The Post-Pandemic Style

An investigation of the impact of COVID-19
on architecture and urban design

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Contents

Introduction

    Throughout history, pandemics have always had a lasting effect on cities; many health issues have been reflected in architecture and urban planning. Architectural design strategies used in previous centuries, including Modernism in the first half of the twentieth century, were shaped at least in part with the goal of creating a healthy building environment after the Spanish flu pandemic. It is entirely possible that our current challenges will generate new innovation, philosophies, and practical solutions for everyday life now too. And if they do, what form and style will this new post-pandemic architecture take? Will the global pandemic affect the re-shaping urban areas?

    Undoubtedly, COVID-19 has triggered a vital reassessment of urban spaces, compelling us to grasp the profound ways in which it has disrupted our social systems. The aim of this review is to study the relationships between the impacts of an epidemic on urban design, historically and currently. Soon enough, post-pandemic architecture and urbanism might have its own distinct style, given how much scrutiny the built environment has been put under as a result of the virus. Future spaces must be designed by considering what we've learned from the past and moving forward in the right direction toward sustainability. This leaves us with the challenge of adapting to the "new normal" in the post-COVID era.

A Historical Account

Pandemics are not a foreign concept to humanity. As long as mankind has been around, we have faced pandemics and infectious diseases (Wade, 2020). The COVID-19 pandemic, however, was the first of such a global scale experienced by many of us. Since its outbreak in 2020, it froze the world, creating intense feelings of uncertainty and vulnerability.

Before all of this, infectious diseases had already moulded our environments and the places we live (Chang, 2020). But how is COVID likely to change architectural design in the years to come? We can start to glean insights into the potential changes in architectural design brought about by COVID-19 by examining the historical impact of pandemics on buildings and urban spaces.

In the 14th century, the bubonic plague wiped out almost a third of Europe's population, but it also enhanced the urban development of the Renaissance (Lubell, 2020). In an effort to rid cities of disease, cramped living quarters were dispersed, and cluttered public spaces were substituted for larger and more organised piazzas and public spaces. Architects were employed to improve these areas and decentralise cities to prevent overcrowding. (Elgheznawy & Eltarabily, 2020).

Similarly, the cholera pandemic in the early 19th century, caused by a bacterial infection from faeces that infected transmitted through contaminated water, spurred advancements in sanitation. Cities implemented underground sewer systems, introduced indoor plumbing, and initiated early disease mapping efforts (Lubell, 2020). The broad boulevards of Baron Haussman's Paris design were conceived as a response to the devastating impact of the cholera pandemic, aiming to counteract overcrowding and improve public health (Chang, 2020 and Andrei Fezi, 2020).


[Fig. 1]

The 1918 Spanish flu was a pandemic most similar to the current COVID crisis. The Spanish flu, like COVID, was a respiratory virus (Elgheznawy & Eltarabily, 2020). During this time, most of the population were staying at home, chose to walk instead of using public transport, and the sidewalks were uncharacteristically empty at night, which is in striking resemblance to the situation we experienced during the COVID pandemic. (Elgheznawy & Eltarabily, 2020).

The architectural style of 'Modernism' emerged in the early 20th century, "Like most major shifts in design, it was based on a major shift in society. And a big part of that shift came about after the flu." (Poché, 2020). "Form follows function" became a defining principle of Modernism, with an emphasis on light, ventilation, and sterility following the experiences of the flu and tuberculosis epidemics. This led to a set of principles on the purity of form and geometry, modern materials, and the rejection of excessive ornamentation (Chang, 2020). Dark corners, wallpaper, and ornamentation provided places for germs to hide and breed., while the aesthetics of clean, smooth surfaces conveyed a sense of cleanliness. The importance of sunlight and fresh air in combating illnesses like the flu and tuberculosis resulted in larger windows, higher ceilings, and improved air conditioning. Until the advent of antibiotics, sunlight and fresh air were the primary treatments available (Philcox, 2020). White walls not only reflected more sunlight throughout buildings it also exhibited its sterility. "Architects started feeling the responsibility to heal people through design" (Sebastian & Ravishankar, 2022). the 1920s, the design of sanatoriums, such as hospitals, included long windows for natural light and patient terraces with "cure chairs" as integral parts of the treatment process, demonstrating how architecture became part of the healing process. "The architecture itself was part of the cure" (Chayka, 2020).

As Modernism in the first half of the twentieth century, was shaped at least in part with the goal of creating a healthy building environment (Stathaki, 2022). It is entirely possible that our current challenges will generate new innovation, philosophies, building types, and practical solutions for everyday life now too. As the Bauhaus architect Hannes Mayer wrote in his 1926 essay, 'The New World', "Each age demands its own form". The Covid age was no different and as expected, demanded its own form.
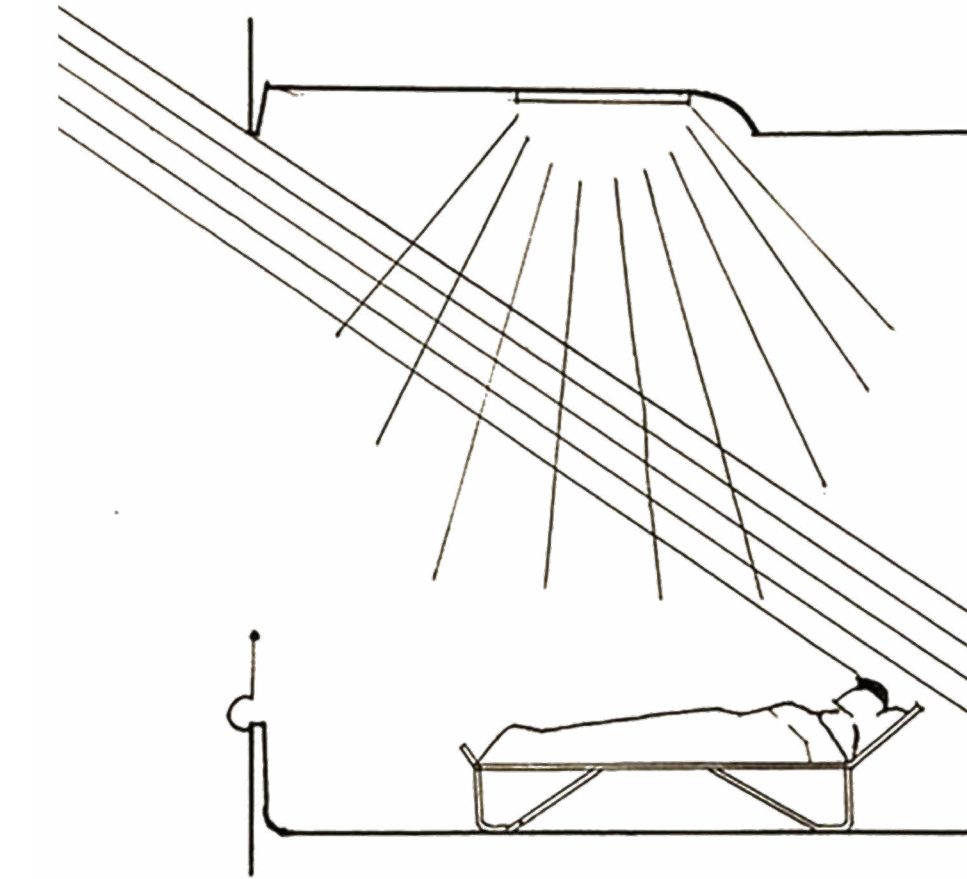
[Fig. 2]

[Fig. 3]

Le Corbusier's design for the Villa Savoye on the outskirts of Paris embodied the aesthetics of modernism. Although he never mentioned the Spanish Flu, having lived through its devastation, which was significant in France, it undoubtedly influenced his thinking (Philcox, 2020). The Spanish Flu led to the addition of 'powder rooms' which were small bathrooms near the entrances of homes. A guest to your house could be carrying germs, so powder rooms allowed visitors to wash up before entering the home. Le Corbusier took this concept further in the Villa Savoye by placing a sink in the entrance hall, which, in the context of COVID, resonates with the practice of placing hand sanitizers at front doors, suggesting a prescient vision of the "new normal" (Chayka, 2020).

Le Corbusier also raised his buildings off the ground to avoid the germ ridden earth below (Philcox, 2021), (Chayka, 2020). In the Villa Savoye, this is elegantly done, where the living quarters of the house are raised and appear to float on protective columns. Similarly, his Unité d'habitation in Marseilles is "suspended on sturdy pilotis, it separates itself from contamination from the ground" (Philcox, 2021).

Overall, the Spanish flu pandemic and the current COVID crisis have prompted reflections on the impact of past pandemics on architectural design. The emergence of Modernism was influenced by the societal shifts and lessons learned from the flu and tuberculosis epidemics. Today, our current challenges have the potential to stimulate new innovations, philosophies, and practical solutions in architecture and design, as each age demands its own form, including the COVID age.

[Fig. 4]

In Praise of the Pandemic?

Junichiro Tanzaki, in his book 'In Praise of Shadows' explores the notion that beauty can be found in dark places, specifically referring to the significance of shadows in traditional Japanese architecture. While Tanzaki's perspectives revolves round shadows, his broader message of being able to "seek beauty in darkness" (Tanizaki, 2001) is a lesson architects could take forward in a post-Covid world.

The above title sounds like an oxymoron of sorts; how could anyone think it is reasonable to praise the pandemic? However, (Alraouf, 2020) contends that from the reactions of people and communities, there are two positions that are clear from the pandemic. To begin, the general public would agree that the pandemic was a deadly atrocity that left the world in an unprecedented state. Face masks were the leading symbol of the pandemic, and social distancing became the 'new normal.' On the other hand, he and many other architects, including Alraouf, acknowledge the pandemic has presented an opportunity opportunity, in particular for architects, to review the shortcomings of the built environment. (Tipton, 2020)

> "Designed space, internal or external, has never been tested like this before. This emergency shows architecture's great central responsibility – the potential to shape lives for the better."
> - Nathalie Weadick, director of the Irish Architecture foundation (Tipton, 2020)

In this context, the notion of "seeking beauty in darkness" takes on a metaphorical meaning. It encourages architects to find inspiration and creativity in the face of adversity, to uncover opportunities within challenges, and to reframe their approach to design. Just as shadows can enhance the beauty of traditional Japanese architecture, architects can use the lessons learned from the pandemic to shape a more thoughtful, resilient, and people-centric built environment.

Thus, while praising the pandemic may seem paradoxical, acknowledging its impact and the subsequent reflections within the architectural community have provided an impetus for positive change. The pandemic has served as a catalyst for architects to reevaluate their practices and strive for innovative solutions that address the evolving needs of society.

Throughout these lockdowns, we have found ourselves scrutinizing the environment in which we live. The pandemic has changed the way in which we occupy internal or enclosed spaces. This has been particularly scrutinized in residential dwellings. The quality standards of apartment design, the ability to be able to work from home, and the access to private and shared outdoor space were all highlighted.

The importance of open space has also been magnified, as communities have increasingly sought to spend time outdoors. The unequal distribution and accessibility of green areas have been highlighted, especially when lockdown measures limited the radius within which people could travel from their residences. In Ireland, for example, the maximum allowed radius was 2km, which restricted access to green spaces for many urban dwellers. This highlighted the significance of one's local area and the composition of its environment, whether it was green, grey, or dominated by concrete. The concept of "life between buildings" (Gehl, 2011) has gained greater importance during this time. Achieving equal availability and accessibility of public spaces will require more than just redesigning existing areas.

It is unclear as of yet whether the built environment will permanently change or return to a state of pre pandemic life. The pandemic has prompted society to reconsider how we approach a better-equipped built environment (Otchere-Darko, 2021). However, as history has shown, cities often change in times of crises. The Chinese word for 'crisis' is formed by using the characters of danger and opportunity (Philcox, 2020). In times of crisis, past civilizations have offered radical and futuristic solutions to a prominent problem. Nevertheless, communities survive and become more resilient. (Frumkin, 2021)

> "When compared to several historical experiences in managing pandemic situations, this COVID-19 pandemic situation can be used as a development opportunity to enjoy a much higher take-off with a new set of attitudes in the process of development."
> (Karunathilake, 2021).
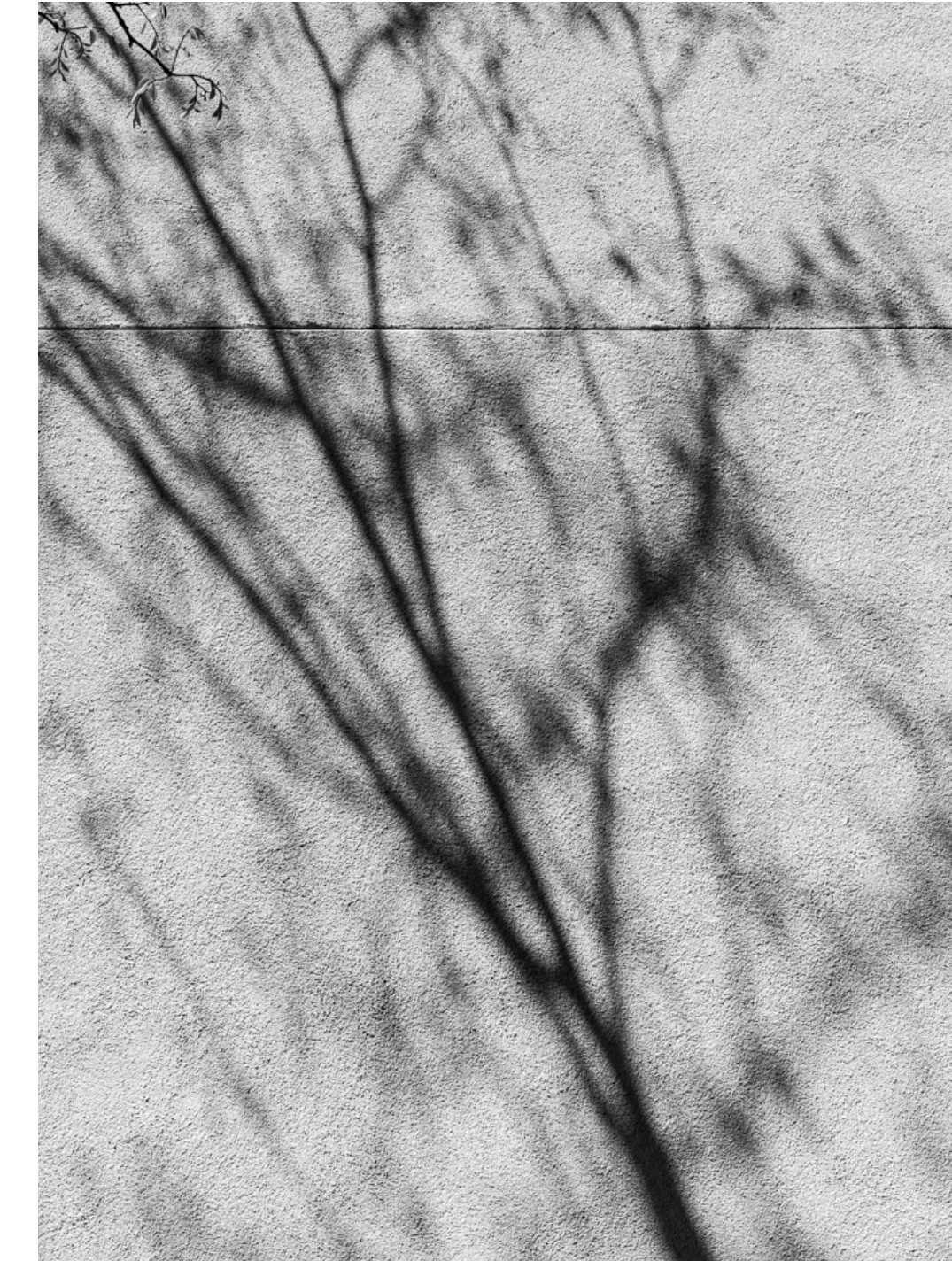
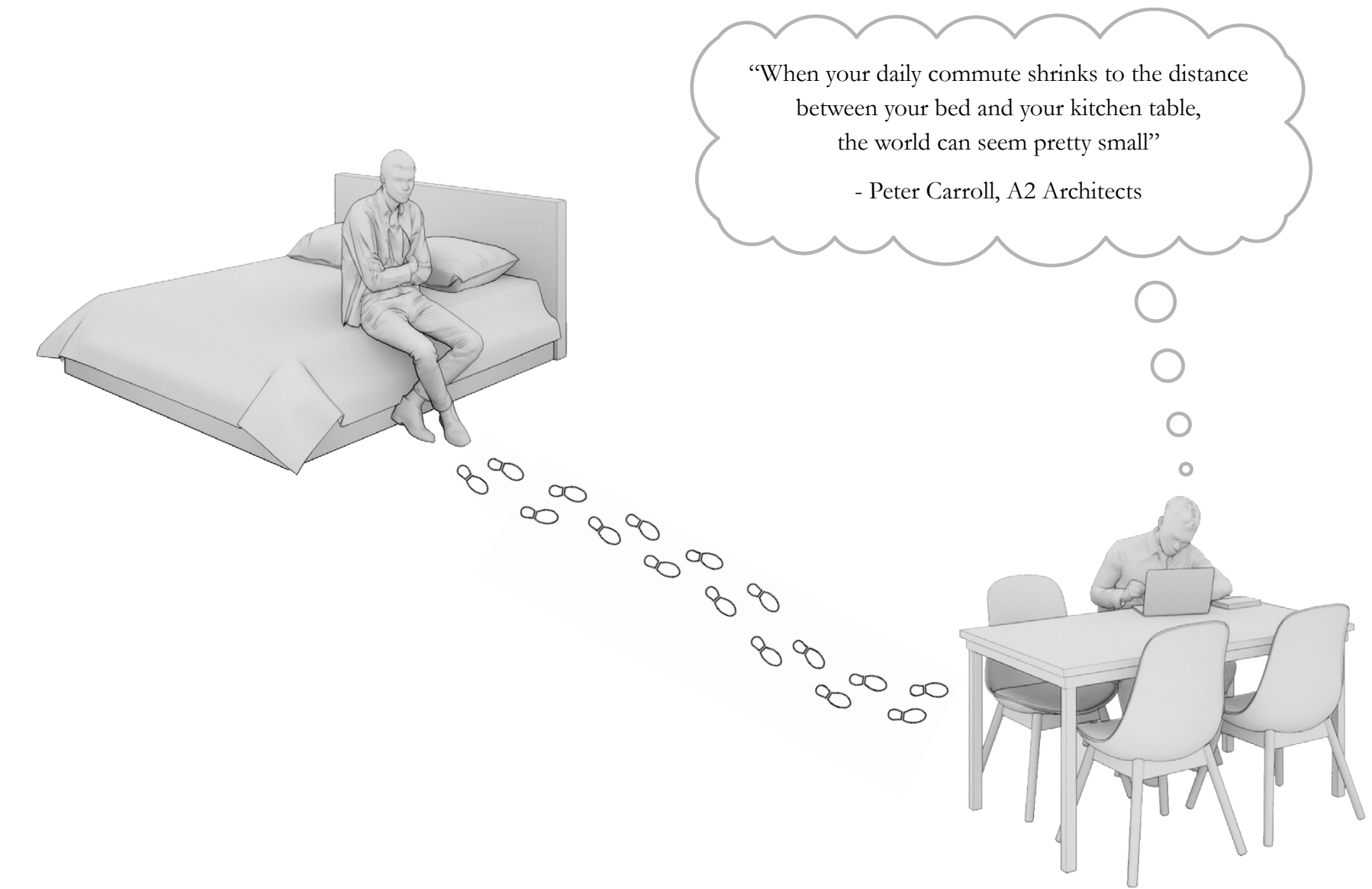[Fig. 5]

Loneliness and Isolation

With cities densifying around the world, we see housing prices go up, which causes more and more people to move into smaller spaces. Balancing the need for individuality and the need for sociability becomes more difficult. Since the COVID epidemic, we've seen the results of people being isolated with minimal social interactions. As isolation, quarantine, and confinement continued, the lack of physical interaction demonstrated how critical social infrastructure is to our well-being (Chang, 2020).

Even prior to the pandemic, there were concerns about the negative impact of indoor living, lack of social interaction, and sedentary lifestyles on mental health. "Depression and loneliness have become normal phenomena. There is an epidemic of poor health and depression from people living their lives indoors, sitting inside mechanically ventilated buildings with artificial light, transporting themselves everywhere in cars" (Sim, 2019).

The COVID-19 pandemic has crumpled our social norms of interaction. If the lockdowns had any devastating effect on people, it was that of loneliness. Loneliness, defined as a sense of isolation despite desiring social connections, became a significant challenge for many individuals (Cherry, 2022). A level of fear was introduced when individuals become aware that the primary source of the virus was within the community, leading to fear and the belief that the only means of prevention was to avoid contact with others. A term coined "social distancing" was developed, but it could more accurately be described as "physical distancing" (Alraouf, 2020).

David Sim describes the idea of neighbourhood as a state of being in a relationship, the relationship of people to place and the relationship of people to people (Sim, 2019). Public spaces in neighbourhoods that promote social interaction have been shown to promote health and psychological benefits. Since the pandemic, with people spending more time outdoors in their neighbourhoods, the use of spaces and its social requirements have changed. We need consider the role of streets as active and social spaces (Mehta, 2020). An interest in design must be accompanied by an understanding of its importance to society. Furthermore, the importance around residential neighbourhoods and their role in facilitating healthy, social, and safe societies. The pandemic has emphasized our dependence on society and the importance of social connections for overall well-being.

"I may indicate briefly what to me constitutes the essence of the crisis in our time. It concerns the relationship of the individual to society. The individual has become more conscious than ever of his dependence upon society." – Albert Einstein, 1949
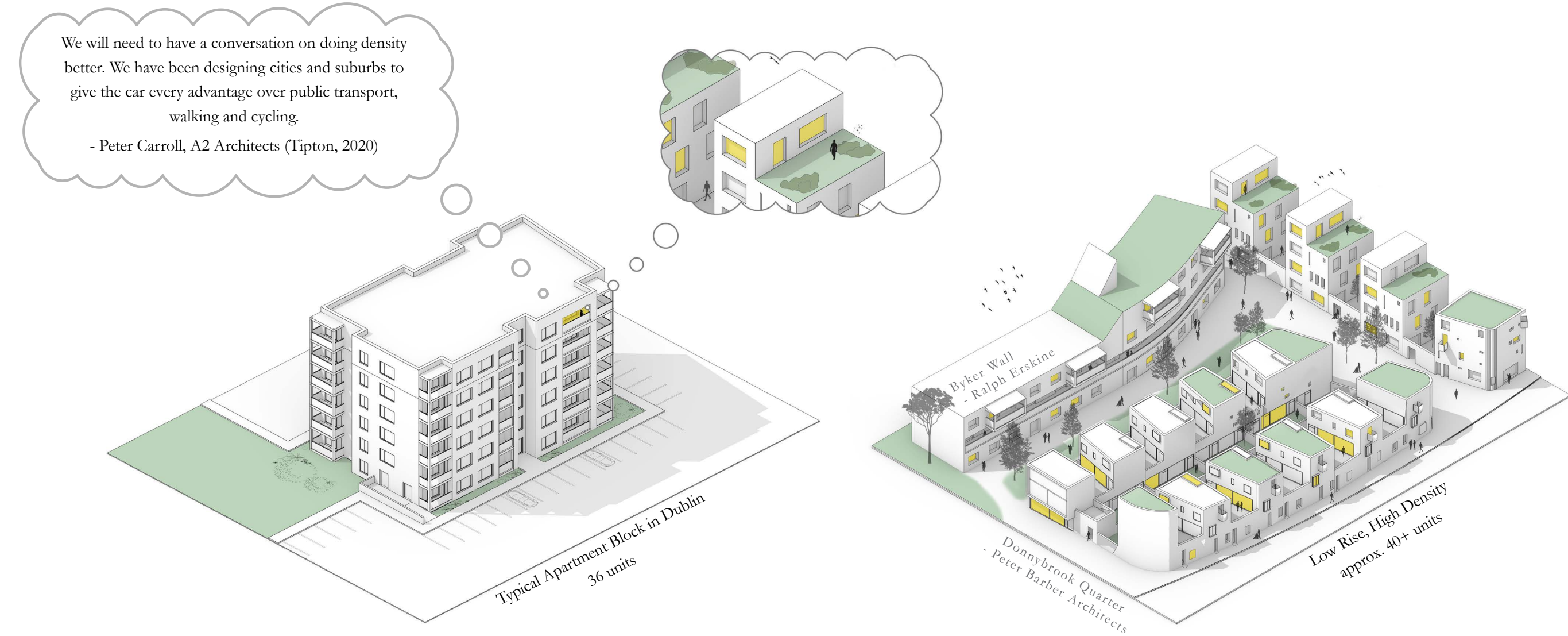

"When your daily commute shrinks to the distance between your bed and your kitchen table, the world can seem pretty small"

- Peter Carroll, A2 Architects

Building Density – Living Locally

During the COVID-19 pandemic, We saw an emphasis on the advantages of individual housing over collective housing. The residents of houses had unrestricted and exclusive use of private space. People living in individual households usually had a higher level of comfort and were more able to maintain social distance. On the other hand, residents of apartments struggled to maintain the rules. Life was more constrained in smaller apartments with little or no benefit space from the form of a balcony (Poon, 2020). The difference in living conditions sparked the debate about and the return to building and living in houses on streets (Adams, 2020). However, the construction of multistorey residential apartments will undoubtedly continue.
For those living in small apartments, people found creative ways to utilize limited spaces. Kitchens became more than just places for cooking, and bedrooms served multiple purposes beyond sleeping (Honey-Roses, 2021).

Authors have been offering their opinions on the idea of density post-COVID. The issues of high-rise apartments seemed to be highlighted during the pandemic. "No real benefit comes from being stacked on top of one another just because its more spatially efficient. True urban quality comes from accommodating density and diversity of building types and uses in the same place" (Sim, 2019). (Jabareen, 2021) agrees with this and believes the problem isn't with high density itself, but with the unjust availability of its contents. To create neighborhoods where living locally is feasible, it is necessary to integrate various functions such as living, working or remote-working, childcare, entertainment, and recreation within walking distance of dwellings. The urban fabric, including density, distribution of buildings, heights, and the provision of open spaces, plays a crucial role in shaping how people use and interact with the environment (Hanzl, 2021).

Jane Jacobs, a renowned figure in the contemporary urban movement, advocated for increasing building density and bringing people back close to street fronts with human scale buildings. She also sneered at the idea of large empty city parks, questioning their purpose and highlighting the potential safety concerns associated with deserted spaces. "More Open Space for what? For muggings? For bleak vacuums between buildings?" (Jacobs, 1962) She also claimed, "This is something that everyone knows: A well-used city street is apt to be a safe street. A deserted city street is apt to be unsafe."


We will need to have a conversation on doing density better. We have been designing cities and suburbs to give the car every advantage over public transport, walking and cycling.
- Peter Carroll, A2 Architects (Tipton, 2020)

Typical Apartment Block in Dublin
36 units

Byker Wall
Ralph Erskine

Dunnybrook Quarter
- Peter Barber Architects

Low Rise High Density
approx. 40+ units

The Human Dimension and Mobility

Modernist planned cities, with their segregated functions, create a significant need for transportation to access different parts of the city. This stems from the CIAM Charter of City Planning in 1933, which essentially advised that basic city functions, such as residential, workplaces, recreation and traffic should be kept separate. Urban areas zoned like this is inconvenient for everyday life and makes for a social challenge as people don't meet in a natural way (Sim, 2019).

Cities nowadays, whose designers advocate less reliance on the public car and place more importance on climate action, advocate for the 15-minute city model. The objective is that all amenities are at an accessible 15-minute walk. Paris is one of the many cities adopting this model with their 'Paris En Commun'. It strives for a carbon-free economy and a healthy life for its citizens by prioritizing the pedestrianisation of large parts of the city (Pozoukidou & Chatziyiannaki, 2021). This model puts the home at the centre of spatial relationships. Walkability makes for sociability. Communities that foster this model will become more walkable and safer (Chamberlain, 2022). Anthropologically, walking isn't only a human movement; it also has intrinsic links to culture and social practices that can promote physical and mental health (Elgheznawy & Eltarabily, 2020).

The decentralization of work from cities to communities will decrease the dependence on private cars and bring about positive social, economic, and environmental transformations. As remote working gains prominence in the post-COVID era, there is a growing demand for residential areas to provide suitable spaces for remote work. This change allows cities to evolve into vibrant centers of culture and entertainment, with a reduced emphasis on work and education.. "The dream of a peaceful suburban life, with the promise of a quiet, green, and safe environment, has the Achilles heel of requiring a car" (Sim, 2019). Through reimagining urban spaces and prioritizing walkability, cities can become more livable, sustainable, and socially connected, enabling people to engage with their surroundings and fostering a sense of community.

From a car dependent, spread out community...
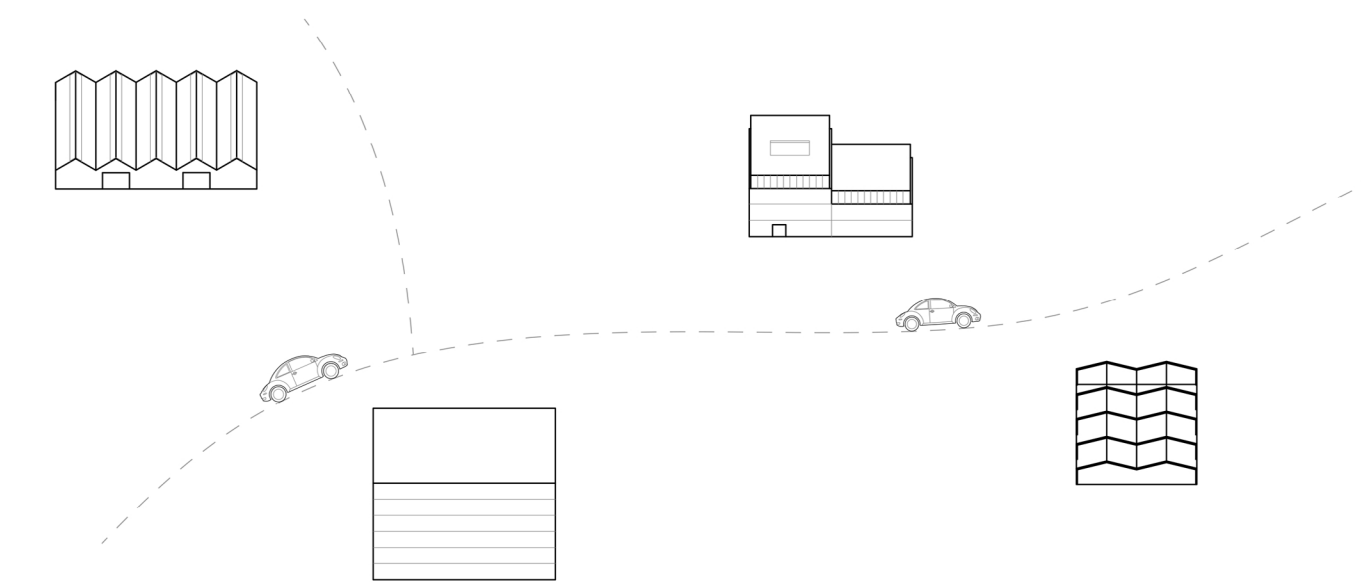
To a car free, walkable community
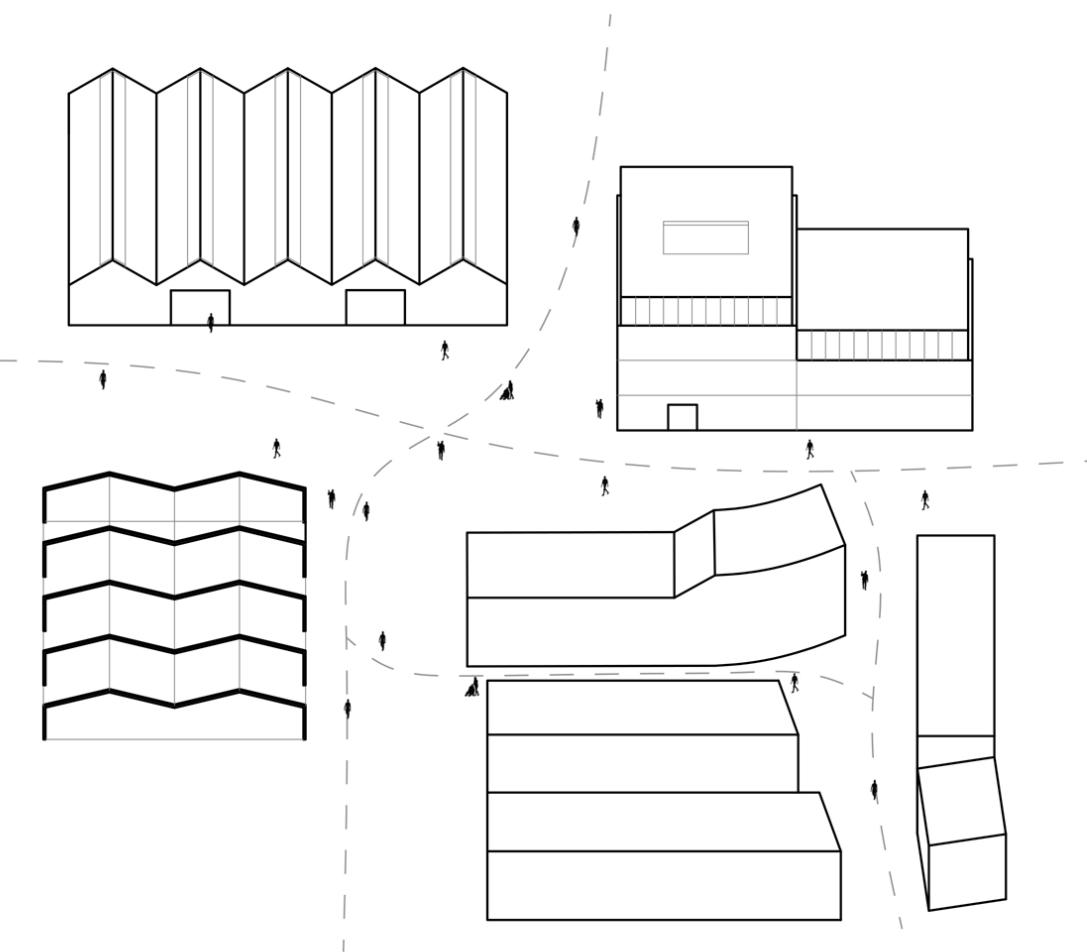
Byker Redevelopment 1969-81– Ralph Erskine

Ralph Erskine's projects were distinguished by their emphasis on people and living locally. Departing from the Modernist movement of monofunctional buildings surrounded by unplanned space, Erskine adopted a people-oriented architecture. None of this is more prominent than his redevelopment of Byker in Newcastle-on-Tyne, which embraced the political slogan "Byker for the people" (Egelius, 1990). The goal of the project was to create a community with positive conditions for dwelling, working, shopping, recreation, and education all near the home. They worked closely with the residents to come up with traffic solutions, green areas, and playgrounds. To foster a direct relationship and gain the trust of the community, the architectural team even established an office within the neighborhood, with many team members choosing to live in Byker themselves to better understand the community's way of life (Abrams, 2003). An important aspect of their approach was to consider the preferences and needs of people of all ages (Egelius, 1990).

The original Byker was characterised by a tight grid of houses orientated in straight lines downhill to the River Tyne, along which cold winds blew. The new development was realigned with the contours creating pockets of protected microclimates for the pedestrian, and relocating vehicular streets to the periphery. (Abrams, 2003) This approach was akin to an early version of the 15-minute city concept that has gained traction in the post-COVID era. According to Egelius (1990) "Byker has never seriously been vandalised" and considers that its possibly due to the range of smaller courtyards that are easier to monitor and maintain a sense of community oversight.

[Fig. 6]

[Fig. 7]
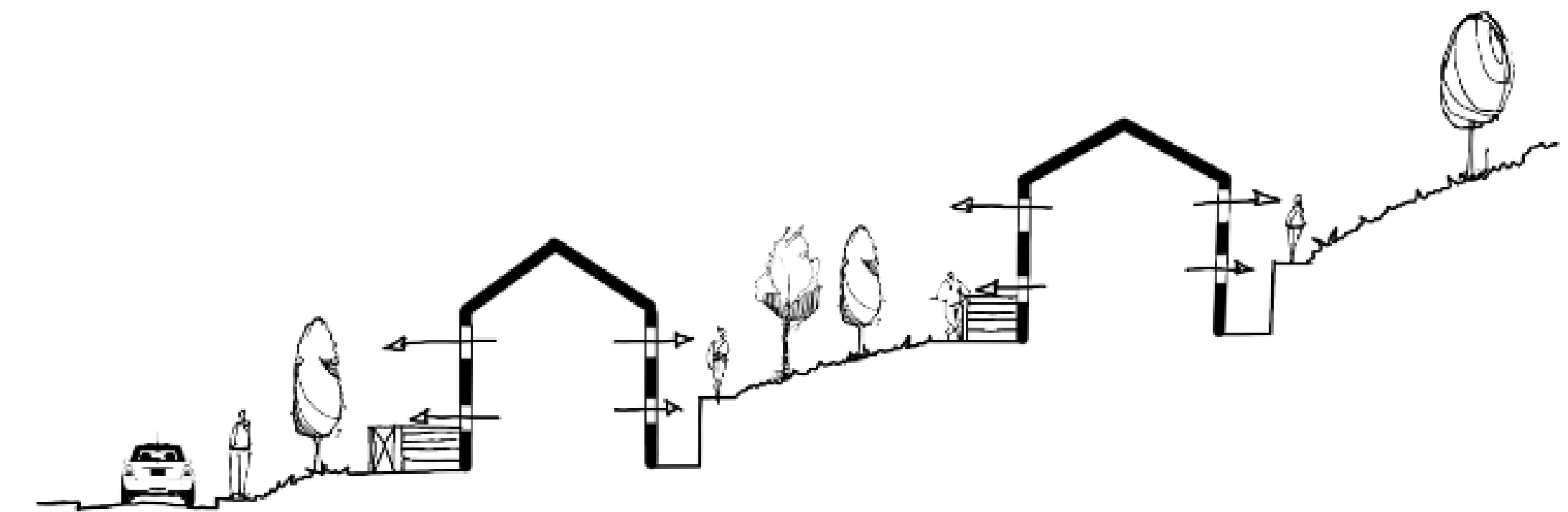
Domestic Space

"The idea of home was majorly affected by the pandemic" (Topale, 2021). At the level of the dwellings, domestic space was tested in a new way. People became very familiar with their homes as they became a place for work, education, and recreation (Alraouf, 2020). The flaws of domestic space started to become apparent: the lack of daylight in a room, the dirty floor in another, and the lack of a space to retreat to in silence (Chayka, 2020). The importance of the 'home' became more important than ever.

The notion of the home as a workplace has sparked a debate about the functionality of home design. According to (Stathaki, 2022) two prominent trends are now emerging: a rejection of open-plan living spaces and the integration of biophilic design concepts in housing to promote both human and environmental well-being.

"The current scenario we find ourselves in also argues against open-plan apartment design. This model was always unacceptable without some form of modulation between the different functions, but that's becoming even clearer now"
- Jennifer O'Donnell and Jonathan Janssens, Plattenbaustudio (Tipton, 2020)

The importance of flexibility in domestic spaces has also come to the forefront. Spaces that can be transformed and enclosed for privacy have become increasingly valuable. Homes have evolved into spaces that accommodate a wide range of activities, necessitating easy adaptability and versatility (Sebastian & Ravishankar, 2022). Modular construction starts to offer part of a solution, it offers not only speed of construction but also customisation. Flexible components like movable walls can help adapt a space to its specific needs (Lubell, 2020).). The "new normal" of working from home and spending extensive time in domestic settings may require greater freedom in design. Usually walls are static; (Chayka, 2020) describes how if walls were moveable, "imagine how much fun you would have". Moreover, an environmentally concsious approach in a post-pandemic housing concept is key; the weaving together of people and nature has a major effect on well-being – for both people and planet (Stathaki, 2022).

During quarantine, the architectural practice SO-IL had been designing a residential project in Brooklyn. They designed their apartment plans "to reflect pandemic anxiety: the kitchen, the dining room, and the living room are all separable instead of flowing together; the bedrooms are spaced apart, for better acoustic buffering as workspaces, and include more square footage for desks; and the architects are aiming for thirty percent exterior space, with varied outdoor options" (Chayka, 2020).

Moving forward, post-pandemic housing and communities to adopt a more diverse range of uses. With the growing trend of remote work, individuals will increasingly require the option to access locally available co-working spaces, regardless of whether their current living conditions can accommodate it. The need to escape the limitations of one's own living space remains a significant factor (Stathaki, 2022).

Therefore, future housing and community designs should prioritize the creation of accessible co-working spaces that provide individuals with alternative work environments outside their own homes. By offering these opportunities, communities can support individuals in finding a balance between remote work and the need for social interaction and a change of scenery.
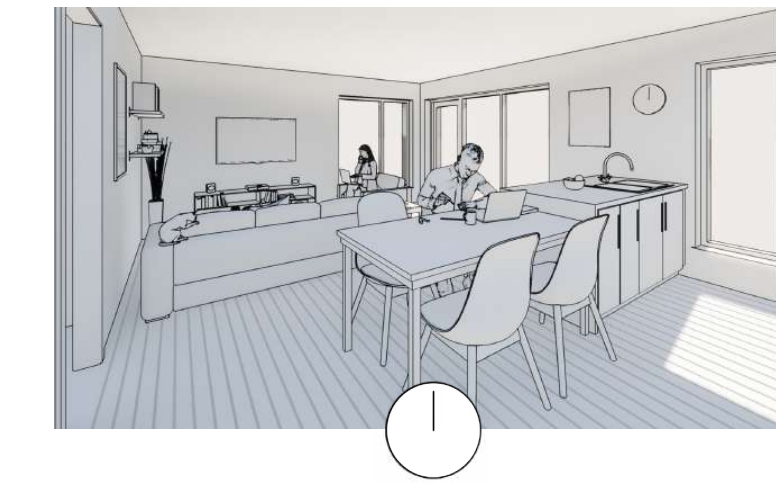
Living In Lockdown
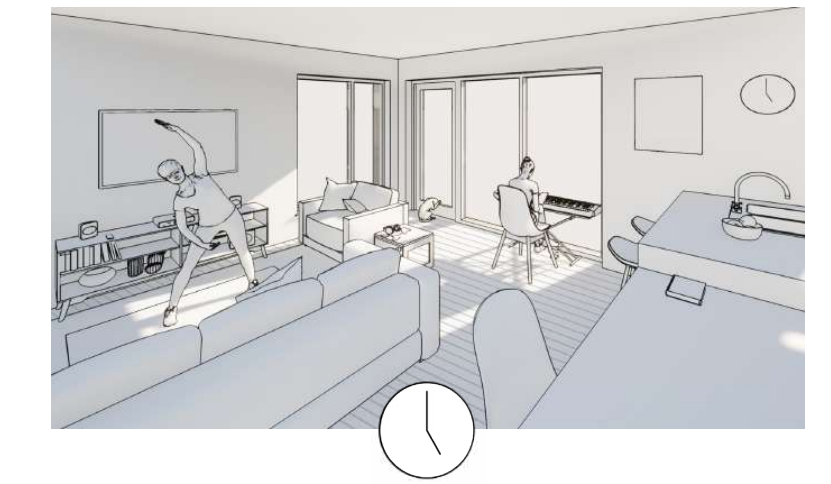Remote Working in a Typical Apartment
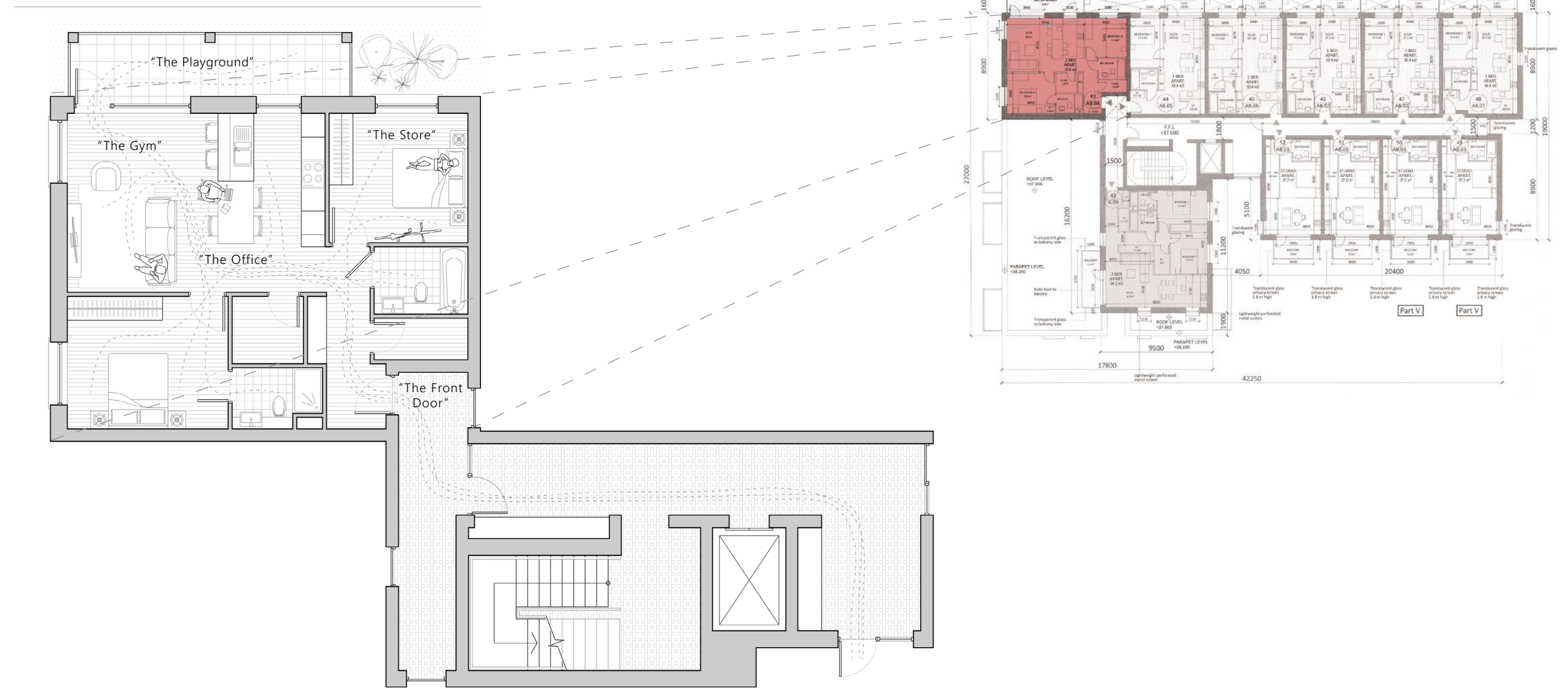
LACK OF SPACE TO **FOCUS**...
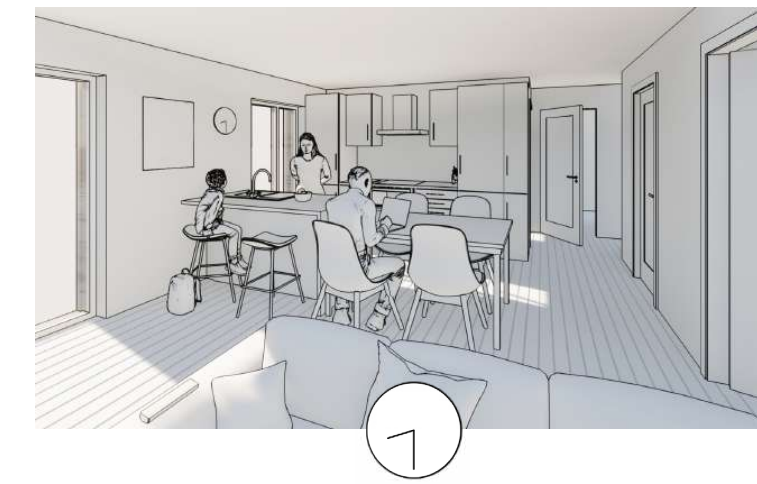
LACK OF SPACE TO **COLLABORATE**...

LACK OF SPACE TO **EXHIBIT**...

Office Space

With a large part of the population working from home since the start of COVID, this style of working seems to be here for the long run. A significant portion of the workforce will continue to work remotely, even as some companies transition back to physical offices (Sebastian & Ravishankar, 2022). The workplace will change, and companies will need to try hard to make offices attractive again. "The need for a formal workplace will remain – just transform" (Stathaki, 2022). The open-plan office, long criticized for its shortcomings, is expected to be phased out in the post-pandemic era (Sebastian & Ravishankar, 2022).

The shift towards remote work, with more people either working from home or working in co-working buildings closer to the neighbourhoods, means that many offices in larger buildings will either be unused or have lower occupancy rates. As a result, these spaces may be reconfigured into smaller, more functional offices that cater to the needs of individual workers (Topale, 2021). This additional space will allow for more social spaces and natural retreats to focus, fostering meaningful collaboration and innovation among employees (Papa & Pal, 2020).

Furthermore, many architects agree that we will see the introduction of hands-free technology to create a touchless environment, such as automatic doors, touch-free faucets, hands-free light switches and temperature controls, and voice-activated elevators to prioritize hygiene and reduce the spread of germs (Giacobbe, 2020).

Office Timeline
Research in Office Plans
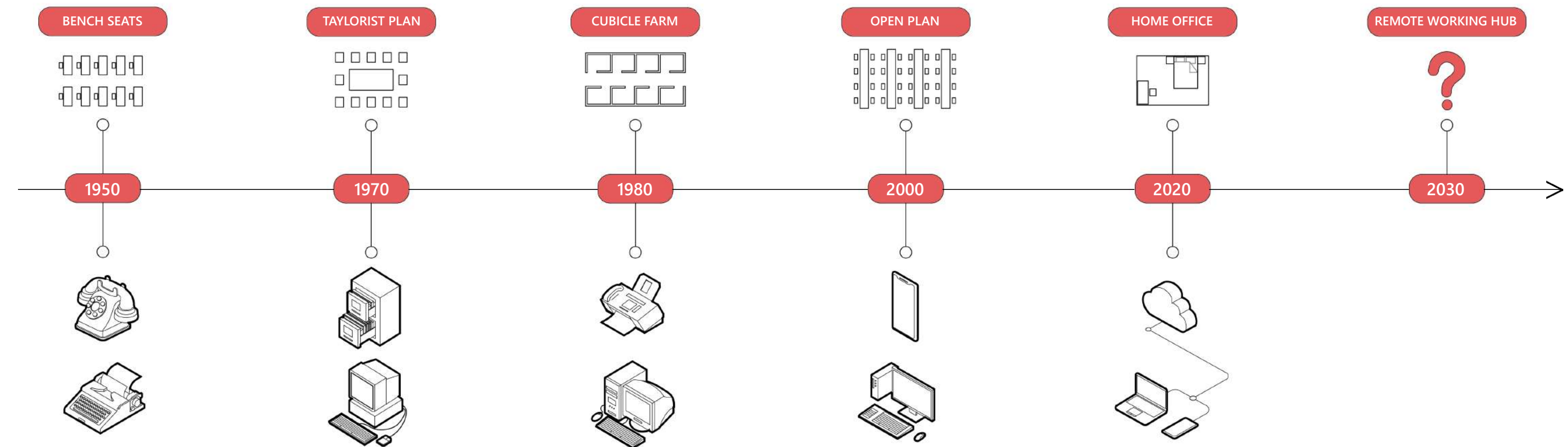
Caring Architecture

In their book, 'Critical Care: Architecture and Urbanism for a Broken Planet', Angelika Fritz and Elke Krasny use the word 'care' not in a medical sense but in a way to speak about "the planet's life-threatening condition" (Fitz & Krasny, 2019). Caring for a broken planet emphasizes not only the importance of future sustainable design, but also the importance of people's well-being. This holistic approach to design recognizes the interdependence of environmental and social factors.

> "Sustainable urban design might instead combat vectors of contagion—litter, pollution, overcrowding—by encouraging people to think of public spaces more like home so they are invested in their care. Rather than denying our fundamental social connections, design might cultivate a deeper sense of global belonging." (Chang, 2020).

Adaptive reuse of existing buildings is a vital strategy for achieving sustainable design in the post-pandemic era. Throughout the COVID-19 crisis, we witnessed numerous examples of how larger buildings, including stadiums and convention centers, were repurposed to meet immediate needs, such as emergency facilities and vaccination centers. This rapid and practical approach demonstrated the potential of adaptive reuse in leveraging the capabilities of existing structures to address evolving challenges (Sebastian & Ravishankar, 2022).

For existing infrastructure to last longer and perform better, it is crucial to encourage retrofitting and adaptive reuse of urban building stock. Repurposing old structures rather than dismantling them and building new ones lessens waste, conserves resources, and lessens the environmental effect of new construction. Additionally, it protects the cultural and historical significance that is ingrained in these structures, adding to the feeling of identity and character of communities.

In the post-pandemic era, the lessons learned from adapting buildings during COVID-19 should be carried forward. By embracing adaptive reuse and retrofitting, we can create sustainable, resilient, and socially conscious built environments. These initiatives prioritize the wellbeing and connection of people within their communities in addition to promoting a more environmentally responsible approach. The adaptive reuse of existing buildings is a tangible manifestation of caring for the planet and nurturing a deeper sense of global responsibility.

Thesis Proposal

This thesis explores the emerging reality of remote working in a post-pandemic world. The COVID-19 pandemic has brought about significant changes in the way we work and interact with each other. Remote work has transitioned from a temporary solution to a permanent practice embraced by many individuals and organizations. As a result, the need for purpose-built spaces that can facilitate remote working in residential areas has become more pressing.
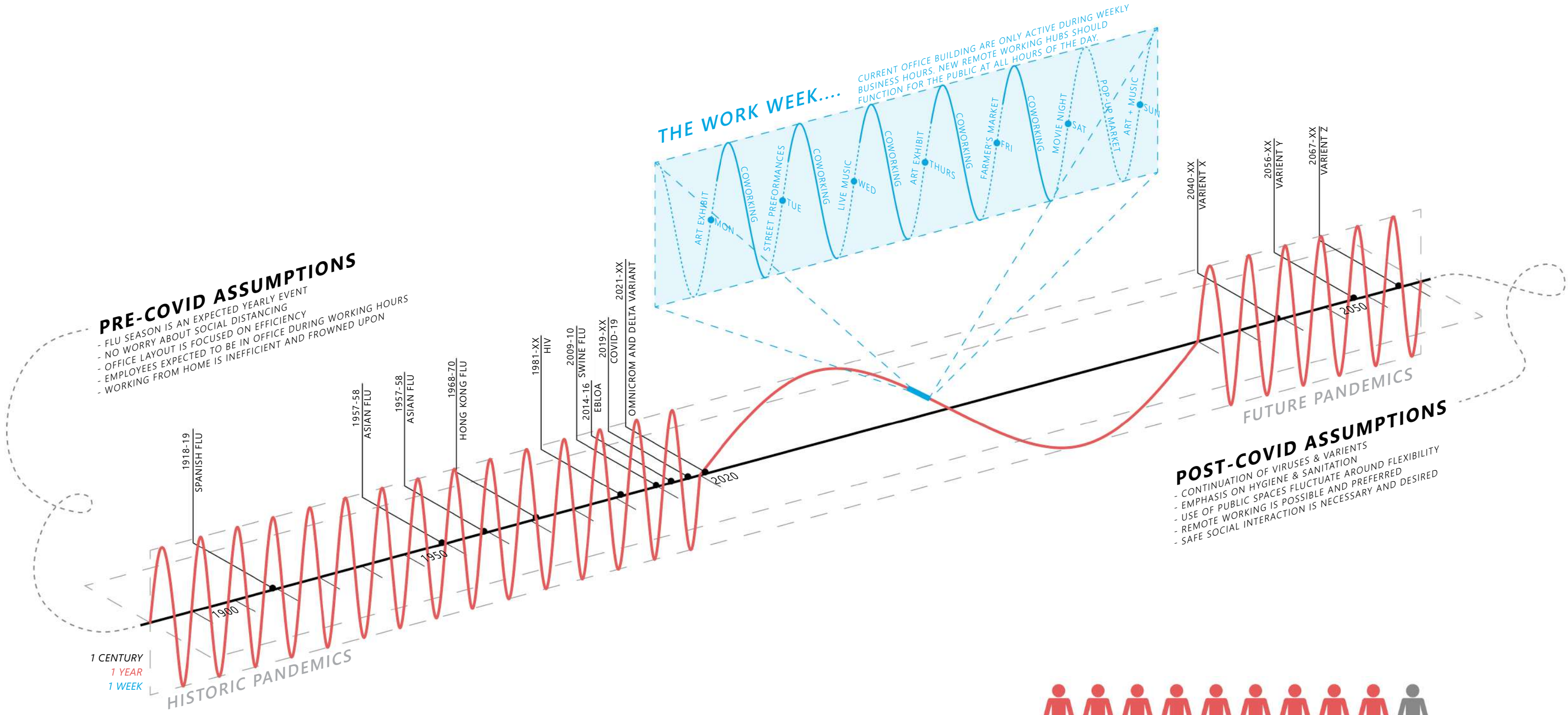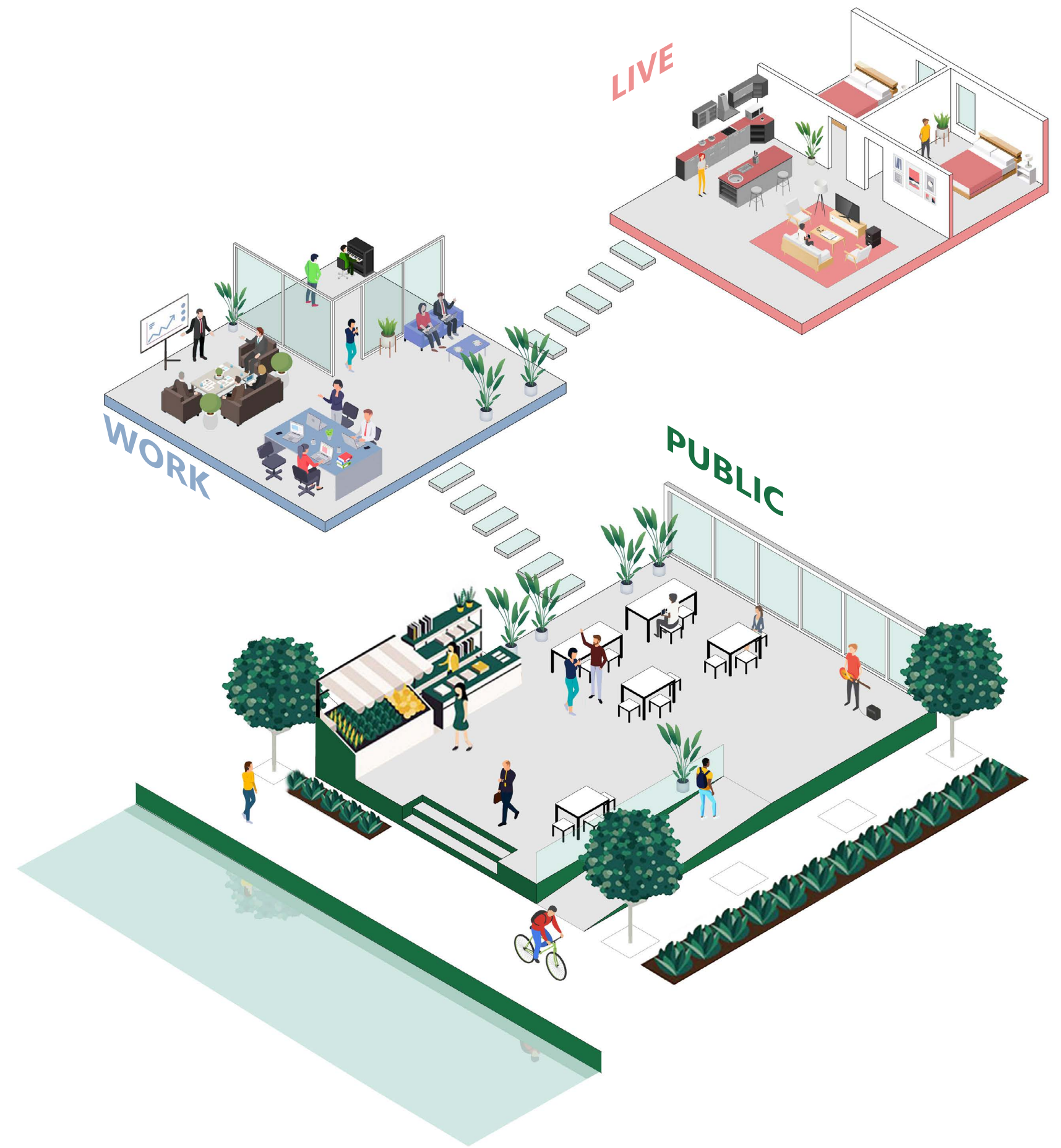
This thesis recognizes the limitations of existing housing structures and apartments in accommodating the needs of a home office. It acknowledges that simply extending houses on a terrace or within existing residential buildings may not be a practical or feasible solution. Instead, the thesis proposes an alternative approach by focusing on purpose-built spaces outside the home that are specifically designed to facilitate remote work within residential areas. This is important to foster sociability again within communities, but also to offer people the chance to work remotely while also giving them the ability to retreat from the four walls of their home.

By showcasing the benefits of purpose-built remote working spaces, the project highlights the potential advantages of having dedicated areas that cater to the diverse needs of modern work. These purpose-built spaces can be designed and equipped to enhance focus, productivity, comfort, collaboration, and connectivity, enabling individuals to effectively carry out their work responsibilities from home.

In essence, the thesis emphasizes the importance of adapting our built environment to the evolving work landscape post-COVID. It recognizes the need for innovative solutions that address the specific requirements of remote work and promote a harmonious integration of work within residential areas. By exploring remote working spaces, the thesis contributes to the ongoing dialogue surrounding the future of work and the design of inclusive and functional residential environments in the post-pandemic era.

[Fig. 8]

LIVE

WORK

PUBLIC

THE WORK WEEK....

CURRENT OFFICE BUILDING ARE ONLY ACTIVE DURING WEEKLY BUSINESS HOURS. NEW REMOTE WORKING HUBS SHOULD FUNCTION FOR THE PUBLIC AT ALL HOURS OF THE DAY.

ART EXHIBIT
FIRST PERFORMANCE
LIVE MUSIC
ART THURS
FARMERS MARKET
MOVIE NIGHT
KARAOKE
LIVE MUSIC

PRE-COVID ASSUMPTIONS
- FLU SEASON IS AN EXPECTED YEARLY EVENT
- NO WORRY ABOUT SOCIAL DISTANCING
- OFFICE LAYOUT IS FOCUSED ON EFFICIENCY
- EMPLOYEES EXPECTED TO BE IN OFFICE DURING WORKING HOURS
- WORKING FROM HOME IS INEFFICIENT AND FROWNED UPON

1918-19 SPANISH FLU
1957-58 ASIAN FLU
1957-58 ASIAN FLU
1968-70 HONG KONG FLU
1981-XX HIV
2009-10 SWINE FLU
2014-16 EBLOA
2019-XX COVID-19
2021-XX OMNICRON AND DELTA VARIANT

2040-XX VARIANT X
2056-XX VARIANT Y
2067-XX VARIANT Z

FUTURE PANDEMICS

POST-COVID ASSUMPTIONS
- CONTINUATION OF VIRUSES & VARIENTS
- EMPHASIS ON HYGIENE & SANITATION
- USE OF PUBLIC SPACES FLUCTUATE AROUND FLEXIBILITY
- REMOTE WORKING IS POSSIBLE AND PREFERRED
- SAFE SOCIAL INTERACTION IS NECESSARY AND DESIRED

1 CENTURY
1 YEAR
1 WEEK

HISTORIC PANDEMICS

88% of people in employment would rather work remotely in the future

The Site

The Royal Canal's significance and appeal during the COVID-19 lockdown as a vibrant and accessible space is interesting. While parks and other public areas were restricted, the Canal remained open and served as a valuable resource for the local community. Its popularity and continued use despite the limitations underscore its importance as a public space.

During challenging times like the pandemic, access to outdoor areas becomes even more crucial for physical and mental well-being. The Royal Canal provided a haven for individuals to engage in outdoor activities, exercise, and find solace in nature while adhering to social distancing guidelines.

Considering the Canal's prominence and the community's attachment to it, the rehabilitation and repurposing of the Silos along the Royal Canal present a unique opportunity to preserve its heritage value and integrate it into the surrounding environment. The existing proposals to demolish the site and construct apartment blocks have been met with objections from the local community, highlighting the attachment and value placed on the industrial heritage represented by the Silos.

In this context, the proposal to repurpose the Silos as a remote working hub aligns with the growing trend of remote work and the need for purpose-built spaces outside of traditional office settings. By adaptively reusing the Silos into a dedicated remote working space, it not only preserves the historical significance of the structure but also offers a valuable resource for the local community, with the surrounding context being primarily residential buildings.

The Royal Canal's significance and appeal during the COVID-19 lockdown as a vibrant and The design concept focuses on enhancing the monumentality of the Silos, positioning it as a prominent landmark along the canal which has been abandoned for a prolonged period and stands in stark contrast to the bustling construction activity in the area. This approach not only highlights the unique features of the Silos but also creates a distinct identity for the remote working hub. The adjacency to the proposed market further strengthens the site's appeal, as it establishes a complementary relationship between work and leisure activities.

By repurposing the Silos as a remote working hub, the project capitalizes on the existing infrastructure while revitalizing the site and providing a valuable resource for the community. It creates a dynamic and functional space where individuals can work remotely, fostering focus, collaboration, and exhibition. Additionally, the integration of the Silos into the Royal Canal Greenway contributes to the overall enhancement of the area, offering a unique blend of natural and industrial heritage elements.

Overall, the proposal to repurpose the Silos as a remote working hub not only acknowledges the local community's attachment to its industrial heritage but also addresses the needs of the changing work landscape. By creating a purpose-built space that combines historical significance with modern functionality, the project aims to transform the Silos into a vibrant and engaging hub that contributes to the well-being and vitality of the local area.
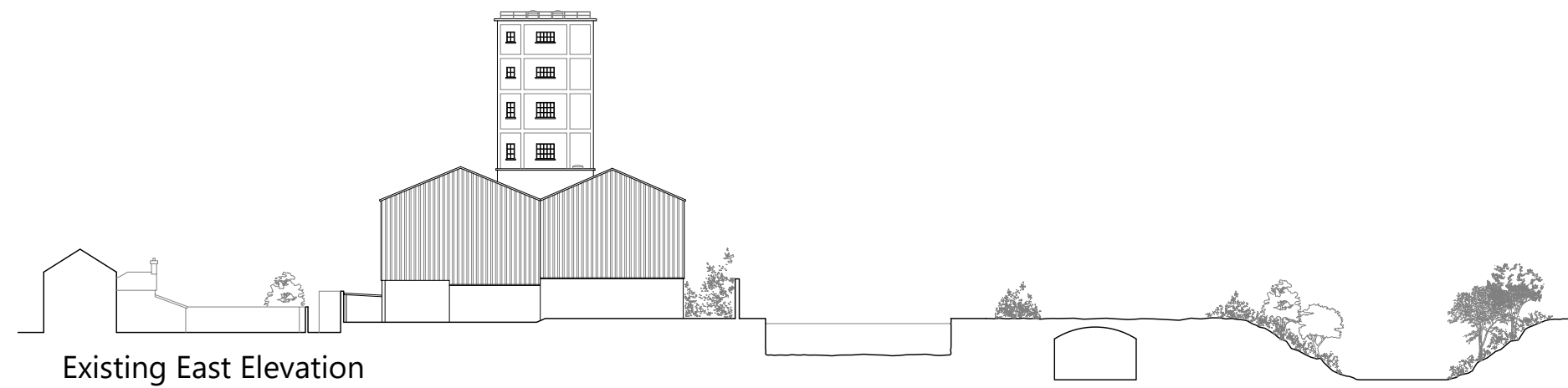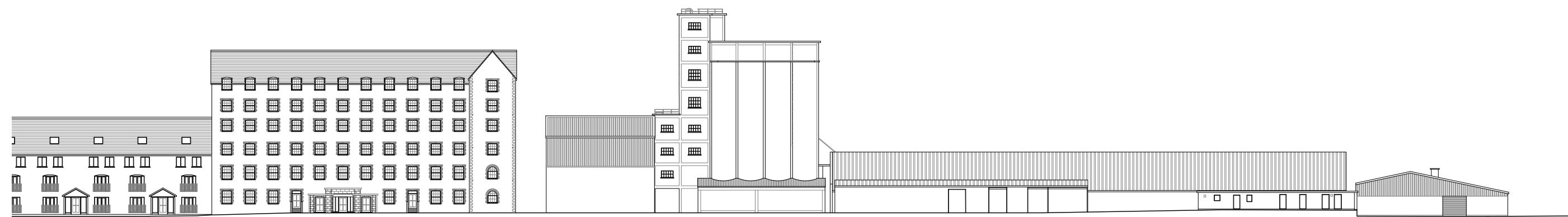
Site Location

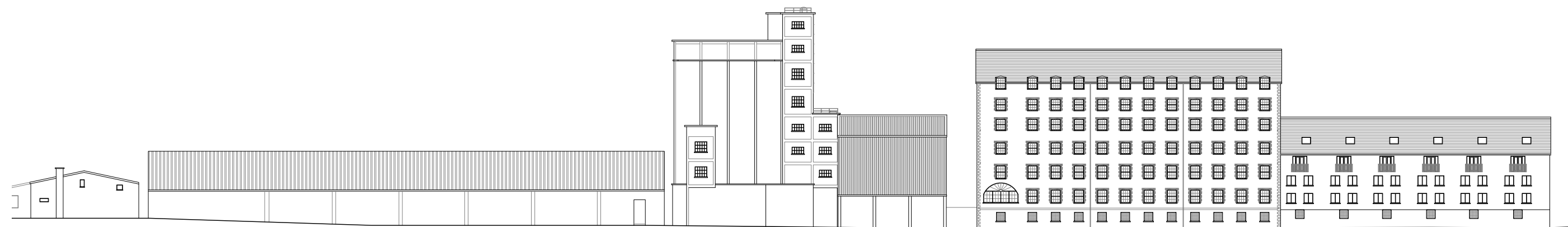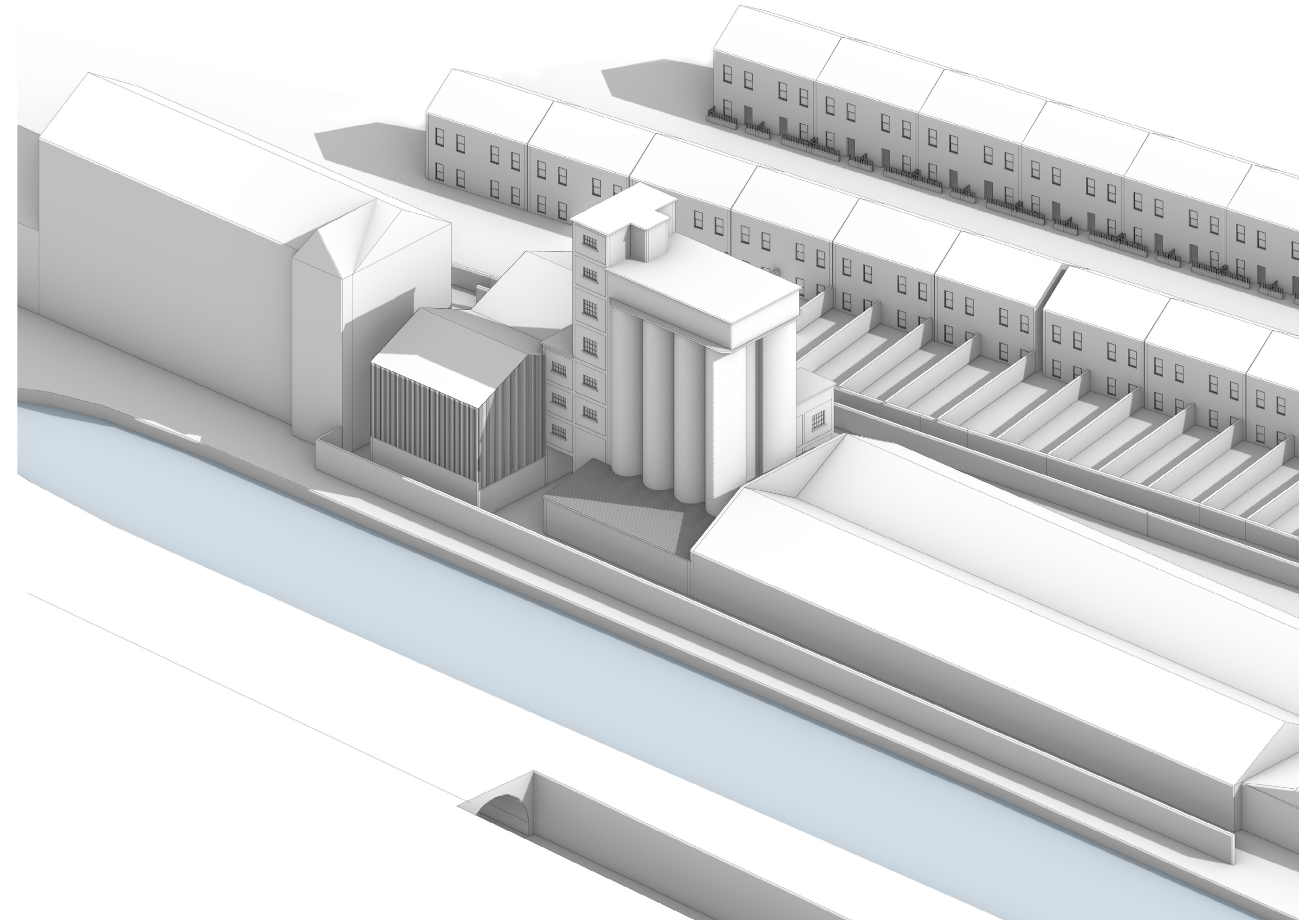Predominantly residential buildings in the surrounding context
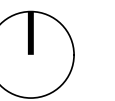
Existing East Elevation

Existing North Elevation

Existing South Elevation

Existing Axonometric

Existing Site Images

[Fig. 9]   [Fig. 10]

Response to the Site

The site strategy for the Silos project focused on several key aspects that aimed to transform the area along the royal canal into a more pedestrian-friendly and inclusive space while preserving its industrial heritage and image.
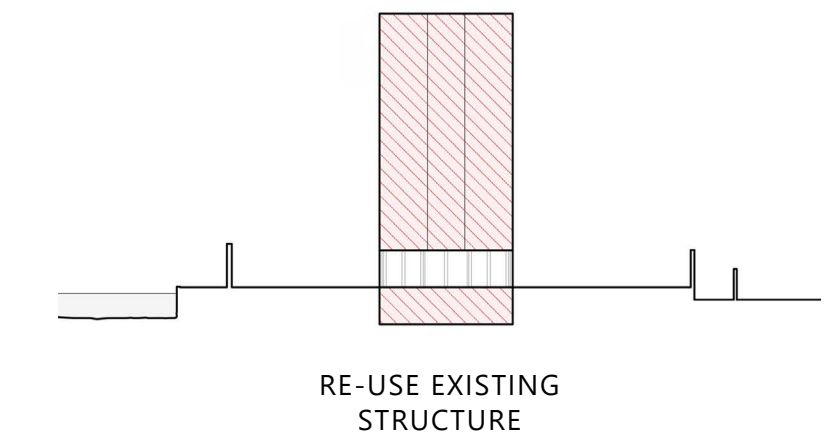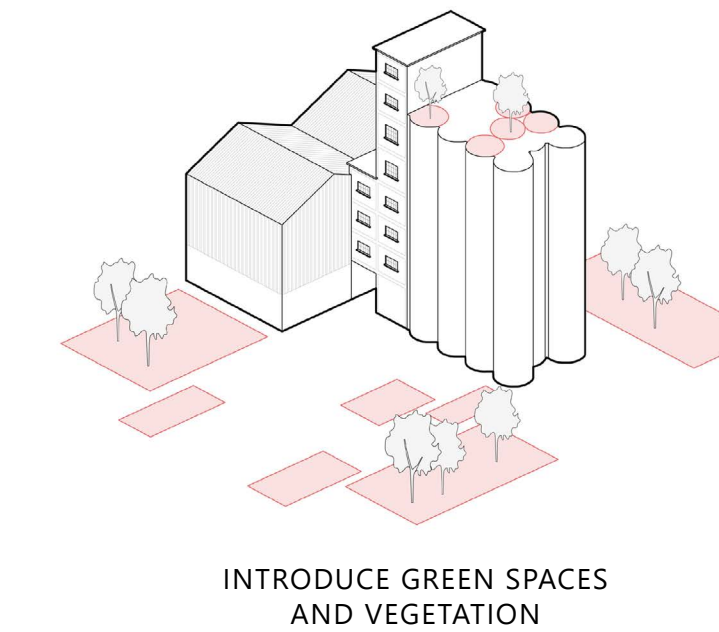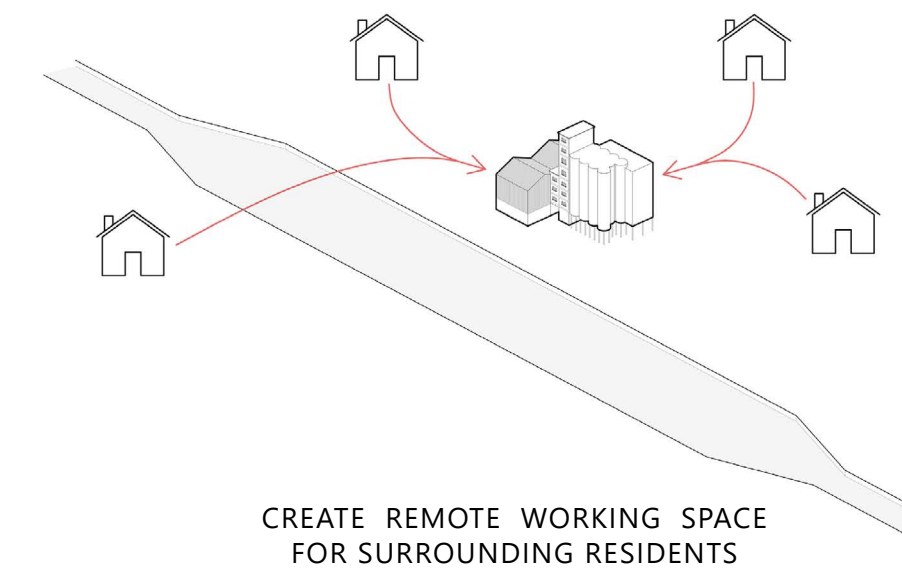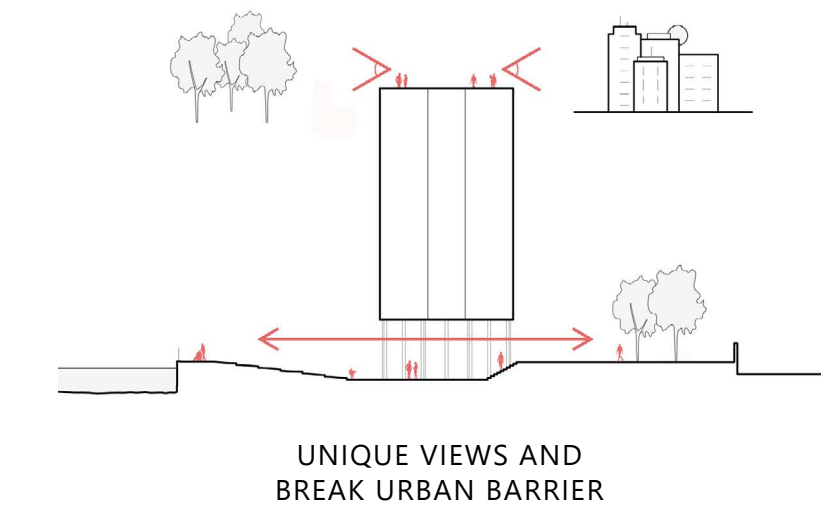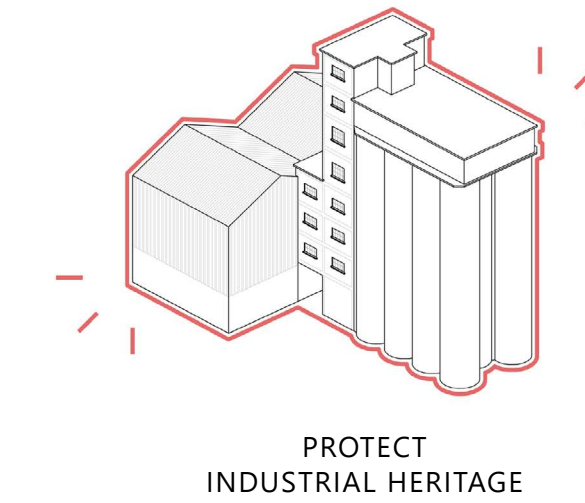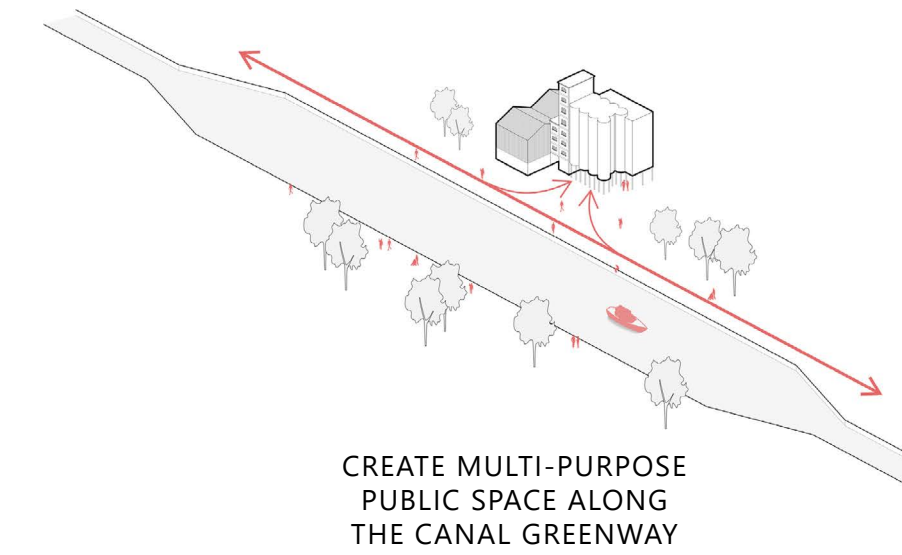
One important objective was to break down the urban barrier created by the Silos and promote pedestrian connectivity. By making the site permeable, it allows for seamless integration with the surrounding greenway, enabling people to easily access and enjoy the public space in conjunction with the adjacent markets. This approach enhances the overall accessibility and encourages interaction between the Silos, the market, and the community.
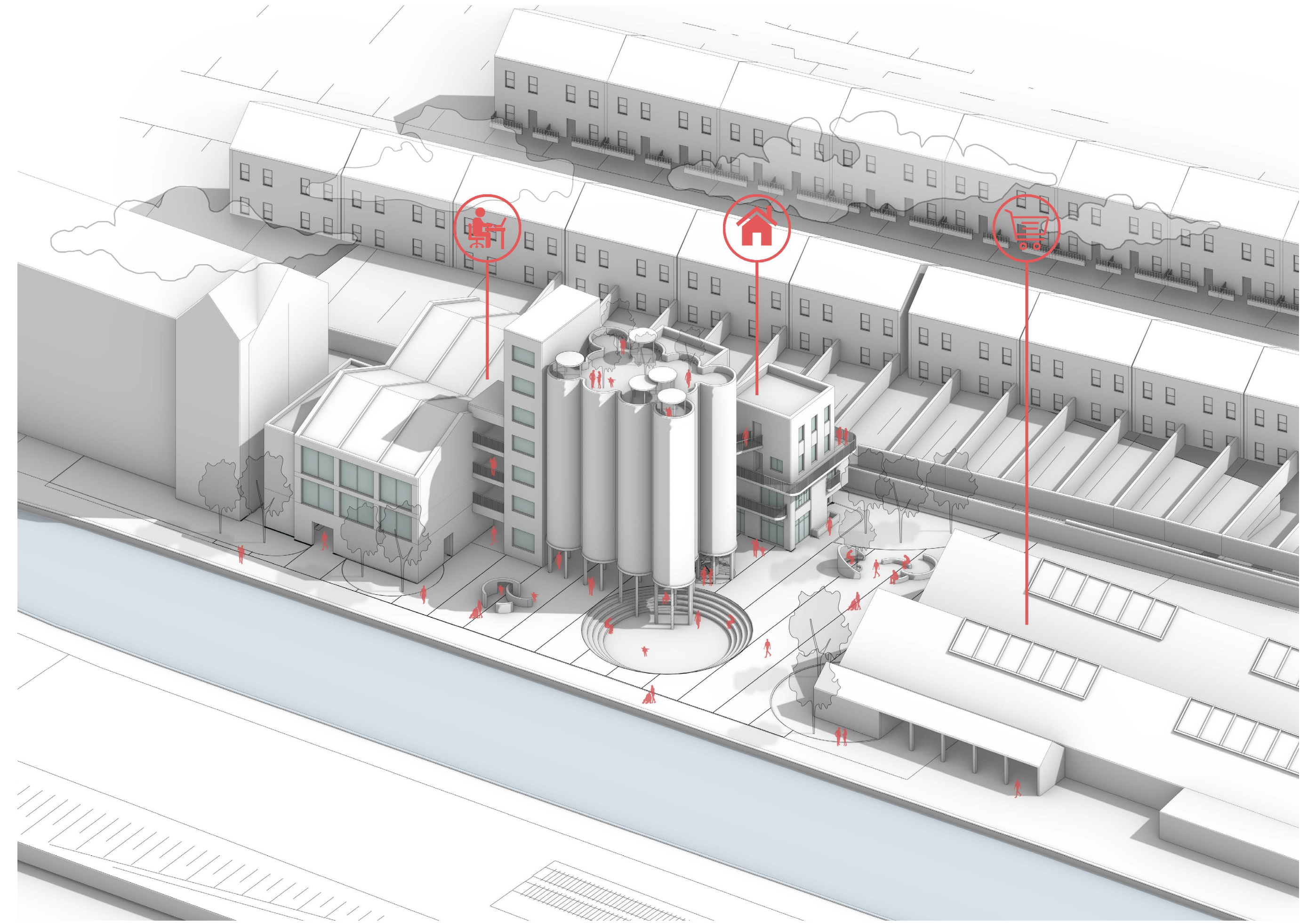
Preserving the industrial heritage of the area was another crucial aspect of the project. By reusing as much of the existing structure as possible, the project honours the historical significance and cultural value associated with the Silos. This approach is to resonate with the local people who have a deep connection to the industrial heritage and ensures that the site retains its unique character.

Introducing green spaces at both ground level and roof level serves multiple purposes. At ground level, the green spaces help to soften the predominantly concrete structure, adding natural elements that break up the visual monotony and create a more inviting environment. These green spaces can serve as gathering areas, relaxation zones, or pockets of nature within the urban context.

At roof level, the project takes advantage of the Silos' height to provide unique urban views that are not typically available from other buildings in the Phibsborough area. This approach offers a distinctive experience for users of the remote working centre, allowing them to enjoy panoramic vistas of the surrounding urban landscape while they work or take a break.

Overall, the project's emphasis on creating a remote working centre that caters to the needs of the surrounding residents while respecting the industrial heritage. By combining functionality, preservation, and aesthetics, the Silos project contributes to the revitalization of the area, fostering a sense of community, and enriching the urban fabric.

CREATE MULTI-PURPOSE
PUBLIC SPACE ALONG
THE CANAL GREENWAY

PROTECT
INDUSTRIAL HERITAGE

UNIQUE VIEWS AND
BREAK URBAN BARRIER

CREATE REMOTE WORKING SPACE
FOR SURROUNDING RESIDENTS

INTRODUCE GREEN SPACES
AND VEGETATION

RE-USE EXISTING
STRUCTURE

Proposed Axonometric

Activation of the Ground Floor

The ground floor of the project was designed to attract people and encourage their movement into the site. While aligning with the objectives of the thesis, the main focus was on responding to the site itself.

Considering the current proposal for the marketplace by 'Fíor architects', which suggests a south entrance that wraps around the back of the silos, I deemed it important to maintain this functional entrance while also creating an open space between the market and the silos accessible from the canal. Two live/work units were incorporated along the south entrance, where the work part of the units can serve as additional market stalls. This arrangement creates a street-like ambiance between the new stalls and the silos, guiding visitors into the market area. Moreover, the external markets were introduced to extend the market atmosphere into the public space beneath the silos during market times. This integration not only enhances the vibrancy of the site but also provides visitors with a continuous and immersive experience as they explore the different areas.

The eastern warehouse was repurposed to accommodate bike stores, storage areas for bins and plant rooms. To benefit the kayak club that utilizes the canal outside the site for their sports activities and lacks storage facilities, the canal-facing side of the warehouse was allocated to them. This allows the club to store their kayaks and training machines but also allows them to spill into the public space when they're training or competing, activating the darker side of the site where passers-by may be less inclined to stop and rest.

Removed sections of the silos, to open areas for working spaces, were repurposed to create intimate resting areas or seating spaces for conversations among work colleagues in the public space. Some sections were also transformed into sculptures for children's play. A sunken circular plaza was designed to accommodate exhibitions or public speaking events. Additionally, the untouched north façade of the silos provides a canvas for projecting art or movies, allowing the space to remain lively and active even during later hours.

Overall, the design of the ground floor aimed to create a vibrant, accessible, and multifunctional space that complements the site's characteristics and promotes engagement and interaction among visitors. By creating welcoming and permeable spaces, pedestrians are encouraged to explore and engage with the site, fostering a sense of integration and connectivity.
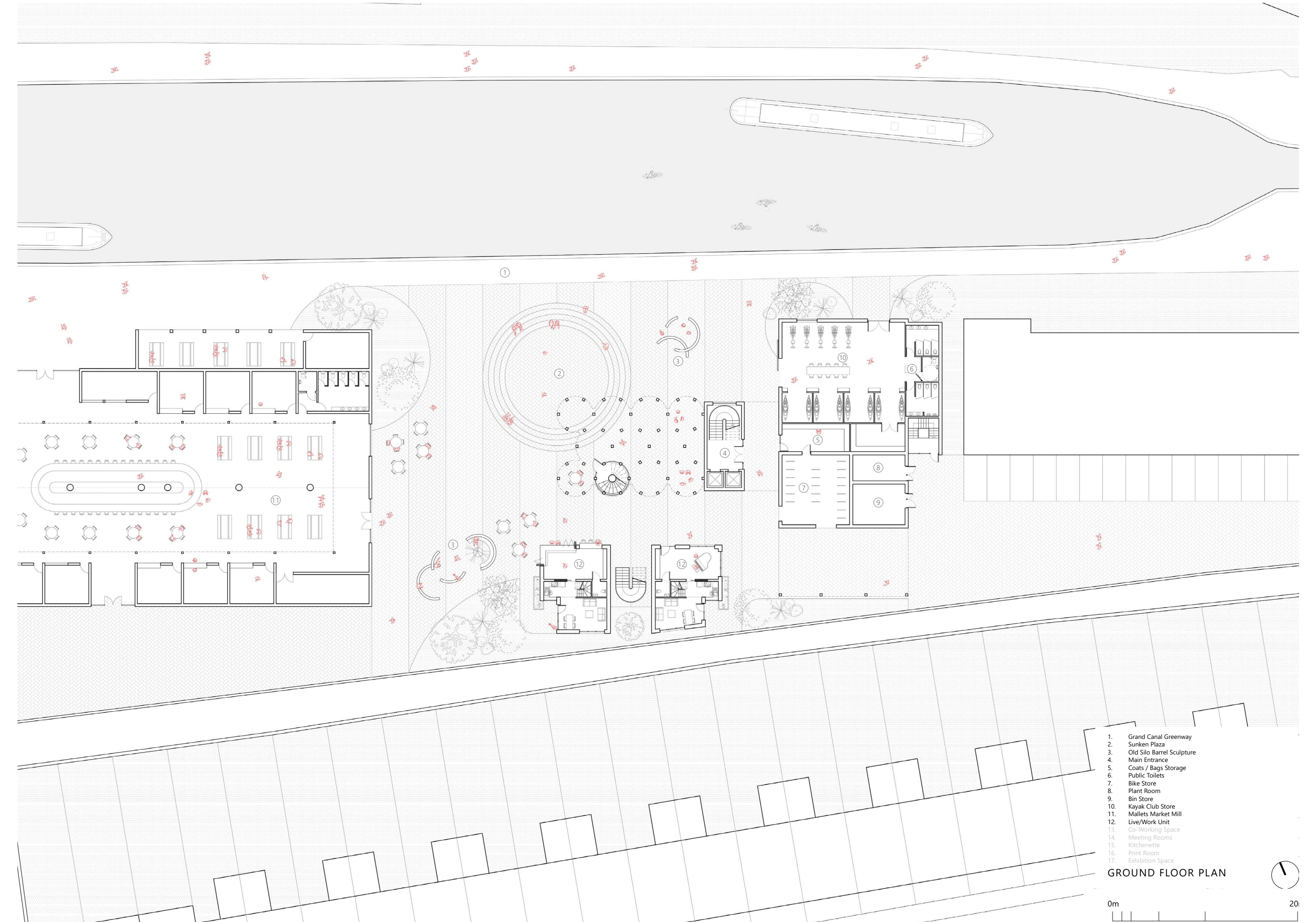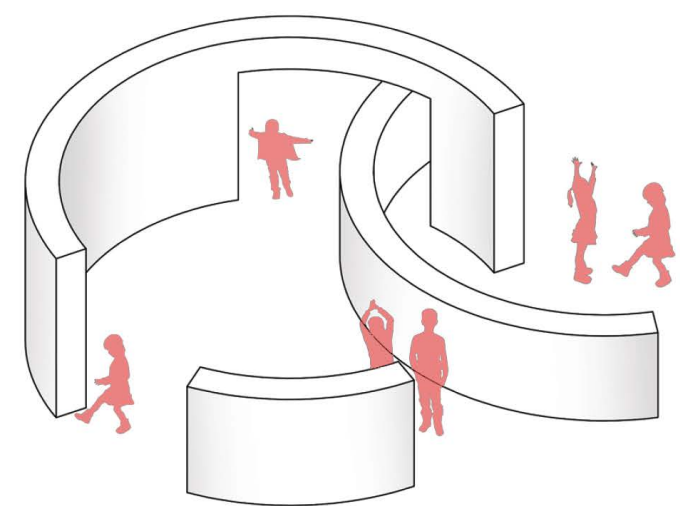
1. Grand Canal Greenway
2. Sunken Plaza
3. Old Silo Barrel Sculpture
4. Main Entrance
5. Coats / Bags Storage
6. Public Toilets
7. Bike Store
8. Plant Room
9. Bin Store
10. Kayak Club Store
11. Mallets Market Mill
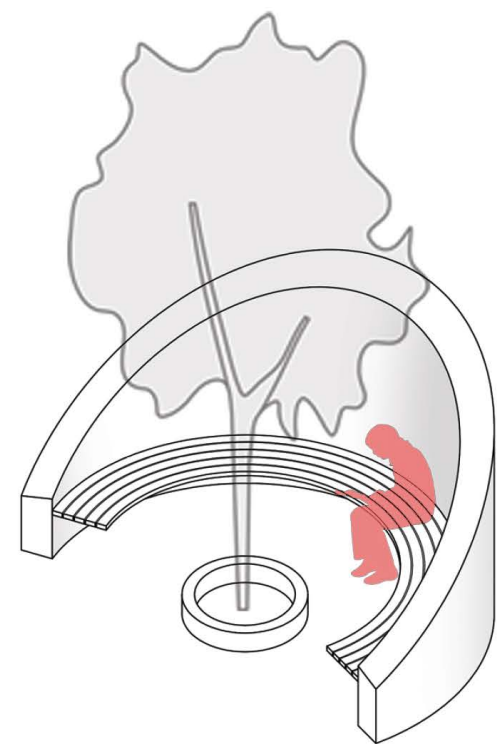12. Live/Work Unit

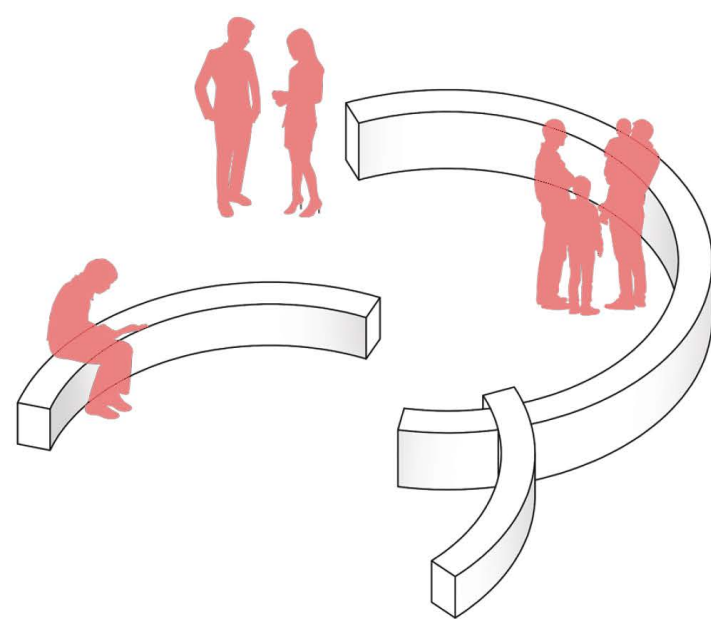GROUND FLOOR PLAN

0m   20
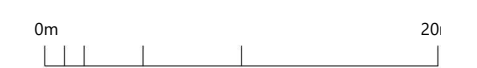
Re-use of the Silos on the Ground Floor

Childrens Play

Rest Space

Leisure Space

Underneath the Silos at night

Entrance to Markets at the South of the Site

Public Space between Silos and Market

Working Matrix

The project recognizes the evolving nature of work, especially with the widespread adoption of remote work due to the COVID-19 pandemic. It highlights the need to redefine the concept of an office building in this new era and reevaluate the essential functions it should fulfill. Simply having a single desk in a spare bedroom at home is inadequate for optimizing productivity and maintaining the social aspects of work. Therefore, the project identifies three fundamental functions of work: **focus, collaborate,** and **exhibit.**

The 'focus' function refers to creating a private space where individuals can work without distractions. 'Collaborate' represents a gathering space designed to facilitate teamwork and the sharing of ideas. 'Exhibit' is a dedicated function for organizations to showcase their work in a public setting. These three functions are crucial for supporting remote work and re-establishing a meaningful connection between work and personal life. Here sociability is no longer what is left over after 'work-time' is expended, but rather the default state.
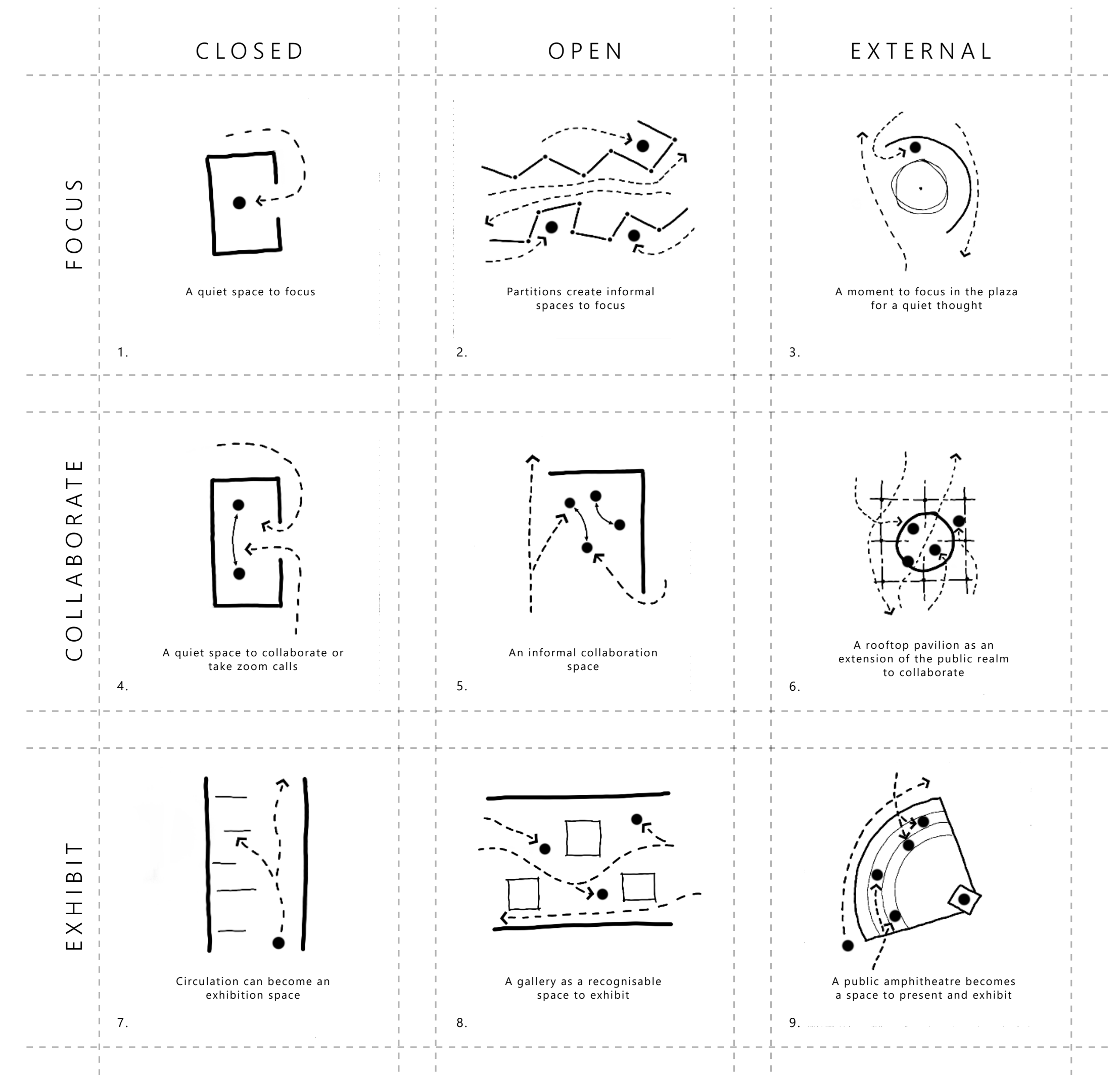
To explore the possibilities of the remote working office, these three functions are intersected with different levels of publicity: **closed, open,** and **external.** This creates a matrix that generates various work scenarios. In the closed space, work takes on a familiar form, with quiet indoor areas for focusing, collaborating, or exhibiting work in corridors. In the open space, work adopts a more flexible approach, allowing for incidental interactions between colleagues. Flexible partitions can create spaces for focus, while thresholds or staircases can serve as collaborative areas. Externally, these work functions are integrated into the urban landscape. Exhibitions can take place in public amphitheatres, engaging the general public in listening and participation. Focus and collaboration can occur in tranquil corners under trees or pavilions that extend the public realm.
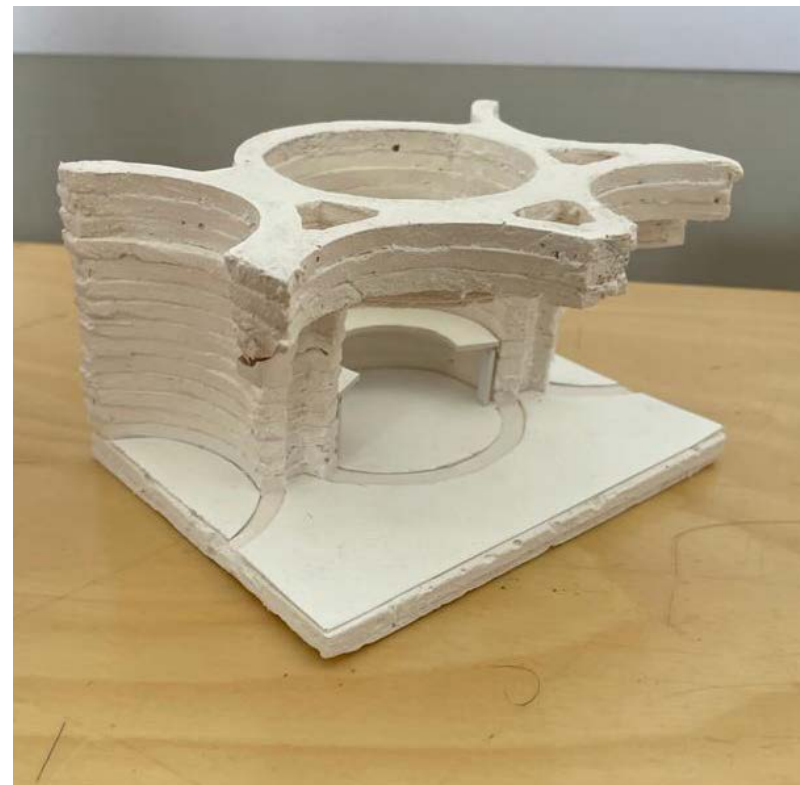
By embracing this matrix of typologies and interventions, the project envisions a new paradigm for the remote working office. It encourages the creation of purposeful spaces that cater to the diverse needs of individuals and organizations, fostering productivity, collaboration, and social interaction. The project explores the potential of this evolving concept, demonstrating how the remote working office can be reimagined to meet the changing demands of the modern workforce.

"In modern times almost all cities create zones for "work" and other zones for "living". But this separation creates enormous rifts in people's emotional lives.
In order to overcome this schism and re-establish the connection between love and work, there needs to be a redistribution of workplaces throughout areas where people live. How must office space be designed to cope with this situation?"

- Christopher Alexander, A Pattern Language

1. FOCUS   X   CLOSED
2. FOCUS   X   OPEN
3. FOCUS   X   EXTERNAL
4. COLLABORATE   X   CLOSED
5. COLLABORATE   X   OPEN
6. COLLABORATE   X   EXTERNAL
7. EXHIBIT   X   CLOSED
8. EXHIBIT   X   OPEN
9. EXHIBIT   X   EXTERNAL

	CLOSED	OPEN	EXTERNAL
FOCUS	A quiet space to focus — 1.	Partitions create informal spaces to focus — 2.	A moment to focus in the plaza for a quiet thought — 3.
COLLABORATE	A quiet space to collaborate or take zoom calls — 4.	An informal collaboration space — 5.	A rooftop pavilion as an extension of the public realm to collaborate — 6.
EXHIBIT	Circulation can become an exhibition space — 7.	A gallery as a recognisable space to exhibit — 8.	A public amphitheatre becomes a space to present and exhibit — 9.

1.   FOCUS X CLOSED

a quiet space to focus
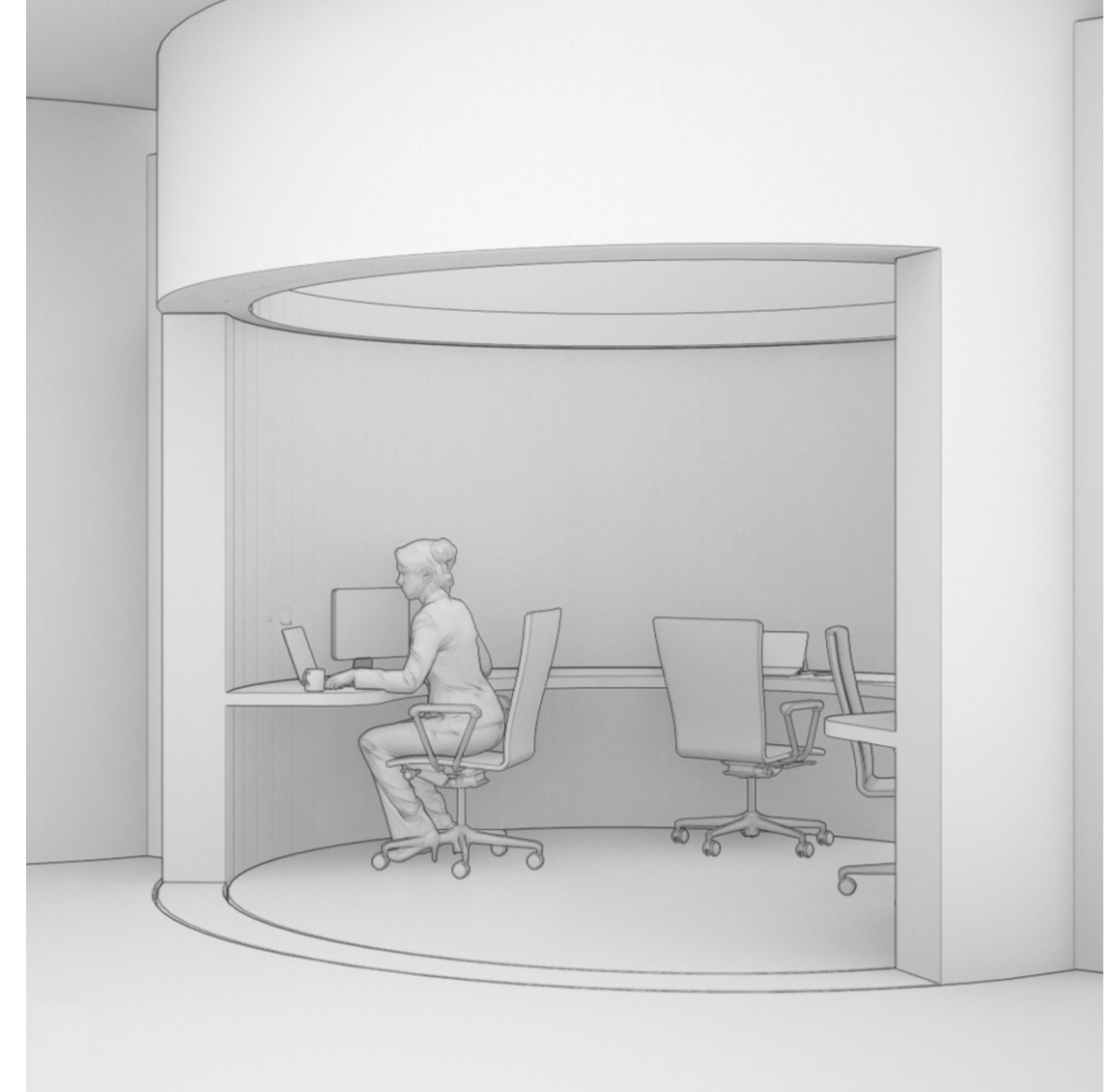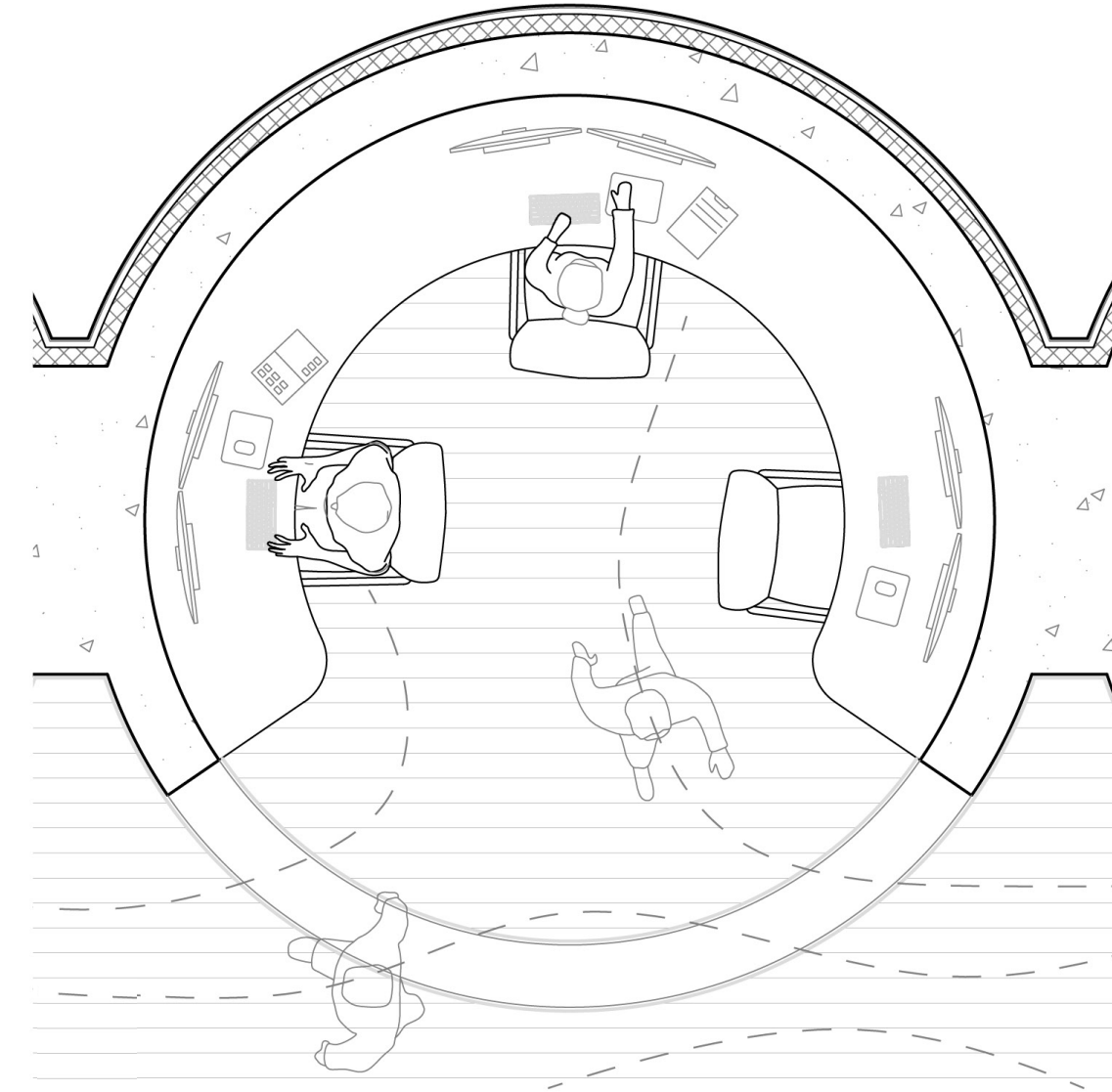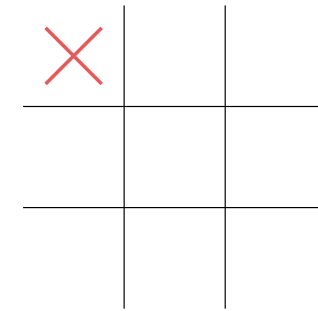
2. FOCUS X OPEN

Partitions create infromal spaces to focus

3. FOCUS X EXTERNAL
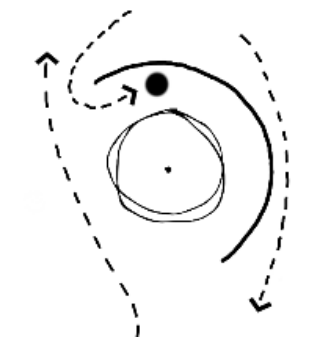
A moment to focus outside for a quiet thought
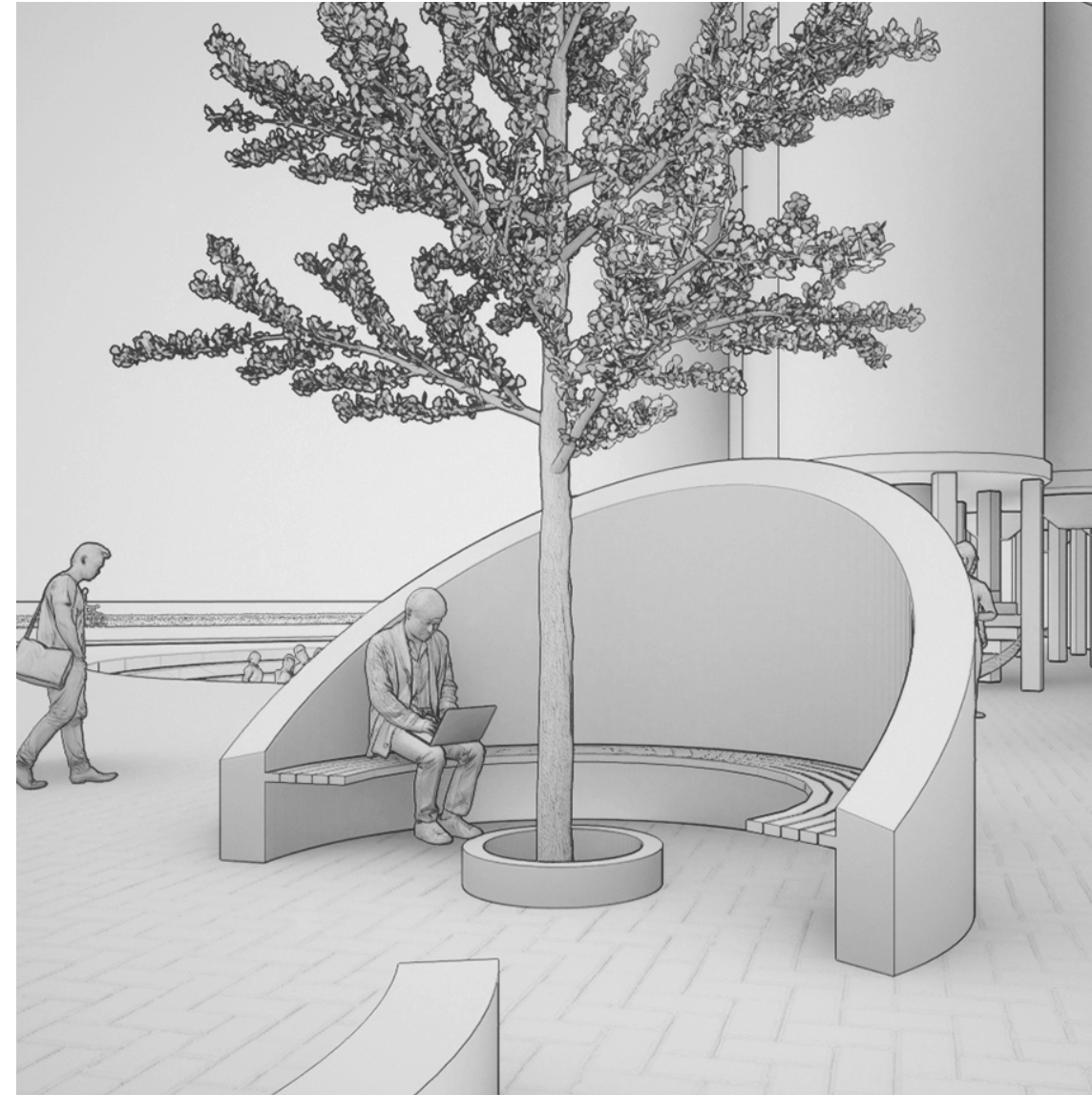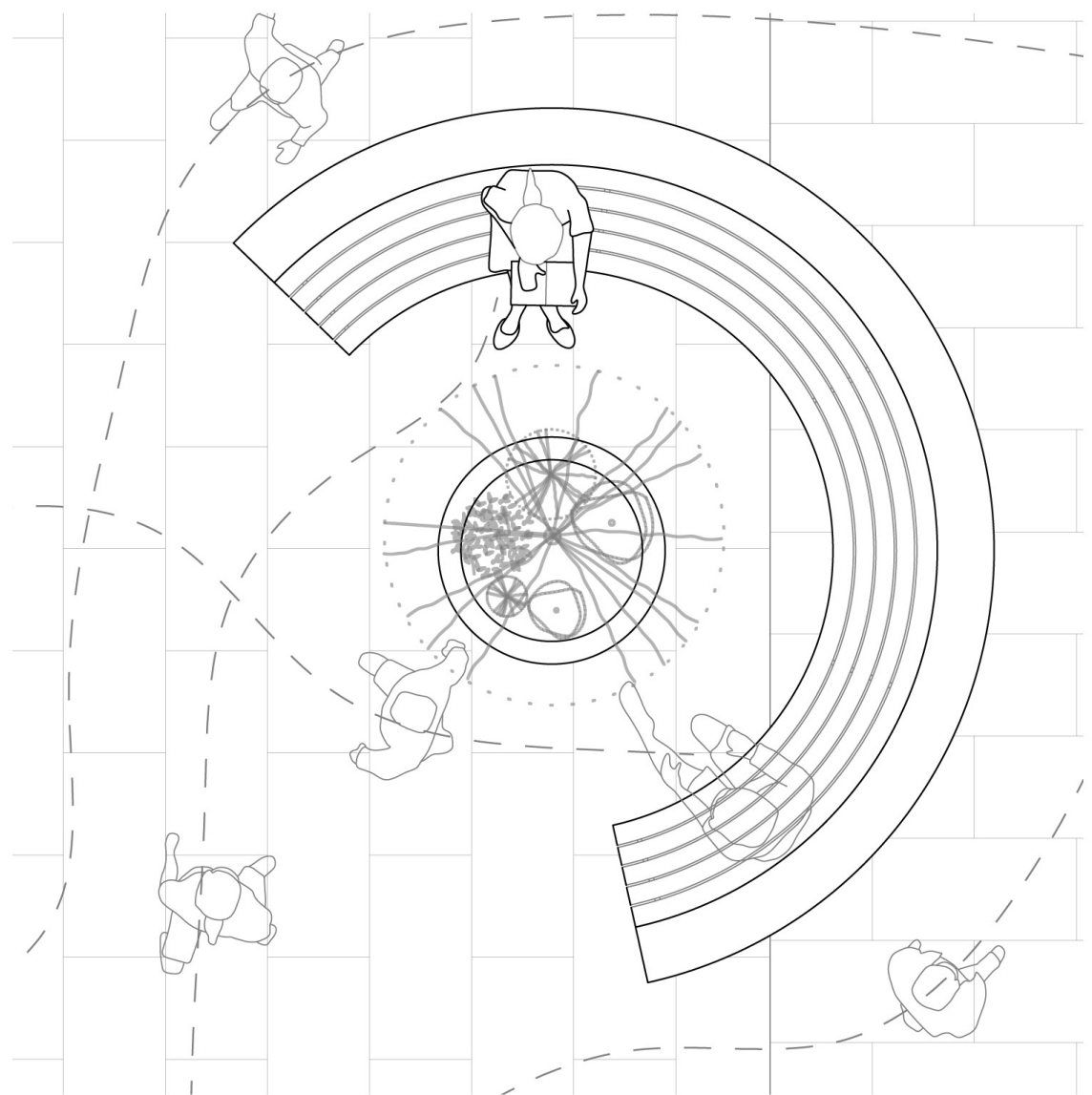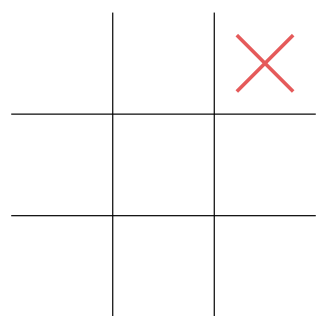
4.   COLLABORATE X CLOSED

A quiet space to collaborate
or take zoom calls
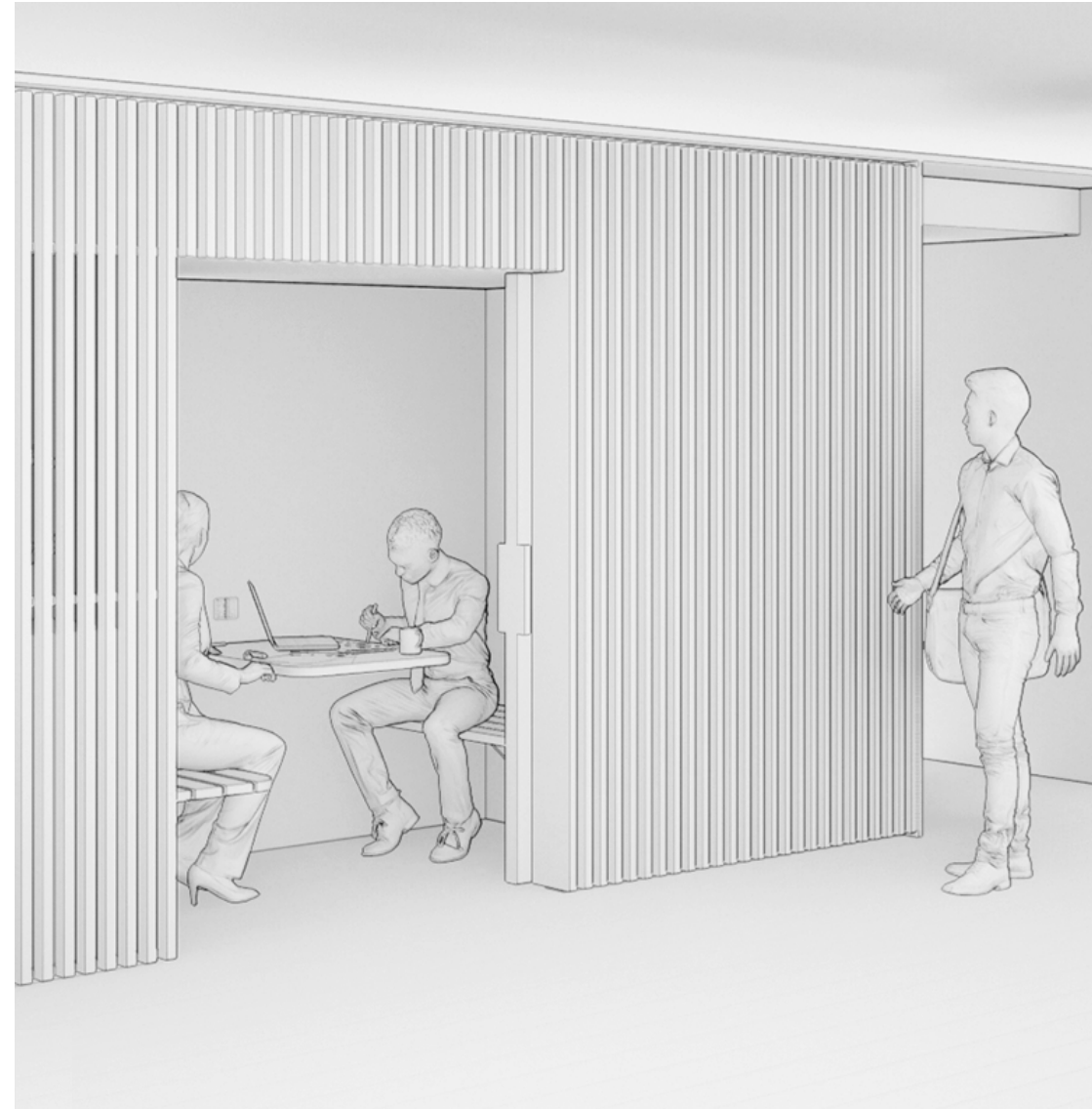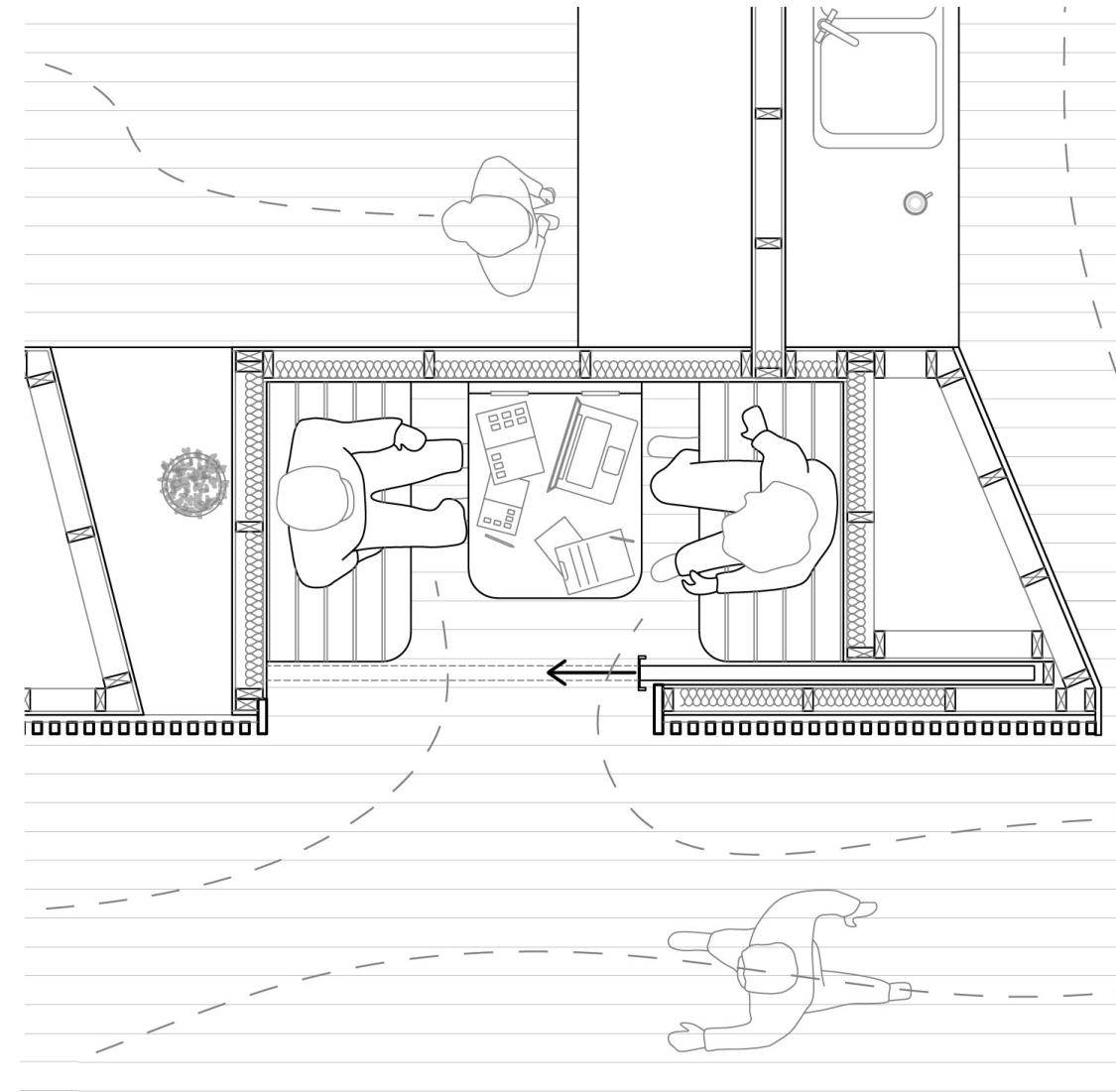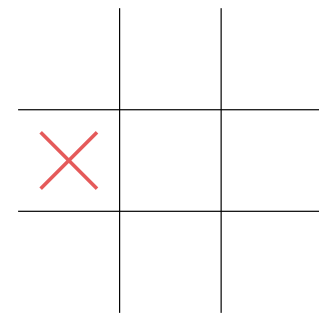
5.   COLLABORATE X OPEN
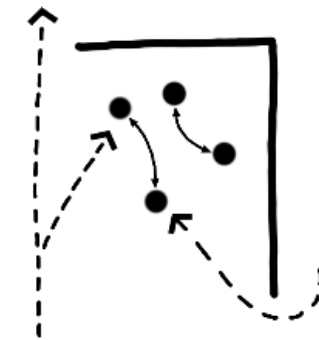
An informal collaboration
space
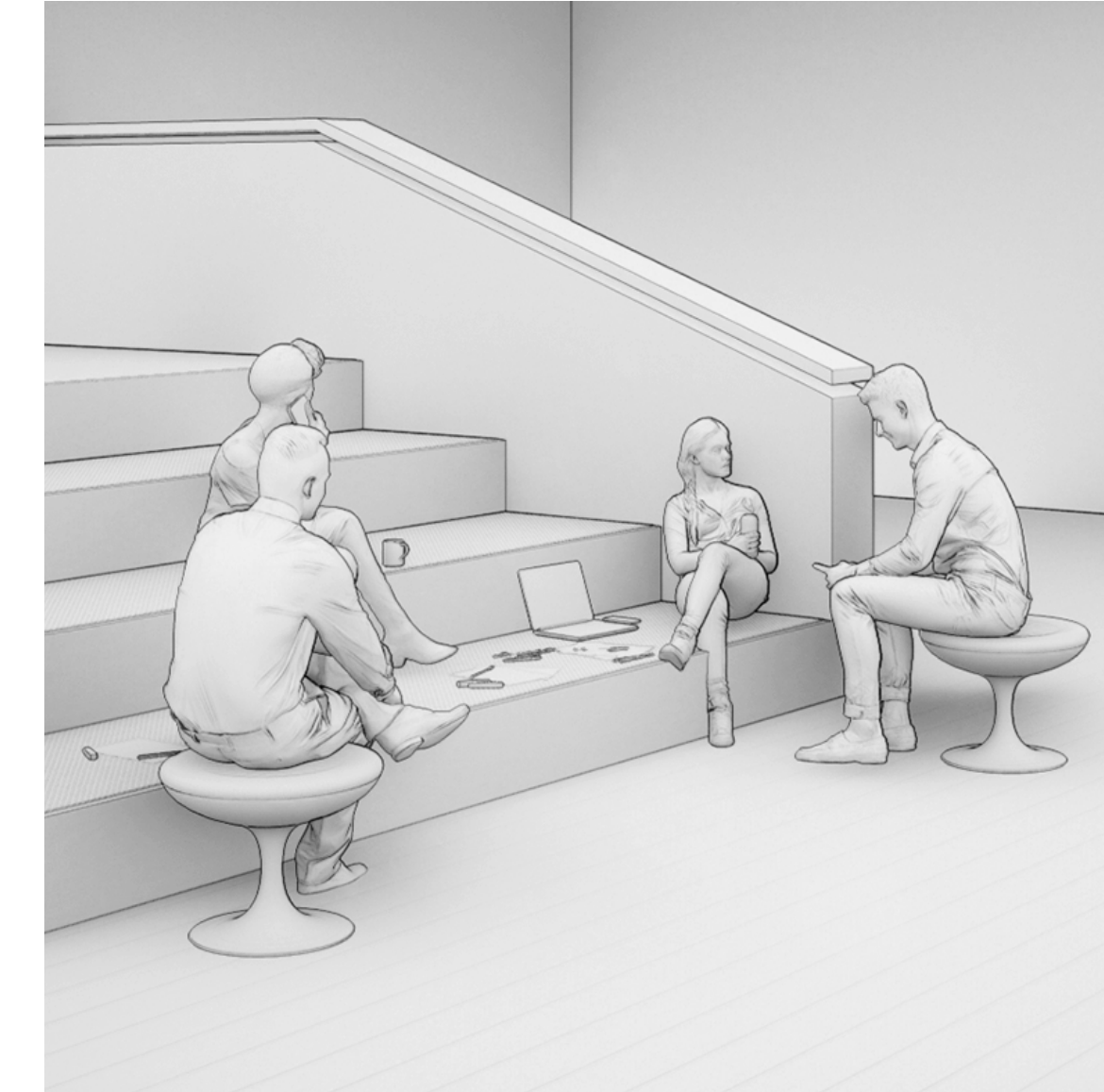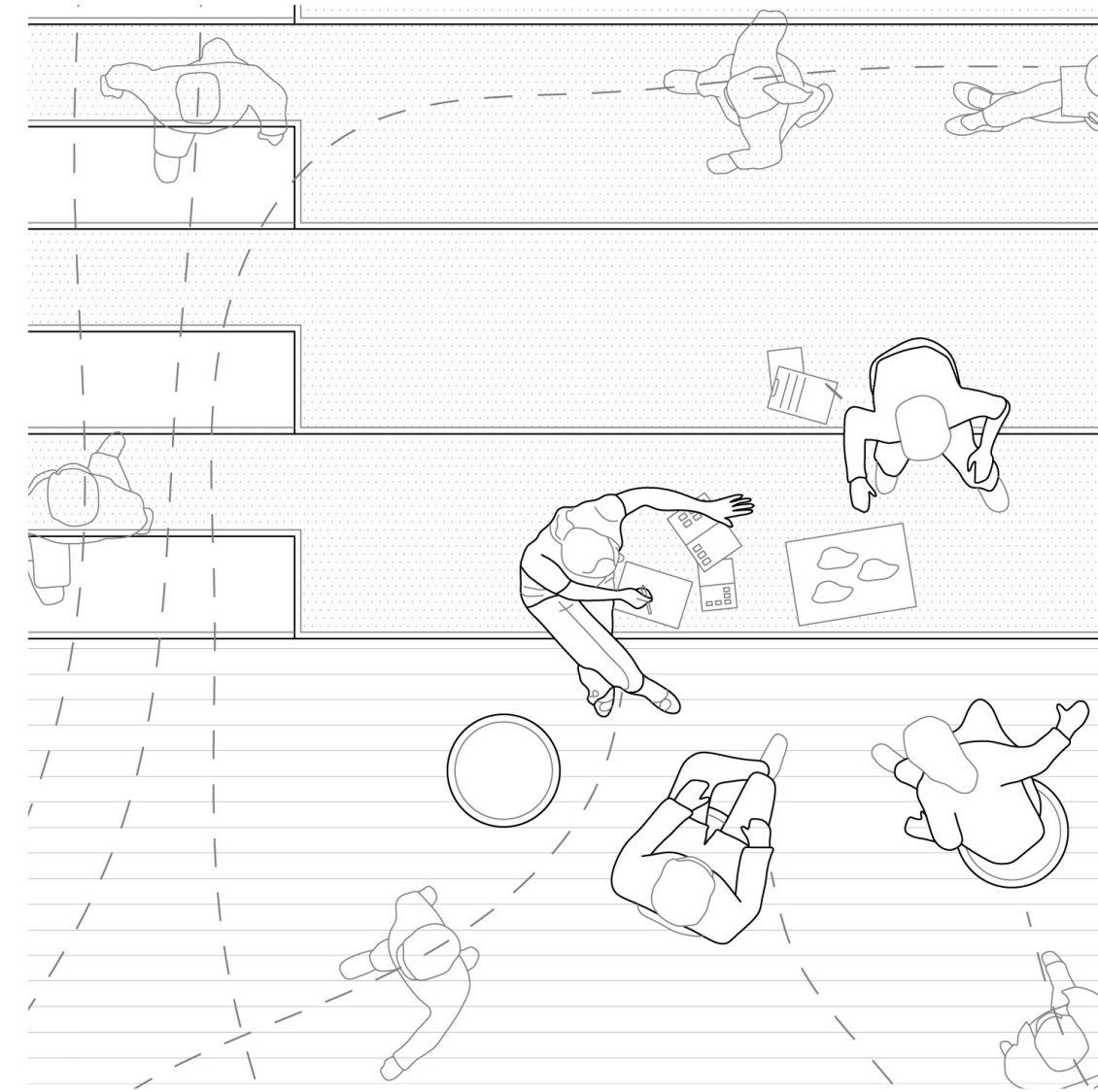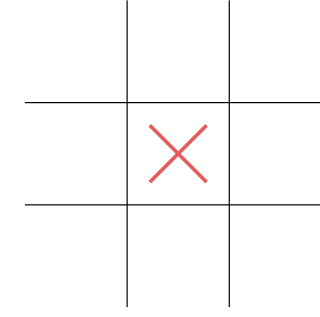
6.   COLLABORATE X EXTERNAL
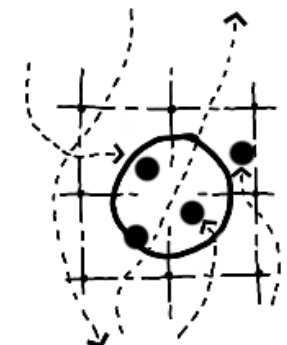
A rooftop pavilion as an extension of the public realm to collaborate
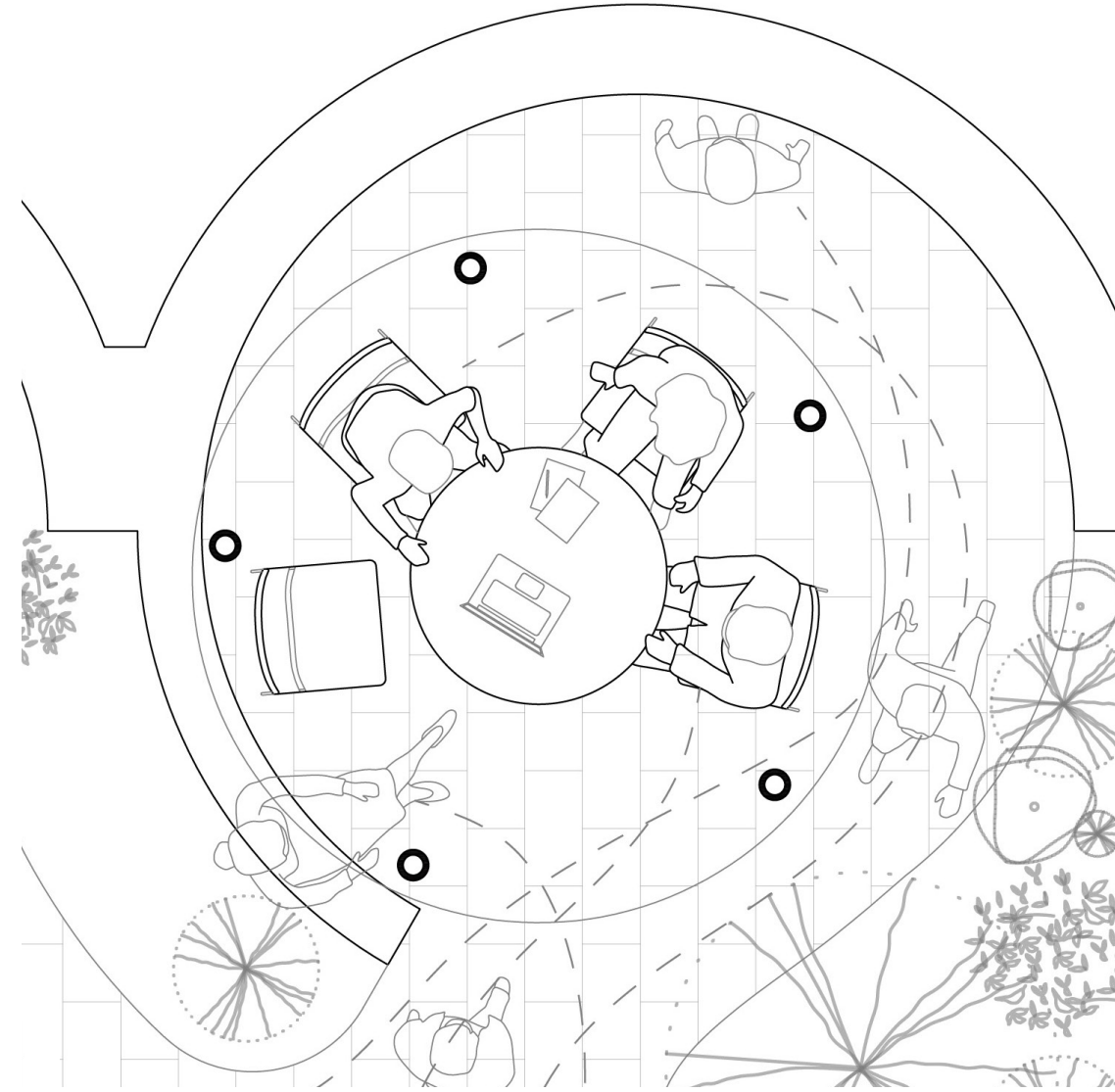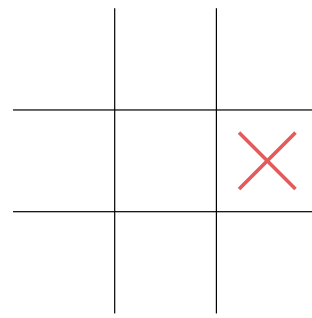
7.   EXHIBIT X CLOSED
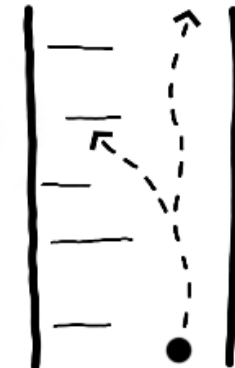
Circulation can become an exhibition state
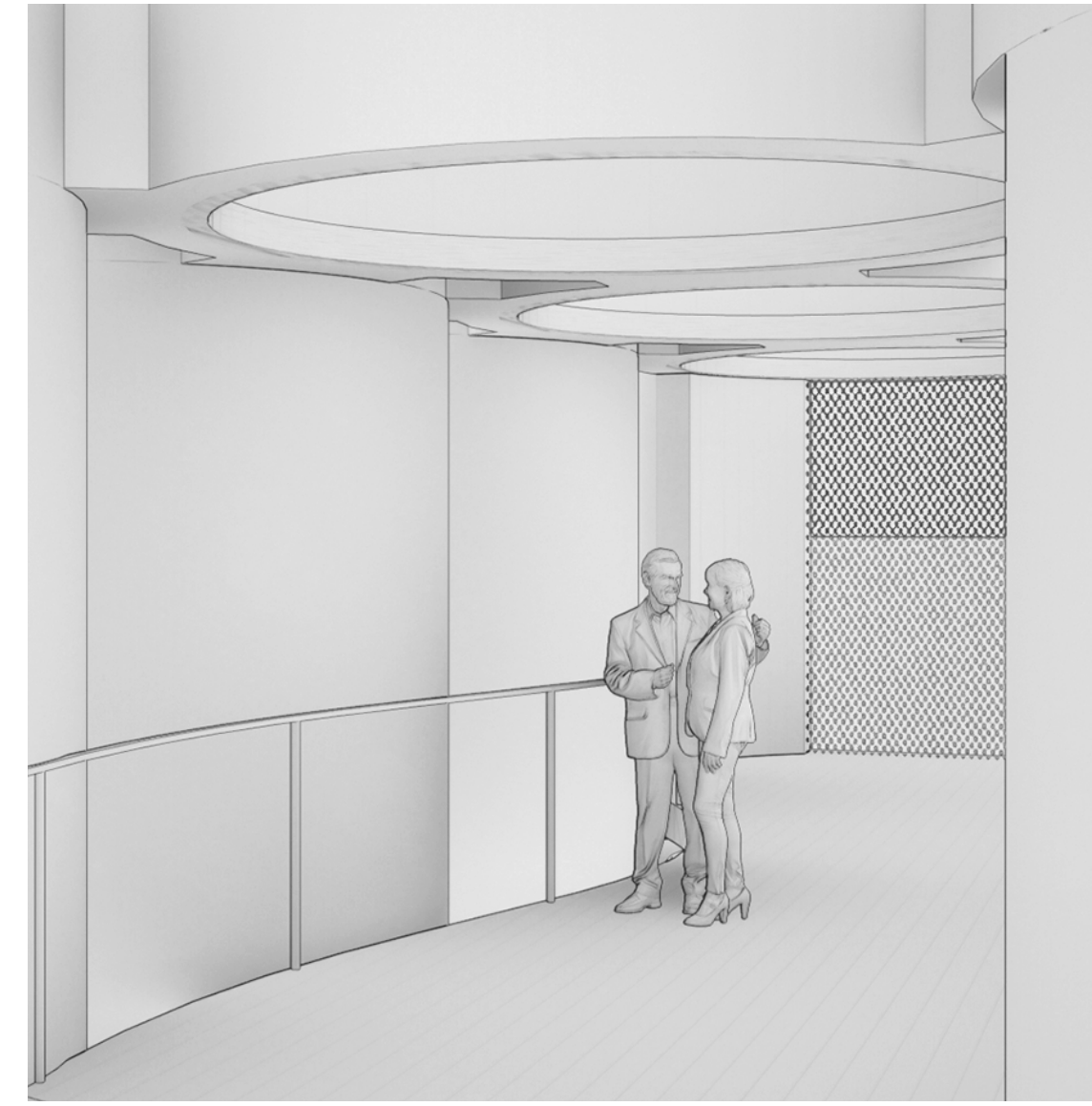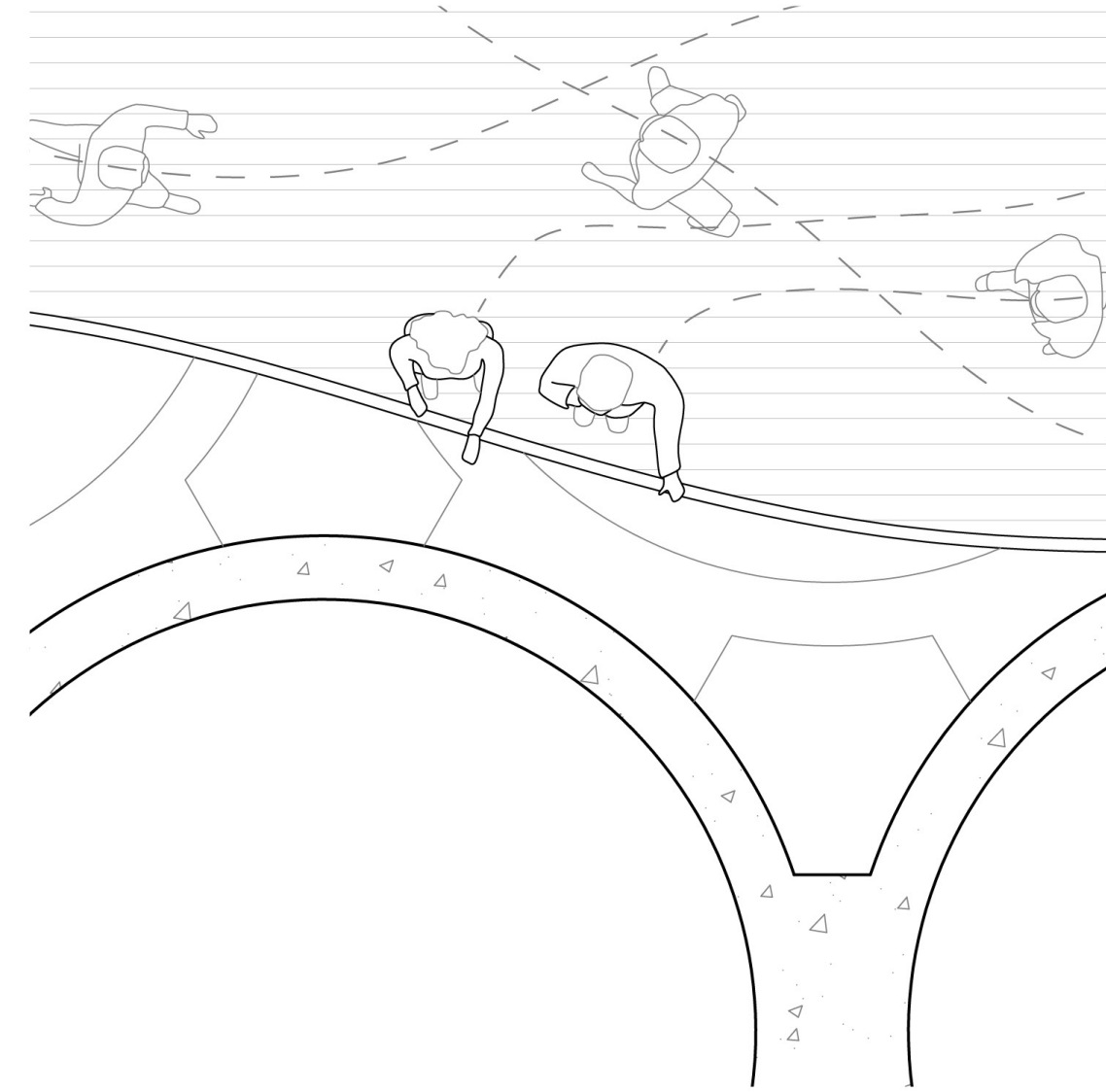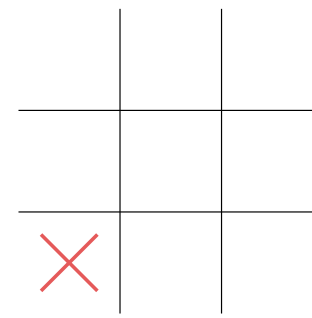
8.   EXHIBIT X OPEN
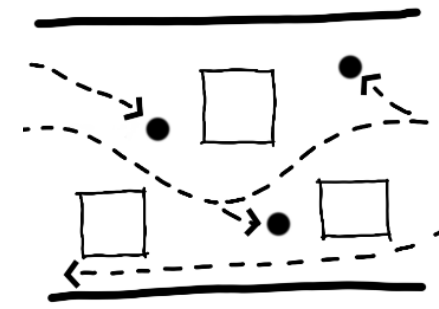
A gallery as a recognisable
space to exhibit
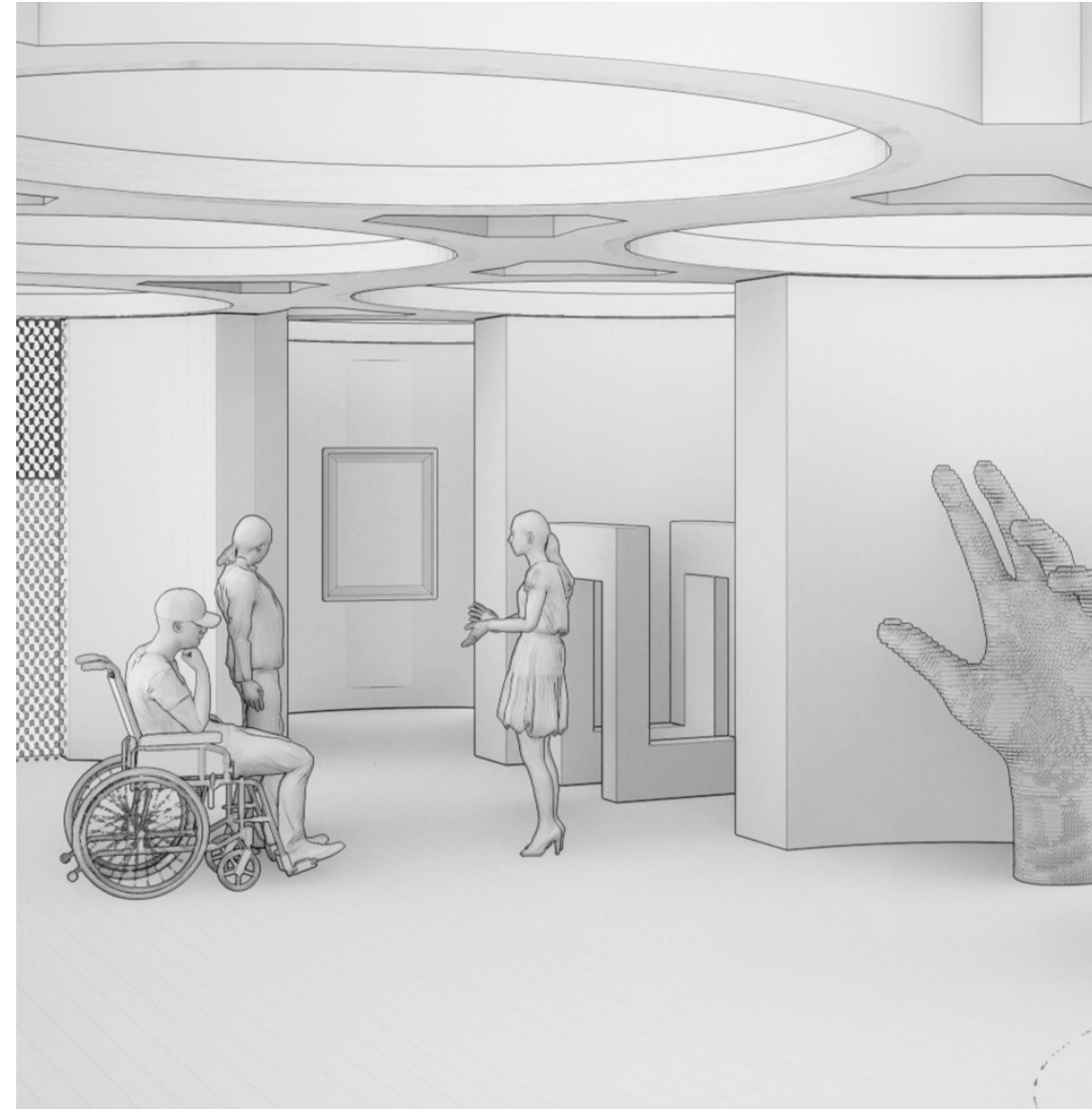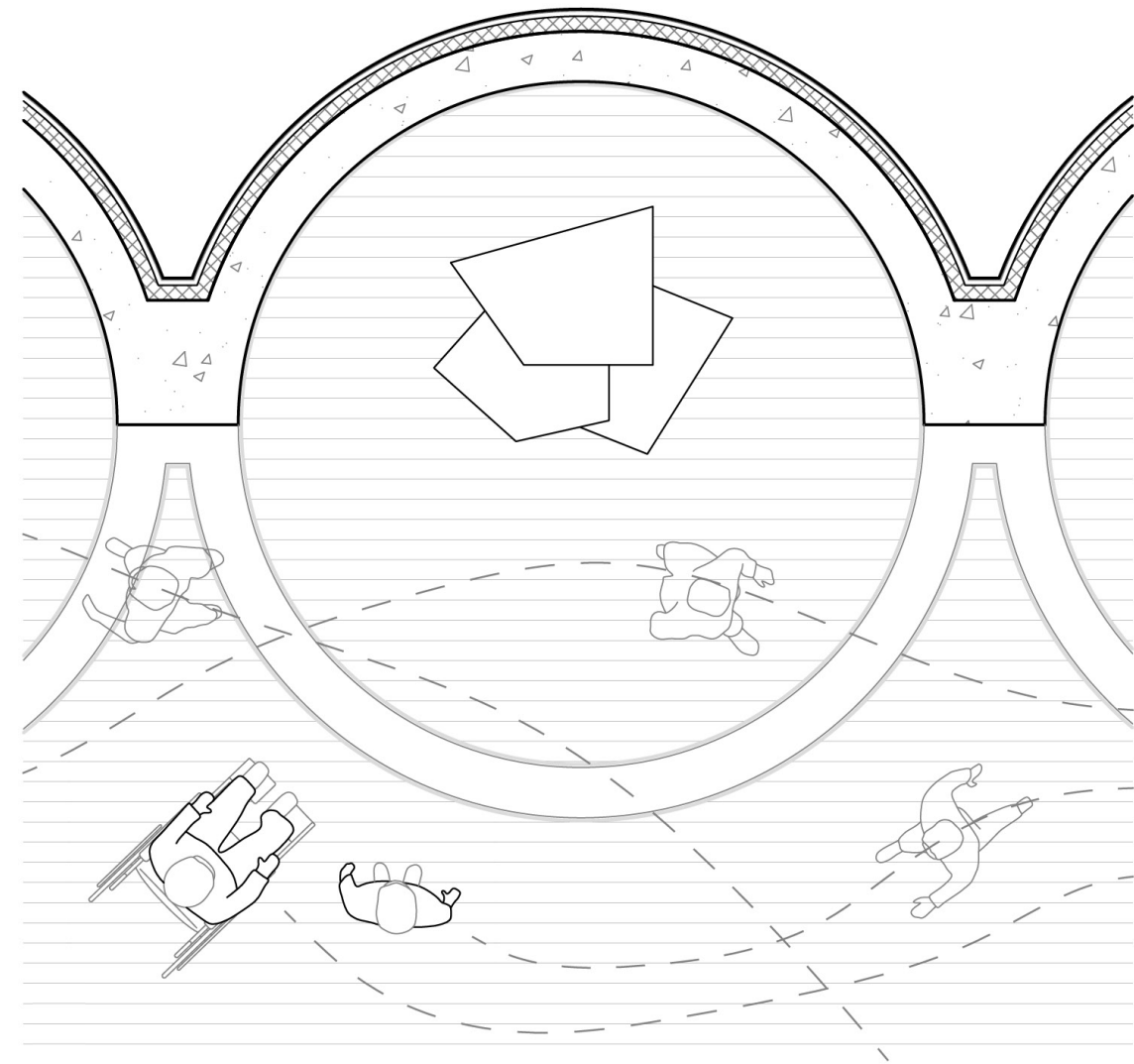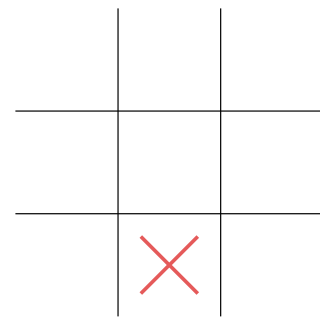
9.   EXHIBIT X EXTERNAL
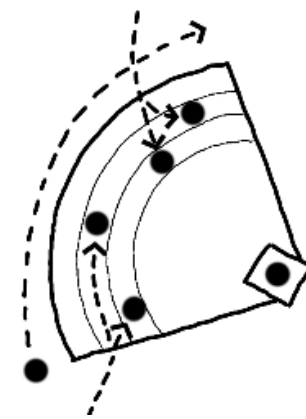
Public amphitheatre becomes a
space to present and exhibit
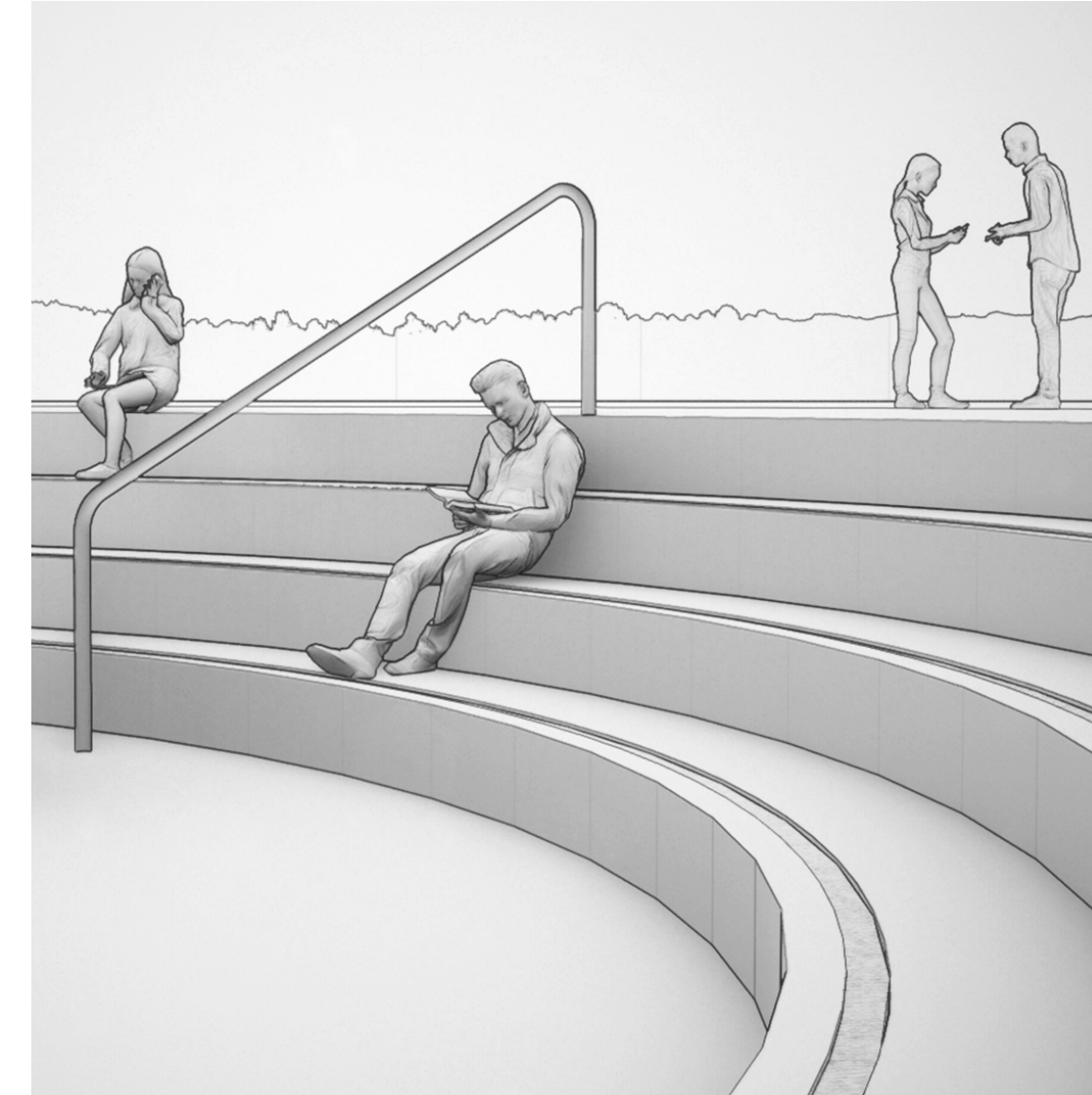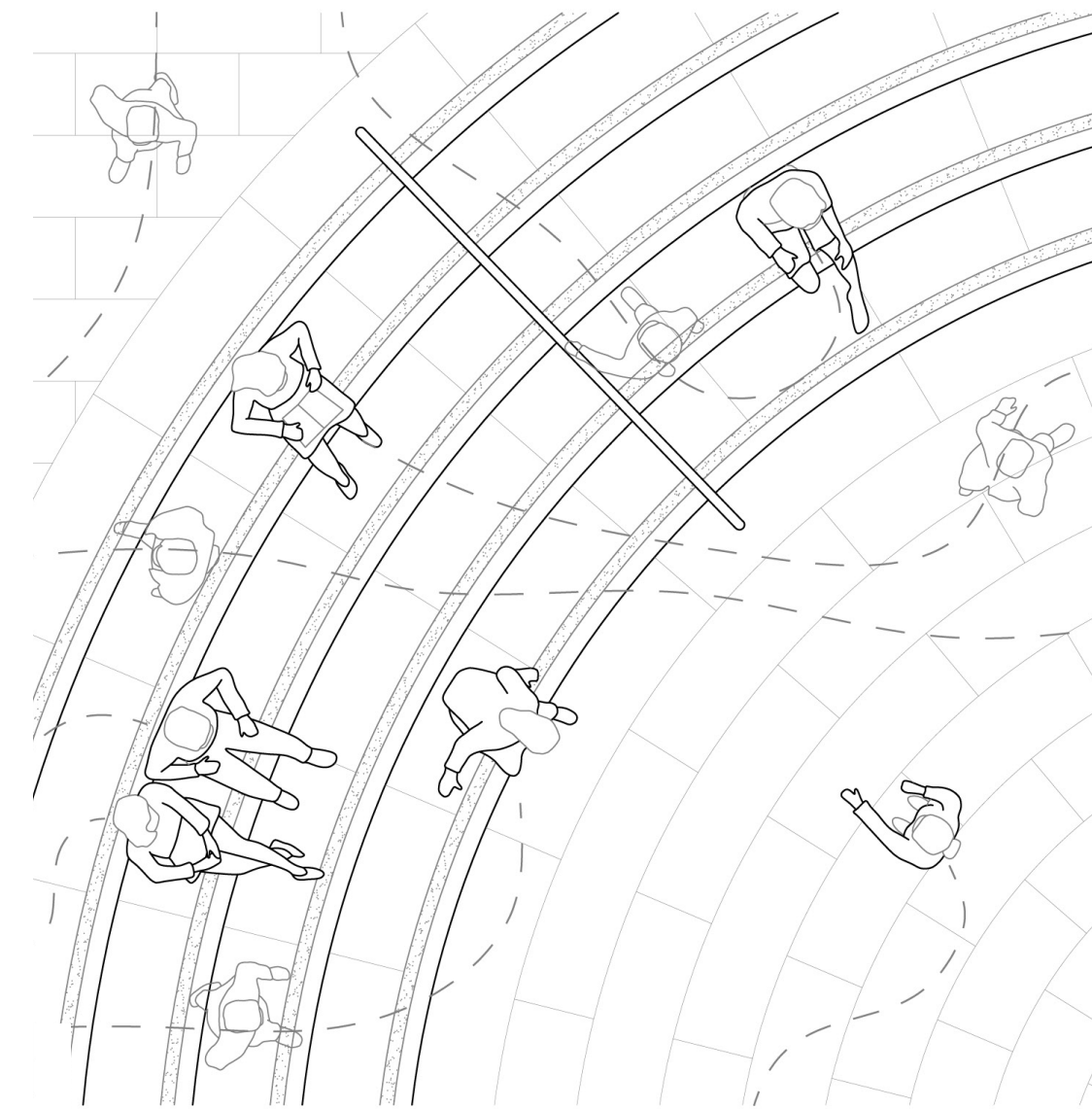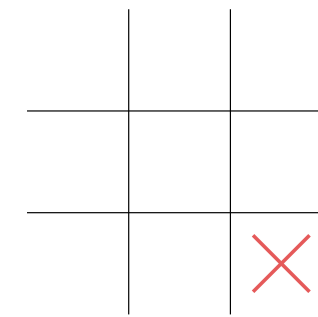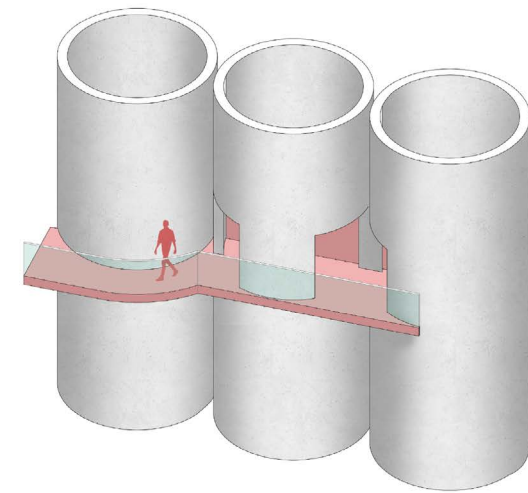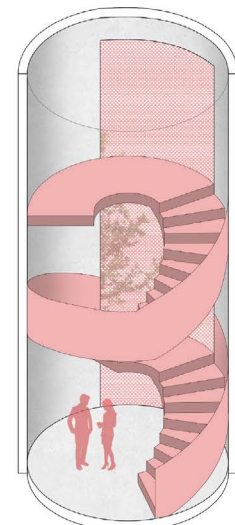
CORRIDOR   STAIRS   LIVE   HISTORY   WORK

1. Grand Canal Greenway
2. Sunken Plaza
3. Old Silo Barrel Sculpture
4. Main Entrance
5. Coats / Bags Storage
6. Public Toilets
7. Bike Store
8. Plant Room
9. Bin Store
10. Kayak Club Store
11. Mallets Market Mill
12. Live/Work Unit
13. Co-Working Space
14. Meeting Rooms
15. Kitchenette
16. Print Room
17. Exhibition Space

0m   20m

FIRST FLOOR PLAN

WORK

LIVE

STATIC

FLEXIBLE

1. Grand Canal Greenway
2. Sunken Plaza
3. Old Silo Barrel Sculpture
4. Main Entrance
5. Coats / Bags Storage
6. Public Toilets
7. Bike Store
8. Plant Room
9. Bin Store
10. Kayak Club Store
11. Mallets Market Mill
12. **Live/Work Unit**
13. **Co-Working Space**
14. Meeting Rooms
15. Kitchenette
16. Print Room
17. Exhibition Space

0m   20m

SECOND FLOOR PLAN

WORK

LIVE

STATIC

FLEXIBLE

1. Grand Canal Greenway
2. Sunken Plaza
3. Old Silo Barrel Sculpture
4. Main Entrance
5. Coats / Bags Storage
6. Public Toilets
7. Bike Store
8. Plant Room
9. Bin Store
10. Kayak Club Store
11. Mallets Market Mill
12. **Live/Work Unit**
13. Co-Working Space
14. Meeting Rooms
15. Kitchenette
16. Print Room
17. **Exhibition Space**

0m   20m

THIRD FLOOR PLAN

SECTION A-A

SECTION B-B

Rooftop pavilions on top of the Silos

0m   20m

SECTION C-C

Above ground, the project features access decks that envelop the buildings, dynamically expanding and contracting to generate spaces of overspill and collision. These access decks serve multiple purposes, providing convenient circulation routes while also serving as communal areas for interaction and social engagement. The design of these access decks aims to break away from the traditional, isolated office setting and instead create a vibrant and interconnected community of remote workers.

Access decks between new and old
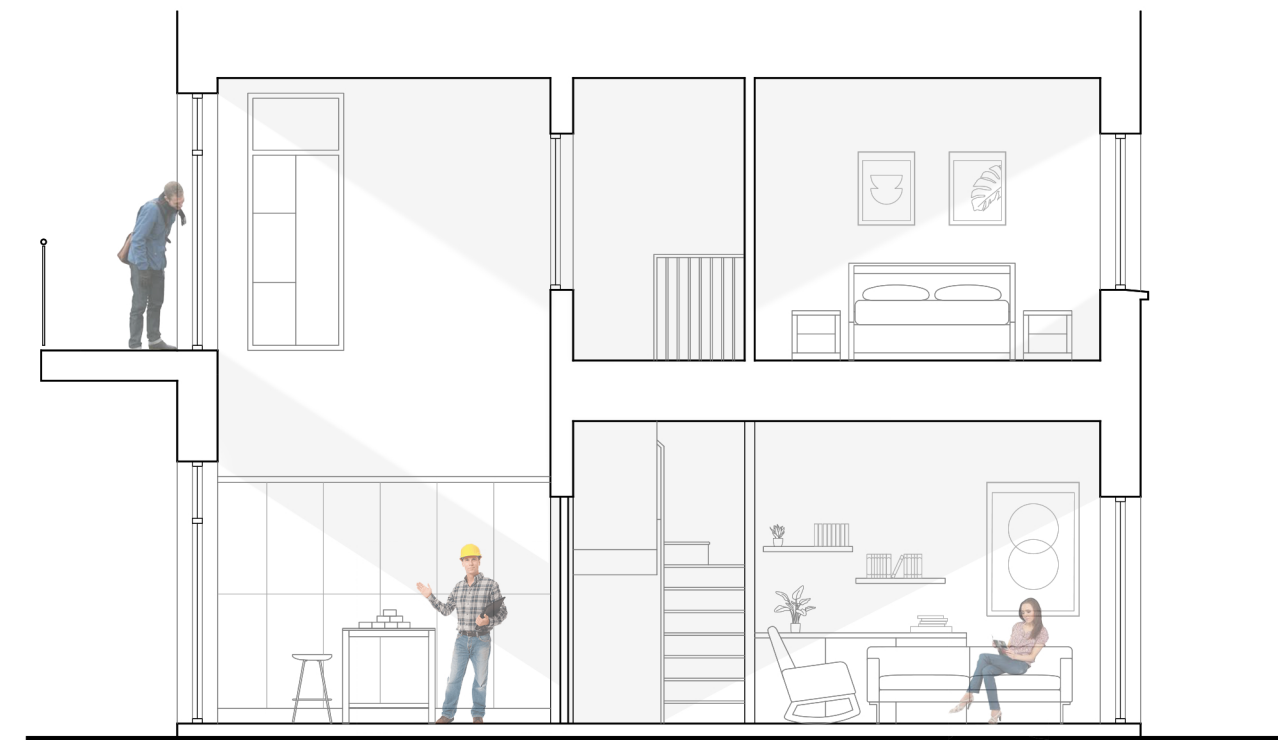
Workhome Unit

Work Elevation | Home Elevation

Facade treatment creates varying spaces of privacy and interaction
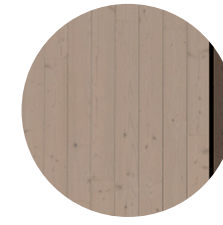
Timber cladding to building to express residential charachter when closed for business

Powder coated aluminium glazing to work units with space for signage

THE WORKSHOP
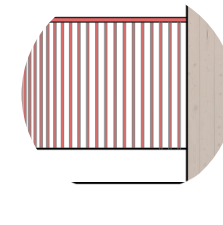
Colour of walkways to match above, with rounded geometries to promote movement and collaboration between work areas

Darker timber windows to residential elevation denote traditional residential charachter

Powder coated planters create defensible spaces for private outdoor space
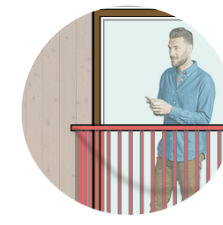
Matching metalwork to private balconies following rounded geometry of walkways

Window Head Detail

1. Timber frame comprising of External breather membrane on 9mm OSB sheeting fixed to 120x38mm timber stud with Timber Frame manufacturer's supplied insulation between studs with air leakage membrane to internal face of studwork with 50mm Kingspan insulation with 35x44mm timber battens to create service void.
2. 12.5mm "Gyproc wallboard" plasterboard, with insulation.
3. 35 x 50mm vertical battens to support horizontal timber cladding.
4. Timber supporting lintel to Timber Frame manufacturer's detail.
5. Insect mesh.
6. Internal vapor barrier lapped over window sill and sealed with sealant to underside of window.
7. Air-tightness tape to provide seal between window and timber frame.
8. Flexible sealant to interface between plaster board and window head.
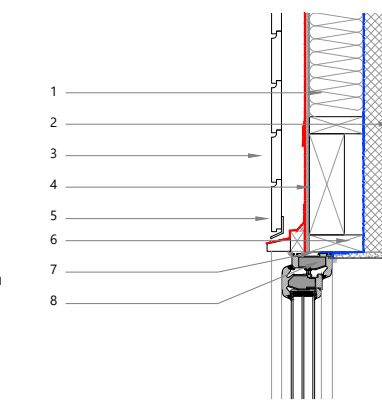
Floor Junction and External Pathway Detail

1. 2 x 18mm OSB floor deck fixed to metal web joist.
2. Seal between wall and floor at barrier and seal gap between skirting board and floor with a flexible sealant.
3. Airtightness membrane from ground floor panel to oversail and to be turned over floor panel on site and sealed, airtightness membrane from first floor wall to Timber Frame manufacturer's details.
4. 200 x 75 PFC.
5. Stub connection with Thermal plate to Glulam Beam to Engineers detail.
6. 2 no. layers of 15mm "Gyproc Fireline" plaster board fixed to underside using 13mm × 45mm Drywall timber screws @ 200mm c/c. All joint taped and filled with skim plaster finish.
7. Fix ceilings first, and seal all gaps between ceiling and timber frame wall with flexible sealant.
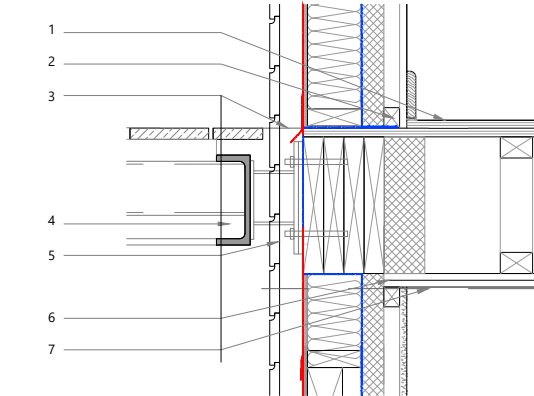
Threshold Detail

1. Level access threshold drainage channel to all level access doorways laid in strict accordance with manufacturers instructions with stainless steel slotted grating.
2. Selected permeable paving on 100mm compacted stone, size 5-20mm on permeable geotextile membrane, beram 01000 on 250mm compacted stone, size 10-63mm, on sub-soil.
3. 50mm pre-formed perimeter insulation to be PIR with 0.022W/mk thermal conductivity value (at threshold).
4. Slab to be recessed to accommodate threshold fitting.
5. 125mm Kingspan insulation on RADBAR radon barrier on sand blinding.
6. RADBAR Radon Barrier or similar approved in accordance with manufacturer/supplier details. RADBAR to be continuous out over subfloor.
7. 325 mm rising block wall to engineers detail and specification.
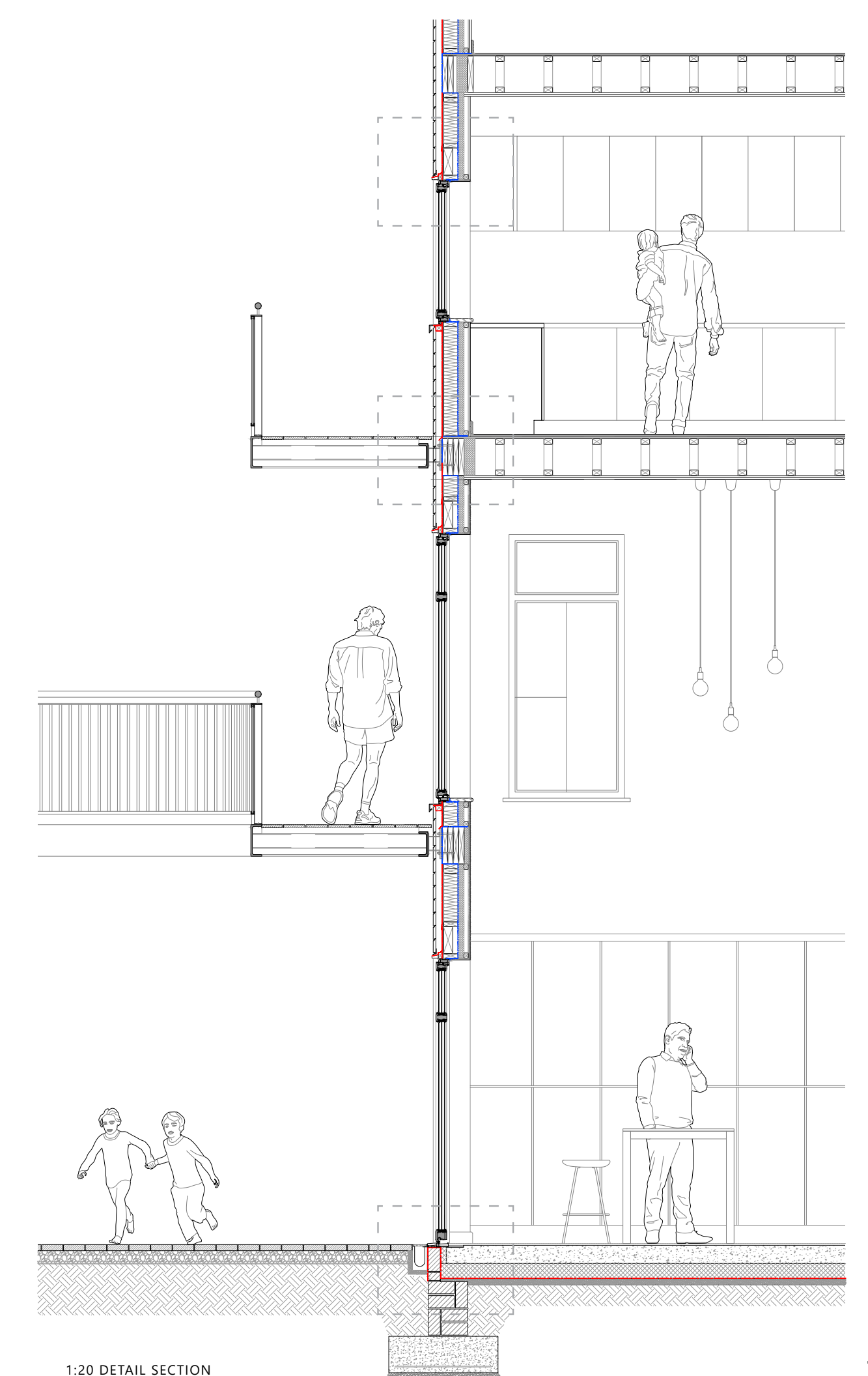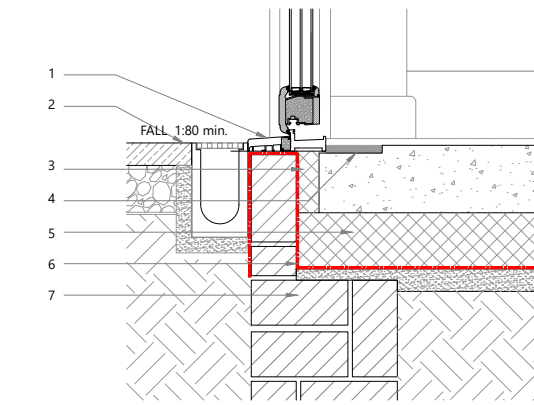
FALL 1:80 min.

Reflection

Reflecting on the final design of the thesis project, there are several areas that could have been further explored and investigated. One aspect that could have been studied is the lighting conditions within the enclosed silos of the remote working hub. Conducting a light calculation would have provided insights into the amount of artificial lighting needed and at what times. Some spaces were intended to be more intimate while others might have benefitted from increased natural light. Although the western side of the silos is naturally lit, exploring the incorporation of punched openings on the southern side could have allowed for additional natural light to permeate the space.

Another aspect that could have been considered is the carbon calculations associated with the decision to retain and repurpose the silos. Comparing the embodied carbon of keeping the silos versus the carbon emissions resulting from their demolition could have provided valuable information regarding the environmental impact and sustainability of the project.

In the final stages of the project, the ground floor landscape and its integration with the market space and kayak club were developed. However, there is room for further evolution of these spaces, particularly in terms of integrating green spaces and exploring ways to enhance public engagement and participation. These aspects could have been given more attention to create a vibrant and inclusive public space that fosters interaction and connects with the surrounding communities.

1:500 Site Model

Conclusion

The pandemic has demonstrated the capacity of society to rapidly transform and adapt to new circumstances. Instead of reverting to the pre-pandemic status quo, it is imperative that we seize this opportunity to reshape our communities for long-term resilience and social interaction. One significant change that has emerged is a shift away from the centralized office model. Many individuals now seek the flexibility of working closer to their homes while still enjoying the social aspects of work. This shift in mindset presents an opportunity to reimagine the concept of work and design spaces that cater to this evolving trend. Furthermore, this shift aligns with the growing desire for more localized and community-oriented workspaces.

Research into remote working has provided valuable insights into the social and architectural aspects of post-pandemic design and architecture, enabling us to develop approaches that cater to the needs of remote workers while promoting collaboration and well-being. Understanding the social dynamics of remote work, such as the need for spaces of focus and spaces that facilitate interactions, has become crucial in designing spaces that foster effective teamwork and communication.

Rather than dwelling on the tragedies of the pandemic, it is crucial to find the silver lining and utilize the lessons learned to build resilient and sustainable communities. This involves considering factors such as flexible workspaces, adaptable infrastructure, and equitable access to public spaces. By integrating these considerations into our designs, we can create environments that promote health, connectivity, and a sense of belonging.

In conclusion, the post-pandemic era calls for a holistic approach to architecture and urbanism that addresses the lessons learned from the COVID-19 pandemic. By embracing resilience, social interaction, and sustainability, we can shape a built environment that supports the well-being of individuals and communities in the face of future challenges.

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