

Pocket in section



Pockets along high street

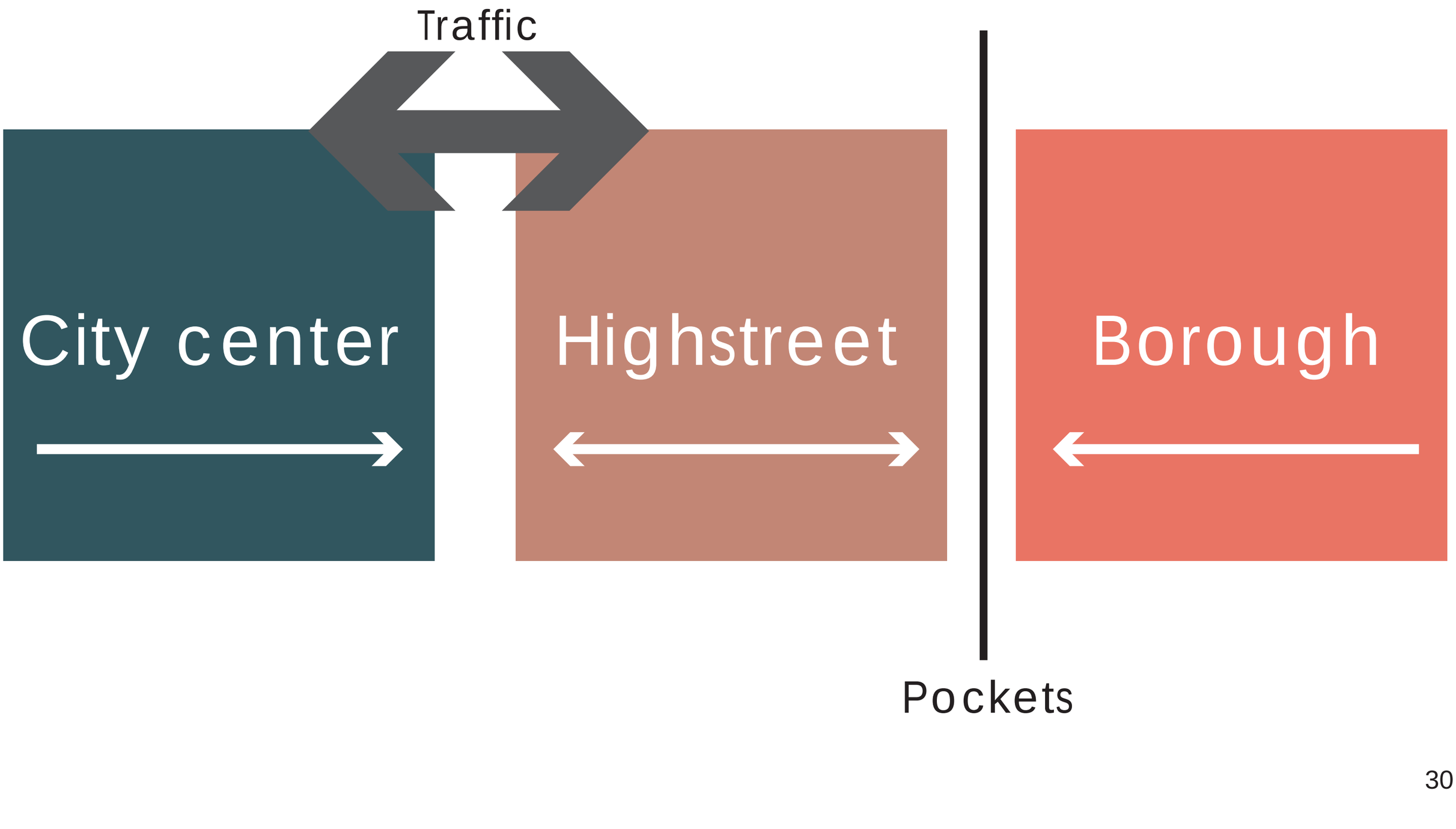
So what have got?

City center

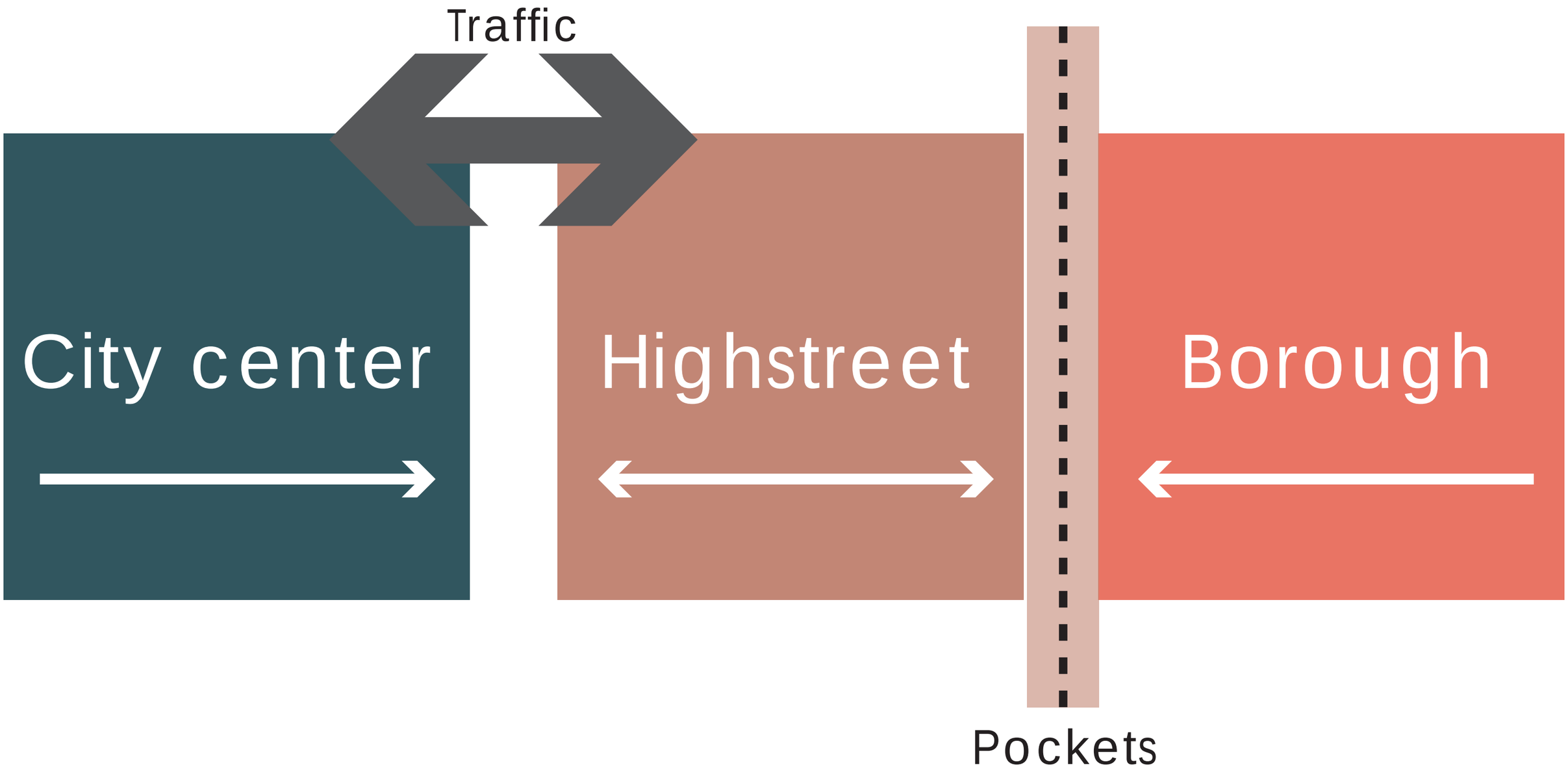
Highstreet

Borough

Two problems...



Reposition pockets to become borders



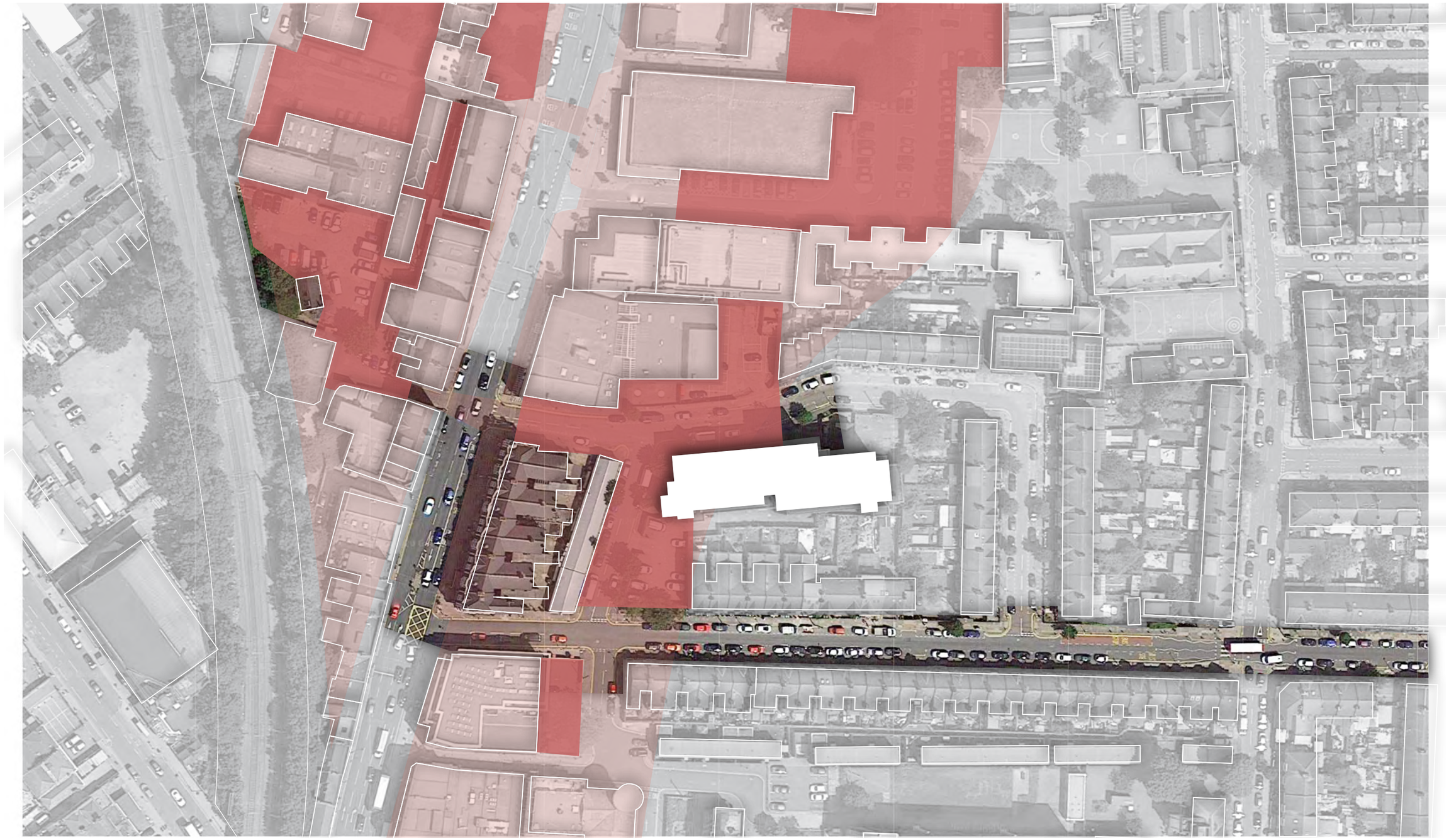
Opportunity of pockets

Un-used = available

Odd = Character

Boundary (can be) Border

Housing | The extended high street | Housing



50 m

Repositioning of the high street

A wider scope

200 m

Interaction

Incompletable spaces

-Allow for different activities to take place
-Keep changing over time

Which results in:

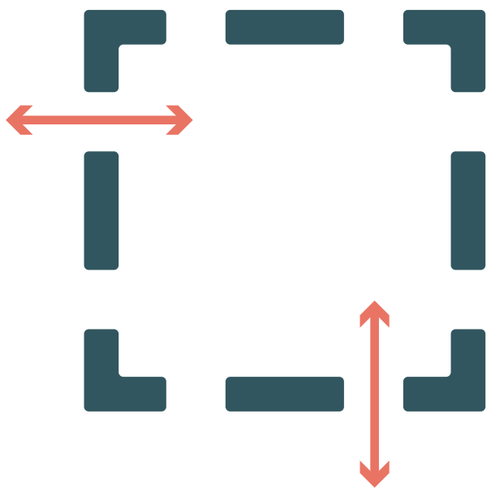
-Negotiation = interaction of users
-Improvisation = interaction with architecture

Borders

-Seperate functional areas
-Are permeable

Which results in:

Interaction of users from different areas



Existing pocket

Telephone Exchange

1:500

Plan
1:500

Telephone Exchange

1

2

3

4

10 m

1 The high street

1 The high street

2 The Telephone exchange

2 The Telephone exchange

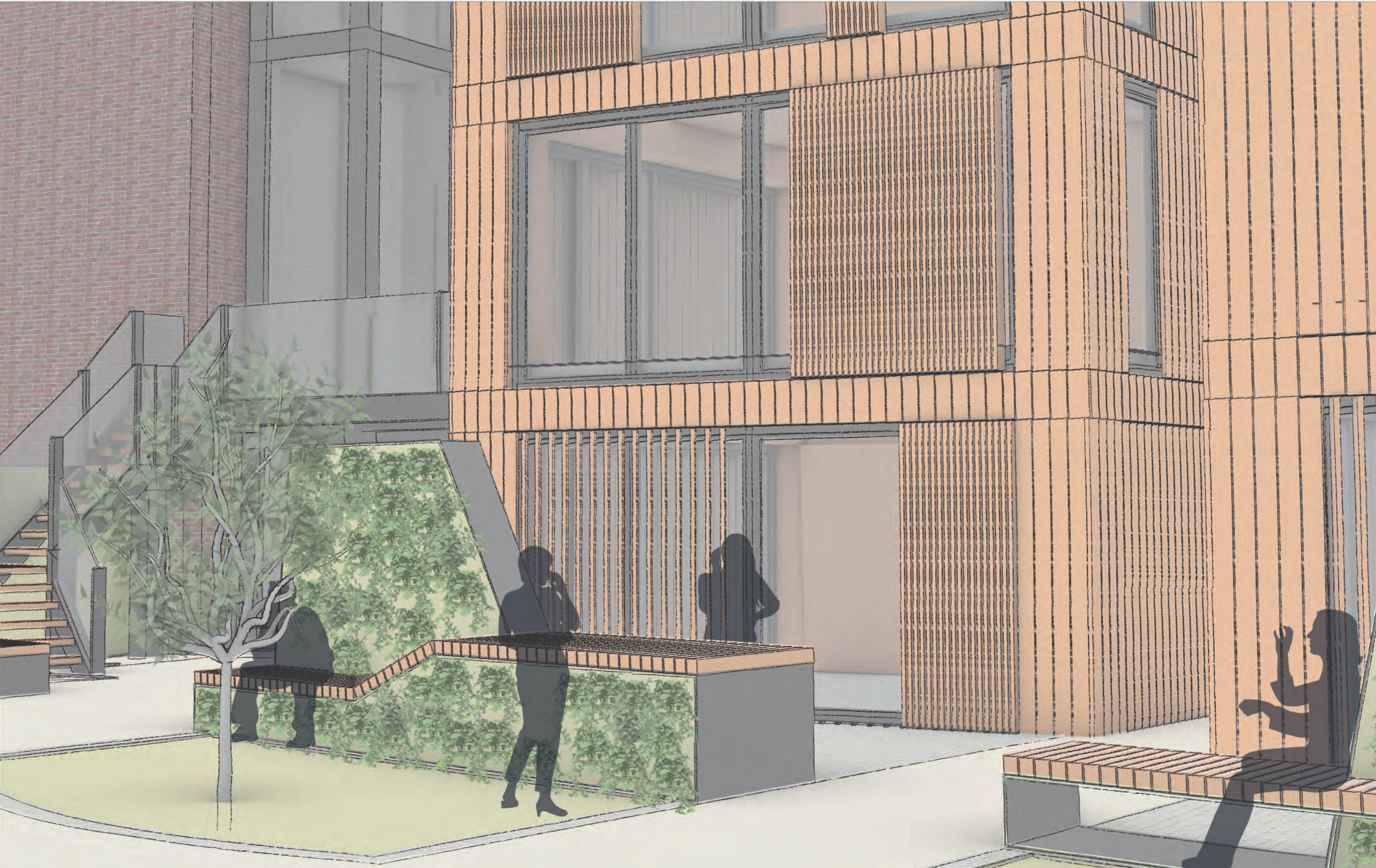
3 The office

3 The office

4 The pocket


CASH & CARRY
0208 885 0041
OFF LICENCE
FOOD CENTRE
20
ZONE
Honeysett Rd


ARRY
AL WHOLESALE
08 885 0041
Ekin
FOOD CENTRE
ZONE
ESKITOO CENTRE



The Telephone Exchange

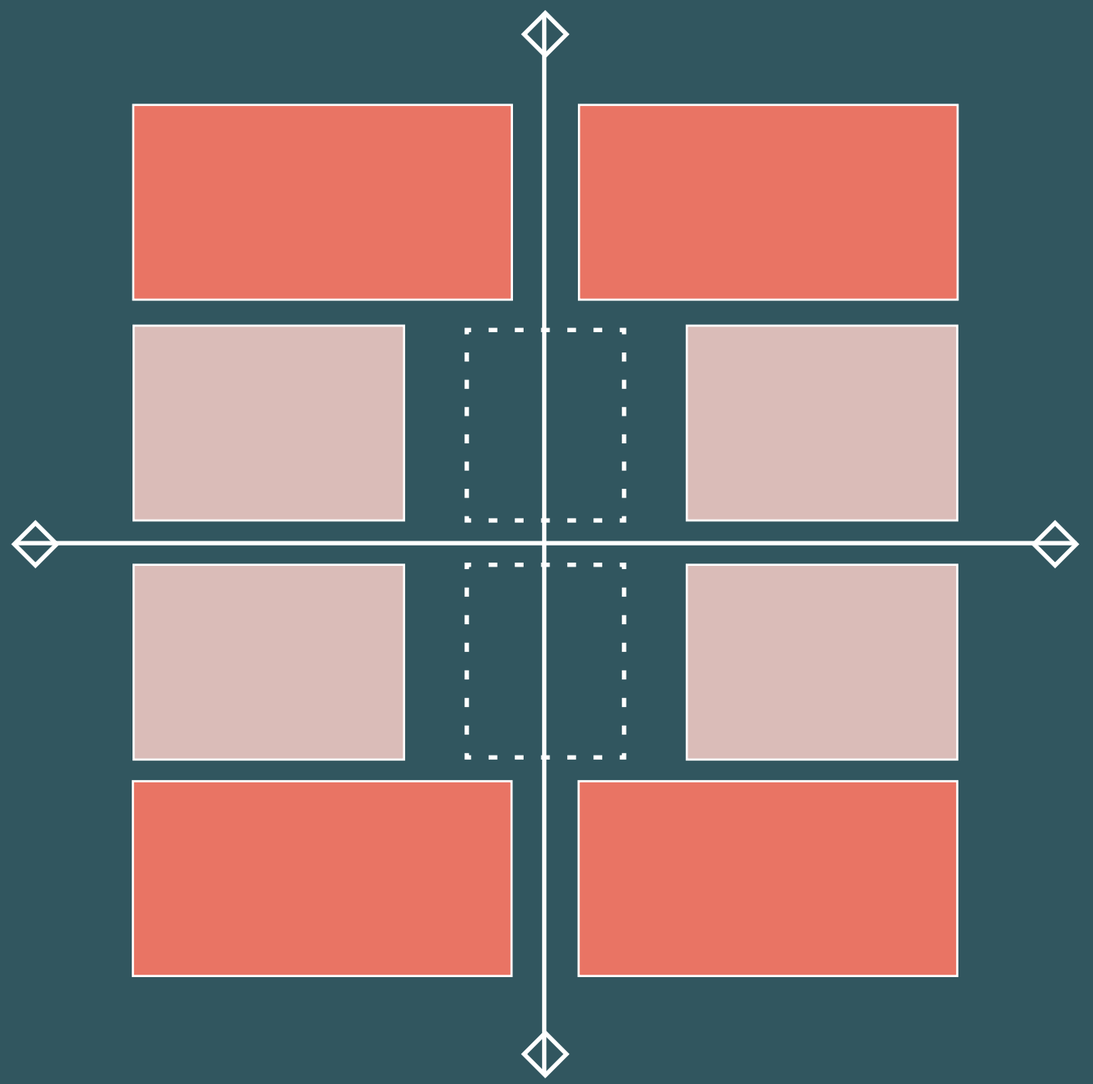
North facade

Telephone Exchange

West facade

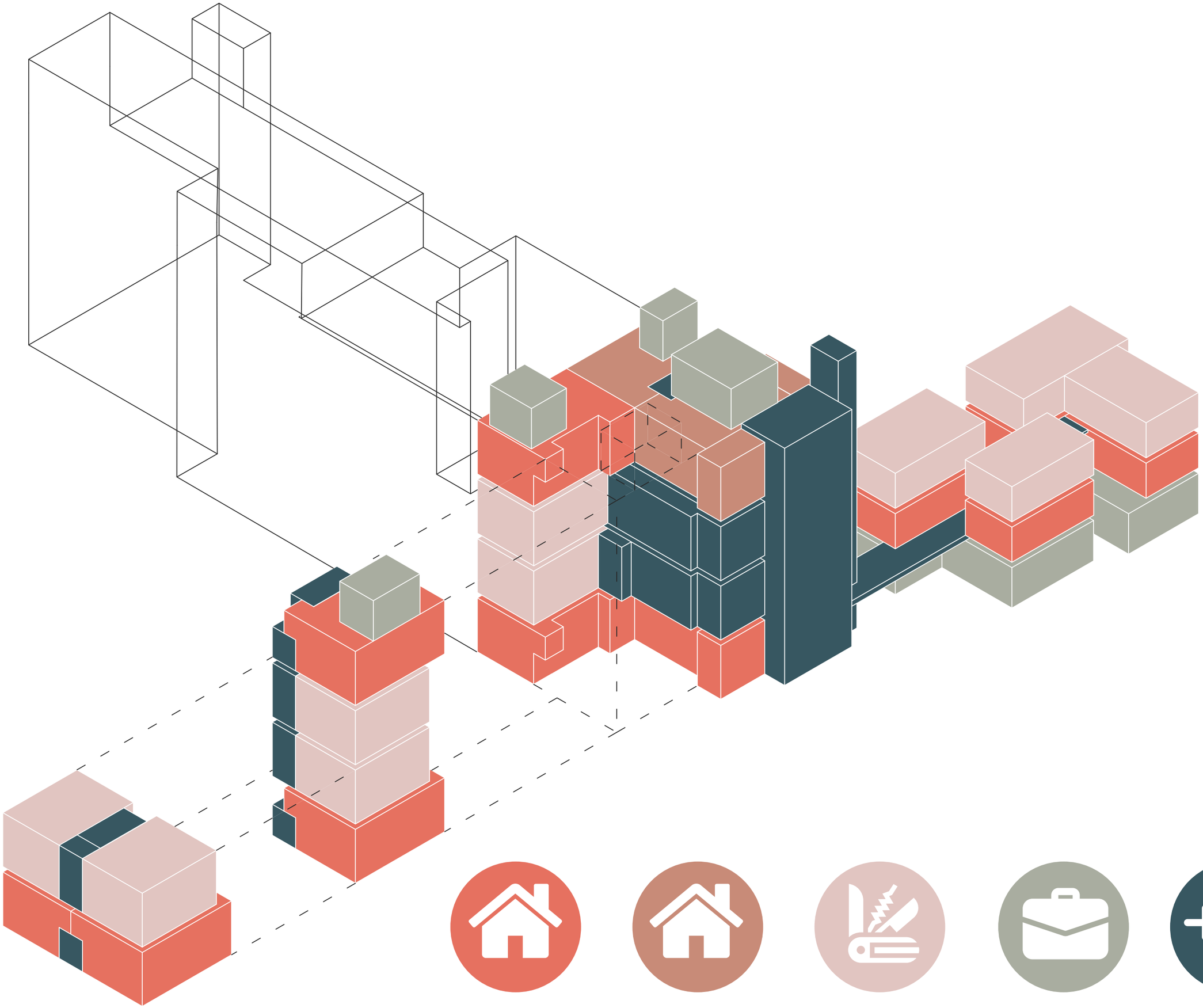
Total

The Incompletable dwelling



Grow

Basic

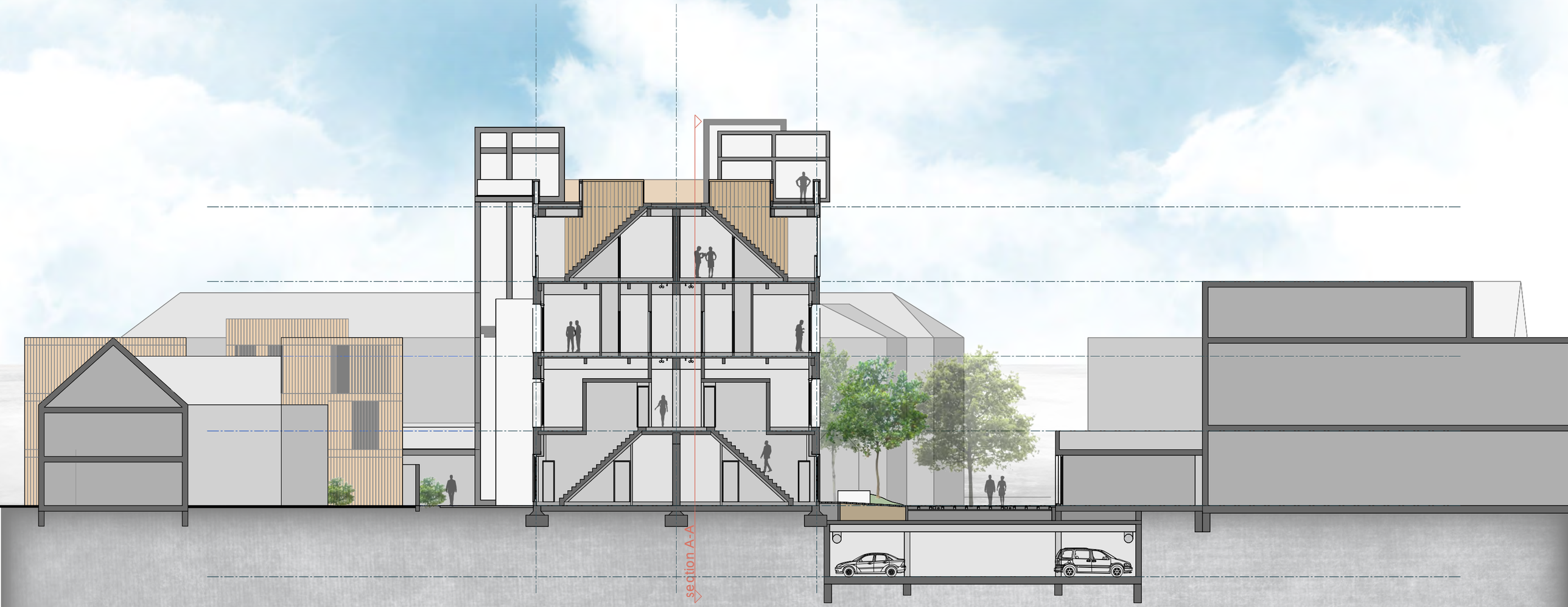


Cross section

1:100

Telephone Exchange

A-A



Ground floor

1:200

Telephone Exchange

Floor drains are placed in the units to allow for a set of configurations. A small wooden wooden bathroom + bed on top, can be placed in the unit. This is suitable for example for a starter or a couple, but for an older inhabitant metal stud walls can create a 2 rooms appartment.

The eight shared stairs connect the street with the corridor on the first floor. They can be joined with a studio on the ground floor and one on the first floor to create a two floor dwelling

References for interior

Source: https://www.dearchitect.nl/projecten/gebouw-anton-op-strijp-s-in-eindhoven

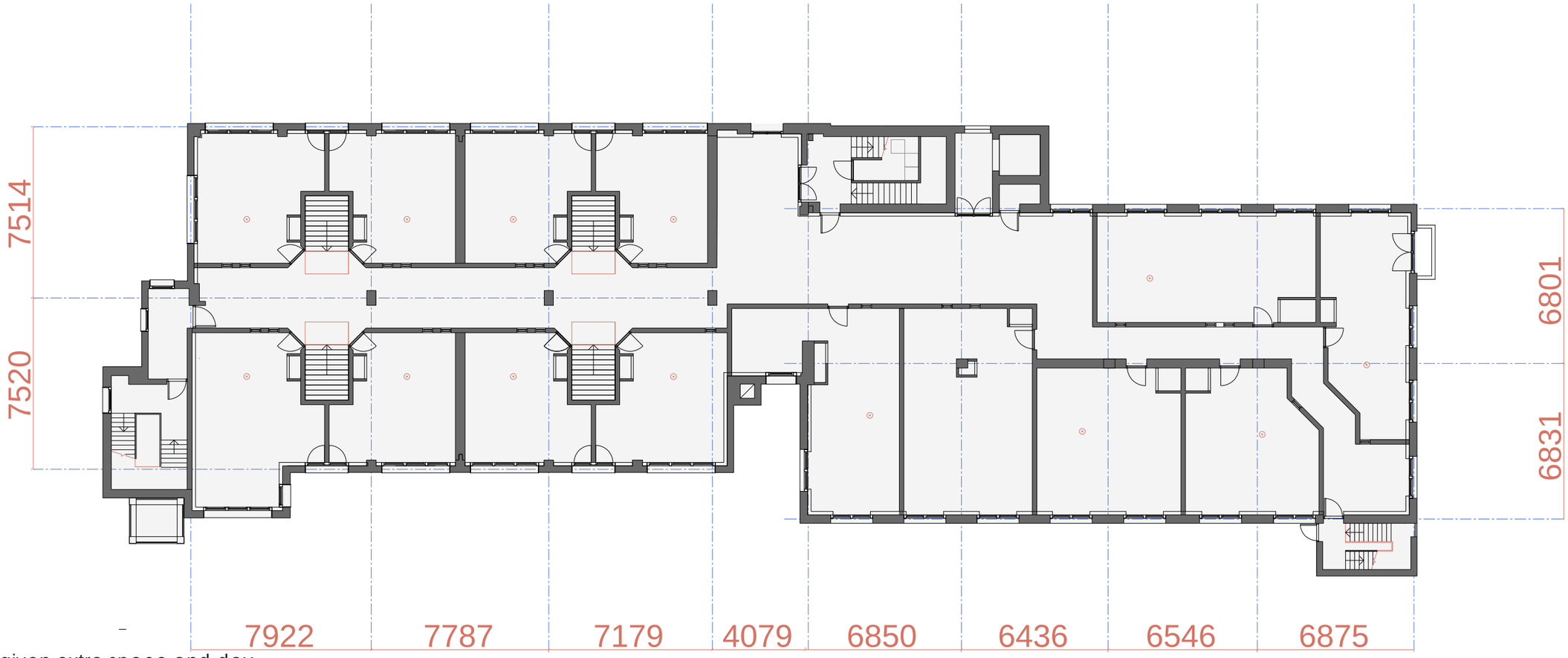
Source: https://www.diederendirrix.nl/website/wp-content/uploads/2016/10/161027_Gebouw-Anton-in-Tektoniek_sfs.pdf

Source: https://www.bygg.nl/loft-at-strijp-s/

First floor

1:200

Telephone Exchange



The corridor is given extra space and daylight to provide communal spaces. This space is well desired for the smaller individual studios. There is room for work places, living rooms and even a communal kitchen.

The studios on this floor can function indivually because of the access through the corridor. However, they can also easily be attached to units on the ground floor to create family (bigger) housing units

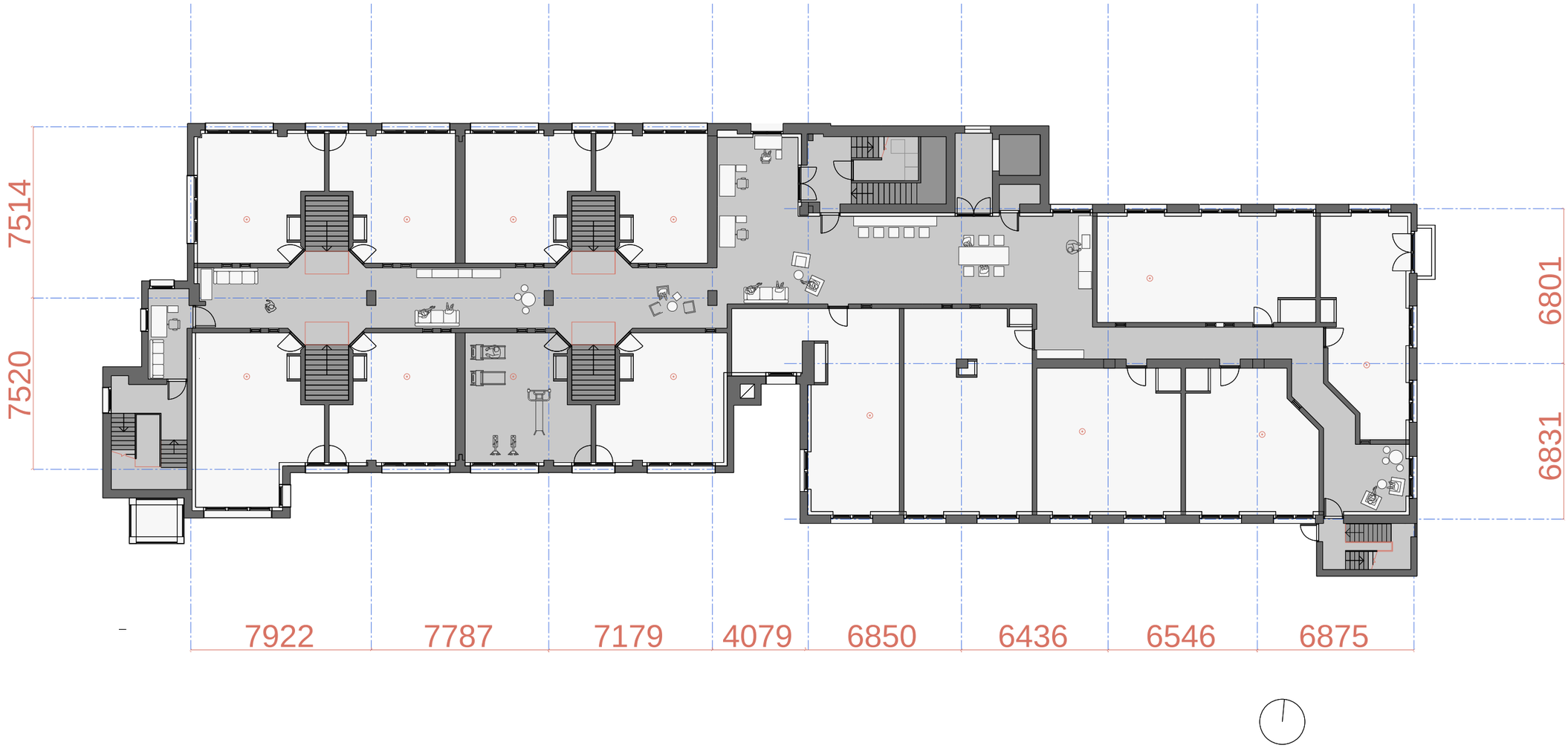
Studios could even be rented collectively and added to the communal space to create functions like: Gym, living room, kitchen and many more.

First floor

1:200

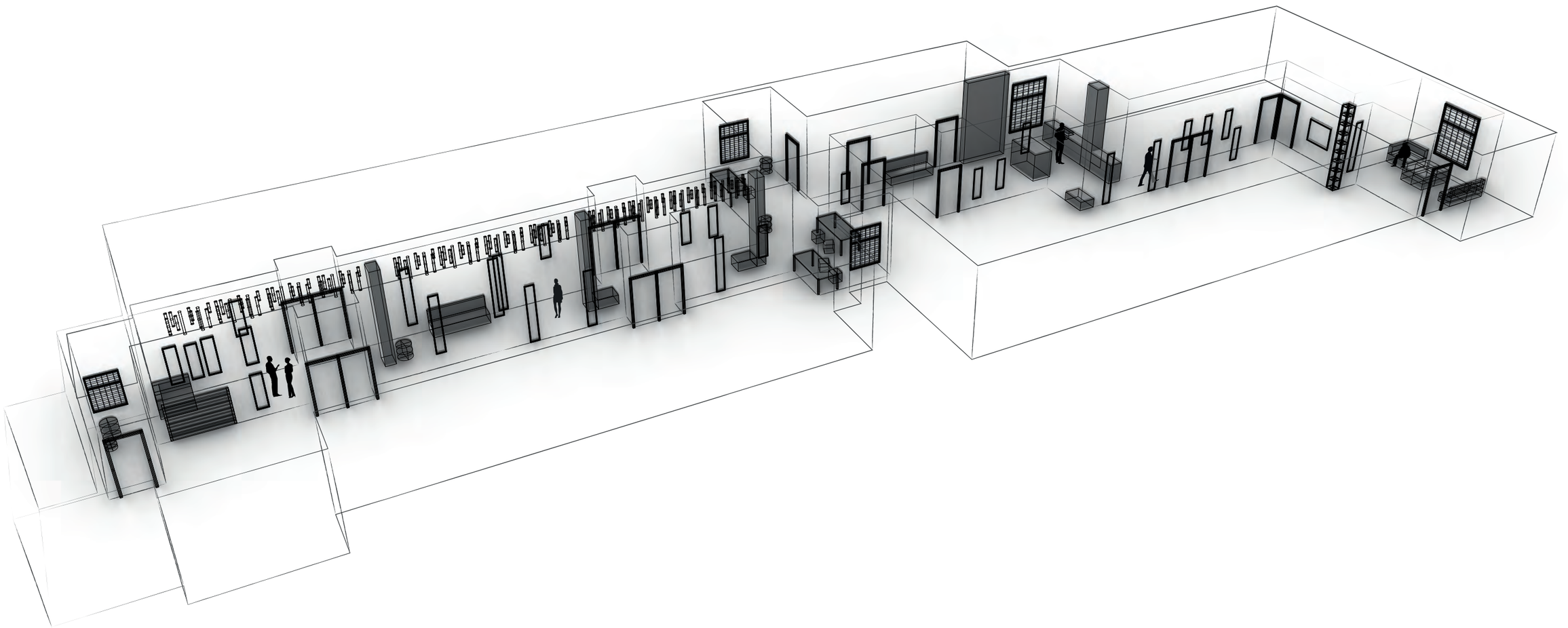
Telephone Exchange

Collective space



Transform boundary into border

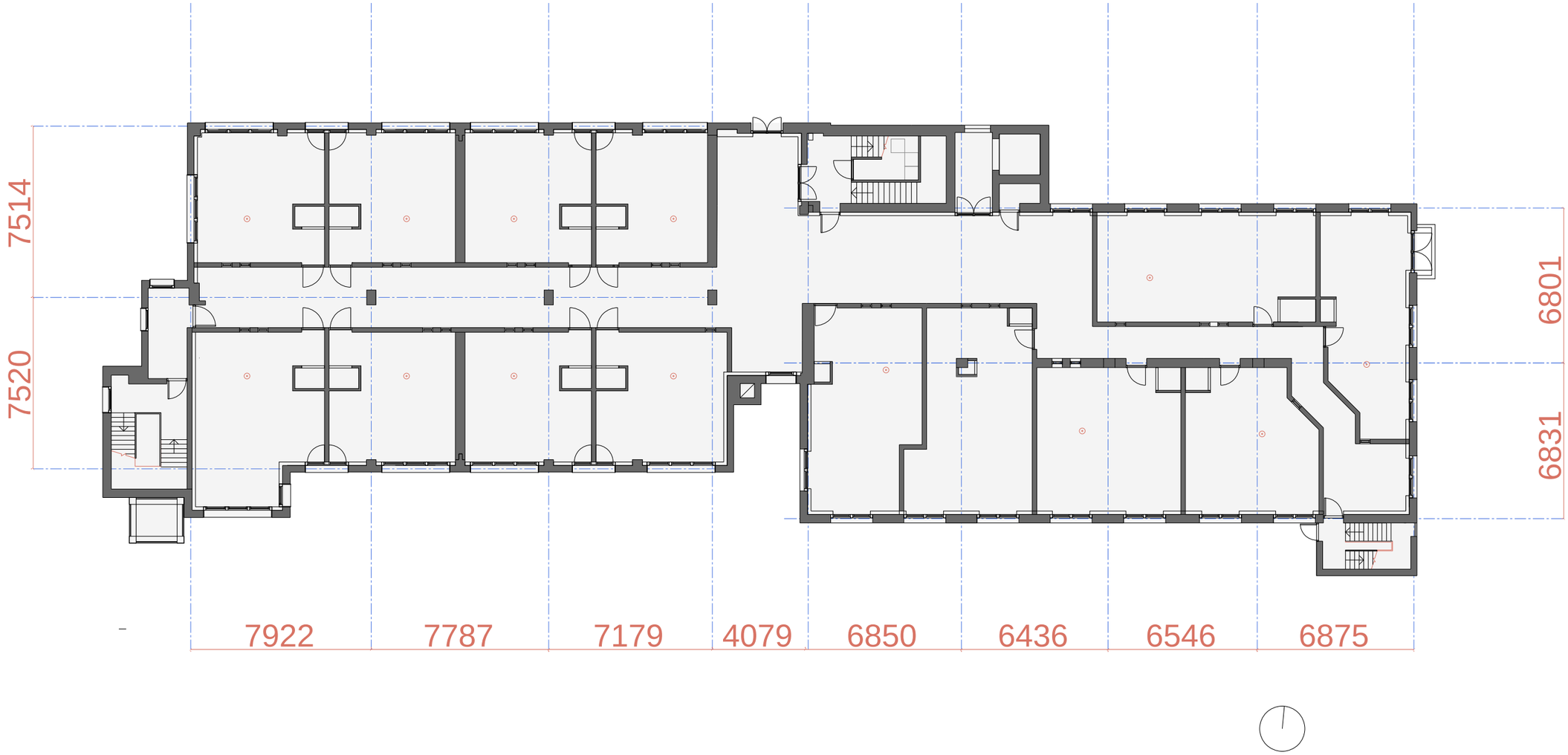
Corridors don’t exist



Second floor

1:200

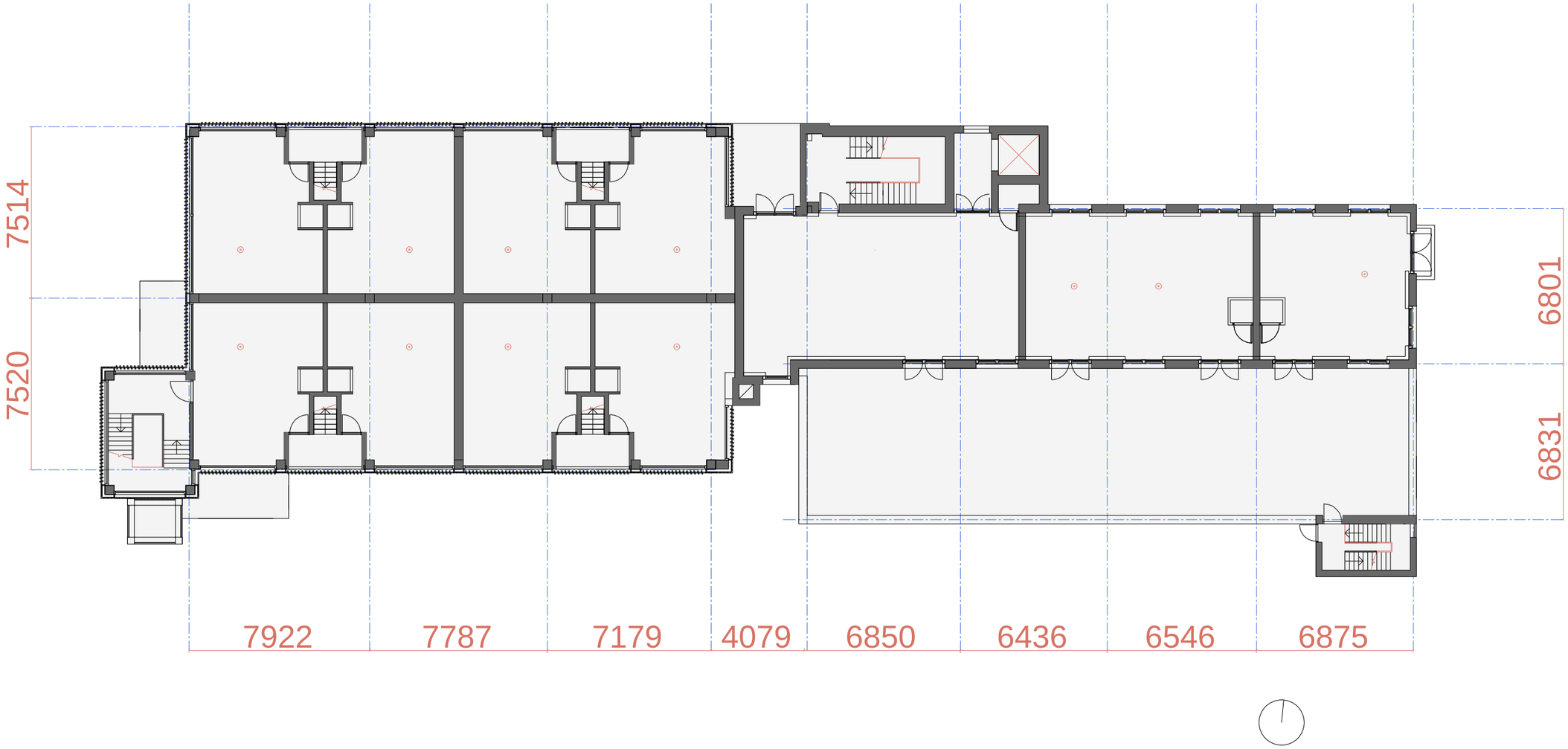
Telephone Exchange



Third floor

1:200

Telephone Exchange

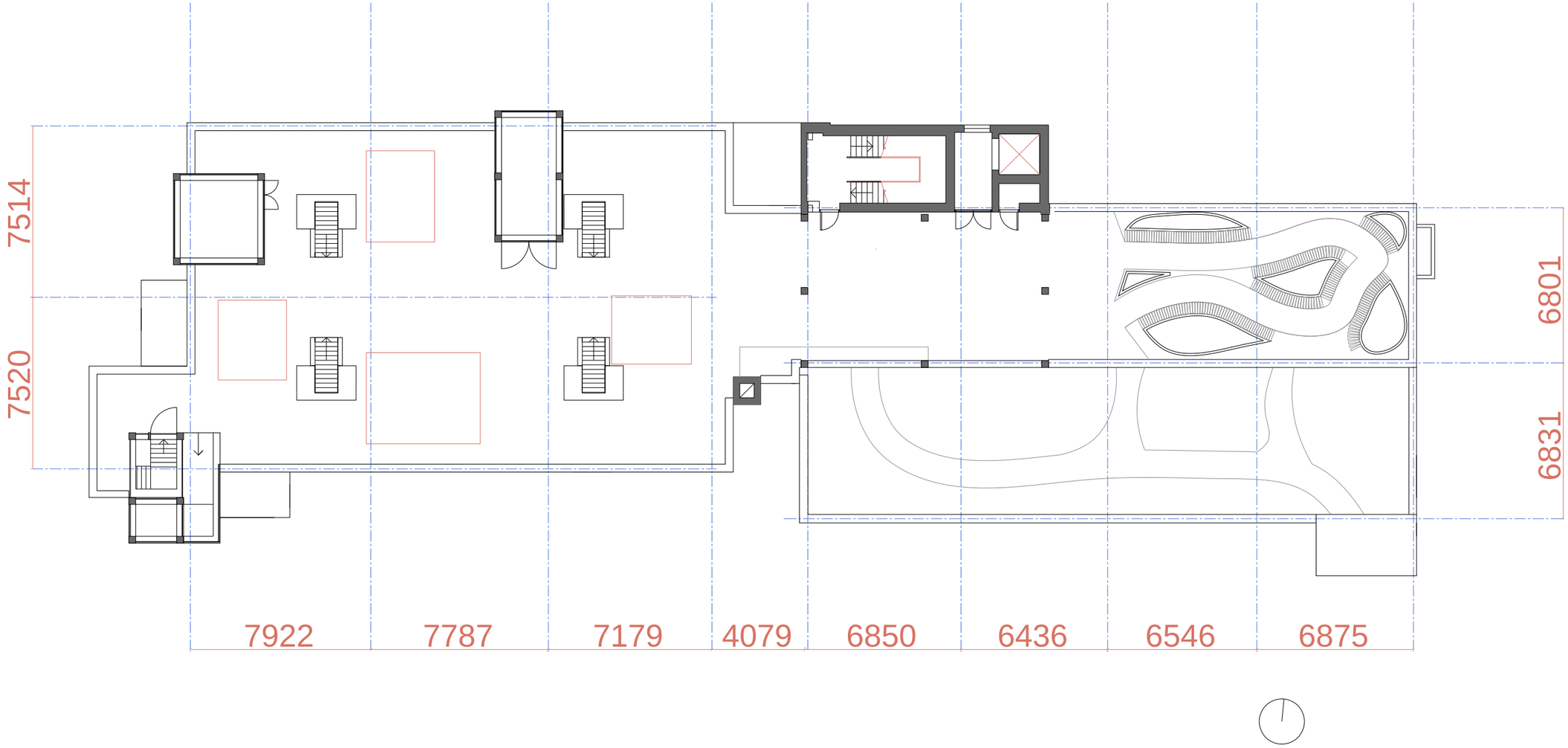


The third floor is accessed via the roof, it is the only floor that is not wheelchair friendly. The smaller units can be merged with units on the second floor to create (family) bigger dwelling units.

Roof

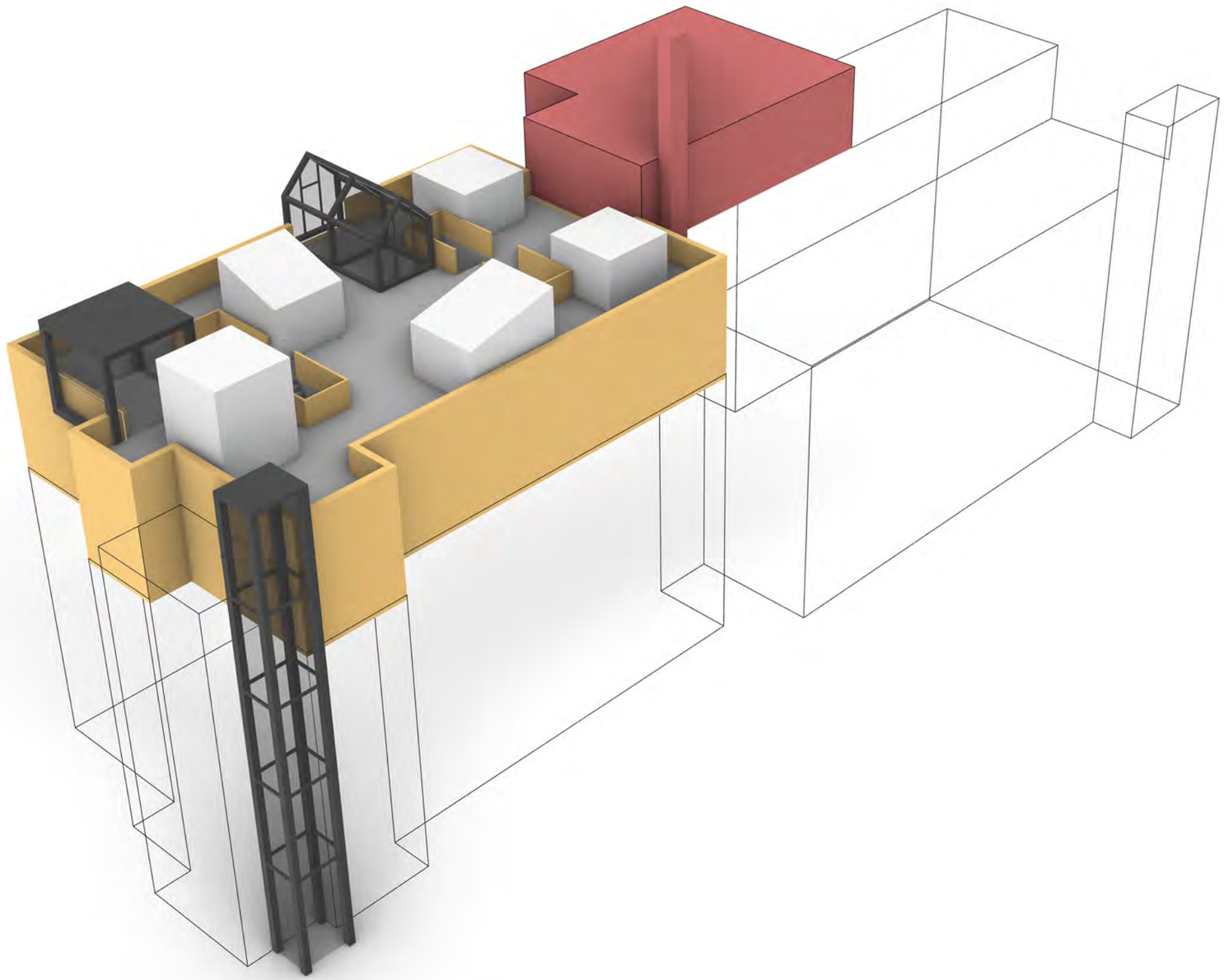
1:200

Telephone Exchange

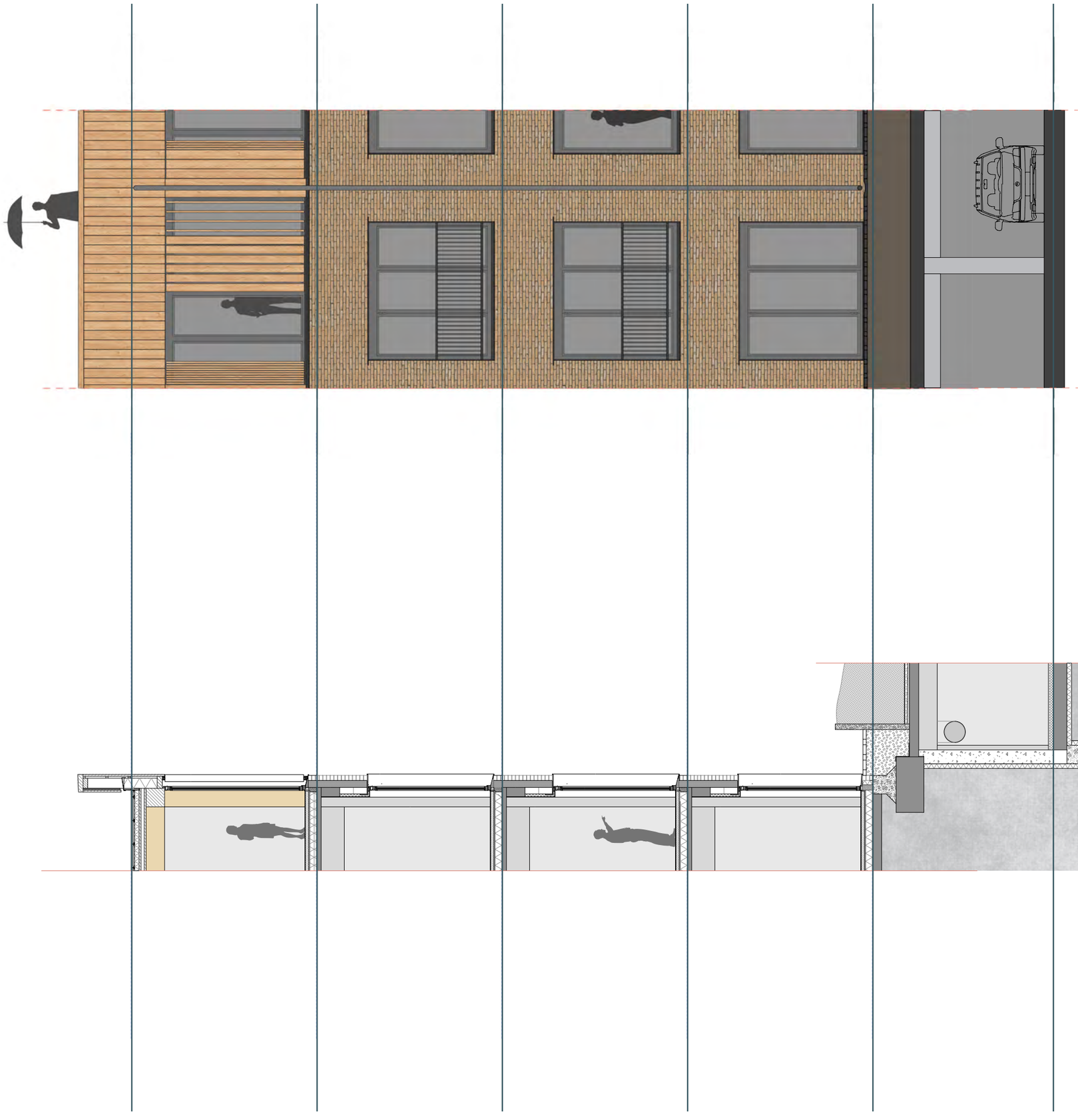


The roof is a collective space, finishing the 3D collective landscape in of the building. two metal structures are initially built to house functions; a work unit and a greenhouse. There is room for at least 6 small lightweight structures to be designed by the users themselves, creating a small city on the roof. They could be art studios, offices, green houses or even host public functions in a future where the roof is public space.
The west side of the building host a small garden. the west and east side are sperated by a porch.

Incompletable roof



Facade details

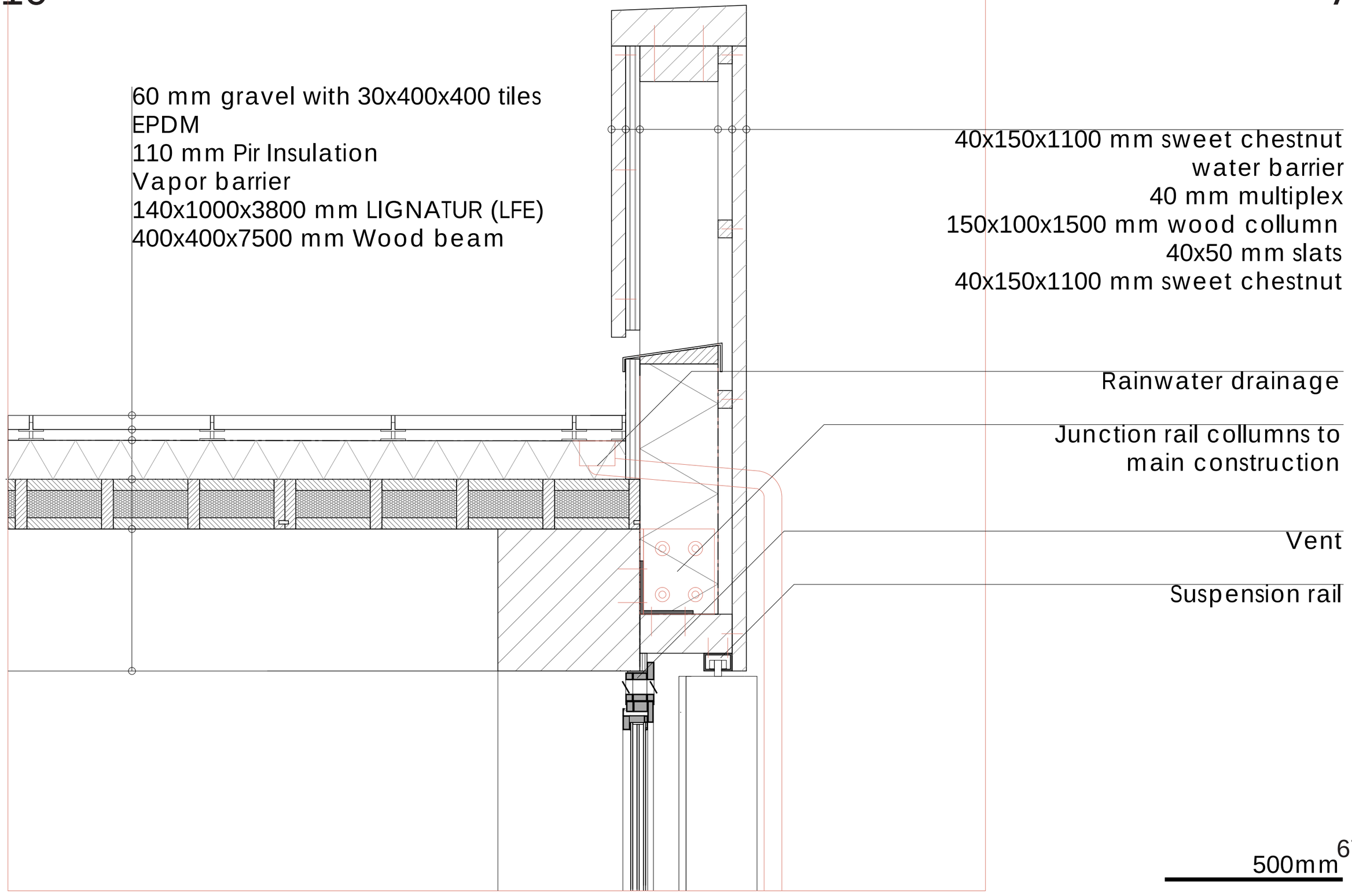


Point Detail

1:10

Telephone Exchange

A



500mm

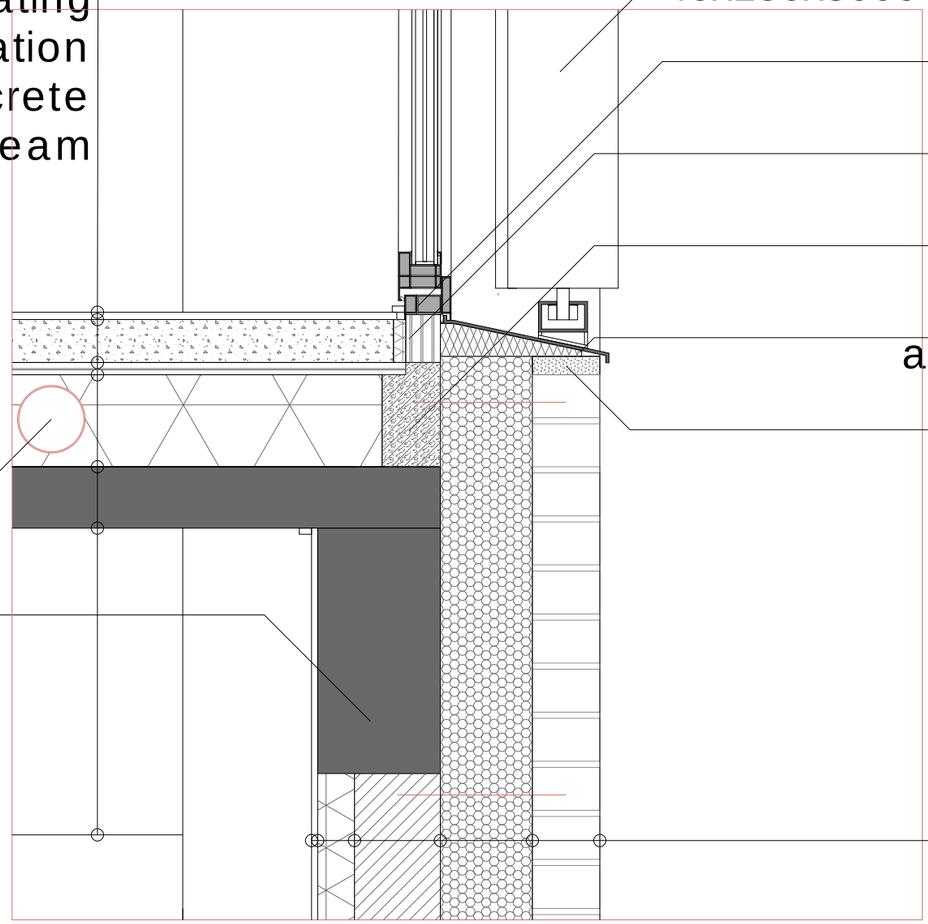
Point Detail

1:10

Telephone Exchange

B

12 mm finish (done by resident)
70mm anhydrite floor
2x8mm acoustic plating
150mm PIR insulation
100mm existing reinforced concrete
500x300x7500 reinforce concrete beam



40x150x3000 Wood panel with steel bar
aluminium frame
Sill
aerated concrete
aluminium Sill and panel rail
Smeared

110mm Ø Sewer

400x200x3500 reinforced cocrete beam

10mm gypsum plating
60mm calcium silicate
140mm *(existing)* gypsum block
150mm EPS pearl filling
110mm *(existing)* brick

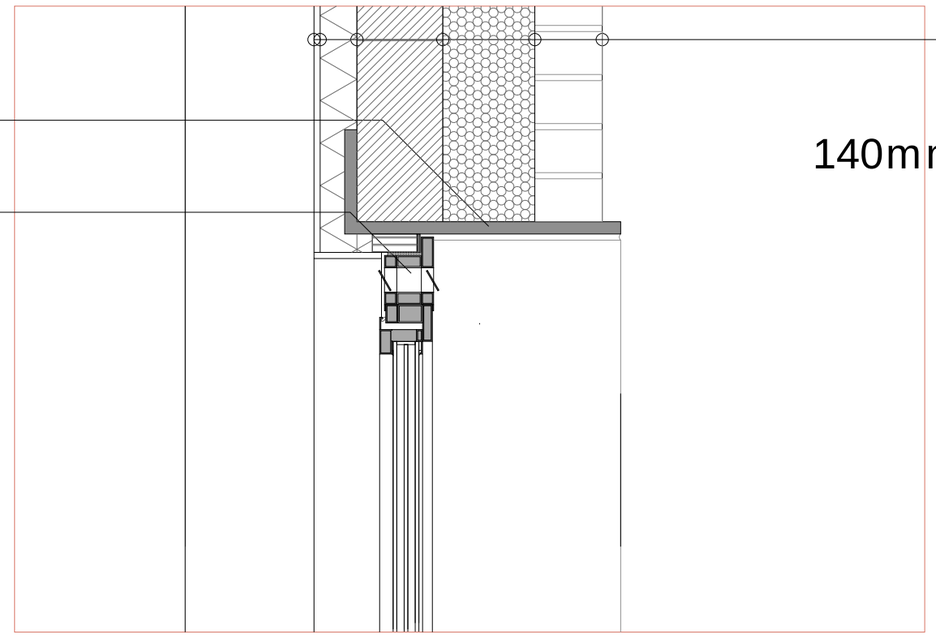
500mm

Point Detail

1:10

Telephone Exchange

C



3000mm steel lintel

Vent for air intake

10mm gypsum plating
60mm calcium silicate
140mm *(existing)* gypsum block
150mm EPS pearl filling
110mm *(existing)* brick

500mm

Point Detail

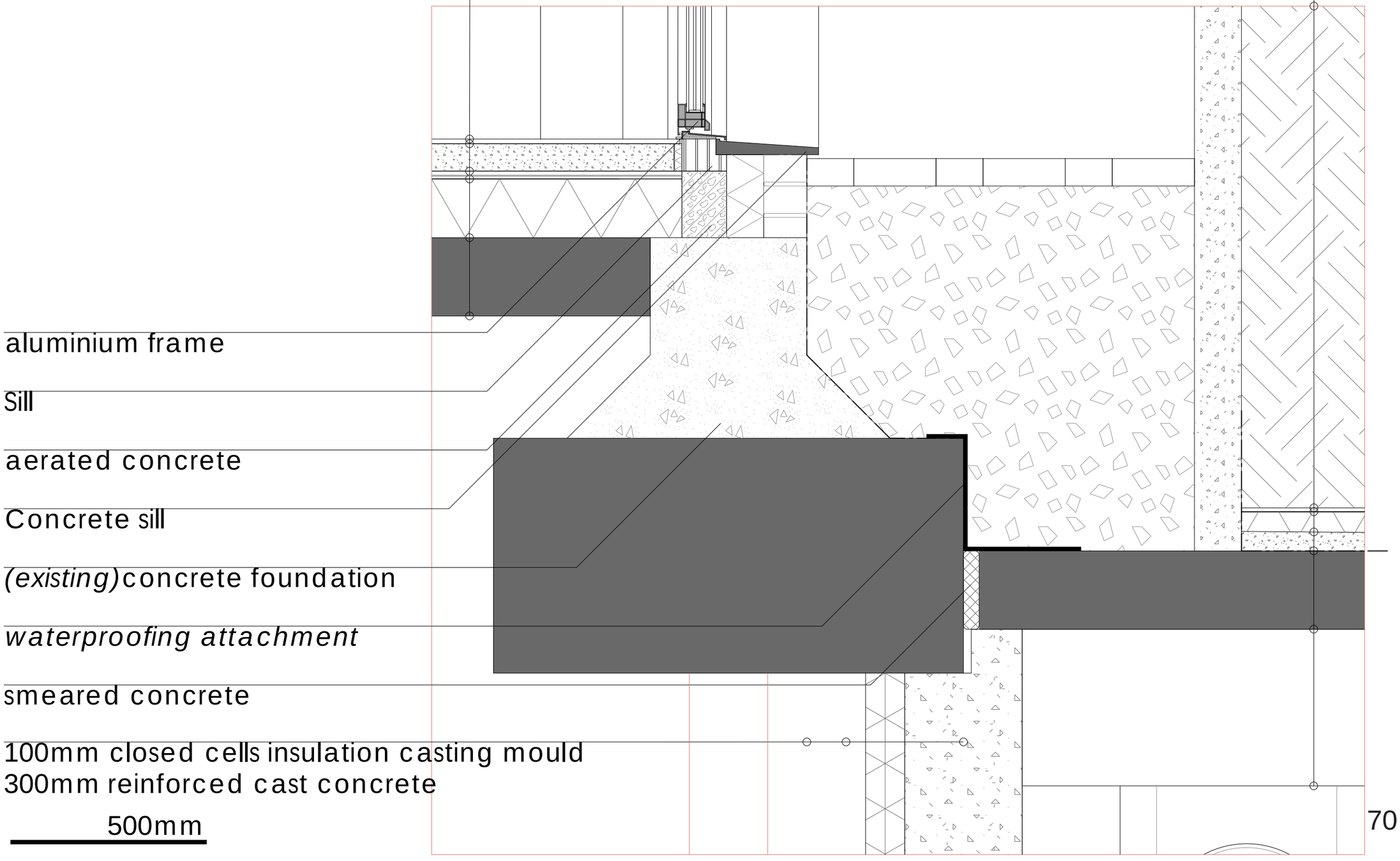
1:10

Telephone Exchange

D

12 mm finish (done by resident)
70mm anhydrite floor
2x8mm acoustic plating
150mm PIR insulation
200mm (*existing*) reinforced concrete

900-1600 mm soil
filter fabric
50 mm drainage layer
50 mm protection layer
water barrier
200 mm precast reinforced concrete floor
500x400x6000 reinforced concrete beams



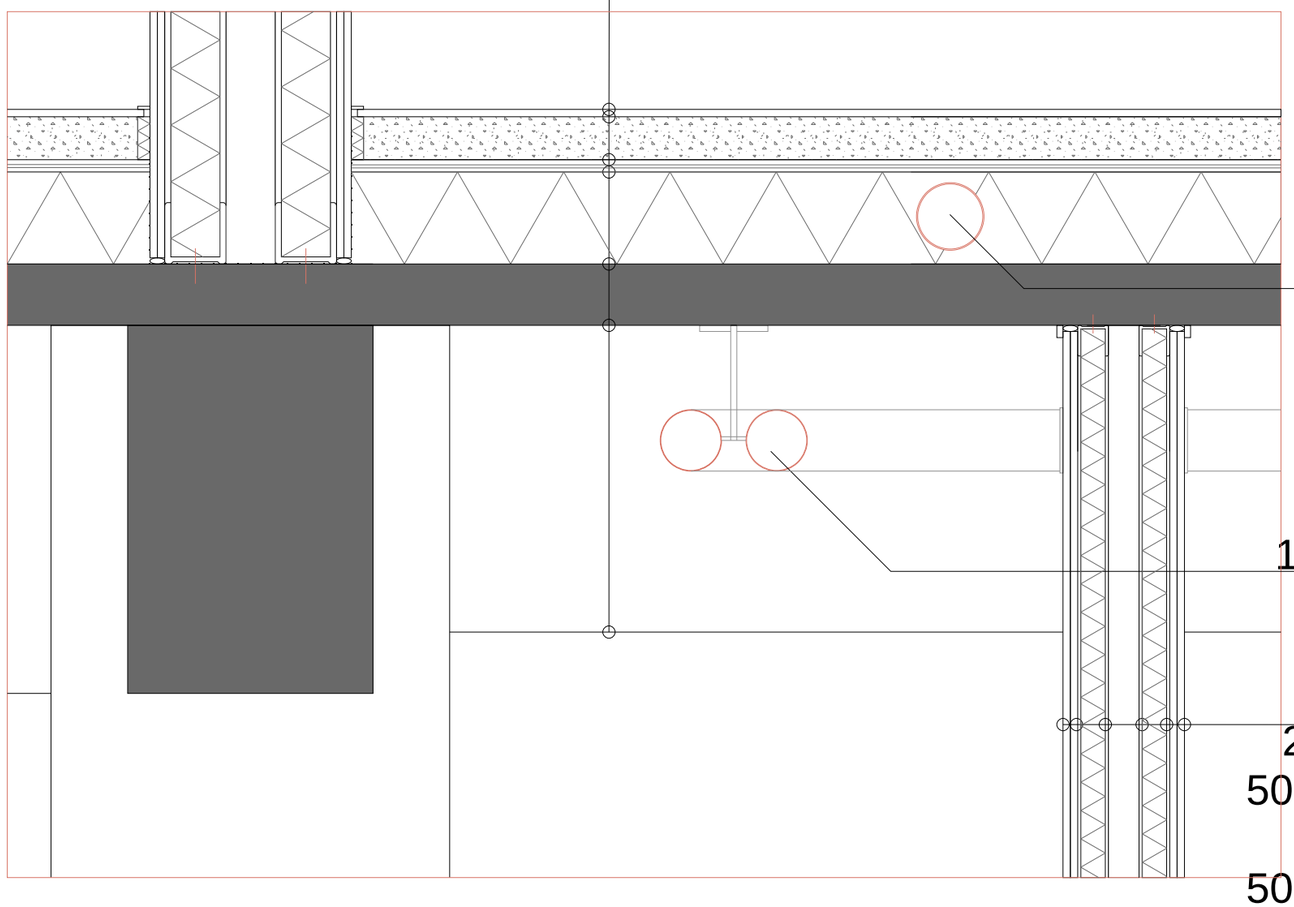
Point Detail

1:10

Telephone Exchange

Inside

12 mm finish (done by resident)
70mm anhydrite floor
2x8mm acoustic plating
150mm PIR insulation
100mm existing reinforced concrete
500x300x7500 reinforce concrete beam



110mm Ø Sewer

100mm Ø ventilation pipe

2x12mm Gypsium plating
50mm insulated metal stud
50mm air cavity
50mm insulated metal stud
2x12mm gypsium plating

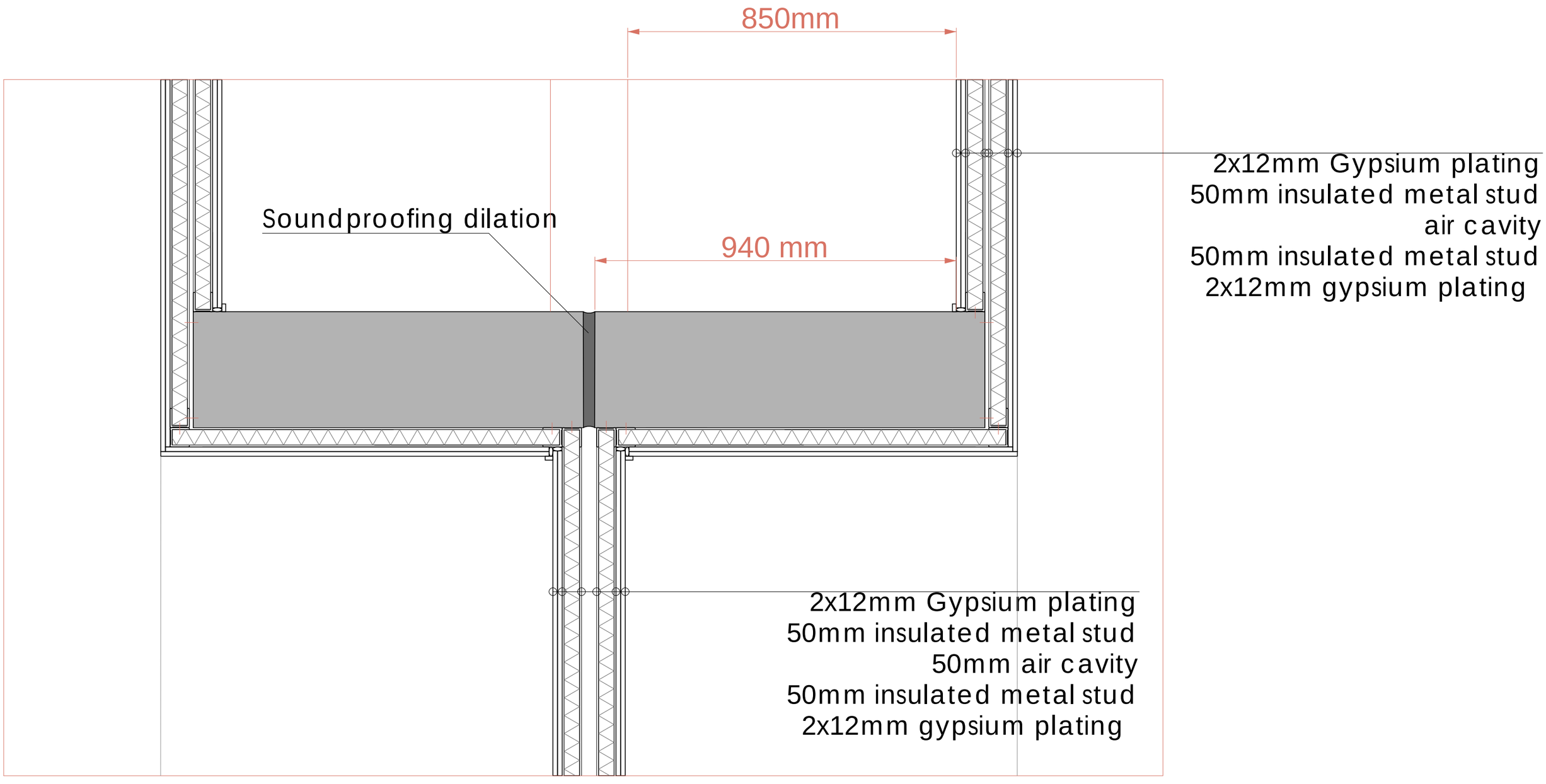
500mm

Point Detail

1:10

Telephone Exchange

Split stairs



500mm

Appearance of facade

1:40

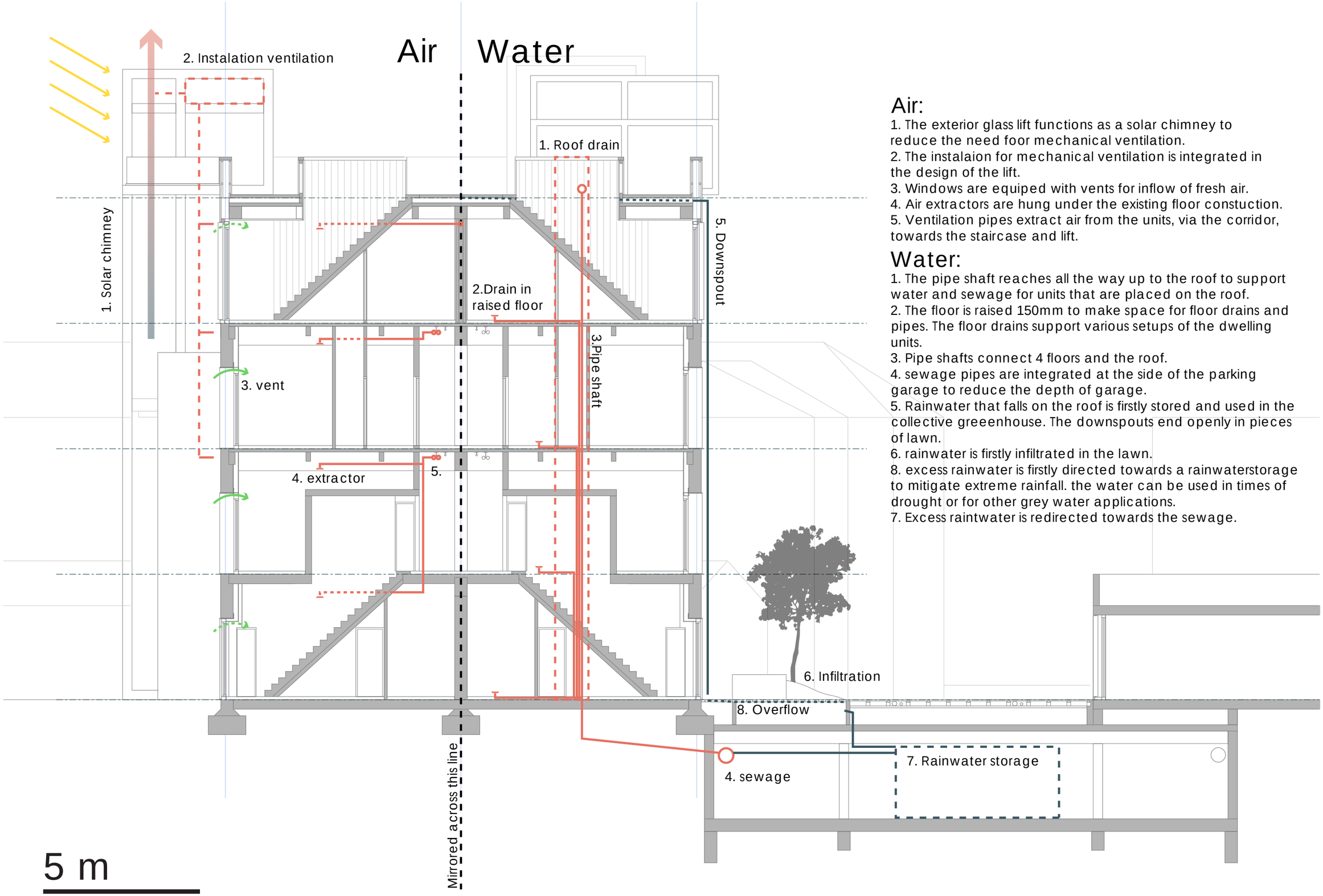
Sweet chestnut cladding(Air dried)
Golden brown (gains silver-grey gloss over time)

Existing brick,
brown-beige

Aluminium framework and additions
frosted dark-grey

5 m

Air and water



Air:

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4. Air extractors are hung under the existing floor constuction.
5. Ventilation pipes extract air from the units, via the corridor, towards the staircase and lift.

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1. The pipe shaft reaches all the way up to the roof to support water and sewage for units that are placed on the roof.
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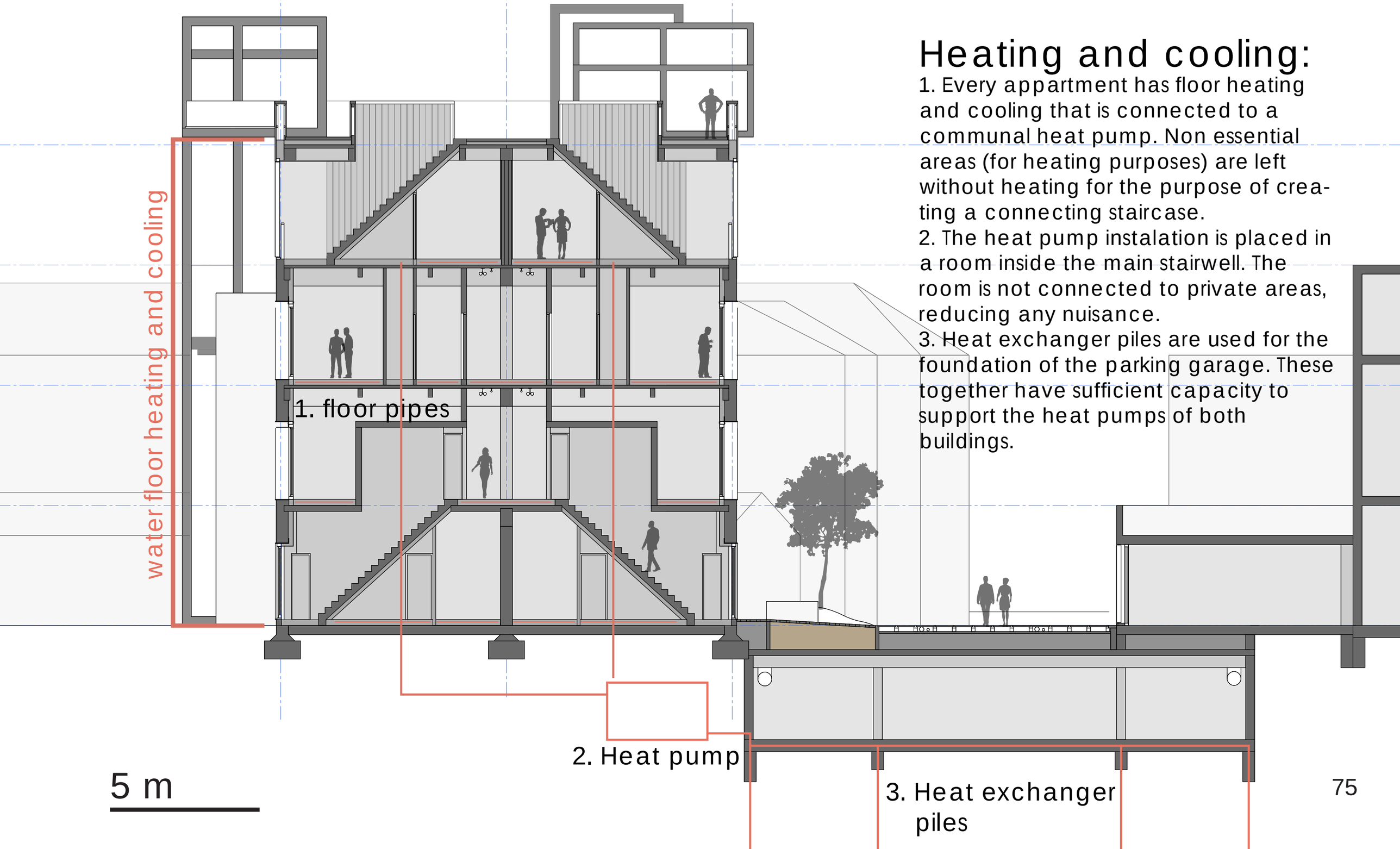
Heating and cooling



Heating and cooling:

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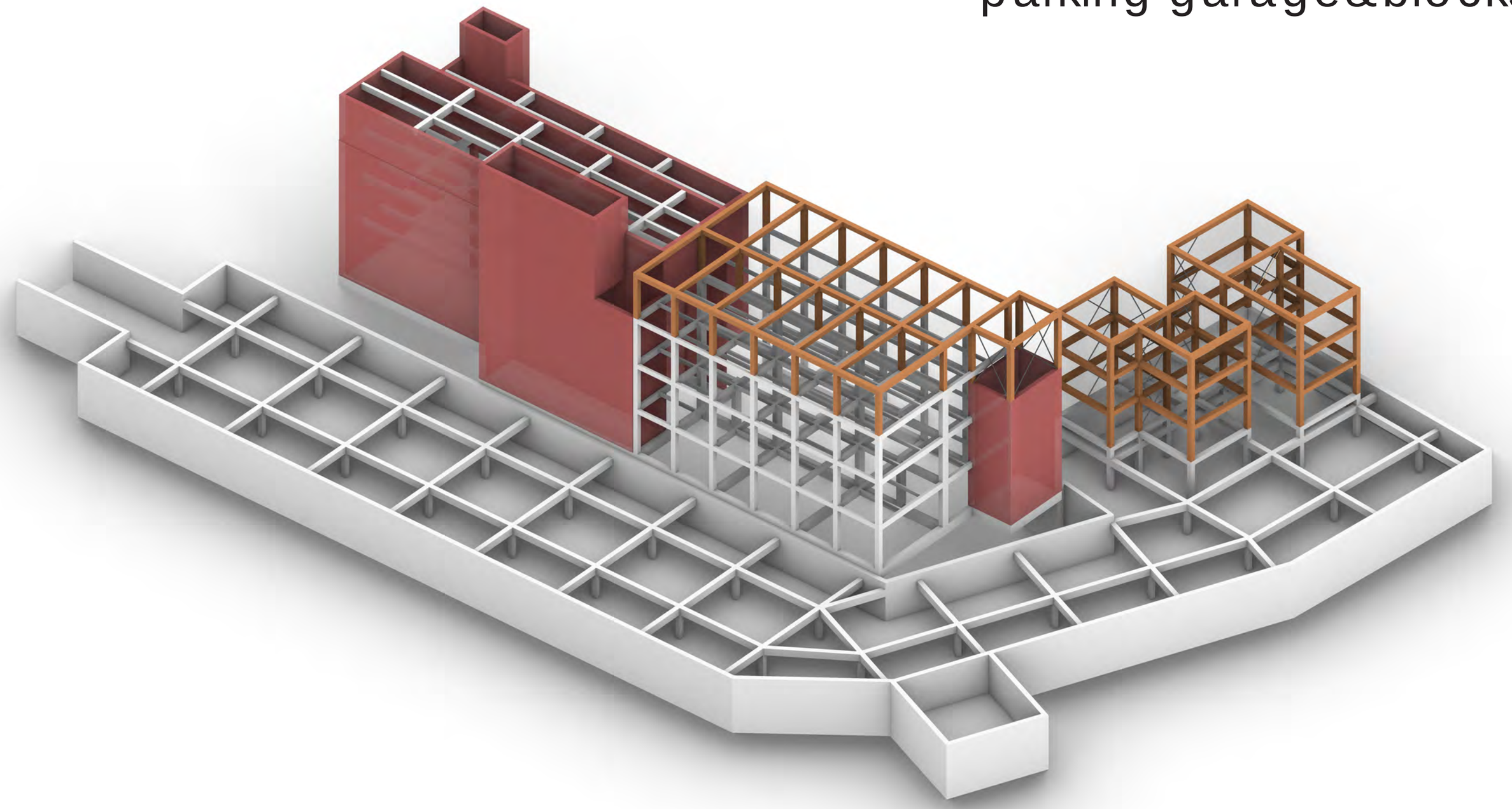
Overall structure

Telephone Exchange
parking garage&blocks




ARRY
NAL WHOLESALE
208 885 0041
FOOD CENTRE
ZONE
LICENCE

Plans

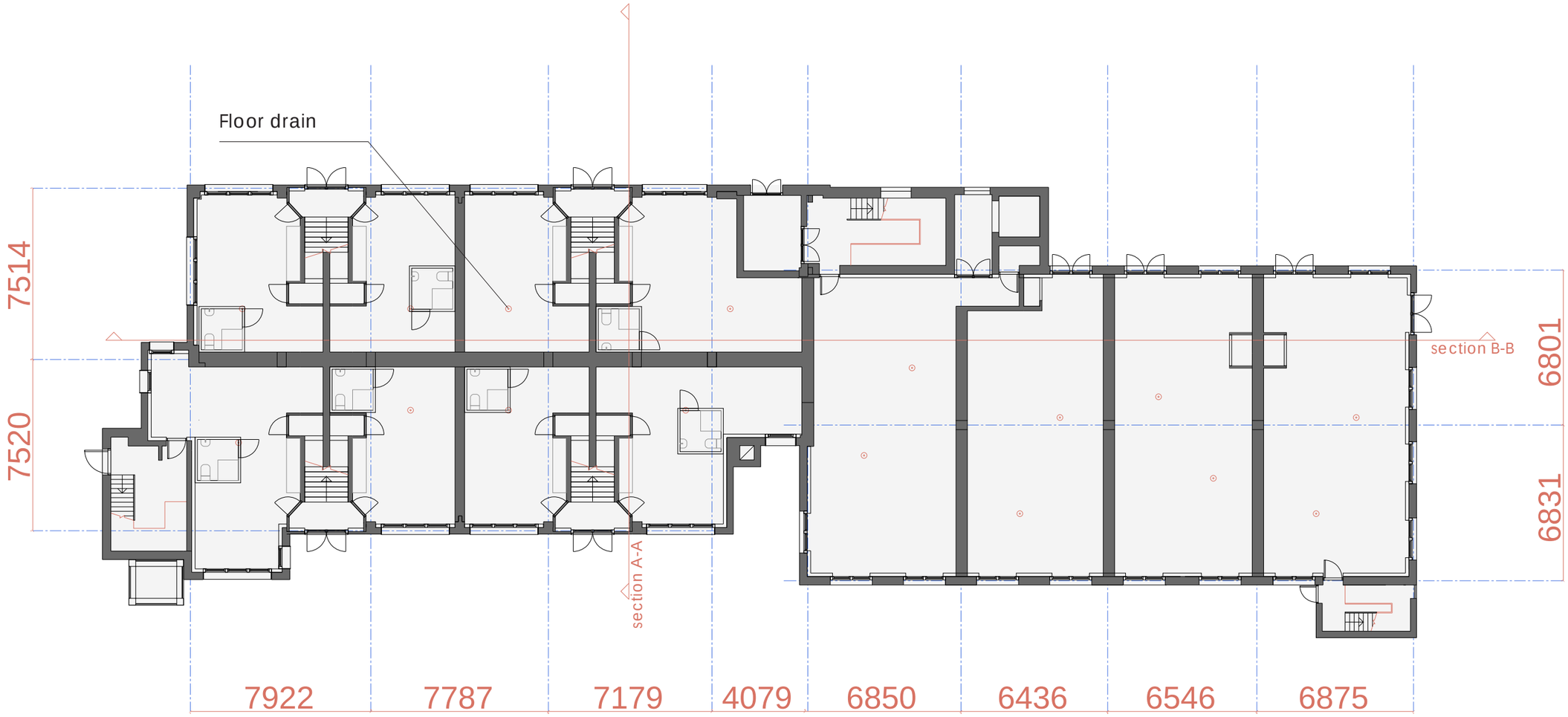
Plan
1:500

Telephone Exchange

Ground floor

1:200

Telephone Exchange



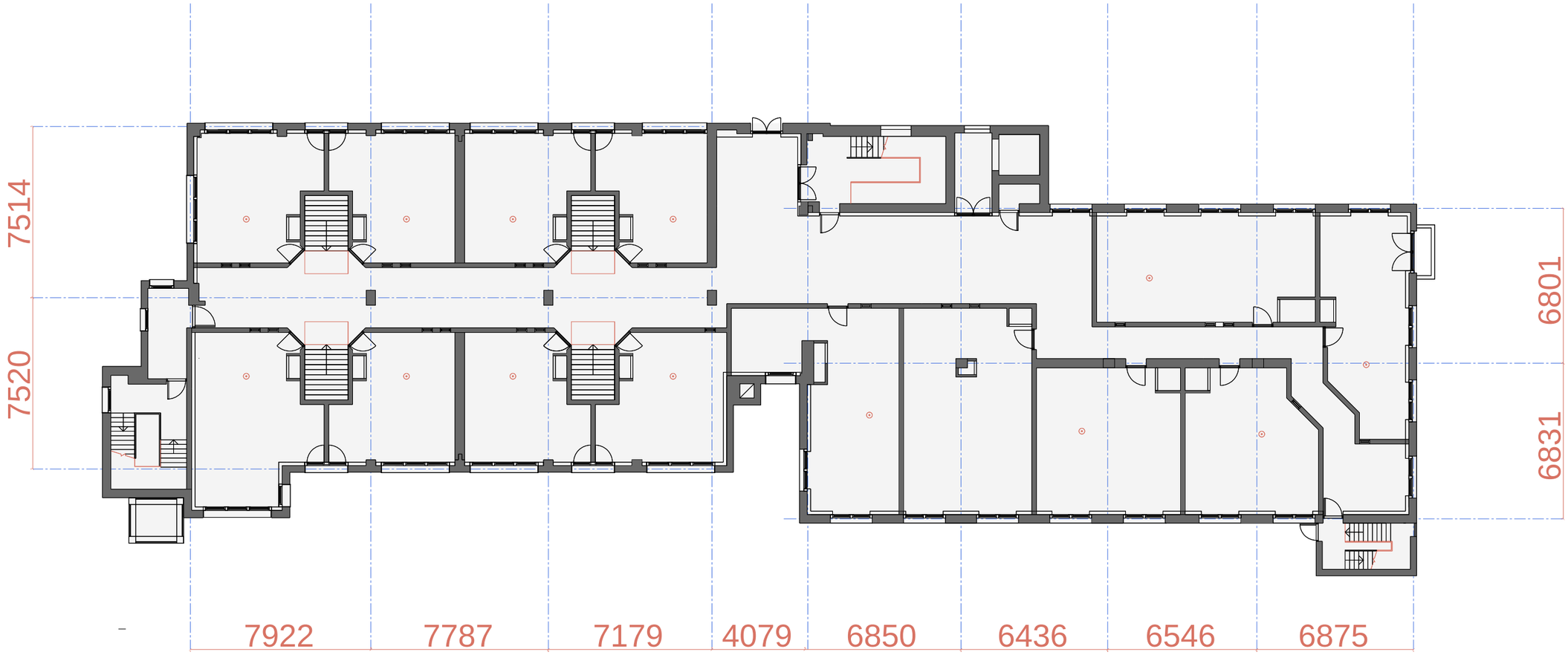
Floor drains are placed in the units to allow for a set of configurations. A small wooden wooden bathroom + bed on top, can be placed in the unit. This is suitable for example for a starter or a couple, but for an older inhabitant metal stud walls can create a 2 rooms appartment.

The eight shared stairs connect the street with the corridor on the first floor. They can be joined with a studio on the ground floor and one on the first floor to create a two floor dwelling

First floor

1:200

Telephone Exchange



The corridor is given extra space and daylight to provide communal spaces. This space is well desired for the smaller individual studios. There is room for work places, living rooms and even a communal kitchen.

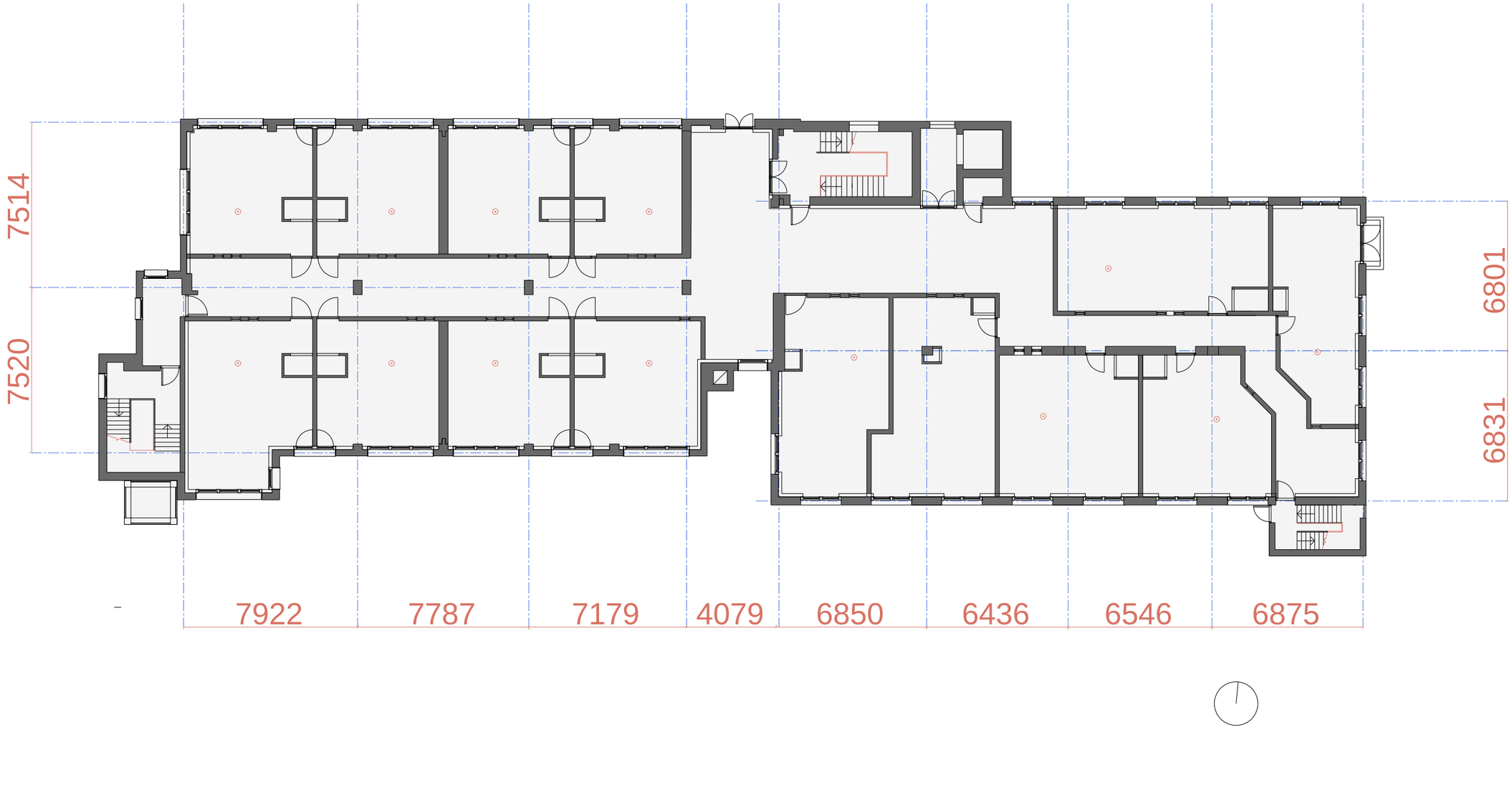
The studios on this floor can function indivually because of the access through the corridor. However, they can also easily be attached to units on the ground floor to create family (bigger) housing units

Studios could even be rented collectively and added to the communal space to create functions like: Gym, living room, kitchen and many more.

Second floor

1:200

Telephone Exchange

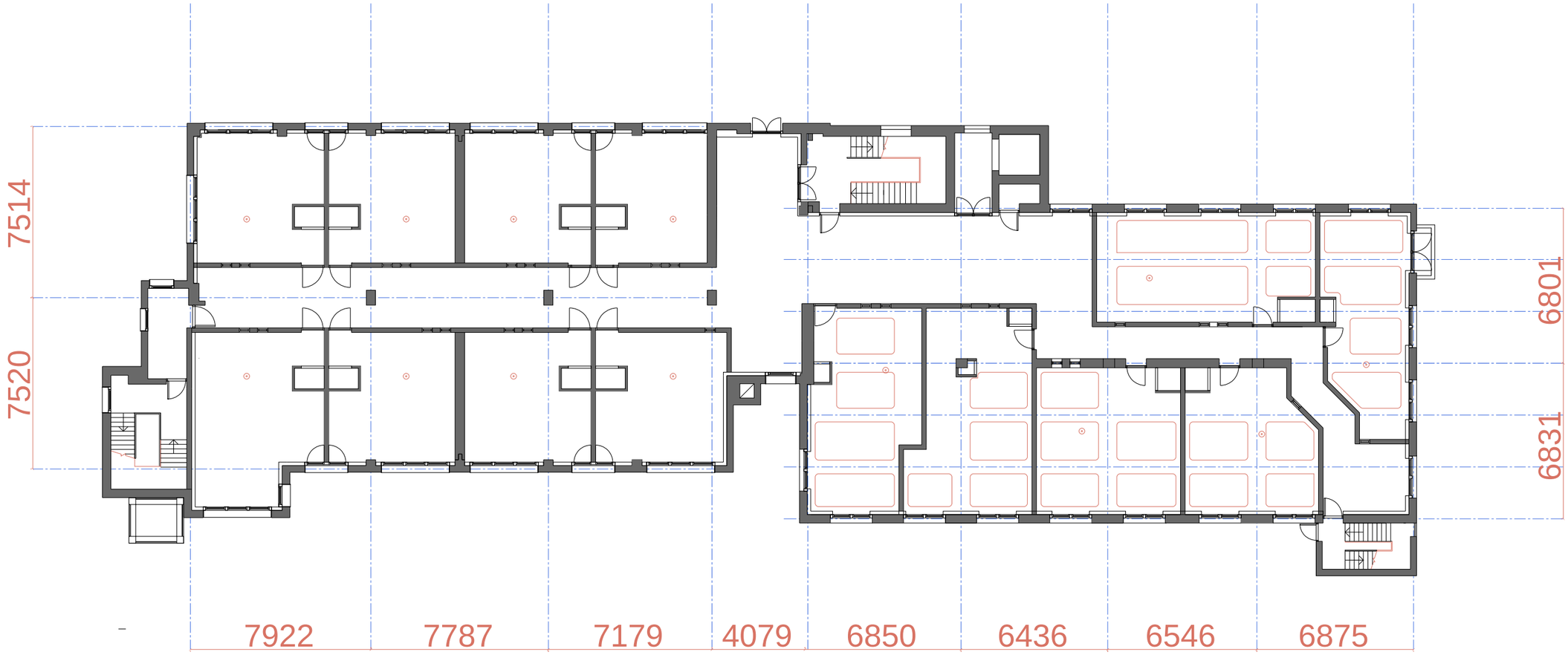


Second floor

1:200

Telephone Exchange

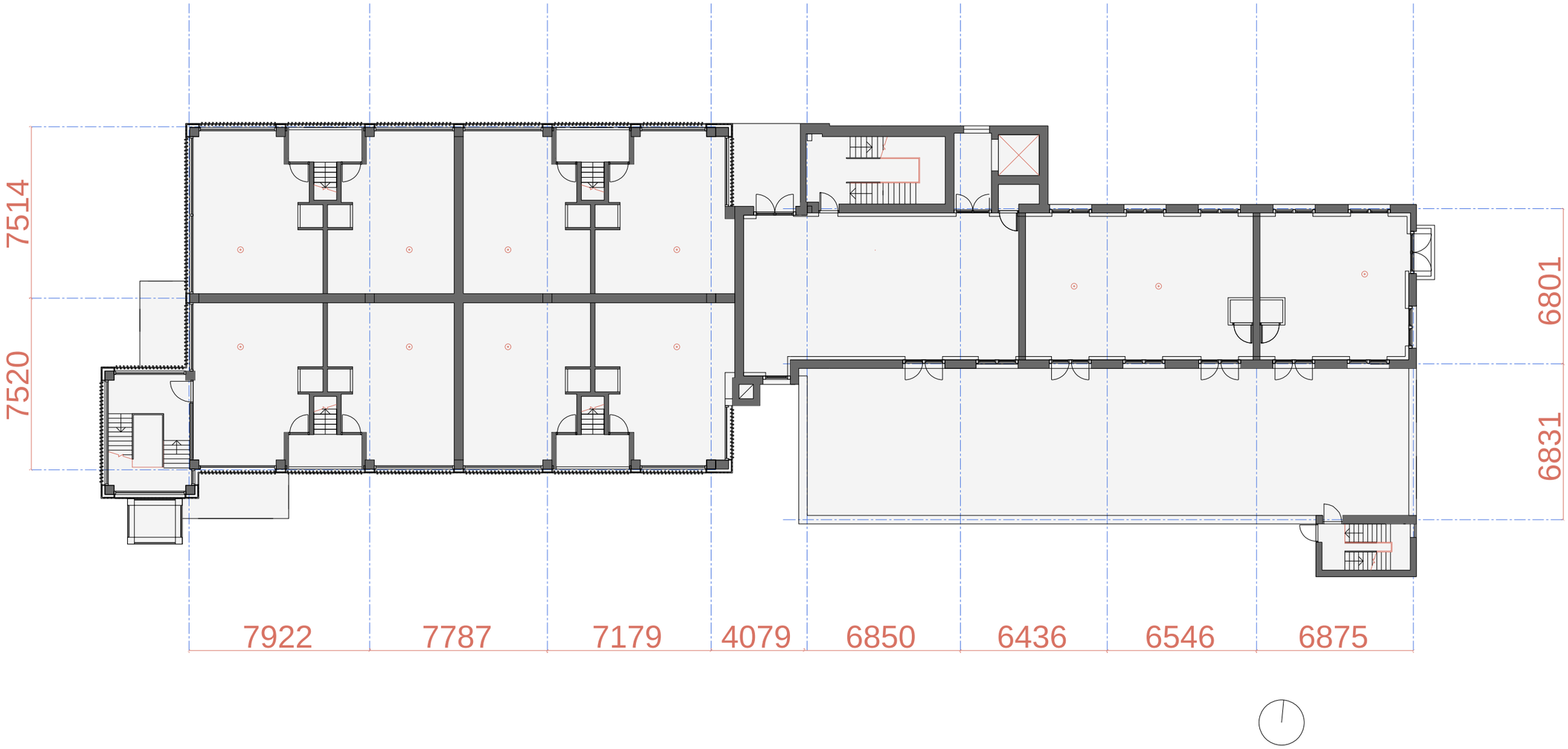
Potential areas for a ø1500mm spiral staircase



Third floor

1:200

Telephone Exchange



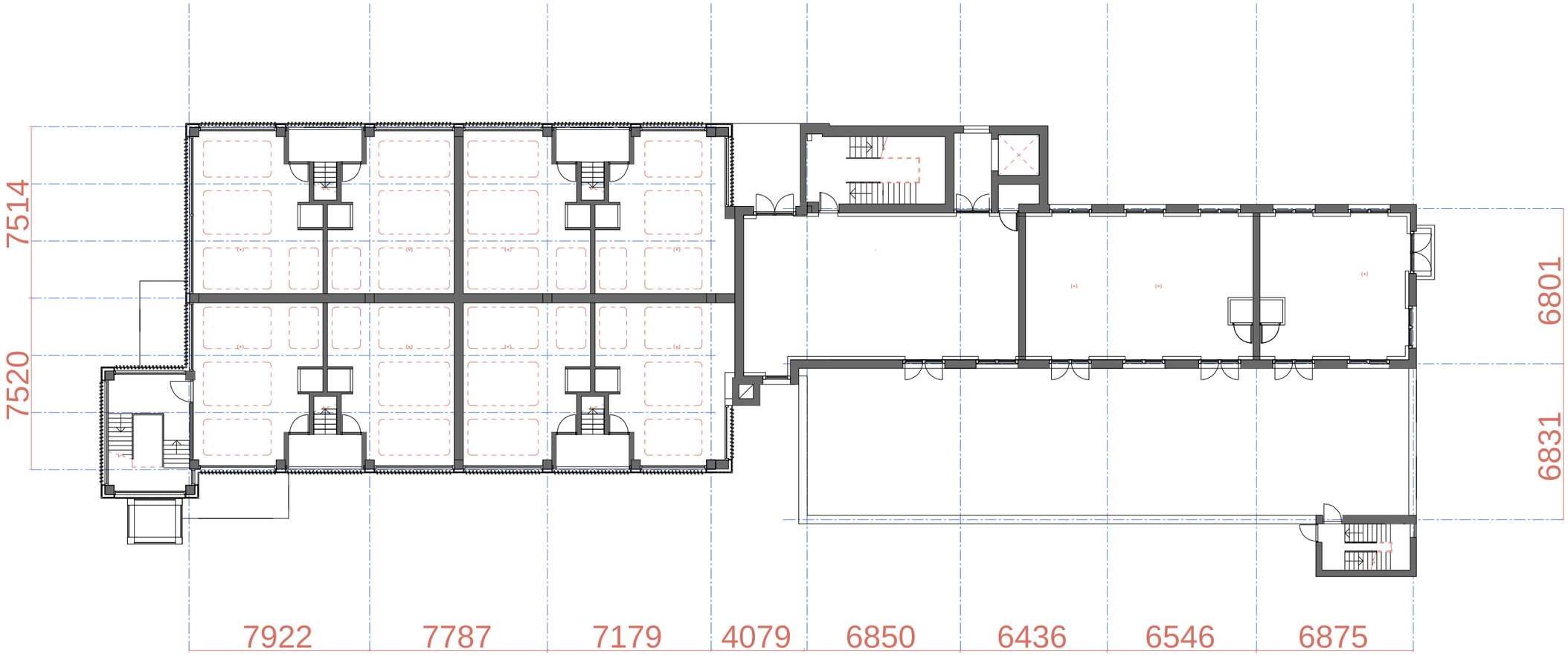
The third floor is accessed via the roof, it is the only floor that is not wheelchair friendly. The smaller units can be merged with units on the second floor to create (family) bigger dwelling units.

Third floor

1:200

Telephone Exchange

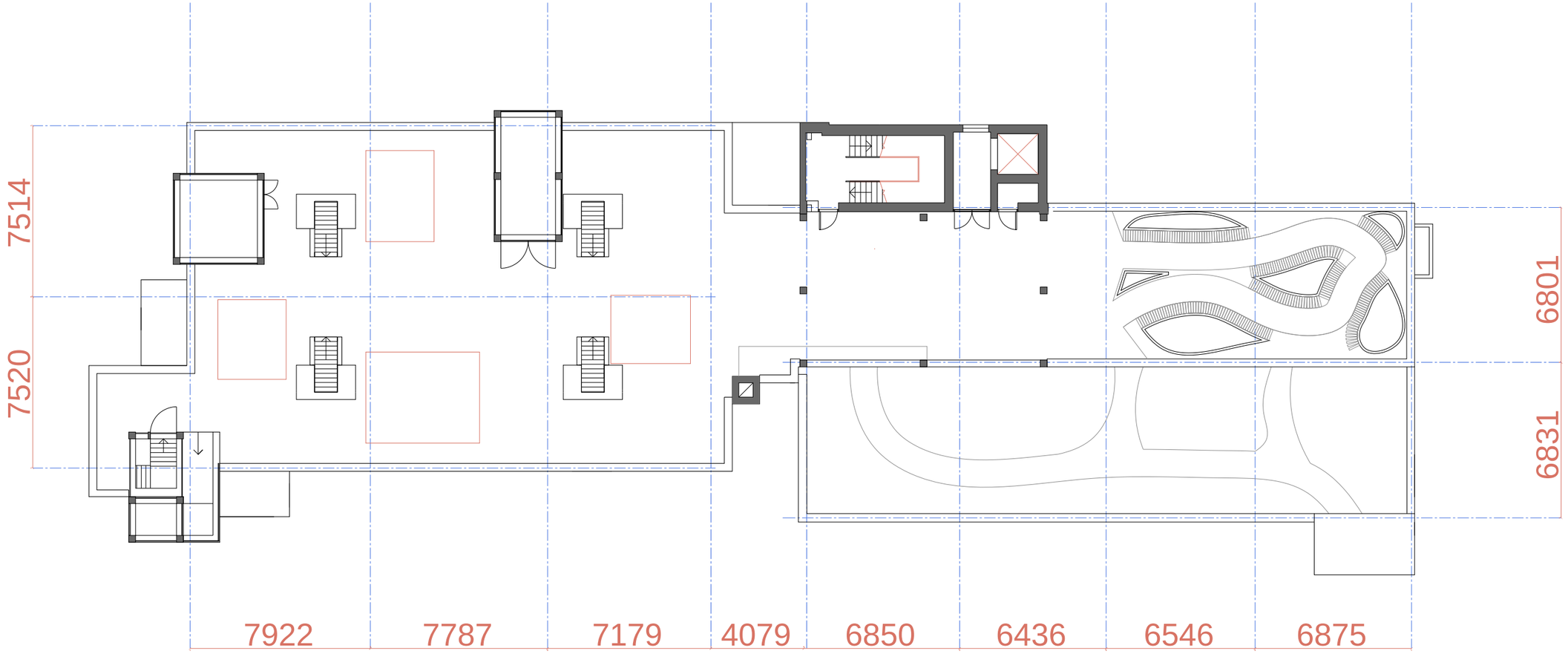
Potential areas for a ø1500mm spiral staircase



Roof

1:200

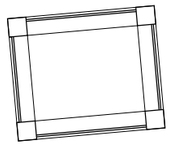
Telephone Exchange

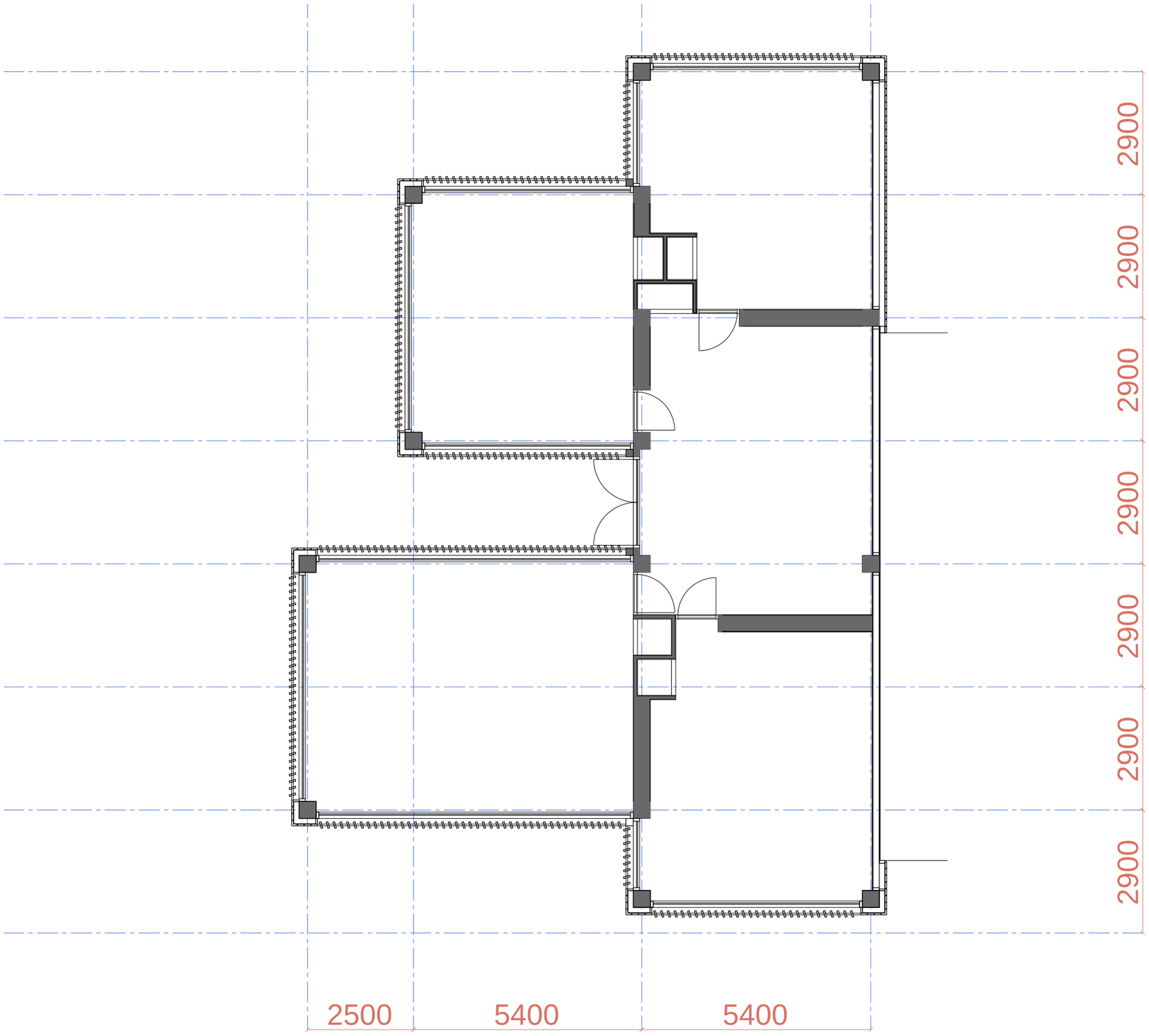


The roof is a collective space, finishing the 3D collective landscape in of the building. two metal structures are initially built to house functions; a work unit and a greenhouse. There is room for at least 6 small lightweight structures to be designed by the users themselves, creating a small city on the roof. They could be art studios, offices, green houses or even host public functions in a future where the roof is public space.
The west side of the building host a small garden. the west and east side are sperated by a porch.

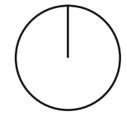
Ground floor

1:100





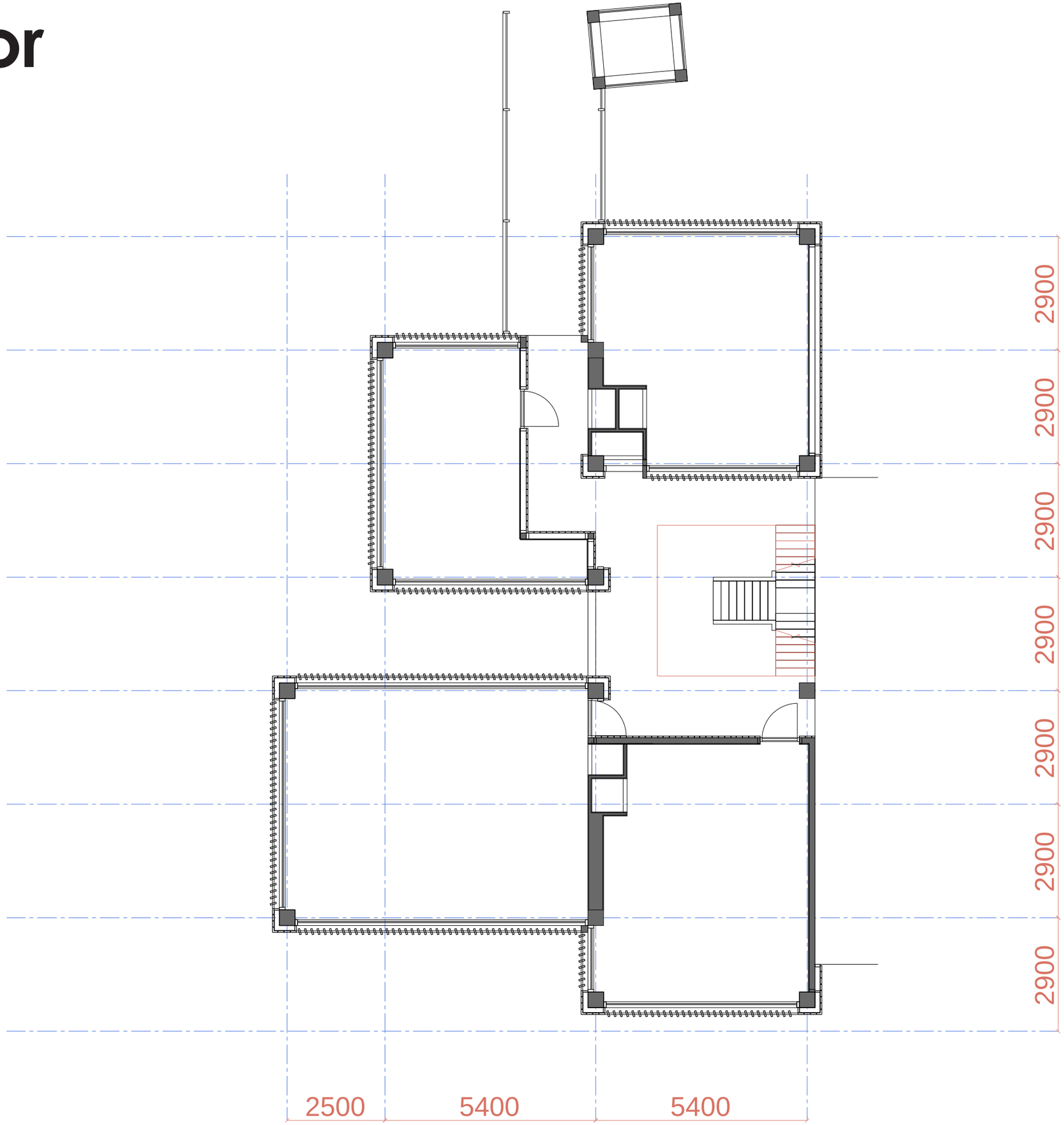
4 units on the ground floor share a collective inside room that could serve a kitchen. The kitchen can be shared, or appropriated by one or several of the units. During the lifetime of the building the inside room could know different configurations: single kitchen, split, partially storage...



First floor

1:100

Blocks

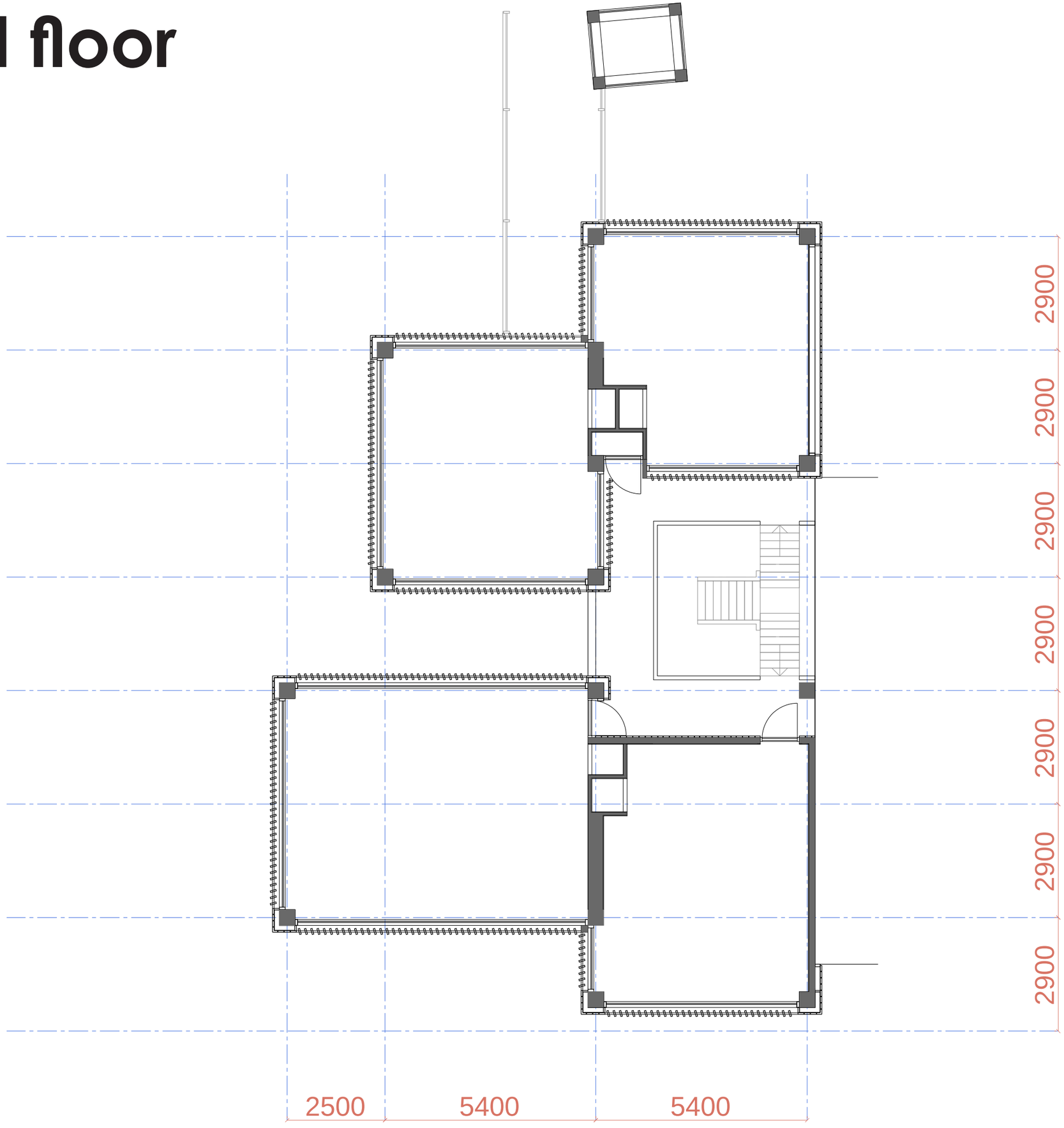


First and second floor host studios for student, starters or expets. They share a staircase and elevator with the telphone exchang.

Second floor

1:100

Blocks



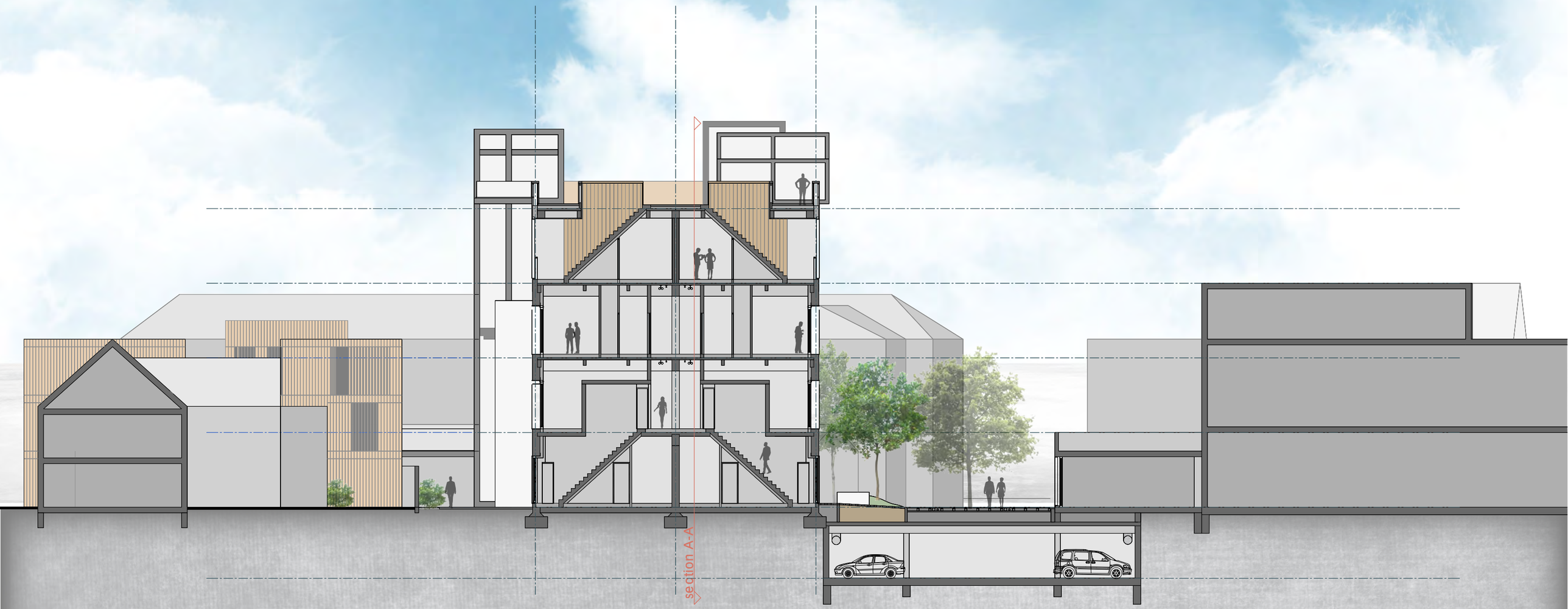
Sections

Cross section

1:200

Telephone Exchange

A-A

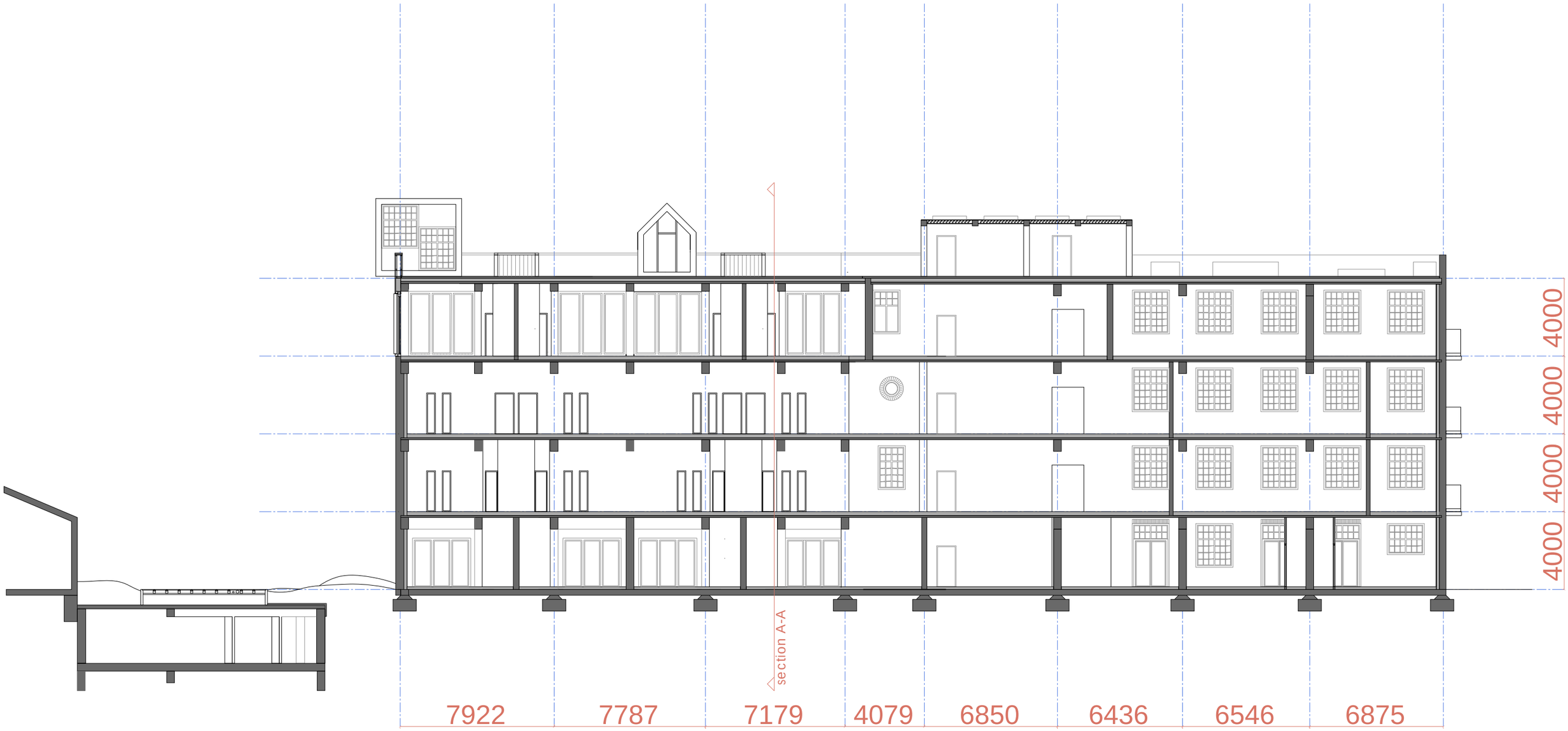


Longitudinal section

1:200

Telephone Exchange

B-B

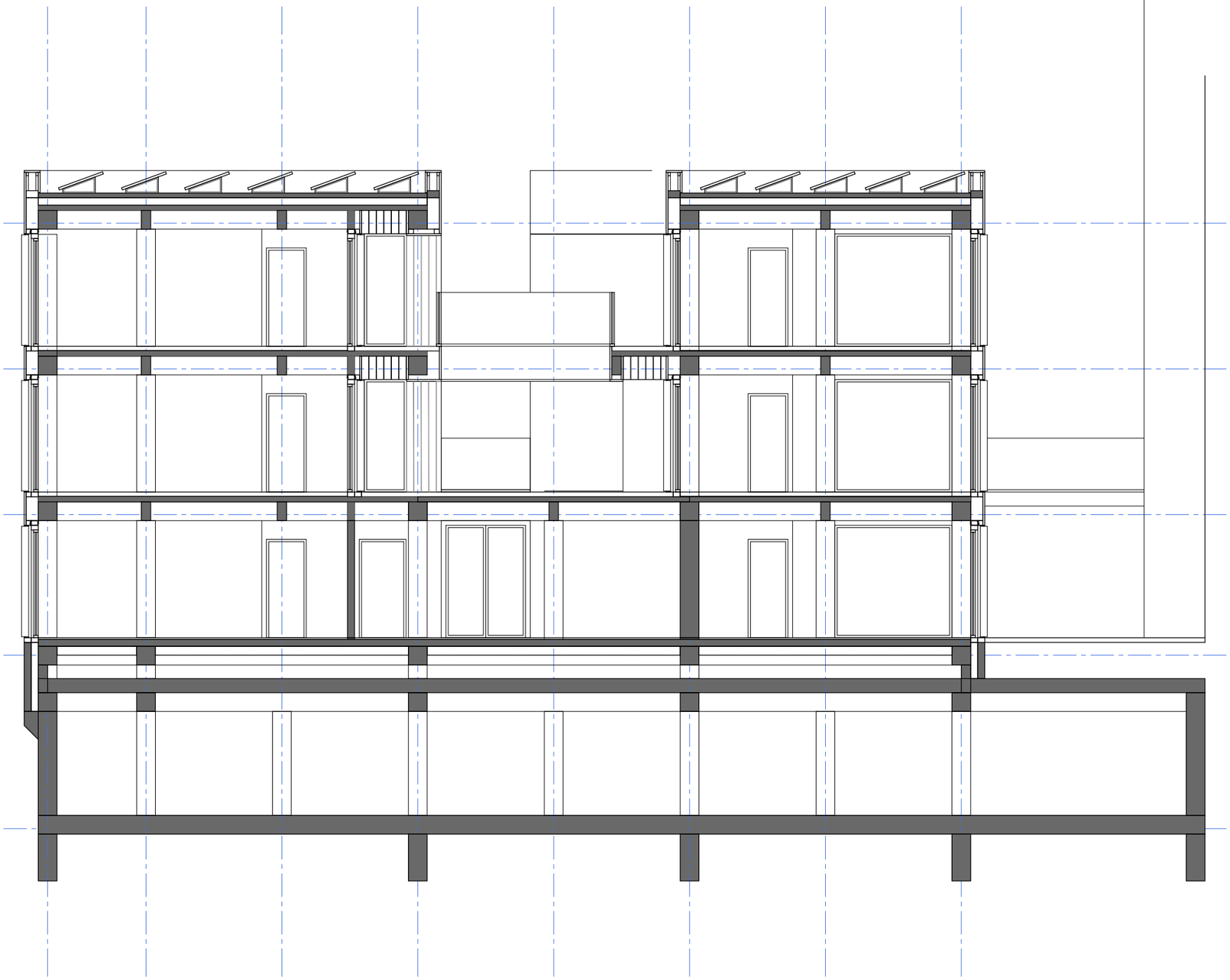


Cross section C-C

1:100

Blocks

C-C



Facades

North facade

1:200

Telephone Exchange

West facade

1:200

Telephone exchange + Blocks

West facade

1:100

West facade
1:200

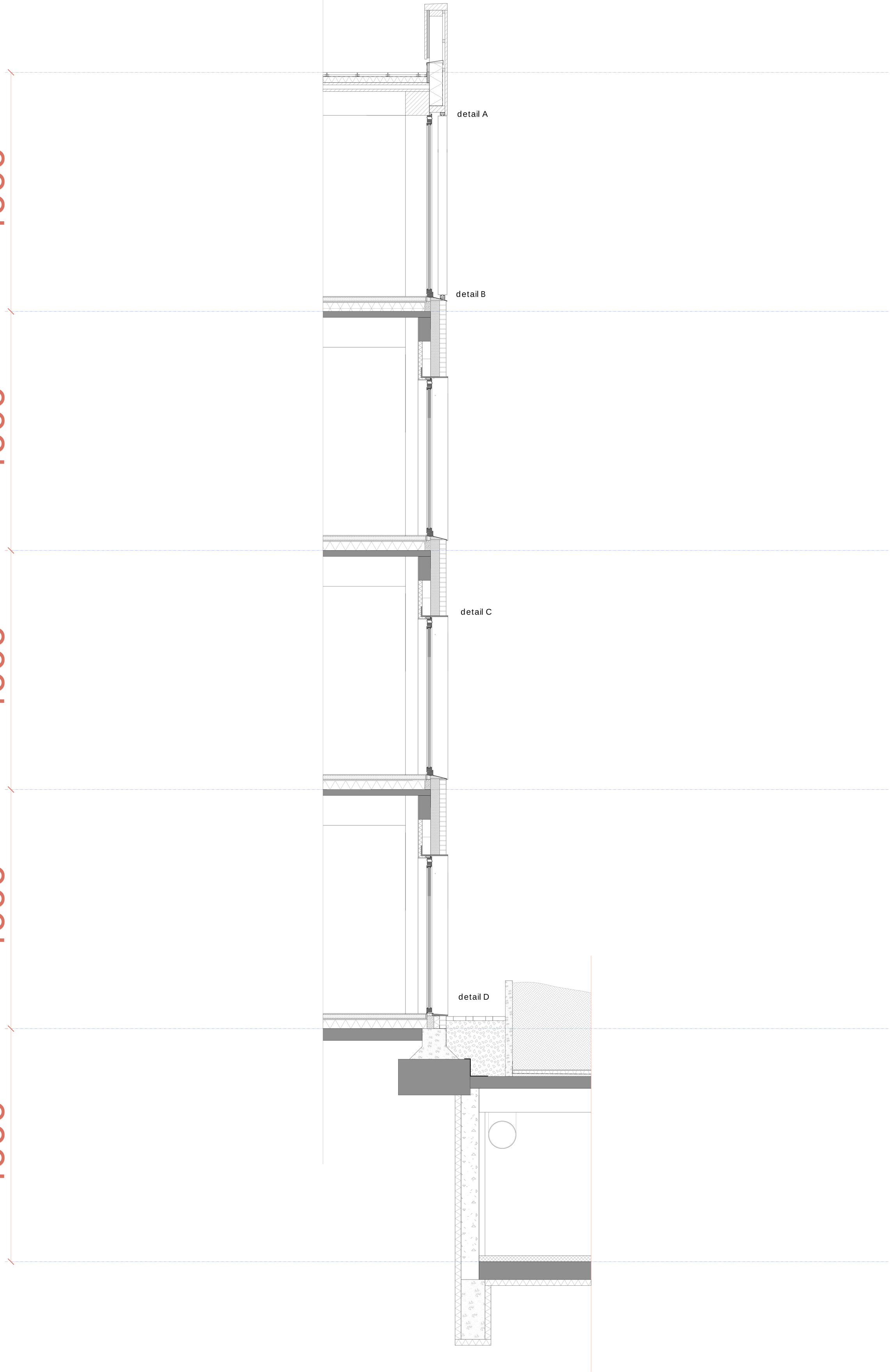
Telephone exchange

Details

Detail section

1:20

Telephone Exchange



Detail facade

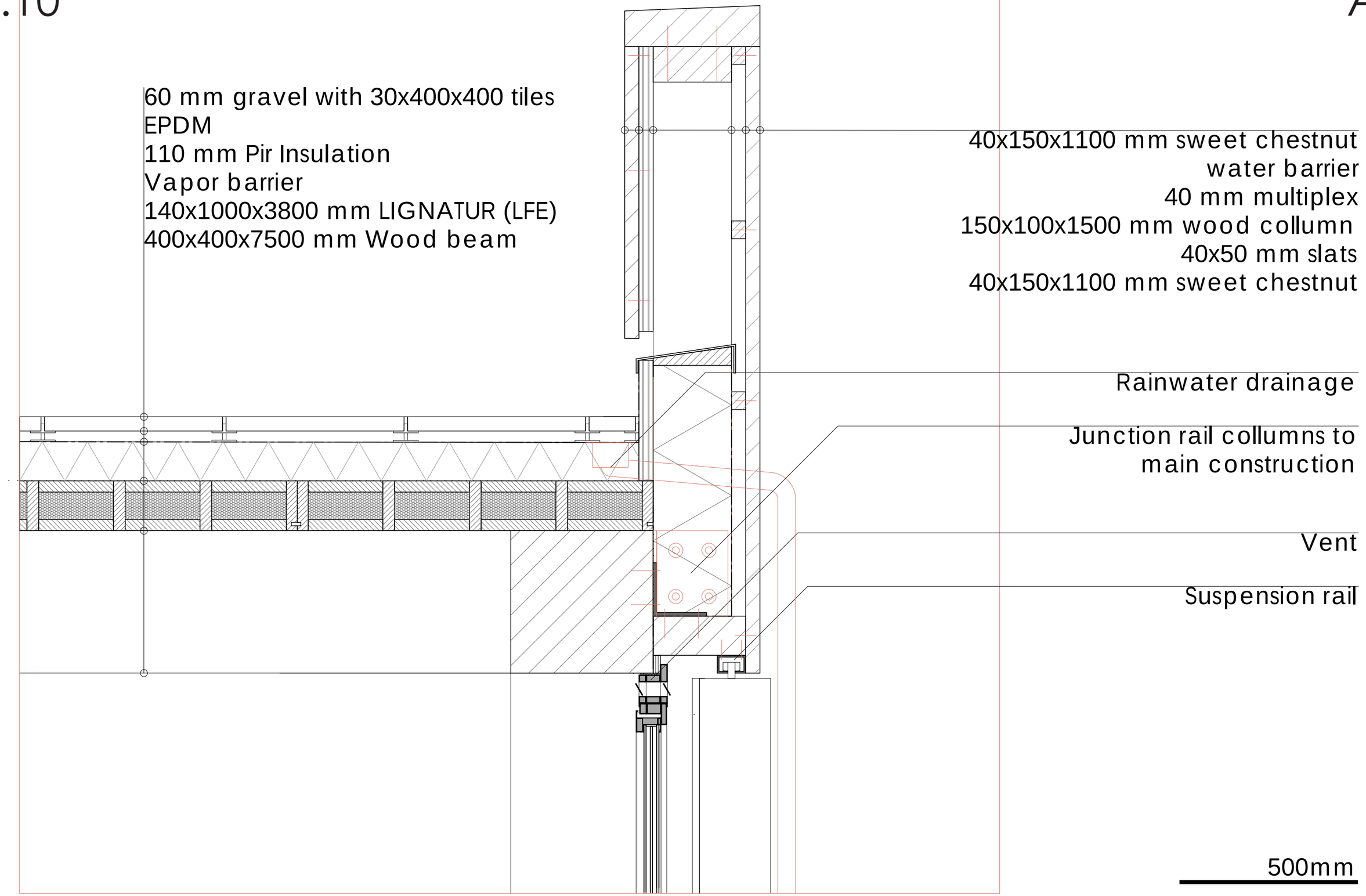
1:20

Point Detail

1:10

Telephone Exchange

A

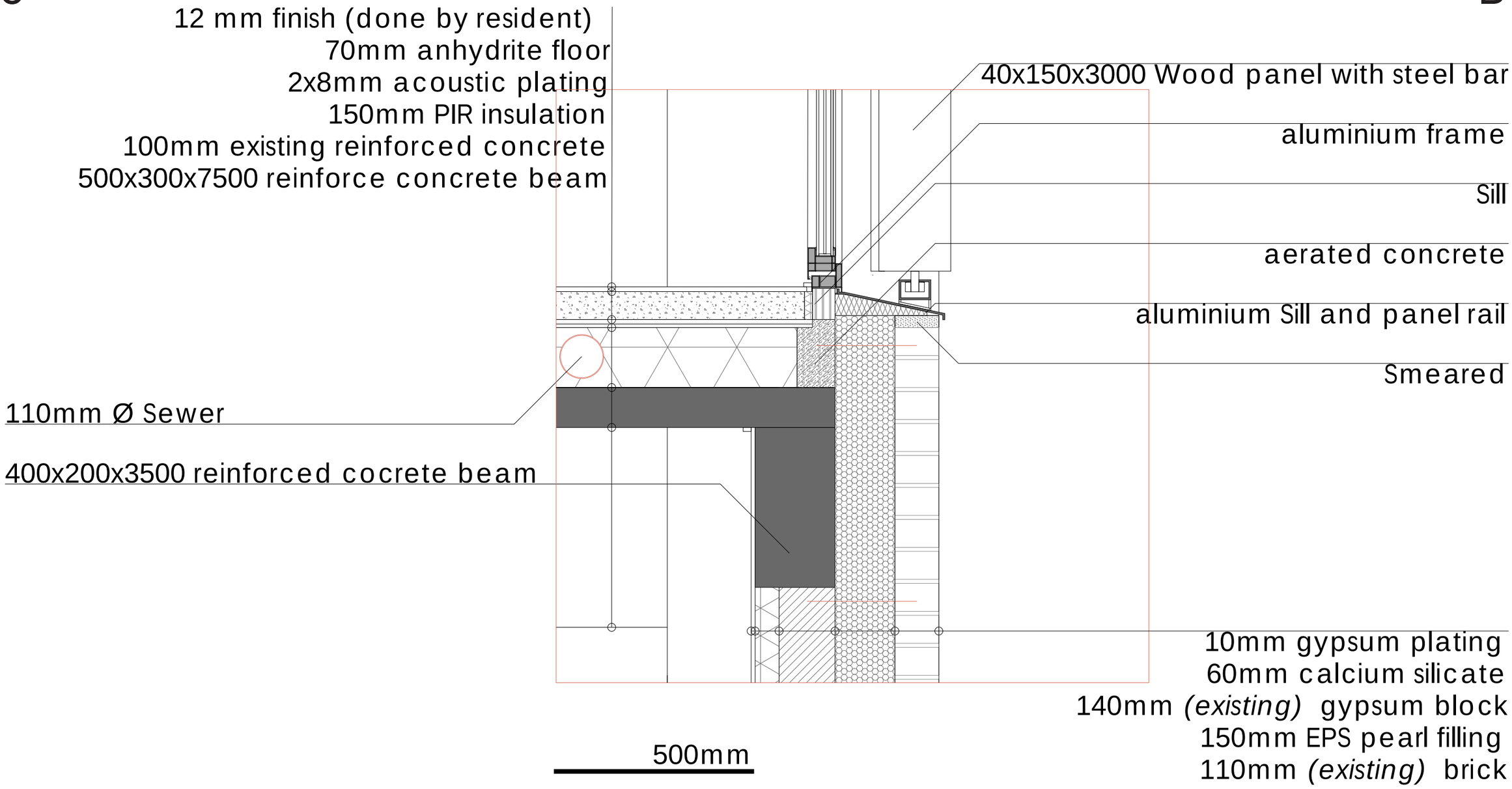


Point Detail

1:10

Telephone Exchange

B

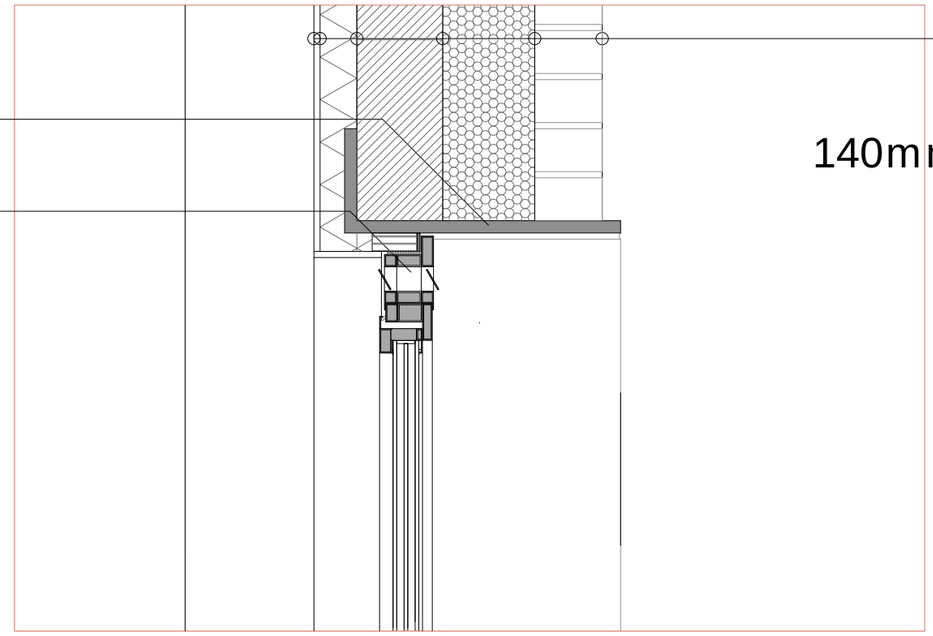


Point Detail

1:10

Telephone Exchange

C



3000mm steel lintel

Vent for air intake

10mm gypsum plating
60mm calcium silicate
140mm *(existing)* gypsum block
150mm EPS pearl filling
110mm *(existing)* brick

500mm

Point Detail

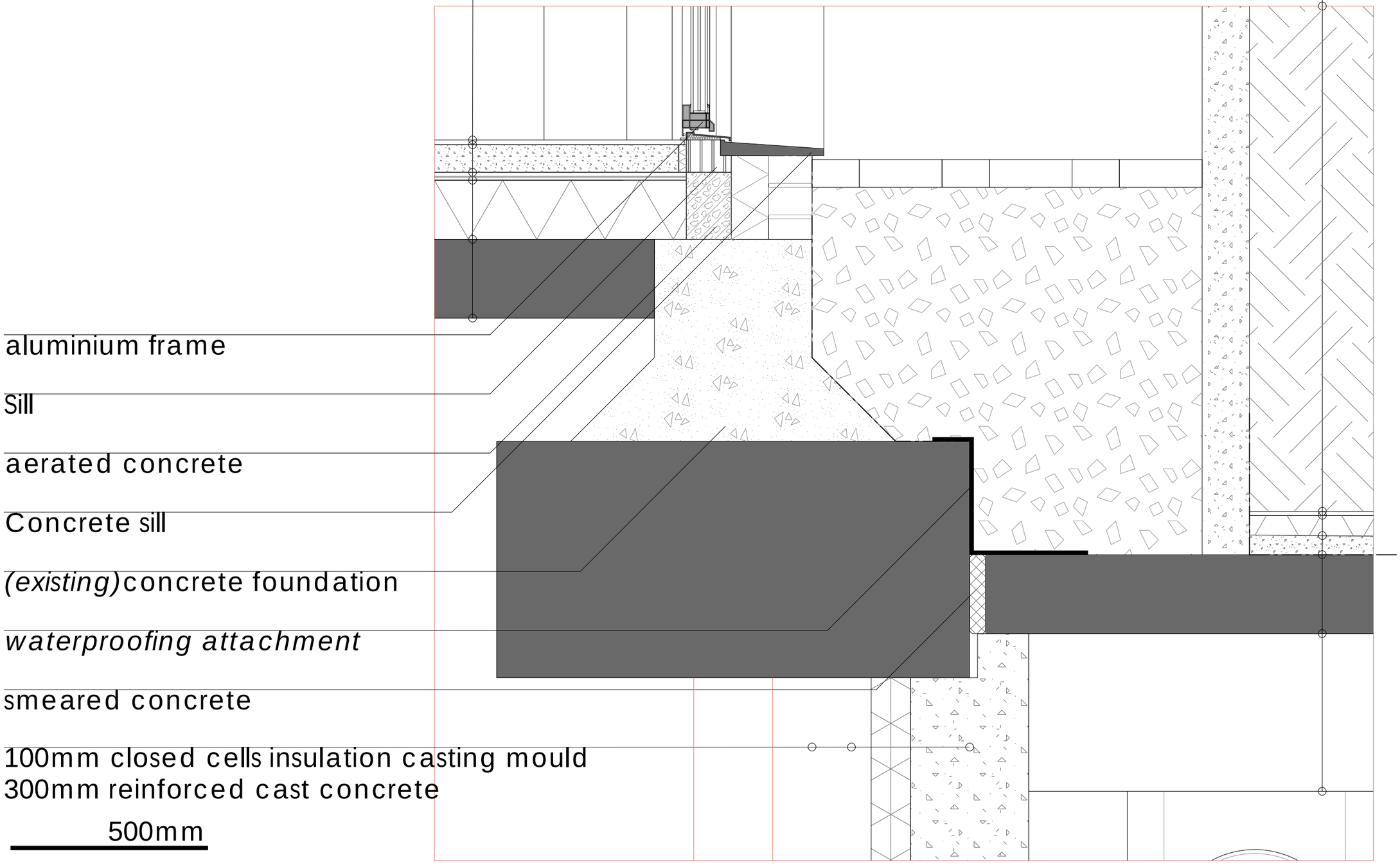
1:10

Telephone Exchange

D

12 mm finish (done by resident)
70mm anhydrite floor
2x8mm acoustic plating
150mm PIR insulation
200mm (*existing*) reinforced concrete

900-1600 mm soil
filter fabric
50 mm drainage layer
50 mm protection layer
water barrier
200 mm precast reinforced concrete floor
500x400x6000 reinforced concrete beams



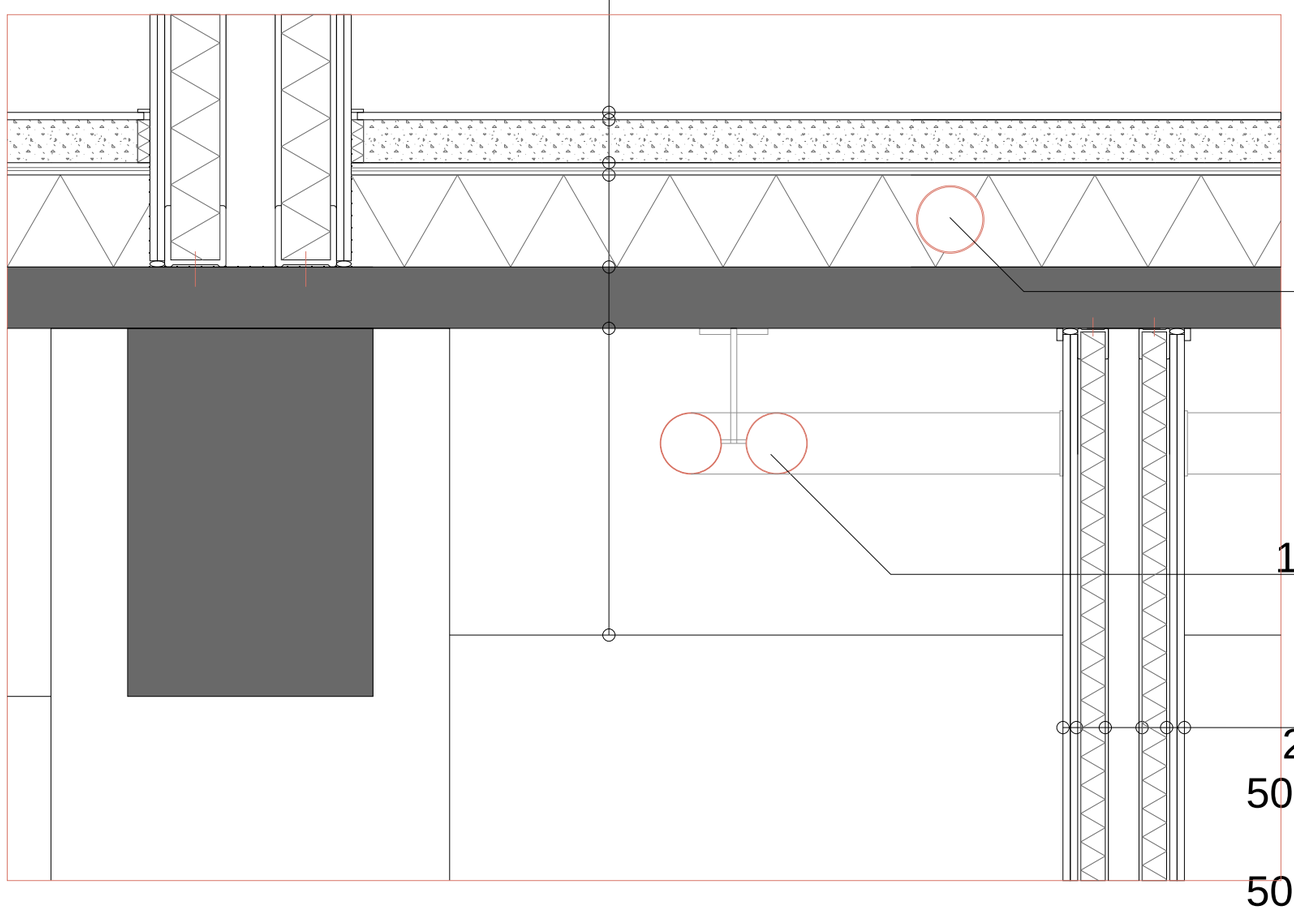
Point Detail

1:10

Telephone Exchange

Connection top up

12 mm finish (done by resident)
70mm anhydrite floor
2x8mm acoustic plating
150mm PIR insulation
100mm existing reinforced concrete
500x300x7500 reinforce concrete beam



110mm Ø Sewer

100mm Ø ventilation pipe

2x12mm Gypsium plating
50mm insulated metal stud
50mm air cavity
50mm insulated metal stud
2x12mm gypsium plating

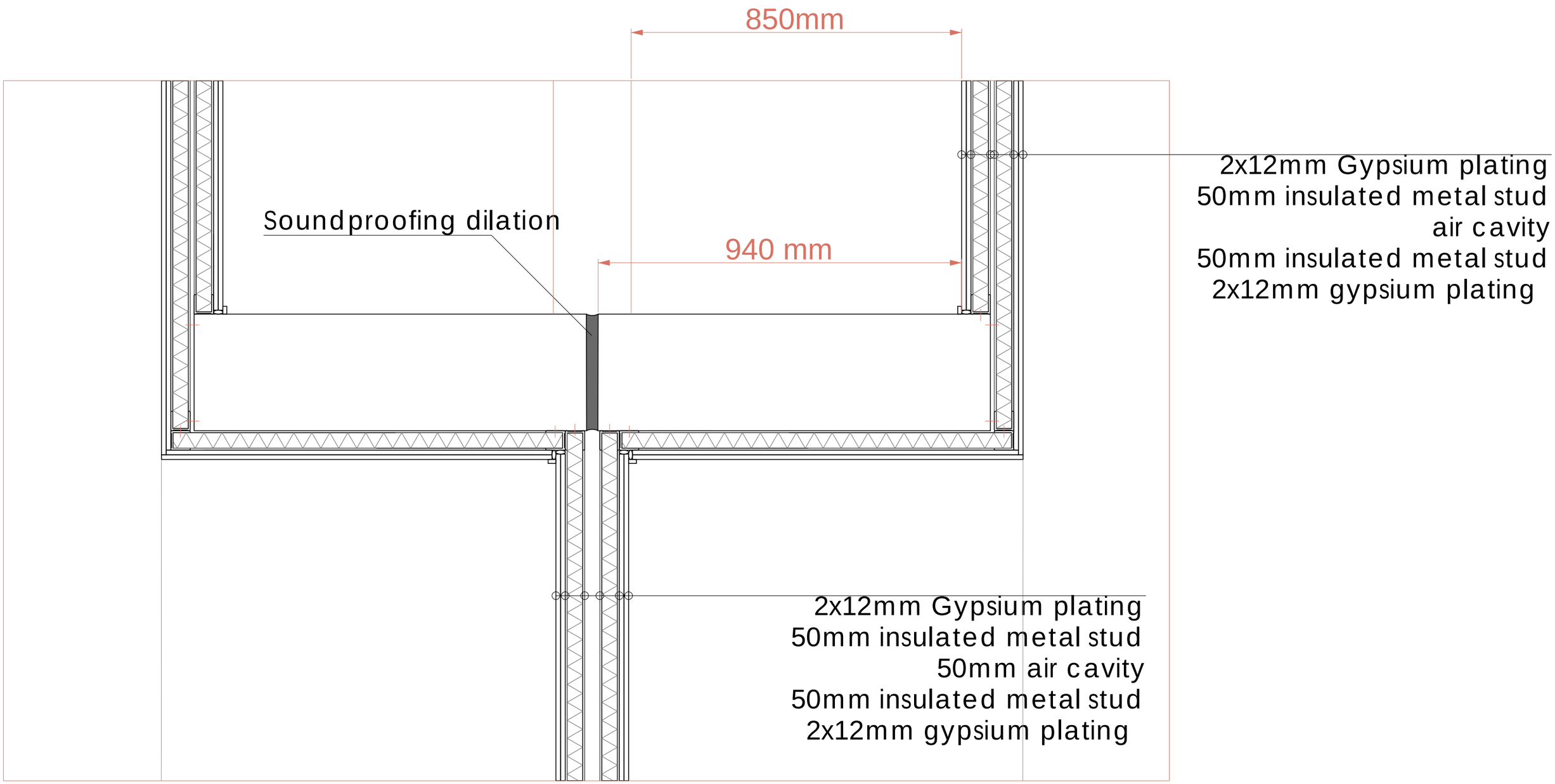
500mm

Point Detail

1:10

Telephone Exchange

Split stairs

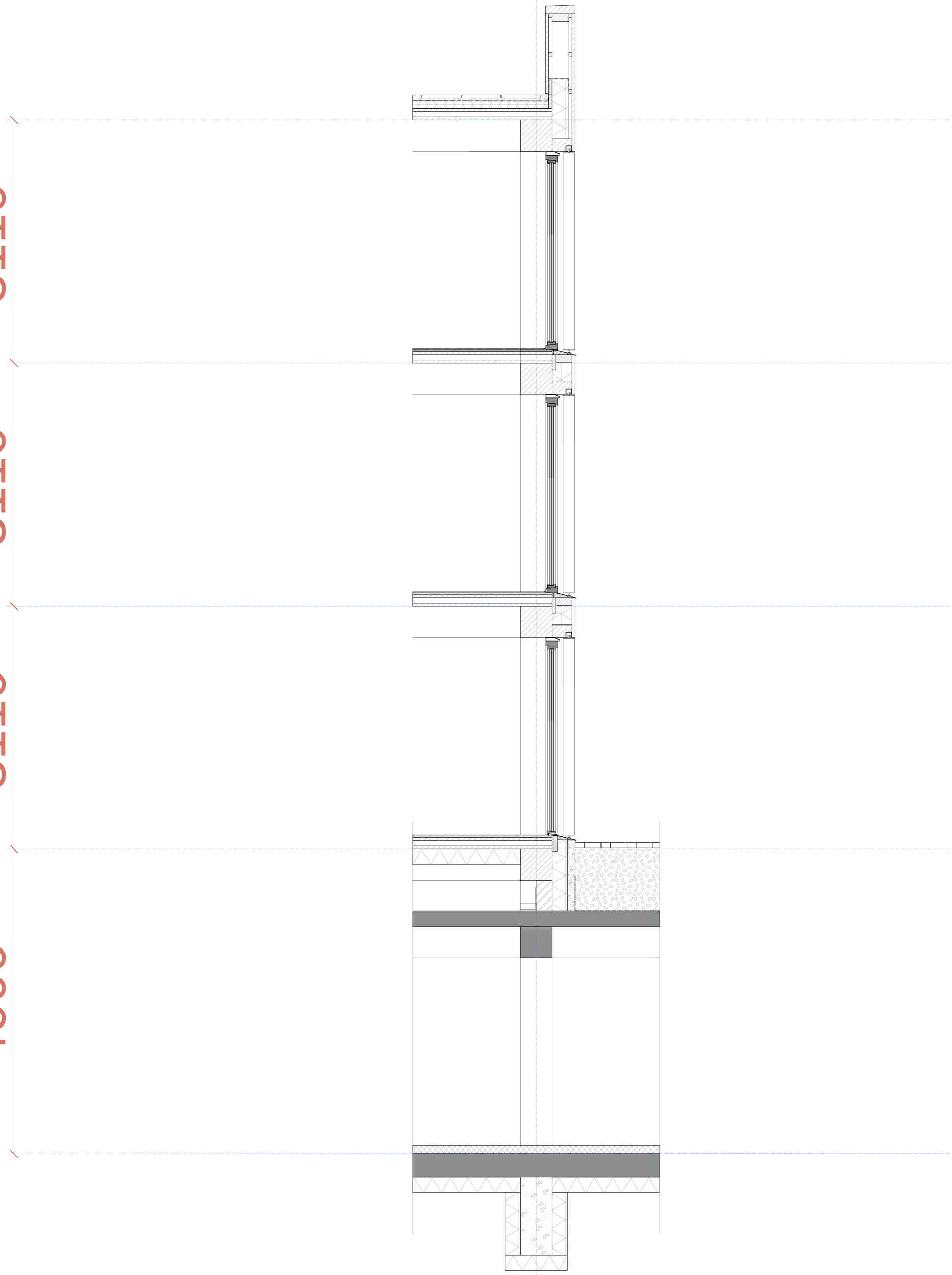


500mm

Detail section

1:20

Blocks



Climate

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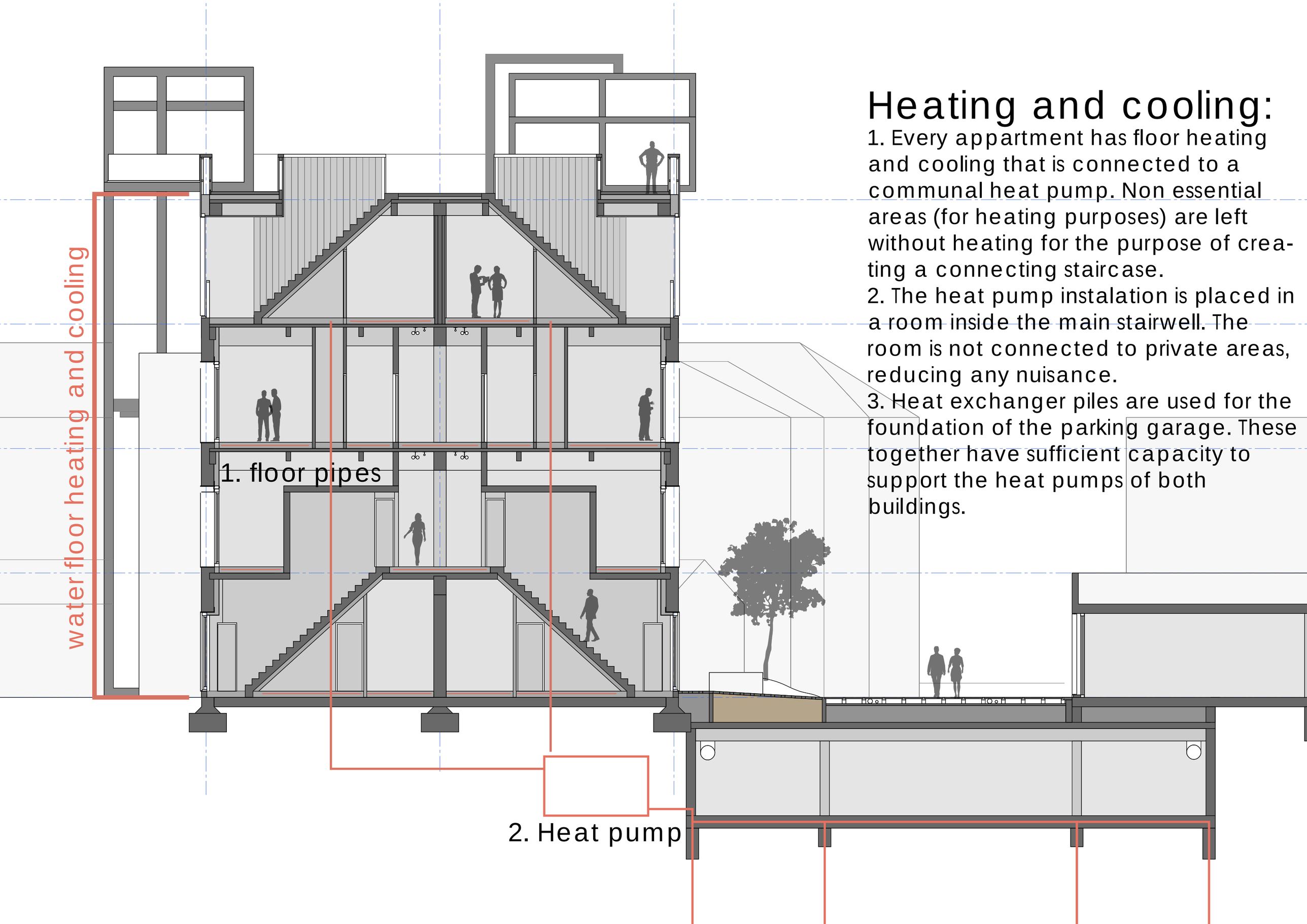

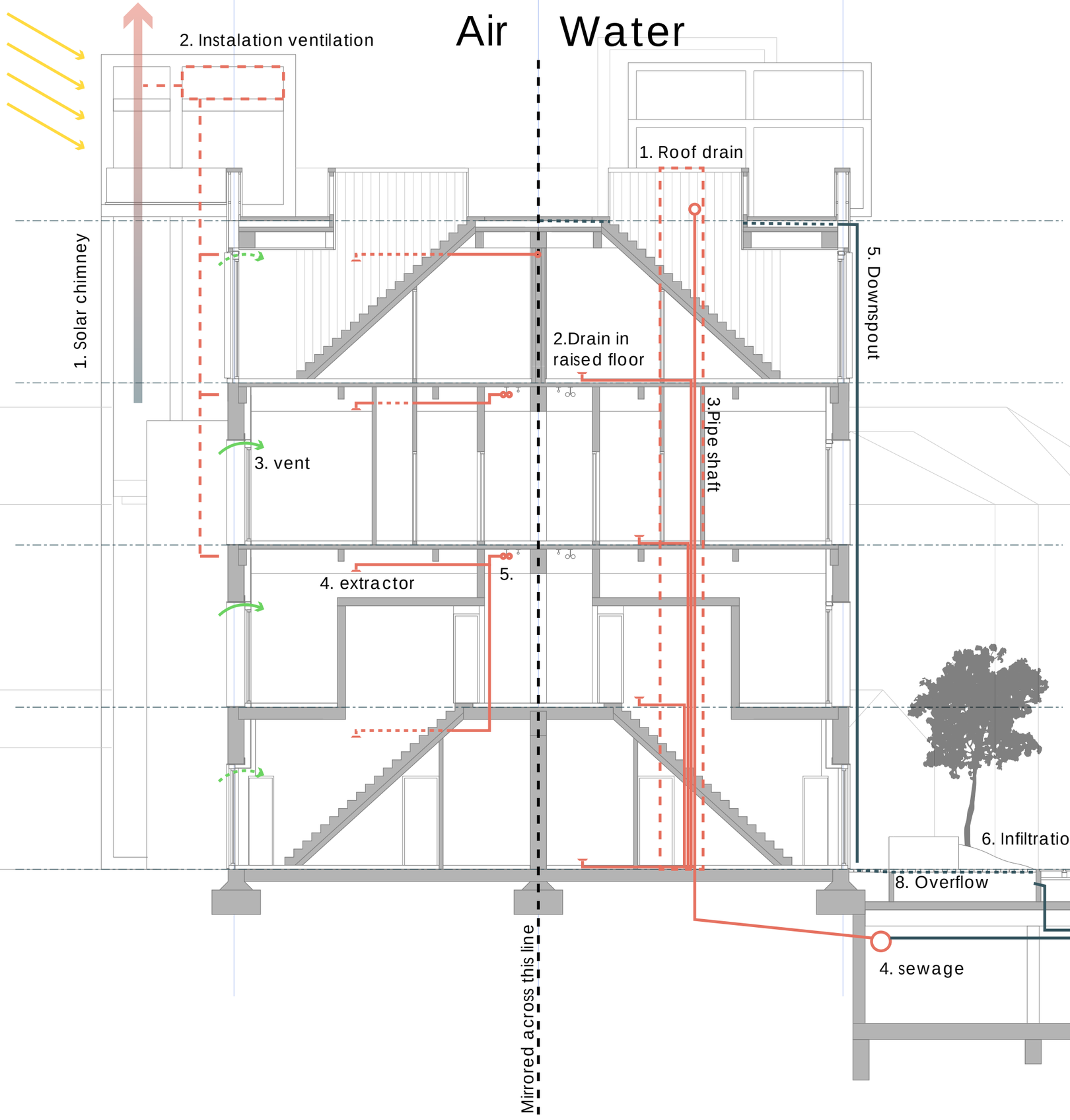

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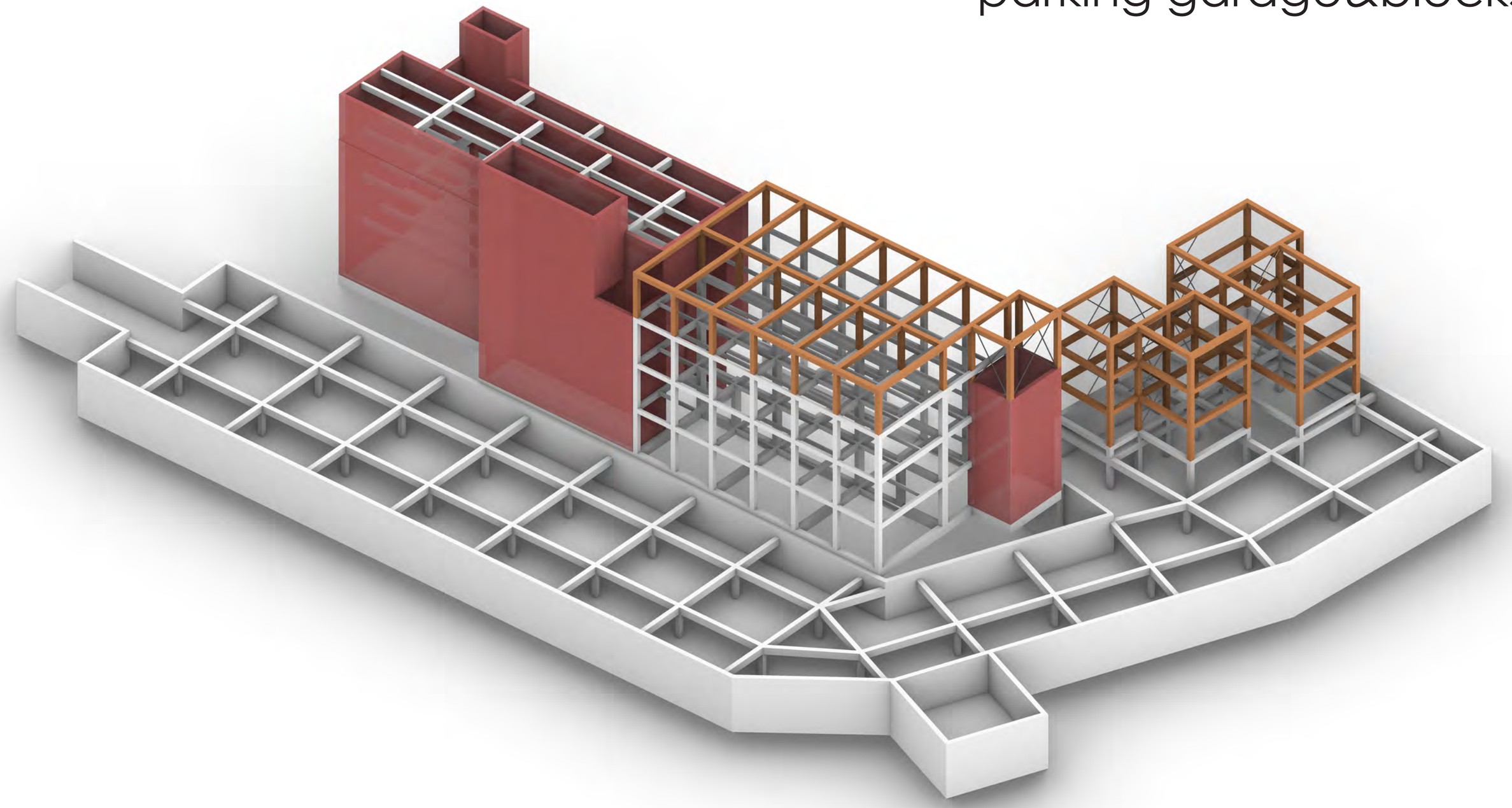
Construction

Overall structure

Telephone Exchange
parking garage&blocks



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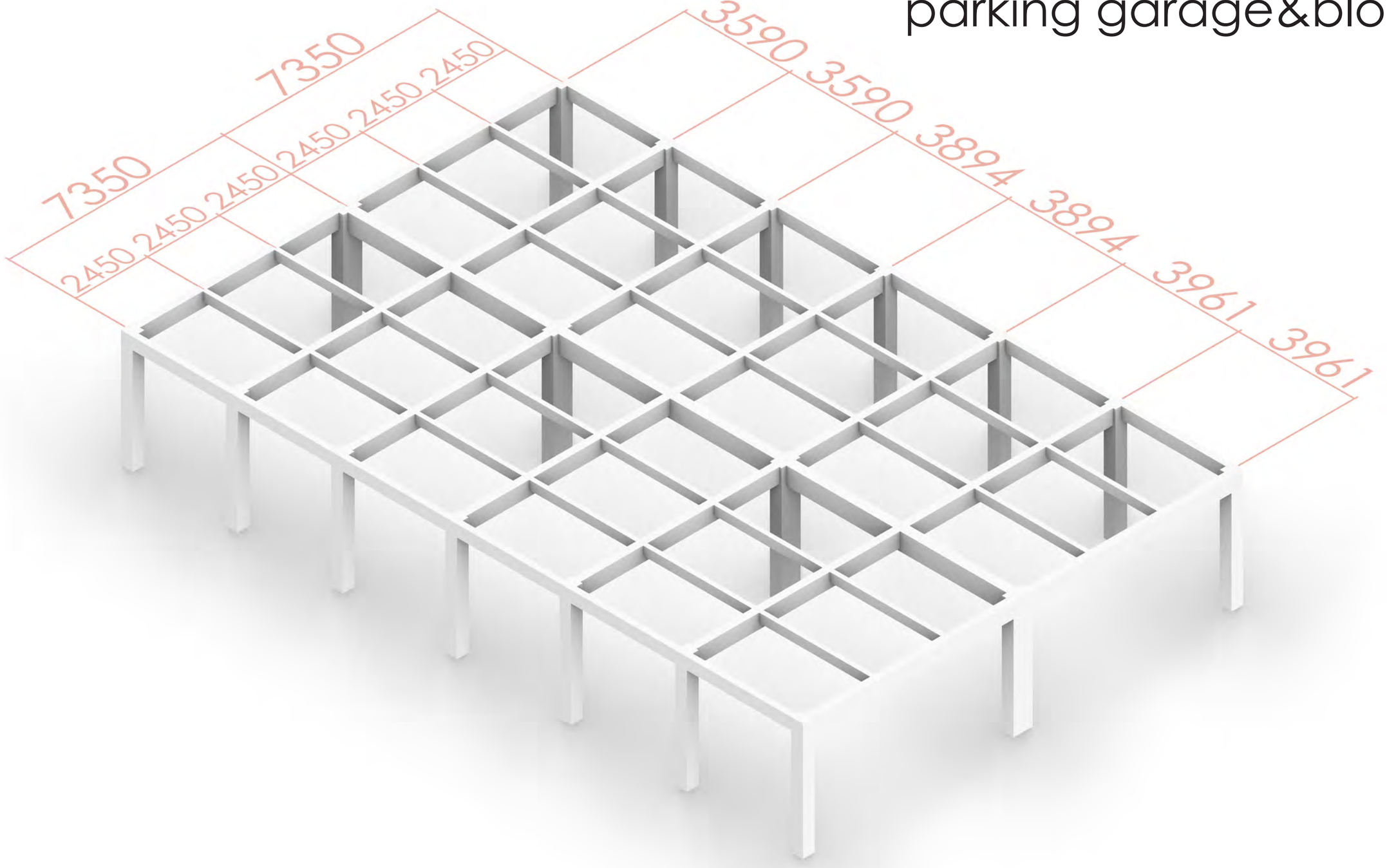
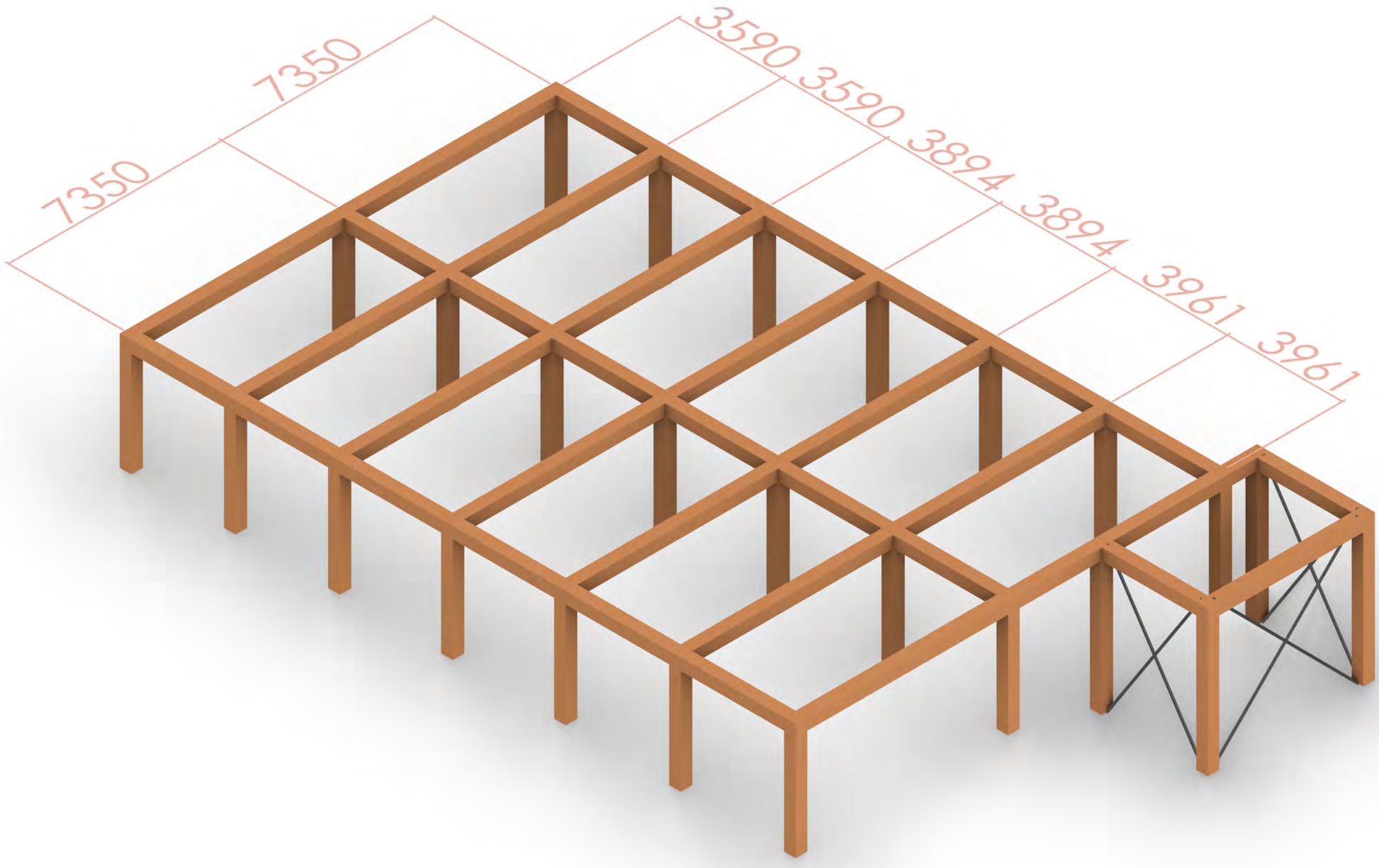
Telephone Exchange
parking garage&blocks



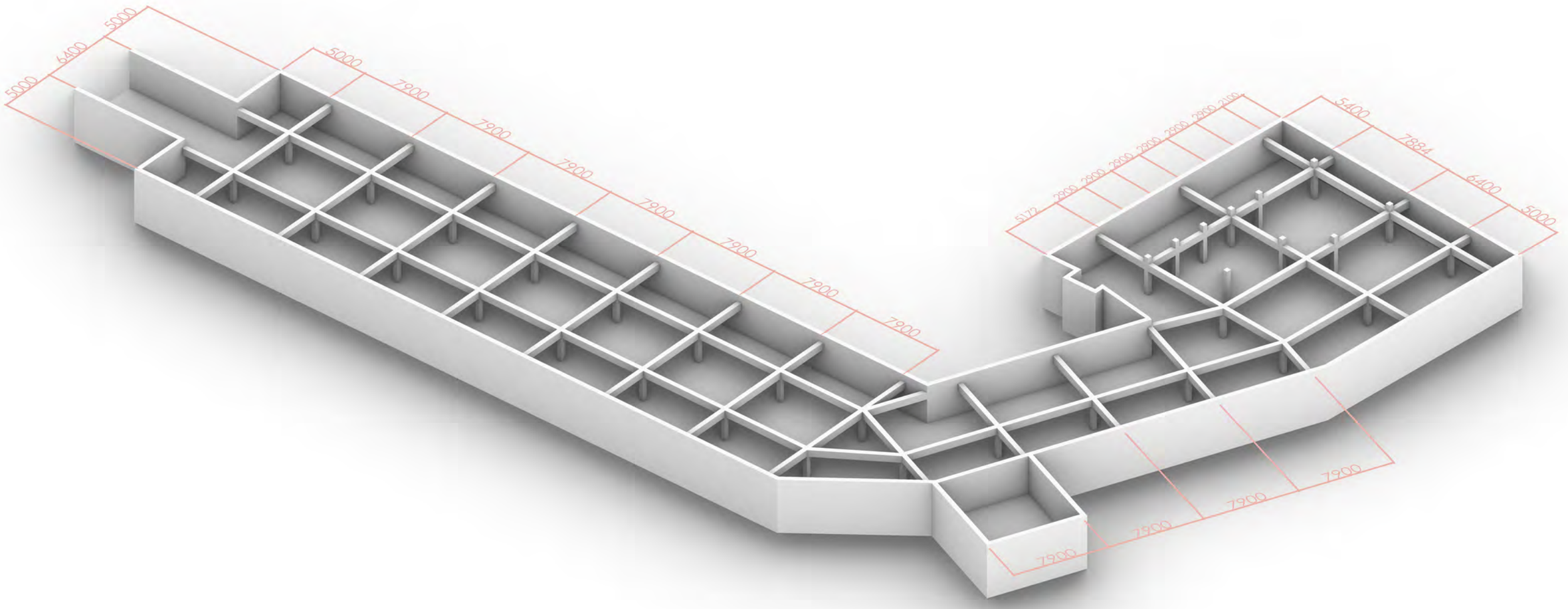
Wood top-up

Telephone Exchange



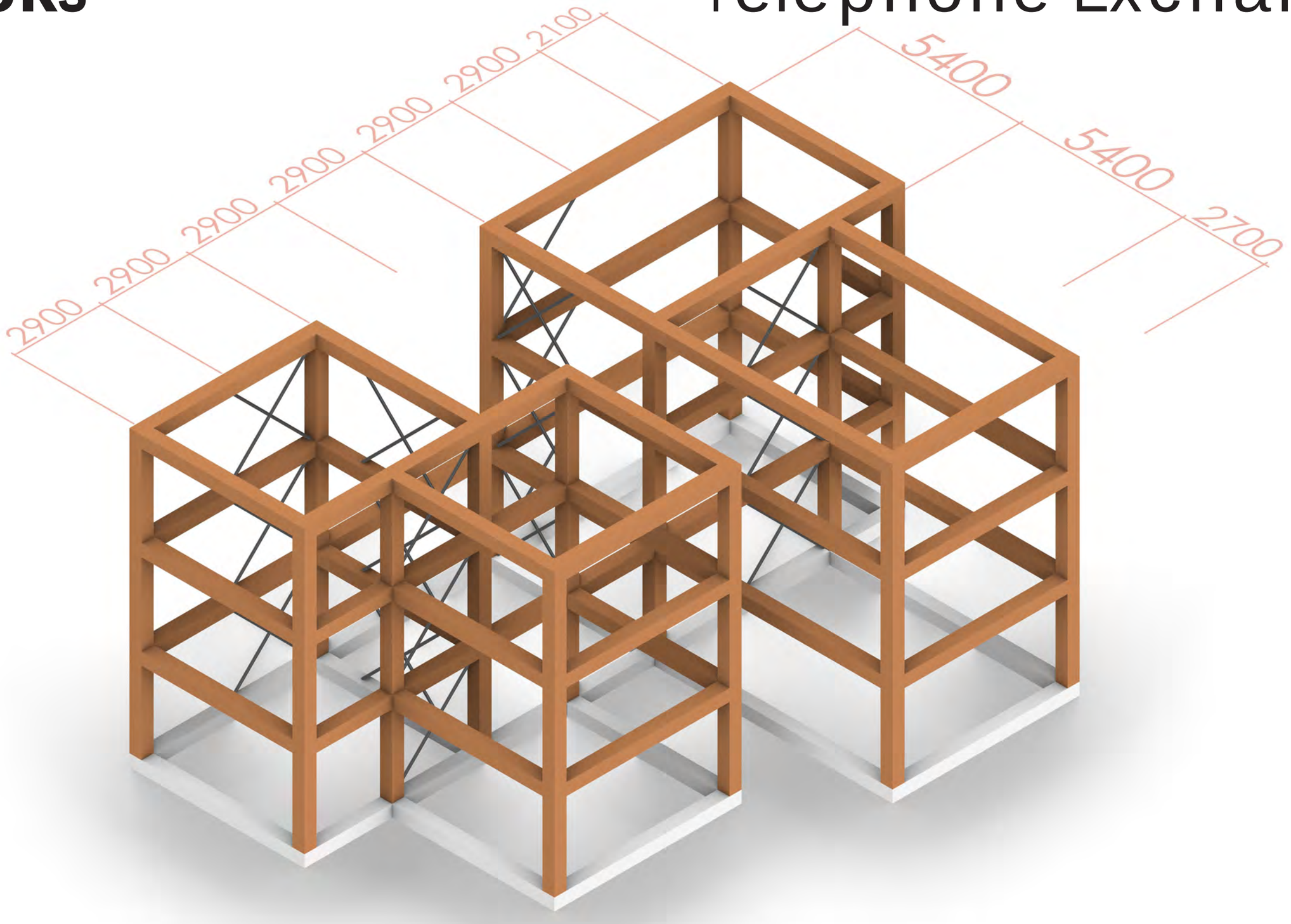
Underground Parking

Telephone Exchange



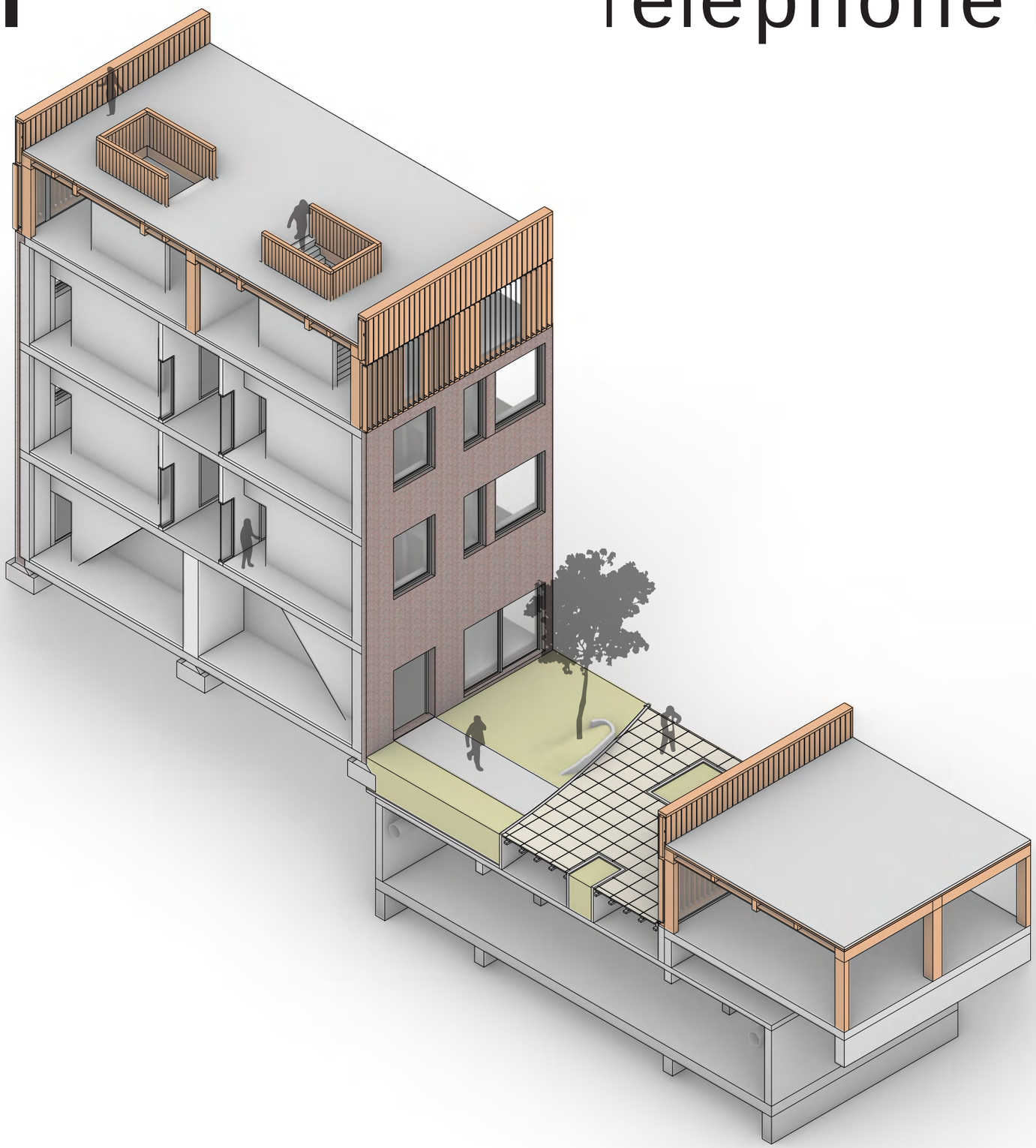
Blocks

Telephone Exchange



3D section

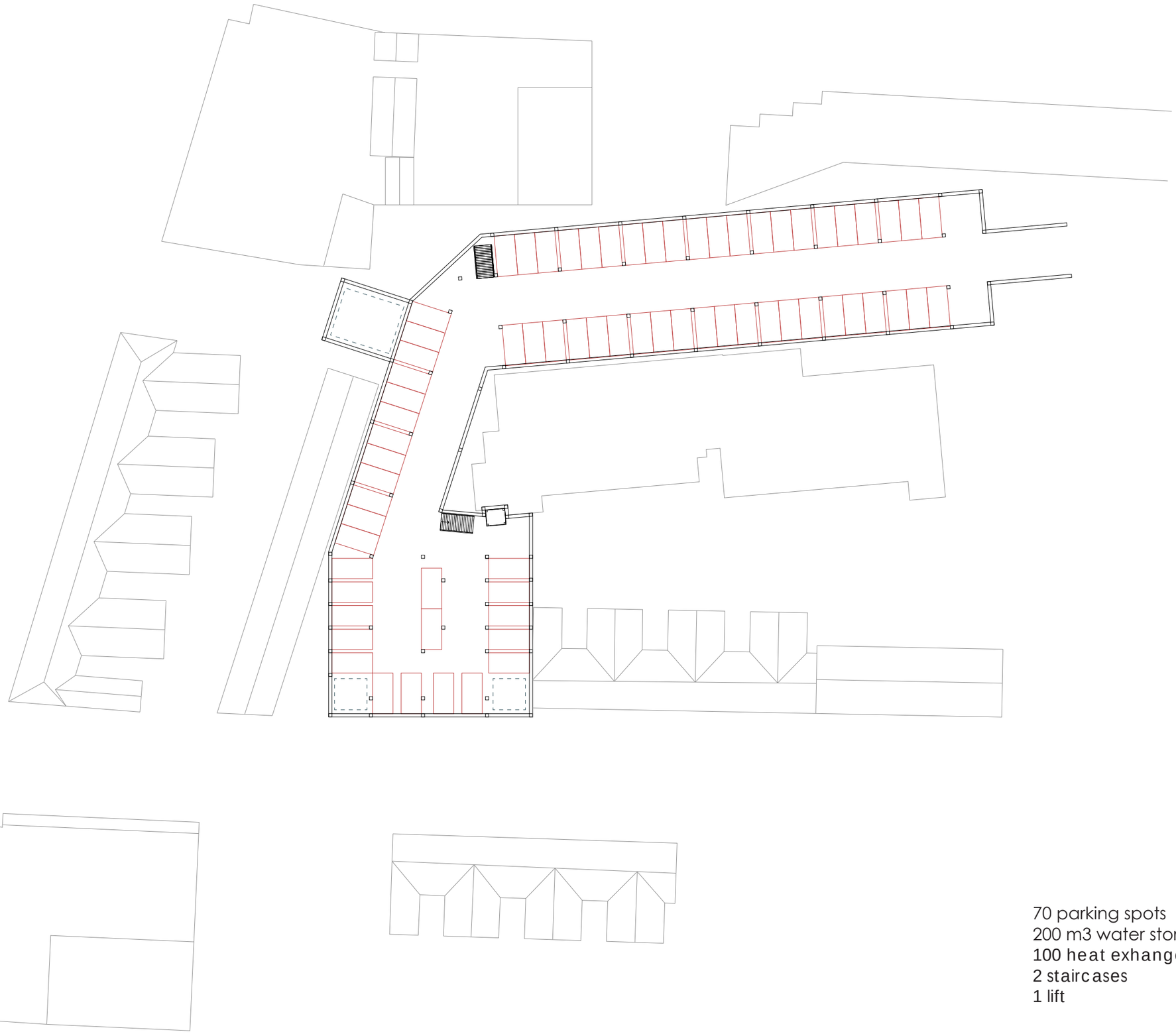
Telephone Exchange



Parking

1:500

Telephone Exchange



70 parking spots
200 m3 water storage (not detailed)
100 heat exhanger piles in foundation
2 staircases
1 lift