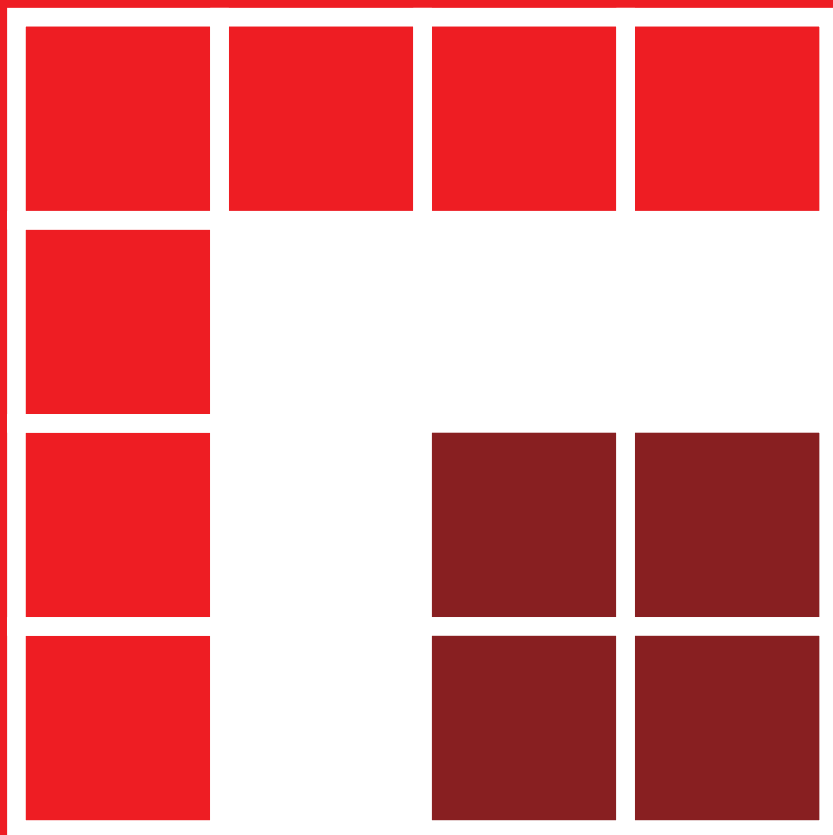


A NEW
"SQUARE DEAL"



FOR THE "SOUL" OF
EAST HARLEM'S SOCIAL
HOUSING PROJECTS

O S M A N U R A L

GRADUATION PROJECT FOR THE MASTER OF SCIENCE IN ARCHITECTURE, URBANISM, AND BUILDING SCIENCES

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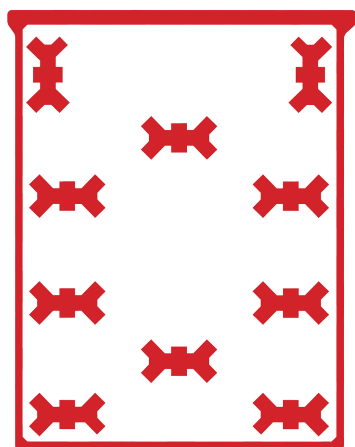
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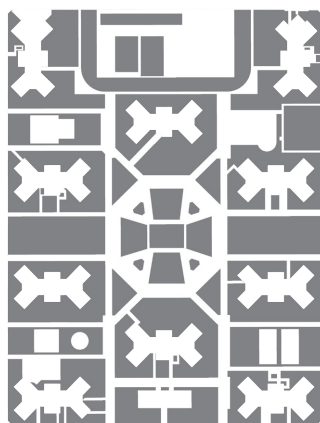
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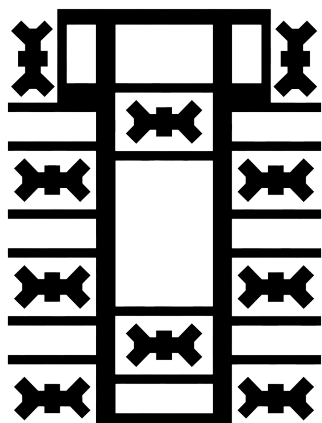


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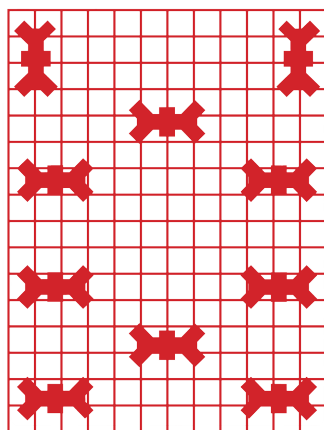
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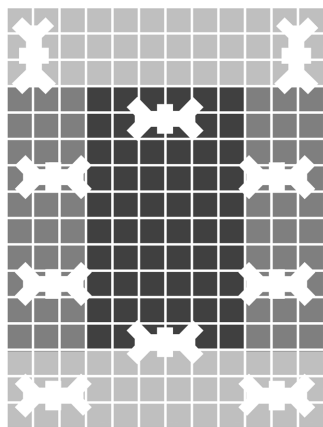


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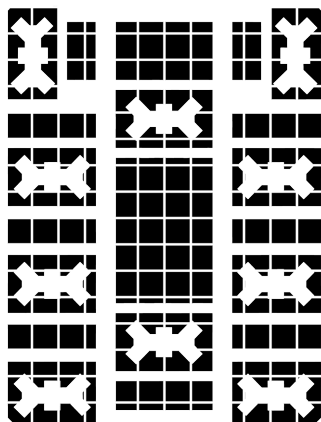
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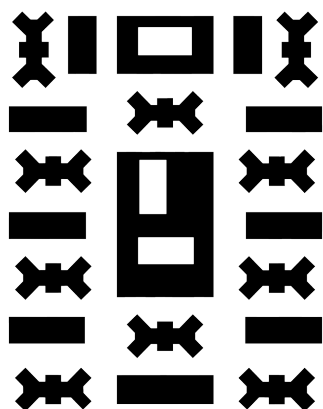


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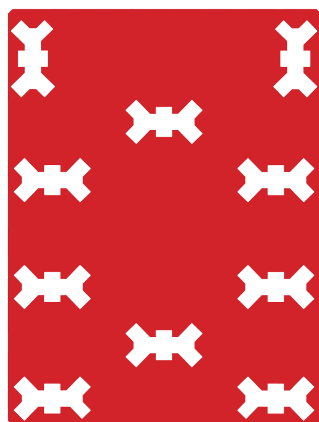
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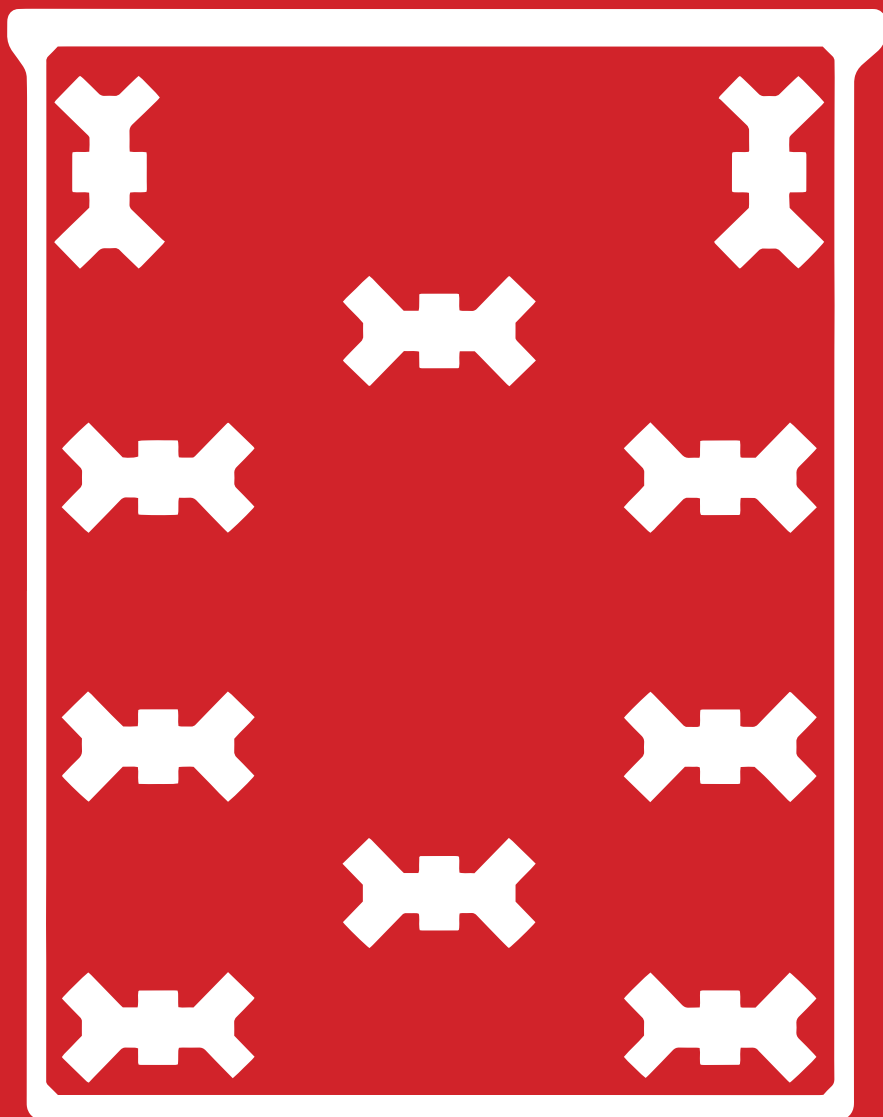


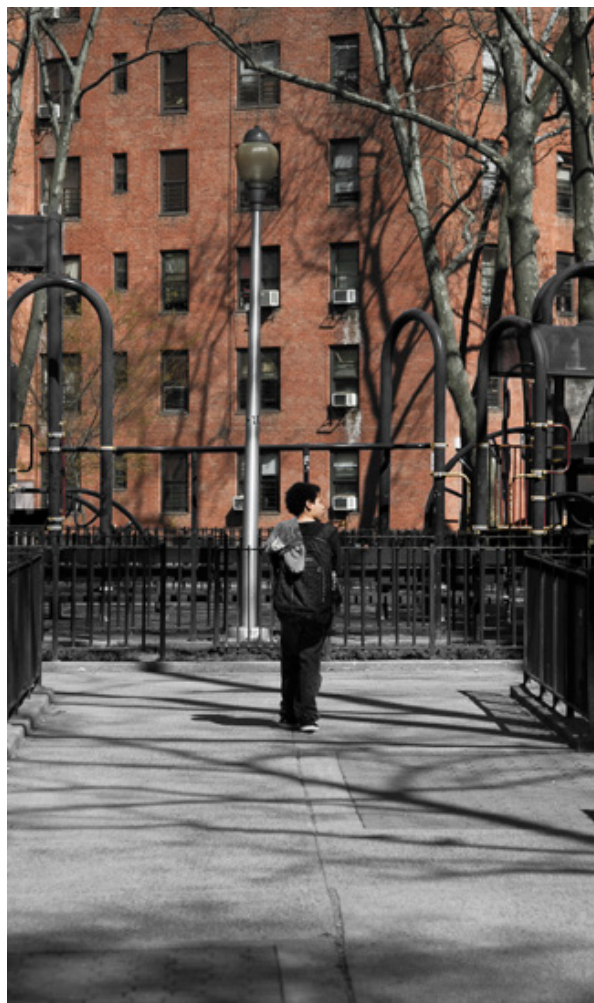
AWAKENING
THE “SOUL”

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THE RISE OF NYC SOCIAL HOUSING





Resident Looking onto their Public Space in the Projects

Source: Photos by Anna Beeke - <https://urbanomnibus.net/2013/05/portfolio-alfred-e-smith-and-vladeck-houses/>

AND THE PLIGHT OF THEIR RESIDENTS



New York is a city made up of varying morphologies, ranging from skyscrapers to the infill tenements of old. Between these rich and dynamic forms and functions exist an anomaly, groups of simple and repetitive buildings stand in defiance - red brick blocks of social housing. These projects are leftovers from a time where progressive ideas had power over politics and policies that pushed for social and economic reform. As time has progressed forward, these experimental uses of urbanism have faded, and now exist in a state of isolation and disrepair. Only low-income families live in them now, and the lack of maintenance funding has created sub-par living standards for the people who live within the social housing projects. In an environment of perpetually rising living costs and rents, coupled with a construction boom that is currently underway in the city, how were these projects so blatantly ignored and left to rot?

CHAPTER STRUCTURE



Sir Basil Spence in Gorbals, a Neighborhood in Glasgow, Scotland (Before and After)
Source: Book Titled "No Deposit, No Return" by Jean-François Batellier, 1978

1. ABSTRACT

A preview of the theory chapter, briefly explaining the rise of the social housing projects in New York, and the unintended issues they created.

2. INTRODUCTION: MORE IS LESS

An overview of the current housing crisis New York is going through, and the implications that is has on low-income families who rely on these social housing projects.

3. FROM TENEMENTS TO TALL TOWERS

A look back at the heritage story of the social housing projects, and the progressive movements that helped create them.

4. BREAKING THE GRID OF NEW YORK

An in-depth look into the unforeseen side effects of the social housing projects, and the rise of public space as an issue.

5. FINDING “SOUL” IN PUBLIC SPACE

An exploration into potential qualities, characteristics, and ideas which could be implemented in order to redevelop public space to increase the quality of life for the inhabitants who use them.

6. CONCLUSION

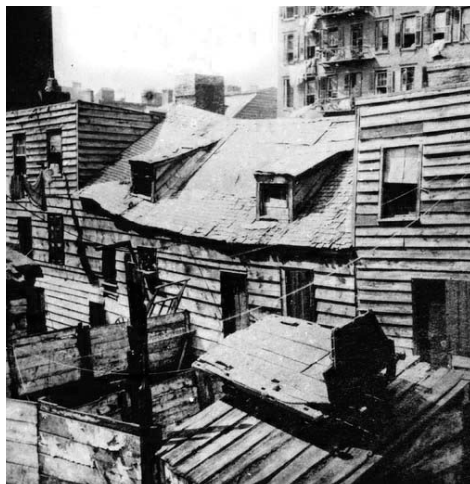
A synopsis of the historical, morphological, and social significance of the social housing projects within the context of New York City, and what we should do to help the people who live in them.

A B S T R A C T

The social housing projects of New York City were born out of what was seen as a social necessity, which was to cure horrid living conditions resulting from the 'industrial city.' The poor of New York cramped into small living spaces where disease, safety, and other social ills were rampant. These issues were brought to light by a book entitled *How the Other Half Lives: Studies Among the Tenements of New York* by late 19th Century photographer Jacob Riis (1890), who documented and exposed the squalor of these communities. This helped spur on radical change as slums were demolished at large scales to make way for the cure - state of the art modern housing high-rises for all with great access to green space and light. This was one of the first movements in urbanism to be used to solve social problems, but it also manifested a new set of problems - more specifically in the realm of public space.

Though this approach quickly provided quality and financially viable housing to the masses, it unintentionally created a discrepancy between the scales of the buildings and the public space that surround them. In the lecture *The Ghastly Tragedy of the Suburbs* by James Howard Kunstler (2004), he stated that the inadvertent byproduct of these projects was the loss of the human scale in the public realm. He angrily lamented the mono-functionality of these projects, arguing that public space lost its humanity and richness in hierarchy. In *The Death and Life of Great American Cities*, Jane Jacobs (1961) would agree, adding that economic and social diversity should bring a sense of vitality that is fundamental in making successful public spaces. This paper aims to explore theories and a fields of research that could help provide social housing projects a better quality of life through the redevelopment of their public spaces.

Key words – New York, neoliberalism, progressivism, social housing, public space, sociospatiality, re-development



Horrid Memories of New York as an Industrial City

Source: *How the Other Half Lives: Studies Among the Tenements of New York* by Jacob Riis



Wagner Houses (2.154 Units) in East Harlem, Manhattan

Source: Il Giornale dell'Architettura - <http://ilgiornaledellarchitettura.com/web/2015/11/20/affordable-new-york/>

INTRODUCTION:

New York, like many other metropolises around the world, is going through a construction boom. Land values are increasing, money is being poured into various projects, and neighborhoods are becoming gentrified. This trend has led to a housing crisis for the city, as rising rents are reducing the amount of available affordable places to live. According to an article in the *Architectural Record* by Ronda Kaysen (2018) entitled *The Housing Crisis in New York*, rents for dwelling went up 31 percent in the past 8 years. The huge spike in rental costs has forced middle-class inhabitants to relocate to the periphery, and has even contributed to an increase in homelessness (Kaysen, 2018).

In the face of this socio-spatial inequality, the current Mayor of New York Bill de Blasio has led an aggressive push to create more affordable housing for the city by both partnering with and financially motivating private developers. This is being achieved by altering zoning laws to allow for larger developments (and therefore profits), and in return making it a requirement for the developer to make a certain amount of affordable housing in their projects (Kaysen, 2018). Though this approach has produced an influx of new and affordable places to live for many middle-class citizens who can afford the new rents, the poor residents of the city still struggle (Kaysen, 2018). New developments like these can also bring the risk of speculation, gentrification, and marginalization of the neighborhood that the city thinks it is helping (Kaysen, 2018).

These problems disparaging low-income inhabitants in these developing neighborhoods are complicated, as larger scale socioeconomic issues also need to be considered. In an article published by the SAIS Review of International Affairs entitled *Neoliberal Urbanism: Models, Moments, Mutations*, Jamie Peck, Nik Theodore, and Neil Brenner (2009) explore these issues by explaining that the social programs that produced public housing was born out of an old economic model called Keynesian-welfarism. As this system started showing signs of collapse in the late 1970's, Neoliberal ideologies were introduced to markets as a political response to this failure of government and public regulatory institutions (Peck et al. 2009). With this new philosophy, cities transitioned to incentivizing growth through corporate investment, privatization, and deregulation of urban housing markets (Peck et al. 2009). The transition towards the free market dictating development has spawned speculative growth at large scales, leading to the sociospatial polarization of the urban fabric (Peck et al. 2009).

The ramifications of this type of approach to economic growth were that social housing projects slowly began to decay as public investment evaporated from political pressure for change. In an article written by Mark Jacobson (2012) in *New York Magazine* entitled *The Land That Time and Money Forgot*, social housing projects had over time developed a reputation for being dangerous and undesirable areas. After the white flight out of the city and into the suburbs, more low-income minorities moved into the housing projects in order to fill up the empty apartments (Jacobson, 2012). In doing so, the demographic of the inhabitants in social housing shifted more towards low-income families, bringing in poverty that in turn increased criminal activities and other social ills (Ferré-Sadurní, 2018). This trend took place in public housing projects all over the country, and unfortunately coincided with the rise of neoliberal policymaking. The social housing projects became symbols of both wasteful spending and the failure of welfare policies (Jacobson, 2012). One by one, infamous large scale projects all over the United States, such as Pruitt-Igoe (Figure 1), were torn down in defeat and submission to public and political pressures (Jacobson, 2012).

M O R E I S L E S S

In spite of all these issues, large scale affordable housing projects today still exist in New York, but are only barely enduring due to the reliance low-income families have on them to survive. According to a recent article from the New York Times by Luis Ferré-Sadurní (2018) called *The Rise and Fall of New York Public Housing: An Oral History*, 400,000 (according to Jacobson's article, some unofficial reports claim up to 600,000) inhabitants reside in these aged dwellings that unfortunately display a variety of maintenance issues. There are health and safety concerns ranging from heating and mold problems, to 15-20 minute waiting times just to use the elevator to get up into their homes (Ferré-Sadurní, 2018). Due to both a lack of funding and mismanagement issues plagued by the New York City Housing Authority (NYCHA), the reputation of the projects have also become synonymous with poor living standards (Ferré-Sadurní, 2018).

When you consider that these dilapidated social housing projects exist side-by-side to the current wave of new high quality private (re)development happening in the city, this phenomena is literally the spatial manifestation of the ever increasing economic divide between the rich and the poor. What is even more ironic is that the original aim of these social housing projects was to provide disenfranchised people a safe and healthy place to live (Ferré-Sadurní, 2018), but the opposite ended up being the reality. To better understand this paradox, the history of what motivated these projects to be built must be considered. Doing so will shed light on the reasoning behind their existence, and the sociospatial implications of these large scales of public housing.



Figure 1: *The second, widely televised demolition of a Pruitt-Igoe building in April 1972*
Source: The U.S. Department of Housing and Urban Development

FROM TENEMENTS

So blatantly apparent is this disparity of living conditions in New York, that experimental architect Lebbeus Woods (2010) wrote about it in his personal blog in a post entitled *Slums of New York*, 2 years before his death. In it, he states that the poor living conditions of the late 19th Century never really went away, and that it just remanifested itself in the social housing projects of today. Woods makes a plea to our society that we should remember the humanistic qualities of welfarism in the face of the prevailing neoliberal attitudes to the treatment of our fellow man. He reminds us to show compassion for all people in our society by “securing physical place for each person within a communal structure that enables us all to live with dignity” (Woods, 2010). It is this approach helped lay the philosophical foundations of the national public housing program in the United States as a tool to fight through the Great Depression (Woods, 2010). This movement was however a reaction to a more practical problem: the slums and squalor of the industrial city.

Woods ends his post with a story about a Danish immigrant named Jacob Riis, a reporter turned social reformer who would in great detail bring to light the plight of people living in the slums of late 19th Century New York City. According to a biography written for an exhibition by the Library of Congress (2015) entitled *Jacob Riis: Revealing “How the Other Half Lives”*, Riis got firsthand knowledge of the slums as a homeless immigrant spending 8 years to find steady work. Once he became a writer for the New York Tribune, he worked as a police reporter at night to understand the underbelly and dynamics of tenement life (Library of Congress, 2015). His background and experience provided the material necessary for his influential book titled *How the Other Half Lives: Studies Among the Tenements of New York*, which is best remembered for his pioneering use of low-light flash photography (Figure 2) which helped him expose the conditions of squalor of the slums (Library of Congress, 2015). The success of his book helped him become a predominant voice in the struggle for urban reform, and paved the way for other progressive movements of the time to force governmental institutions to provide reform to their constituents (Library of Congress, 2015).

The progressive movement would push for the implementation of New York’s first regulations of the urban form. In a sub-chapter entitled *Planning the modern metropolis* under the entry for New York in the Encyclopædia Britannica, the editor and historian George Lankevich (2018) explains that the out of control housing conditions of the slums were brought to heel by the Tenement House Law of 1901. This legislation demanded that old buildings be retrofitted with ways for inhabitants to escape if there is a fire, and even install toilets where there were once none (Encyclopædia Britannica, 2018). It also made new residential structures be limited to 6 floors that were required to have kitchens, indoor plumbing, and windows in all rooms - which we all take for granted in the dwellings of today (Encyclopædia Britannica, 2018). In the City Zoning Ordinance of 1916, controls would be put in place in order to manage how the urban fabric is shaped through the use of density controls, land use zoning, and setback requirements that would allow daylight to seep into the city streets (Encyclopædia Britannica, 2018). It can therefore be understood that the progressive movement birthed the modern city as we know it.

TO TALL TOWERS

The progressive movement also influenced the first experiments with affordable public housing in New York. In a book titled *Renewing Black Intellectual History: The Ideological and Material Foundations of African American Thought* by Adolph Reed Jr. and Kenneth W. Warren (2010), it is explained that these efforts began as philanthropic endeavors which took place in order to combat racist and unfair rent practices. This struggle for better housing practices were led by the advocate group called the New York Urban League, which aimed to help fight discrimination practices against African Americans in Harlem by convincing both landlords and developers of the time to provide decent affordable housing (Reed Jr. et al. 2010). A result of these efforts was the building of the Dunbar Apartments in 1928, which was financed by John D. Rockefeller Jr., and was advertised as a cooperative that would have renters eventually transition to the ownership of their apartments (Reed Jr. et al. 2010). Unfortunately, the project was small and did not make the impact it hoped to create due to the relatively small amount of units available in relation to what was available in Harlem's housing market, combined with rents being too unaffordable as the Great Depression began a year later after construction.



Figure 2: *Crowded Lodging in a Tenement*

Source: *How the Other Half Lives: Studies Among the Tenements of New York* by Jacob Riis

FROM TENEMENTS

A housing crisis brought on by the Great Depression transformed urban reform into a nation wide policy. In an article written by Charles L. Edson (2011) for the Journal of Affordable Housing & Community Development Law entitled *Affordable Housing—An Intimate History*, he explains that this expansion had been initiated by the New Deal programs that U.S. President Franklin D. Roosevelt pushed through in order to combat extreme unemployment and poverty in the country. These programs included the creation of the United States Housing Authority (USHA), later called the United States Public Housing Administration (USPHA), whose goal was to provide financial support to local public housing authorities (Edson, 2011). There were a couple of driving forces behind these programs were to provide construction jobs for the unemployed, while eradicating the slums (Figure 3) at the same time (Edson, 2011). Housing programs such as these helped organizations like the New York City Housing Authority (NYCHA) provide social housing projects on a massive scale.

Founded in 1934, NYCHA went on a campaign of slum clearance and mass construction in order to provide needy families affordable homes to live in (Ferré-Sadurní, 2018). Urban planners achieved this through the implementation of the ideals of the international movement, which was seen as a cost efficient and quick solution to the housing crisis caused by the Great Depression. According to a research article written for the Journal of the European Architectural History Network by Rixt Woudstra (2018) entitled *Exhibiting Reform: MoMA and the Display of Public Housing (1932–1939)*, the international style was popularized in the United States during this time, due in part to multiple exhibitions done at the Museum of Modern Art (Figure 4) throughout the 1930's. The scale and efficiency of the planned projects displayed influenced urban planners and politicians alike, therefore directly influenced the form of how social housing projects in New York would manifest itself (Woudstra, 2018).



Figure 3: *Slums Breed Crime and Cross Out Slums by Lester Beall*
Source: Library of Congress - <https://www.loc.gov/pictures/>

TO TALL TOWERS

With the ideologies of the international style now firmly in the auspices of NYCHA, the mandate now was to quickly demolish problematic slums and make the space for social housing at a previously unseen scale in New York (Ferré-Sadurní, 2018). According to an article in *Metropolis Magazine* entitled *A Brief History of Affordable Housing in New York City* by Anthony Paletta (2016), not only did this approach to urban regeneration erase complete sections of neighborhoods and displace local residents, but it also dismantled the organizing grid system that had defined New York since the beginning of the 19th Century. Instead of a morphology based on infill blocks defined by the grid, these new projects are arranged within themselves while their buildings float in green space (Paletta, 2016). This change in both size and scale marks a massive shift in the identity of how inhabitants of the city experience public space. In order to understand how the perception of public space has changed in New York, we must look at how the grid came to be and how public space became an issue for the city.



Figure 4: *Housing Section of Modern Architecture: International Exhibition*
Source: Digital Image © The Museum of Modern Art/Licensed by SCALA/Art Resource, NY

BREAKING THE GRID

The significance of the grid system and its relation to public space is explained in an article for the 2012 Congress of European Research in Architecture and Urbanism (EURAU) titled *New York: the revitalization of public space* by Ana Morcillo Pallarés (2012), who explains that the grid system first appeared in the masterplan of New York with the introduction of the Commissioner's Plan of 1811. At the time of its implementation, New York was considered a chaotic place, and the urban grid was seen as a practical approach to reduce congestion problems of the city by providing a rigid system of roads and parcels which can also regulate land values (Pallarés, 2012). The original grid plan displayed a sparse amount of public spaces, except for a couple of small squares combined with specialized areas such as a military parade ground and a place for markets (Pallarés, 2012). The lack of planned recreational space resulted from the increased land values of Manhattan, combined with the fact that the spaces along flanking riverfronts of the island were considered adequate enough for the inhabitants of the city (Pallarés, 2012). Therefore, most of the public realm existed in the spaces in-between the infill of urban fabric regulated by the grid.

What made the grid system so successful for New York was the fact that it was really flexible to change to the needs of the city, such as realizing the need for more recreational spaces, avenues, and other public goods (Pallarés, 2012). With the creation of the large public housing projects by the NYCHA, the parameters that made the grid successful were broken as the new developments ignored the infill system defined by the streets. This was perpetrated by the mass produced buildings of the projects, which float within super blocks formed by the slum clearances (Figure 5). Though this guaranteed light and open space to the new housing towers, the public space around the buildings became empty and recreational places for its inhabitants.



Figure 5: Section of East Harlem (left image), which, in the 1940's, was cleared to make way for the Johnson Houses (right image). Source: NYC.gov - <http://gis.nyc.gov/doitt/nycitymap/>

OF NEW YORK



1807 Commissioners Plan of New York - The Birth of the Grid of Manhattan
Source: Library of Congress - <https://www.loc.gov/resource/g3804n.ct000812/?r=-0.061,-0.201,1.111,0.69,0>

BREAKING THE GRID

In her book *The Death and Life of American Cities*, Jane Jacobs (1961) explains that this blurring of public and private space a major problem in terms of safety for the inhabitants of the projects. According to Jacobs, safety is an issue because the high-rise buildings and the large spaces between them do not display a clear separation of public and private (Jacobs, 1961). In addition to this, a vast majority of people living in the projects cannot look to see what is happening on the street level, while the mono-functionality of the residential projects decreases the activity on the street level, allowing more opportunities for vandalism and crime because of a lack of pedestrian density that could prevent such activities to happen (Jacobs, 1961). She therefore argues that an essential part of a community is the control of public behavior through self-awareness, combined with a public space that motivates consistent activity and liveliness throughout the day (Jacobs, 1961). Jacobs also laments the green spaces that surround the buildings of the social housing projects. She complains that the lack of diversity -both social and programmatic - prevents the neighborhood park from becoming active and dynamic (Jacobs, 1961). Destroying the grid diminishes the potential for these sorts of qualities to exist in the social housing projects, and helps contribute to the crime problems they experience.

Another problem with the public space around the buildings of the social housing projects involve the actual physical scale of the public space itself. Since it is made up of one uniform texture and scale, the space exhibits a lack of hierarchy or variety (Figure 6). In a lecture called *The Ghastly Tragedy of the Suburbs* by James Howard Kunstler (2004), he angrily laments that the design approach of the social housing projects are too radical a rejection of urban ideas of the past, as the mechanical design processes that created their residential high-rises caused a loss of the human scale in the public realm.

He argues that the organic way in which cities used to grow in provided a variety of public spaces that allowed inhabitants to experience a richness of humanity (Kunstler, 2004). He claims that there was an informal but implicit hierarchy between various forms of public space, helping to create meaningful places that reflect "the physical manifestation of the common good" (Kunstler, 2004). He therefore argues that the recreational space in designs such as social housing projects are only provided in order to hide the de-humanizing size and scale of their buildings (Kunstler, 2004).

Taking these problems into consideration, it is clear that the international style in which social housing projects in New York were built went against all preexisting ideas of how public space functions. The poor state in which the projects are in are not just the result of political and economic issues, but a more complicated amalgamation of sociospatial dimensions that exist as a byproduct of the design approach of the projects themselves. According to the book entitled *Public Places - Urban Spaces* written by Matthew Carmona (2003), this trend can be reversed by restructuring these inactive public spaces that exist within the social public housing projects that answer the issues brought up by Jacobs and Kunstler. In order to understand how to activate these spaces, methods for countering the issues of monofunctionality, scale, and safety, must be found. Doing so will allow for the phenomena of social segregation and fragmentation to be reversed, and in return increasing the quality of life of the residents living in the projects (Carmona, 2003).

OF NEW YORK



Figure 6: *Stuyvesant Town: Built by Metropolitan Life Insurance Company in 1943*
Source: <https://www.stuytown.com/about-nyc-apartments/pcvst-history>

FINDING “SOUL”

Carmona (2003) frames this reconstructing of public spaces as a set of needs that need to be met in order to achieve meaningful and “soulful” places. He references these needs from multiple sources, but two stand out in relation to the public housing projects in New York. One source involves a set of human components that were identified by American psychologist Abraham H. Maslow (1968) in his book *Towards a Psychology of Being*, and the other being a book by Andrew M. Stone, Leanne G. Rivlin, Mark Francis, and Stephen Carr (1992) entitled *Public Space*, which lists a set of needs that public space should meet in order to serve its users. When these are synthesized together, a framework in which public spaces need to be designed can be formed.

According to Maslow (1968), there is a hierarchy of needs that exist in the form of a tiered system where once the most basic needs of people have been met, more nuanced and complex needs can be considered that increase the quality of life for inhabitants of the city. This takes form in the shape of a pyramid (Figure 7) that portrays a structure of human motivation that could help inform how public spaces should function. At the base of the pyramid exists basic physiological needs like warmth and comfort, followed by safety and security needs. The middle of the pyramid houses affiliation needs such as belonging to a community, then esteem needs have to be met so people feel valued by others. Finally, at the top of the pyramid exists self-actualization needs like artistic expression and fulfillment (Maslow, 1968). When you consider the current state of public housing projects in New York, it can be stated that the base of the human motivational pyramid have been compromised due to the lack of maintenance, combined with sociospatial issues created by the design of the projects themselves. Therefore, in order to provide the residents of the social housing projects a better quality of life, spatial interventions must be done in order to satisfy the basic needs of Maslow's pyramid of human motivation.

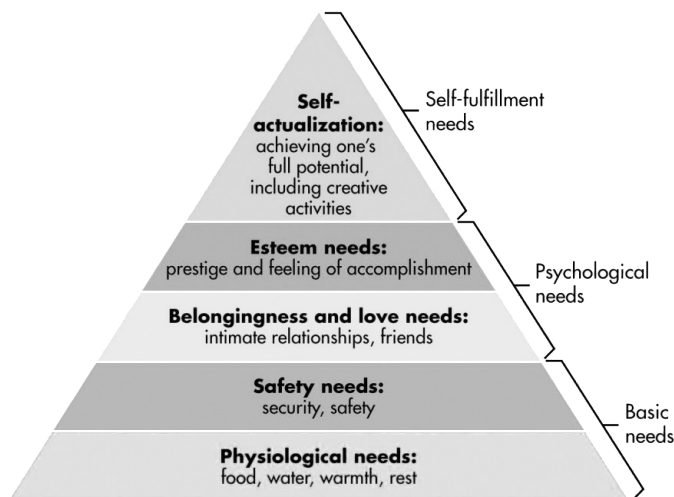


Figure 7: Maslow's Hierarchy of Needs.

Source: <https://www.simplypsychology.org/maslow.html>

I N P U B L I C S P A C E

In their book *Public Space*, Carr et al. (1992) provides a list of five characteristics that can be implemented into the design of public space which would satisfy the needs identified by Manslow. According to Carr et al. (1992), by meeting more than one of these characteristics can help provide proper public spaces and increase the quality of life of the inhabitants who live around them. These spaces need to at least provide these people feelings of “comfort” and “relaxation,” a “passive” or “active engagement with the environment,” and a sense of “discovery” (Carr et al., 1992). “Comfort” involves protecting users from environmental factors such as heat and wind, sufficient seating, and a degree of safety in which people feel that they can spend a proper amount of time in public space without feeling threatened (Carr et al., 1992). “Relaxation” refers to the function of public space as a place to get away from the pressures of the city where the person experiencing the public space can be at ease and unwind (Carr et al., 1992). A “passive engagement in with the environment” is an explanation of the feeling people experience when they feel they are being a part of something through observing the activities and interactions of other people around them, and recommends providing places in which this type of observation can happen (Carr et al., 1992). An “active engagement in the environment” refers to a more direct interaction between all peoples experiencing public space, by providing compressed places where the possibility of face to face interactions can occur (Carr et al., 1992).

By combining all of these characteristics and motivations, a theoretical framework in which to solve the issues of the social housing projects can be proposed. In the handbook *Placemaking and the Future of Cities* by the Project for Public Space (2012), an endeavor funded and created by the UN-HABITAT Sustainable Urban Development Network (SUD-Net), provides a set of guidelines that encapsulates the sociospatial needs defined by both Carr et al. and Manslow. The Project for Public Space (PPS) calls this list of guidelines “Ten Ways to Improve your City,” and is comprised of as follows (Project for Public Spaces, 2012):

1. Improve Streets as Public Spaces
2. Create Squares and Parks as Multi-use Destinations
3. Build Local Economies through Markets
4. Design Buildings to Support Places
5. Link a Public Health Agenda to a Public Space Agenda
6. Reinvent Community Planning
7. The Power of 10 - Concept to Kickstart Placemaking Processes
8. Create a Comprehensive Public Space Agenda
9. Lighter, Quicker, Cheaper: Start Small, Experiment
10. Restructure Government to Support Public Spaces

These fundamental steps are technically oriented to developing countries with public spaces issues in residential areas which are socially and economically problematic, but, all of the aforementioned steps could be applied to help the quality of life in the social housing projects of New York. By combining all the needs that have to be met to solve sociospatial issues regarding public space with the guidelines developed by the PPS, designers can have a good framework (Figure 8) in which to redevelop failing public spaces.

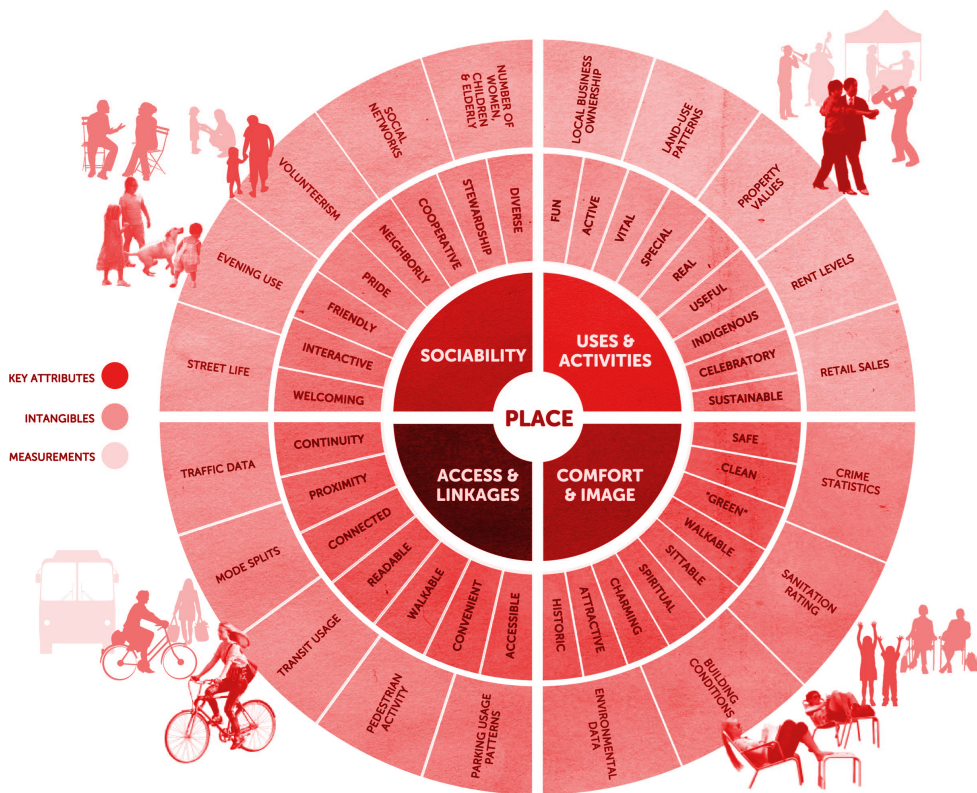
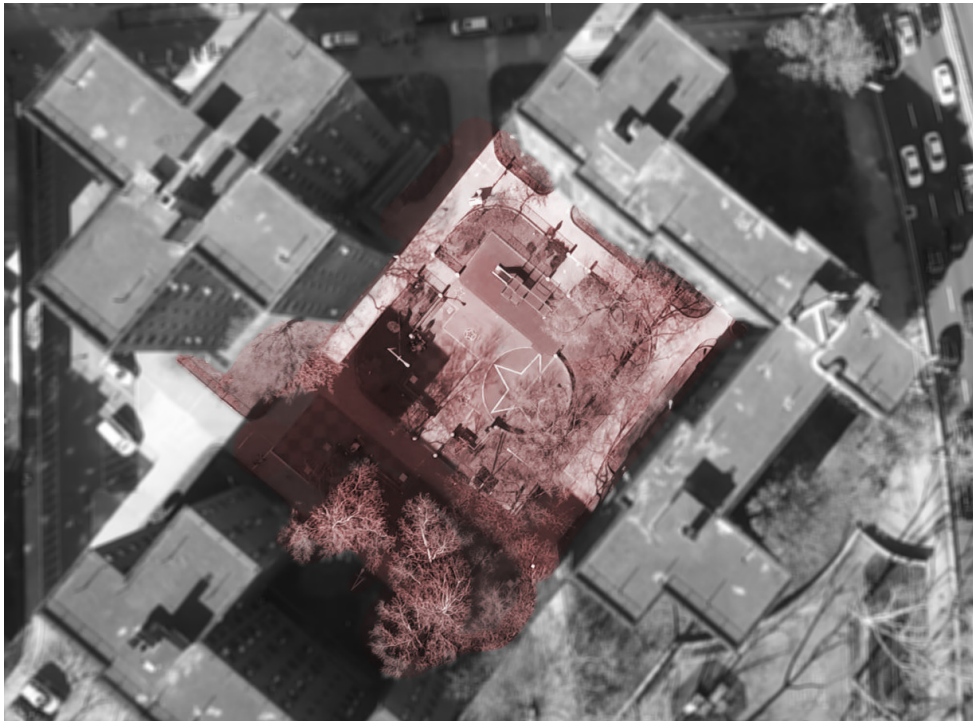


Figure 8: What makes a Successful Place?

Source: Project for Public Spaces - <https://www.pps.org/article/grplacefeat>

C O N C L U S I O N

In summary to the issues regarding the inhabitants of the social housing projects of New York, architect David Adjaye (2014) in his article *Contextualizing Approaches to Urbanization* makes the argument that in order to deal with the pressures of the reality of neoliberalized globalization in the development of our cities, the processes in which urban design happens need to shift. Adjaye (2014) calls for innovative typologies of public space, new hybrids of social functions within ordinary architectures, and more contextually sensitive approaches to site context analysis. If we take his plea to heart, and apply it to the projects, we should learn from both the reasons why they were built in the first place, and the failures that followed them. We should appreciate the progressive movements that fueled the manifestation of social housing, but we need to understand that the over-correction created anomalies in the urban fabric of New York, and created problematic voids within its flexible grid. We need to realize that even though the projects are completely out of scale, they are part of New York's history as an attempt to provide all levels of society a proper place to live. Instead of ignoring them, like the city is doing now, they need to be appreciated and redeveloped to provide a sense of dignity for the inhabitants of the projects. By doing so, the objective of which the social housing projects were created to complete can finally be met.

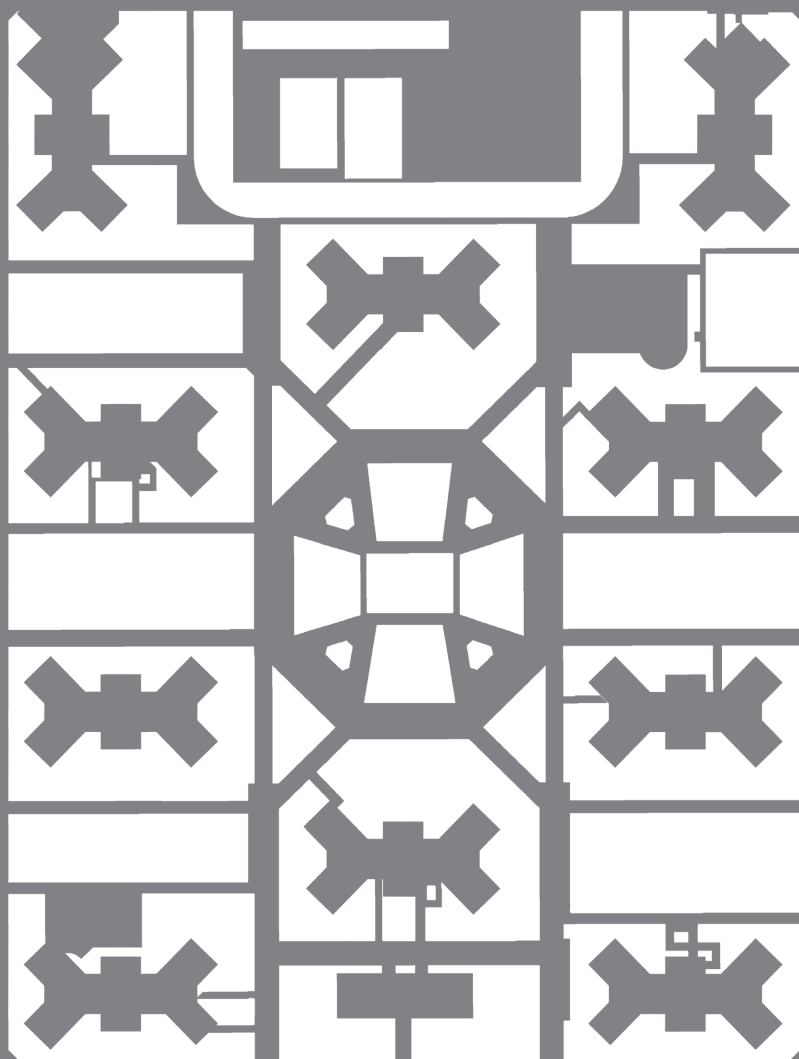


East Harlem Aerial - Wagner Houses

Source: Screenshot of Video by David Sakover - <https://www.youtube.com/watch?v=d1TZUP12nXc>



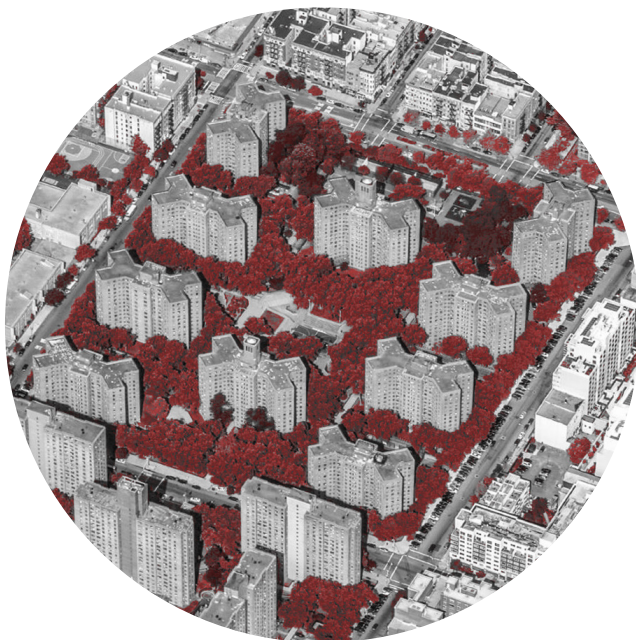
UNDERSTANDING THE "SOUL" OF ITS PUBLIC SPACE





Empty Recreation Space Sitting Unused at the Jefferson Houses
Source: <https://www.flickr.com/photos/jag9889/6412087945/in/photostream/>

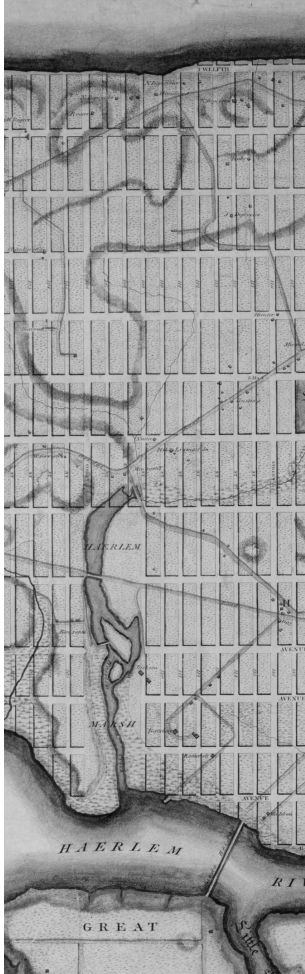
AND CONTEXT THAT IT EXISTS IN



Before understanding how to transform the public realm of the social housing projects, an in-depth analysis of the issues currently plaguing it must be done in order to understand what needs to be fixed. This approach will involve the study of issues that include the history of the public space in the projects, the quantitative aspects that exist in their context, and the qualitative aspects of the public space in the projects.

By better understanding the relationship between the inhabitants of the projects and the public space that they have learned to live with, a more comprehensive knowledge can be collected and implemented within the proposed intervention area. Key issues regarding the projects will be explored, such as the hardships of the community, the sense of ownership, and the meaning of public space to the residents of the projects.

CHAPTER STRUCTURE



East Harlem Over Time

Source: Commissioners Plan of 1807 and Aerial Survey of Manhattan Island are from the Library of Congress.
Satellite Image from Google Earth

1. A CONTEXT OF ISOLATION

A summary of the overall problem facing the social housing projects of NYCHA, including the low-income families that were left behind.

2. LOCATION: EAST HARLEM

An island of social housing projects at the edge of Central Park that sits in a state of disrepair and isolation.

3. OVERVIEW: EAST HARLEM

A look into the local demographic problems regarding the context surrounding the project location.

4. LOCATION: KING TOWERS

The chosen housing project that will be the location of the site intervention.

5. CASE STUDY: KING TOWERS

A look into the local demographics of the context surrounding the project location.

6. SUMMARY: PUBLIC SPACE

A conclusion on the issues of public space in the projects of East Harlem.

7. CASE STUDY: A “SOUL” SEIZED

A definition of what the current state of the “soul” in the social housing projects.

A C O N T E X T

AN UNFAIR FORM OF GROWTH

The City of New York is currently going through a construction boom. Developers are trying to take advantage of rising land values caused by both economic growth and a lack of affordable housing, resulting in a lack of affordable housing available to middle-income families. According to an article in the Architectural Record by Ronda Kaysen (2018) entitled *The Housing Crisis in New York*, It is because of this problem that the current Mayor of New York, Bill de Blasio, has made it a priority to meet the demands and challenges of the housing crisis by incentivizing private development through various methods.

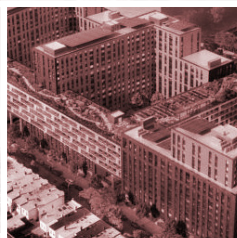
These methods include changing zoning laws and cutting red tape for access to abandoned lands, as a way to inject steroids into the housing market (Kaysen, 2018). This has unfortunately led to issues regarding gentrification and speculative development, which has in turn led to the disenfranchisement of the low-income inhabitants of the city (Kaysen, 2018). These policies have marginalized people by either forcing the poor to either live in the periphery of the city, or be crammed into poorly maintained social housing projects that were built more than half a century ago.

THE SLUMS OF NEW YORK, TODAY

According to a recent article from the New York Times by Luis Ferré-Sadurní (2018) called *The Rise and Fall of New York Public Housing: An Oral History*, this is worrisome due to the fact that these aged dwellings display a variety of health and safety issues that the New York City Housing Authority (NYCHA) is having a hard time managing.

The low-income families which rely on these projects have a hard time paying the minimum rent to begin with, and when you couple this with unacceptable living conditions, you end up with the spatial manifestation of an increasing divide between the rich and poor which now defines New York City . What is more shocking is that when you look back in history, the social housing projects were originally seen as a solution to poverty and slumification, but they ended up just being vertical versions of the slums which they took place of (Ferré-Sadurní, 2018).

O F I S O L A T I O N



Neo-Liberalization of Residential Development
Various Proposals for Redevelopment in the NYC Areas such as Harlem and Queens

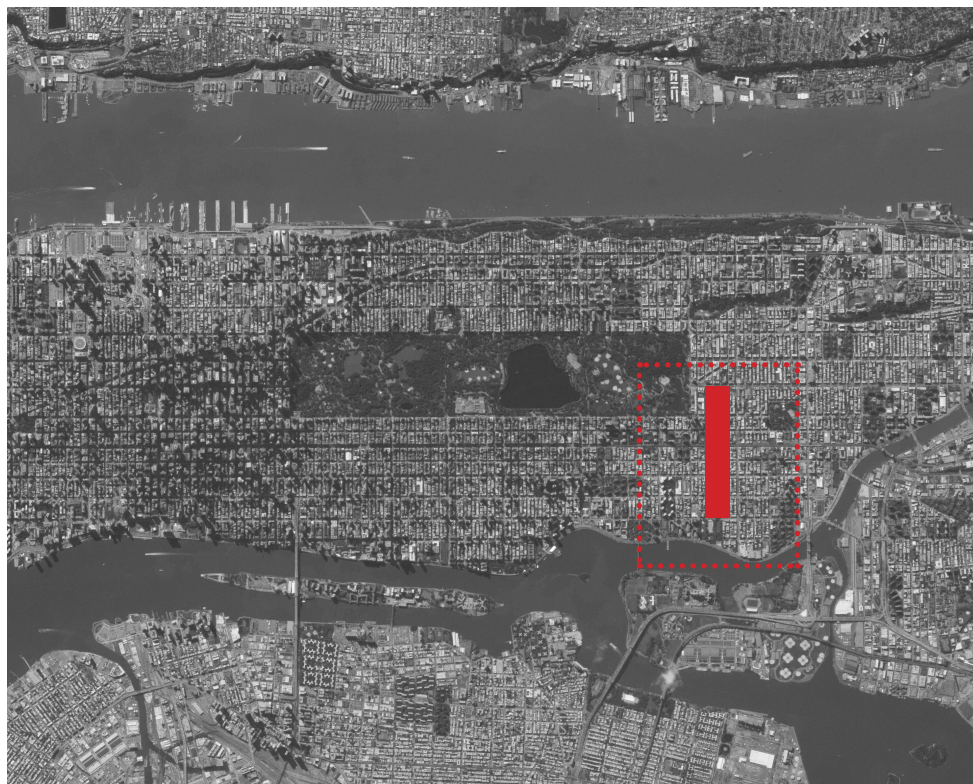


Low-Income Families Left Behind
Various Social Housing Projects in East Harlem

L O C A T I O N :

AN ISOLATED COMMUNITY OF SOCIAL HOUSING

The location of the thesis project is determined to be East Harlem, a neighborhood that exists north of Manhattan Island. The project site is made up of four social housing projects: Jefferson Houses, Johnson Houses, Taft Houses, and King Towers. There are multiple reasons for this selection, but one of the most motivating factors is that its a continuous super block of social housing projects which happen to exist at the corner of Central Park. The spatial realization of social inequality is apparent in this case when one considers the presence of expensive real estate around Central Park. From a morphological standpoint, the project area is a massive interruption in the planned grid of New York, and sits isolated around the infill tenement morphology that defines the city. There are also different design typologies of residential blocks on the site, and has a good potential to connect to the waterfront of the East River with Central Park.



East Harlem Social Housing Projects at the North of Manhattan Island

Source: Edited by Author from Google Earth

EAST HARLEM

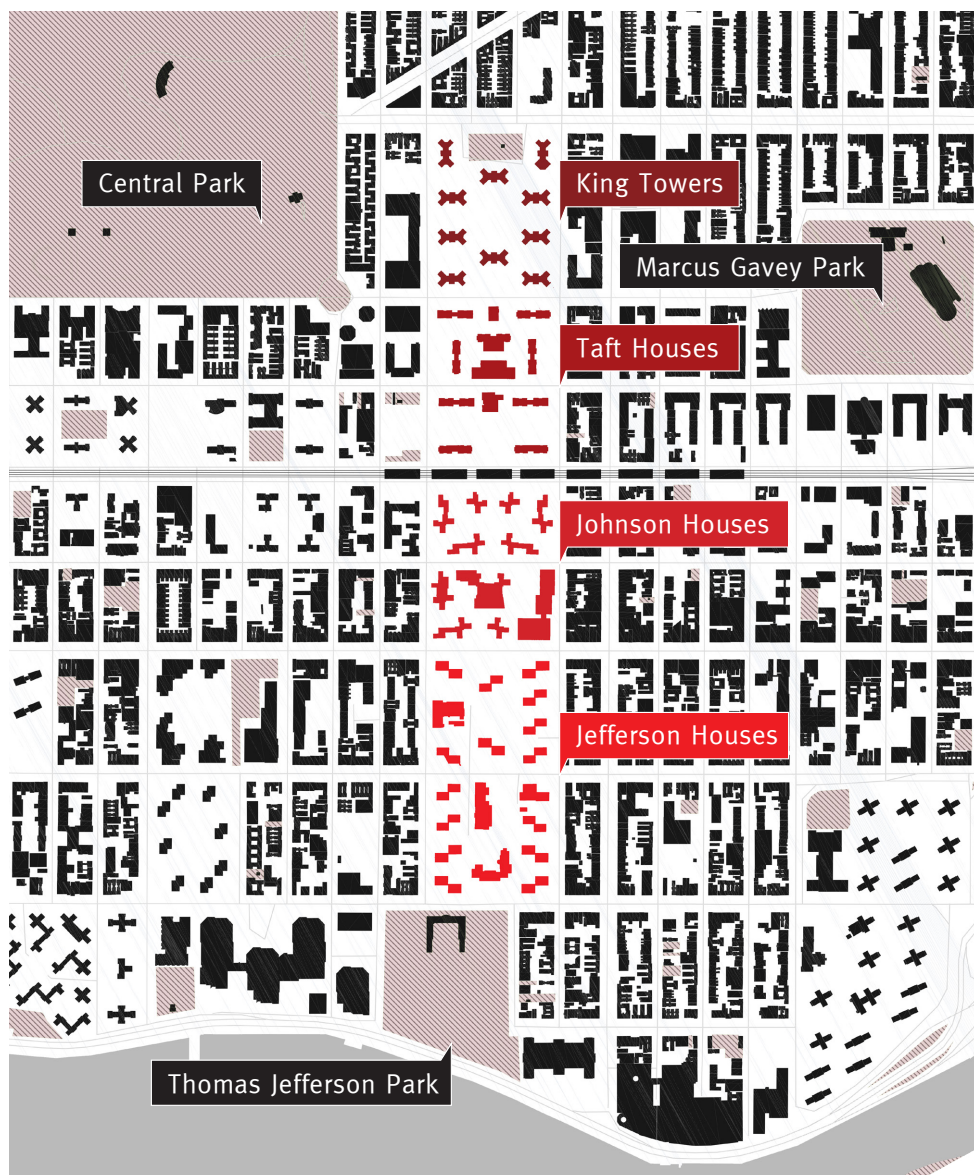


Figure Ground Showing Morphology of Site in Relation to Context
Source: Edited by Author from SCHWARZPLAN.eu

L O C A T I O N :

UNDERSTANDING THE PROJECTS

Another reason for choosing the East Harlem projects is because of the socio-economic issues that exist around them. According to a report by the NYC Department of City Planning (2012) regarding the district needs of East Harlem, gentrification is a major challenge for the neighborhood as it is reducing the amount of affordable housing available to people living in the area. This is a problem, because according to data from the American Community Survey by the Census Bureau (2017), around 95% of all residents in the neighborhood rent their housing. This threatens the local residents, as they will potentially be forced to move away because of rising rents and land values. The report also states that the area also faces one of the highest unemployment rates in the city, partially due in part to the absence of commercial space for local entrepreneurs. Issues of health and safety also are problematic in this area, with crime and pollution being the main culprits of these issues.



One of the Many High-Rises at the King Towers Project

Source: Edited by Author. Photo Taken from Flickr - <https://www.flickr.com/photos/jag9889/6411557883>

E A S T H A R L E M



Cars Parked on a Street Facing the Johnson Houses

Source: Edited by Author. Photo Taken from Flickr - <https://www.flickr.com/photos/jag9889/6411557883>



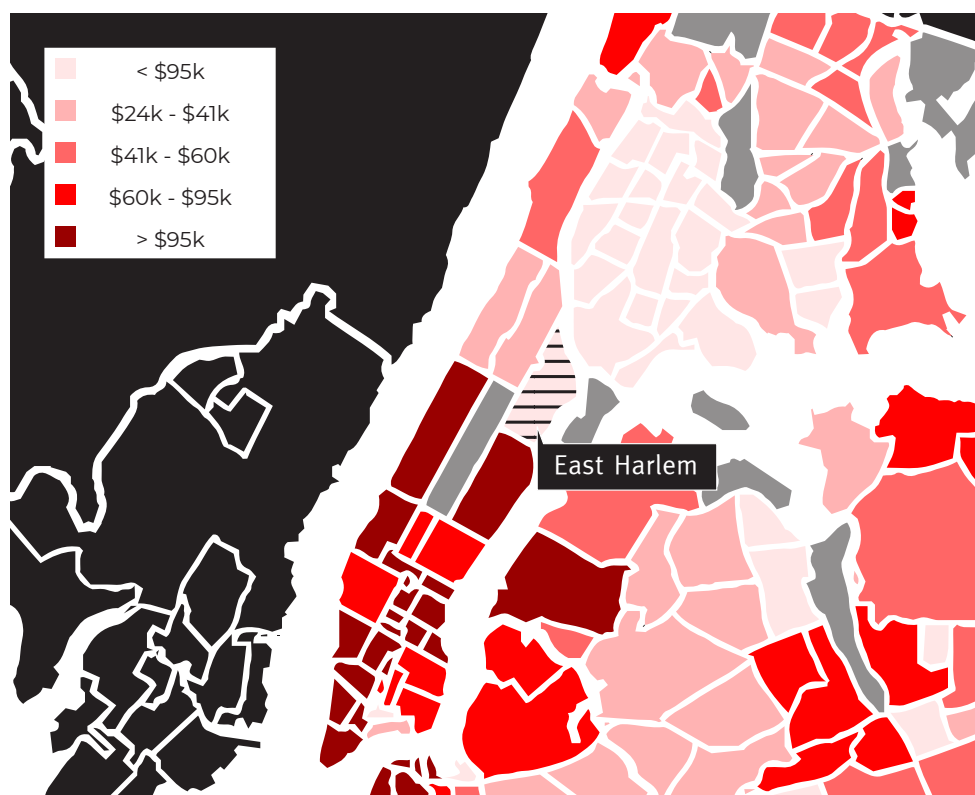
A Sports Field in Front of the Jefferson Houses

Source: Edited by Author. Photo Taken from Flickr - <https://www.flickr.com/photos/jag9889/6411557883>

O V E R V I E W :

A POOR PLACE TO LIVE

According to a report by the New York State Comptroller (2017) on the economic situation in East Harlem, many families in the neighborhood struggle to earn a living due to having some of the lowest incomes in the city. This confirms the fact that gentrification is a major threat to the community, because a third of the inhabitants living in East Harlem live below the poverty level set by the U.S federal government. East Harlem also is home to at least 255 vacant buildings and 72 vacant lots. This is according to a report titled *Banking on Vacancy* (2011) by the non-profit organization called Picture the Homeless. They blame this on a practice that they call “warehousing vacant properties,” which is a method developers use to collect properties together in order to make a profit on the potential gentrification of an area (Picture the Homeless, 2011). This makes a homelessness an issue in the neighborhood, and adds pressure to the already limited supply of affordable housing in the area.



Median Household Income (U.S Dollars) by Neighborhood 2010-2014
Source: Map Edited from Unixtitat.net, Data from The New School Center For New York City Affairs

E A S T H A R L E M



A Closed Up Apartment Building in East Harlem

Source: Photo by Daniel Goodman for the Business Insider



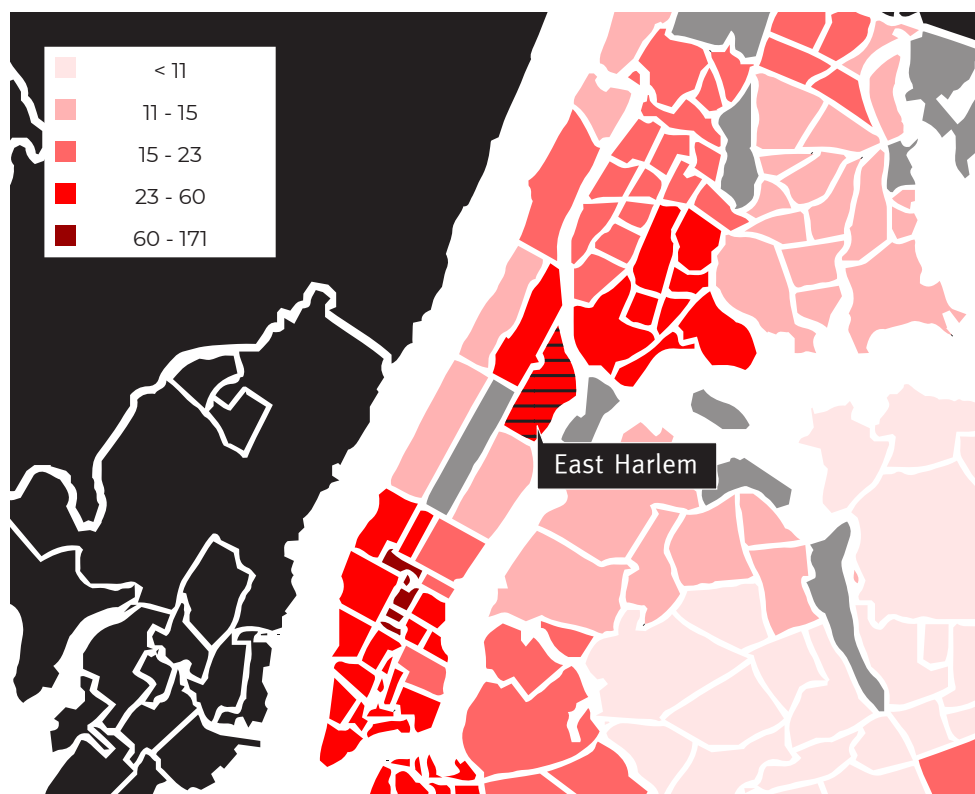
Typical Living Conditions of Apartments in the NYCHA Projects

Source: Photo taken by Sam Hodgson for The New York Times

O V E R V I E W :

AN UNSAFE PLACE TO LIVE

Crime is a major problem in East Harlem. It is the 14th (out of the 59 districts of New York) most dangerous neighborhood in the city. The NYCHA projects in East Harlem account for more than 9% of all crimes perpetrated in the entire social housing system (New York State Comptroller, 2017). This is especially true at the Jefferson Houses, according to Greg B. Smith (2015) in his story titled *Spike in Violent Crime in Housing Division where Slain NYPD Officer Randolph Holder Worked* published by the New York Daily News. He explains that in 2015, 7 murders took place in Police Service Area 5 (PSA 5), which is responsible for protecting 30 NYCHA projects in Harlem. The Jefferson Houses accounted for 3 of those murders, including Officer Randolph Holder, and is considered the housing project with the most amount of crime in PSA 5. In order to deter crime in the NYCHA projects, the NYPD installs light towers in both poorly lit and problematic areas around the housing.



Crimes Per 1000 Residents by Neighborhood in 2018

Source: Map Edited from Unixtitat.net, Data from NYC Crime Map - <https://maps.nyc.gov/crime/>

E A S T H A R L E M



NYPD Investigate a Shooting at the Thomas Jefferson Houses

Source: Photo from the New York Daily News by Sam Costanza



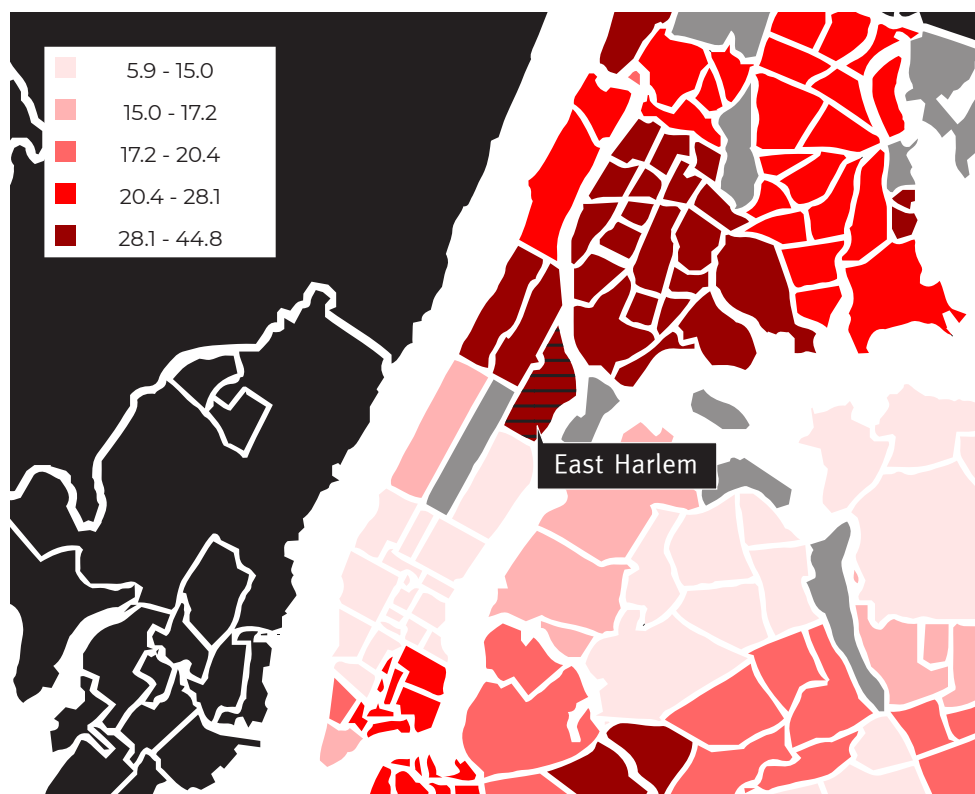
Mobile NYPD Lighting Unit that Increases Visibility at Night to Prevent Crime

Source: NYCHA Flickr - <https://www.flickr.com/photos/nychapics/8169749791/>

O V E R V I E W :

AN UNHEALTHY PLACE TO LIVE

Health issues are rampant in East Harlem. An article written by Lindsey Konkel titled *Kids Struggle to Breathe in This Neighborhood on Pope's Tour* for National Geographic (2015) points out that the severe lack of maintenance on the NYCHA apartments are causing inhabitants to get illnesses just by living inside their own homes. The most predominant sickness is Asthma, with many children being taken to an emergency room as soon as one of them have an asthma attack (Konkel, 2015). Compounding to this problem, families of these children already have a hard time paying rent and living expenses, so getting the necessary treatment is a challenge (Konkel, 2015). In addition to this, residents of the Jefferson Houses were forced to threaten to sue NYCHA just to clean up their basements which had flooded with sewage water, which was reported by Nolan Hicks (2018) in the New York Post in a story titled *NYCHA Cleans Up Sewage in Basement After Residents Threatened Lawsuit*.



Particulate Matter Attributable to Respiratory Hospitalization Rate

Source: Map Edited from Unixtitat.net, Data from NYC Health Report - Air Pollution and the Health of New Yorkers

E A S T H A R L E M



Children are Developing Asthma Caused by Exposure to Hazardous Mold

Source: Photo by Ana Brigida for The New York Times

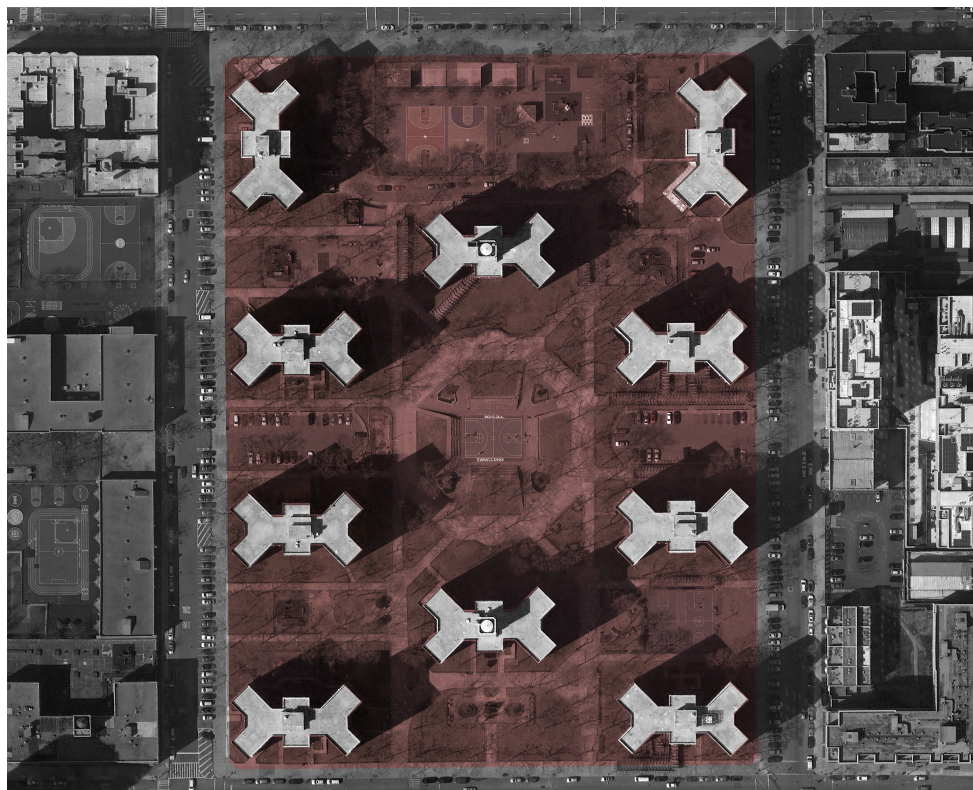


NYCHA Workers Cleaning and Removing Debris from a Basement

Source: NYCHA Flickr - <https://www.flickr.com/photos/nychapics/8169749791/>

L O C A T I O N :

Based on the qualities that determined the site location, a closer look will be made at the King Towers Project, which has been deemed as the place where a potential design intervention can take place. The project site is a large and single block that is clearly defined, with a repetitive tower typology that flanks the sides of the site. The form of these towers are irregular, making it a complex site to intervene in, but also proving that the proposed intervention can be done at other various NYCHA projects across the city. The King Towers is also characterized by ample green space that is anchored by a basketball court at the heart of the project. Having a single large public space such as this makes a potential intervention more flexible to implement, as well as provides more opportunities for creating variety in public space. The site is also the closest block (of the other social housing projects) to Central Park, giving it greater accessibility to circulation flows. The combination of these factors makes the King Towers an attractive location for the potential development and investment of a design intervention.



Aerial View of the King Towers Project
Source: Edited by Author from Google Earth

K I N G T O W E R S

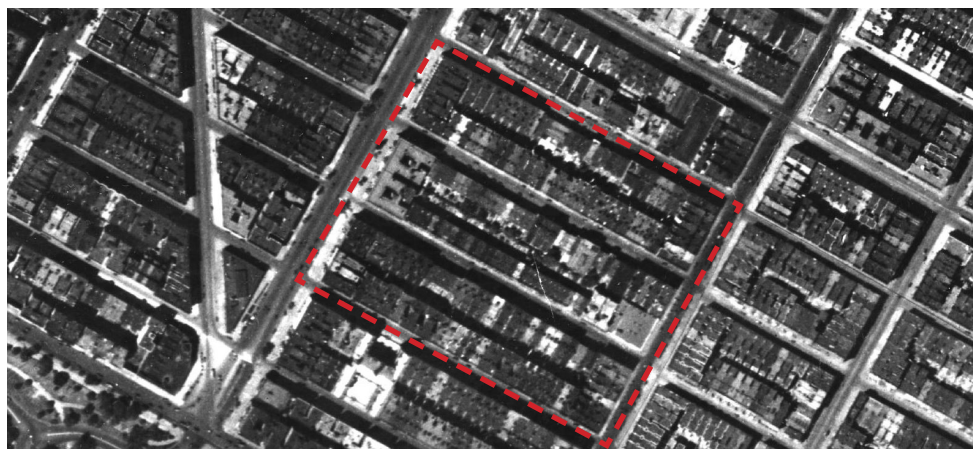


Figure Ground of the Project Area, with the Focus Area Highlighted
Source: Diagram Created by Author

C A S E S T U D Y :

THE BIRTH OF THE KING TOWERS PROJECT

In order to make way for the social housing projects, slum clearance plans were implemented throughout the city, and East Harlem was no exception to this destruction. Blocks of tenements were torn down simultaneously with the construction of the towers. This was done in order to create the projects as quick as possible, while also giving time for local residents to accept the fact that they must relocate to different parts of the city. The leftover space between the towers were then left as landscaped green spaces for the new residents.



Construction of the King Towers (1924 - 1951)
Source: NYC.gov - <http://gis.nyc.gov/doitt/nycitymap/>

K I N G T O W E R S

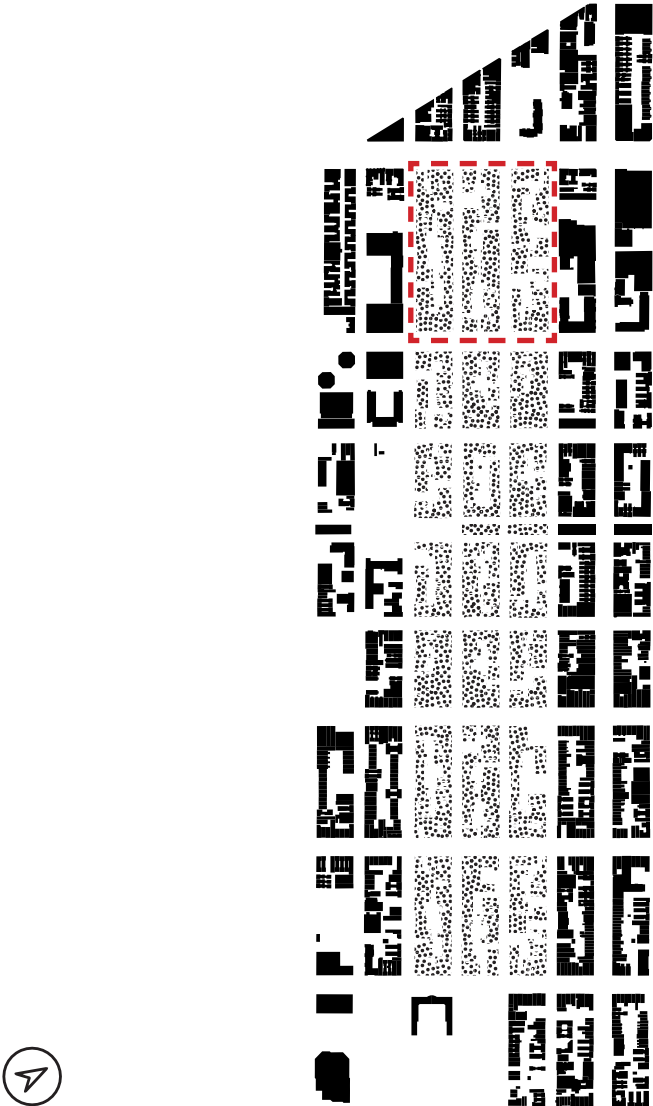


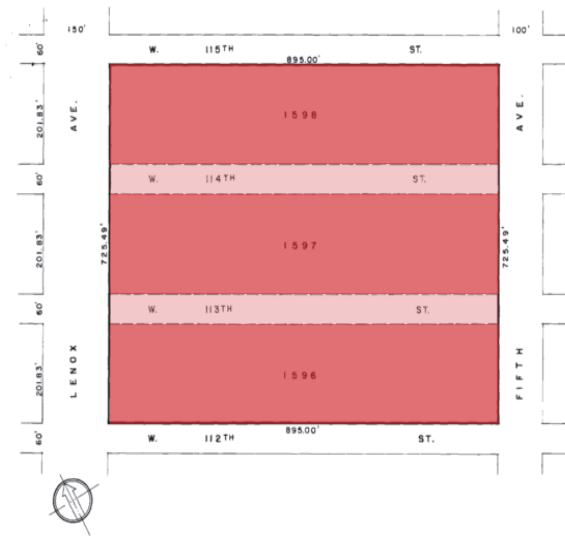
Figure Ground of the Project Area with the Cleared Urban Texture
Source: Diagram Created by Author

C A S E S T U D Y :

BIRTH THROUGH CONDEMNATION

According to a report created by the East Harlem Land Use Studio at the Pratt Institute (2010), the King Towers were finally built in 1954. The project consists of 10 towers, each having around 13-14 floors per building. This resulted in the construction of around 1,378 apartments for needy families to move into.

The phasing that was implemented in the development of the King Towers was based on the systematic removal of the existing tenements in the three blocks which were condemned to be demolished. This removal was done block by block, all while the new towers were simultaneously being constructed, one by one. As the project started to slowly take shape, the roads dividing the project were removed, and slowly but surely the large public space left over from the construction and destruction transformed into a green park.



SUBJECT TO ENCGROACHMENTS, IF ANY, UPON THE PREMISES HEREIN DESCRIBED OF ANY STRUCTURES AND APPURTENANCES STANDING OR MAINTAINED PARTLY UPON THE PREMISES HEREIN DESCRIBED AND PARTLY UPON THE ADJOINING PREMISES.

SUBJECT TO ALL PUBLIC EASEMENTS IN, OVER AND UPON THE PUBLIC STREETS AND THE PORTIONS THEREOF INCLUDED WITHIN THE PREMISES TO BE ACQUIRED.

I, Maxwell H. Tretter, Executive Director of the New York City Housing Authority do hereby certify that this is one of the three similar maps required to be filed pursuant to Section 125, Subdivision 3, of the Public Housing Law as amended. The resolution of the Board of Estimate granting the petition of the New York City Housing Authority to acquire by condemnation the property hereon delineated was duly adopted on June 27, 1946 calendar No. 209

Date: JUNE 28, 1946

NEW YORK CITY HOUSING AUTHORITY -ACQUISITION MAP-

SHOWING CERTAIN LANDS AND PREMISES TO BE ACQUIRED IN FEE BY THE NEW YORK CITY HOUSING AUTHORITY AS A SITE FOR A STATE AIDED LOW RENT HOUSING PROJECT KNOWN AS STEPHEN FOSTER HOUSES, PROJECT NUMBER N.Y.S.-30, IN THE BOROUGH OF MANHATTAN, CITY OF NEW YORK.

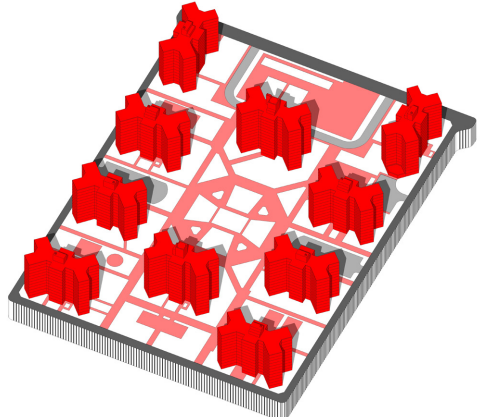
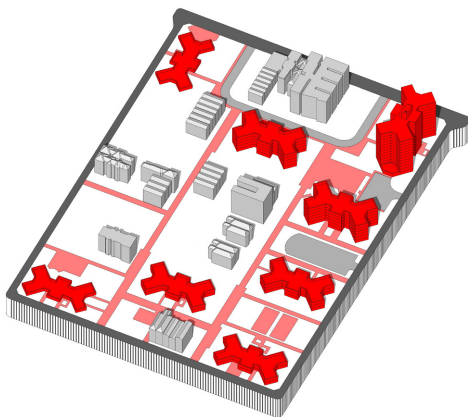
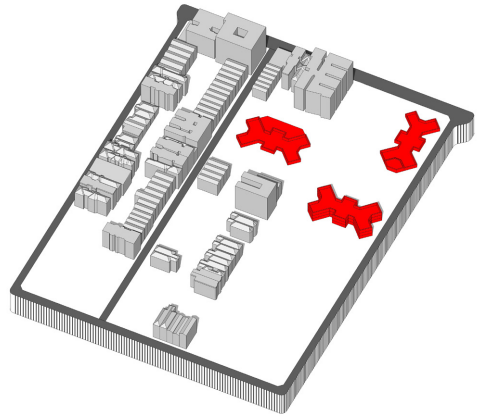
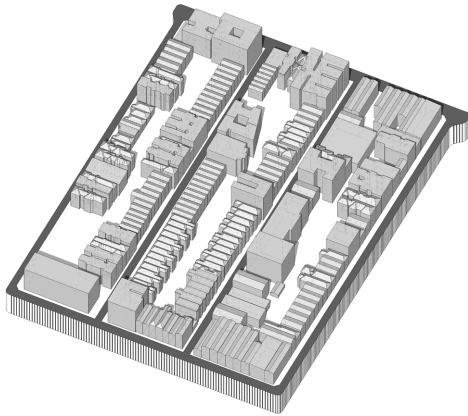
APPROVED

[Signature]

Maxwell H. Tretter
Executive Director
New York City Housing Authority

Transferring Ownership to NYCHA for the Land to Build the King Towers (1946)
Source: Picture from Redflux Architecture, Design, and Planning

K I N G T O W E R S

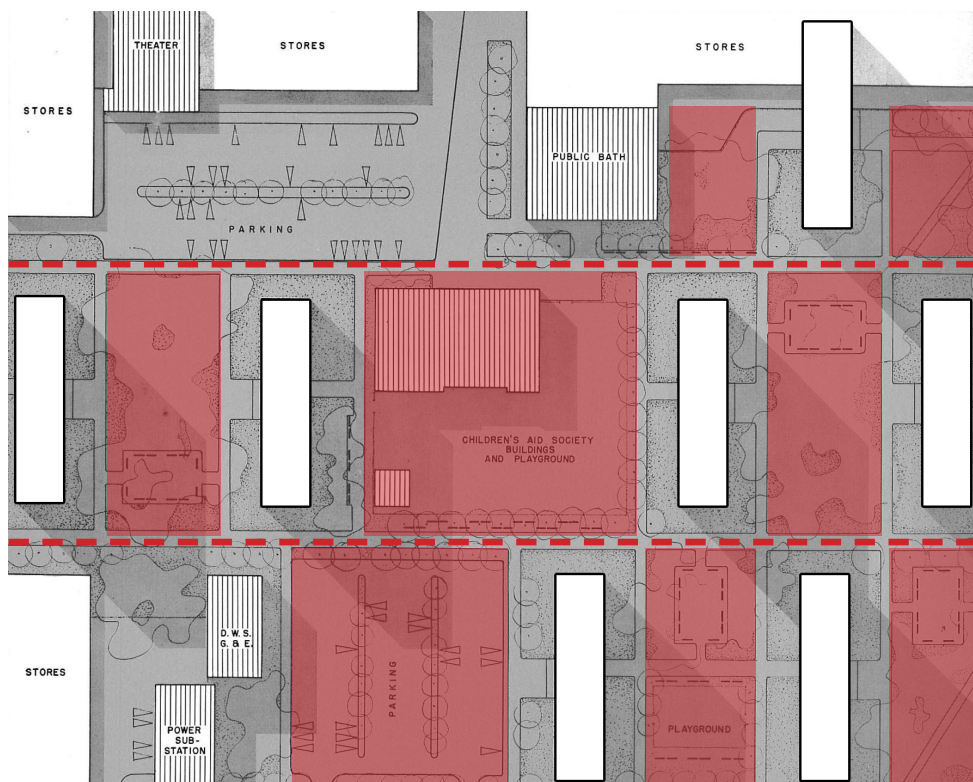


Construction of the King Towers (1924 - 1951)
Source: Diagrams Created by Author

C A S E S T U D Y :

DESIGN TENETS OF THE ORIGINAL SITE PLAN

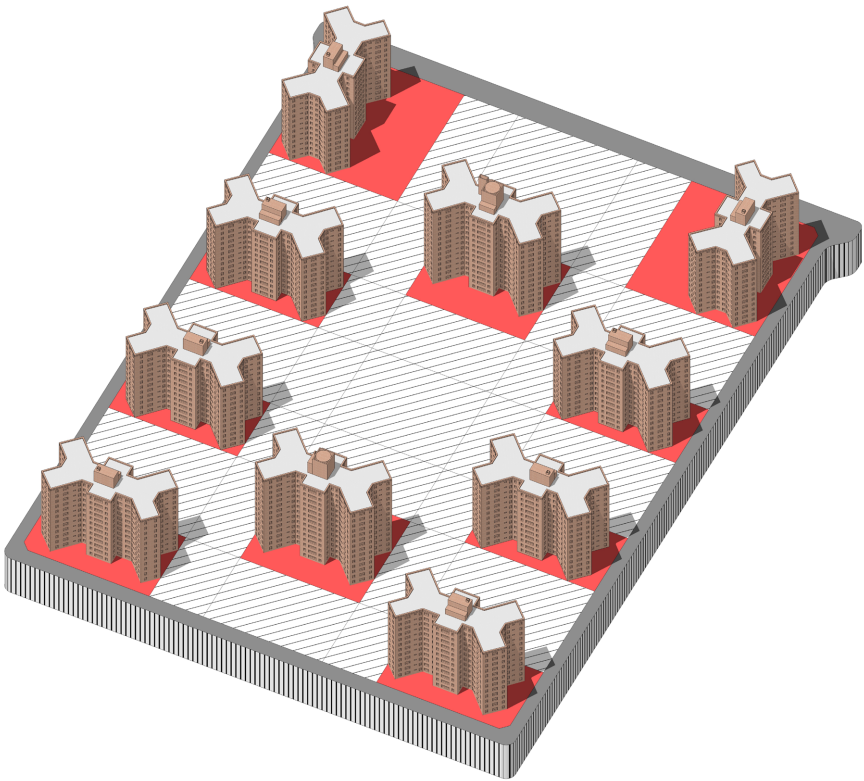
The intentions of the site plan designers are not implicitly stated anywhere, but an analysis of how the towers work together with the combined block can be done in order to understand the ideas used to generate the King Towers. According to the Slum Clearance Plan for Lenox Terrace in East Harlem (1951), the goal of urban renewal was to provide a building footprint significantly smaller than the space occupied by the tenements. Doing so would allow ample amounts of sunlight to enter the housing, while also making space for parks and recreational space. To make sure this was divided equally, the apartment buildings were arranged like a checkerboard. Going into more detail, the widths of the towers were based on the width of the original New York City grid blocks. Secondary characteristics of the site plan involved either using the center for socio-cultural functions, with the edges of the site being reserved for either/or commercial properties and/or other amenities.



Original Site Plan for the Lenox Terraces

Source: Edited by the Author. Plan from the Slum Clearance Plan for Lenox Terrace in East Harlem (1951)

K I N G T O W E R S



The Towers are Equally Divided Around the Project Site
Source: Created by Author

C A S E S T U D Y :

CONSTRUCTION PLANNING OF THE SITE

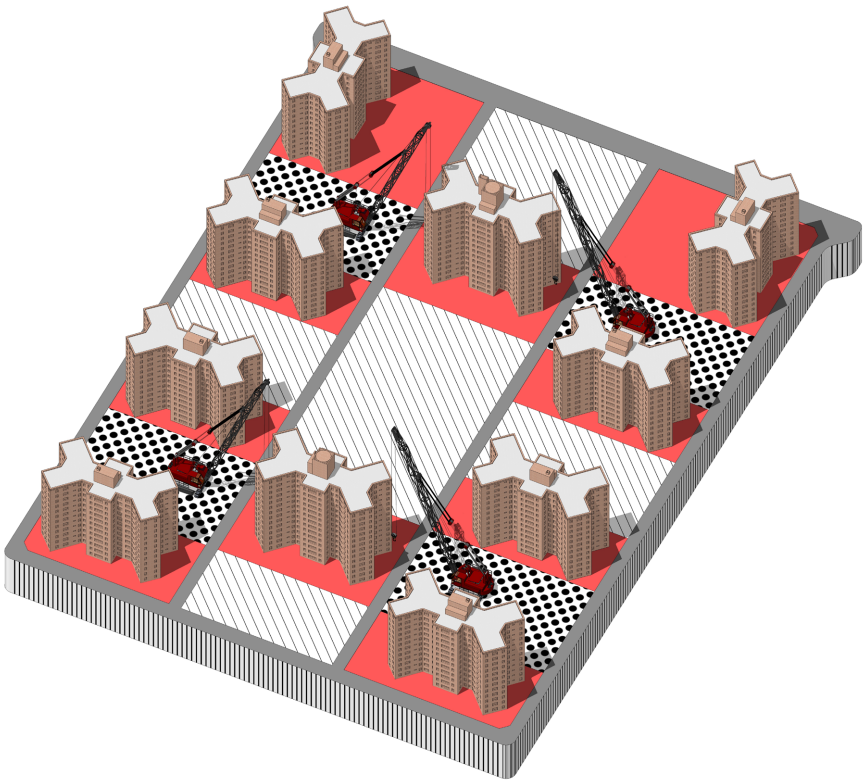
The spacing of the buildings were also influenced by the construction method that they were built with. Construction cranes needed to be strategically positioned to effectively have access to building materials in the same place, while also being able to construct multiple buildings at the same time around the reach of the crane. This efficiency would have made the towers' construction time significantly faster, which was important considering the amount of people that were displaced by the slum clearance in the first place. The clear definition of built and unbuilt space would define the binary relationship between the housing and the public space around it.



Johnson Houses Being Built in 1947

Source: Photo by Al Aumuller in 1947. Retrieved from the Library of Congress.

K I N G T O W E R S



The Reach of the Cranes Took Advantage of the Spacing of the Site Plan
Source: Created by Author

C A S E S T U D Y :

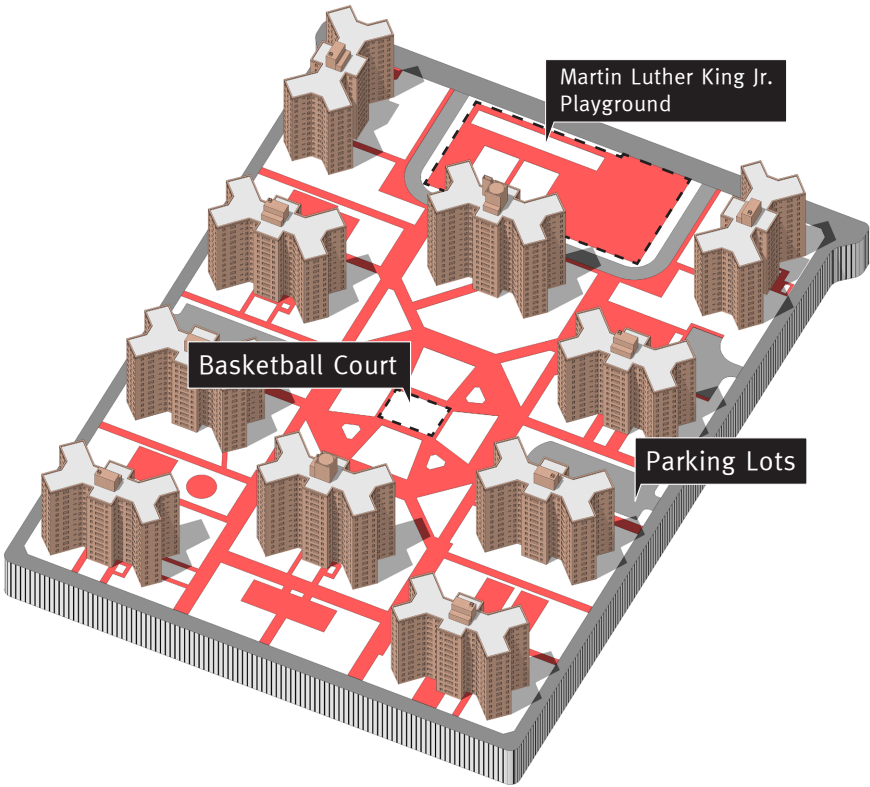
LANDSCAPE PLANNING OF THE SITE

The unbuilt space became a leftover of the construction process. The towers were then surrounded with greenery and playgrounds, and it was seen as an good way to provide all inhabitants a sense of having their own backyard. This was a radical approach at the time, considering the spatial qualities of the tenements that used to exist on the site. However, the speed at which these projects were conceived, combined with the rigid and inflexible site plan produced by the international style planners, could not foresee the socio-spatial impact they would actually make. The maintenance of these green and lush gardens were dependent on the rent produced by the projects' inhabitants, and having middle class families help pay for it was a sound idea at the time. However, this plan would eventually fail because macro economics would shift the demographics of the inhabitants towards poverty level citizens, therefore making upkeep of the public realm impossible to maintain.



Advertisement for Building Materials Used in NYCHA's Fort Greene Houses
Source: Brooklyn Historical Society

K I N G T O W E R S



An Idealized Park Landscape Spreads Throughout the Site
Source: Created by Author

S U M M A R Y :

A PUBLIC SPACE THAT NEVER CHANGED

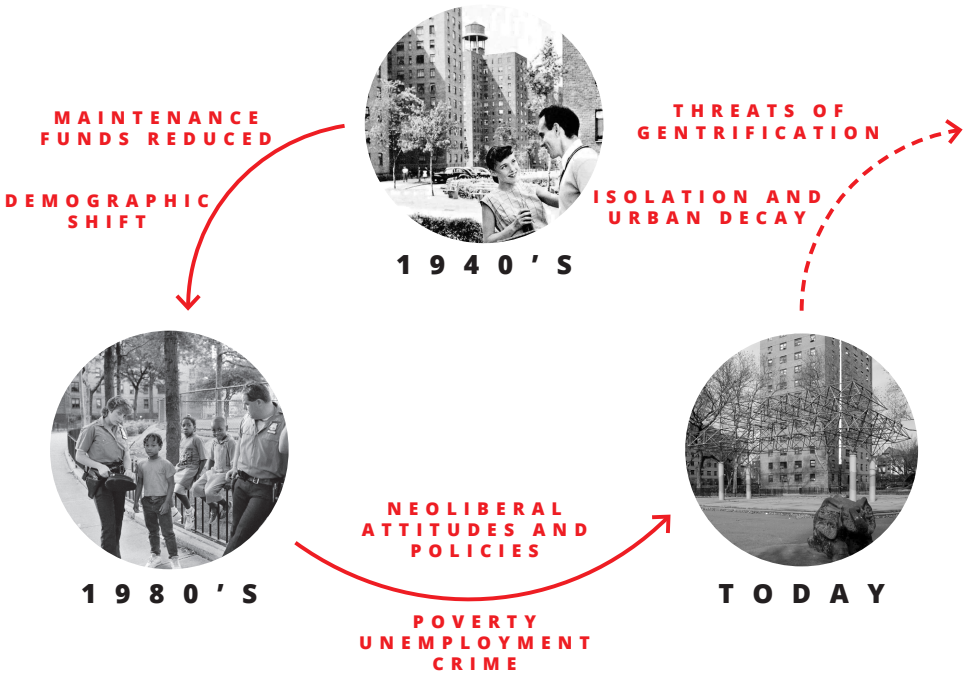
The analysis has shown that the public realm of the social housing projects is problematic in multiple ways. It has low public activity caused by monofunctionality, it has limited circulation caused by poor spatial hierarchy, and the spatial relationship between itself and the towers are completely out of the human scale. These flaws propagate issues of health and safety for the inhabitants, therefore increasing the feeling of disconnection between themselves and the environment they live in. This seems to have resulted from the fact that the NYCHA projects are frozen in time, and they did not evolve to meet the needs of their inhabitants. The original design of the social housing was for a middle class America of Post-World War 2, and when macro-economics drastically shifted in this era, the urban poor took their place. This caused the projects to slowly fail as the costs of maintaining them were unsustainable for both the inhabitants and neo-liberal sentiments of the federal government.



The Current Situation of the King Towers Project

Source: Picture from Redflux Architecture, Design, and Planning. Edited by Author.

PUBLIC SPACE



The Reemergence of the Slums
Source: Created by Author

S U M M A R Y :

THE REPETITION OF HISTORY

As the city continues to develop with shiny new residential towers, the social housing projects are perpetually sliding into disrepair, as neo-liberal economic and governmental approaches have deemed them a burden on the public.

The motivation behind this thesis is to recognize that the people living in these projects have a right to the city, and do not deserve the quality of life that they are living through now. What is more shocking about the current state of affairs deals with the process that birthed the social housing projects in the first place. The tenement slums were cleared in order to make way for them, and the reasoning behind this traumatic act was to eradicate poverty and other social ills that progressives found unsightly and unacceptable. Little did they know their efforts would be in vain, as history just ended up repeating itself, except this time in another urban form.

The “soul” of the public space in the social housing projects is therefore an old and stubborn one that is stuck in the past. It is an empty vessel that exists as a reminder of a promise unfulfilled to its inhabitants, which was a guarantee of a certain quality of life for all people living within it. Therefore, the people living in the projects are locked in time. They are clutched by their past, their economic situation, and their environment. This current state of affairs needs to change.

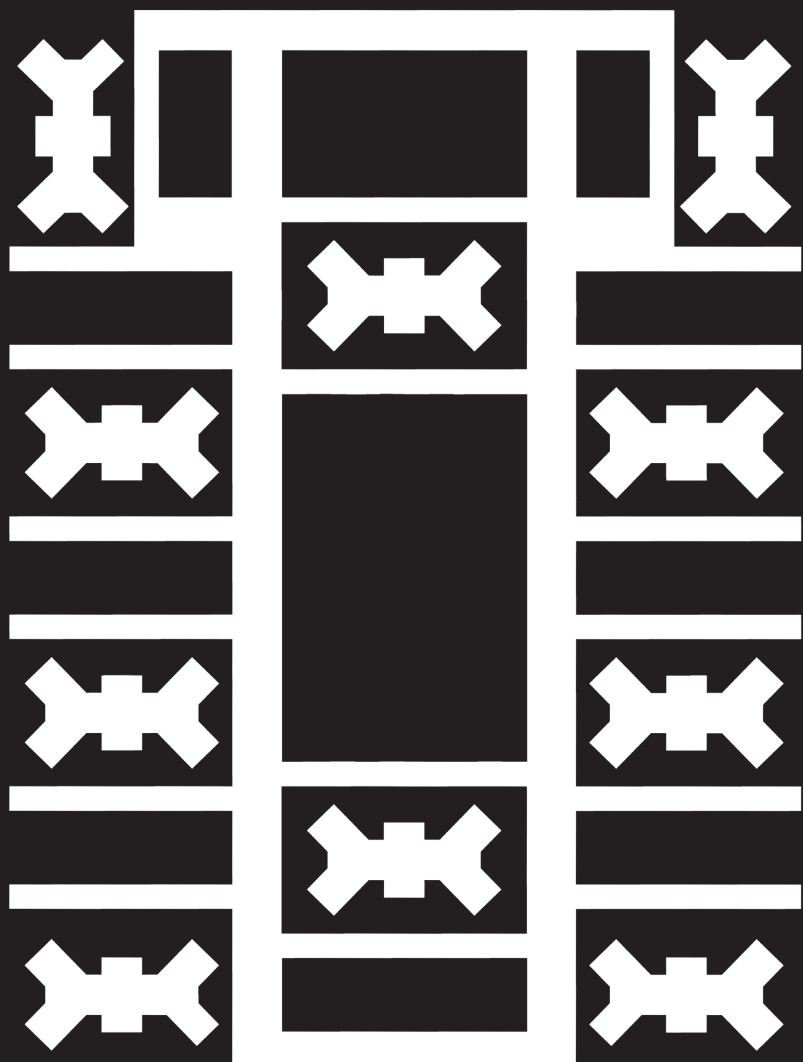
A "SOUL" SEIZED

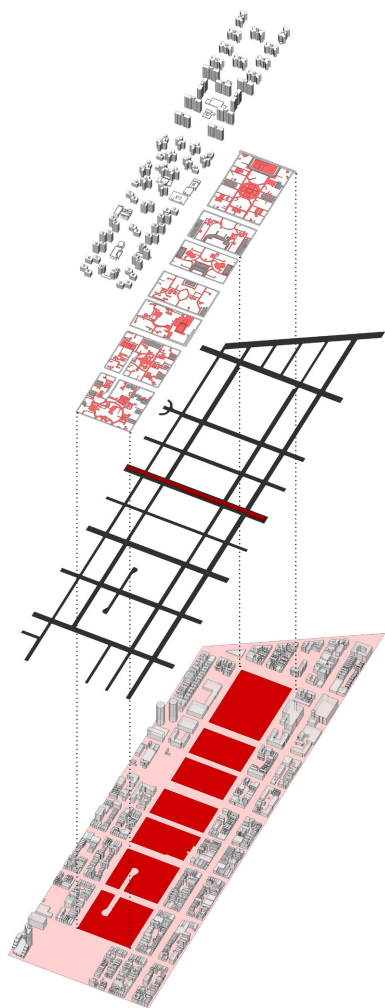


The "Soul" of Social Housing in America is Locked in Time
Source: Collage Created by the Author



M E T H O D O L O G Y F O R R E C R E A T I N G A C O M M U N I T Y

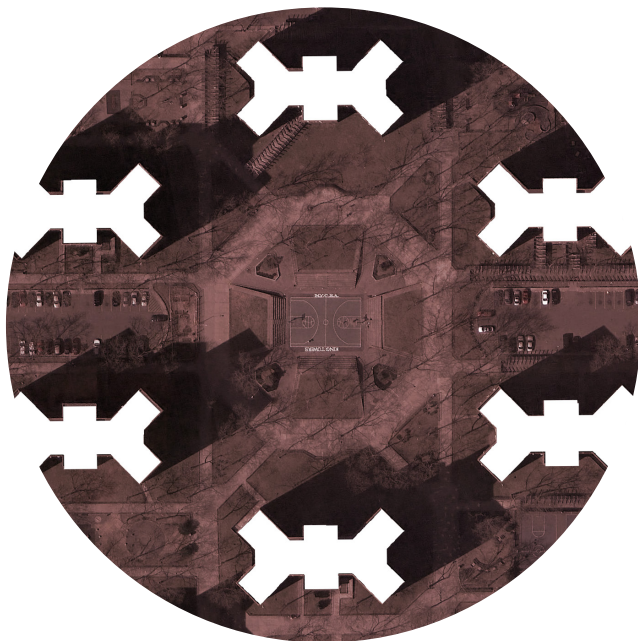




Exploded Axonometric of Project Area

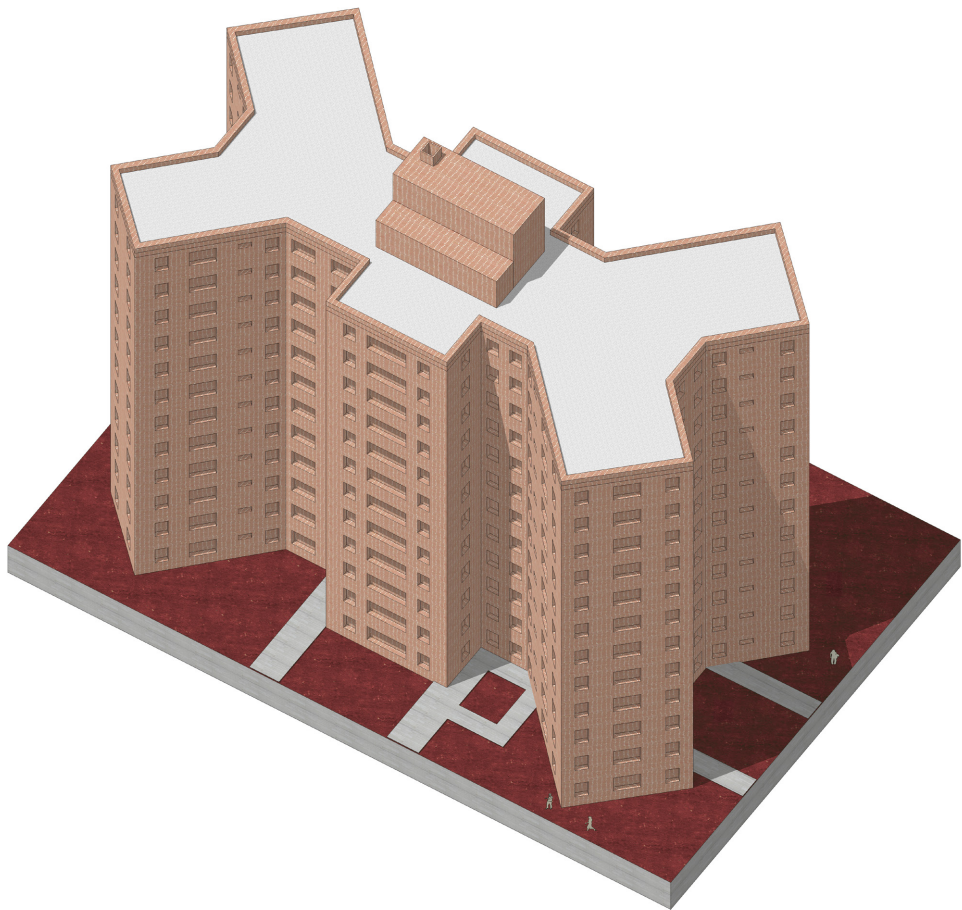
Source: Created by Author from Sketchup and Placemaker Plugin

THAT IS CONNECTED TO ITS PUBLIC SPACE



In order to find a solution to the poor quality of life experienced in the social housing projects, a transformational framework must be developed in order to help its residents become a healthy community once again. This will involve methods of research and design that can help provide a strategic plan that promotes the regeneration of the passive public spaces that they live in. This transformational framework will explore zoning rules and regulations, which in turn can provide parameters and limits that can inform the structure and form of a new socio-spatial reality. With the collaboration of the various stakeholders required to take on such an endeavor, public space can be used as a generator of development, instead of just being a leftover of a development made long ago. The framework must also be adaptable over time, in order to avoid repeating the same mistakes made by the international style designers, without compromising their vision of a fair and just society.

CHAPTER STRUCTURE



A Typical High-rise in the King Towers Projects
Source: Created by Author from Sketchup

1. RESTORING THE COVENANT

A look into the overall theme and purpose of this chapter in regards to the low-income families who were promised a decent quality of life.

2. NOURISHING THE “SOUL” OF PUBLIC SPACE

A problem statement dealing with the relationship between public space and the quality of life in the public housing of New York City, and how to bring the “soul” of the projects back to life.

3. HOW TO BRING THE “SOUL” BACK TO LIFE

Research questions and aims that ask to look at the potential of redefining space between the buildings of public housing projects as a driver for change.

4. THE ROLE OF STAKEHOLDERS

An overview of the involved stakeholders in the potential rehabilitation of the social housing projects.

5. THE DIFFERENT SCALES OF DESIGN

An overview of the various levels at which the project proposal will be developed and designed.

6. METHODOLOGY FRAMEWORK

6.1 CONCEPTUAL FRAMEWORK

6.2 RESEARCH FRAMEWORK

6.3 THEORETICAL FRAMEWORK

6.4 ANALYTICAL FRAMEWORK

6.5 TIMELINE OF THE PROJECT

7. A FRAMEWORK OF PHILOSOPHY

A set of questions that not only ask about the meaning of the transformational framework, but also asks what is the overall philosophy of the proposed design strategy.

RESTORING THE

A FAILURE FIXED IN TIME

In order to fulfill the promise made between the social housing projects and their inhabitants, there must be an effort in place to help increase their quality of life. In her book *The Death and Life of Great American Cities*, Jane Jacobs (1961) explains that in order to achieve this, the monofunctionality of their public space needs to be made more functionally diverse. This is because the lack of diversity in both social and programmatic elements results in low public activity, which in turn leads to crime and vandalism due to a lack of self-awareness which tends to not exist in places of high public activity (Jacobs, 1961).

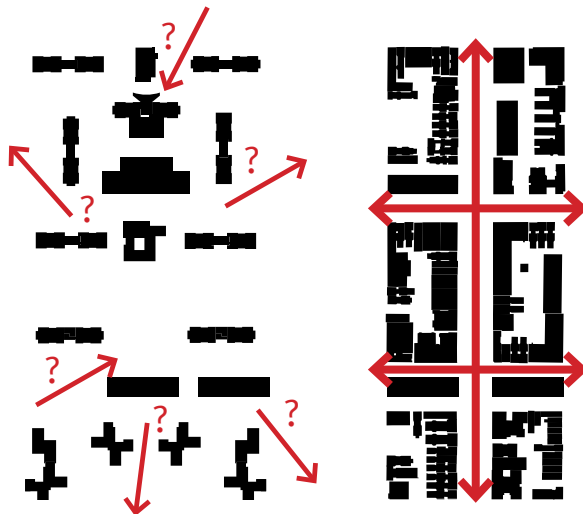
In addition to this, James Howard Kunstler (2004) stated in a lecture called *The Ghastly Tragedy of the Suburbs* that this problem of public space is exasperated by the design philosophy that was used to create the projects. Planners used the International Style, which was a popular urbanist theory during the time that the dwellings were created. By clearing the tenement slums that were defined by a spatial hierarchy created by the street grid of New York City, he accused the planners of intentionally destroying the rich hierarchy and variety that existed in the contextual public realm (Kunstler, 2004). He also argues that the high-rises of the projects themselves destroyed any sense of human scale, which in combination of his other concerns, eradicated the inhabitants connection to the public realm (Kunstler, 2004).

FULFILLING A PROMISE

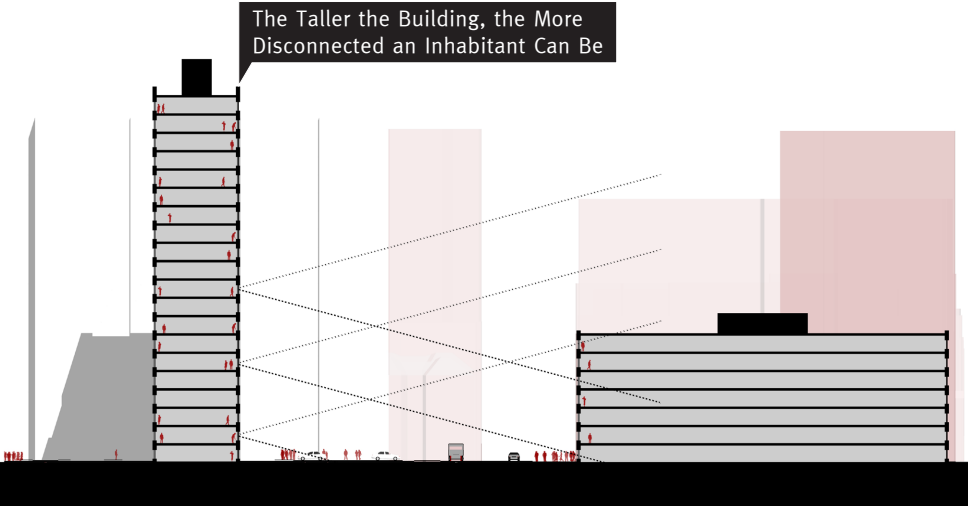
By looking at these failures of the social housing projects, a transformational framework needs to be produced that acknowledges these issues of monofunctionality, scale, and safety. This framework should also act as a blueprint of rehabilitation for all NYCHA projects, including what needs and characteristics need to be created in order to activate a public space that increases the inhabitants quality of life.

Therefore, the purpose of this thesis is to find a transformational framework that implements a strategic design intervention that helps social housing projects to diversify and add porosity to their public space. By providing a framework that brings the “soul” of public space in these projects back to life, the original intent of the projects - or the promise it made to the people who would live in them - can be met and achieved. This motivation informs the methodology that will be explained in this chapter, which aims to define the parameters that need to be implemented in order to develop the public space of social housing projects in New York City.

C O V E N A N T



Lack of Hierarchy within the Projects when Compared to the Typical NYC Infill Morphology
Source: Created by Author from Sketchup and Placemaker Plugin

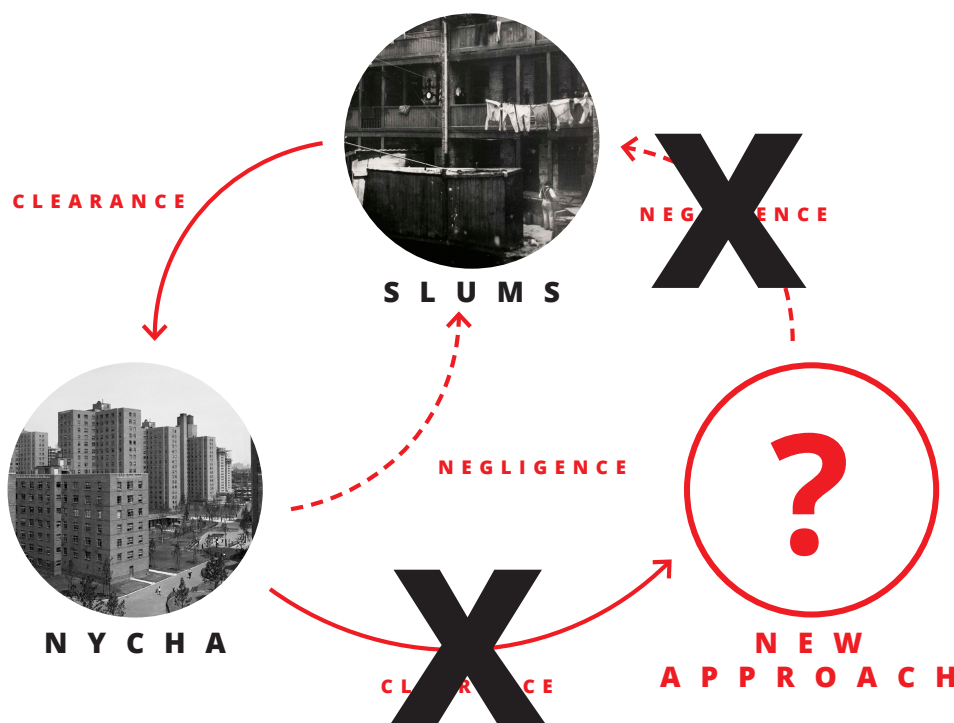


Inhabitants of the Projects Disconnection with the Street
Source: Created by Author

NOURISHING THE “SOUL”

PROBLEM STATEMENT

The current functionality of public space in the social housing projects of East Harlem is passive, low in activity, and has no variety in both space and function - propagating problems of health and safety that the low-income families of the projects have to face on a day-to-day basis. In order to help these inhabitants attain a higher quality of life, their public space needs to be redeveloped through a transformational framework that incentivizes the development of both diverse residential areas with social-cultural elements that will help bring more activity, self-awareness, and diversity to the projects. This framework also needs to prevent the displacement of the current inhabitants, and preserve a sense of community among them. This will allow the people living in the projects to be better positioned to protect themselves from future gentrification and preserve their community.



How to Stop the Cycle of Destruction and Negligence?
Source: Created by Author

OF PUBLIC SPACE

MAIN RESEARCH QUESTION

What possible methods can be implemented into the passive public spaces of the social housing projects in East Harlem that will allow themselves to be redeveloped by not only providing their inhabitants with a better quality of life, but also by keeping the existing community intact in the face of an increasingly gentrified New York City?

SUB RESEARCH QUESTIONS

Are there any potential zoning regulations that could be implemented on the project site that would motivate relevant stakeholders to provide the necessary investments needed to redevelop and rehabilitate the public space of the projects?

How can the potential structure of the theoretical framework create a flexible and future-proof strategic design intervention?

What kind of needs, or requirements, will be met in the design intervention of the public space of the projects? In what ways can this be enforced upon the stakeholders who will be responsible for redeveloping the public space?

RESEARCH AIMS

To provide a transformational framework that can realistically be implemented upon both the public space, and the housing structures, of all the social housing projects in New York City. The framework should be able to work parametrically, and it should provide a system that allows for the urban fabric of any NYCHA project site to change over time.

To help establish an approach that uses flexible design ideas in order to reduce the health and safety problems of the projects, in turn helping to repair the dismal reputation they have developed over time.

To protect the social housing projects themselves from demolition and gentrification. Many low-income families rely on them as their dwelling. The apartment towers are also a symbol of early 20th Century progressivism, which dared to use urbanism as a driver for egalitarian social and economic change.

EXPECTED RESEARCH OUTPUT

A replicable method of site intervention that motivates the redevelopment of the social housing projects in New York City. A rezoning approach that provides limits of what programmatic functions can be implemented in the rehabilitation of them, but also provide incentives for stakeholders to do so. A transformational framework that will dictate multiple and flexible scales of design, while also determining rules involving ownership and parceling of the project site. Then, a design intervention that brings more activity, self-awareness, and diversity to the public space, while also being adaptable to change. The overall method should also preserve the architecture of the projects, while keeping their community intact.

T H E R O L E O F

A WIN-WIN SITUATION FOR ALL

In order for a rehabilitation intervention to work within the NYCHA projects, there needs to be a proposal that is beneficiary to all parties involved. Each one of the stakeholders have a motivation to work together to find the most optimum solution regarding various issues, such as responsibility, funding, and their role within a regenerated social housing project. Using an egalitarian approach such as this will nourish the “soul” of their public space.

NYC HOUSING AUTHORITY (NYCHA)

As mentioned earlier in the report, NYCHA is having multiple issues with funding the maintenance of their buildings. According to an article by Konrad Putzier for *The Real Deal Magazine* (New York real estate news magazine) entitled *NYCHA's Private Lifeline* (2017), the authority had a \$17 billion dollar capital shortfall. That is a massive deficit, but, interestingly enough, the authority is also New York City's largest land owner (Putzier, 2017). In order to generate funds for the rehabilitation of their residential buildings, NYCHA should sell their empty land within their project areas to both private developers and the NYC Parks and Recreation Department. Private developers will buy newly parceled land and add diversity by creating new housing buildings, while the NYC Parks Department will both purchase the leftover land and take over the maintenance of the landscaping. This will reduce the expenditures in the budget, therefore allowing NYCHA to focus on housing quality for the residents that live within their apartments.

NYC DEPARTMENT OF PARKS AND RECREATION

Appropriating the maintenance of landscaping to this department will unload the burden of finance off NYCHA and onto New York City's coffers. It will also allow for NYC Parks to implement resilient landscaping in these large super blocks that the social housing projects exist upon. This is an important issue for the department, as Hurricane Sandy caught the city unprepared, which causing major damages to both public and private property. NYC Parks will also be able to provide a sense of ownership for the inhabitants of the NYCHA projects through their “GreenThumb” program, which provides support for urban gardening knowledge and materials for communities across the city.

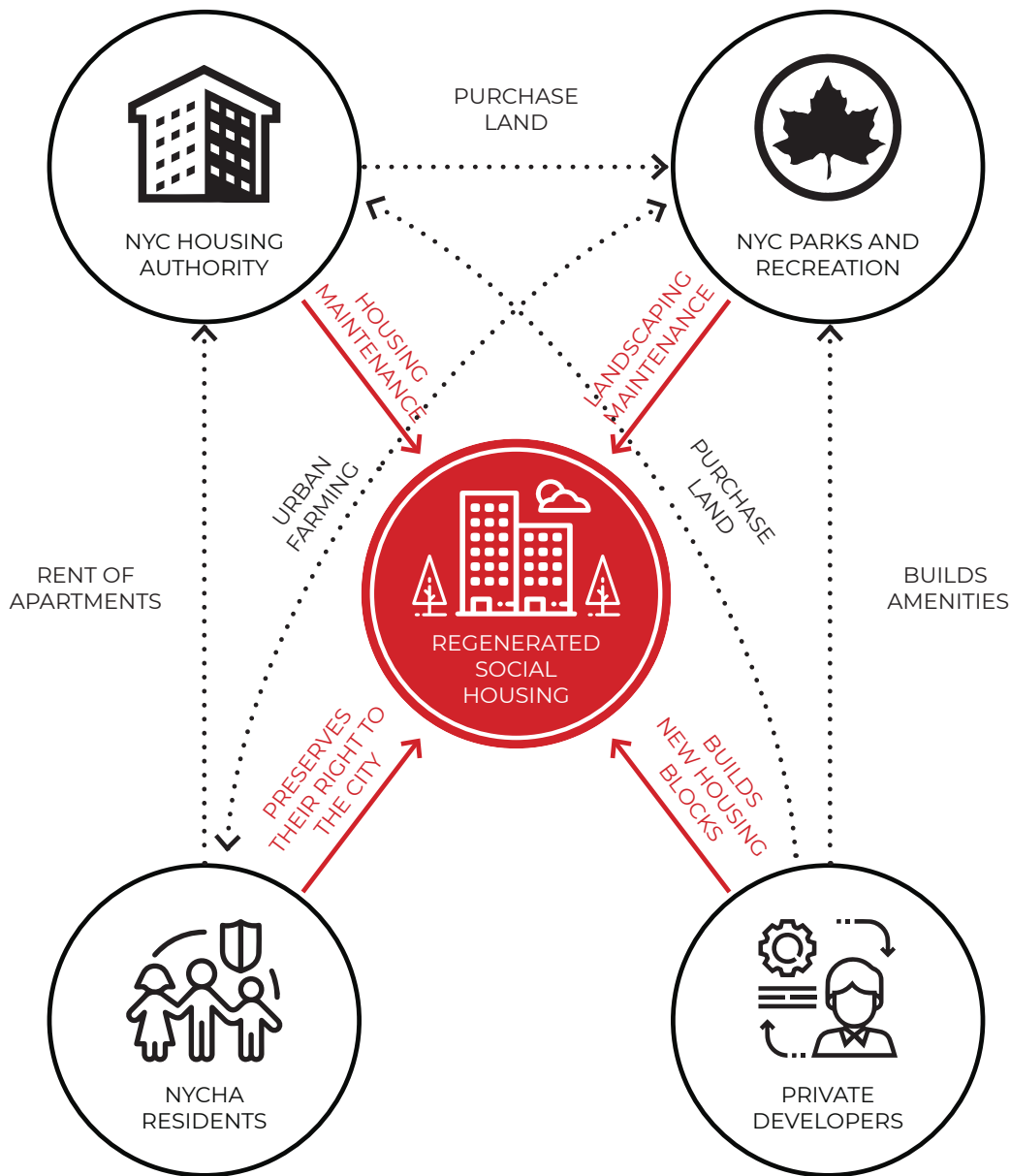
PRIVATE DEVELOPERS

The new parcels that will be sold to developers will be very lucrative, especially in the East Harlem NYCHA projects since they are centrally located in the borough of Manhattan. As a condition for being part of this opportunity, the participating developers will need to build amenities for NYC Parks in the NYCHA projects site. These will be maintained by NYC Parks, and will be managed by an nonprofit organization founded between all the involved stakeholders to promote activity of the local residents.

RESIDENTS OF NYCHA

Regenerating the projects in this way will help NYCHA residents preserve their rights to the city. It will also foster a sense of ownership, thus creating a stronger community.

STAKEHOLDERS



Proposed Structure of Governance + Collaboration
Source: Created by Author

T H E D I F F E R E N T

REZONING OF THE PROJECT AREA

Before undertaking any sort of design intervention, the zoning rules and regulations of the project area must be understood. By mapping the different layers and programs that exist within the zoning regulations, both the transformational framework and the design intervention can be dictated and controlled by proposing a change within the existing zoning situation of the project area. Rezoning gives the overall design of the project area scope as it starts the intervention at a macro scale.

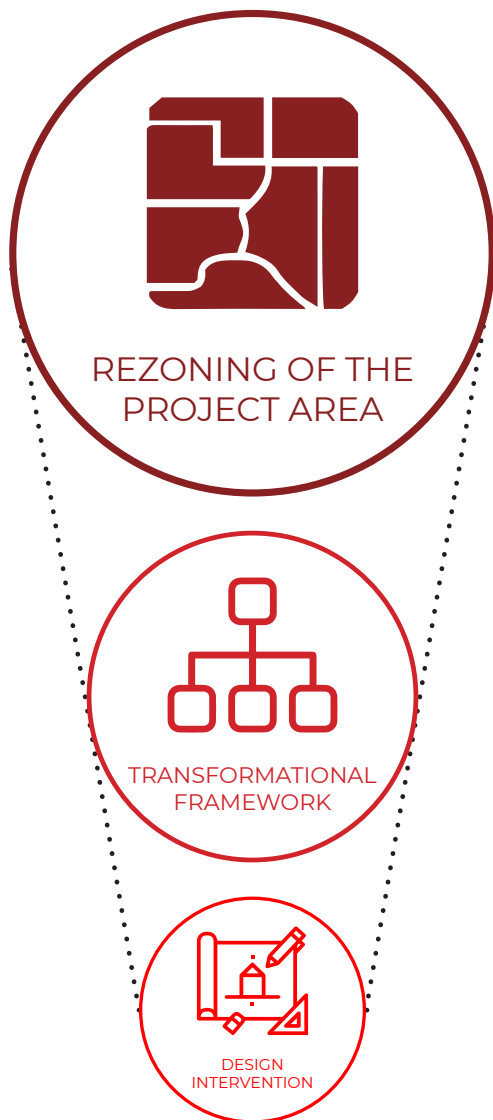
TRANSFORMATIONAL FRAMEWORK

The intermediary scale between the zoning and the design intervention is the transformational framework. The purpose of the grid is to transform public space as a generator of development, instead of treating public space as a leftover of development. It will also provide a way to interpret new zoning regulations, determine the division of ownership, and produce the parcels on which the design intervention will manifest upon. The framework will also be flexible enough to be adaptable to any potential future changes over time.

DESIGN INTERVENTION

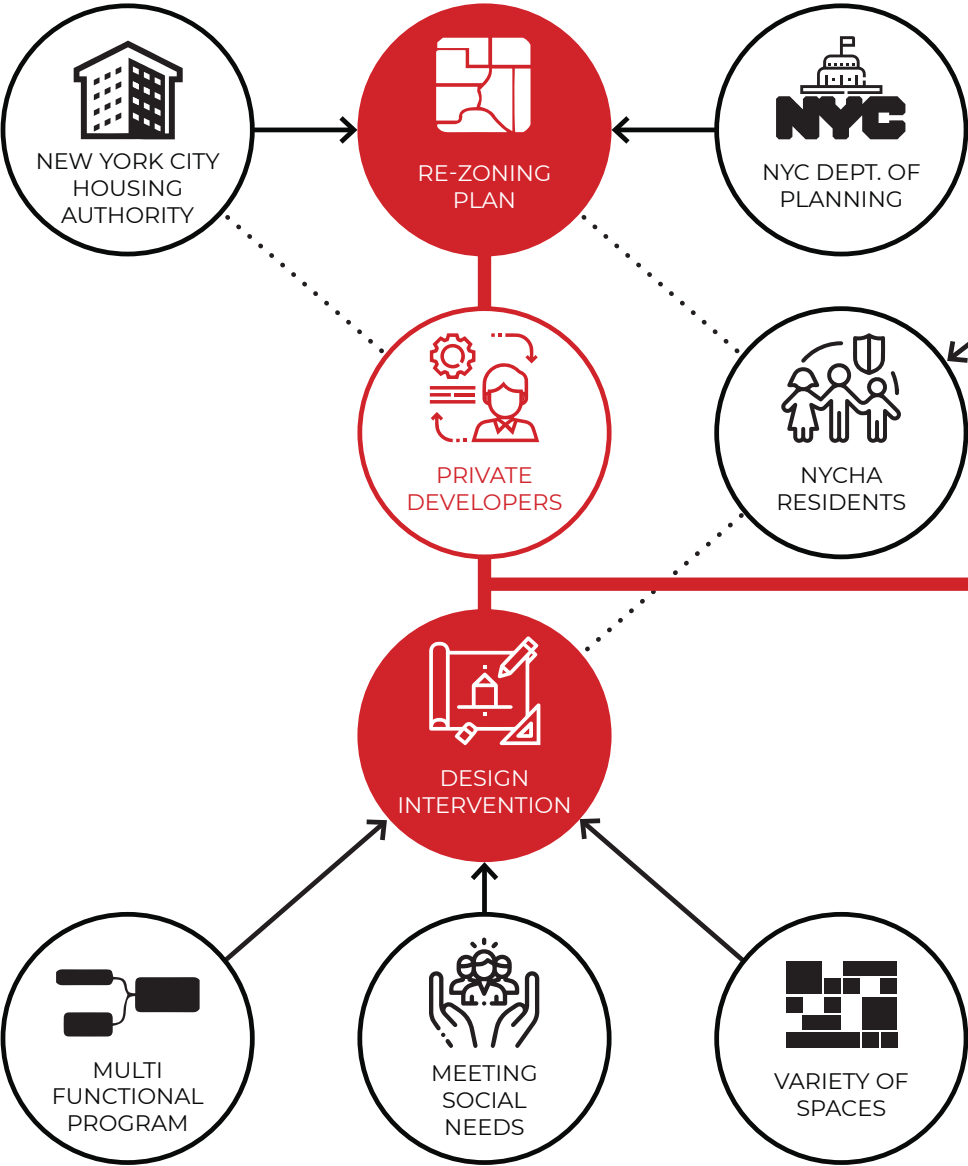
At the smallest scale of the design proposal, all the previously mentioned needs and requirements will be tested. This level will look into the form and functions of both the new buildings and landscaping concepts. It will not only define the rules and limits that will define the forms and functions, but it will also provide a method for making them flexible overtime. Using ideas of modularity and sustainability will be crucial at this level, therefore the plans of the newly proposed buildings will be provided to prove that these ideas can transcend all scales of design.

SCALES OF DESIGN

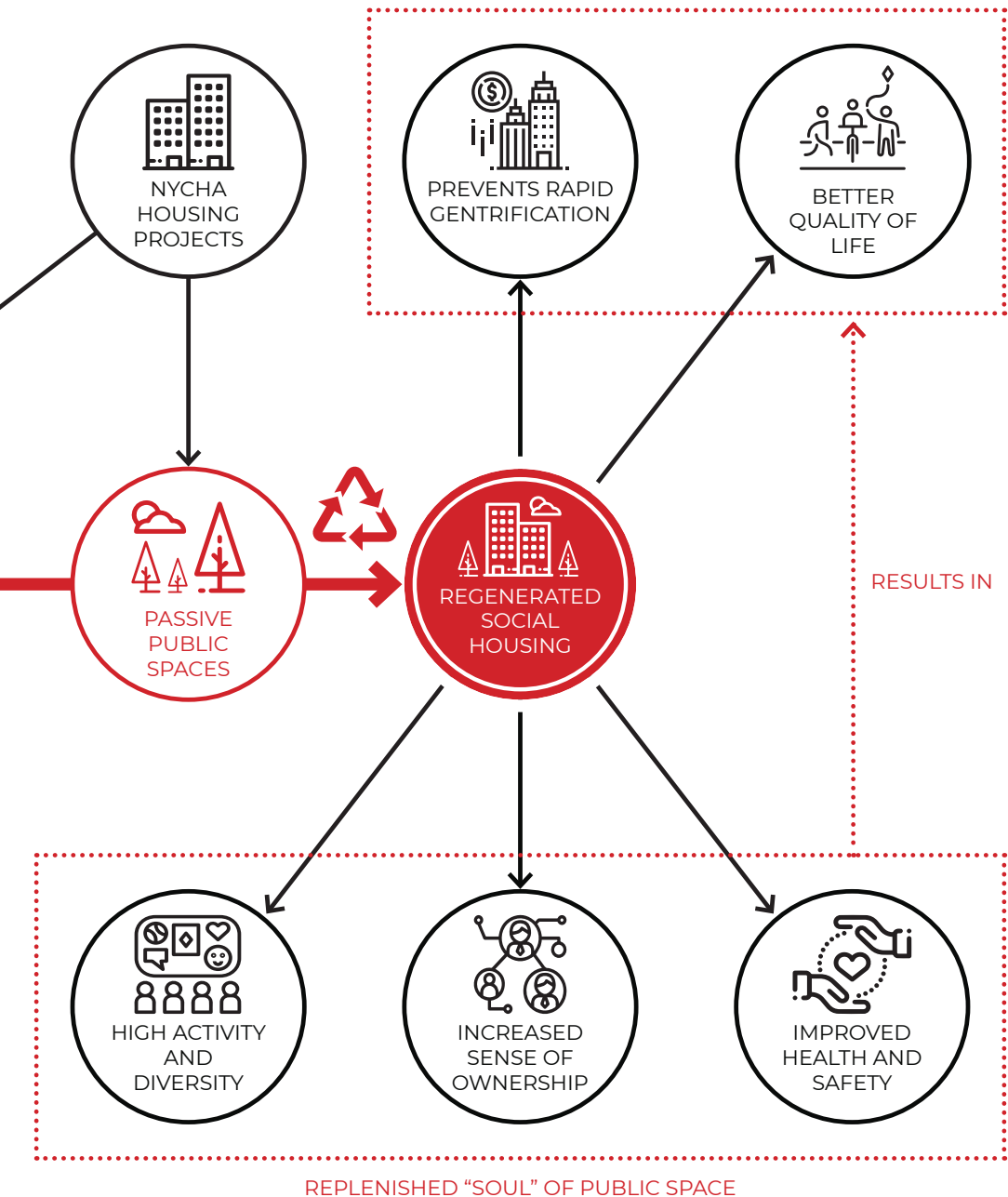


The Three Scales of Design within the Thesis Proposal
Source: Created by Author

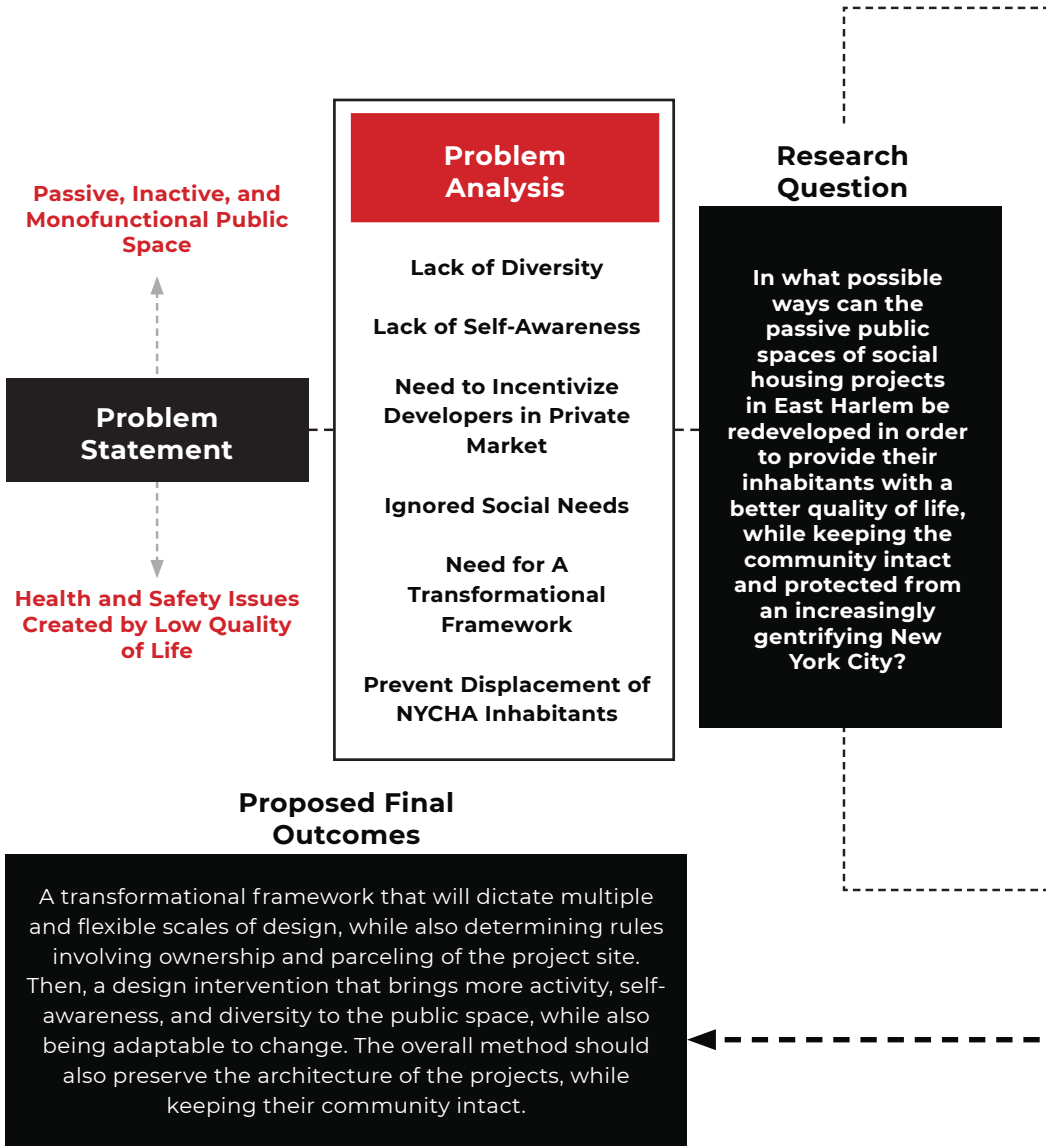
C O N E P T U A L



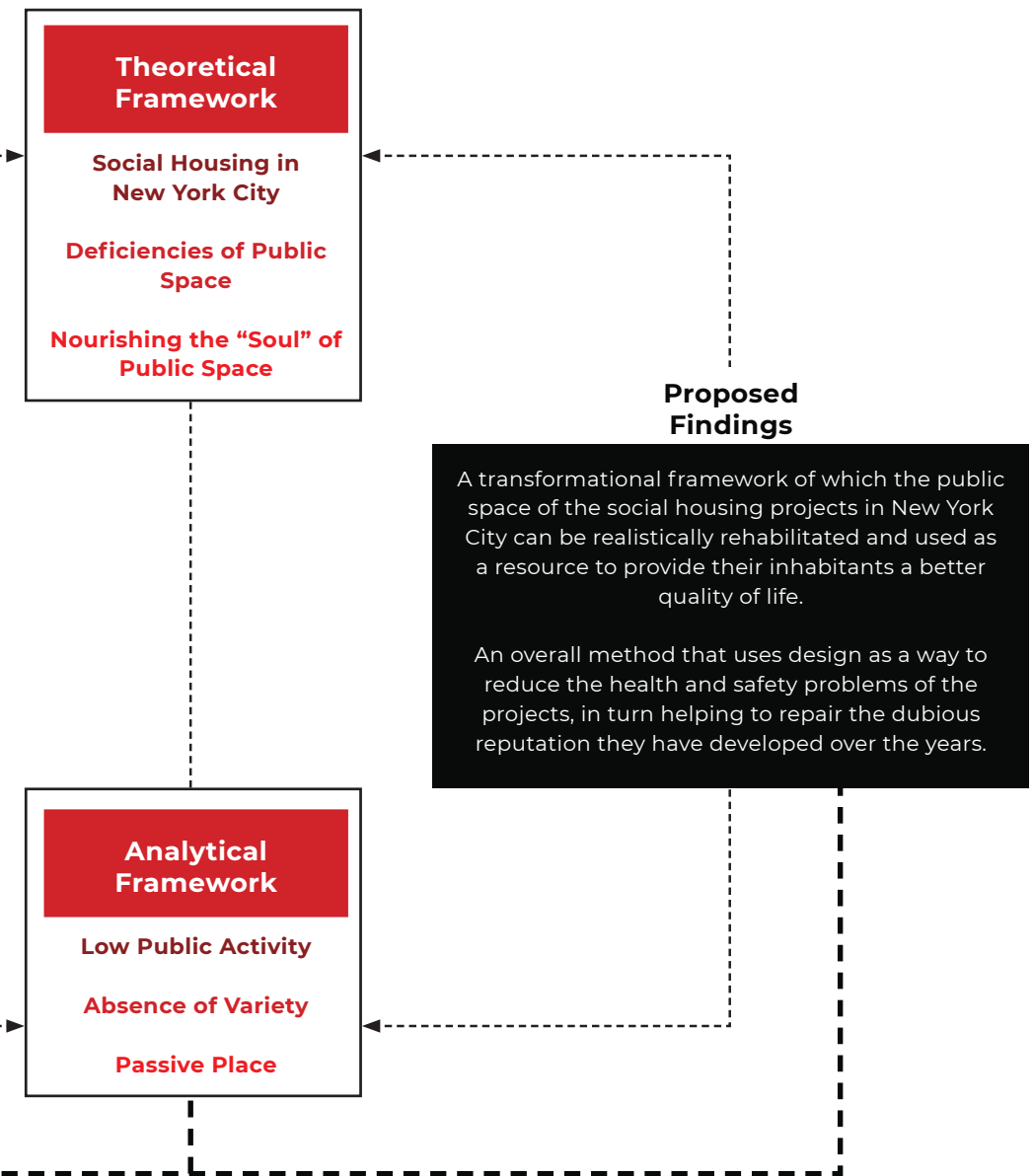
FRAMEWORK



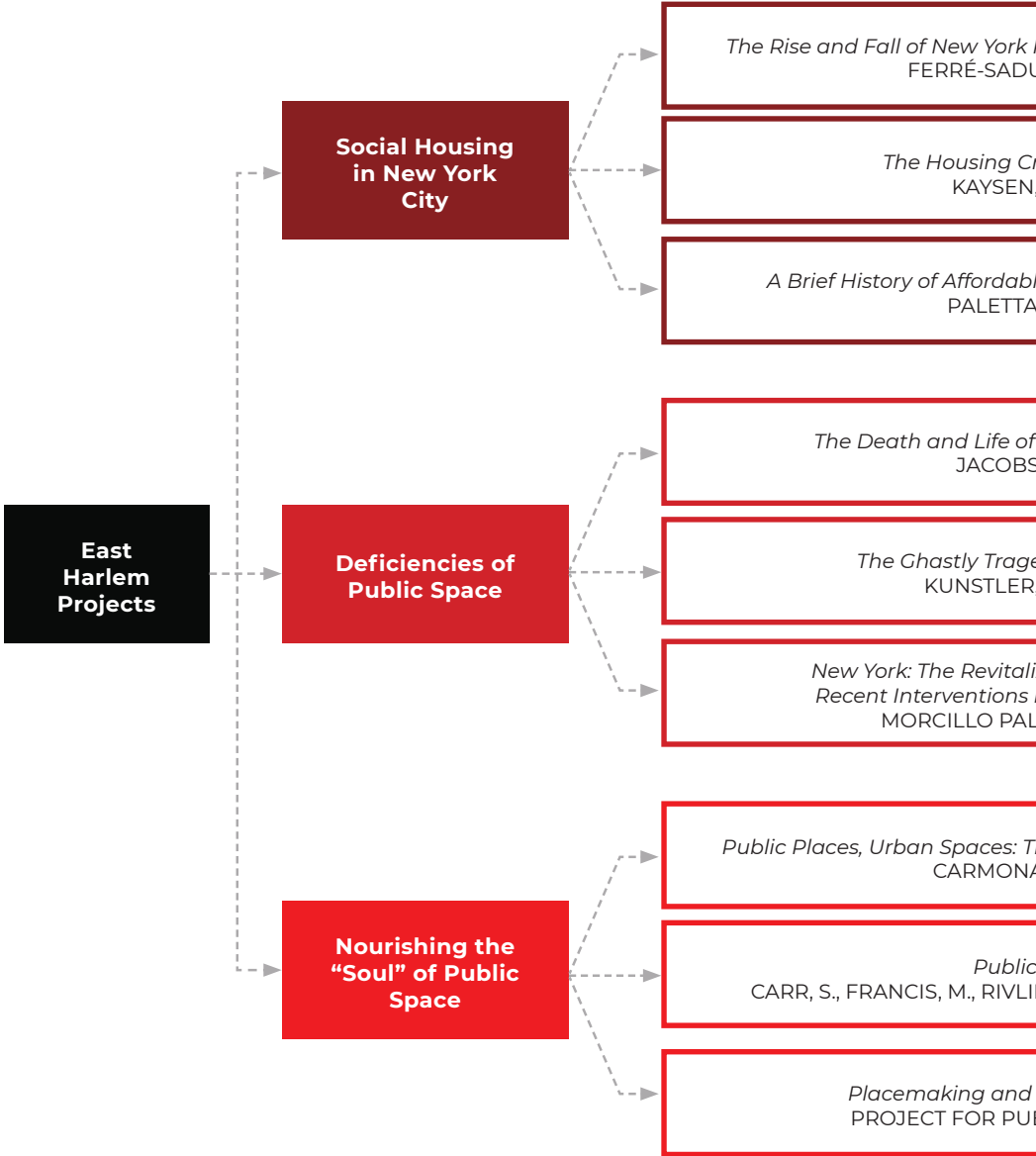
R E S E A R C H



FRAMEWORK



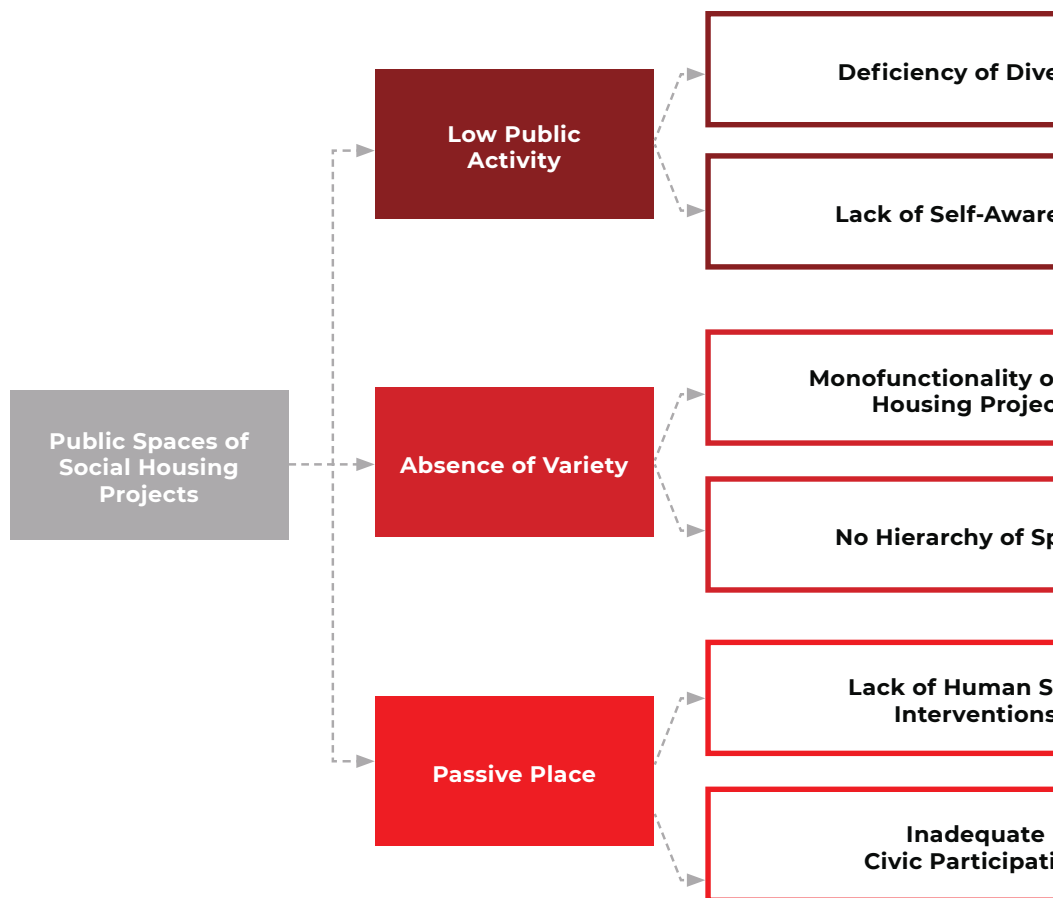
T H E O R E T I C A L



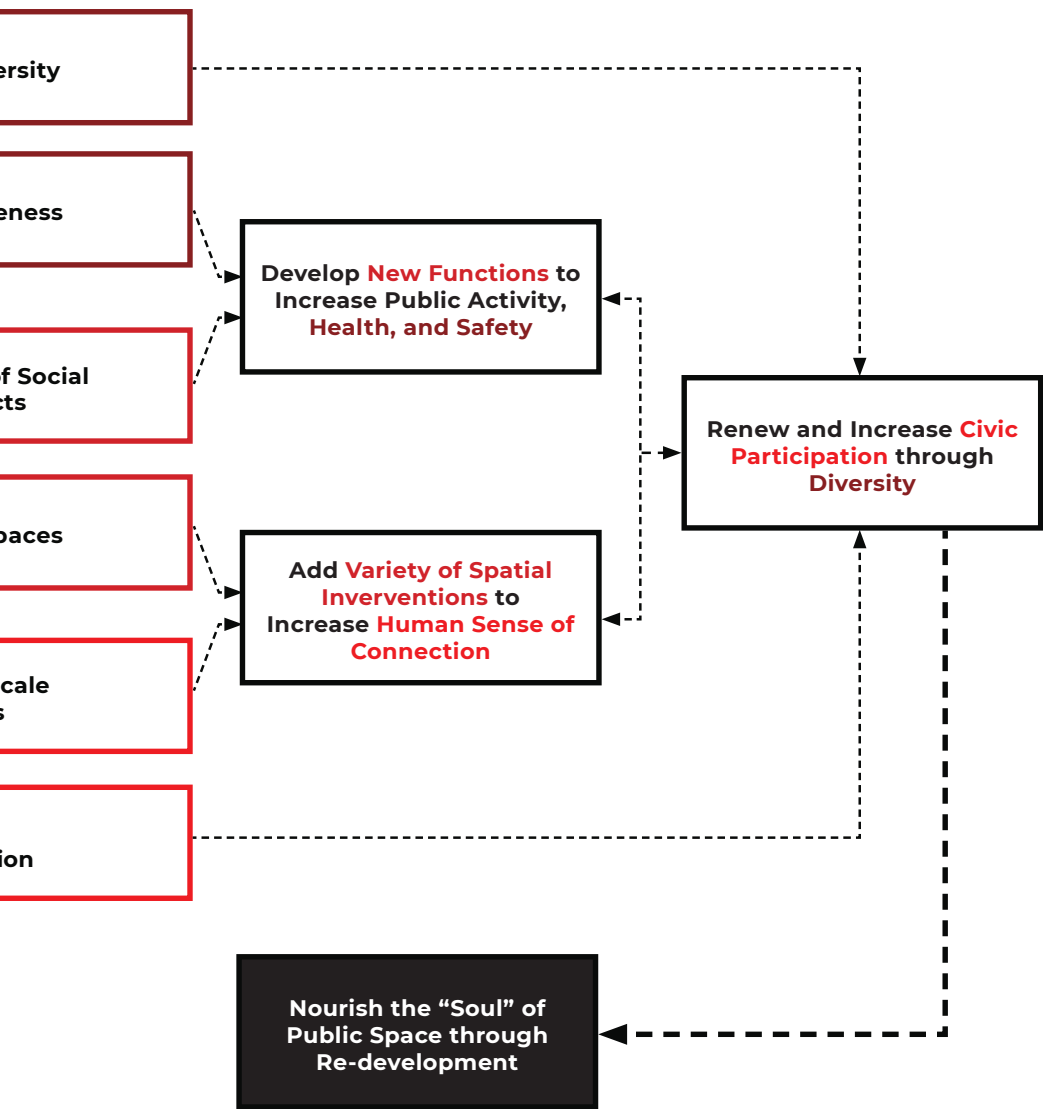
FRAMEWORK

<i>Public Housing: An Oral History</i> JURNÍ, L. (2018)	An article which describes both the history, and the current health and safety issues which have plagued the social housing projects of New York.
<i>Crisis in New York</i> R. (2018)	An article about the challenges New York is experiencing in providing affordable housing to its residents, and how the city is trying to meet them.
<i>Public Housing in New York City</i> A. (2016)	An article which describes the processes that took place in order to develop and build the social housing projects of New York.
<i>The Great American Cities</i> S, J. (1961)	A book that takes an in-depth look at the relationships between the people, the built environment, and the public space around them.
<i>The Suburb</i> J. H. (2004)	A lecture about the failures of modern urban planning, and the public spaces which resulted from them.
<i>The Organization of Public Space. in the Manhattan Grid</i> LLARES, A. (2012)	An article that explains the history of public space in New York, and the major implications that the urban grid had on the city.
<i>The dimensions of Urban Design</i> A, M. (2003)	A book that tackles a broad range of ideas and theories about the use and design of public space in the urban context.
<i>Public Space</i> N, L. G., & STONE, A. M. (1992)	A book explaining the link between civic space and public life, and offers approaches that need to be considered when designing public space.
<i>The Future of Cities</i> PUBLIC SPACES (2012)	A handbook advocating that public space is an important key to building inclusive, healthy, functional, and productive cities.

A N A L Y T I C A L



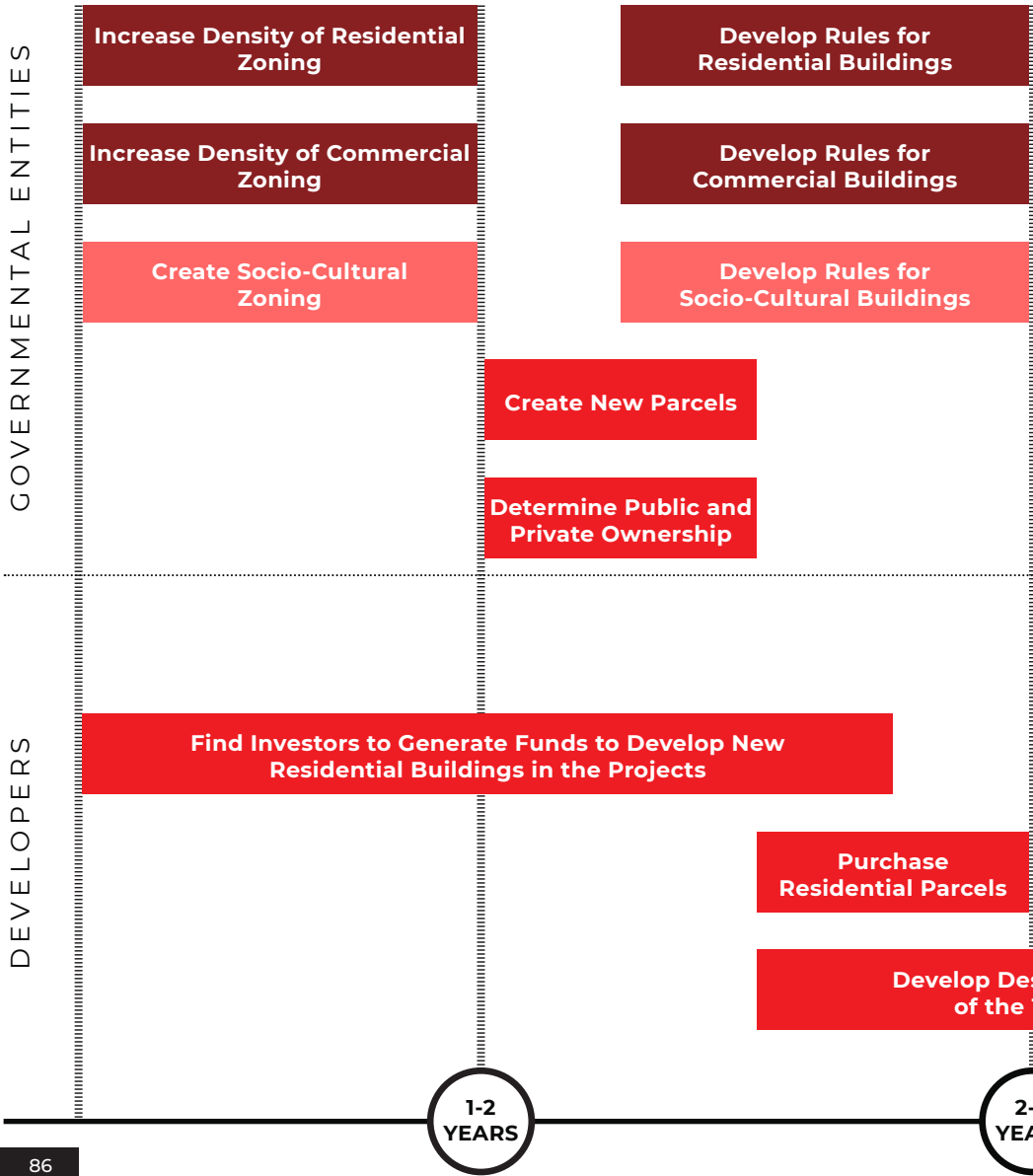
FRAMEWORK



TIMELINE OF

PHASE 1 REZONING

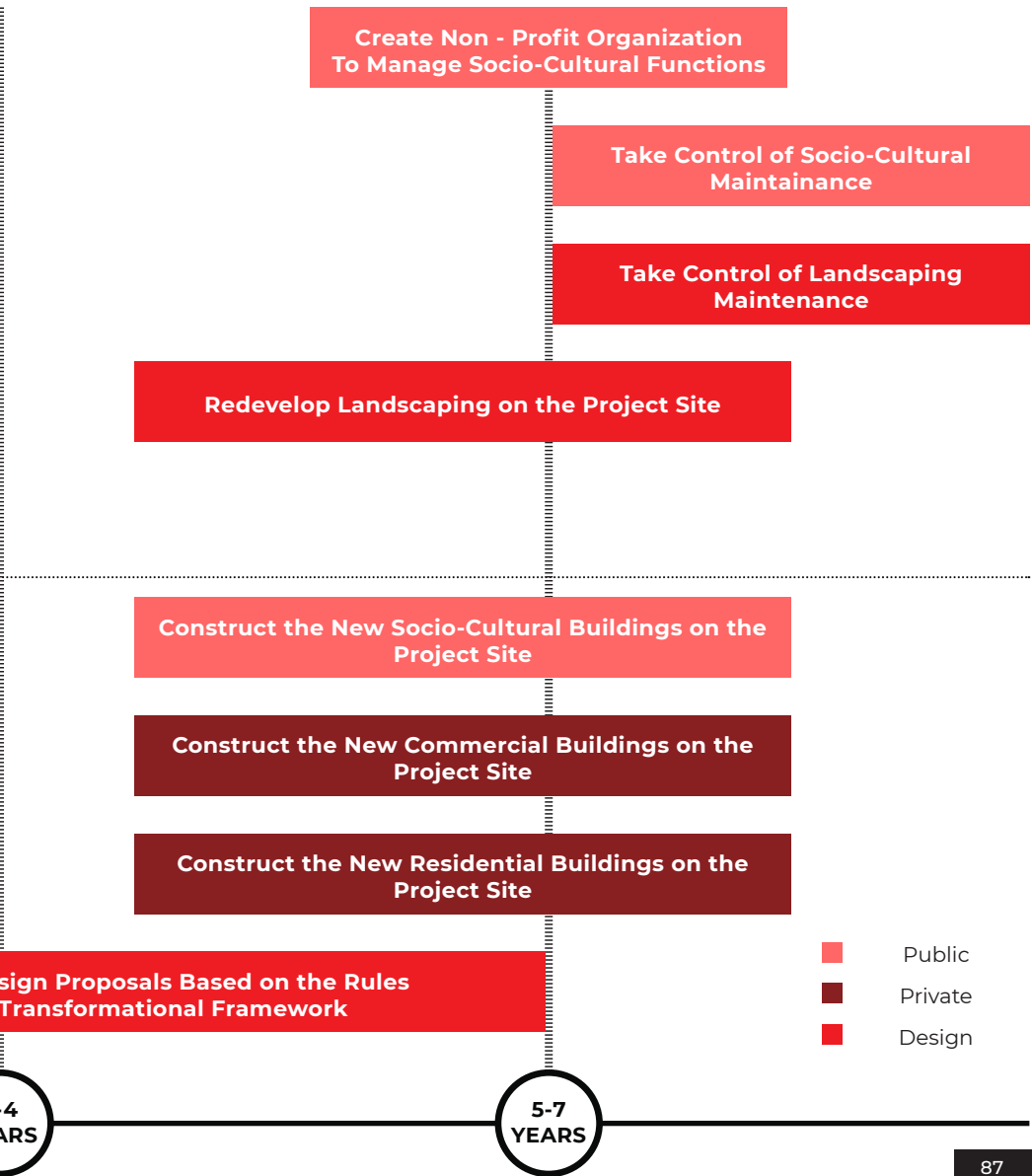
PHASE 2 TRANSFORMATIONAL FRAMEWORK



THE PROJECT

PHASE 3

DESIGN INTERVENTION



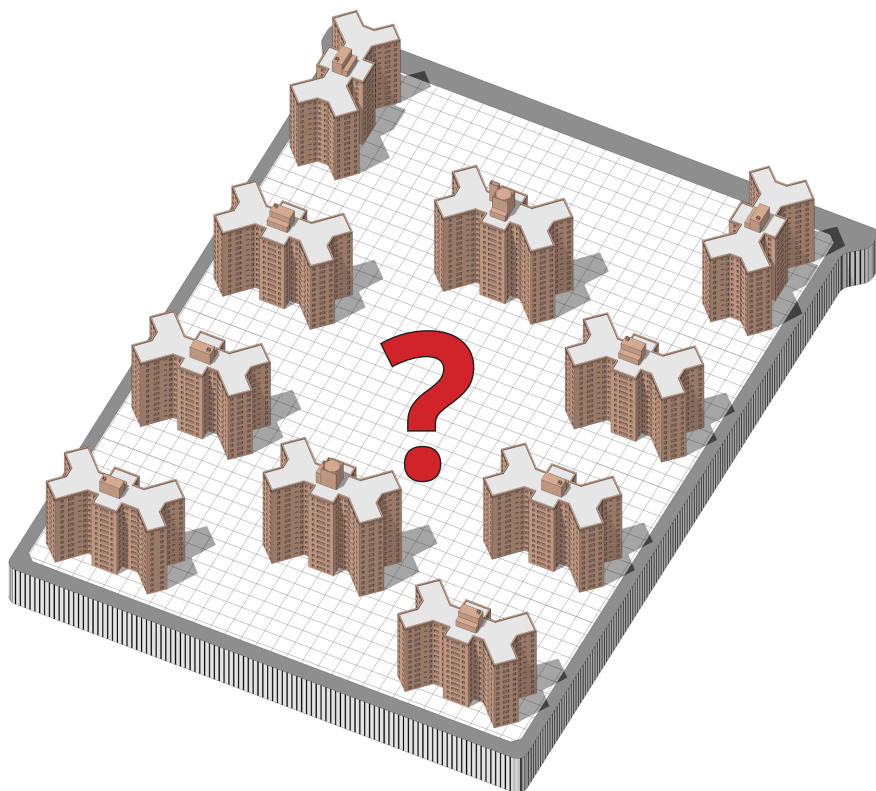
A F R A M E W O R K

THE MEANING BEHIND THE METHODOLOGY?

With the structured method on how to generate a transformational framework in place, how can it be guaranteed that public housing will change for the better and become a positive place to live in? What shape should this structure take?

Besides having the ability to designate programmatic characteristics, what other ideas should motivate zoning rules in the project area?

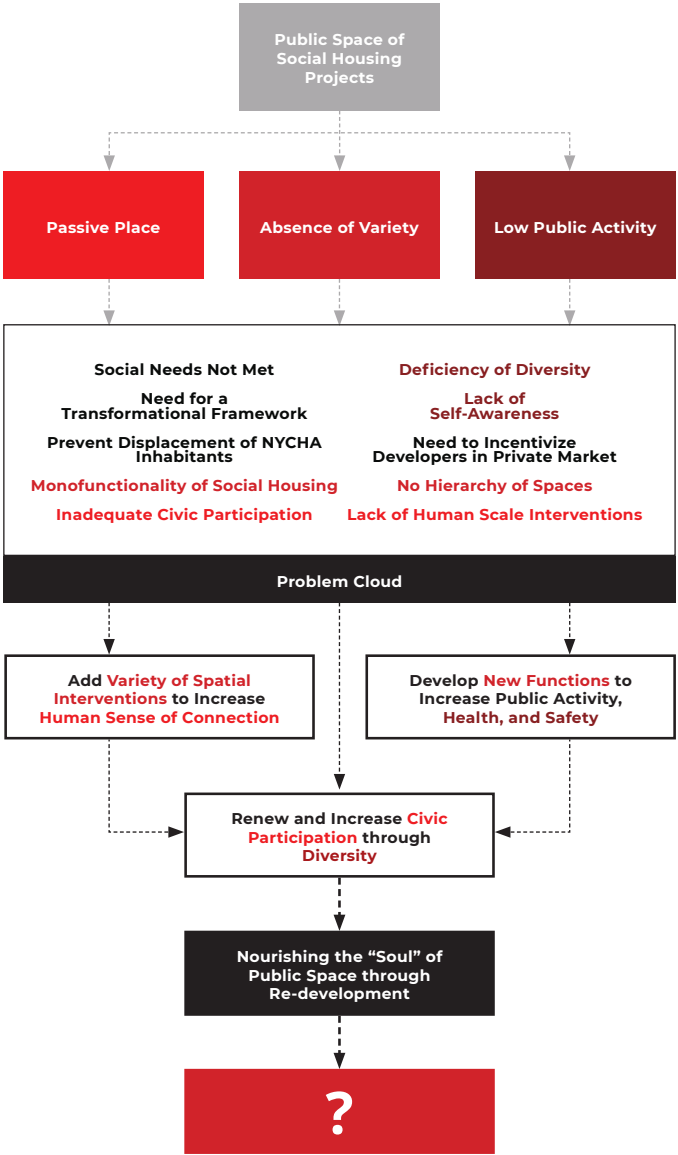
What are the main philosophies that can be implemented in order to promote the welfare of the community living in the social housing projects?



What is the Meaning Behind this Transformational Framework?

Source: Created by Author from Sketchup and Placemaker Plugin

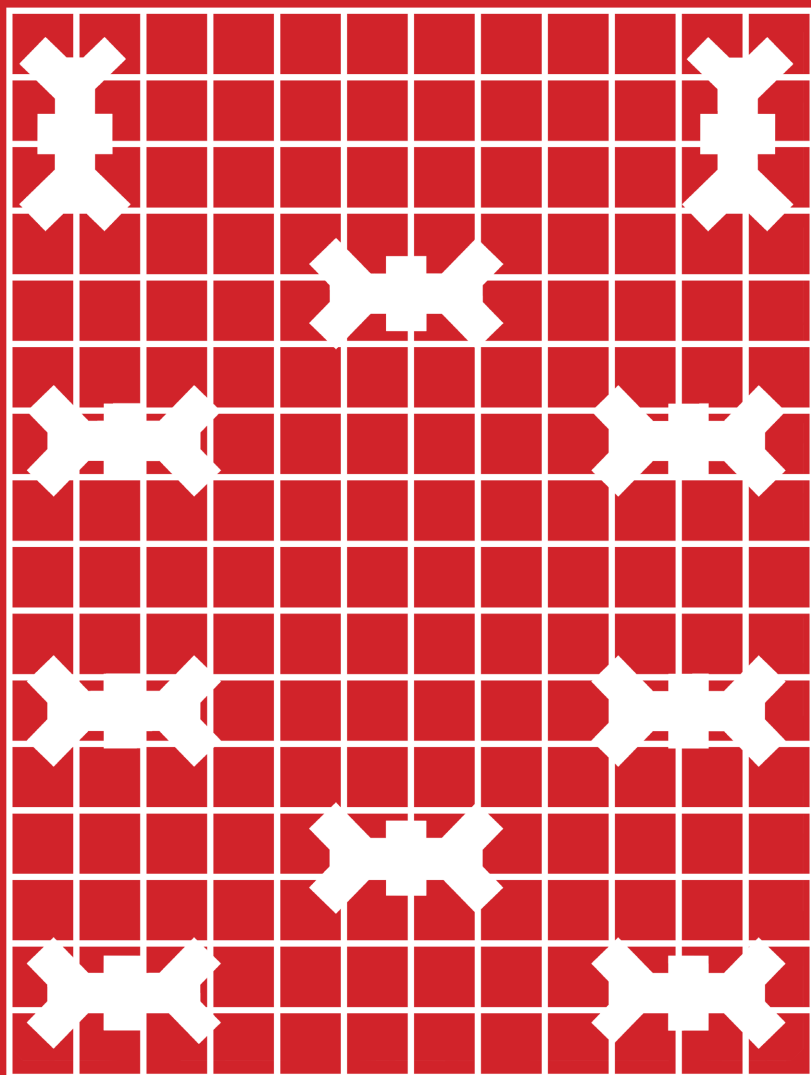
O F P H I L O S O P H Y

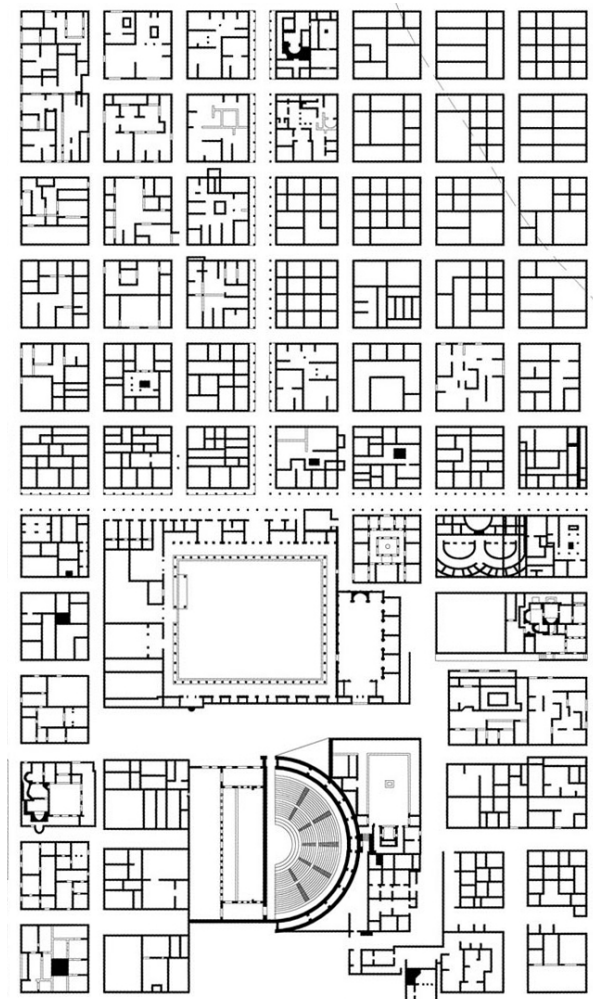


What Philosophical Approach is Needed to Nourish the “Soul” of Public Space?
Source: Created by Author from Sketchup and Placemaker Plugin



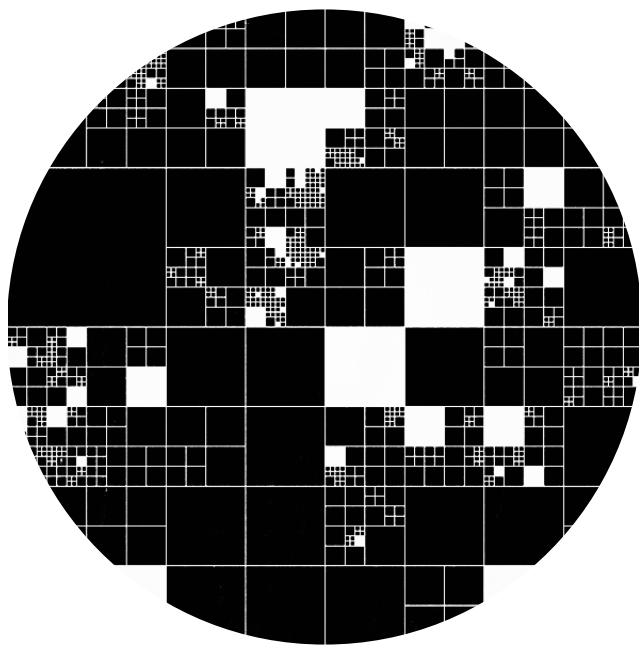
SEARCHING FOR THE "SQUARE DEAL" MANIFESTO





Timgad, Algeria - 100 A.D - A Roman Grid that Projects Power
 Source: Drawing by Frederik Pöll (2010)

IN ORDER TO NOURISH THE "SOUL" OF THE PROJECTS



In searching for the structure of the transformational framework, it was certain that a new organizational grid was necessary to create it. The important question was, what shape would it take? The form of this grid needs to be flexible and adaptable, while still being relevant to the fact that it will be a tool used to foster equality in one of the poorest neighborhoods of New York City. It also needed to meet all the requirements necessary to nourish the "soul" of public space within the social housing projects. In order to find this grid, there is a need to look back at the history of social housing in America again, but this time, it was important to find a link between a form of spatial organization with the socio-political ideas that helped create the social housing projects in the first place. It was also necessary to find a narrative that not only promoted equality, but would also need to be applicable to the multiple scales of design in the project.

CHAPTER STRUCTURE



The Gilded Age was Defined by Internal Corruption and Laissez Faire Politics
Source: Created by Author.

1. THE PLIGHT OF THE COMMON MAN

A look into the post-industrial age and the rise of progressivism.

2. THE THREE “C’S” REBOOTED

The sub-categorical philosophies that define the manifesto.

3. POWER PROJECTION URBANISM

The socio-political meaning behind certain types of urban planning.

4. PALIMPSEST URBANISM

A method of heritage preservation by re-interpreting history with the lens of today.

5. FRACTALIZED URBANISM

An approach to spatial planning that is flexible and adaptive at multiple scales.

6. SUMMARY: A NEW “SQUARE DEAL”

An overview of the overall goals of the project, what is aimed to be achieved, and how to achieve it.

THE PLIGHT OF

A POST-INDUSTRIAL ERA

The philosophical reasoning behind using a grid for redeveloping social housing projects can be sourced from the Progressive Era. This was a time of populist change, as the people grew tired of being abused by the captains of industry that defined the Gilded Age. This movement was a direct reaction to the abuse of wealth and power perpetrated by super wealthy monopolies and trusts whose concentration of assets controlled many facets of society. These abuses included the exploitation of natural resources, poor living conditions of the workers, and the lack of health and safety regulations in the urban environment.



Industry Dictating Health and Safety to the Urban Environment
Source: Armour and Company Production Factory (1910)

THE COMMON MAN



Child Labor was Rampant in this Era

Source: Photo taken by Lewis Hine - The U.S National Archives



A Political Cartoon Demonstrating the Plight of the Blue Collar Worker

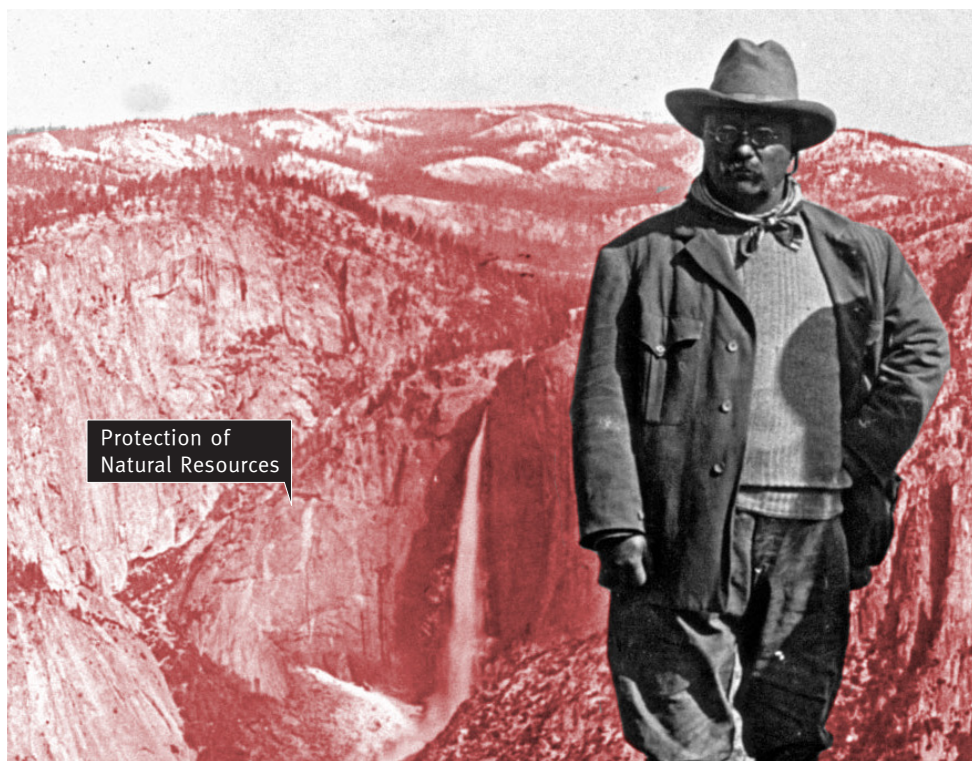
Source: Chicago Labor Newspaper (1894)

THE PLIGHT OF

AN EQUAL PLAYING FIELD

Health and safety in the urban environment would be ignored no longer, especially when President Theodore Roosevelt made it his mission to fight for a fair deal for all, including low-income workers and families. In a famous speech he made in Dallas, Texas on April 5th, 1905, he proclaimed that “We must treat each man on his worth and merits...that he is given a square deal, because he is entitled to no more, and should receive no less.” Roosevelt would make these progressive ideals his mission, and the defining philosophy of his domestic programs while serving as president.

The struggle for equality is one of the main motivations behind the Progressive movement, and it informed the concept of social housing in the United States. Therefore, the transformational framework grid should act not only as a facilitator for flexibility, but also as a method to provide an equal playing field for all inhabitants of the social housing projects.



Conservation of Natural Resources

Source: Photo of Theodore Roosevelt and John Muir - Library of Congress. Edited by Author.

THE COMMON MAN

PROGRESSIVISM TODAY

When looking at these simple, yet effective, promises of governance, they seemed to be in-line with what is needed to be achieved in the social housing projects of New York City. In an age of Neo-Liberalist policies that dictate the form of our cities, the lives of our urban poor generally get overlooked in the United States.

Many still think providing a level playing field for our fellow man is a foreign and socialist ideal. However, when looking back to the founding principles of America, we can see that equality and the rights of man are essential ideals that freed the country from its old world shackles. Therefore, the parts of the Square Deal needed to be interpreted through an urbanist perspective, by translating these ideals to the spatial urban fabric of the projects themselves.



Roosevelt was Known as the "Trust Buster," because he Broke Apart Many Monopolies

Source: National Wildlife Federation (2010) by Max Greenberg

THE THREE "C's"

THE THREE "C'S" OF T. ROOSEVELT

The Square Deal was made up of three goals of which he intended to achieve.

CONTROL OF CORPORATIONS

Regulation and Breakup of Monopolies who Fixed Prices in the Free Market

PROTECTION OF CONSUMERS

Standardization of Food and Drug Products to Protect Health and Safety of Consumers

CONSERVATION OF NATURAL RESOURCES

Replenish Destroyed Resources and Conserve the Resources Still Available



T. Roosevelt Pixelated

Source: <https://pixelfigures.tumblr.com> - Edited by the Author

R E B O O T E D

MY NEW THREE “C’S”

Can these ideas be translated to the spatial urban fabric of the social housing projects?

CREATING COMPETITION FOR THE NYCHA

Breaking up the hegemony of the housing association by inserting private companies to create competitive social housing. Creating a more diverse community with various income levels within the same area.

PROTECTING THE COMMUNITY

Preserving the people who currently live in the projects, and protecting their right to the city. Providing health and security to these inhabitants.

CONSERVATION OF NATURAL RESOURCES

Preservation of green spaces. Ecologically responsible approaches to public space. Prefab structures as a resource friendly way to create the future built environment.



The Author Pixelated

Source: <https://pixelfigures.tumblr.com> - Edited by the Author

U R B A N I S M

G R I D A S A F O R M O F P O W E R

According to Jill Grant (2001), the system used to plan a city is based on the outlook of the prevailing authority during its conception. Roman settlements in their peripheral territories planned square grid cities to project Roman power and identity to domains under their control (Grant, 2001).

Grant categorized various types of cities throughout the world, and came up with 3 typologies of power projection: Diffusing Authority, Centralizing Authority, and Globalized Authority (Grant, 2001).

Diffused grids tend to be egalitarian (pictured at the bottom) to promote equality (Grant, 2001).

Centralizing grids tend to be totalitarian and centralized.

Globalized grids promote the concentration of capital and wealth (also pictured at the bottom).

Based on the qualities of these typologies, the proposed strategic plan aims to blend best of both approaches by promoting a generation of wealth for the community (pictured below). The infusion of new flexible and adaptive developments within the strategic plan is a way to project this synthesized form of power.

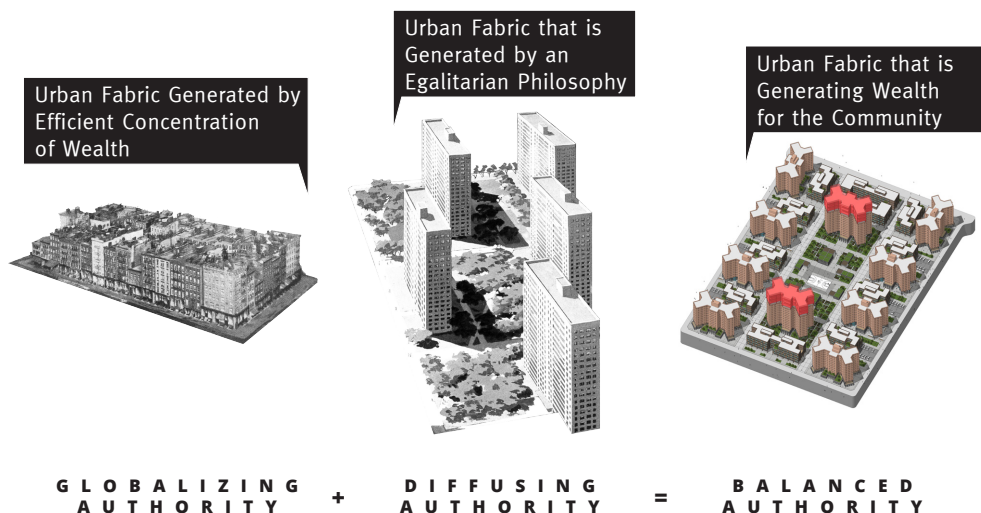


Diagram Comparing Various Types of Planned Authorities

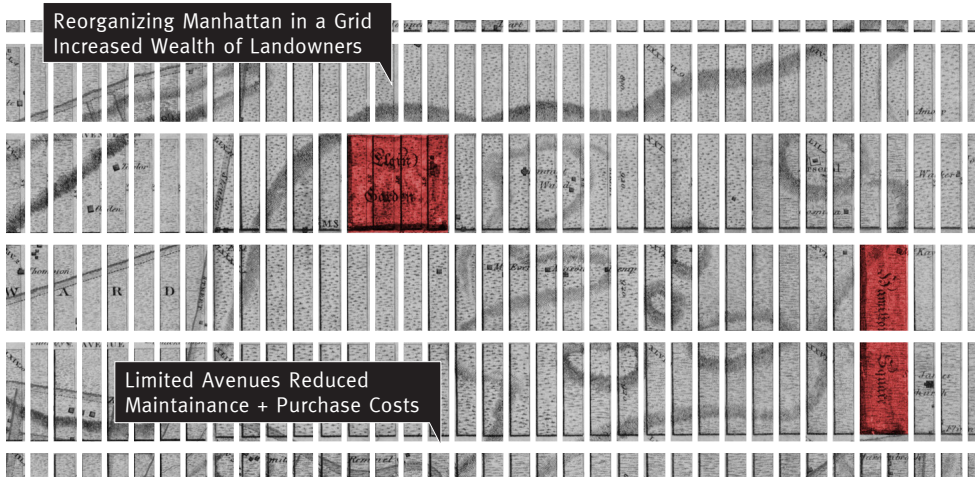
Source: Various Post-war Proposals for NYC Urbanism. Image on the Right Created by the Author.

POWER PROJECTION

A GRID MOTIVATED BY GREED

According to an article titled *The Law and Economics of Street Layouts: How a Grid Pattern Benefits a Downtown* by Yale Law School Professor Robert C. Ellickson (2013), the economic incentives of creating the New York City grid were very influential, as it determined both its density and orientation.

First of all, the grid organized the original irregular plots of land above the original settlement into smaller and more easily calculable plots (in terms of value) that real estate investors would be attracted to (Ellickson, 2013). Secondly, the width of streets and the amount of avenues were kept to a minimum, so that the city would not have to pay landowners more damage compensation than it had to (Ellickson, 2013).



1807 Commissioners Plan of New York - The Birth of the Grid of Manhattan
Source: Library of Congress - <https://www.loc.gov/resource/g3804n.ct000812/?r=-0.061,-0.201,1.111,0.69,0>

P A L I M P S E S T

E V O L V I N G S P A T I A L I T Y

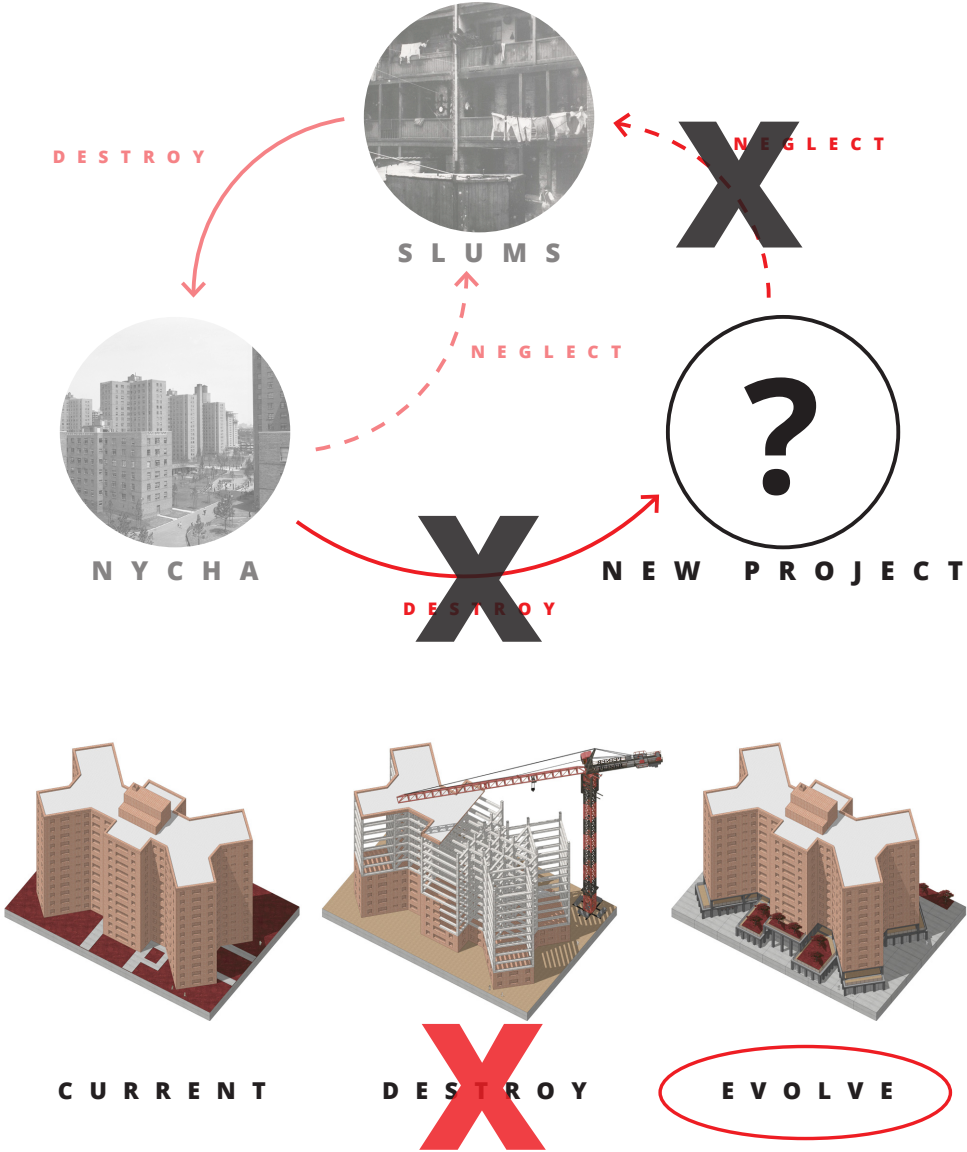
According to Luna Khirfan (2010), cities are continuously evolving entities whose forms change and whose elements acquire new meanings and functions. Palimpsest, a term that originates from reusing old manuscripts by writing on top of them, is a useful method for preserving urban narratives. Applying it to the social housing projects allows for the narrative of their existence to continue, while adapting them to a new reality.

Aldo Rossi (1984) equates the city's essence, or "soul," with the collective memory of the history of the city. Therefore, protecting and adapting the social housing projects are preventing the whitewashing of New York City's history. The towers are also a defining feature for the community, and completely losing them would mean losing the "soul" of their neighborhood.



Railways and Highways Crossing Over the Land Survey System Grid of the United States
Source: Edited by Author from Google Earth

U R B A N I S M



Break the Cycle of Destruction and Neglect! Evolve!
Source: Diagrams Created by the Author.

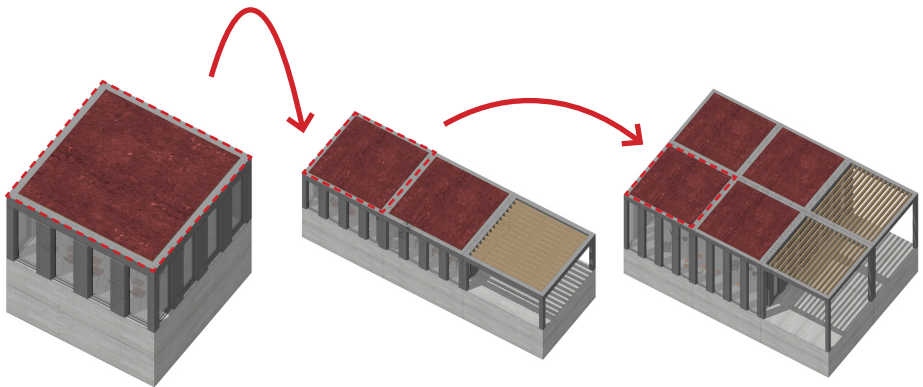
FRACTALIZED

A FLEXIBLE SYSTEM

The spatial development of a vast majority of the United States can be sourced from the Cartesian Coordinate System (1637), which was interpreted at the time as a method of rationality and reason. This can be best seen in the grid layouts of American cities, with one of the first planned cities being Philadelphia in 1683.

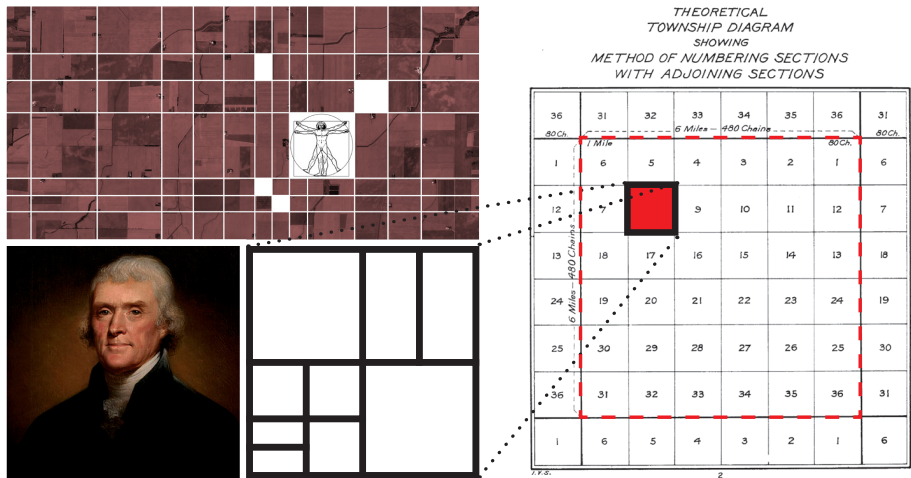
This approach to spatial planning eventually made its way into American law with the Land Ordinance of 1785, which implemented a grid system to survey U.S. public lands and sell them to private investors for farming. This also provided a framework which land was settled and populated, providing a controlled sense of variety and scale. Based on this historical precedent, using a square grid as a spatial framework for the public space seemed logical. This system of spatial management and growth reflects the ideas of René Descartes, as the massive grid imposed order and subdued nature herself.

In an essay written by Nikos A. Salingaros (2004) entitled *Connecting the Fractal City*, he explains that a fractal grid connects multiple scales of design together because of its repeatability. Components working within the system of the grid can interchangeably work with each other, while also being able to congeal with other same size (or smaller) pieces to make larger components and/or compositions (Salingaros, 2004). A system such as this easily allows for the modularity of buildings, making any design both very flexible and adaptive to any situation.



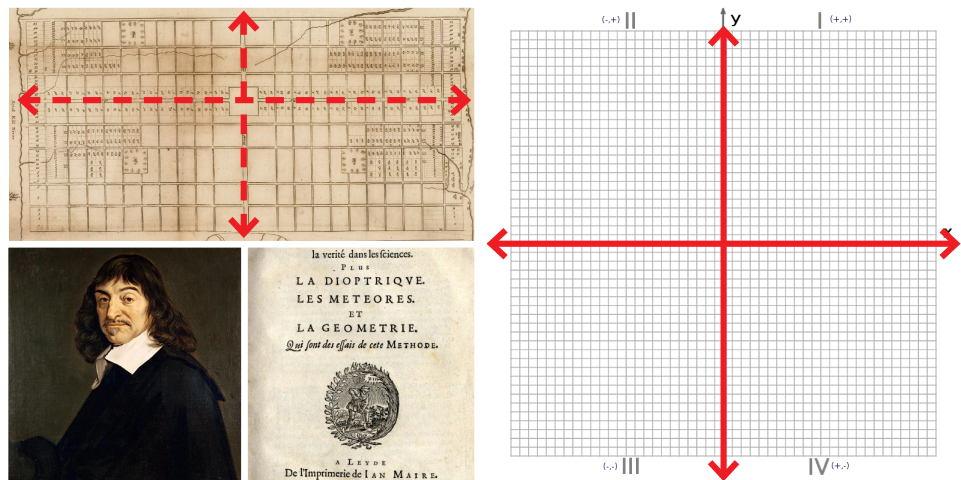
Modularity and Fractalization Go Hand in Hand
Source: Diagram by Author.

U R B A N I S M



Farmland for All Americans with the Help of a Fractal Grid

Source: Photo of Thomas Jefferson from the White House Historical Association. The Rest has been Edited by the Author.



A System of Rationality and Reason

Source: Photo of René Descartes from the Louvre Museum. The Rest has been Edited by the Author.

S U M M A R Y :

THE NEW “SQUARE DEAL” MANIFESTO

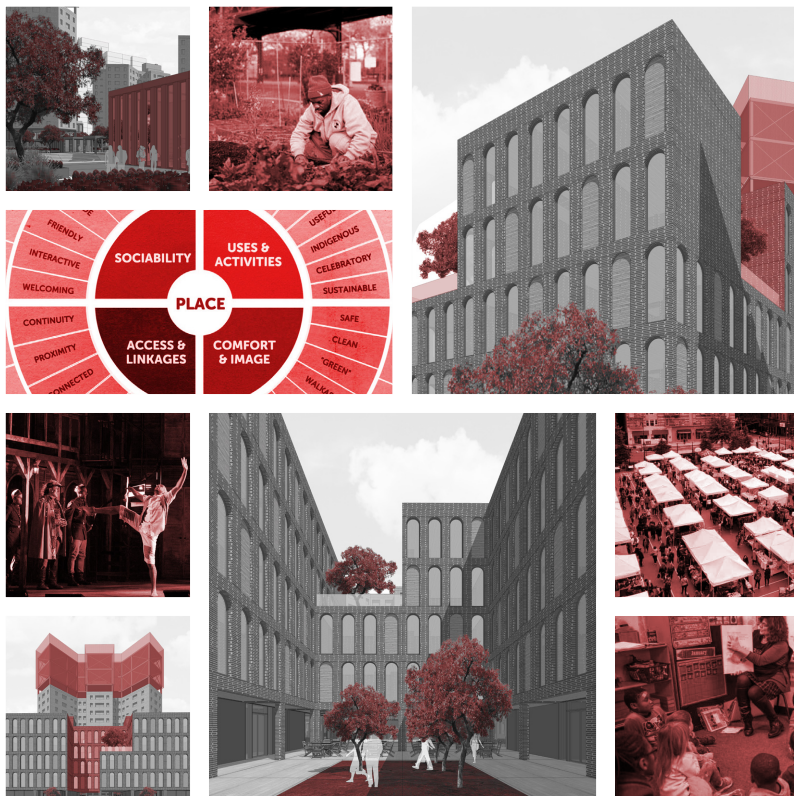
This declaration is an egalitarian and progressive call for change in the social housing projects of New York City! The transformational framework will take the shape of a square grid. This approach will allow for the public space of the social housing projects to have an increased quality of life by providing a system of development that is not fixed in time. This overall success of this project will be measured by the fulfillment of Manslow’s Hierarchy of Needs, and the overall design intervention should exhibit characteristics set forth by the Project for Public Places.

The new development will bring a wider variety of people to the community, bringing various forms of people together in one place. The grid will therefore act as a tool that promotes the welfare of the community by enforcing the ideals set forth by the objectives defined by the new “Three C’s” that make up the new “Square Deal” manifesto. By being a flexible framework, the grid will foster development that can change over time as the blocks that make up the grid can be coalesced or broken down into bigger or smaller parcels, depending on the situational demand. This flexibility will be amplified by the implementation of modular construction in the creation of new urban fabric. Modularity of the built environment is also a more sustainable method of growth.

The grid can also help establish a sense of ownership for the people living in the social housing projects by providing urban gardens at a scale that can be equally shared by the community. This program can create stronger bonds between the inhabitants of the social housing projects, while also creating a dynamic and safe place to live. The addition of a palimpsest strategy within the transformational framework fosters social resiliency against the displacement of the community living in the projects. It also helps to preserve the right to the city for all the citizens of New York City, not just the ones who have money.

Therefore, the effectiveness of the grid can be measured by the connectivity between the various layers and scales of design exhibited in the proposed design intervention. The development of rules and regulations at each of these domains would also give weight to the argument that the grid is, in fact, a method that enforces an agency of change.

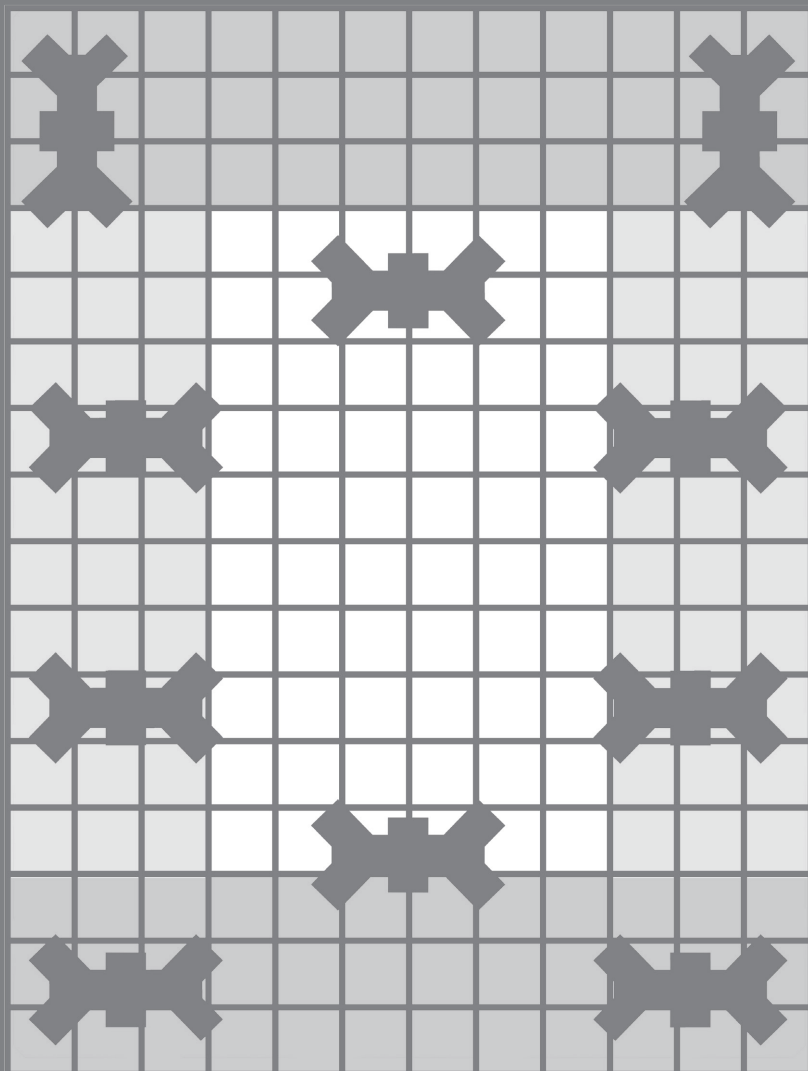
A NEW “SQUARE DEAL”



The “Soul” of Social Housing Brought Back to Life
Source: Collage Created by the Author



GENERATING DEVELOPMENT THROUGH REZONING





The Project Site During the Summer Solstice - June 21 at 12pm
 Source: Diagram Created by Author, Information from Google Sketchup

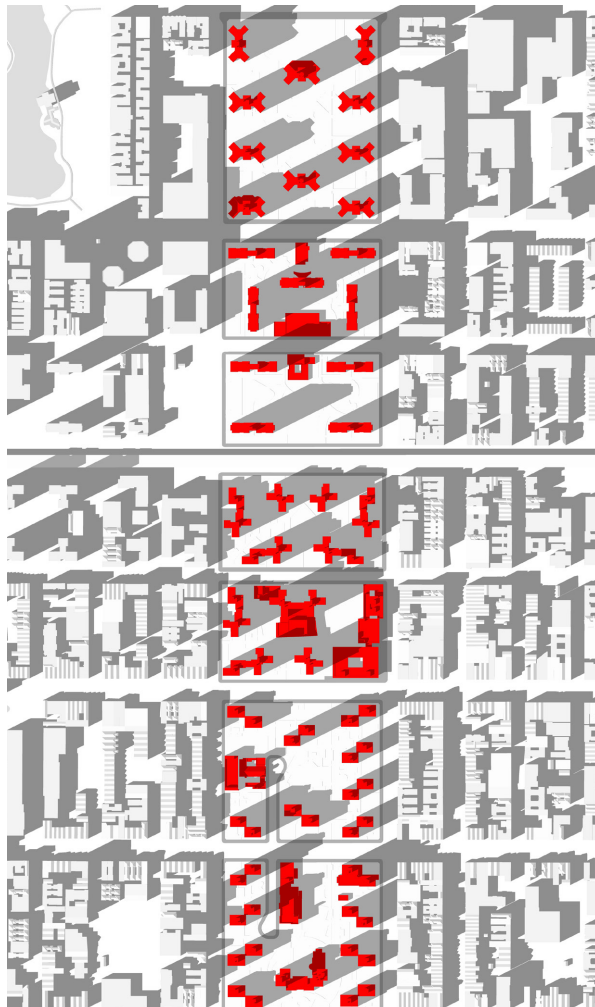
TO REPAIR THE RELATIONSHIP OF THE NYC GRID



The most macro level of the design intervention - the rezoning of the project site - first requires an in-depth analysis of the immediate context. Starting from the morphology of the figure ground, the exploration also maps economic issues, transportation corridors, and even measures the qualitative state of the buildings. In doing so, motivations dealing with function, circulation, and connectivity of the site can be better understood.

The next step starts to define the various overlays of commercial and residential zoning layers in and around the project site. These are also helpful to understand the functionality of the New York City street grid, in addition to how people circulate around the blocks. The combination of all these factors lead to a rezoning proposal of the project area that aims to bring familiarity to a very unfamiliar urban fabric organization.

CHAPTER STRUCTURE



The Project Site During the Winter Solstice - December 21 at 12pm

Source: Diagram Created by Author, Information from Google Sketchup

1. ZONING: THE CONTEXT

An in-depth look into the surrounding environment and its relationship with the projects.

2. ZONING: THE OVERLAYS

An overview of the current city planning regulations regarding the future development of the spaces around the project site of the social housing projects.

3. ZONING: THE PHILOSOPHY

A summary of the maps regarding site analysis and zoning. Two prevalent issues bubble to the surface.

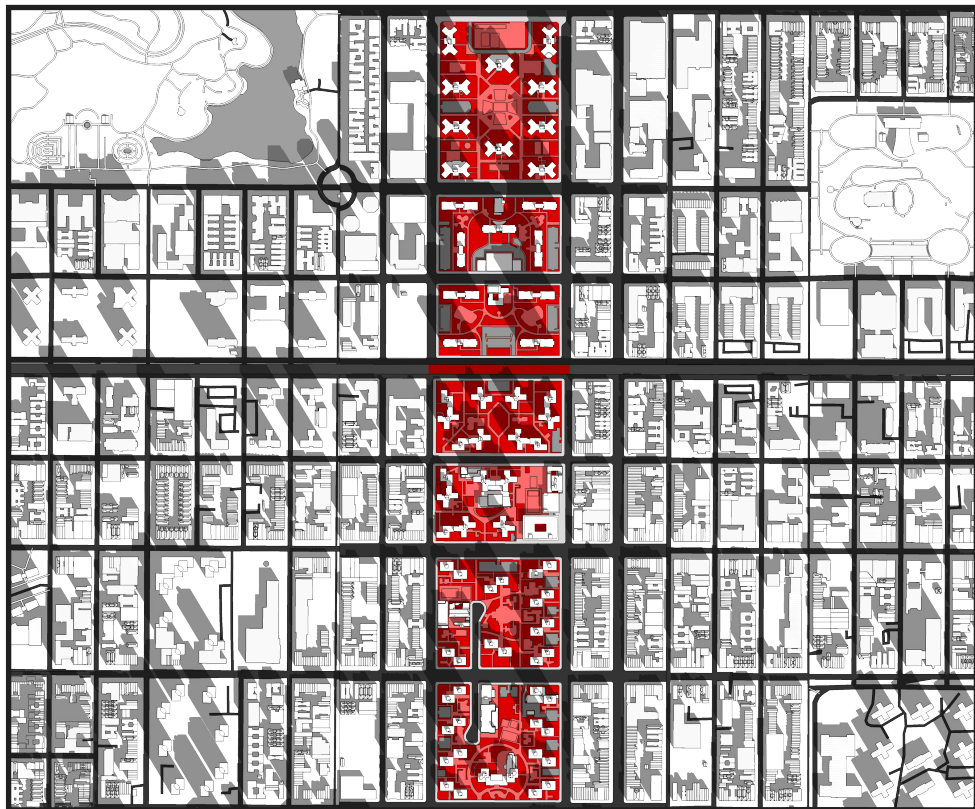
4. ZONING: THE PROPOSAL

A proposal for the rezoning of the project site, which includes implementing a special zone at the center of the King Towers as a way to protect the interior green space.

Z O N I N G :

THE RELATIONSHIP OF SITE AND ENVIRONMENT

The transformational framework needs new zoning overlays within the project area in order to determine the allowable program that can be developed within the new parcels on the site. These parcels will fill up the spaces between the preexisting towers. Doing this will increase the density of the social housing projects, which will in turn add more population, creating more activity and diversity.



The Project Area within its Urban Context
Source: Created by Author from Sketchup and Placemaker Plugin

T H E C O N T E X T

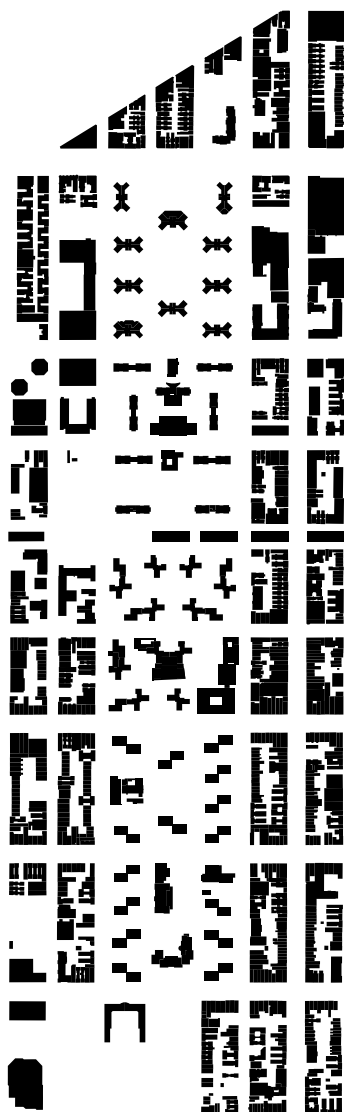
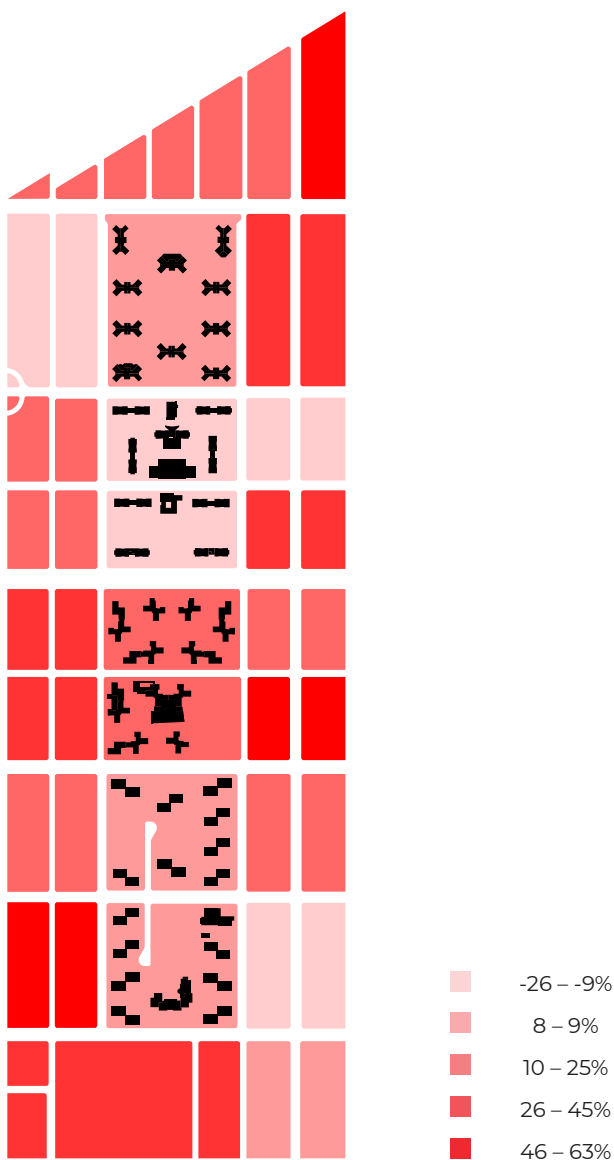


Figure Ground of the Project Area
Source: Diagram Created by Author



Z O N I N G :

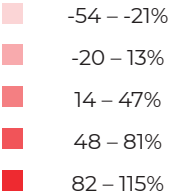
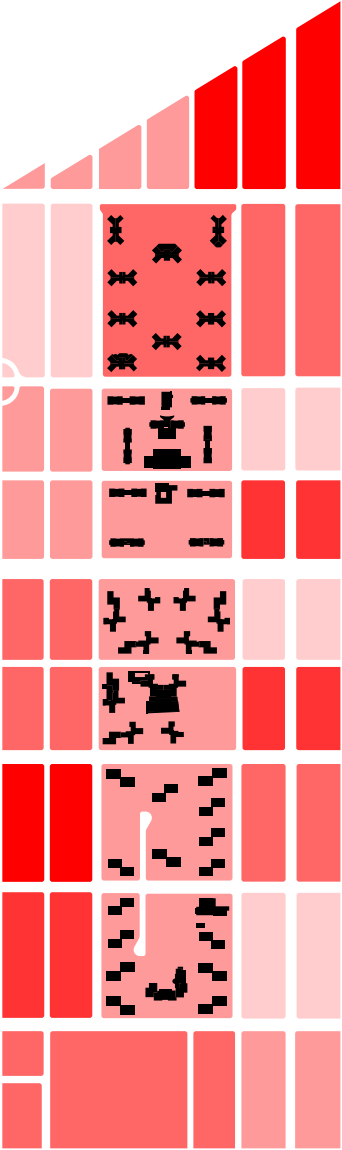


Percentage Change in Rent of Project Area (1990-2000)

Source: Diagram Created by Author, Information from the Pratt Institute East Harlem Land Use Studio

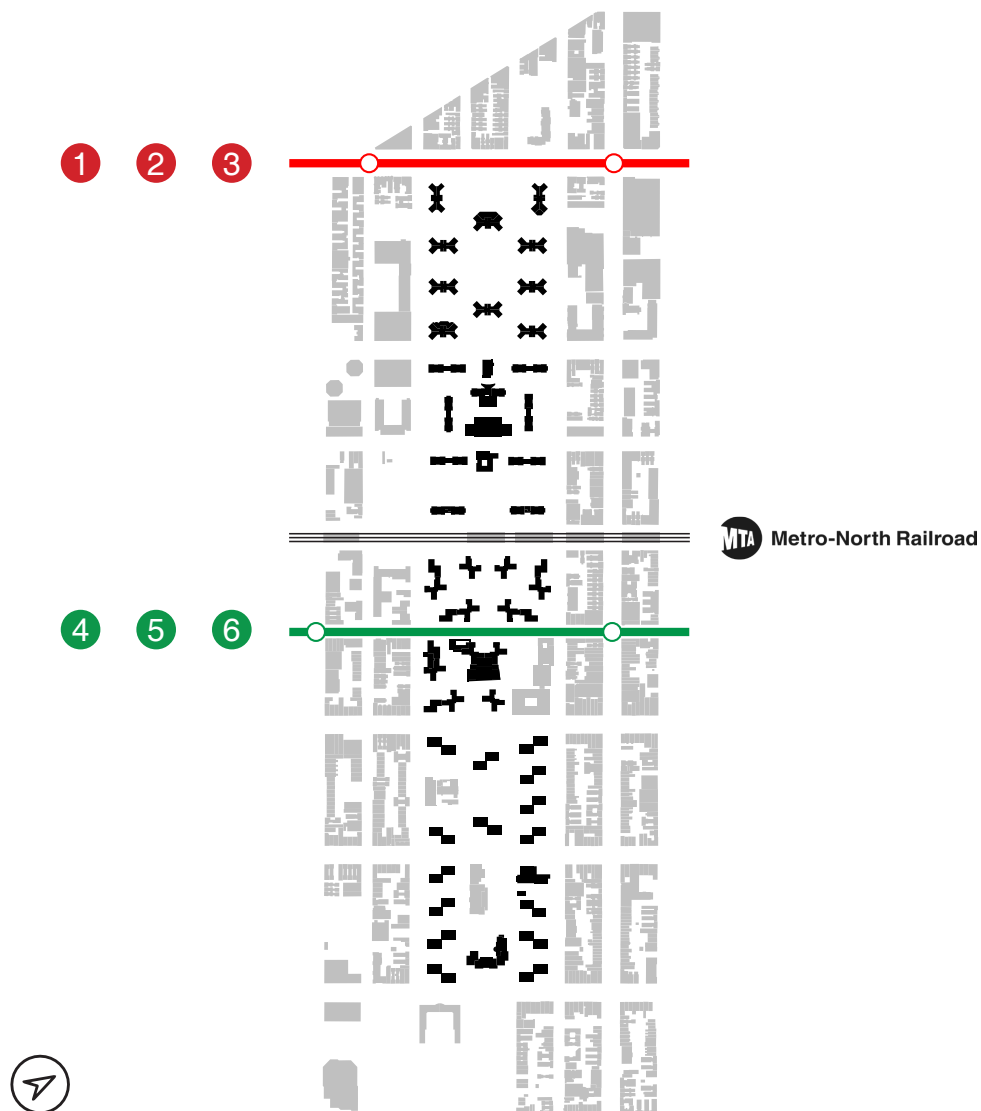


THE CONTEXT



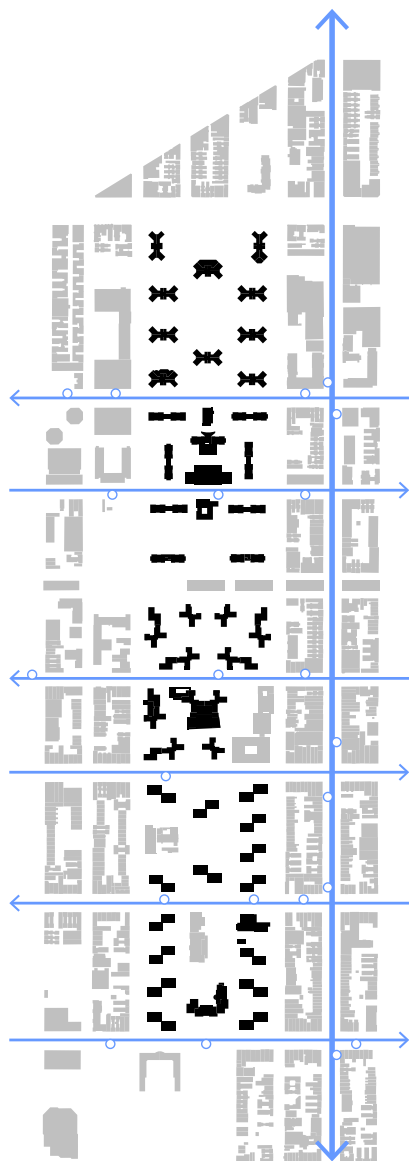
Percentage Change in Median Income of Project Area (1990-2000)
Source: Diagram Created by Author, Information from the Pratt Institute East Harlem Land Use Studio

Z O N I N G :



Train Viaduct + Subway Lines and Stations
Source: Diagram Created by Author, Information from Google Maps

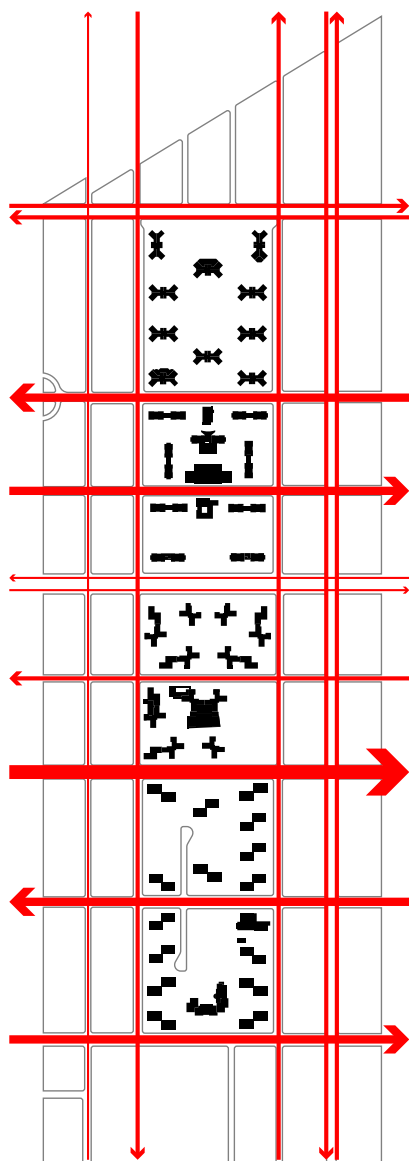
T H E C O N T E X T



Public Bus Lines and Stops

Source: Diagram Created by Author, Information from Google Maps

Z O N I N G :

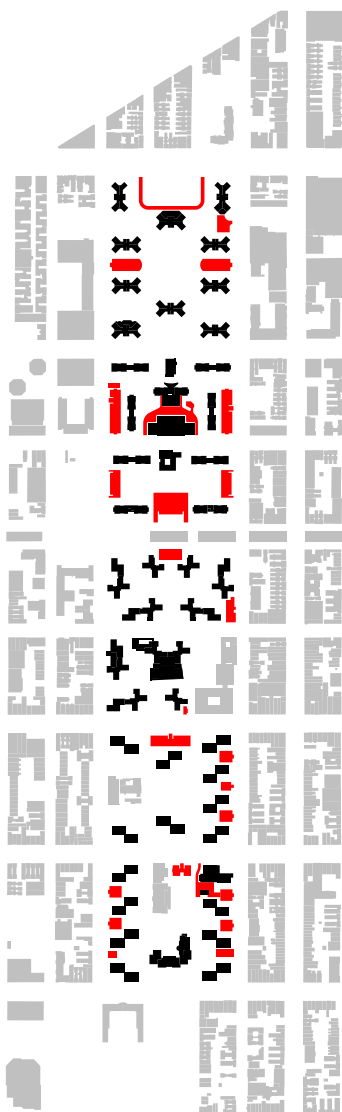


- 1 Lane
- 2 Lanes
- 3 Lanes
- 6 Lanes

Relative Traffic Volume
Source: Diagram Created by Author

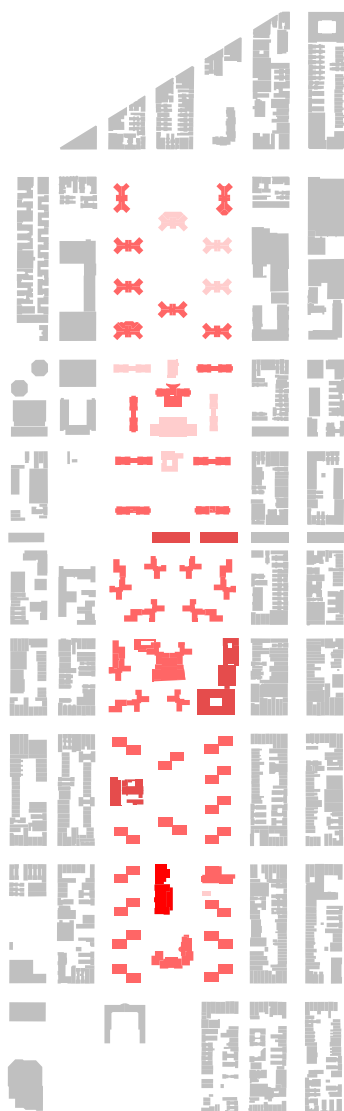


T H E C O N T E X T



Parking Lots of the Projects (19.204 M2 of Surface Area)
Source: Diagram Created by Author, Information from Open Street Map

Z O N I N G :



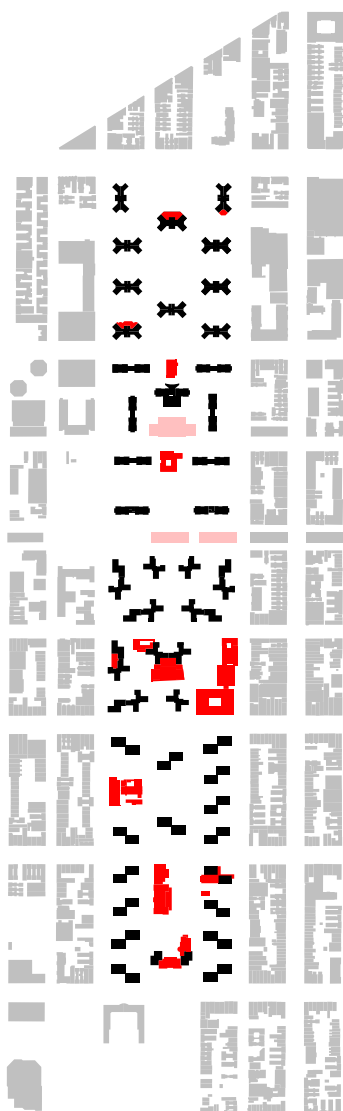
- Poor - Fair
- Fair - Good
- Excellent

Conditions of Buildings of the Project

Source: Diagram Created by Author, Information from the Pratt Institute East Harlem Land Use Studio



T H E C O N T E X T



- Commercial
- Public Service
- Residential

Functions of the Buildings on Site
Source: Diagram Created by Author

Z O N I N G :

RESIDENTIAL ZONING

The current zoning plan for East Harlem has recently been amended (November 30, 2017) in order to keep up with rising rents and take advantage of the increased incomes of the area. The residential zoning of the project area has not been updated, but the urban fabric along the avenues of the city grid have been upgraded to higher densities in order to attract development for affordable housing. According to the previous site analysis, the avenues seem to have more circulation, and handle more traffic, most likely to commuting patterns from lower Manhattan to Harlem and beyond.

The definitions of the zoning districts created by the the NYC Department of Planning are as follows:

R10

This rating is the highest possible density allowable in New York City. This allows for the construction of towers in its district. It has a maximum floor to area ratio (FAR) of 10, and can even increase depending on bonus FAR potential developers can obtain by providing affordable housing (also known as the Inclusionary Housing Program).

R9 AND R9-A

The R9 rating is the highest possible density allowable without necessarily building a tower, but depending on the size of the building footprint and the amount of open space that is left on the site. It has a maximum FAR of 7.52, and can also increase depending on allowable bonuses. The R9-A variation of this district uses “Quality Housing” regulations, which requires higher standards of construction quality. It also requires the street wall of the building to be directly on the sidewalk line of the street.

R8-A

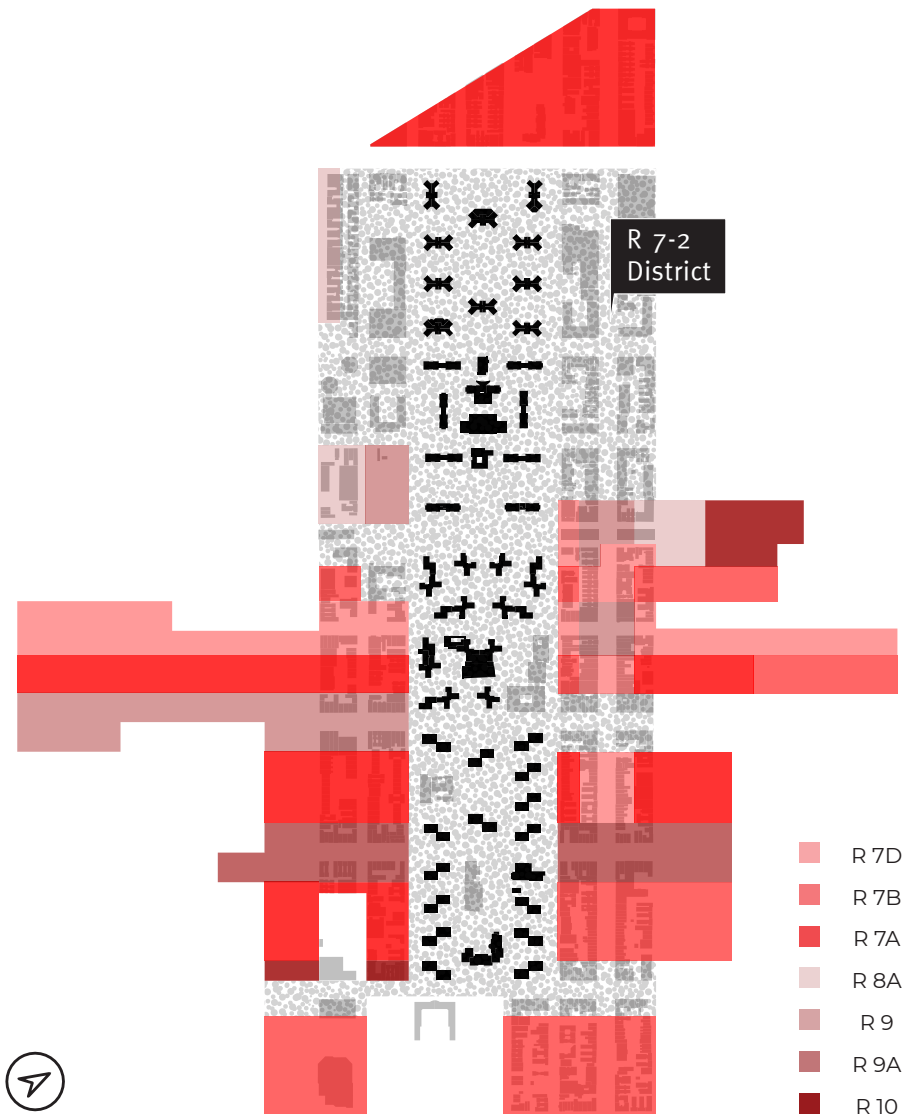
This rating creates mid-rise buildings that usually are 8 to 10 stories tall. It has a maximum FAR of 6.02, and can also increase depending on allowable bonuses.

R7-A, R7-B, R7-D, AND R7-2

These ratings provide medium density apartment buildings. The R7-A requires “Quality Housing” regulations that produce 7 to 9 storey buildings. It has a maximum FAR of 4, and buildings in this district cannot have their street wall too set back from the street. The R7-B also requires similar “Quality Housing” regulations that produce 6 to 7 storey buildings. It has a maximum FAR of 3. R7-D has regulations that help new development that specifically responds to the context, especially along transit corridors. It has a maximum FAR of 4.2, which provides more density around potential stations and stops.

R7-2 is a normal R7 district with less demands on parking requirements. It has a maximum FAR of 3.44.

THE OVERLAYS



Mapping of Residential Zoning Around the Project Site

Source: Created by Author, Information from NYC Department of City Planning - <https://zola.planning.nyc.gov>

Z O N I N G :

COMMERCIAL ZONING

The recent amendment to the zoning plan also increased the amount of potential shops, restaurants, and other small and local retail needs. The commercial districts in the zoning plan seem to be extremely restricted to the street edges. There are two main types of commercial districts, standard and overlay. Overlays are embedded within residential districts, and the retail it creates stays on the ground floor. The standard commercial districts serve as focus areas of business and shopping.

The definitions of the zoning districts created by the the NYC Department of Planning are as follows:

C1-4, C1-5, AND C1-9

C1-4 and C1-5 are ratings that are found all over the city, and are focused in low to medium density areas. These districts usually consist of stores that are 1-2 floors. These districts have a maximum FAR of 1, and require very little to no off-street parking. C1-9 is the same, it does however have a maximum FAR of 2.

C2-5

This zone is roughly about the same as the C1-5, except it has more flexibility when it comes to the allowed commercial activities within this district.

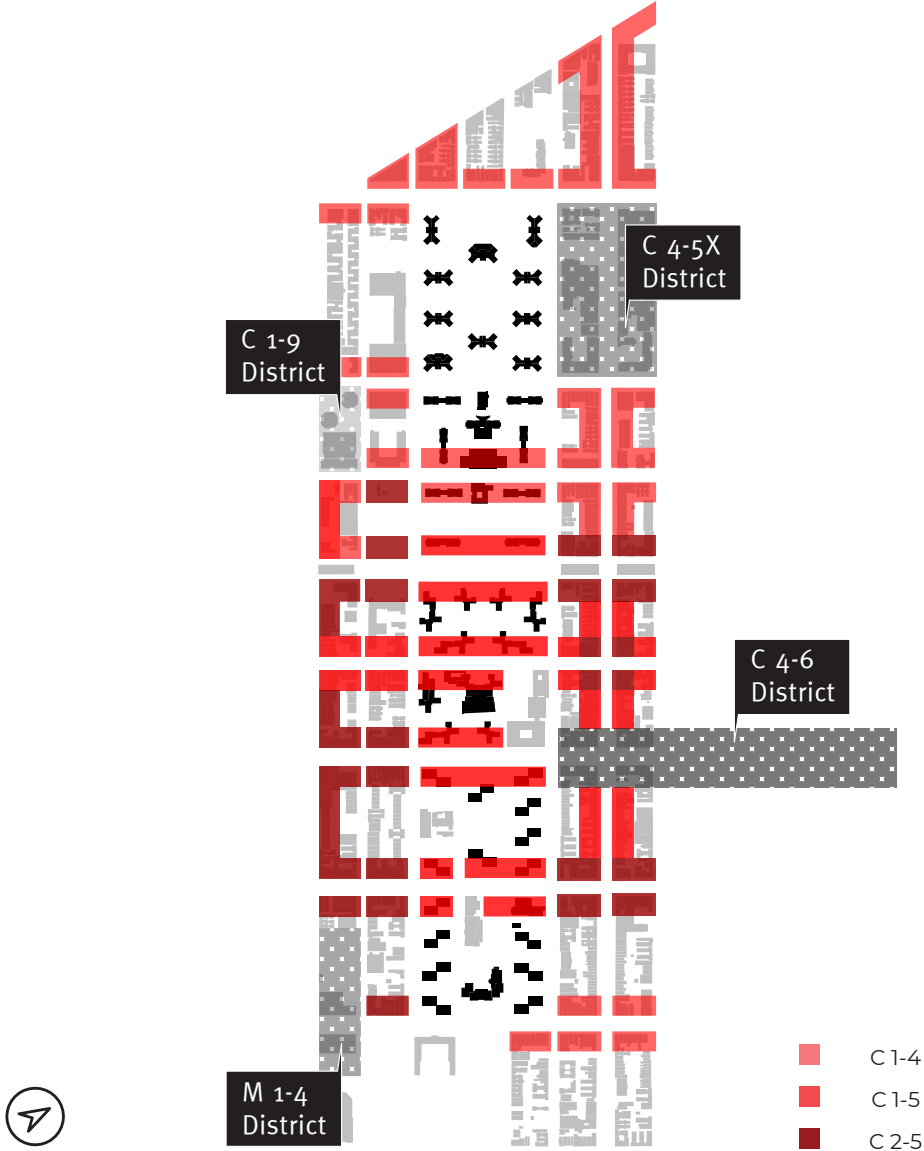
C4-5X AND C4-6

These ratings act as a regional business and commerce center for the surrounding area. Offices and other larger commercial activities can exist in this district. The X suffix denotes a "Contextual District," which means issues such as parking and FAR requirements are slightly more different than standard C4 ratings.

M1-4

This zone is a light industrial area, and has a maximum FAR of 2.

THE OVERLAYS

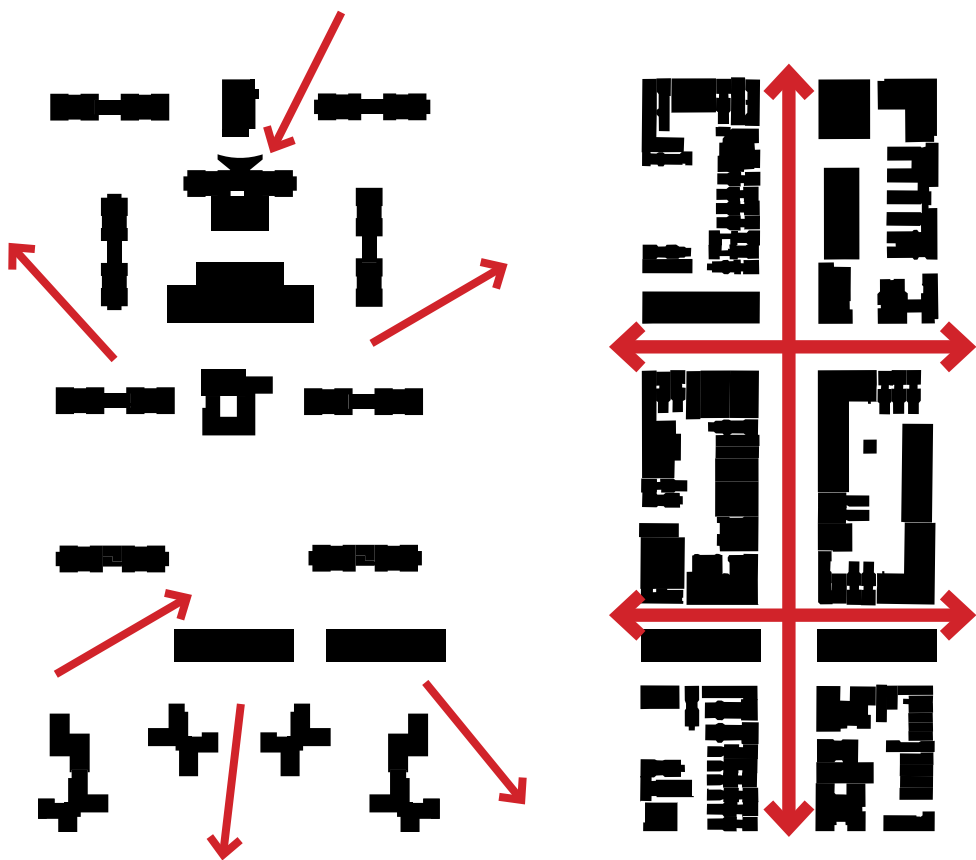


Mapping of Commercial Overlays Around the Project Site
Source: Created by Author, Information from NYC Department of City Planning - <https://zola.planning.nyc.gov>

Z O N I N G :

STREET WALL ISSUE AND MORPHOLOGY

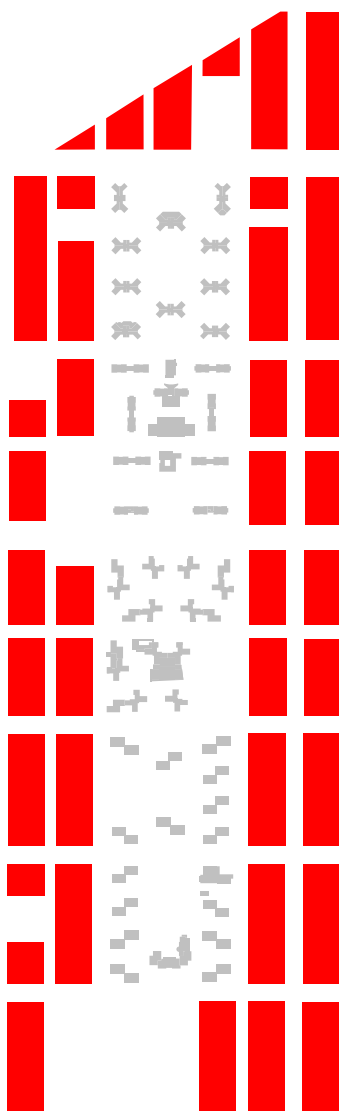
As a conclusion to the site analysis, one of the main reasons the buildings of the social housing projects are floating is that there are no street walls. The infill morphology of the city forces circulation and other social activities into the street, which act like canals that cut through a urban landscape. Not only did the social housing projects destroy the grid, it also corrupted the way circulation works in the city. The passive public spaces within the projects do not work due to the fact that there are no streets that connect to the grid. The public space of the projects are windy landscaping with basketball courts and playgrounds, which were put there in a vain attempt to motivate residents to use the passive public space.



Spatial Hierarchy is Non-existent in the Social Housing Projects

Source: Diagram Created by Author

THE PHILOSOPHY

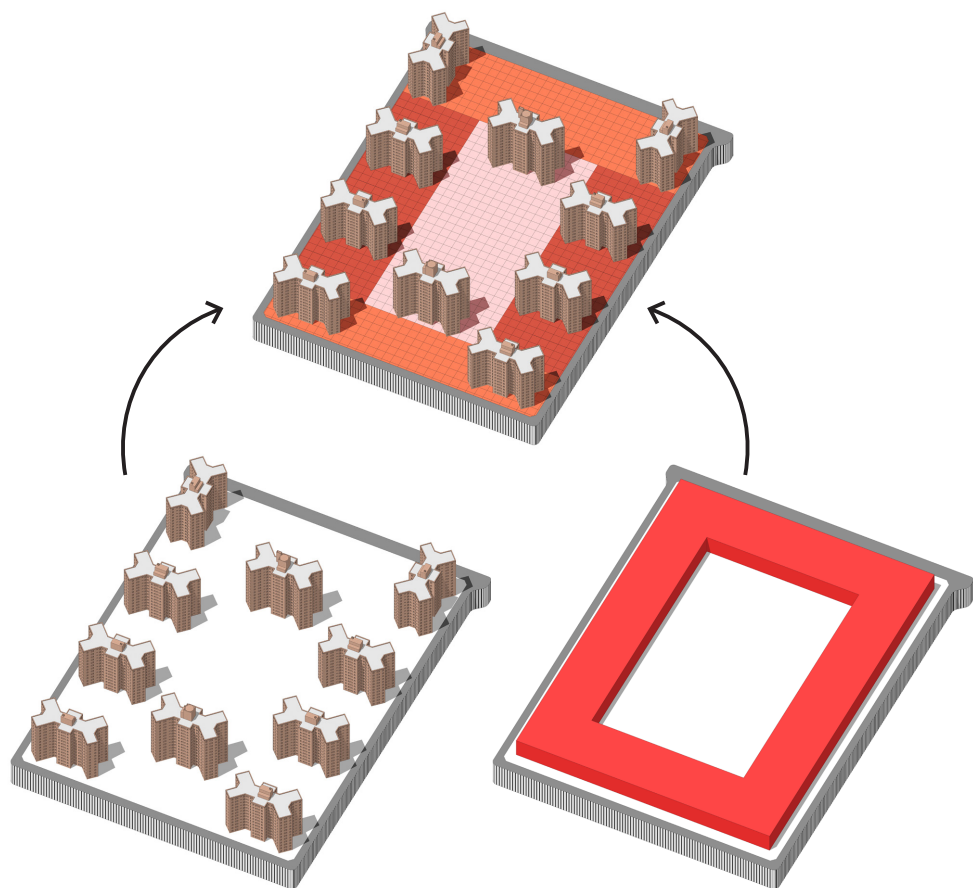


Infill of Grid Blocks vs. the Emptiness of the Projects (Creating a Floating Space)
Source: Created by Author, Information from NYC Department of City Planning - <https://zola.planning.nyc.gov>

Z O N I N G :

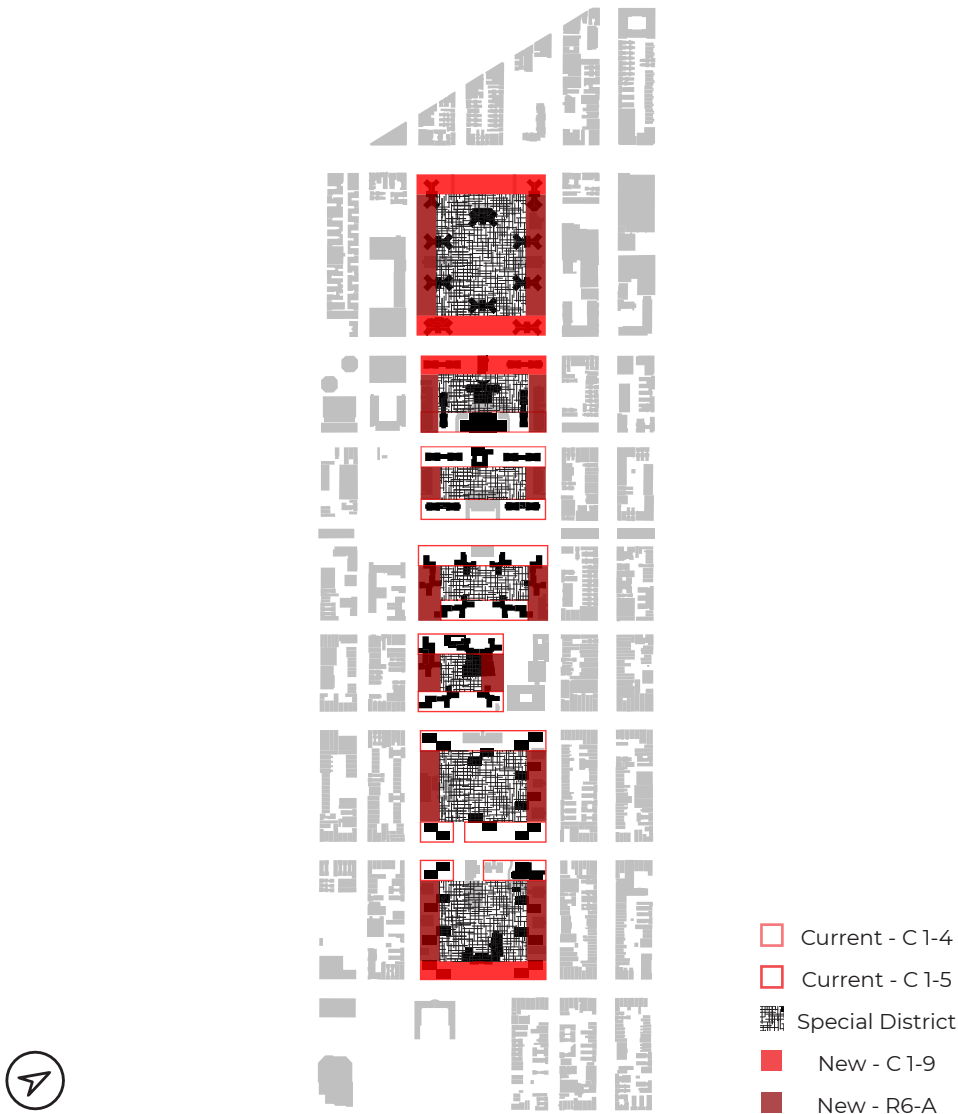
MERGING OF URBAN FABRIC TYPOLOGIES

The new zoning plan is designed in a way that will foster the hybridization of urban forms. The two that are predominantly on in the project area, one being a group of floating apartment towers, and the other being an infill + offset typology determined by the NYC street grid. This approach to adding density and program to the site will bring a sense of familiarity to the spatiality to the projects, making the social housing projects appear not so alien in the urban fabric, thus allowing for residents to be more connected to their community.



Example of Densification through New Zoning Proposal
Source: Created by Author from Sketchup and Placemaker Plugin

THE PROPOSAL

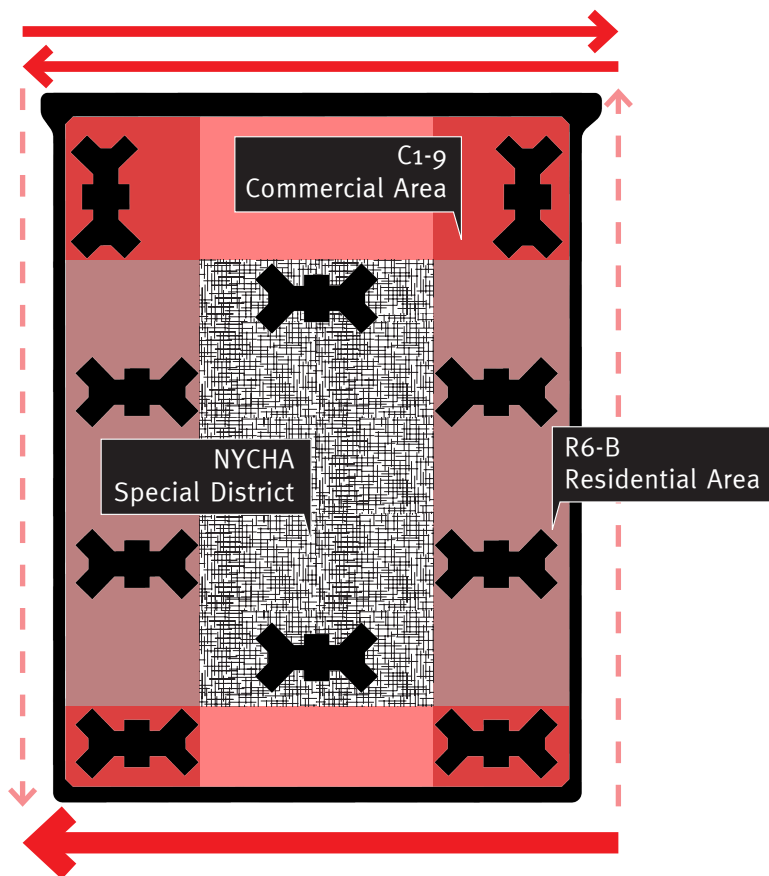


Proposal for New Zoning Plan for the Project Site
Source: Created by Author, Information from NYC Department of City Planning - <https://zola.planning.nyc.gov>

Z O N I N G :

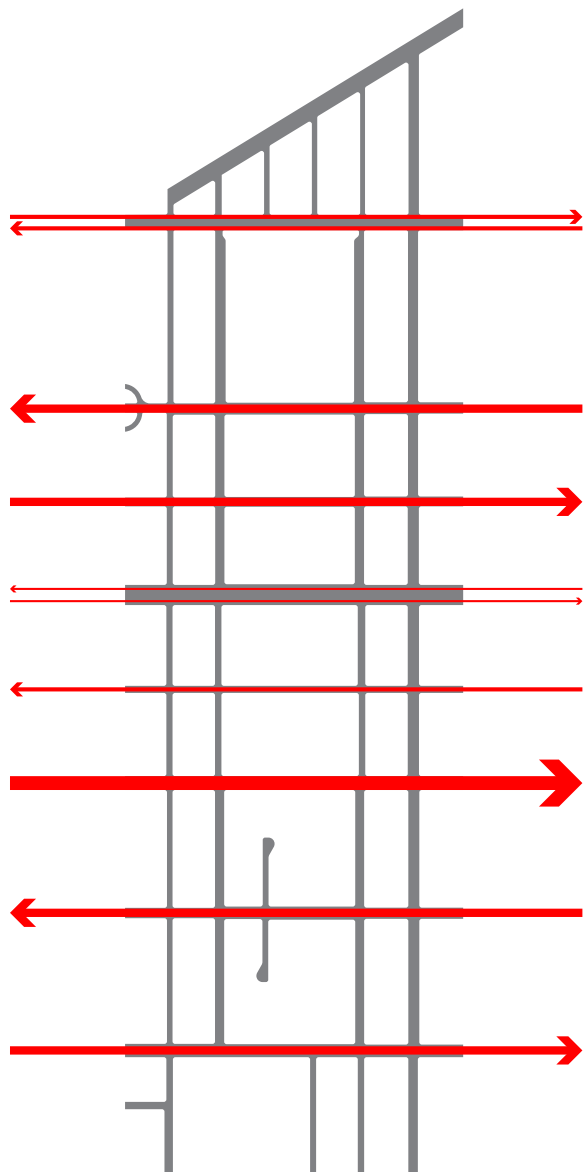
REINFORCING THE CIRCULATION OF THE GRID

The zoning proposal aligns with the circulation of traffic that has been defined by the street grid of New York City. The zoning along the avenues are commercial, while zoning along the streets are residential. At the center of each of the housing projects, a “NYCHA Special District” is proposed. The NYC Department of Planning have several districts that have a specific influence to its development. The one proposed here will implement a bonus system for providing cultural and social functions. For reference, the Special 125th Street District uses an first of its kind “Arts” bonus, which aims to promote the creation of performing arts spaces.



Circulation around the King Towers Project
Source: Created by Author from Sketchup and Placemaker Plugin

THE PROPOSAL

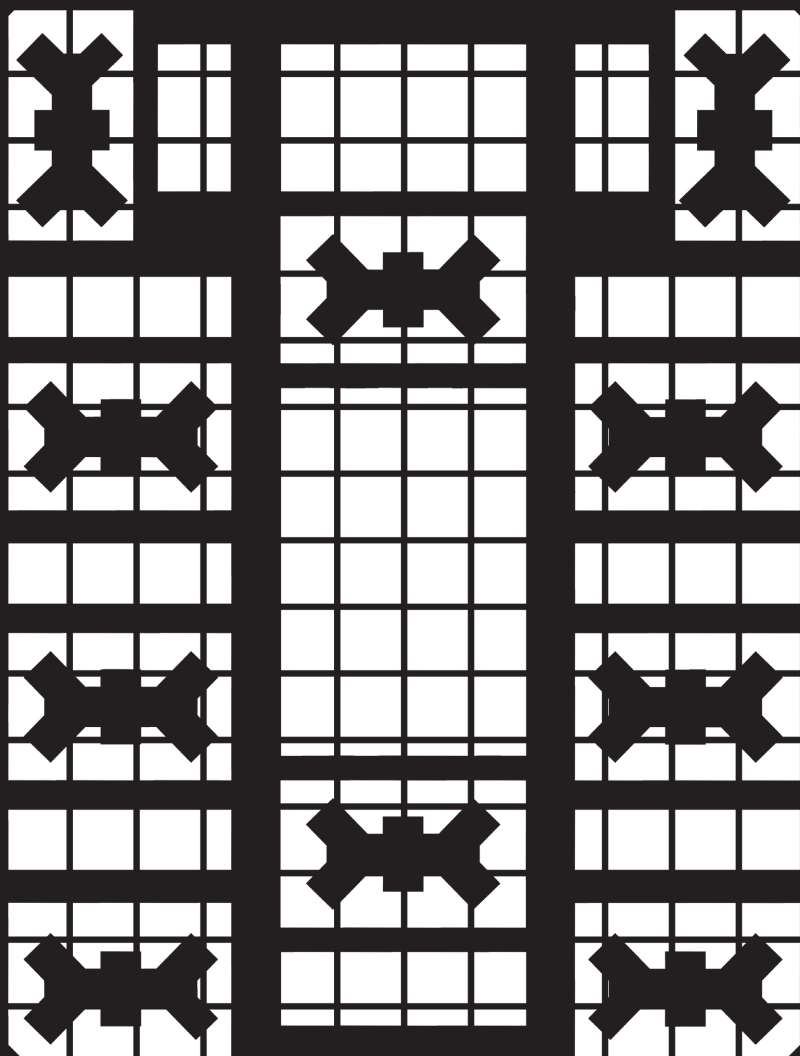


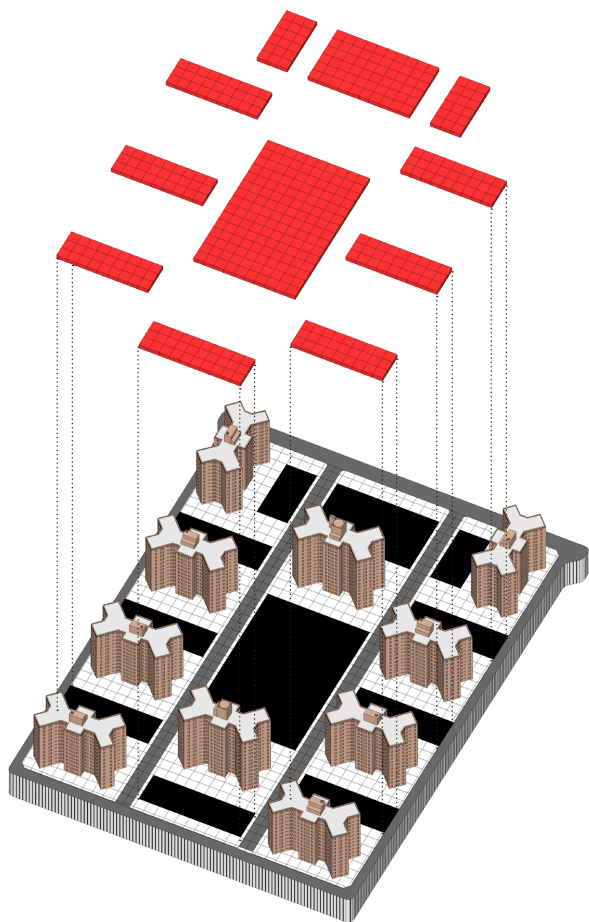
The Circulation of the Avenues are the Dominant Grain

Source: Created by Author, Information from NYC Department of City Planning - <https://zola.planning.nyc.gov>



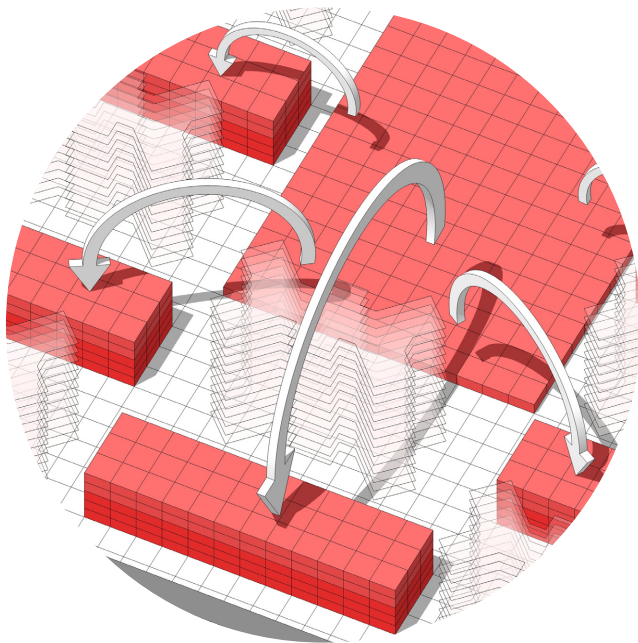
OVERLAYING A GRID OF TRANSFORMATION





Exploded Axon of the Grid Generating the Parcels
Source: Created by Author from Sketchup and Placemaker Plugin

IN ORDER TO ENHANCE THE LOCAL COMMUNITY



With the rezoning of the project area firmly in place, the next scale of design involves the development of a transformational framework in the form of a square grid. The grid is responsible for dictating the form of the parcels on the site, for determining private and public ownership, and for the structure of the buildings themselves. The grid also helps in the generation and development of rules of which will determine the spatial form that the above mentioned design domains. Before determining those, however, the grid itself must be planned and anchored into the site itself. Once the parceling has been finalized, the program that will exist upon them will be determined by the new zoning regulations developed in the previous chapter.

CHAPTER STRUCTURE



Social Housing Facade

Source: Photo taken by Andriy Prokopenko - <https://www.flickr.com/photos/mistergalaxy/14116191082/in/pool-gothamist/>

1. TRANSFORMATIONAL FRAMEWORK

An overview of the design methods and philosophies that will be implemented within the grid.

2. RULES FOR MAKING THE GRID

The steps involved in the generation of parcels and buffer zones within the project site.

3. OWNERSHIP REQUIREMENTS

A brief economic review of the processes that will take place once NYCHA has sold its property to the appropriate stakeholders.

4. ADDITIONAL LAYERS

Secondary rules to consider before continuing on to the design intervention scale.

5. WHY A 6x6 SQUARE GRID?

An deeper look into the reasoning behind the strict dimensioning of the transformational grid.

6. HERITAGE AND ECOLOGY

Resource conservation and climate security.
A look into what it achieves will also be touched upon.

7. SUMMARY: THE HUMAN SCALE

A review of what effect the grid has on the project site.
A look into what it achieves will also be touched upon.

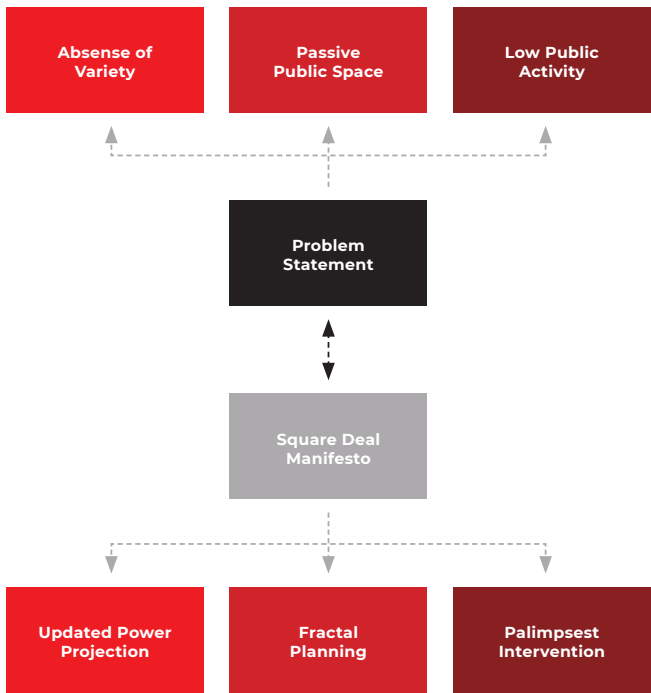
TRANSFORMATIONAL

THE PRODUCTS OF THE NEW “SQUARE DEAL”

The purpose that motivates the grid is based on the three design philosophies that were extracted from the manifesto. Each one of these are then applied to various scales and levels of the design project.

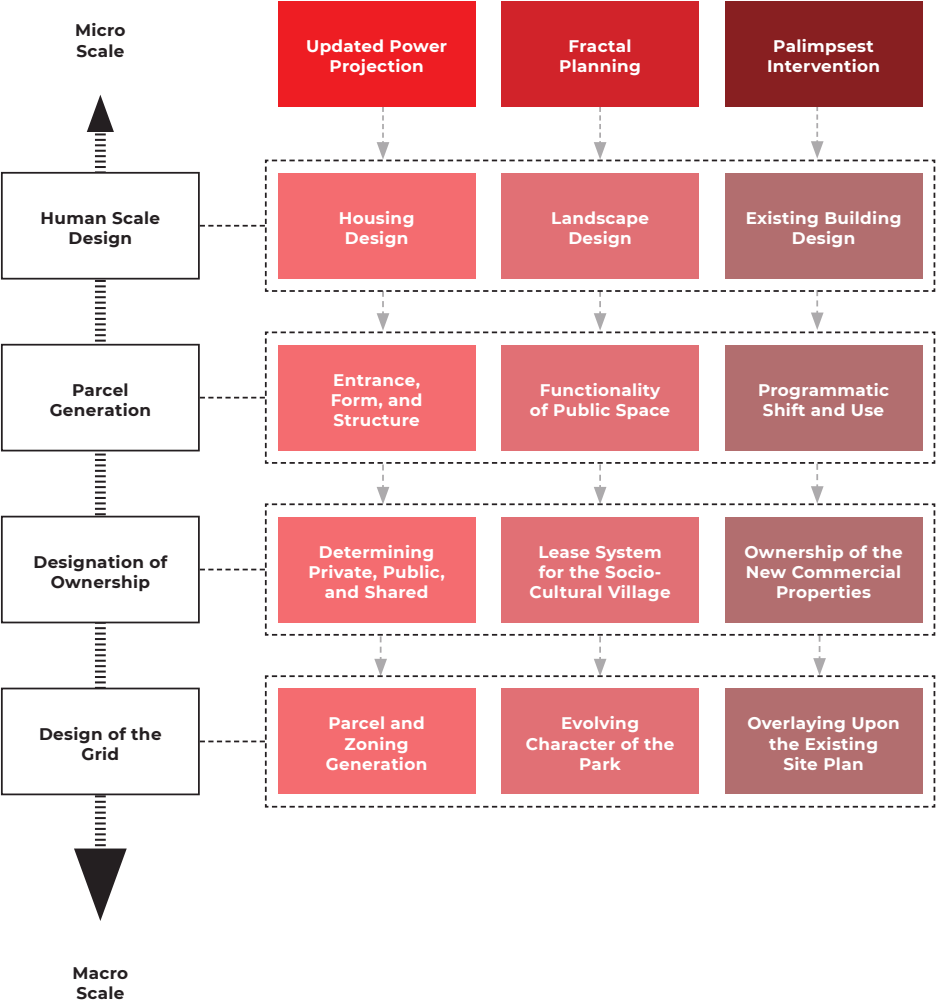
These philosophies are subdivided into three design influences: Power Projection, Fractal Planning, and Palimpsest Intervention.

The scales and domains that will be affected are defined as: Human Scale Design, Parcel Generation, Designation of Ownership, and the Design of the Grid itself.



The Philosophical Crux of the Thesis Proposal
Source: Diagram by Author.

FRAMEWORK



A Transformational Framework Made Up of Scales, Domains, and Philosophies
Source: Diagram by Author.

R U L E S

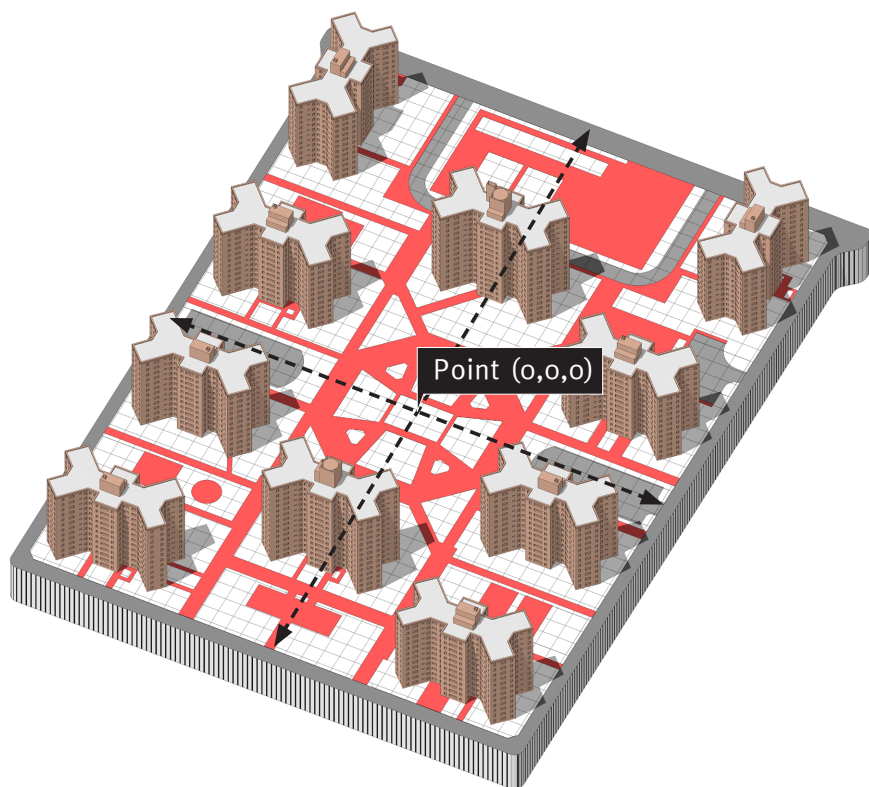
F O R

1. THE CENTER POINT

Find the center point (0,0,0) of the project site.

The point should be centered as best as possible with the preexisting towers on the site.

The objective of this rule is to make sure the grid is symbiotic with the potential new urban fabric, so that the area of the project site is used effectively.



Existing Situation of the King Towers

Source: Created by Author from Sketchup and Placemaker Plugin

MAKING THE GRID

2. RESTORING THE NYC BLOCKS

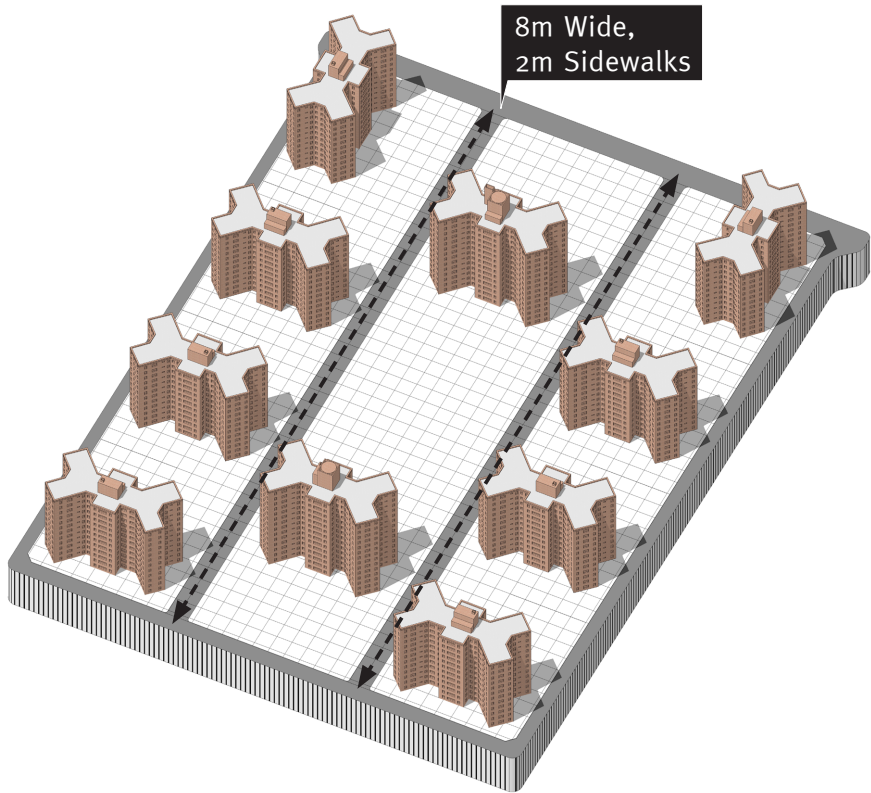
Subdivide the project area with (1-2) 8m wide access streets.

These streets should be symmetrical when possible.

The streets should also line up with the other streets of the NYC grid when possible.

The objective of this rule is to restore the street grid of New York City, while provide logistical and emergency access to the inside of the project site.

The effect of this rule involves restoring a road network that used to exist long ago.



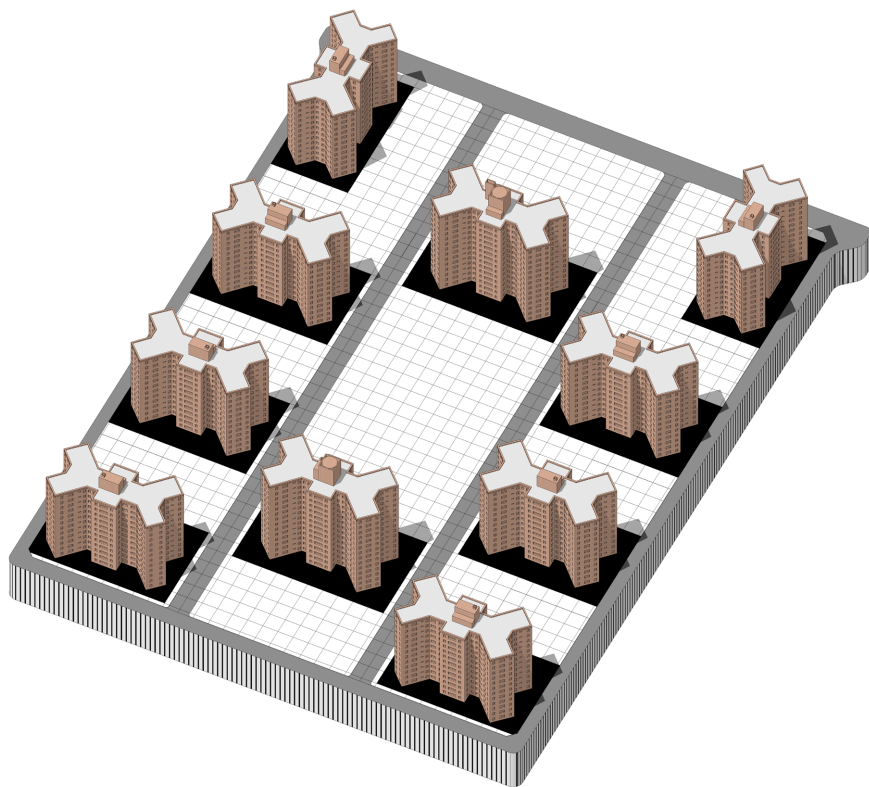
Restoring the NYC Grid Back on the Project Site
Source: Created by Author from Sketchup and Placemaker Plugin

3. PARCELS FOR THE TOWERS

Generate the parcel boundaries of the NYCHA towers on the project site. The size of these are determined by the footprint of the buildings. Any grid block that has contact with the towers are to be kept for the NYCHA.

The objective of this rule is to define the parcels of the existing towers. These parcels will be owned by NYCHA, with the rest of the land being sold off or transitioned to another owner.

The downscale of NYCHA land ownership will help provide capital to rehabilitate the towers, preserving them for the community, and the inhabitants within them.



The New NYCHA Parcels that Contain the Preexisting Apartment Towers
Source: Created by Author from Sketchup and Placemaker Plugin

MAKING THE GRID

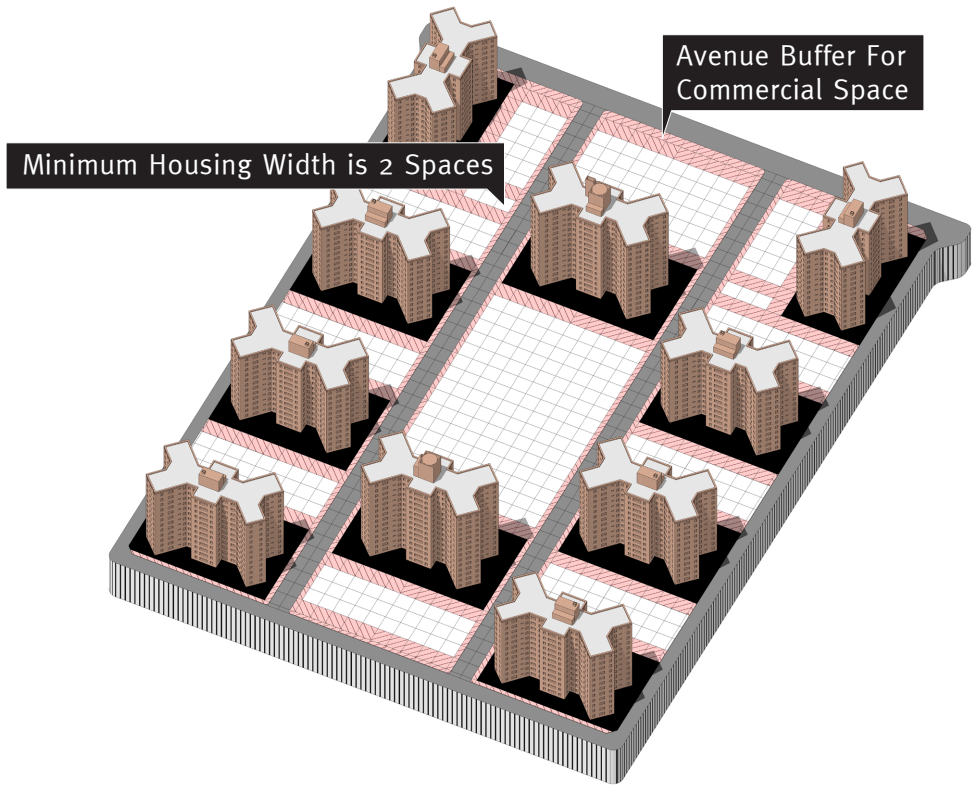
4. CREATING THE BUFFER ZONES

Provide no less than one (1) grid space of buffer zone from the NYCHA Parcels for:

- a. Daylighting Purposes, b. Access Purposes, c. Safety Purposes

More than one (1) grid space buffer zone is needed along the avenues to create a larger area for pedestrian circulation along busy corridors.

The objective of this rule is to create a safe separation between both existing buildings, and new buildings as well. The effect it will make is provide ample circulation room for both inhabitants and visitors of the projects.



Extracting the Remaining Parcels through the Creation of Buffer Zones
Source: Created by Author from Sketchup and Placemaker Plugin

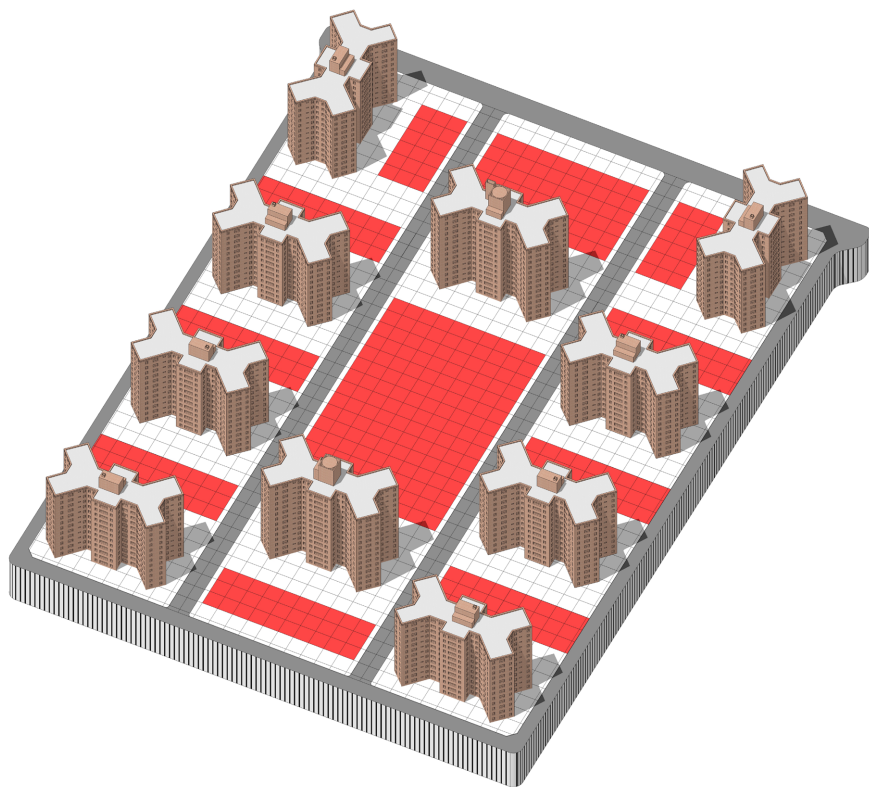
R U L E S F O R

5. GENERATING THE FINAL PARCELS

The generated remaining space define the final parcels sizes for the site.

The objective of this rule is to provide the maximum available parcels to sell off to the other stakeholders. These marked parcels are the limits of which buildings can be erected.

This method of creating parcels will create a street wall that clearly defines the boundaries of the project site, making the design intervention more familiar with the urban tissue of the surrounding context.



The Final Parcels

Source: Created by Author from Sketchup and Placemaker Plugin

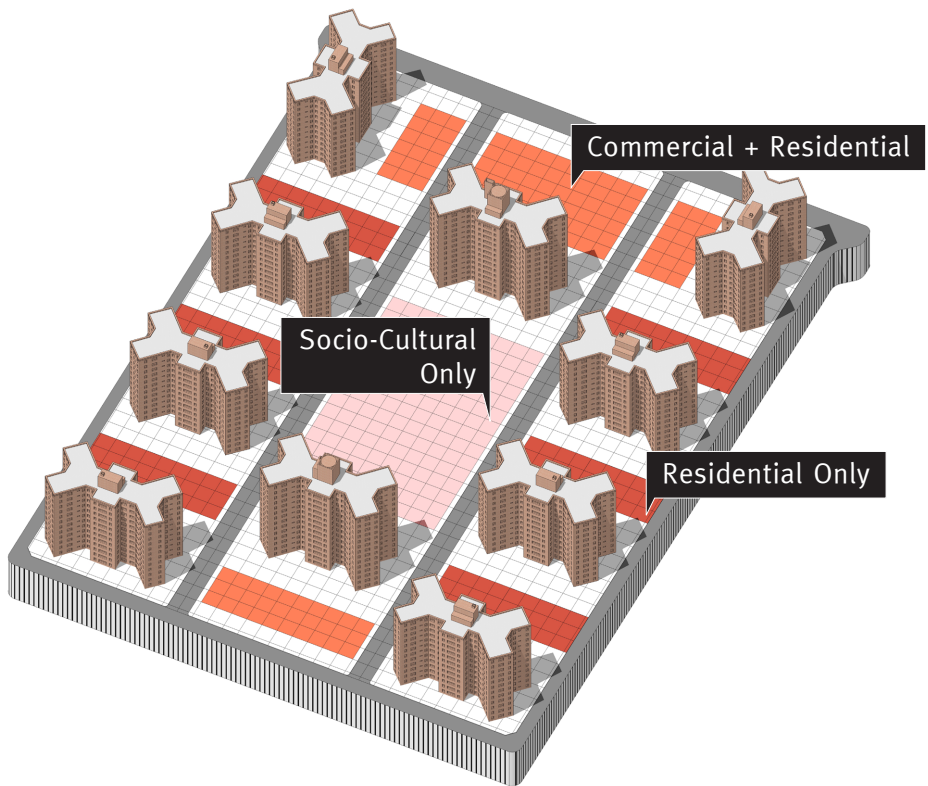
MAKING THE GRID

6. APPLYING THE ZONING REGULATIONS

Apply zoning regulations overlay to determine use of parcels:

- a. Parcels in the center are restricted by the socio-cultural overlay
- b. Parcels along avenues will have commercial activities on the ground floor
- c. Remaining parcels are entirely housing with amenities on the ground floor

The objective of this rule is to control the functions that will be placed within the design intervention by placing restrictions on what can and what cannot be built.



Parcels with the Zoning Overlay that Determines the Allowed Functions
Source: Created by Author from Sketchup and Placemaker Plugin

O W N E R S H I P

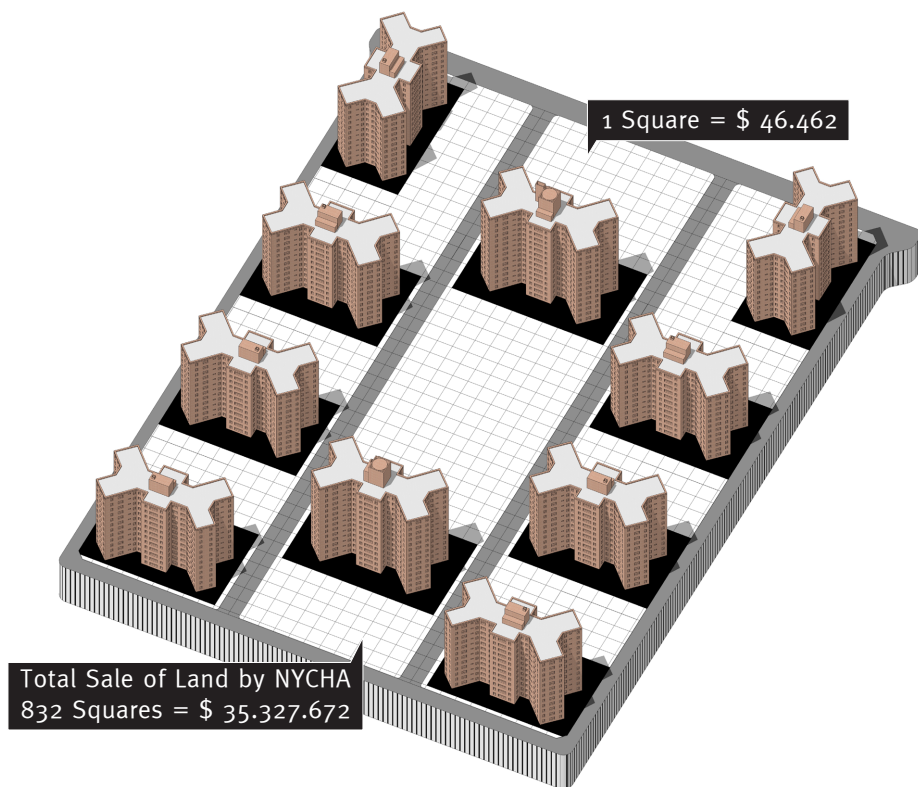
7. THE REDISTRIBUTION OF OWNERSHIP

NYCHA will sell all property that isn't part of their designated tower parcels.

The new parcels will be sold to private developers.

The central socio-spatial parcel, combined with the leftover grid blocks, will be sold to the NYC Department of Parks and Recreation.

The objective here is to lighten the burden of maintenance on NYCHA by selling its land to potential developers. This will bring a lot of investment to the neighborhood.



The Price of One Square Block

Source: Created by Author from Sketchup and Placemaker Plugin

REQUIREMENTS



Land Values of Each of the Social Housing Projects
Source: Created by Author from Sketchup and Placemaker Plugin

OWNERSHIP

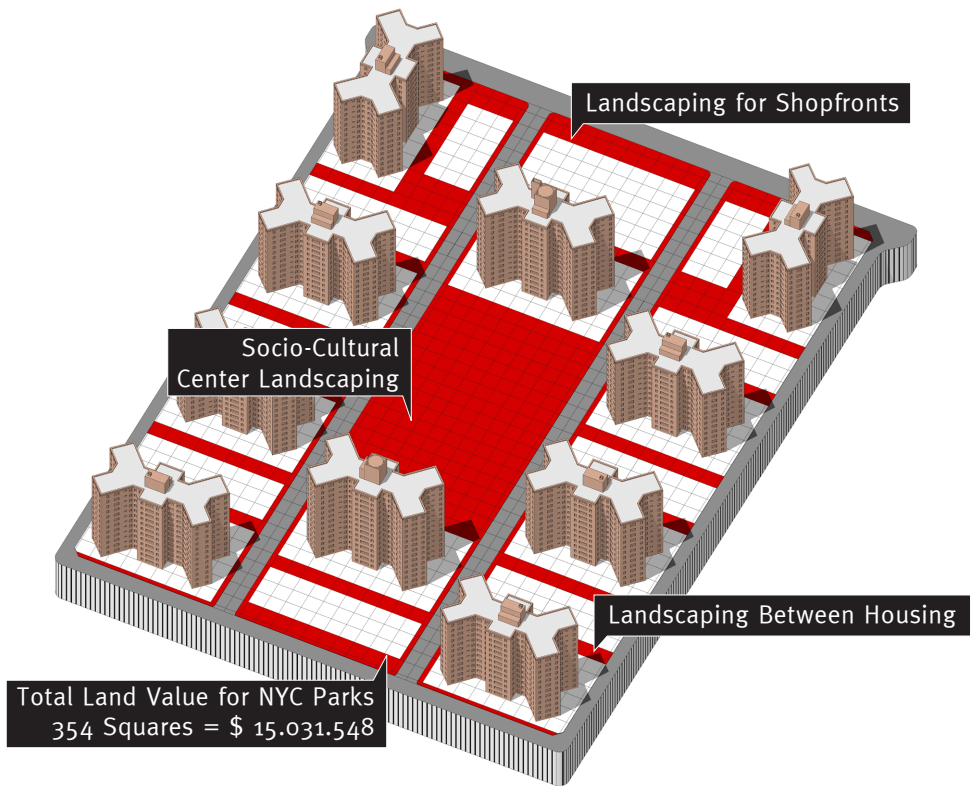
8. PUBLIC OWNERSHIP

Funds from the sale of NYCHA land will be used to rehabilitate their apartment towers.

The towers will also be regenerated by including the development of commercial property at the entrance floors of the towers.

The generated rent from the commercial property will be put towards the maintenance of the NYCHA Towers.

The objective here is to finally give the inhabitants of the towers a quality of life that is healthier and safer.



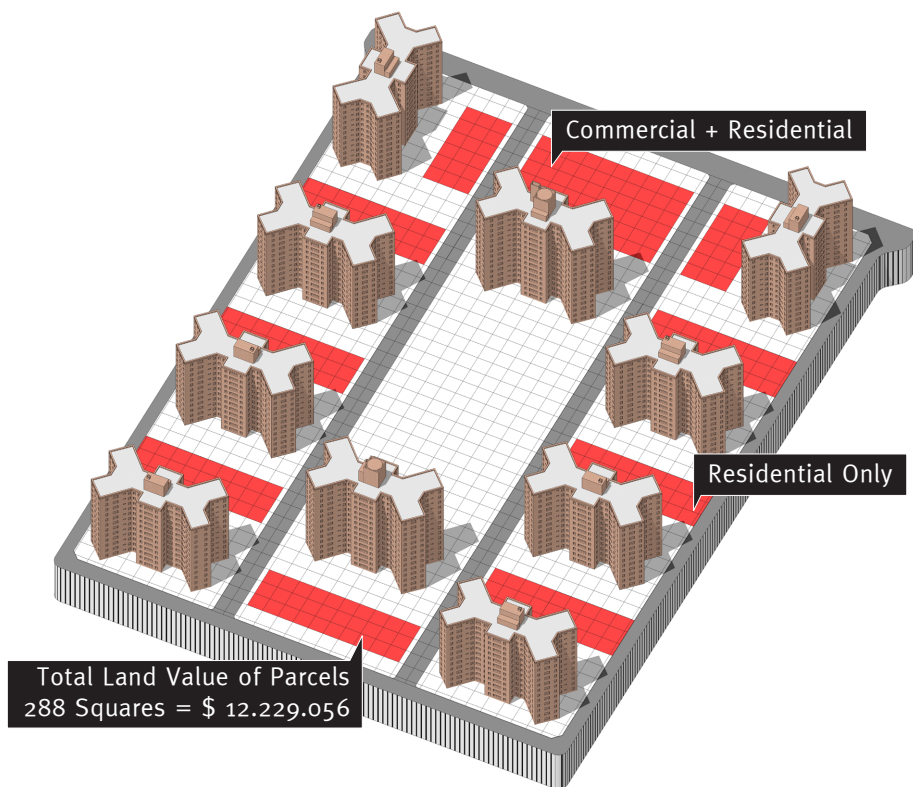
The New Property of the NYC Departmente of Parks and Recreation
Source: Created by Author from Sketchup and Placemaker Plugin

REQUIREMENTS

9. PRIVATE OWNERSHIP

The central socio-spatial parcel will be a collaborative effort between all stakeholders:

- a. The "GreenThumb" Community Gardening Program of NYC Parks will Manage the Parcel. Collaborating with NYCHA to Provide a Lease System of the Gardening Plots is Needed for the People of the Community.
- b. Private Contractors will Build the Socio-Cultural Center as Part of the Land Sale Agreement, then NYC Parks will Own and Maintain it.
- c. A Non-Profit Organization will be Opened as an Effort Between All Stakeholders that Educates and Promotes Cultural Programs in the Center.



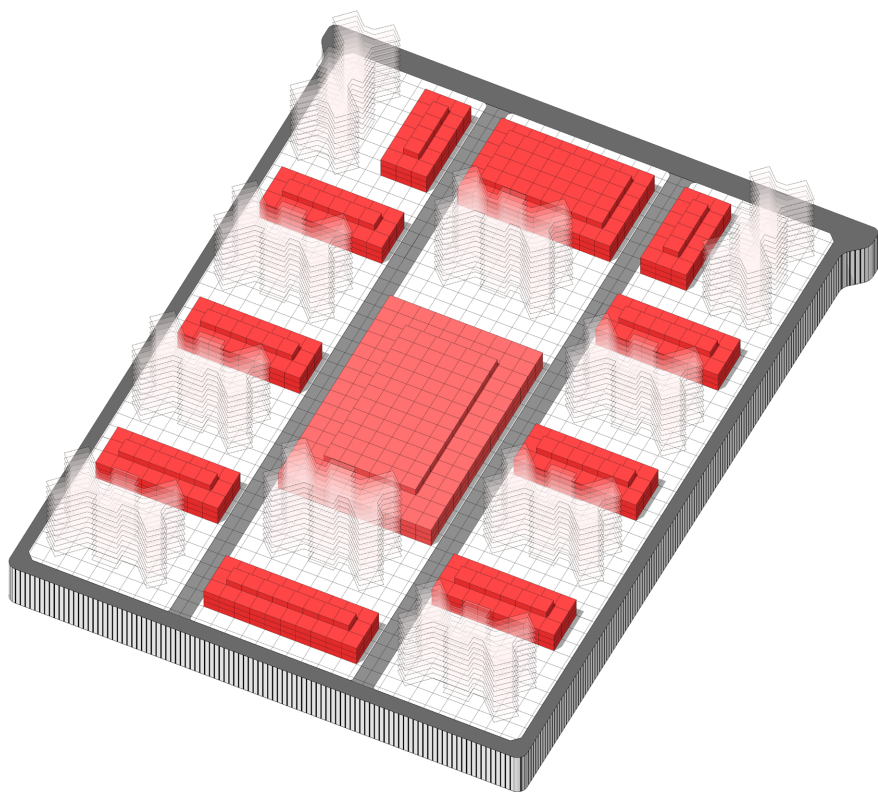
The Private Parcels that have been Generated
Source: Created by Author from Sketchup and Placemaker Plugin

A D D I T I O N A L

10. (3.44) FAR WITH NEW SCALES INCLUDED

The current zoning regulations dictate that the site has an FAR of 3.3

If you extrude all the parcels evenly at the same time, the maximum building height you can legally achieve is 3-4 stories tall.



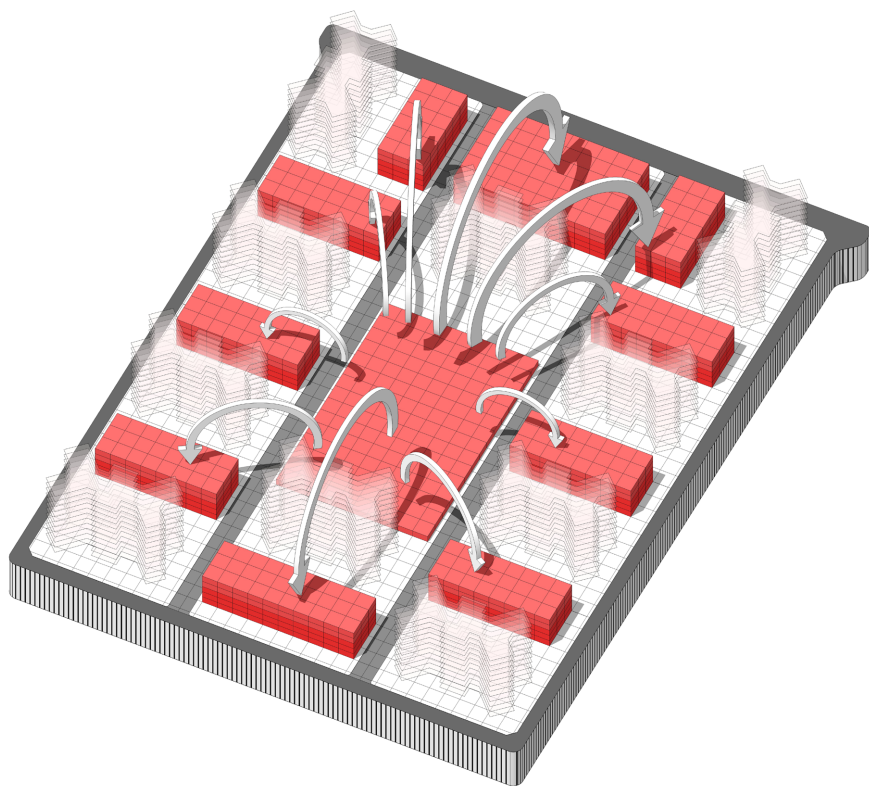
Visualization of the Maximum Buildable Mass
Source: Created by Author from Sketchup and Placemaker Plugin

REQUIREMENTS

11. REDISTRIBUTING BUILDABLE AREA

To increase activity on the ground floor of the project, there needs to be a higher density of people living in the area. Therefore, an increase in residential program along the sides of the King Towers project is necessary to bring a more diversified group of people.

This will be achieved by the redistribution of buildable area from the center parcel, which is now only regulated to be socio-cultural program thanks to the rezoning plans. This limits the building heights in the center of the project, but in return add more dwelling space for the community. This also helps with creating a street wall by plugging up the spaces between the existing buildings.



Shifting the Buildable Area to the Edges of the Project Site
Source: Created by Author from Sketchup and Placemaker Plugin

A D D I T I O N A L

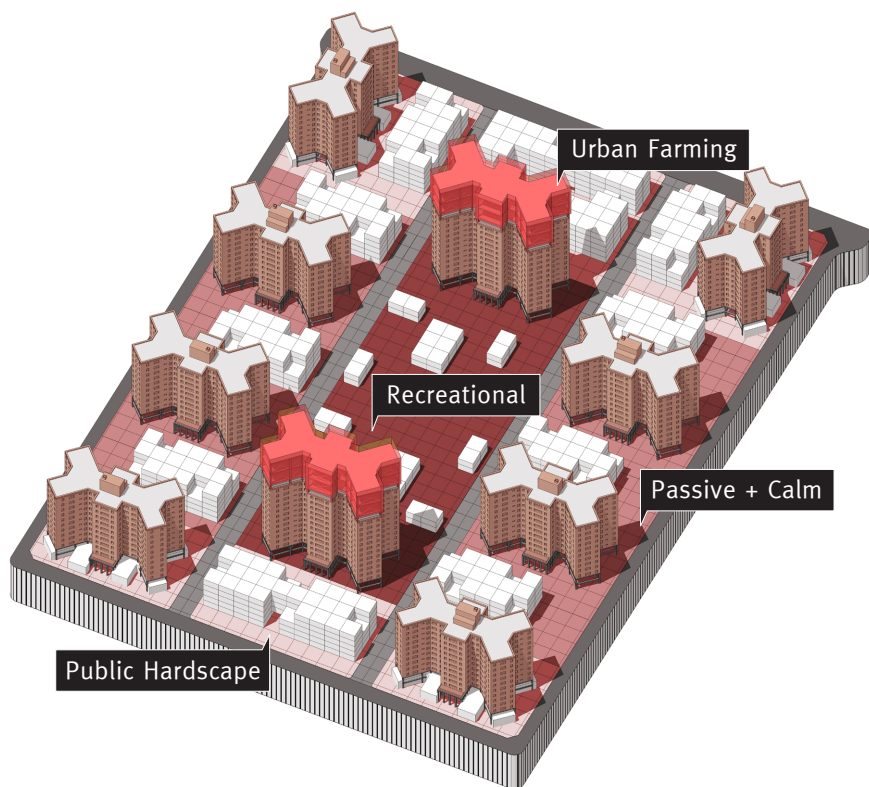
12. PUBLIC SPACE DEFINED BY ZONING

The rezoning of the project area also provides a hierarchy for the landscaping.

The street edges on the side will have a passive and calm landscaped space, which works quite well with housing.

The edges facing the avenues will have more of a hardscape in order to make them more public.

The objective here is to finally give the inhabitants of the towers a public space that is rich and dynamic.



The Landscape Typology Plan for the Design Intervention
Source: Created by Author from Sketchup and Placemaker Plugin

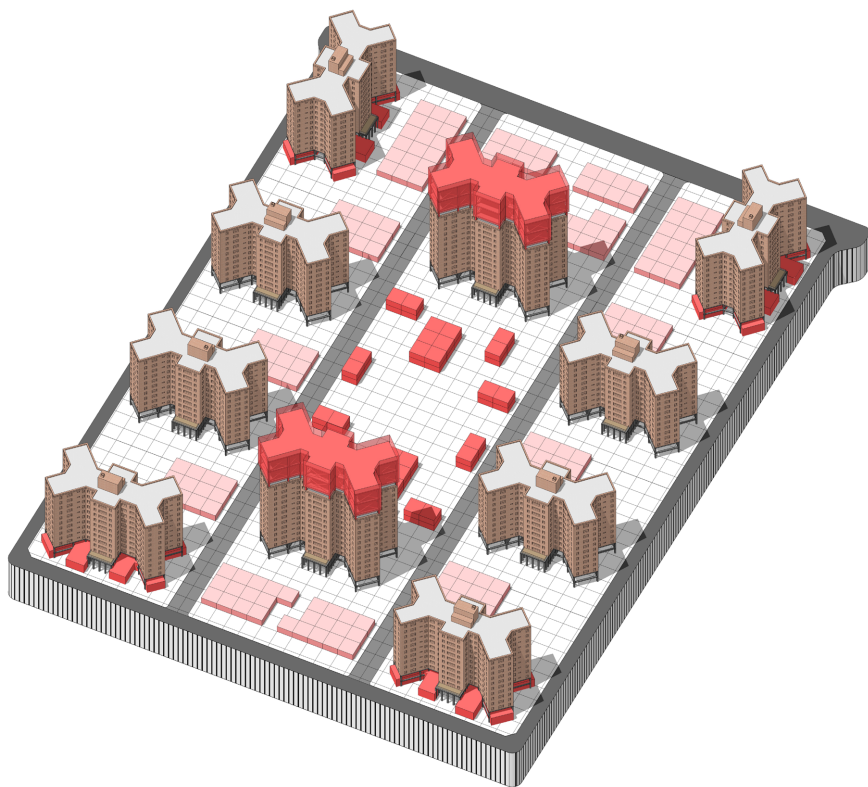
REQUIREMENTS

13. POROSITY THROUGH FRAGMENTATION

The ground floor of the design intervention should be porous so that inhabitants can freely flow through the site.

Having small and fragmented urban tissue spread out across the ground floor will provide many opportunities to increase spatial variety and hierarchy.

The objective here is to increase public activity in and around the social housing projects, and implementing this approach in the design intervention will certainly do that.



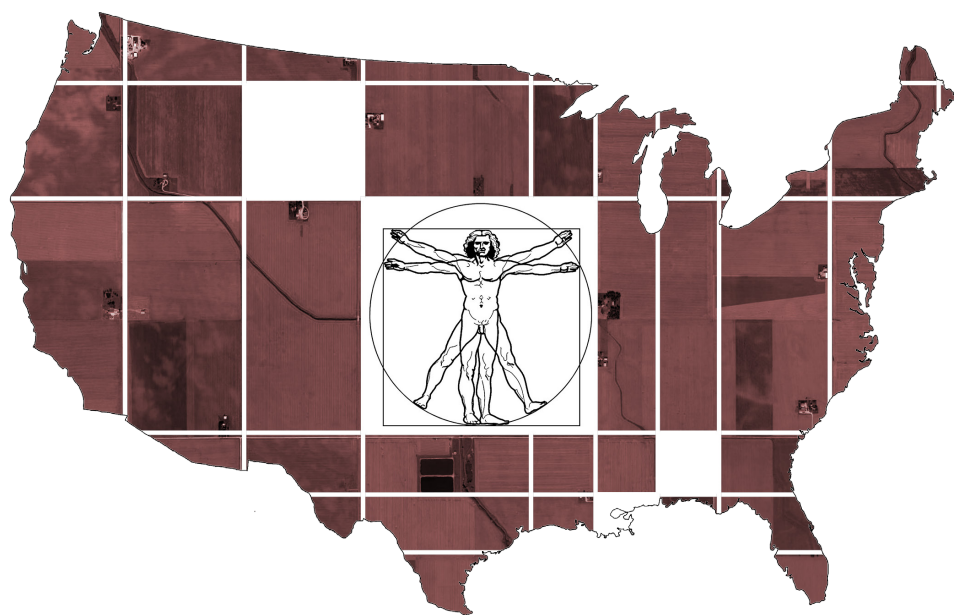
Fragmenting the Base of the Projects

Source: Created by Author from Sketchup and Placemaker Plugin

THE MEANING OF THE SQUARE ITSELF

In choosing what physical shape the transformational grid should take, it is important to consider a base unit that is not only flexible, as shown in the fractalization concept in the "New Square Deal," but is also stable as well. In Euclidean geometry, the square is seen as a symbol of both stability and evolution (Haag Bletter, 1986), which are qualities that are needed in order to transform the social housing projects.

These values were also part of the reasoning behind the Land Ordinance of 1785, which was heavily influenced by Enlightenment Age thought. This square grid has traversed and subdivided most of the United States, thus shaping the lives of many Americans. The proportions of the grid were regulated by 6 x 6 miles, which is a size that connects the transitional grid to the planning heritage of the country. The grid is a framework/ tool to promote the "New Three C's." Using it in this way will promote an agency of change, which is what the Land Ordinance of 1785 did for the rest of America.



The Overall Effect of the Land Ordinance of 1785
Source: Created by Author. Sattelite Image is from Google Earth

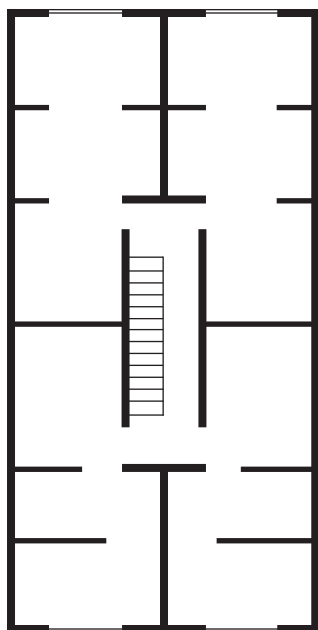
S Q U A R E

G R I D ?

THE FUNCTIONALITY OF 6x6 METERS

Another motivation behind the decision of choosing the square is based on a reaction to the 25-by-100 foot lot size limit that has defined the living conditions of the urban poor in New York City since the 19th Century. According to Dr. Michal R. Montgomery's article for the Cato Journal entitled *Keeping the Tenants Down: Height Restrictions and Manhattan's Tenement House System* (2003), the tenements that developed, after the limit was put in place, had very poor access to light and ventilation. The shape of these large, long, and linear lots created windowless rooms and long corridors, exasperating the crowded slums that existed within them (Montgomery, 2003).

The 6x6 square is an answer to this, as square plans provide shallower rooms for better day-lighting and ventilation. The optimum depth of a room, as a rule of thumb, is 4-5 meters, so the 6x6 module is ideal for creating such a living environment. The unidirectional characteristics of the square prevents closed facades, in addition to creating bufferzones between both preexisting and new buildings alike.



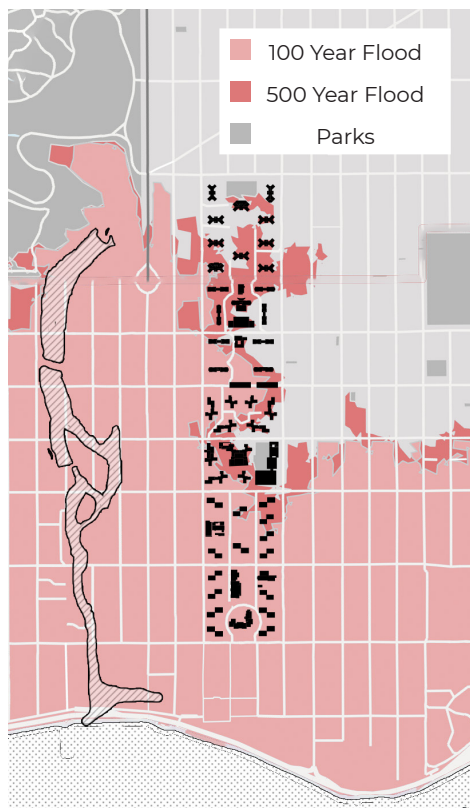
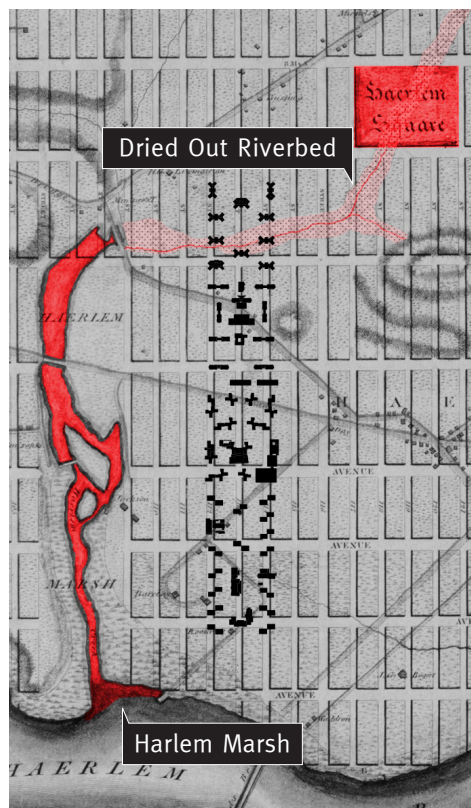
Tenement Plan from the 19th Century, vs. the 6x6 Meter Housing Block Proposal
Source: Tenement Plan from <https://www.hursthistory.org>. Housing Block Drawn by Author.

HERITAGE

THERE ONCE WAS A RIVER

The location of the site sits in what used to be marshlands, with a stream that fed into the Harlem River. This low lying area, in addition to the soil not being able to retain water very well, creates problems for the neighborhood when there is heavy rainfall. When you consider the threat of climate change, this can become a real issue in the future.

Climate change is making a significant impact on New York City. This can be observed from the havoc created by Hurricane Sandy back in 2012, which caused both flooding and millions of dollars of property damage. With this in mind, it is vital for East Harlem to mitigate these risks by implementing resilient landscaping. The social housing projects have a lot of open space, making it an ideal place to develop some form of a flood management system.



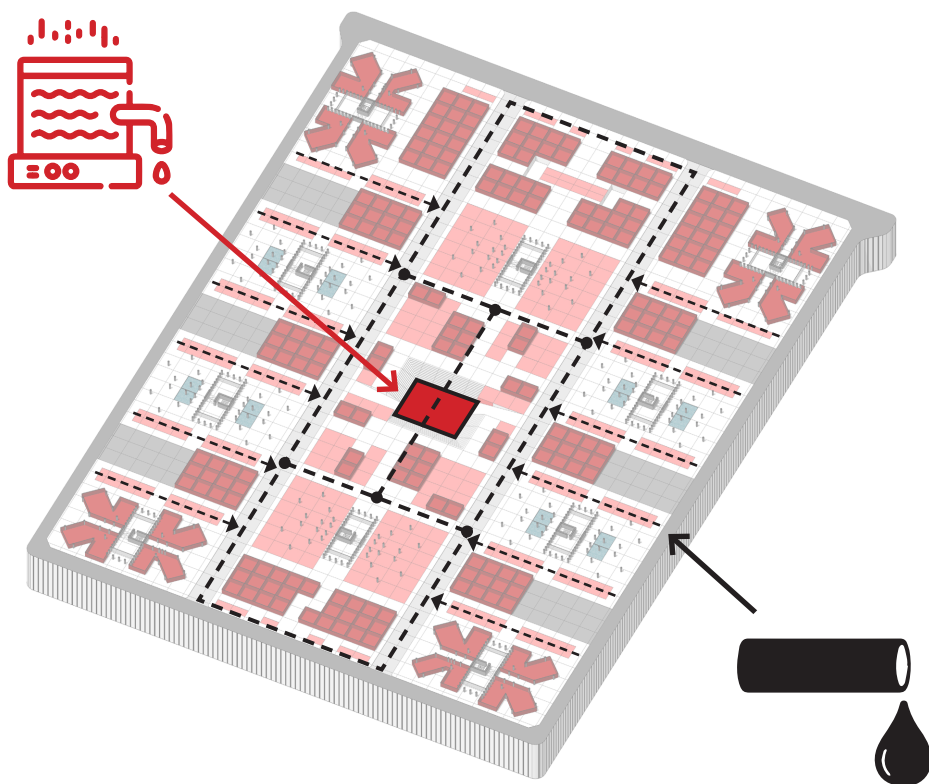
East Harlem was Originally Marshland, and Makes it Prone to Flooding
Source: Library of Congress, Data is from the New York City Panel on Climate Change. Edited by Author.

A N D E C O L O G Y

MANAGING FLOODING IN THE PROJECT SITE

The transformational grid makes it relatively easy to implement a flood management system. Buffer zones between the buildings not only provides space for both hard and soft landscapes to allow for water distribution, but it physically provides the shape of the system itself.

The system works by routing water collected from the sides of the project site to the socio-cultural center. Smaller pipes feed into a central loop, which then feeds the collected water into an underground cistern beneath the basketball court in the middle of the King Towers. Collecting water in this way also makes the intervention circular, as the stored water can be used to irrigate both the landscaping and the urban farming on the site.



Run Off and Rainwater System Collecting in a Central Cistern
Source: Diagram Created by Author.

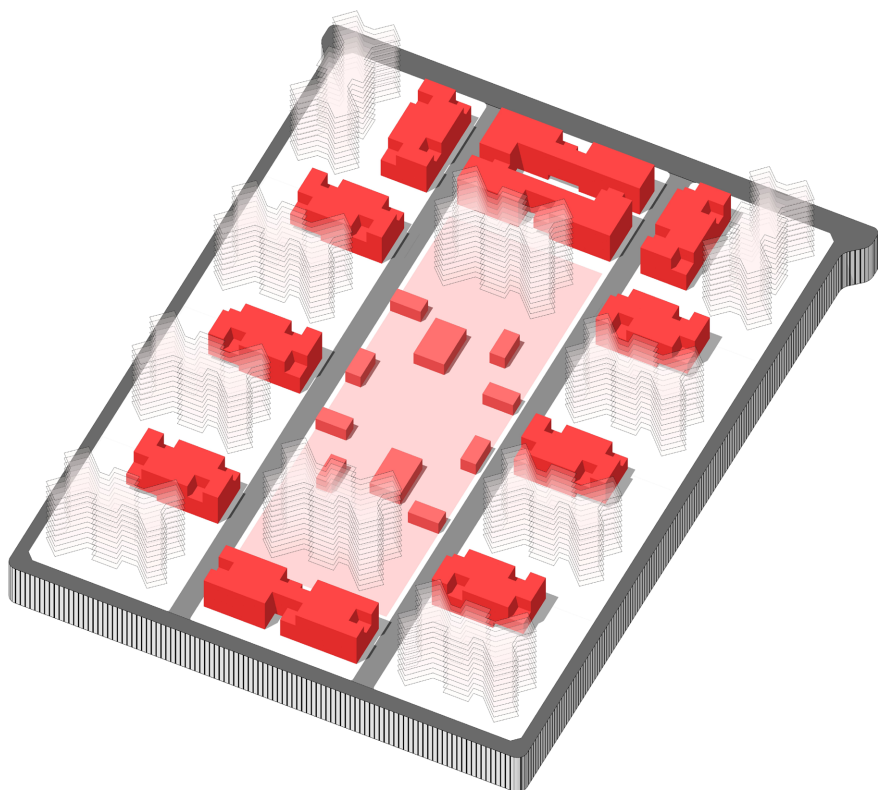
S U M M A R Y :

OVERALL EFFECT OF THE GRID PALIMPSEST

Overlaying the grid over the King Towers project site achieves many objectives set fourth by the problem statement.

Public spaces are more active, caused by an influx in the variety of functions that simply did not exist before. The street wall created by the new developments creates a hierarchy of various public spaces, allowing for a better sense of a human scale to their urban reality, while also creating ownership for the inhabitants of the projects.

When all of these factors are combined, a healthier and safer community is fostered as civic participation and diversity have increased because of the overall intervention.



The Overall Effect of the Transformational Framework
Source: Created by Author from Sketchup and Placemaker Plugin

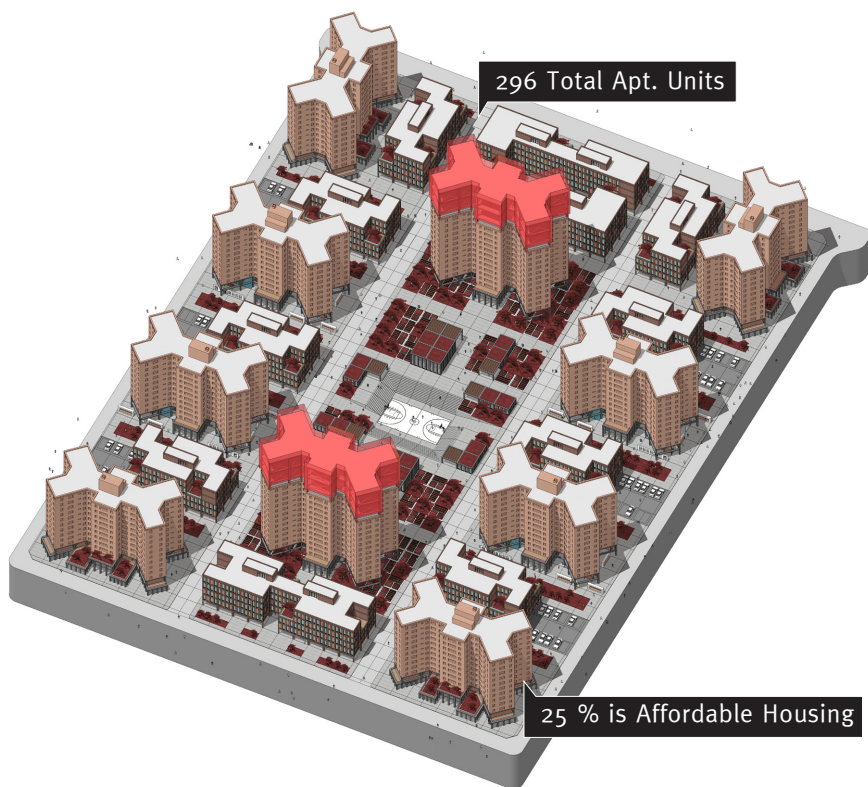
THE HUMAN SCALE

AN EGALITARIAN DESIGN INTERVENTION

The grid aims to transform the public domain from a space that is passive and void, to one that is vibrant and full of life.

The grid will create new structures and peoples, while also trying to increase the quality of life of the current residents living in the social housing projects.

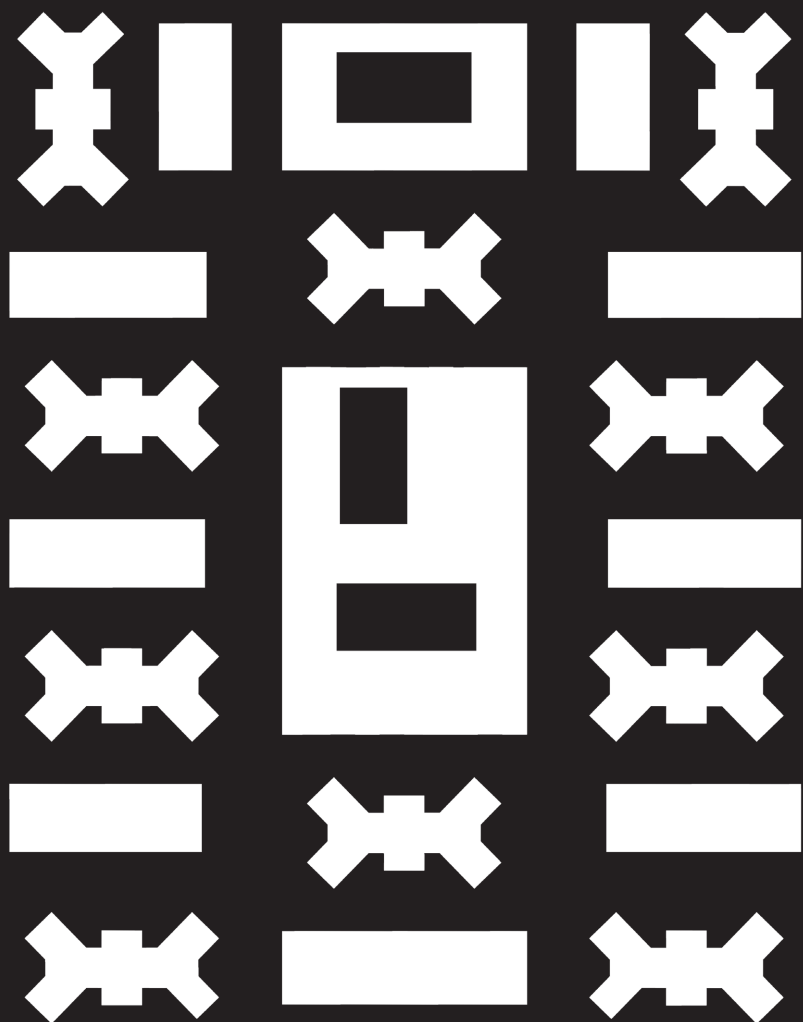
The grid sets out to provide design solutions at multiple scales, mostly due to both its ability to be modular and flexible at the same time. It is now time to move forward and start getting into the human scale of design intervention.



Final Result of the Transformational Framework
Source: Created by Author from Sketchup and Placemaker Plugin



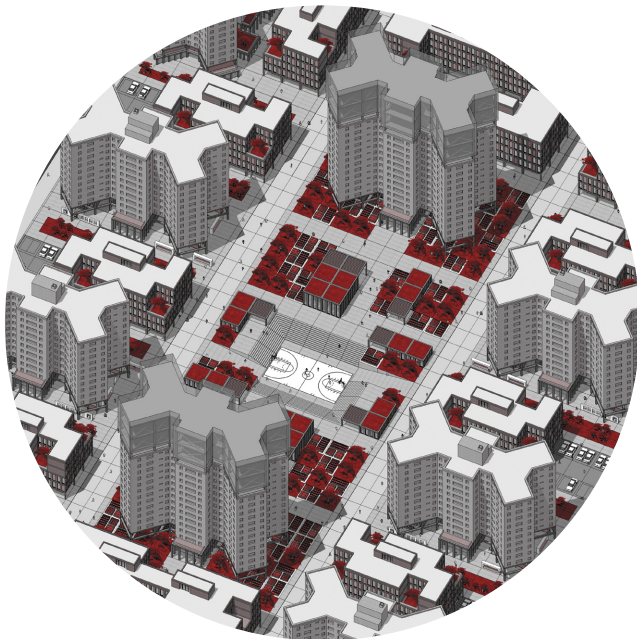
CREATING A NEW URBAN REALITY





Perspective of an Apartment Building in the Center of the King Towers Project
Source: Created by Author from Sketchup and Placemaker Plugin

FOR THE RESIDENTS OF NYCHA



With the transformational grid well defined, it is time to explore all of these themes and philosophies regarding the rise and fall of social housing in New York City. The design intervention will be split into three different methods that reflect the three philosophies adopted by the new “Square Deal” manifesto and the new “Three C’s” it wishes to set out to accomplish. The first of these methods involves the creation of new housing blocks on the periphery of the project site. Not only will this restore the “street wall” that has defined the urban fabric of New York City for decades, but it will also bring more activity that will diversify the preexisting community that exists in and around the project site. The second method involves protecting the people currently living in the apartment towers through interventions of palimpsest that radically change the way the inhabitants engage with public space. The third is a fractalized landscape that is adaptable and flexible in the face of change.

CHAPTER STRUCTURE



One of the Pavilions in the Socio-Cultural Park
Source: Created by Author from Sketchup and Placemaker Plugin

1. THE DESIGN INTERVENTION

An overview of the design impact made by the combination of the transformational framework and the grid.

2. HOUSING DESIGN

An in depth explanation of the design methods and philosophies of housing inside the grid.

2.1 HOUSING PRINCIPLES

2.2 HOUSING PARCEL RULES

2.3 HOUSING DETAILS

3. TOWER REHABILITATION

The steps involved in the palimpsest of the preexisting towers on the site.

3.1 TOWER PRINCIPLES

3.2 TOWER PARCEL RULES

3.3 TOWER DETAILS

4. LANDSCAPE GENERATION

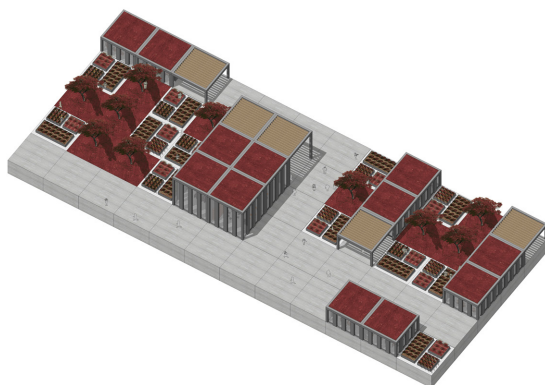
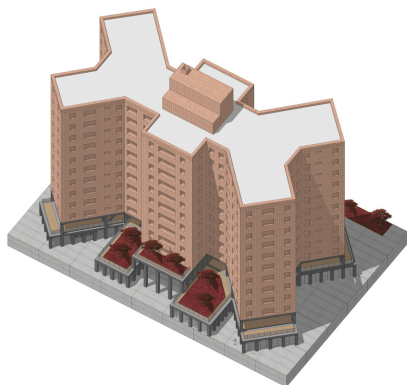
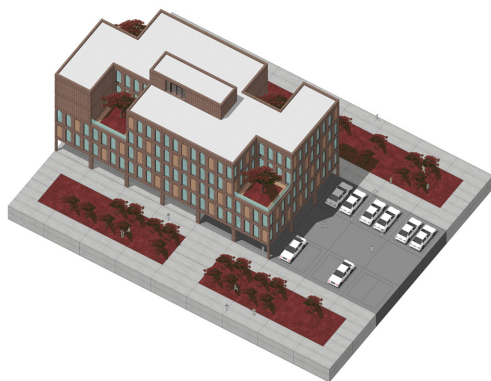
A brief economic review of the processes that will take place once NYCHA has sold its property to the appropriate stakeholders.

4.1 LANDSCAPE PRINCIPLES

4.2 LANDSCAPE PARCEL RULES

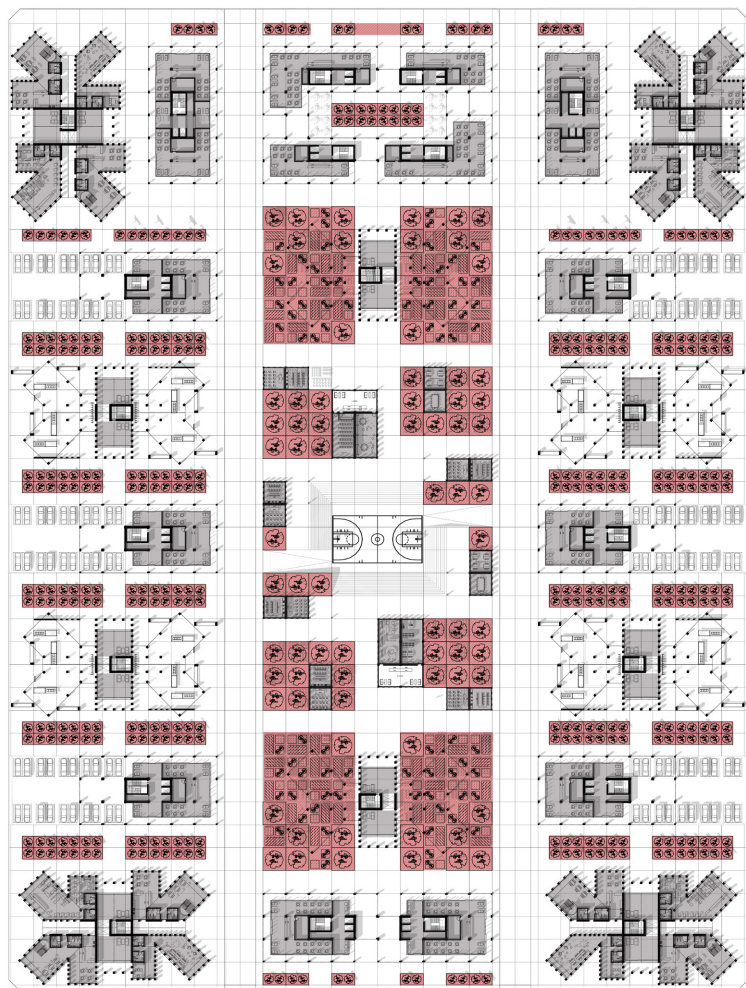
4.3 LANDSCAPE DETAILS

T H E D E S I G N

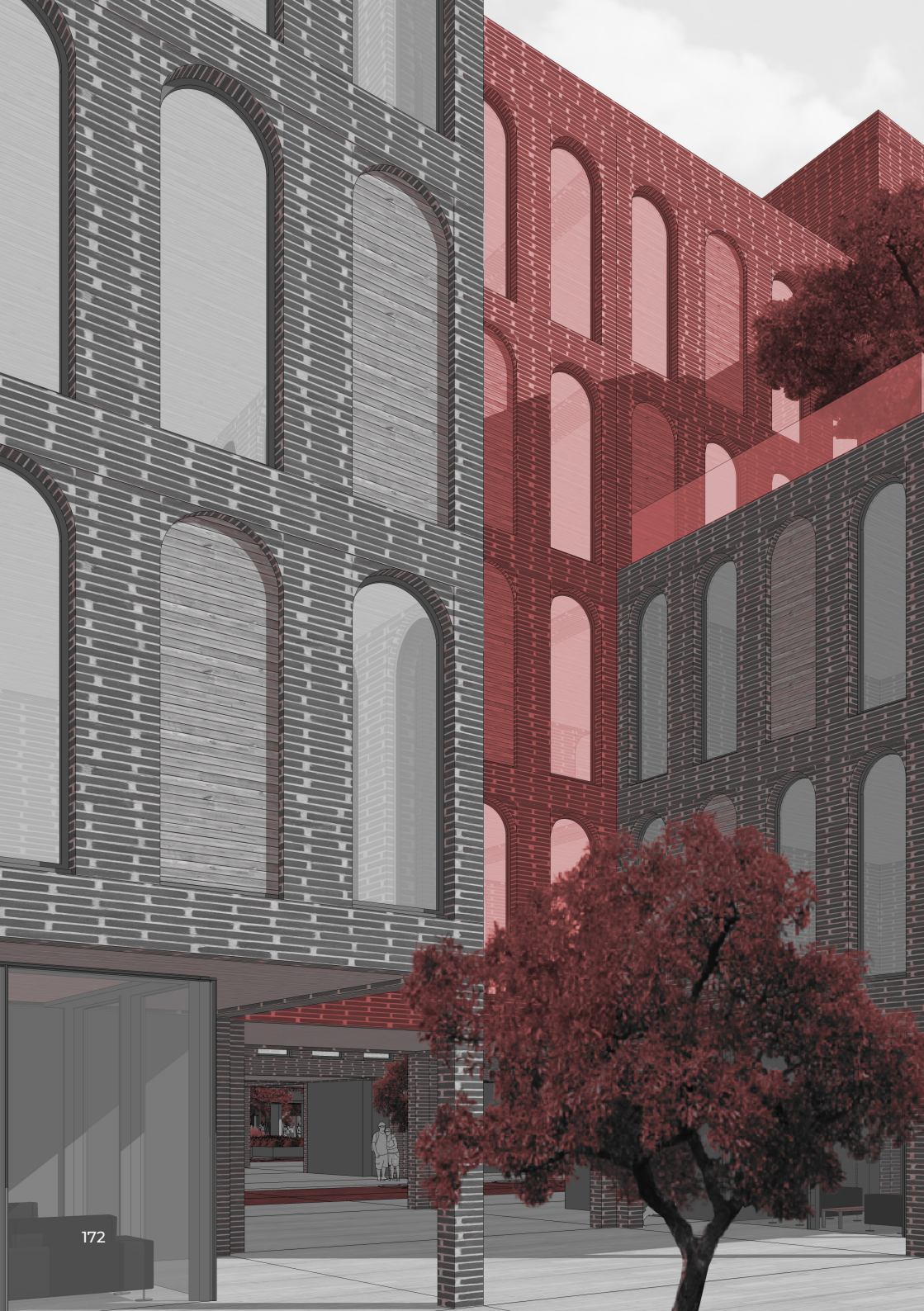


The Three Intervention Typologies: Housing, Existing Towers, and Landscape
Source: Diagram by Author.

INTERVENTION



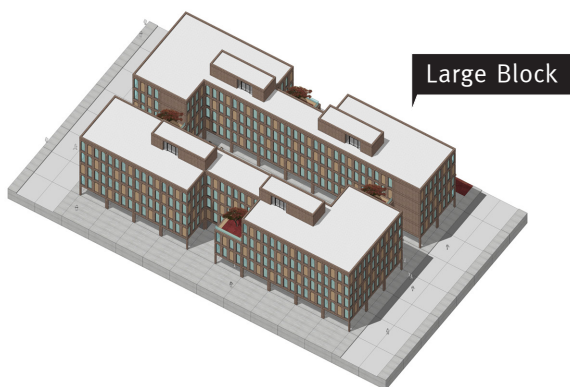
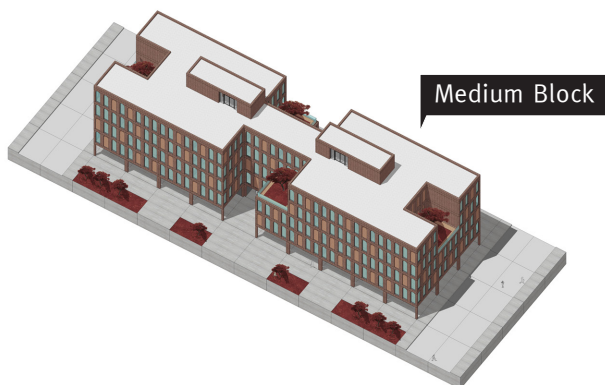
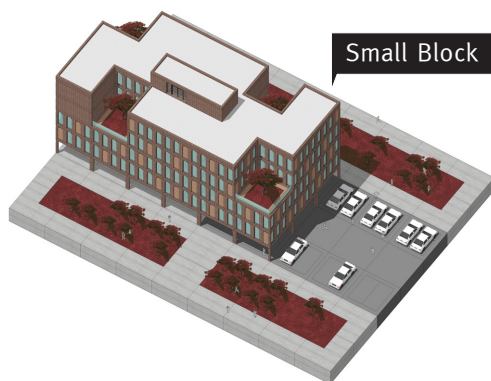
Ground Floor Site Plan of the Design Intervention
Source: Site Plan by Author.



HOUSING DESIGN

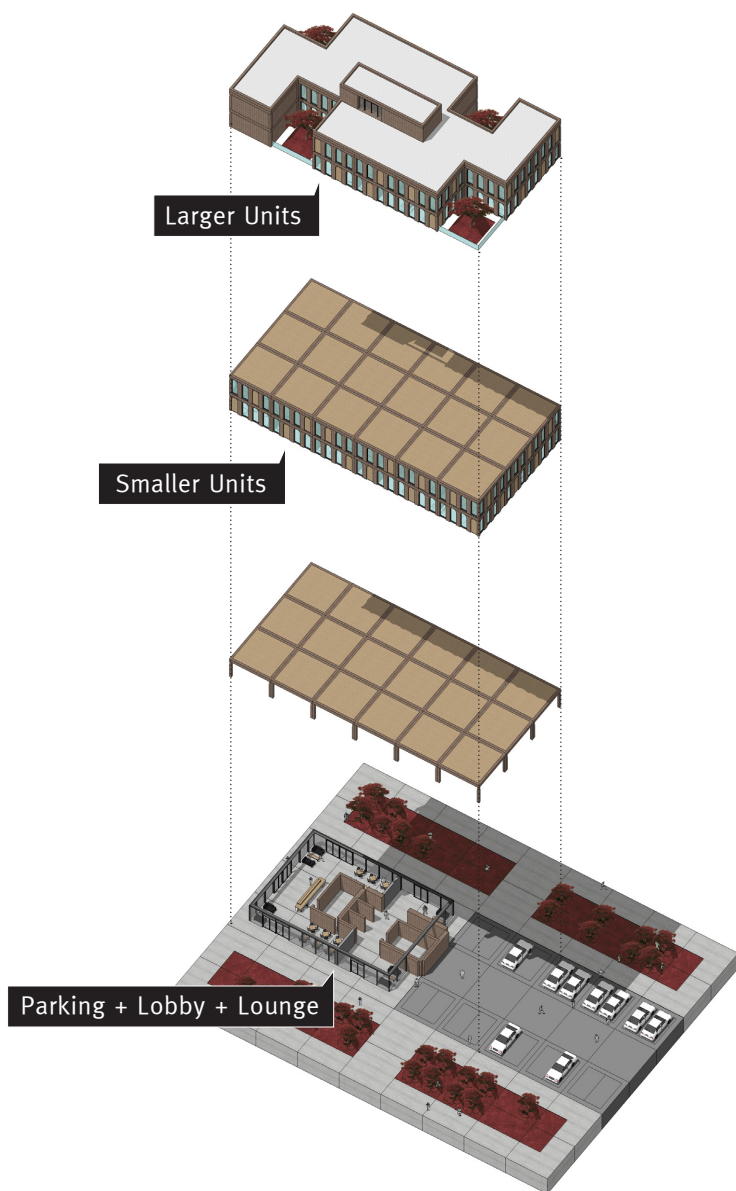


H O U S I N G



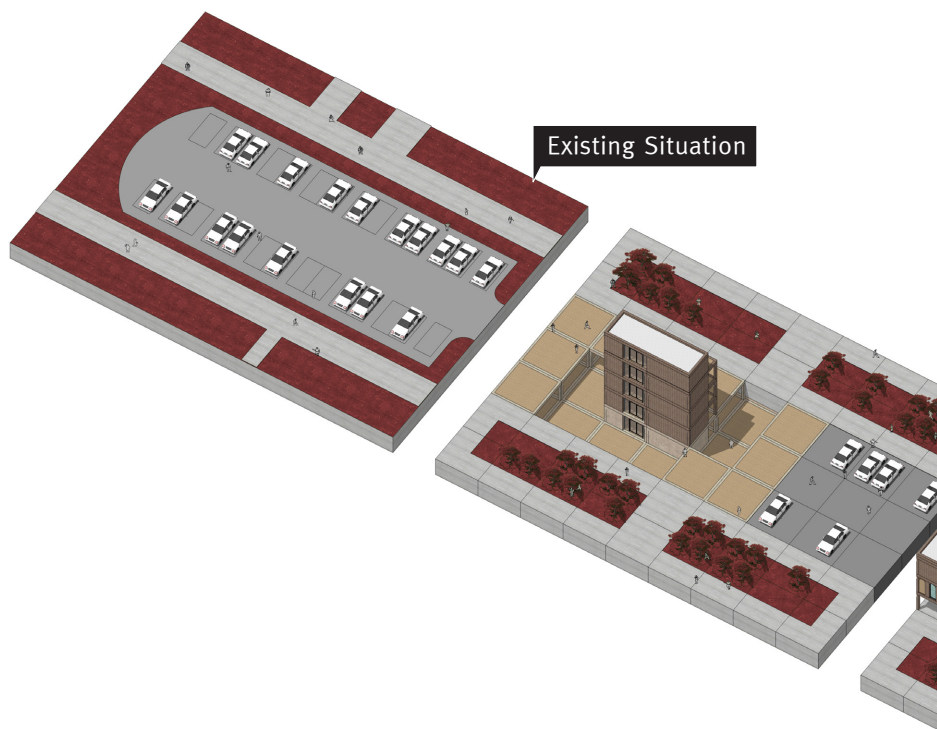
The Three Intervention Typologies: Housing, Existing Towers, and Landscape
Source: Diagram by Author.

P R I N C I P L E S

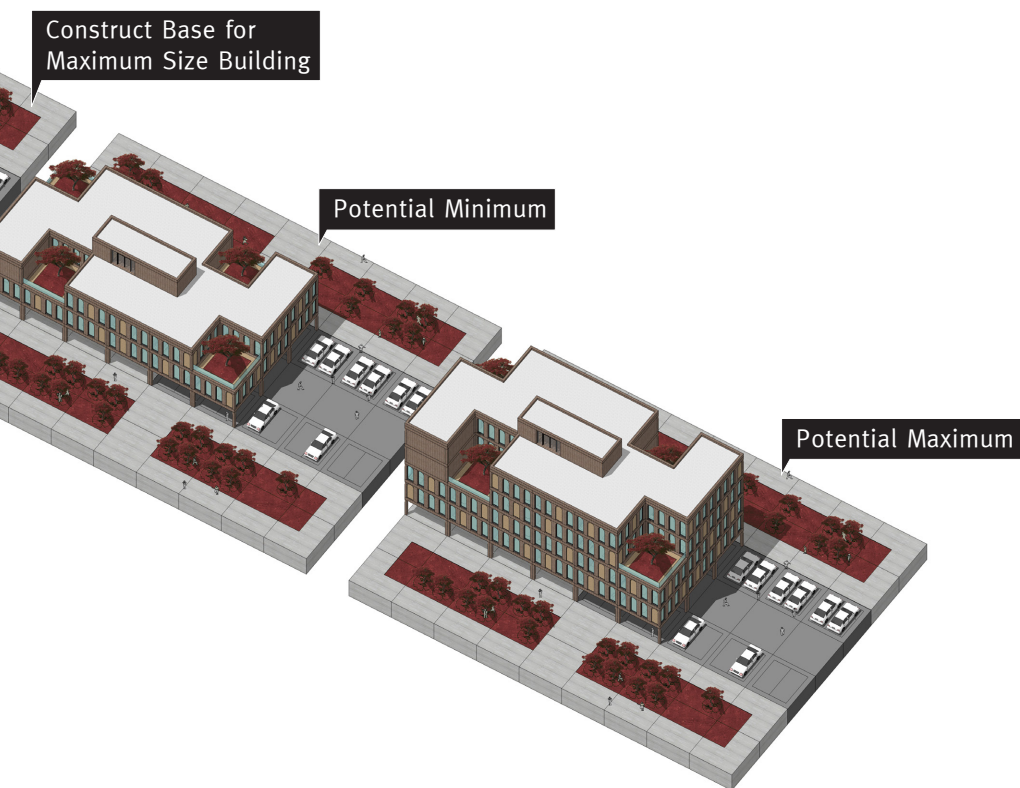


Exploded Axonometric of a Typical Housing Block
Source: Diagram by Author.

H O U S I N G

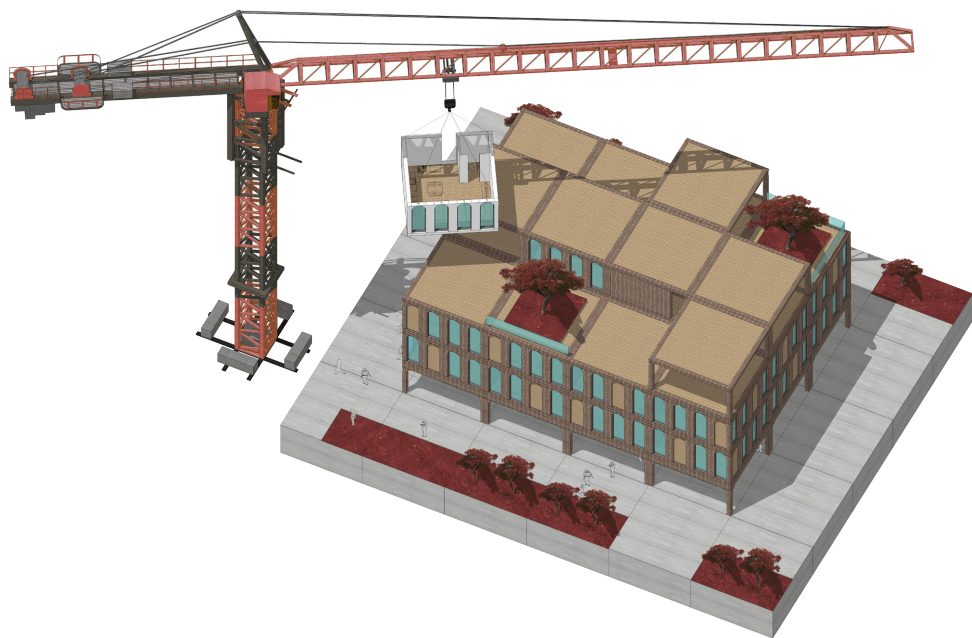


P R I N C I P L E S



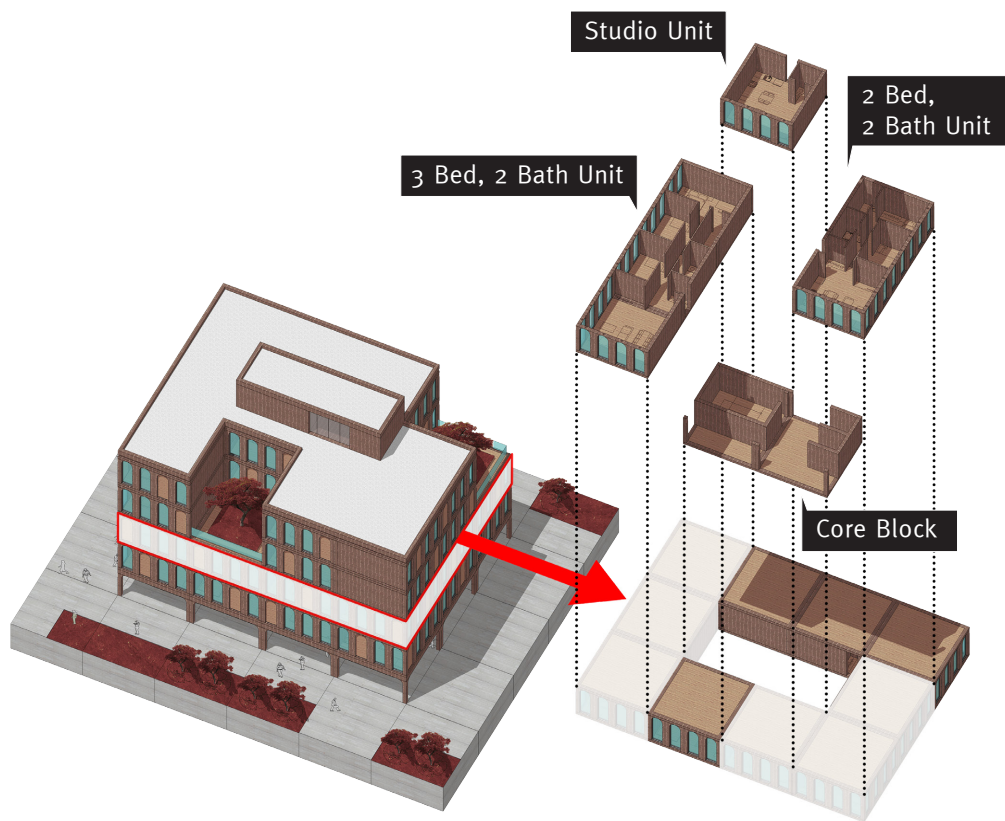
Potential Change Over Time for the New Residential Developments in the Intervention
Source: Diagram by Author.

H O U S I N G



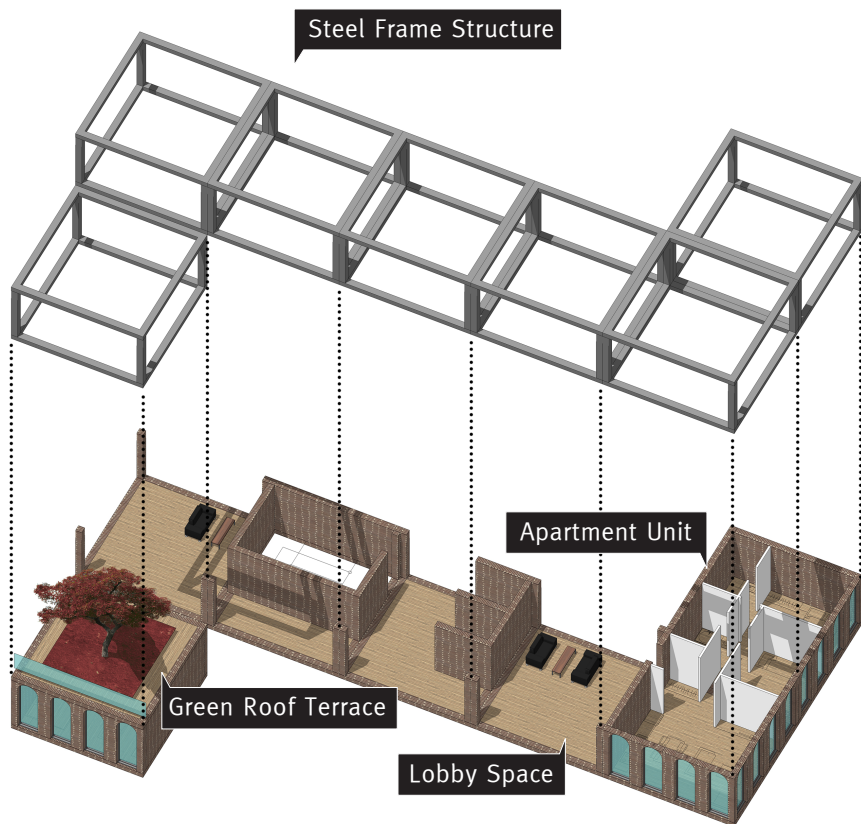
A Prefab Modular System for the Construction of the Housing Blocks
Source: Diagram by Author.

P R I N C I P L E S



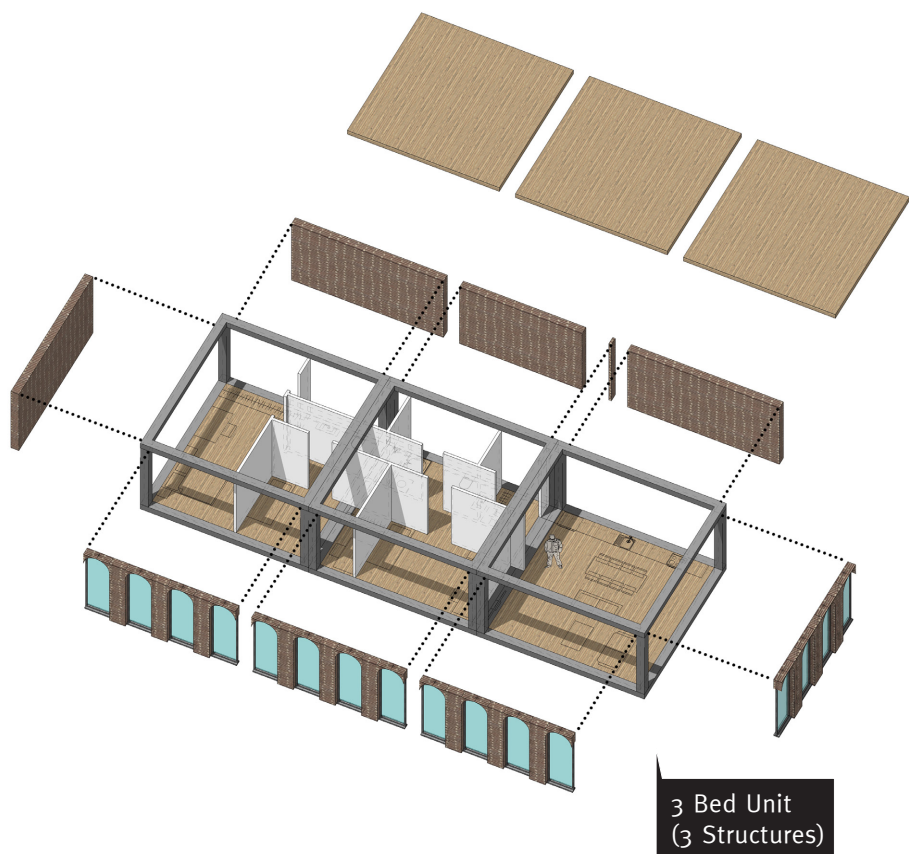
Floor Plans of the Housing Blocks Dictated by Modular Construction
Source: Diagram by Author.

H O U S I N G



The Spatial Relationship Between the Structure and Living Space
Source: Diagram by Author.

P R I N C I P L E S



Structural Components of a Typical Apartment Unit
Source: Diagram by Author.

LOCATION :



An Array of Windows Face the Streets of Harlem. Entrances Add Semi-Public Space
Source: Jake Vargo - <http://unisci24.com/247837.html>

K I N G T O W E R S



Separation of Public and Private with Commercial Program, but No Spatial Separation?

Source: Hunter College - <https://www.nycfoodpolicy.org/resources/east-harlem/east-harlem-needs-assessment/>



Semi Public Space Behind the Tenements Breaking the Street Wall

Source: Ariel Property Advisors - <http://arielpa.nyc/listing/2031-2033-3rd-avenue>





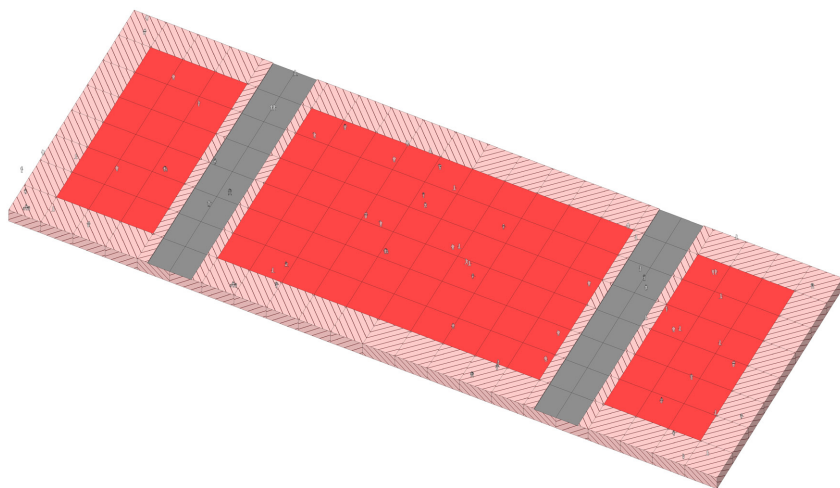
H O U S I N G

1. FIVE STORY EXTRUSION LIMIT

All buildings are restricted to 5 stories high, as per dictated by the proposed zoning ordinance overlay. The entire parcel can be extruded to it's maximum height.

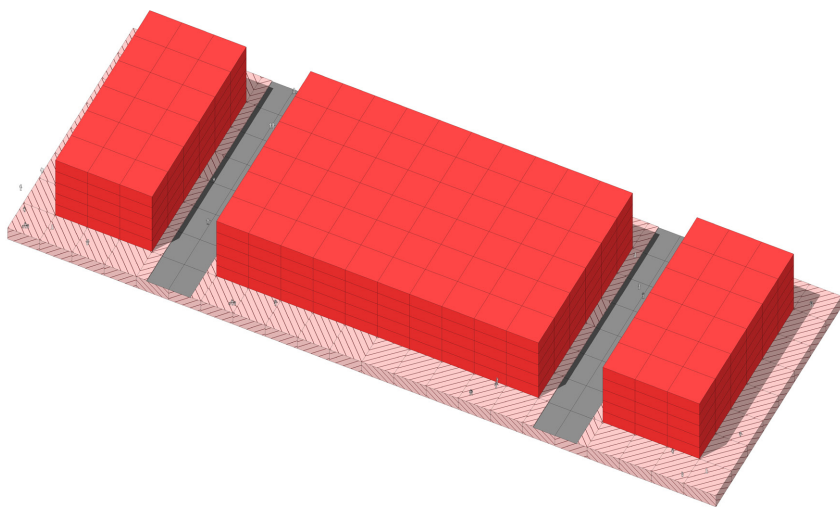
If a parcel faces a side street (non-primary circulation artery), then a community parking lot must be included on said parcel.

The objective here is to create a mass whose height is similar to the tenements that characterize the local context of East Harlem.



3 Housing Parcels as a Case Study for the Parcel Rules
Source: Created by Author from Sketchup and Placemaker Plugin

PARCEL RULES



5 Story Extrusion Limit.

Source: Created by Author from Sketchup and Placemaker Plugin

H O U S I N G

2. MINIMUM / MAXIMUM WIDTH OF THE BLOCKS

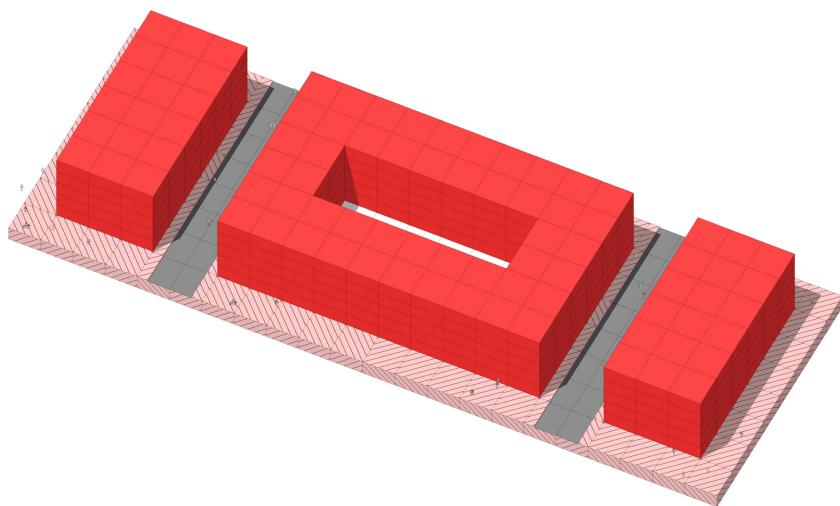
A building must have a minimum width of 2 grid blocks, and no more than 3.

The aim of this rule is to make sure the housing units are getting enough sunlight into the living spaces.

The rule is also based on the functionality of the modular structure used in the buildings.

A double loaded apartment buildings are 3 grid blocks wide.

A single loaded apartment is 2 grid blocks wide.



Guaranteeing Equal Access to Light for the Inhabitants of the Housing Blocks
Source: Created by Author from Sketchup and Placemaker Plugin

P A R C E L R U L E S

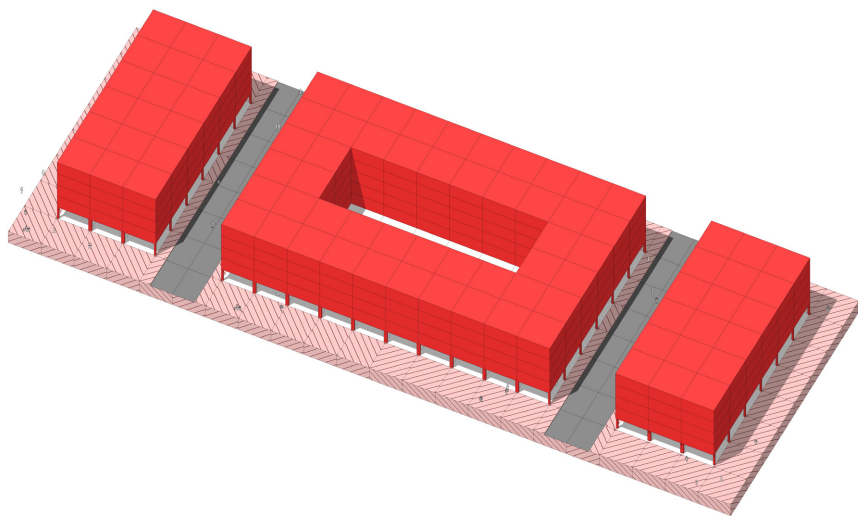
3. ARCADE ALONG ALL SIDES OF THE PARCELS

All sides of a buildings ground floor must implement an arcade.

The objective with this step is to provide a unidirectional entrance to the building.

An arcade also adds an intermediary space between public and private.

This adds to the hierarchy of public space by providing a semi-open place between the housing and landscape.



Manipulating the Form of the Building to Clearly Identify the Entrance to the Housing
Source: Created by Author from Sketchup and Placemaker Plugin

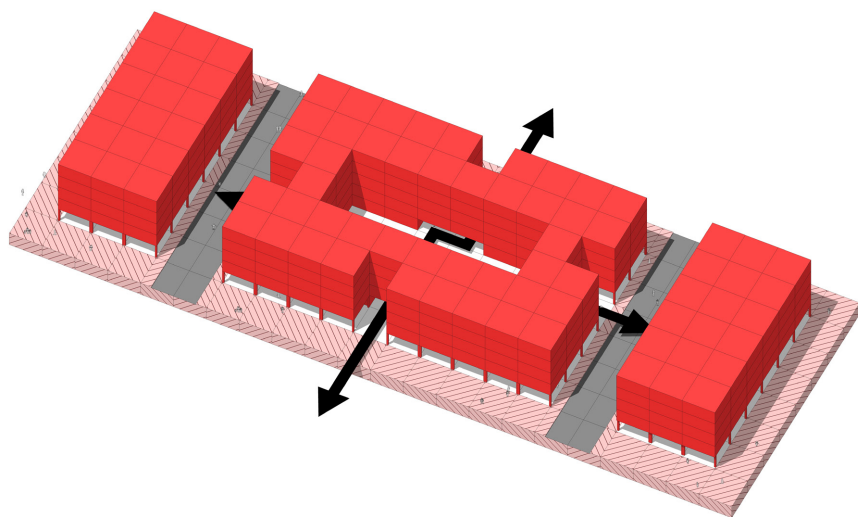
H O U S I N G

4. CREATING GROUND FLOOR PASSAGES

If the building in the parcel is long enough to create ground floor passages, then the point at which the passage crosses can only be one block wide.

The purpose of this rule is to clearly mark the passages, while also providing inhabitants extra light underneath these points.

They also visually make breaks in the mass of the building, making them feel less massive overall.



Providing Secondary Paths Underneath the Housing Blocks
Source: Created by Author from Sketchup and Placemaker Plugin

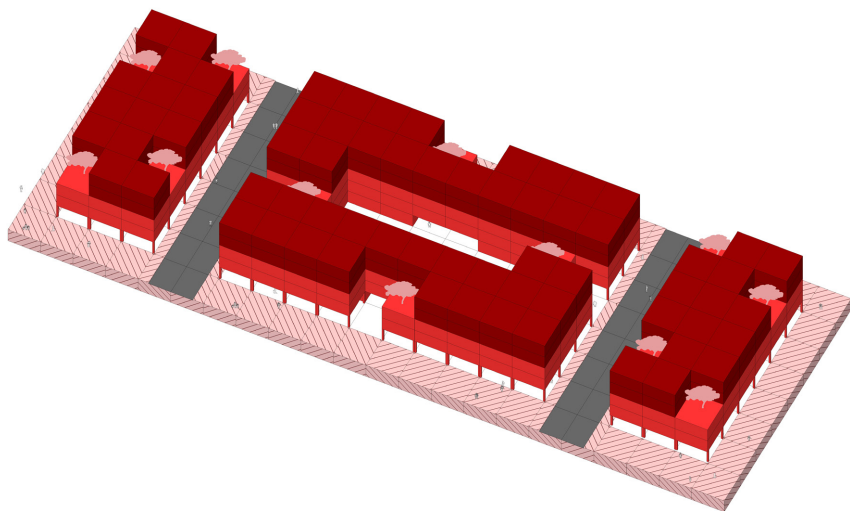
PARCEL RULES

5. SEMI-PRIVATE GREEN TERRACES

The top 2 floors of the building should implement green terraces that act as a semi-public space that the inhabitants of the housing can use.

The motivation behind this rule is to give residents another layer to the overall hierarchy of public space in the project area.

Making places like these makes social interactions more likely, and thus an overall healthy place to live.



Creating Garden Terraces for the Inhabitants of the Housing Blocks
Source: Created by Author from Sketchup and Placemaker Plugin

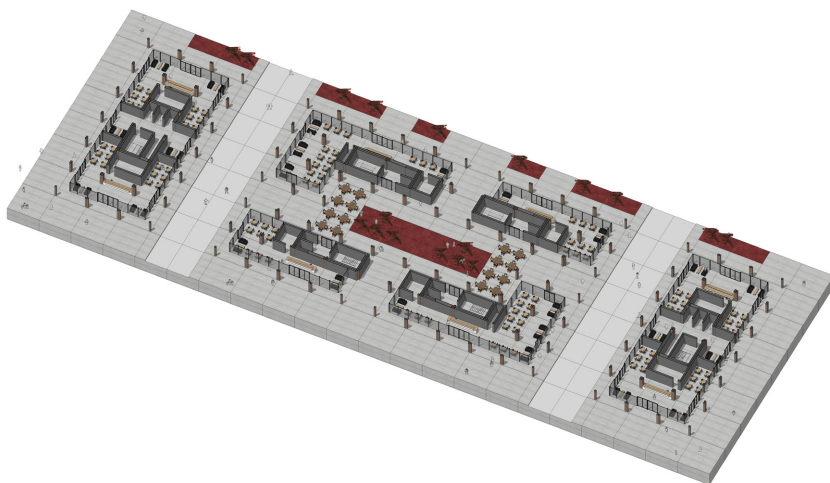
H O U S I N G

6. 2 METER STOREFRONT OFFSET

Functions of the ground floor are restricted to social space for the housing, unless stated otherwise by the zoning ordinance overlay.

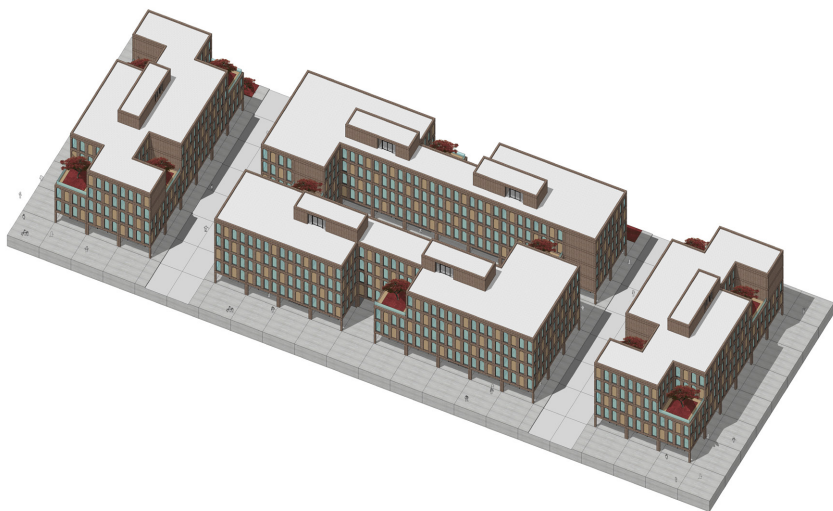
The space between the structural columns and the closed space of the ground floor should be a minimum of 2 meters wide.

This also gives the program on the ground floor some shading coverage through the day.



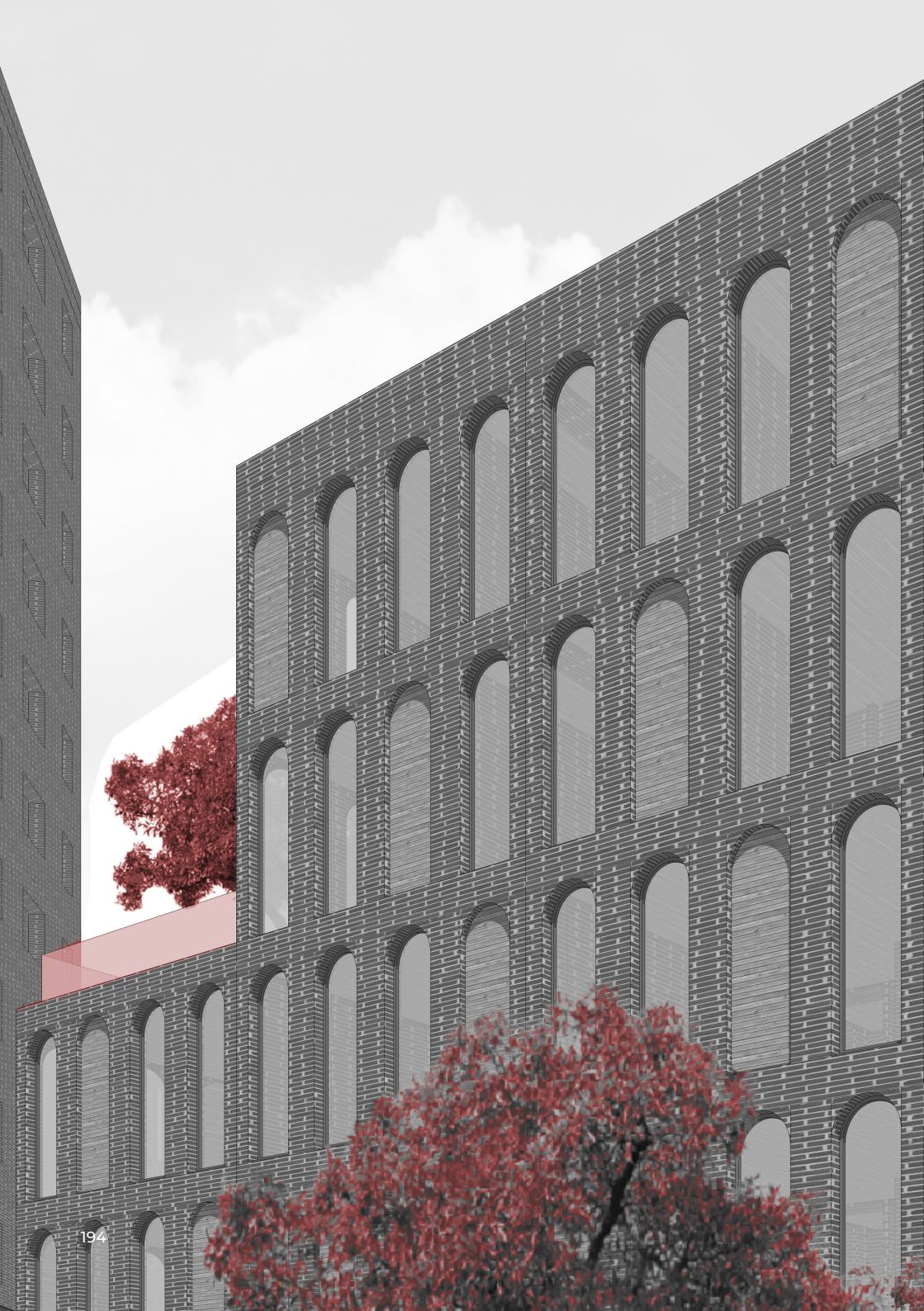
2 Meter Offset Away from the Columns of the Arcade
Source: Created by Author from Sketchup and Placemaker Plugin

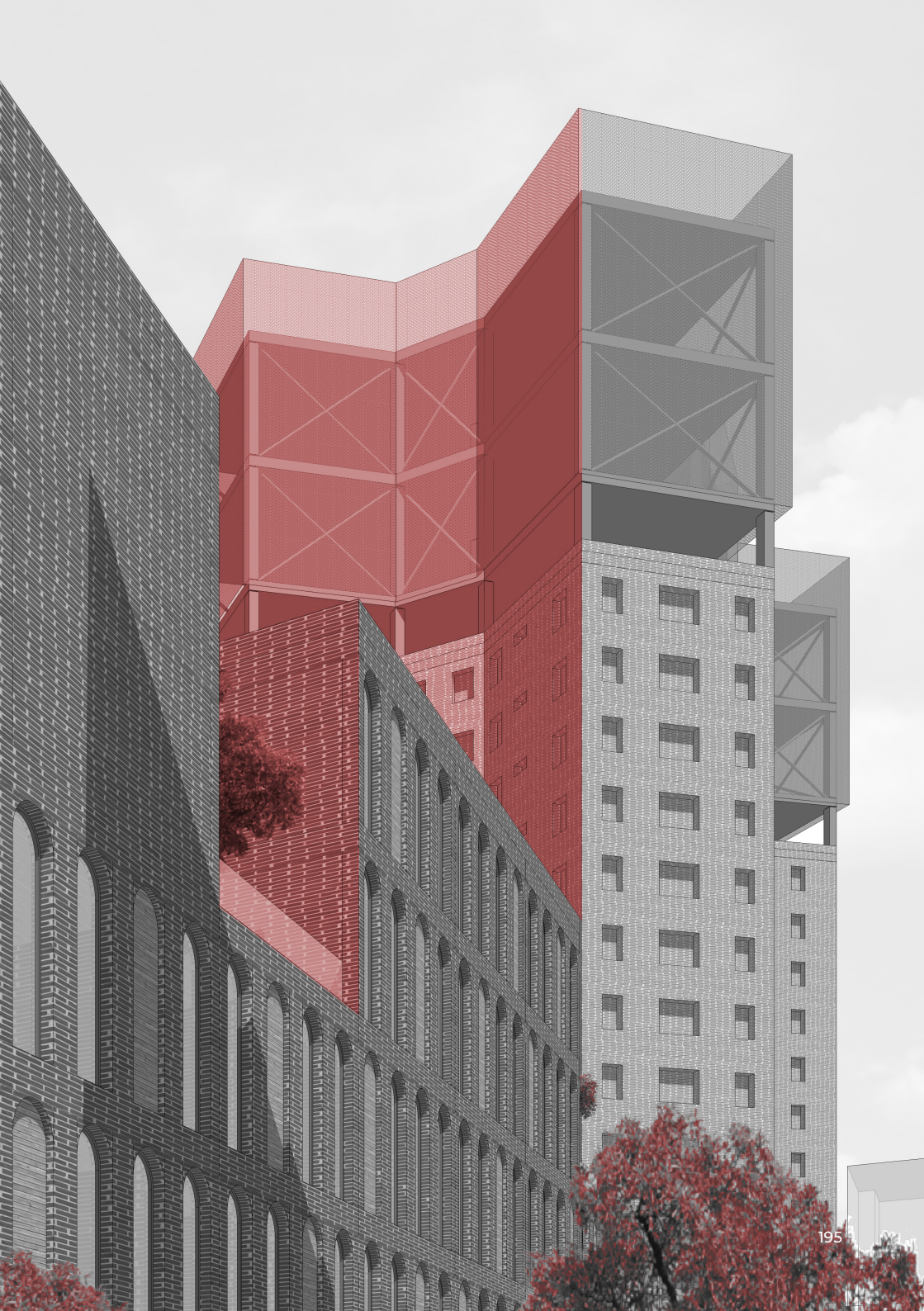
PARCEL RULES



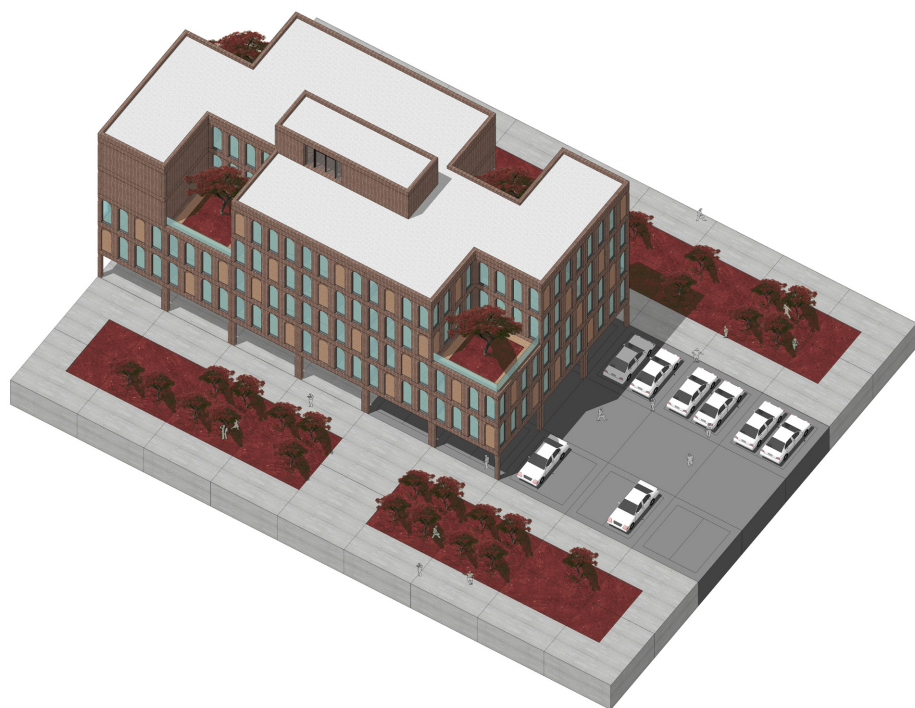
The Final Result of the Parcel Rules

Source: Created by Author from Sketchup and Placemaker Plugin



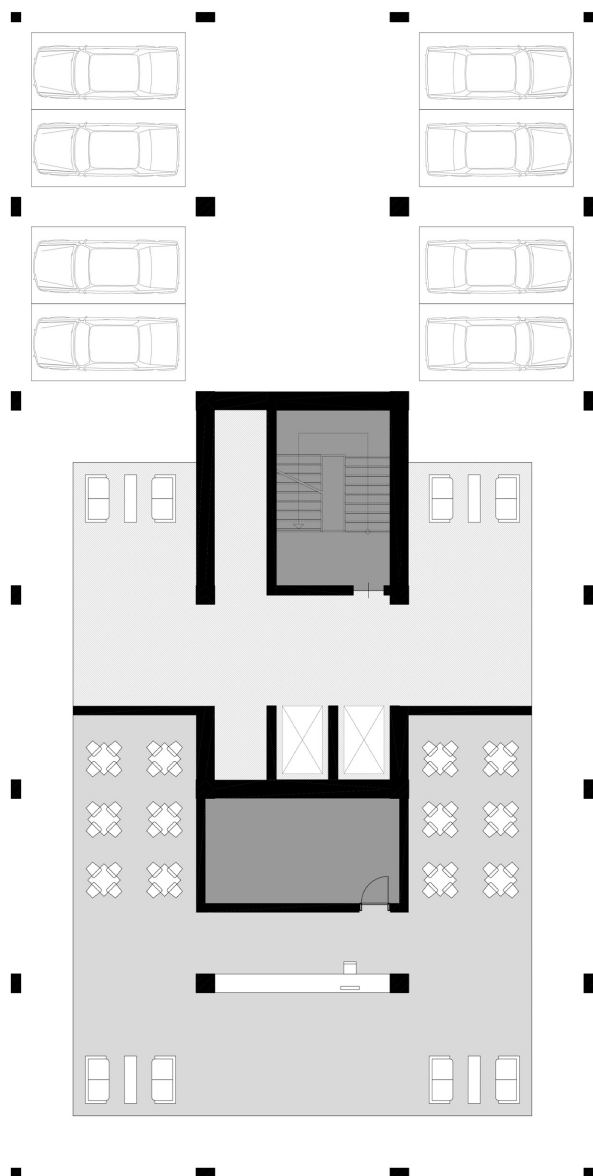


H O U S I N G



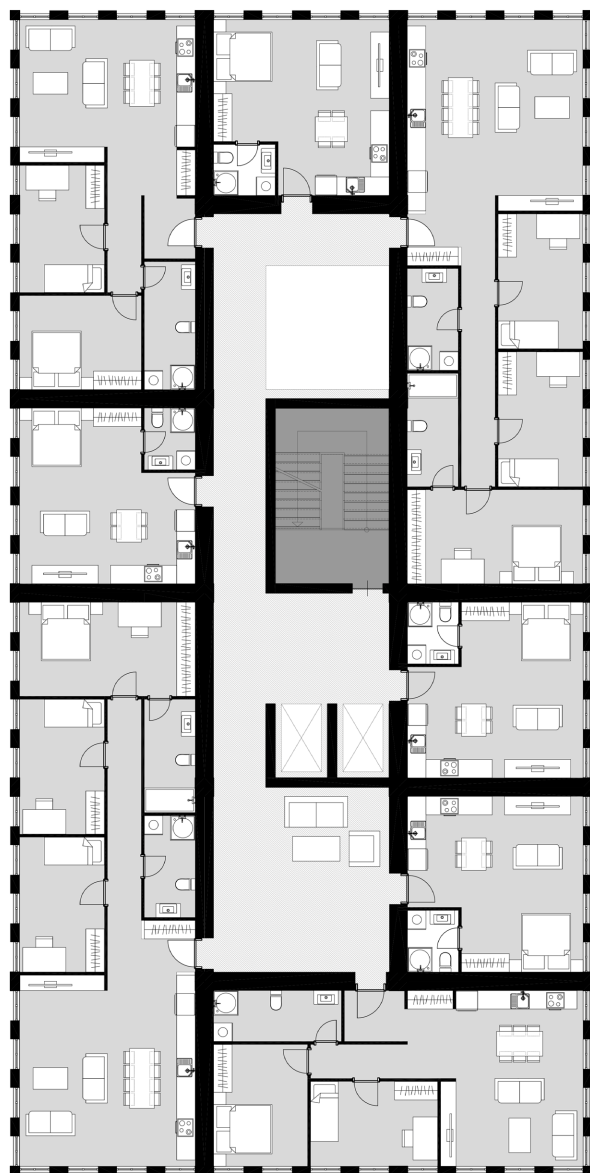
The Small Housing Block
Source: Diagram by Author.

DETAILS



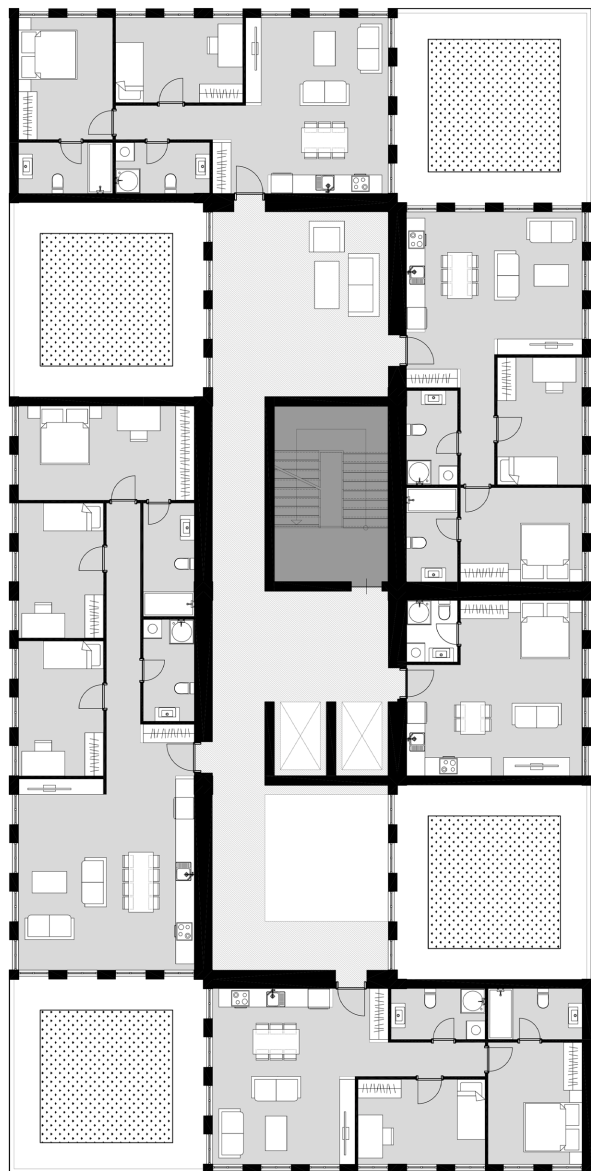
Ground Floor Plan of the Small Housing Block
Source: Plan by Author.

H O U S I N G



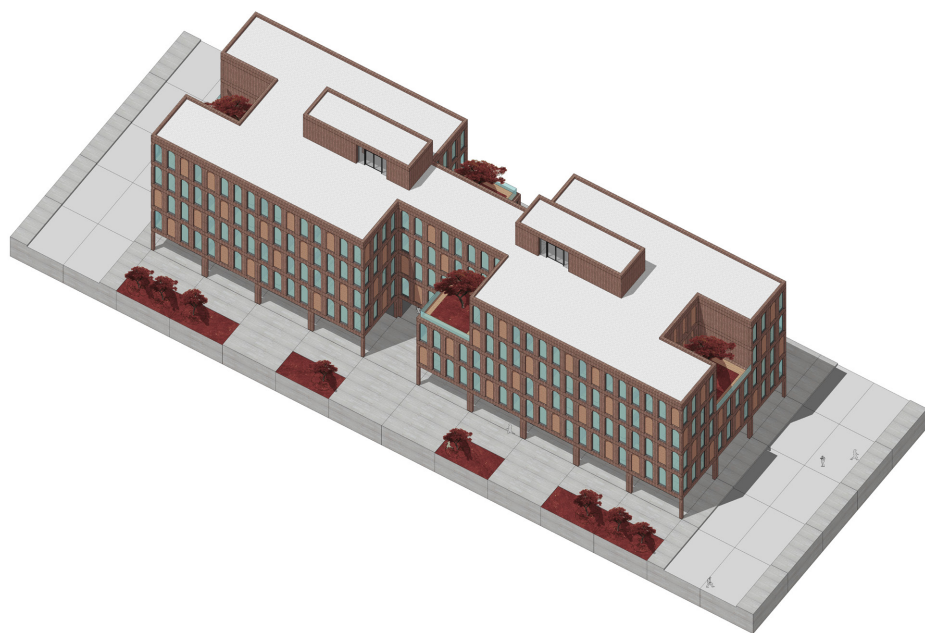
Typical Floor Plan of the Small Housing Block
Source: Plan by Author.

DETAILS



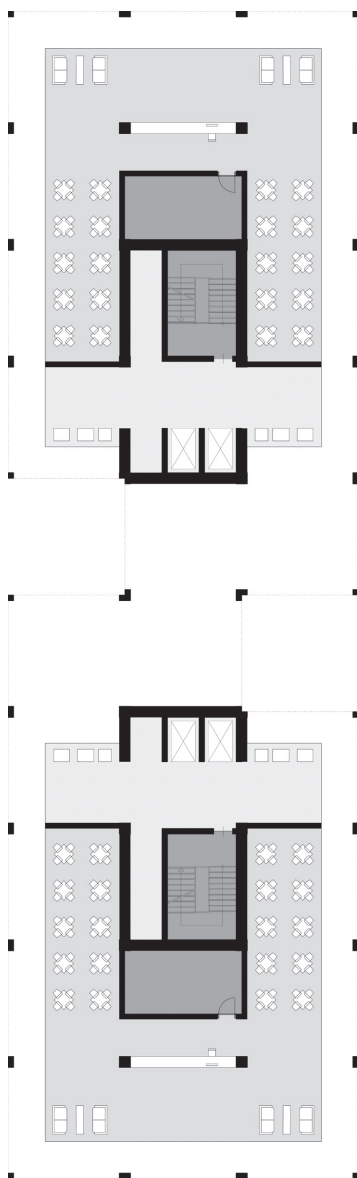
Upper Floor Plan of the Small Housing Block
Source: Plan by Author.

H O U S I N G



The Medium Housing Block
Source: Diagram by Author.

D E T A I L S



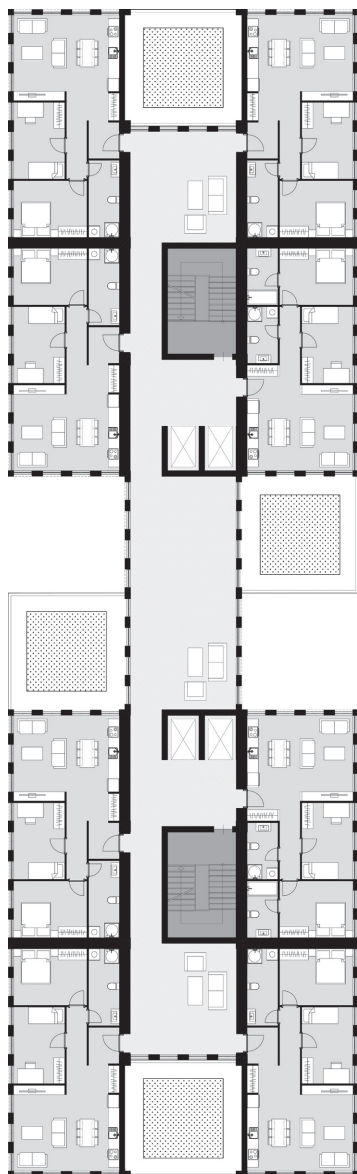
Ground Floor Plan of the Medium Housing Block
Source: Plan by Author.

H O U S I N G



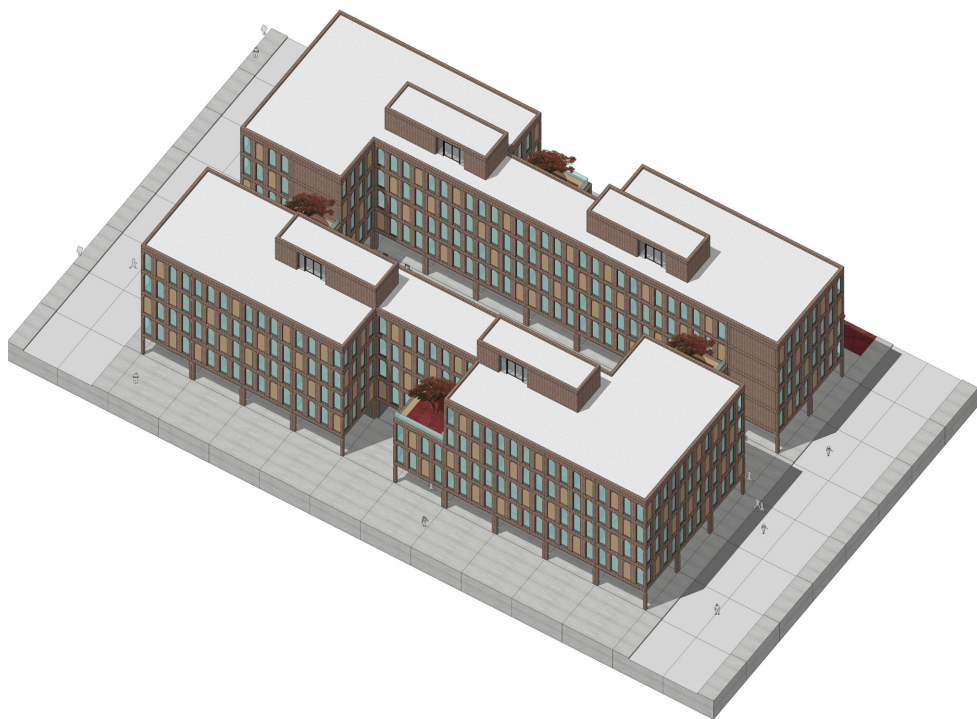
Typical Floor Plan of the Medium Housing Block
Source: Plan by Author.

DETAILS



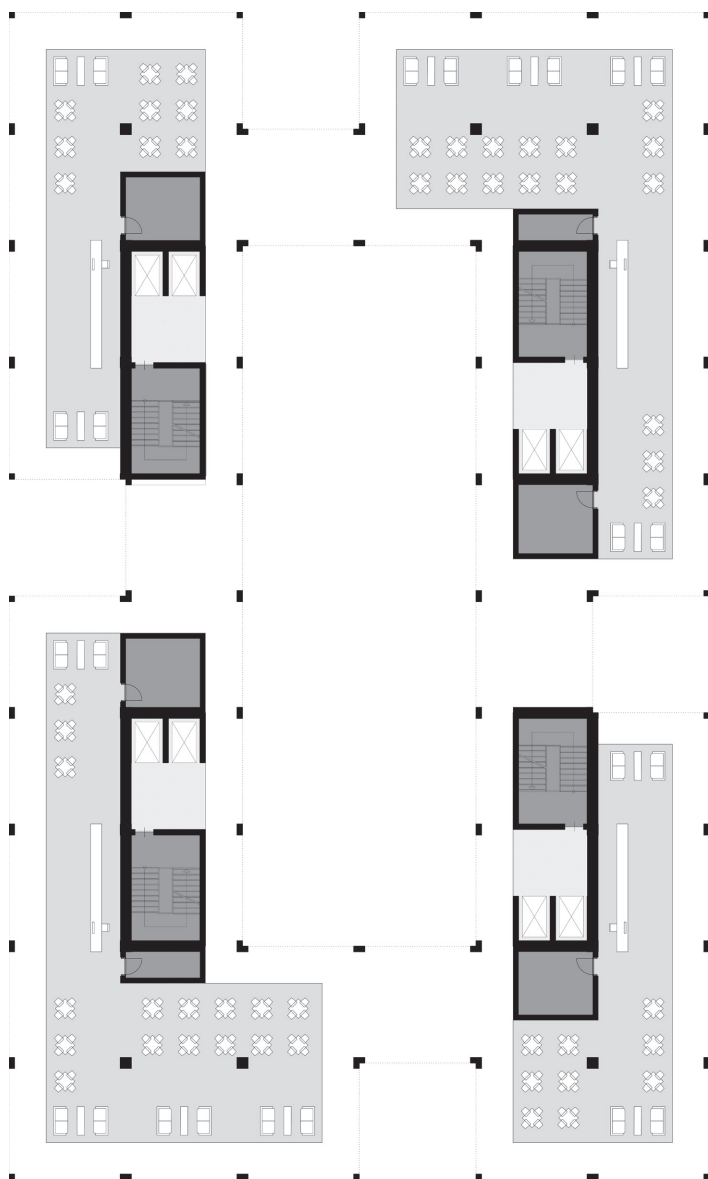
Upper Floor Plan of the Medium Housing Block
Source: Plan by Author.

H O U S I N G



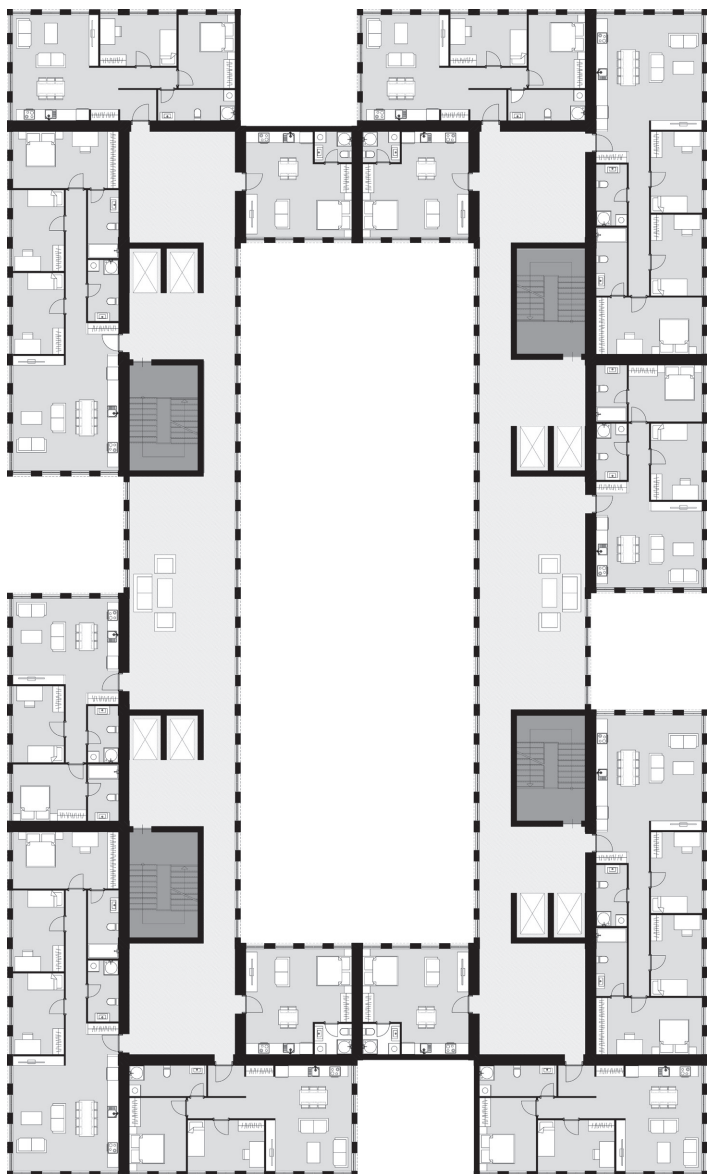
The Large Housing Block
Source: Diagram by Author.

DETAILS



Ground Floor Plan of the Large Housing Block
Source: Plan by Author.

H O U S I N G

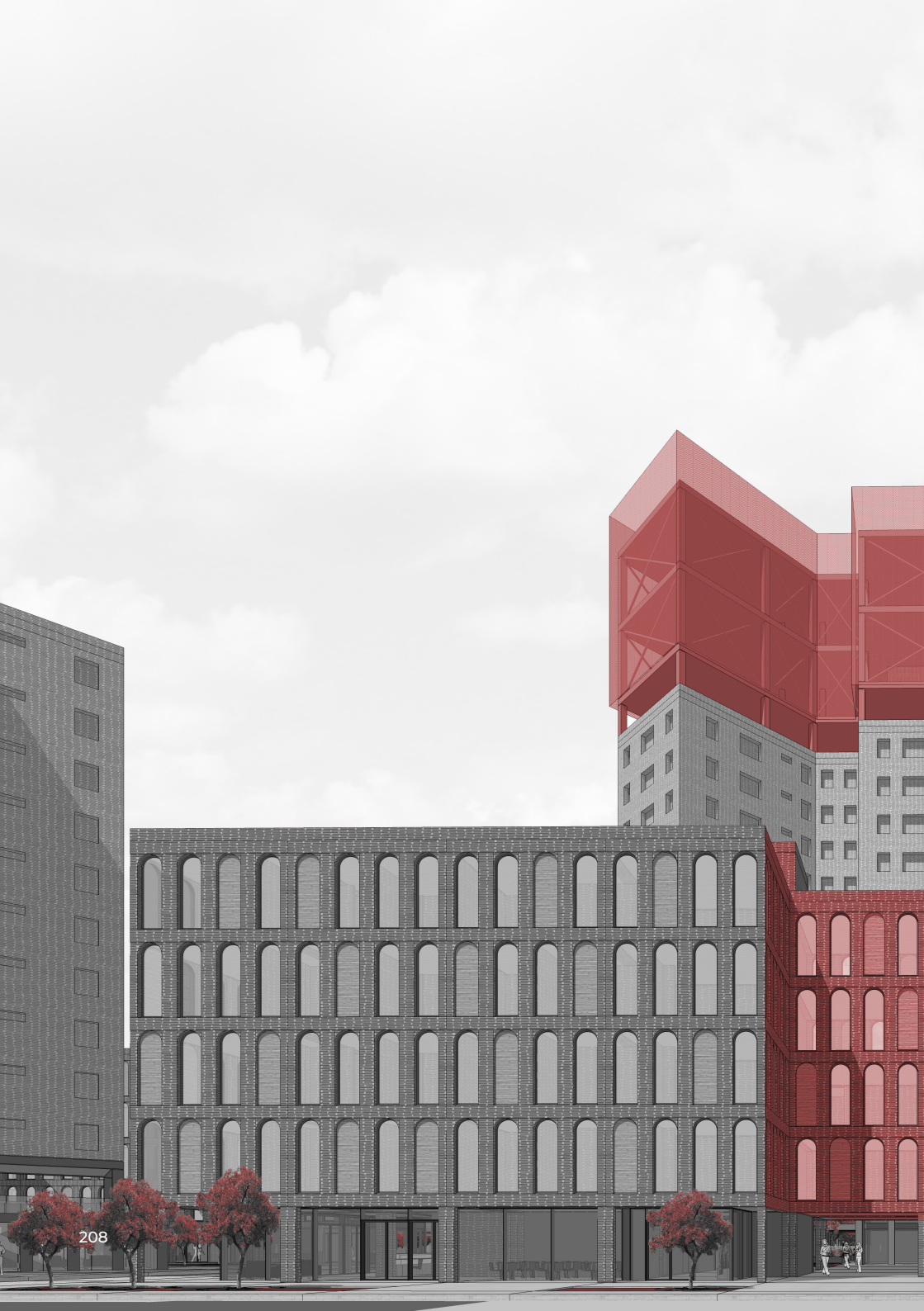


Typical Floor Plan of the Large Housing Block
Source: Plan by Author.

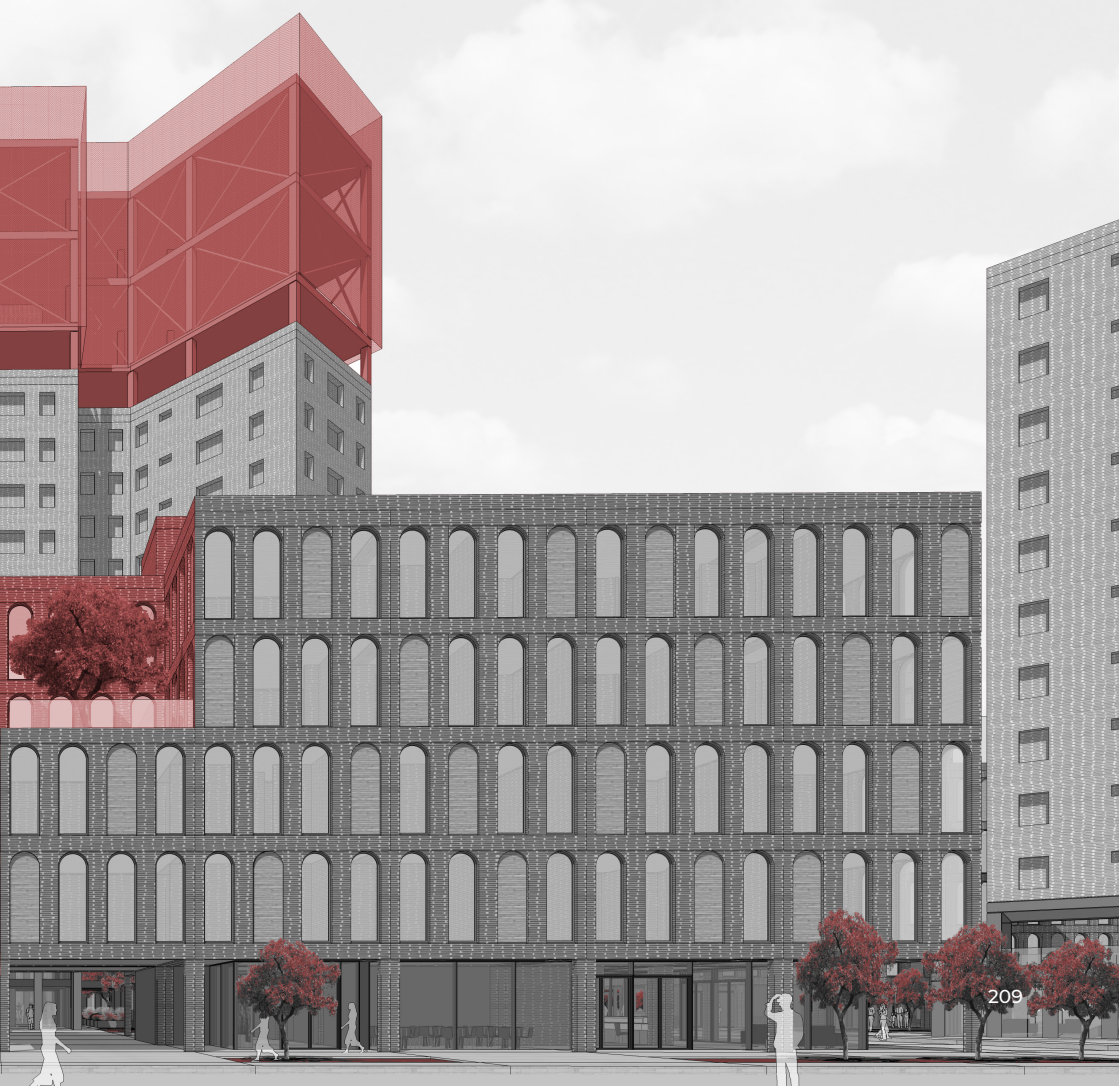
DETAILS



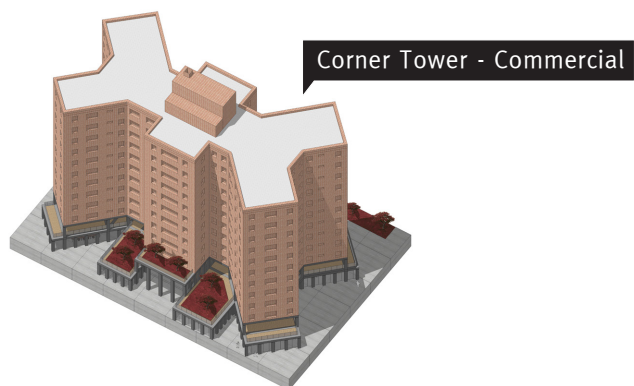
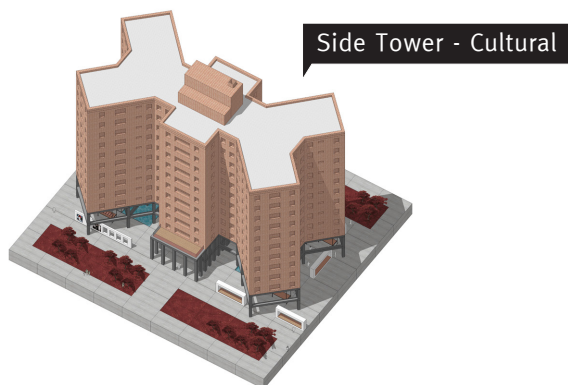
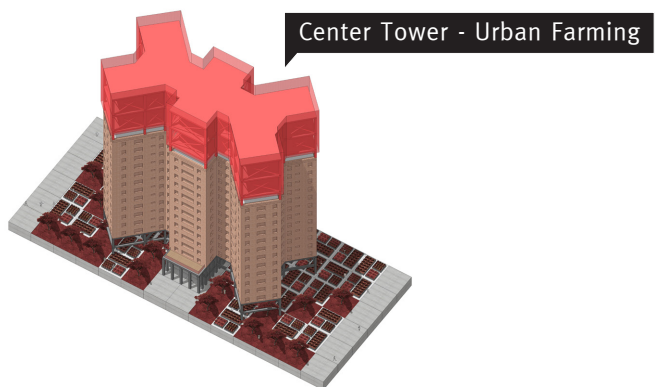
Upper Floor Plan of the Large Housing Block
Source: Plan by Author.



TOWER DESIGN

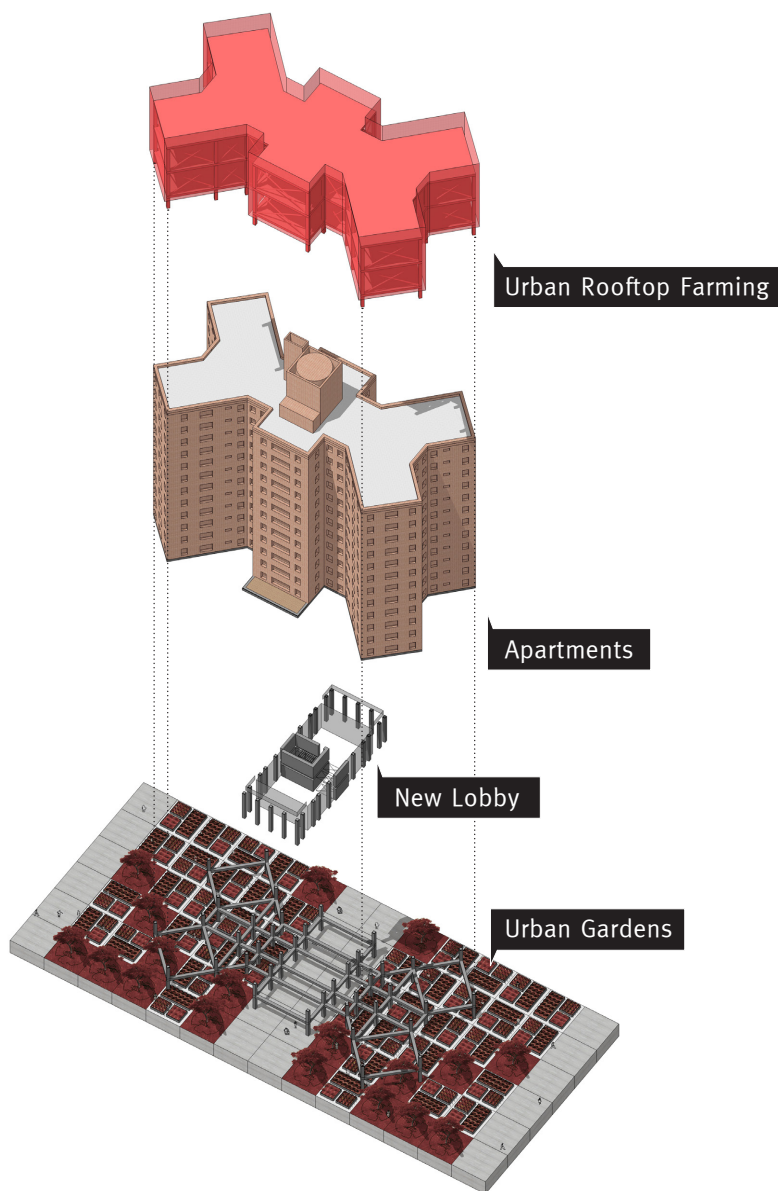


T O W E R



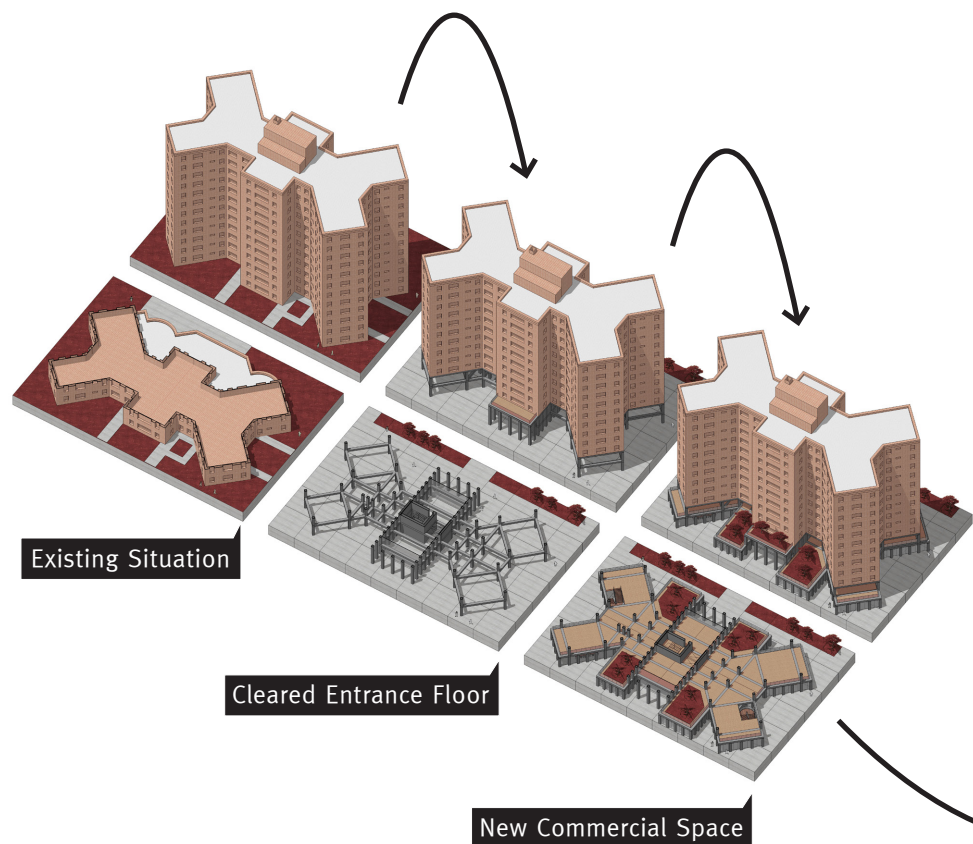
The Three Intervention Typologies: Commercial, Cultural, Urban Farming
Source: Diagram by Author.

P R I N C I P L E S



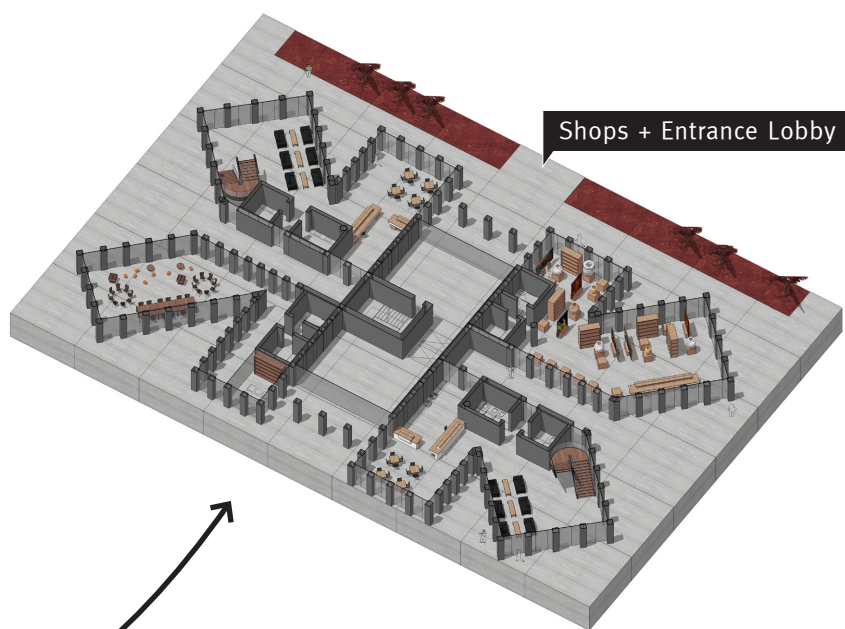
Exploded Axonometric of a Potentially Rehabilitated NYCHA Tower
Source: Diagram by Author.

T O W E R



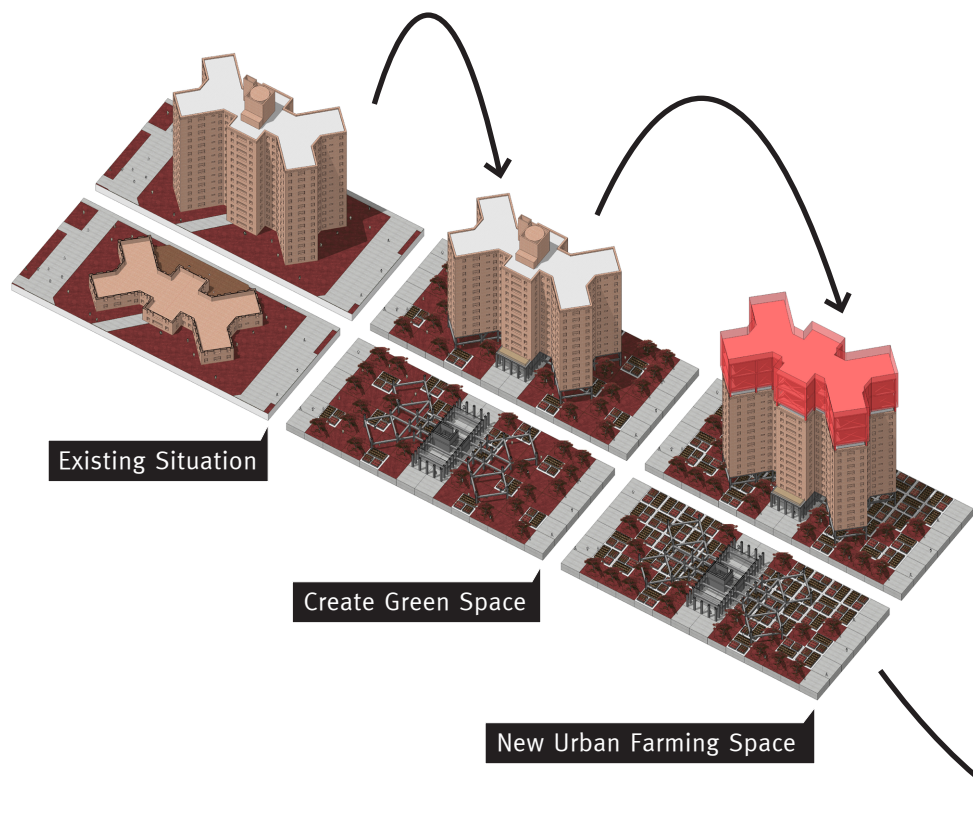
Three Steps to Make a Commercial Palimpsest Intervention in the Tower
Source: Diagram by Author.

P R I N C I P L E S



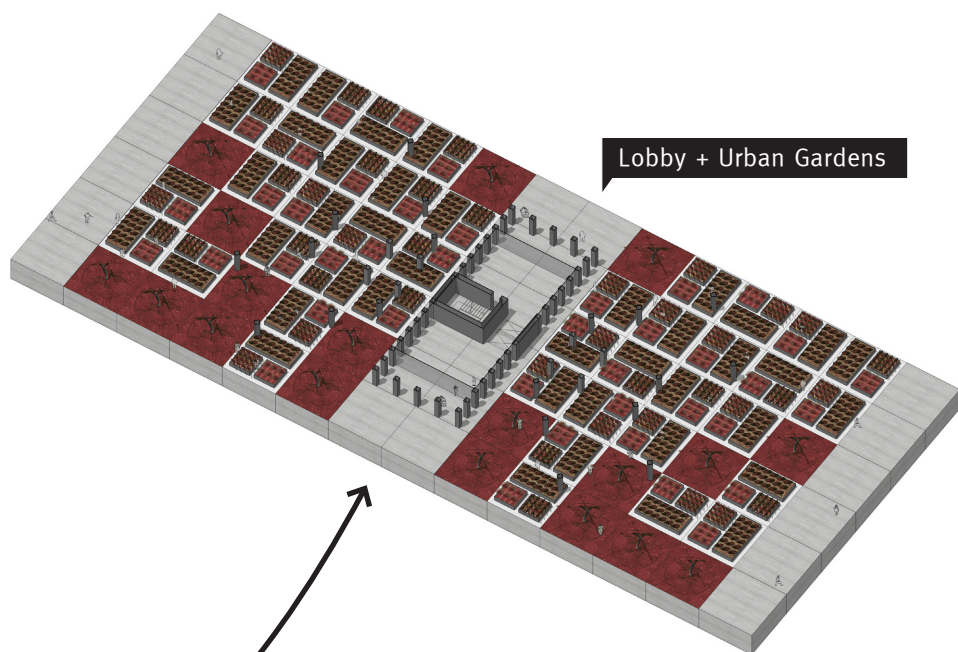
The Available Functions in the Commercial Palimpsest Intervention
Source: Diagram by Author.

T O W E R



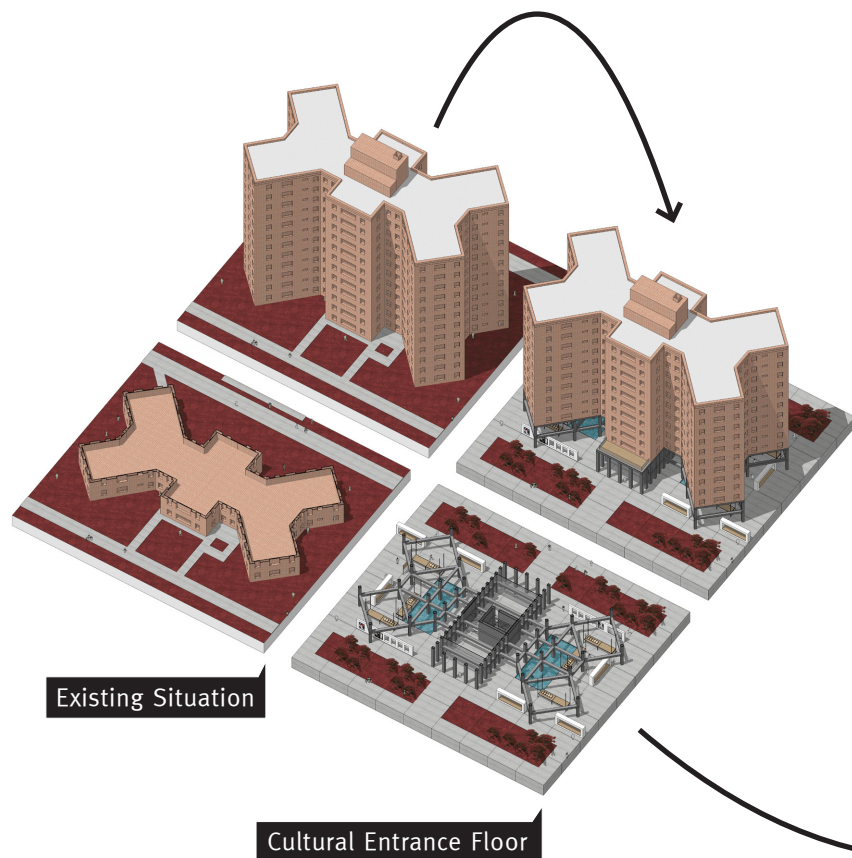
Three Steps to Make an Urban Farming Palimpsest Intervention in the Tower
Source: Diagram by Author.

P R I N C I P L E S



The Available Functions in the Urban Farming Palimpsest Intervention
Source: Diagram by Author.

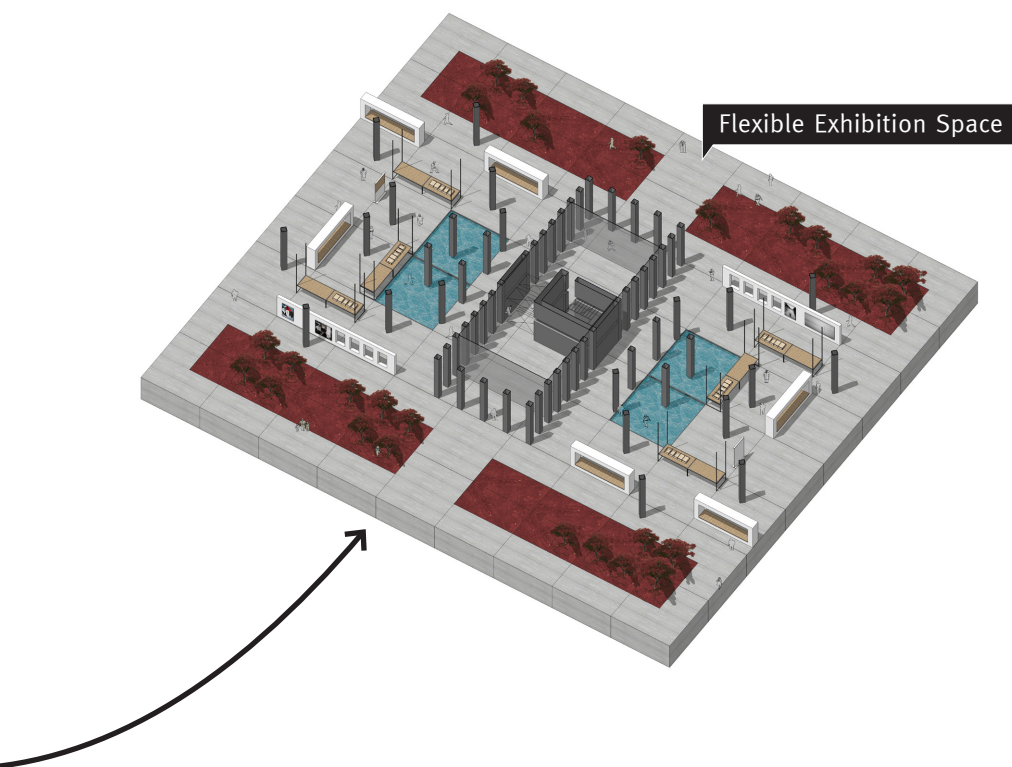
T O W E R



Two Steps to Make a Cultural Palimpsest Intervention in the Tower

Source: Diagram by Author.

P R I N C I P L E S



The Available Functions in the Cultural Palimpsest Intervention
Source: Diagram by Author.



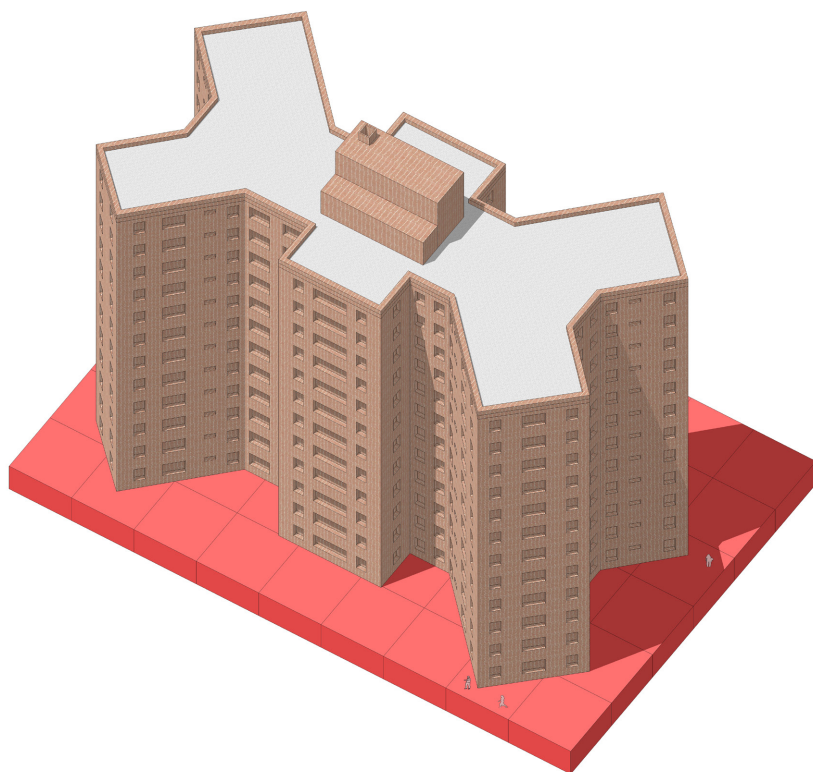


T O W E R

1. CONTAINING REHABILITATION

Any palimpsest intervention shall be contained within the parcel designated to the social housing apartment tower.

The purpose of this strictness is to reiterate the fact that their responsibility has been reduced so that the organization can focus on maintaining the wellbeing of the apartments that their clients live in.



All Interventions Should Manifest Themselves within the Parcel
Source: Created by Author from Sketchup and Placemaker Plugin

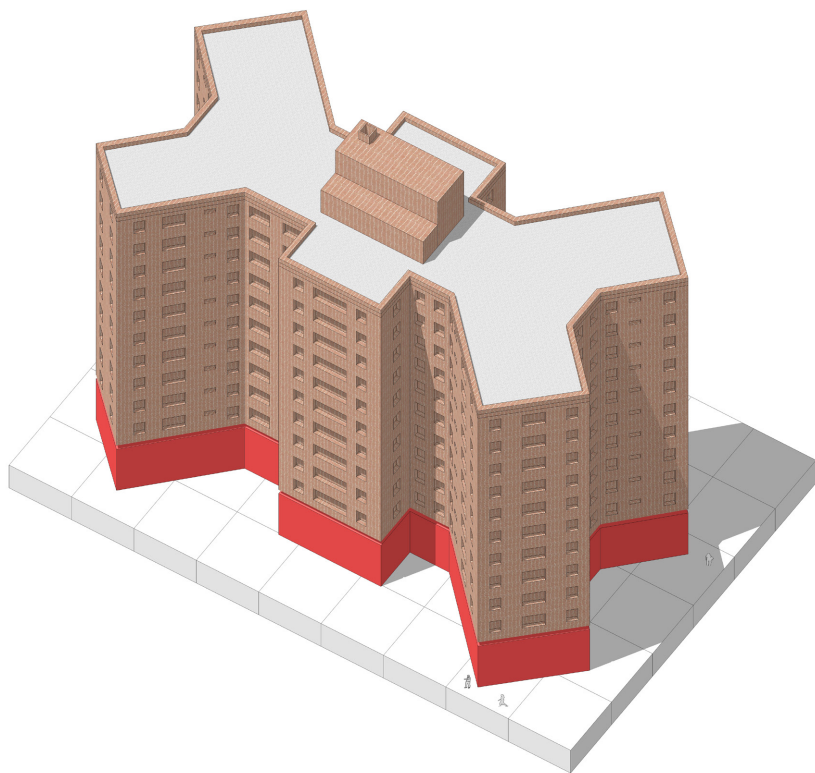
PARCEL RULES

2. CREATING A CLEAR SEPARATION

The program of the first two floors shall be removed to create space for new functions that are not private housing.

This is done to create a clear separation between the apartments above, and the public space on the ground,

Another positive to this rule is that making an intervention at this level provides an intermediate space between public and private, adding more depth to the hierarchy of space in the social housing projects.



Making Space for an Active and Public Intermediary Space
Source: Created by Author from Sketchup and Placemaker Plugin

T O W E R

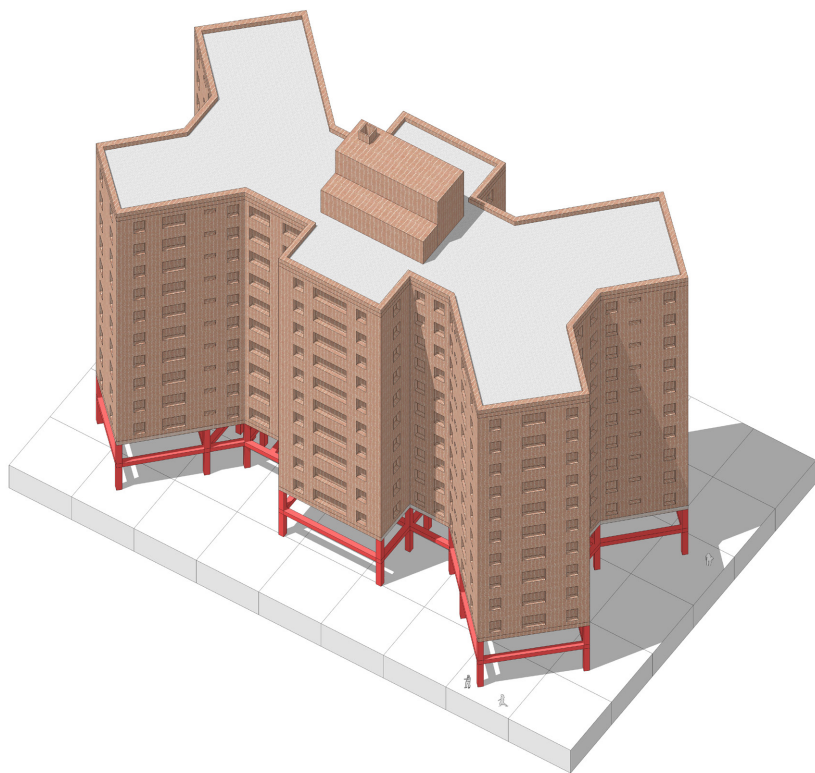
3. PRESERVING THE STRUCTURE

Any intervention that happens at the ground floor of the towers needs to preserve the main structure of the tower.

People will still be living in the tower as NYCHA start rehabilitating the apartments within it.

Therefore, the main structure of the tower needs to remain intact.

Any proposal should also integrate the structure into its own design, so there is a symbiotic relationship established between the new and the old.



Preserving the Structure of the Tower

Source: Created by Author from Sketchup and Placemaker Plugin

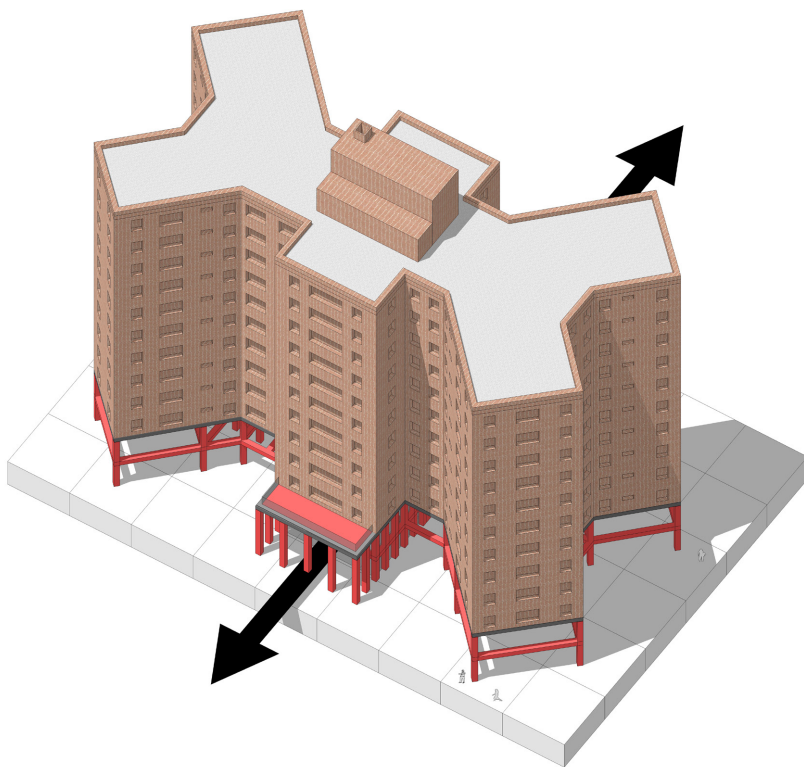
PARCEL RULES

4. IMPROVE ENTRANCE LOBBY

Regardless of the program or zoning needs at the base of the tower, an entrance lobby should be developed that can be accessed from multiple sides.

The reason for this is that the current entrances to the towers are quite small and hard to find.

They do not exhibit any positive intermediary space between private and public areas, therefore reducing a inhabitants sense of connection and belonging to the community.

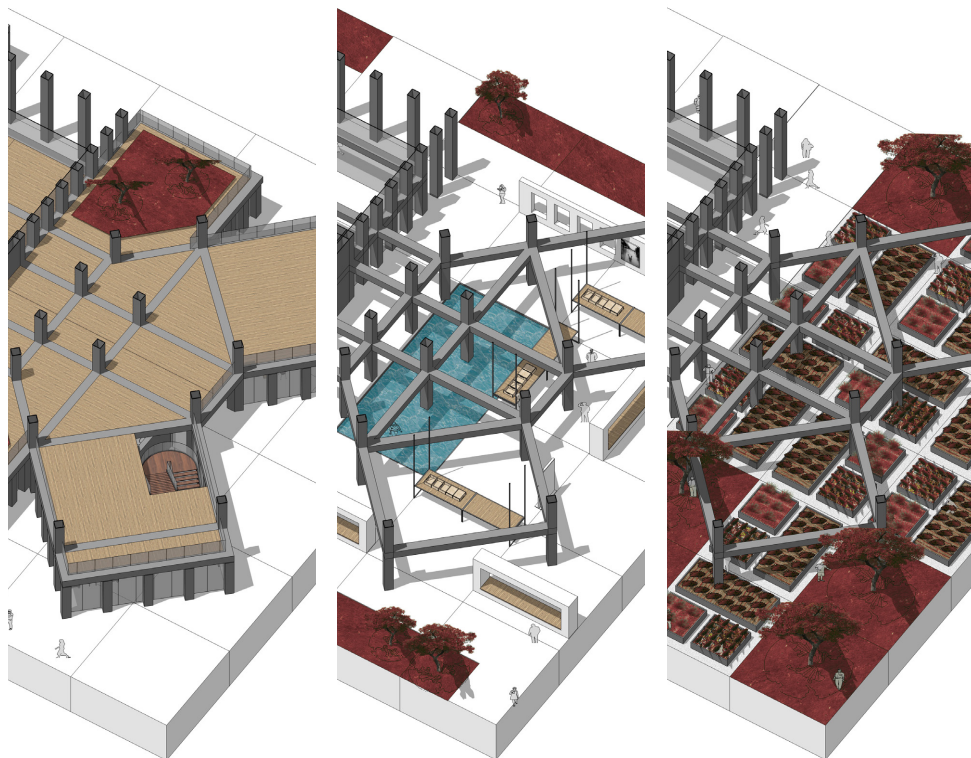


Using the Lobby as a Transitional Pubic Space
Source: Created by Author from Sketchup and Placemaker Plugin

4. CREATING A TRANSITIONAL SPACE

Any intervention should act as a transitional space between the public space and the housing, and therefore should also have a very clear visual separation between the them.

When creating commercial space, this separation can be enhanced with terraces and green roofs.



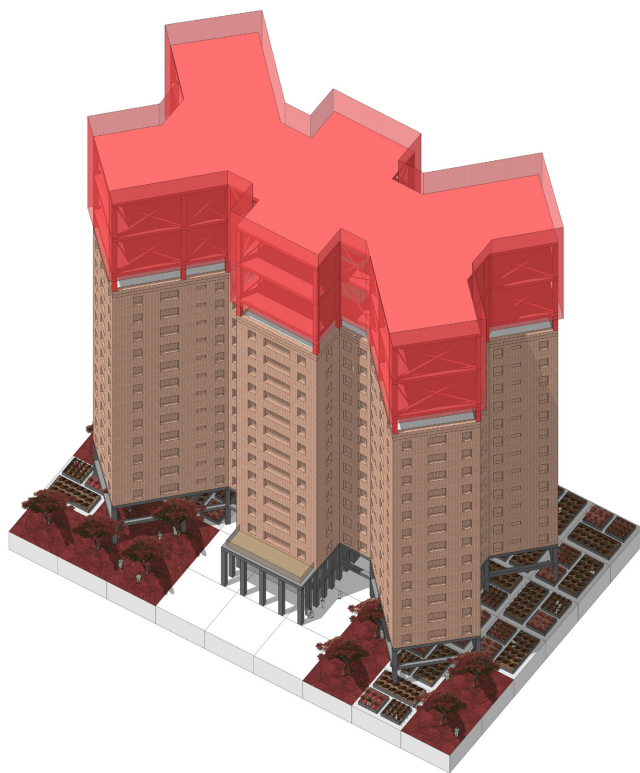
Providing Secondary Paths Underneath the Housing Blocks
Source: Created by Author from Sketchup and Placemaker Plugin

P A R C E L R U L E S

5. SEMI-PRIVATE GREEN TERRACES

An urban farming structure can be added to the rooftops of center towers.

Doing so will provide a communal, yet productive and educational, space for residents to learn and produce food for themselves.

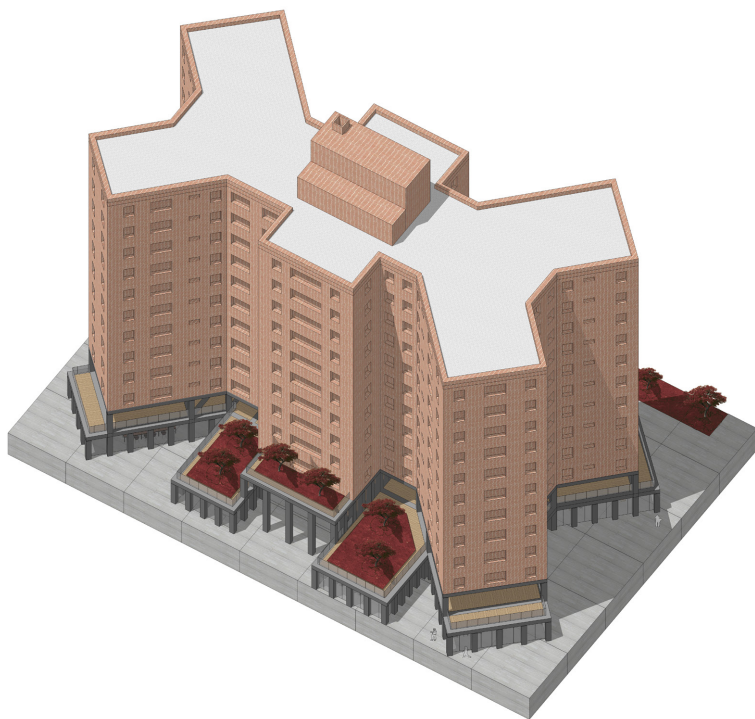


Creating Garden Terraces for the Inhabitants of the Housing Blocks
Source: Created by Author from Sketchup and Placemaker Plugin



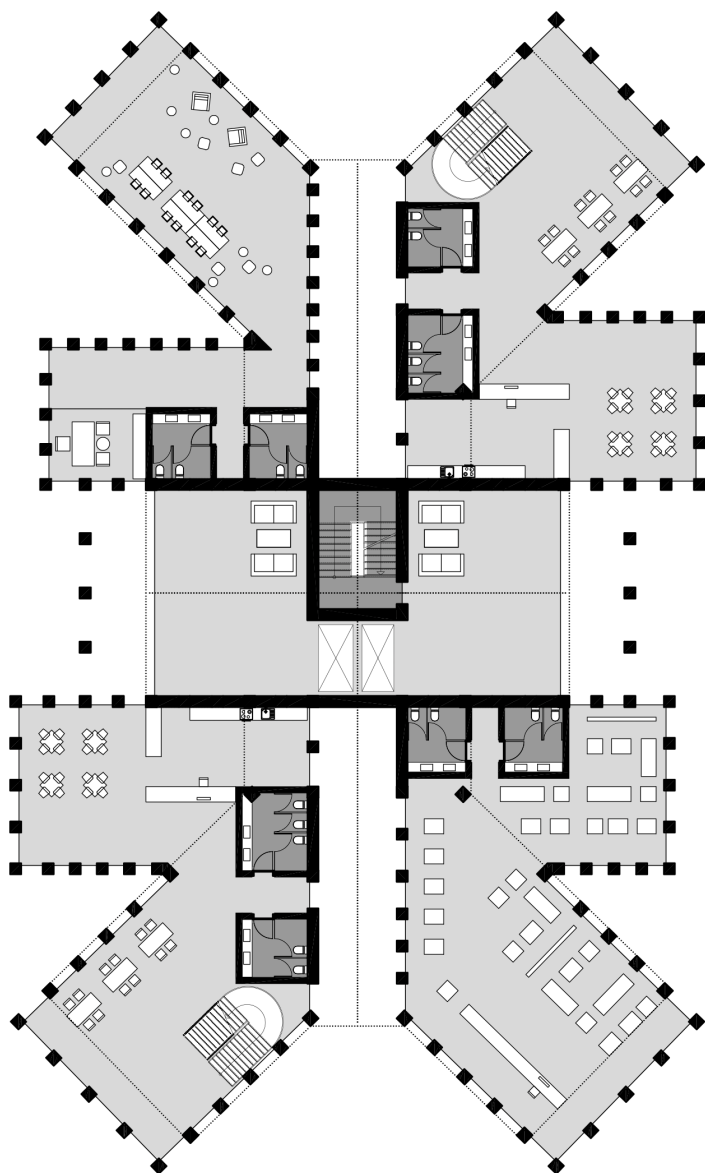


T O W E R



The Palimpsest Commercial Base
Source: Diagram by Author.

DETAILS



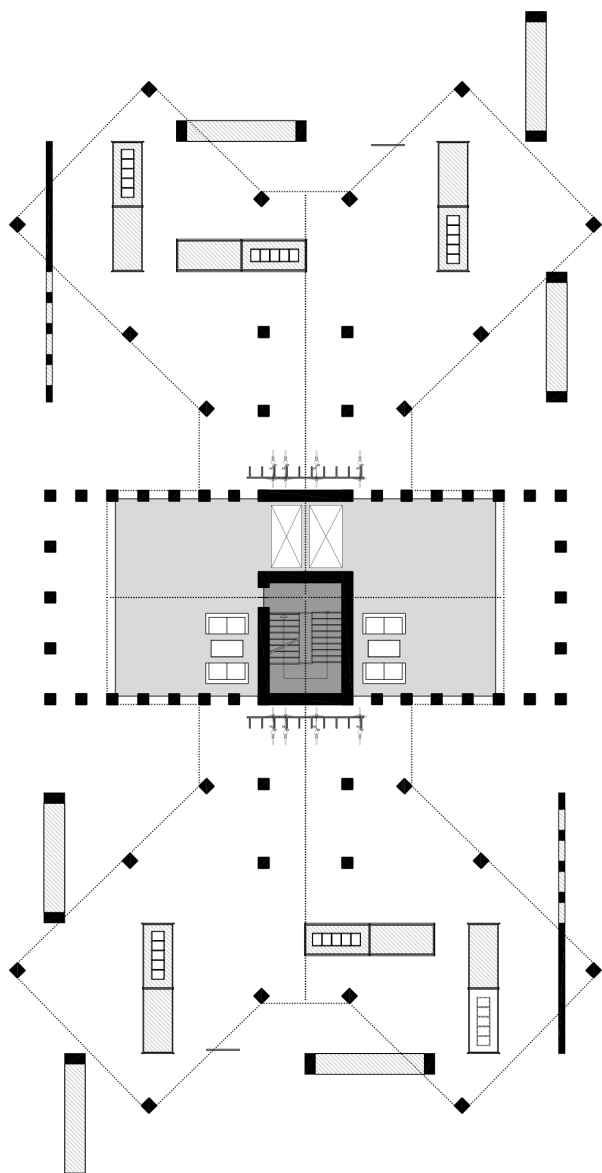
Ground Floor Plan of the Commercial Base in the NYCHA Tower
Source: Plan by Author.

T O W N E R



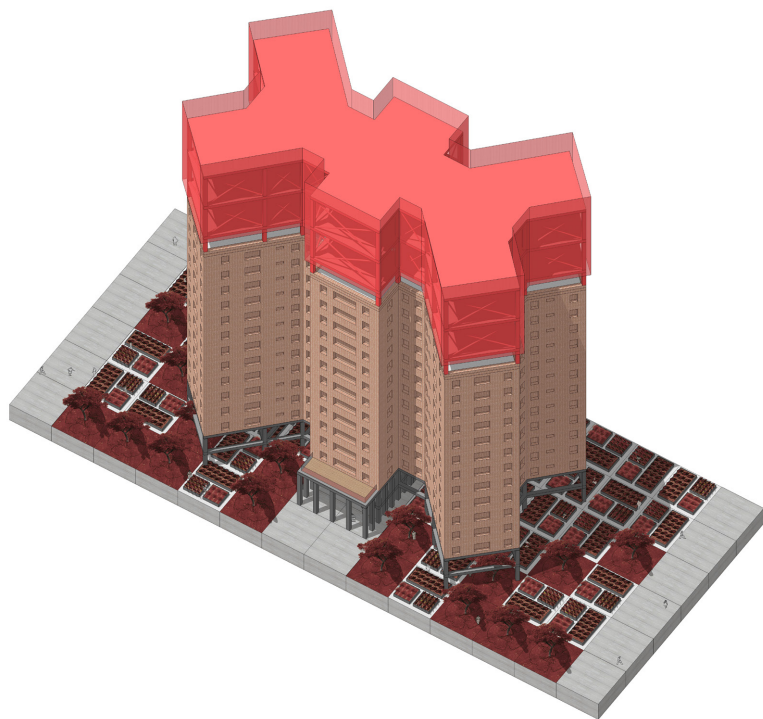
The Palimpsest Cultural Base
Source: Diagram by Author.

DETAILS



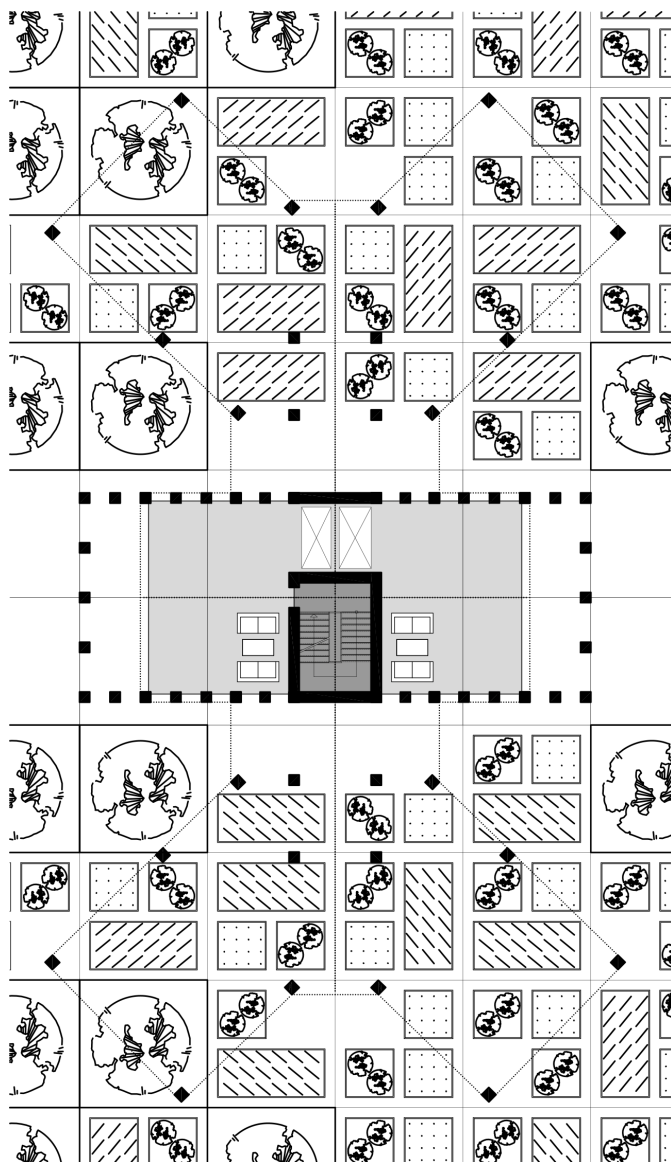
Ground Floor Plan of the Cultural Base in the NYCHA Tower
Source: Plan by Author.

T O W E R



The Palimpsest Urban Farming Base
Source: Diagram by Author.

DETAILS



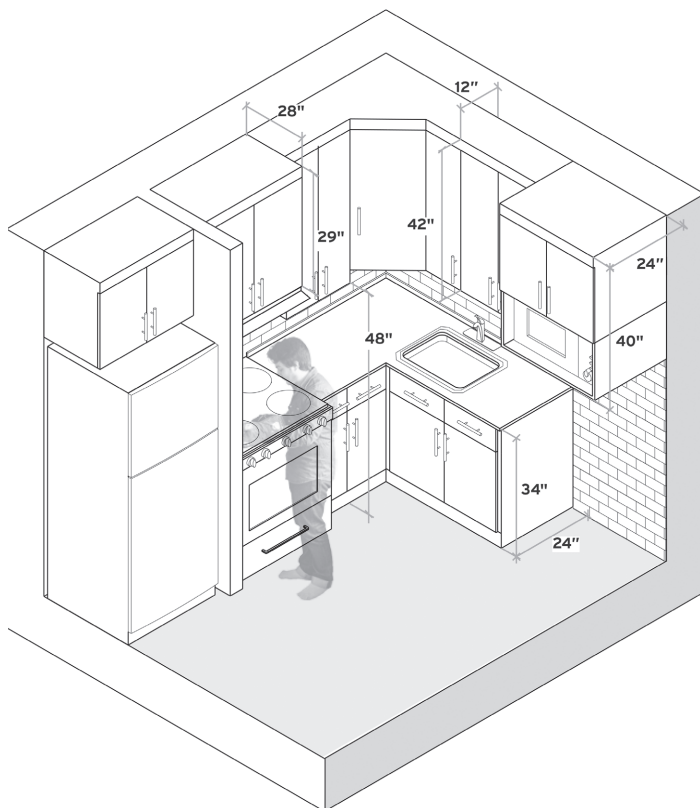
Ground Floor Plan of the Urban Farming Base in the NYCHA Tower
Source: Plan by Author.

T O W E R

REHABILITATION PLAN

In addition to these changes, the interiors state of the towers will also be rehabilitated to a level that brings a higher quality of living to their inhabitants. The plan that sets fourth to achieve these goals was outlined in a report by NYCHA is entitled Design Guidelines - Rehabilitation of NYCHA Residential Buildings (2017), which is part of an overall strategy (Next-Generation NYCHA) to improve the current living standards of their apartment buildings.

This report claims that the repairs will be extensive, ranging from site amenities and landscaping, to the exteriors of buildings, rooftops, and apartment interiors (Design Guidelines, 2017). The report goes into detail in terms of what standards need to be met in these repairs, but does not explain how it will be funded. The transformational framework attempts to answer this issue.



New features:

Taller wall cabinets provide more storage.

Wall cabinet for microwave saves counter space.

For durability:

Provide 4" Integral backsplash

Cabinets should consist of 5-ply side panels with solid hard wood face frame and 7-ply wood doors. Use minimum 170 degree hinges.

Sustainability standards:

Kitchen faucet water conservation standard: 1.5 gpm

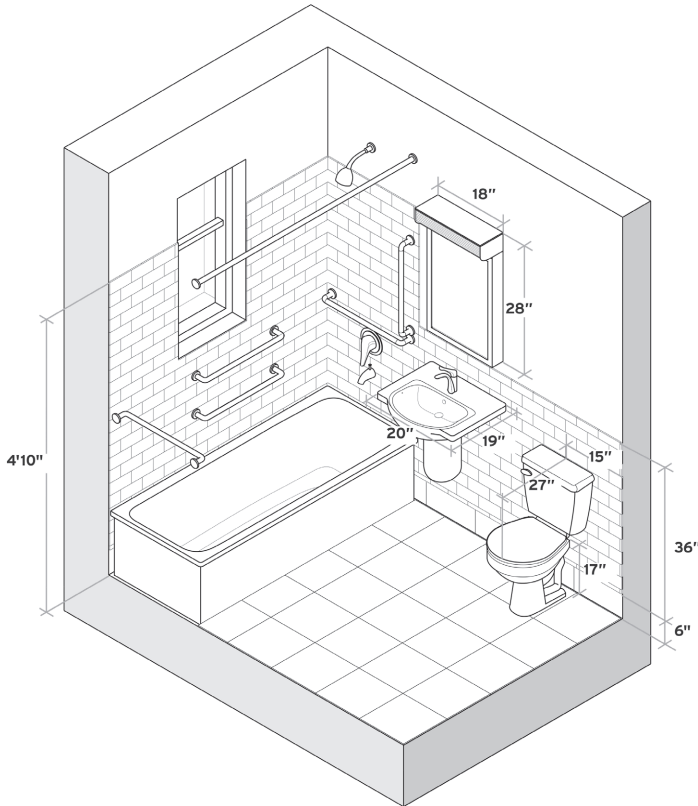
All appliances provided are ENERGY STAR Certified

For cabinets use wood products that emit little or no formaldehyde.

Floor and wall finish must use low- or no-volatile organic compound (VOC) caulks, paints, primers, coatings, and adhesives.

New Kitchen Standards to be Implemented by NYCHA
Source: Design Guidelines Rehabilitation of NYCHA Residential Buildings (2017)

DETAILS



New features:

Bigger medicine cabinets with wall-mounted LED Light

Increased number of grab bars for safety

Better walls and floor materials protect against water damage and mold.

Solid tub and wall surrounds and larger base tiles are more durable and help better prevent water damage.

Vitreous china sinks reduce long-term maintenance cost.

Sustainability standards:

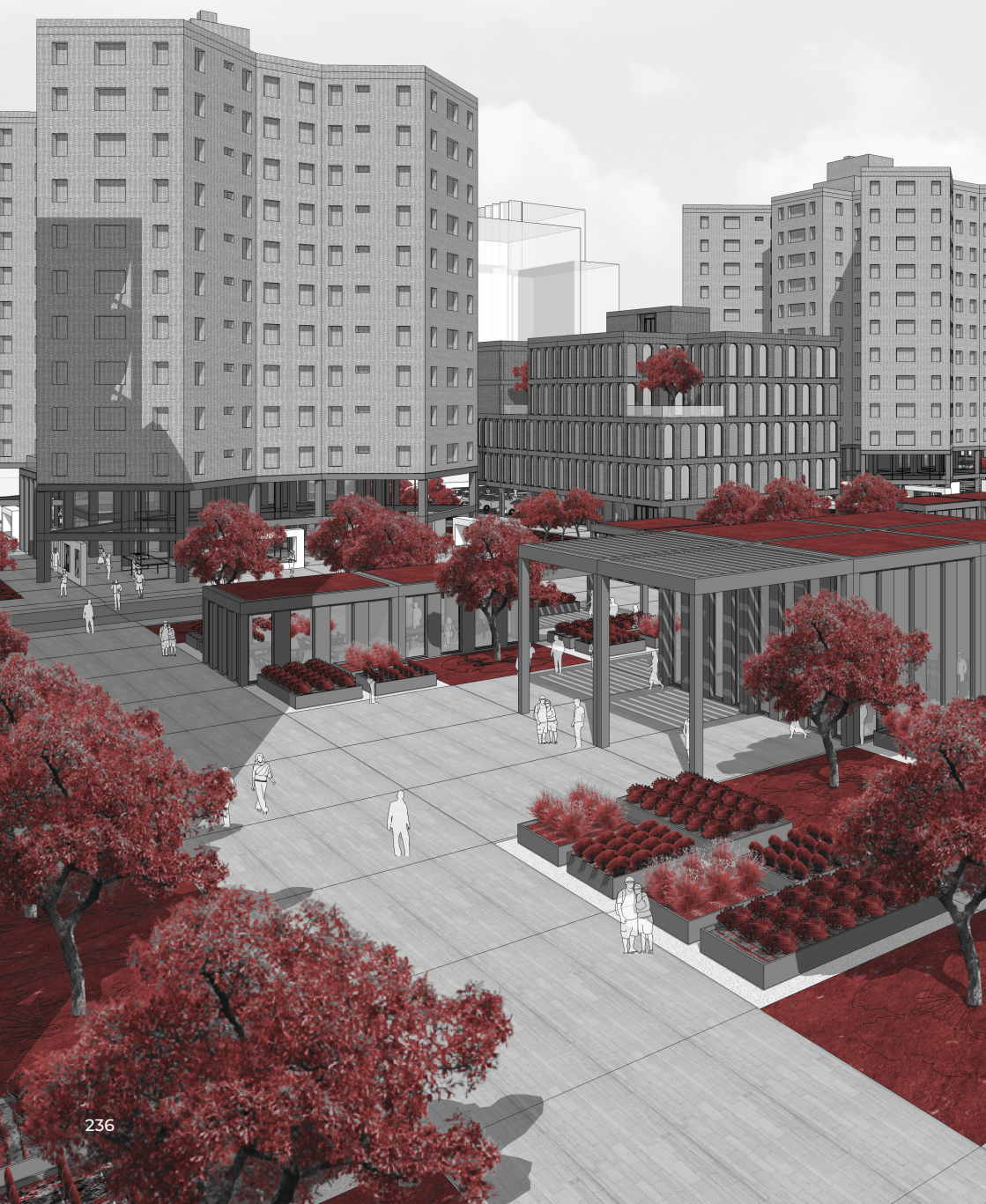
Water conservation standard:
Toilet 1.28 gpf

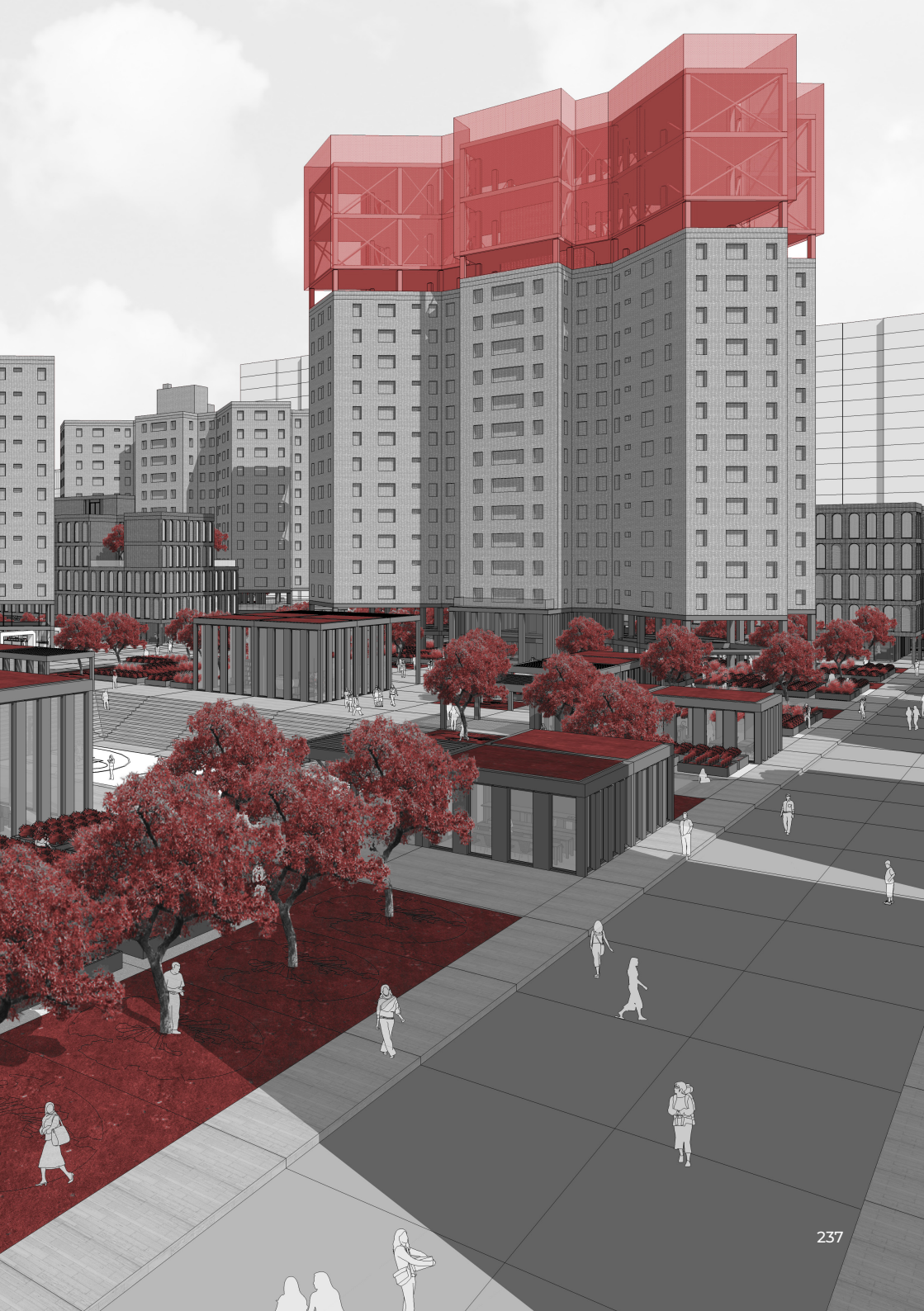
Lavatory faucet: 1.0 gpm or less

Shower head: 1.5 gpm

New Bathroom Standards to be Implemented by NYCHA
Source: Design Guidelines Rehabilitation of NYCHA Residential Buildings (2017)

LANDSCAPE DESIGN



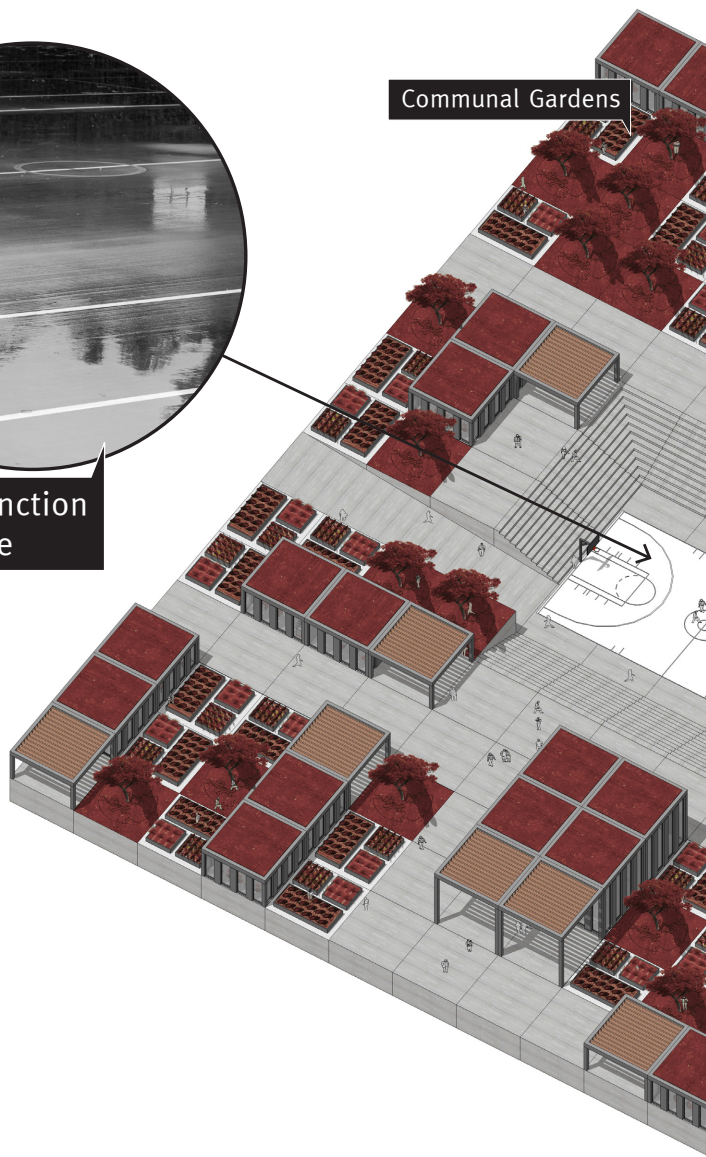


LANDSCAPE

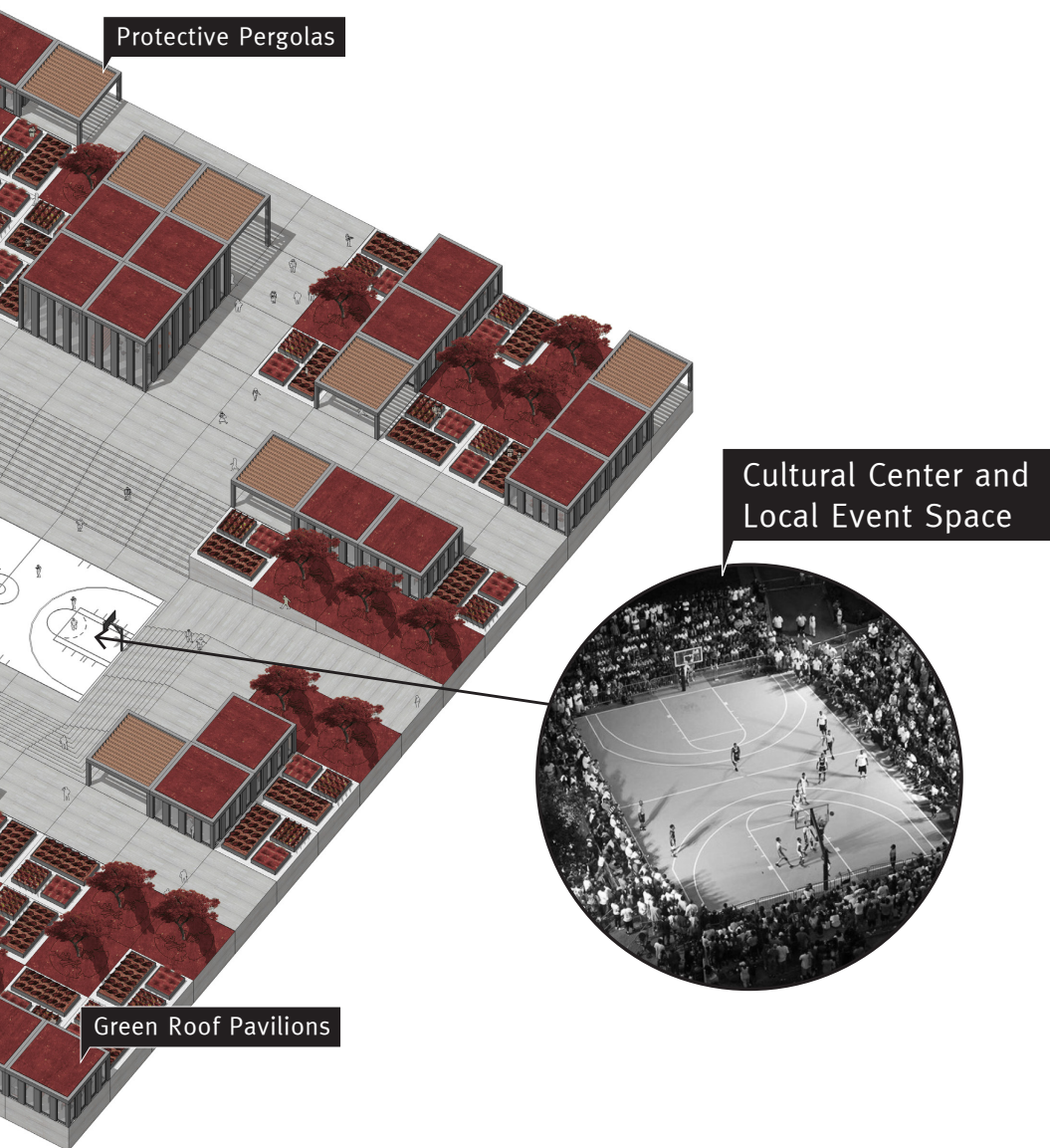


The Court Will Function
as a Water Square

Communal Gardens

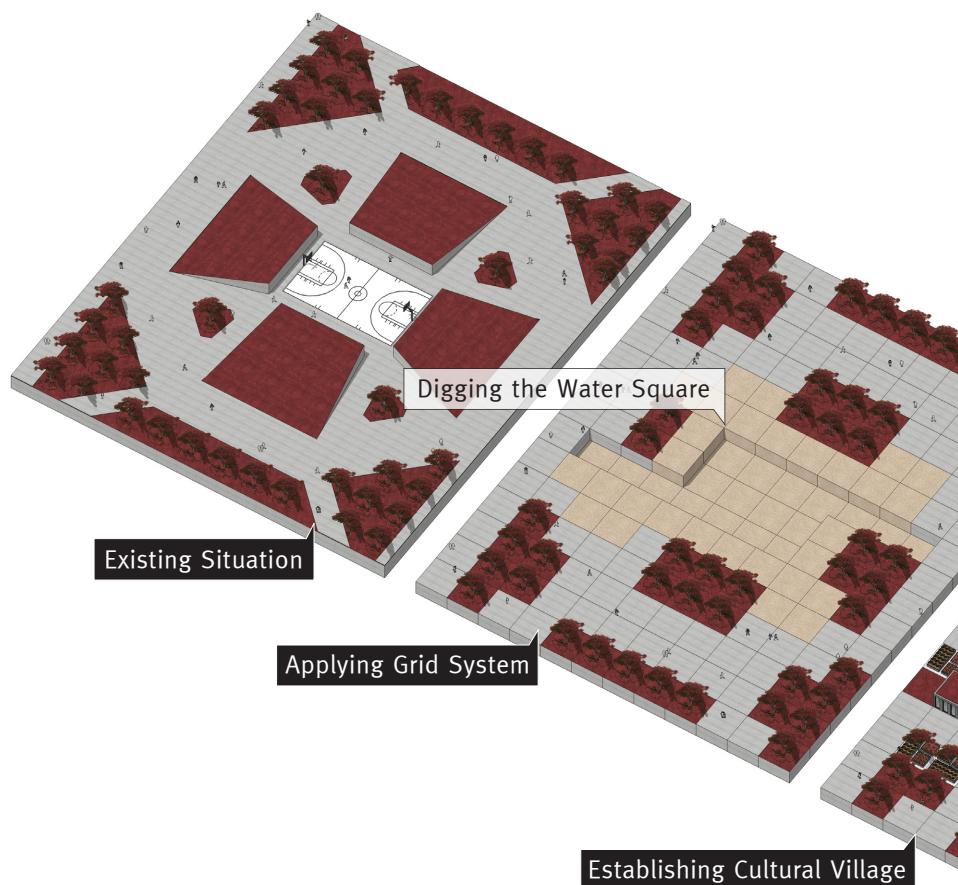


P R I N C I P L E S



Axonometric Close Up of the Pavilions Socio-Cultural Center
Source: Diagram by Author.

LANDSCAPE



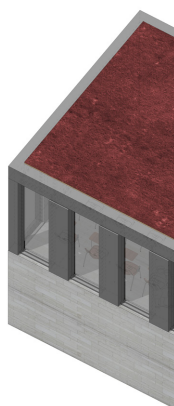
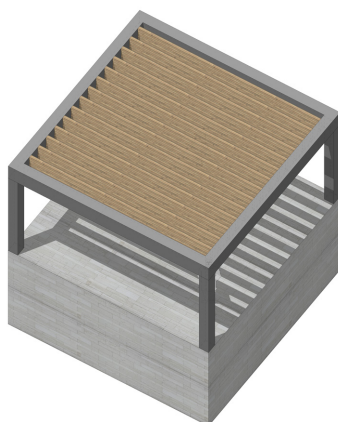
P R I N C I P L E S



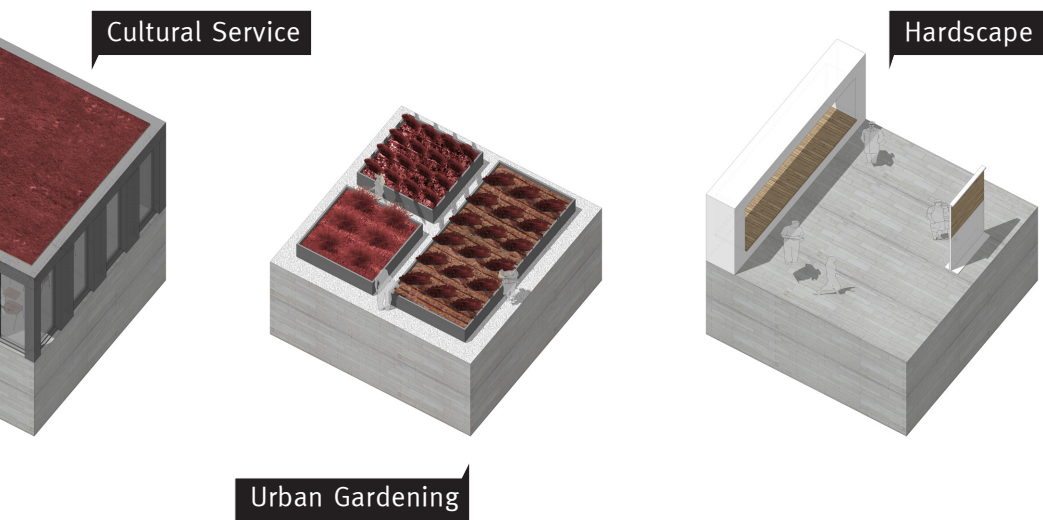
Fully Developed Cultural Village

The Development of the Socio-Cultural Center Over Time
Source: Diagram by Author.

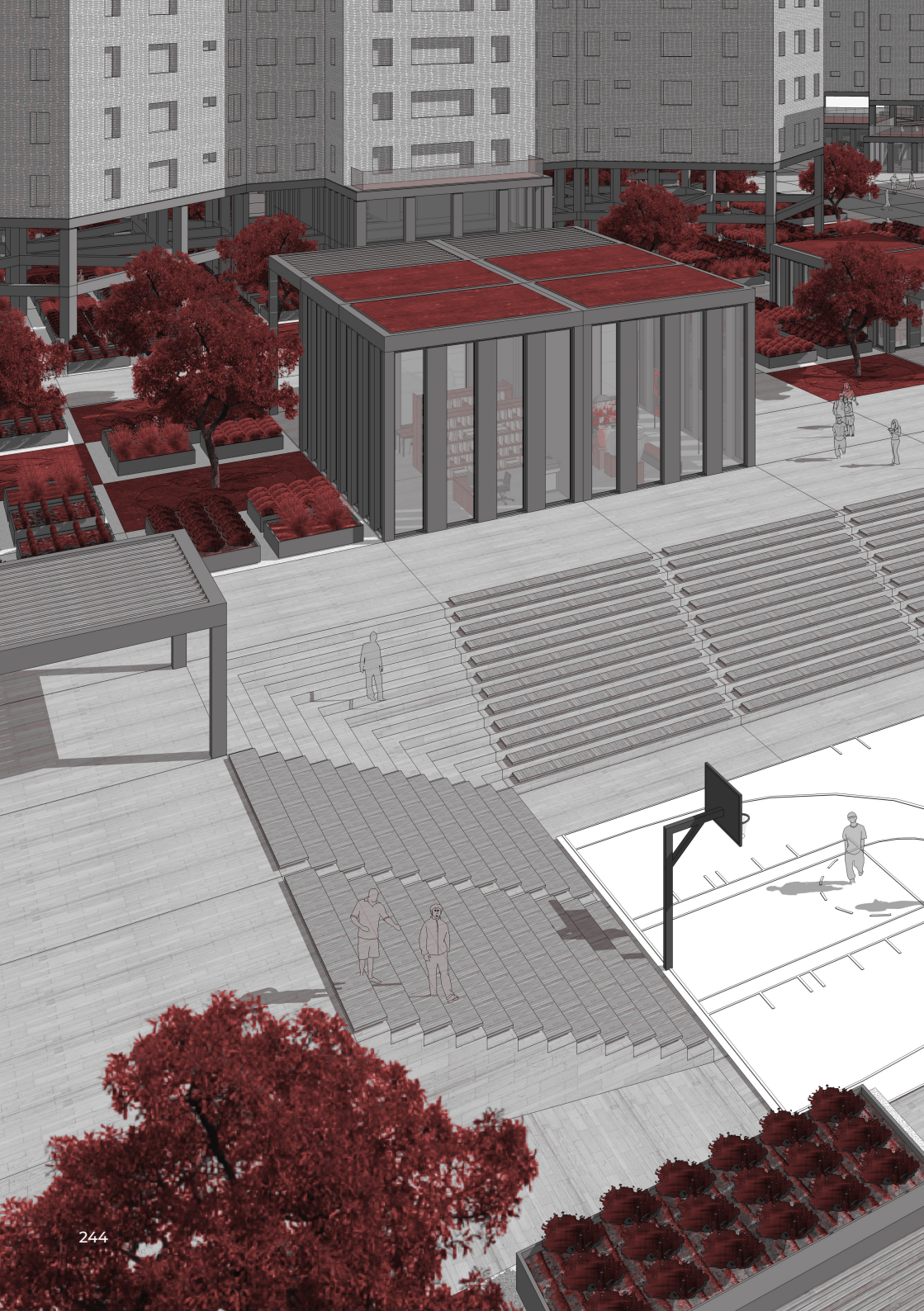
LANDSCAPE

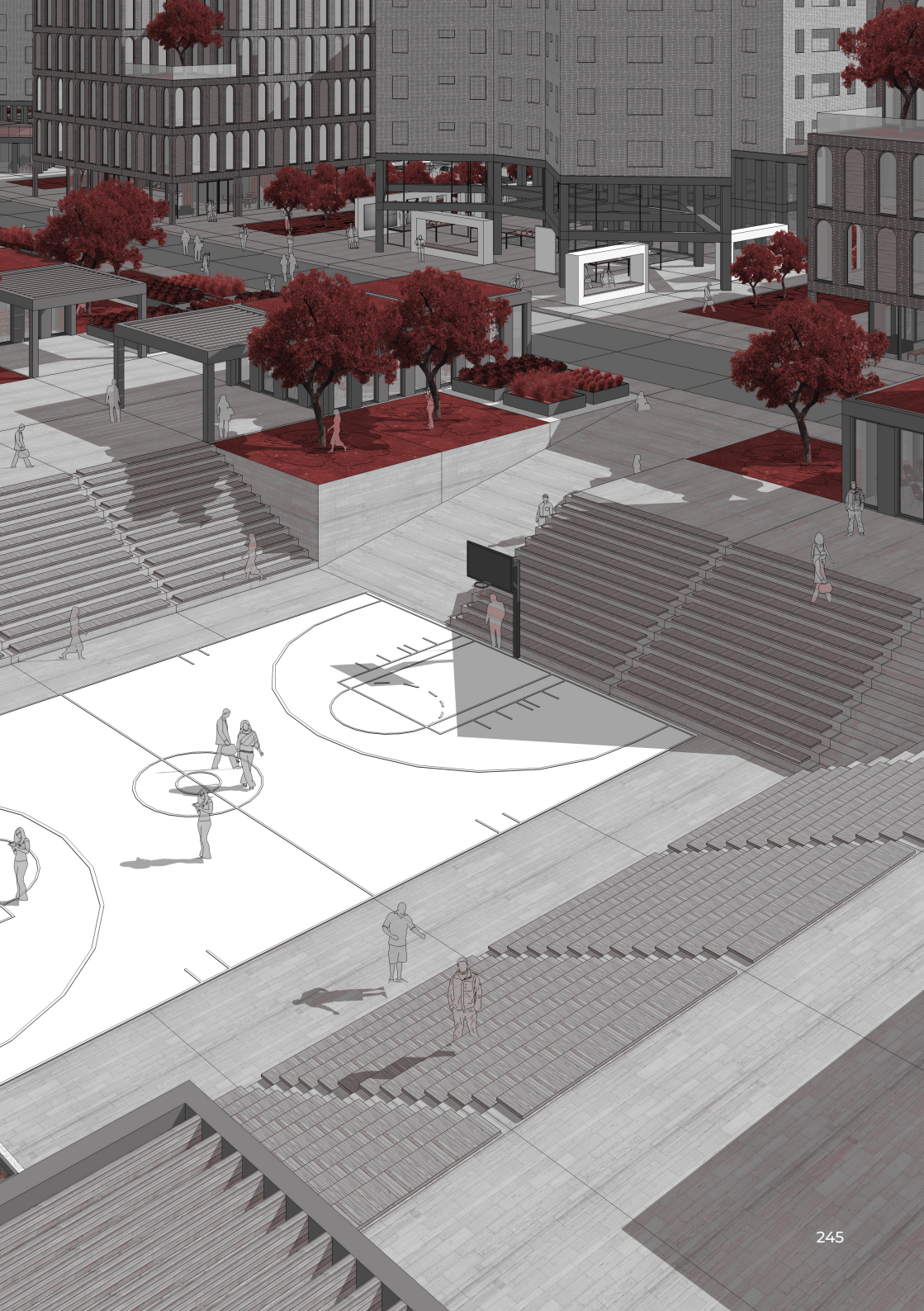


P R I N C I P L E S



The Grid Makes Possible the Various Components that can Exist in the Landscape
Source: Diagram by Author.





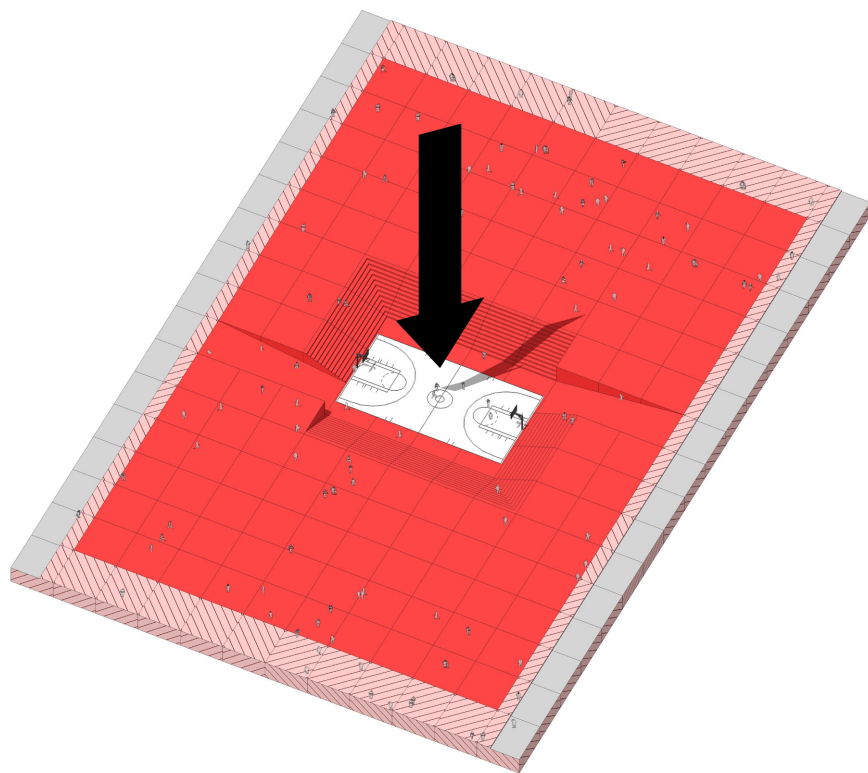
LANDSCAPE

1. RECREATING AN ACTIVE CENTER

The special zoning in the central parcel restricts functions to sociocultural program.

Therefore, if there are any public or meaningful social elements within the parcel, then they must be integrated into the overall site. In this specific situation, there is a basketball court in the center, where many sports and other social events happen during the year.

This element is part of the identity of the neighborhood, so it must be treated with care. Doing so protects the heritage of the social housing project, and leaves something familiar within the sociocultural center. Integrating seating into the landscape emphasizes the importance of the court, and makes something that is already existing there new and exciting.



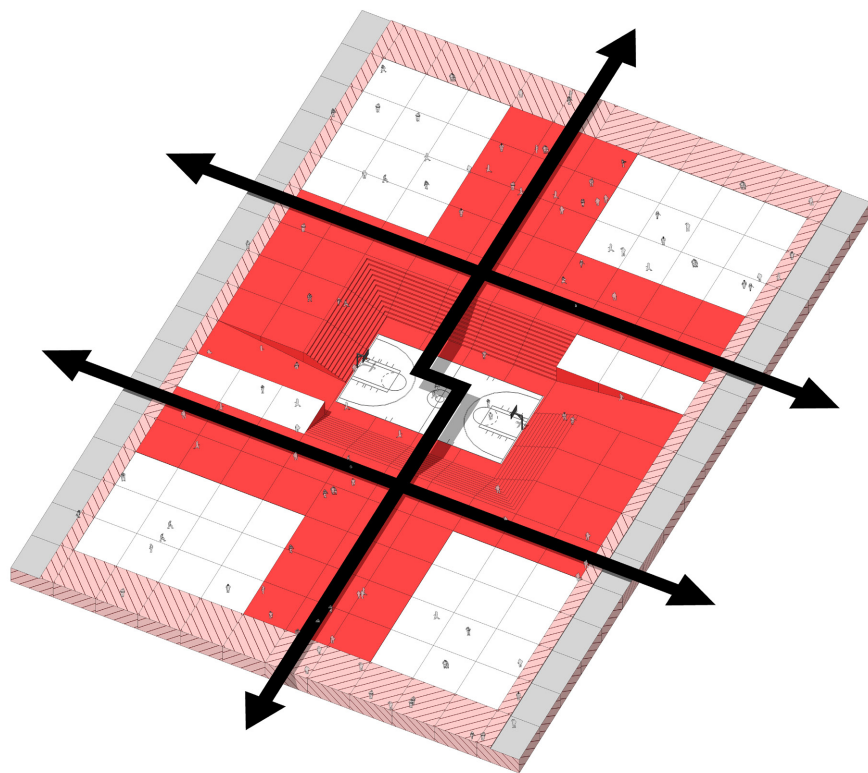
Submerging and Integrating the Court into the Sociocultural Center
Source: Created by Author from Sketchup

PARCEL RULES

2. STRENGTHENING PEDESTRIAN CIRCULATION

One of the main issues of the preexisting green space is the limited mobility and access regarding circulation. Therefore, one of the main design objectives is to enhance the user experience in this regard by making sure paths are clear, public, and engaging.

The spaces not intruding on the circulation retains its characteristic as green space. Preserving the greenery is necessary to the sociocultural center, as it is an essential part of the main design objectives of the original planners of the social housing projects. It also preserves the character that defines the neighborhood, and again leaves something familiar to the inhabitant, yet is re-framed in a new and exciting way.



Enhancing the Relationship Between Circulation and Green Space
Source: Created by Author from Sketchup

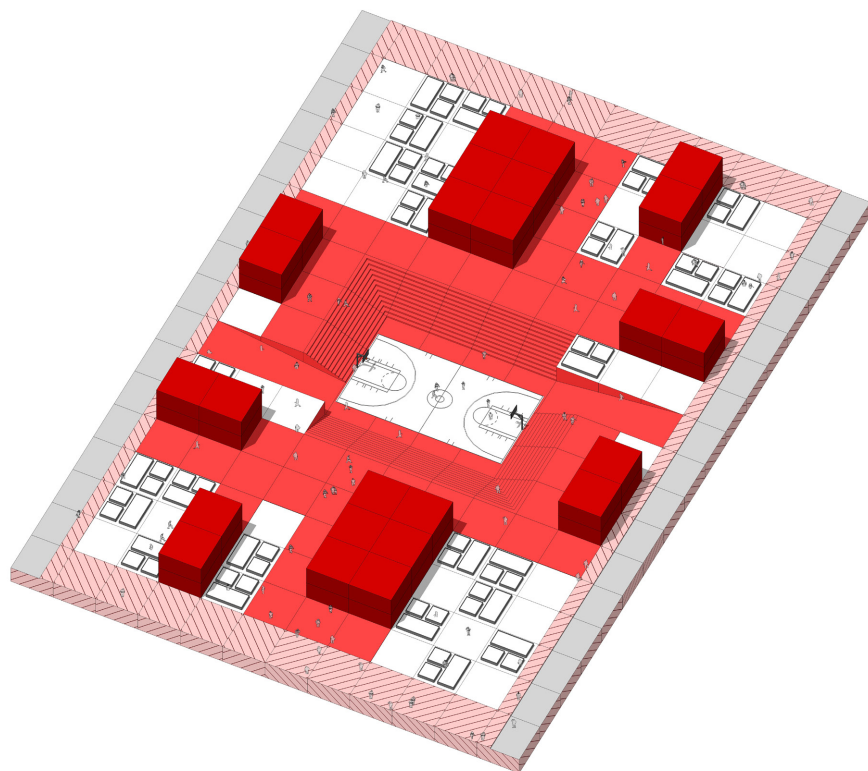
LANDSCAPE

3. CREATING PAVILIONS AND URBAN GARDENS

All potential buildings are restricted to 2 stories high, as per dictated by the proposed zoning ordinance overlay.

There are no restrictions on the size of the pavilions, but they need work without creating an impediment towards pedestrian circulation.

Various plots within the green space will be open to leasing, under the management of the NYC Dept. of Parks and Recreation. The amount of available plots will change over time, according to the demand from around the neighborhood.



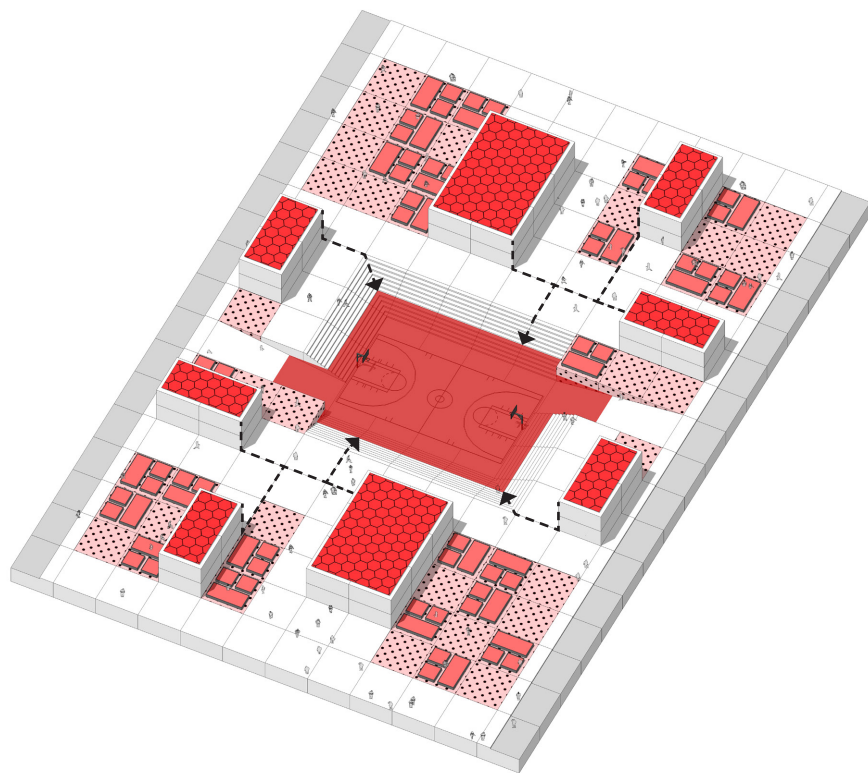
Adding a Layer of Pavilions and Urban Gardens to the Center
Source: Created by Author from Sketchup

PARCEL RULES

4. CLIMATIC RESPONSIVE DESIGN ELEMENTS

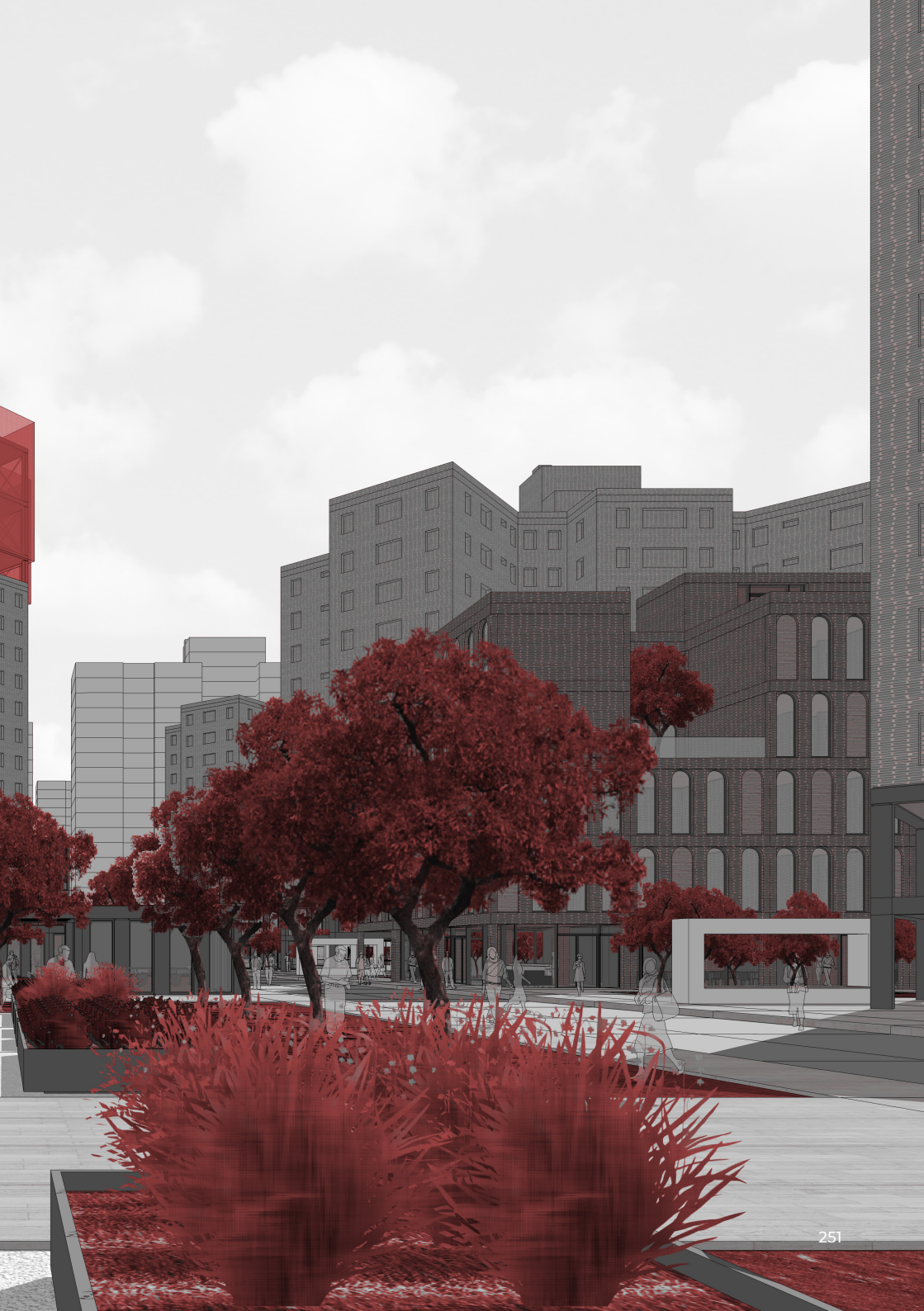
One of the guiding principles for the sociocultural center comes from the “New Three C’s,” and is based on the conservation of natural resources. The aim of this space is to make it an active and productive landscape. Therefore, climatic responsive design elements are required to complete the sociocultural center.

Climate responsive design elements are fused with the center. Issues regarding flood management, water filtration, and the preservation of green space are all acknowledged in the sociocultural center. The basketball court acts as a water square, the green roofs of the pavilions help collect gray water, and the green areas soak up whatever is left.

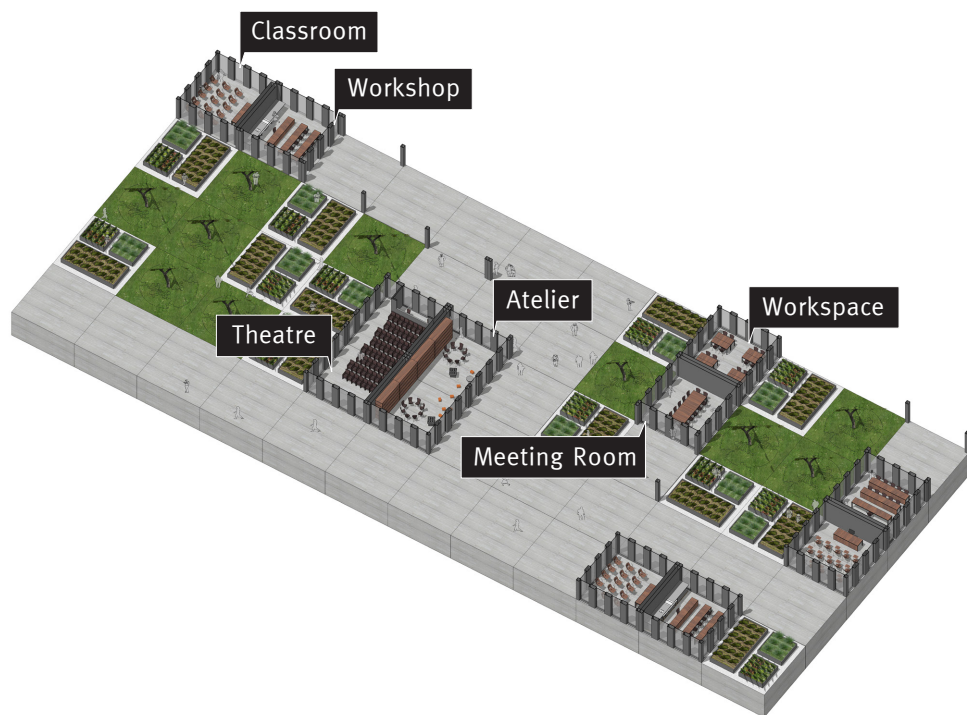


Integrating Climate Responsive Design to the Center
Source: Created by Author from Sketchup



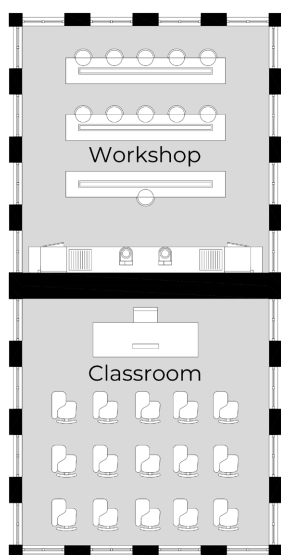
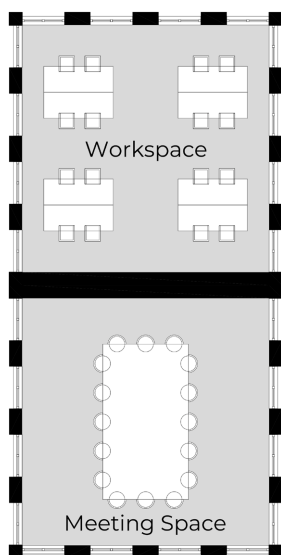


LANDSCAPE



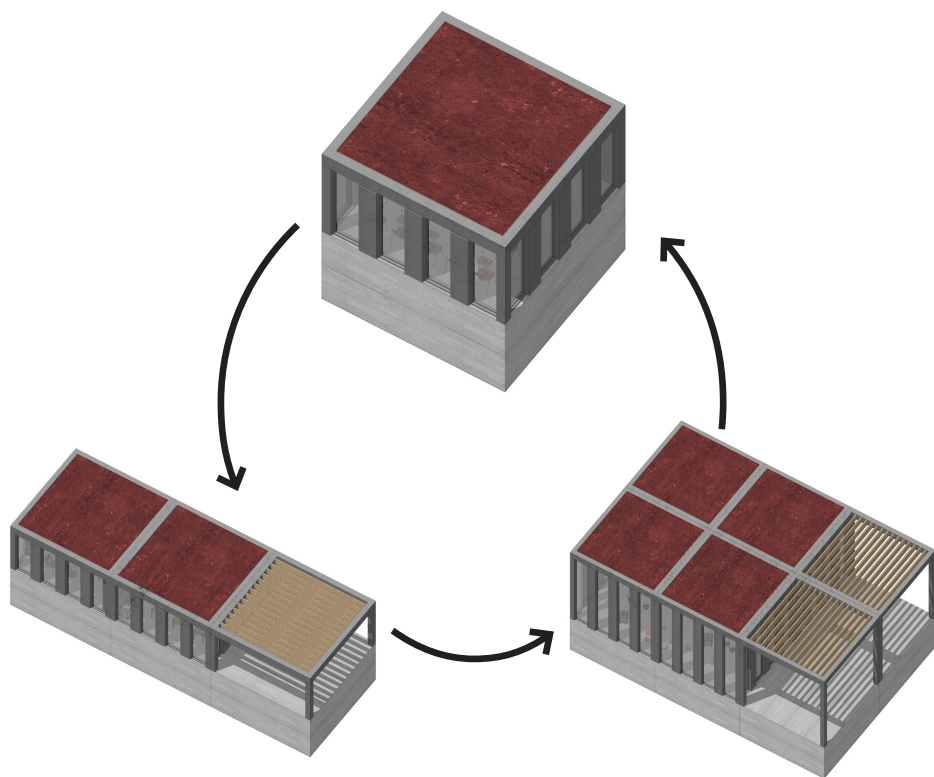
Section Cut Plan of a Zoom Into the Organizational Structure of the Socio-Cultural Center
Source: Created by Author from Sketchup and Placemaker Plugin

D E T A I L S



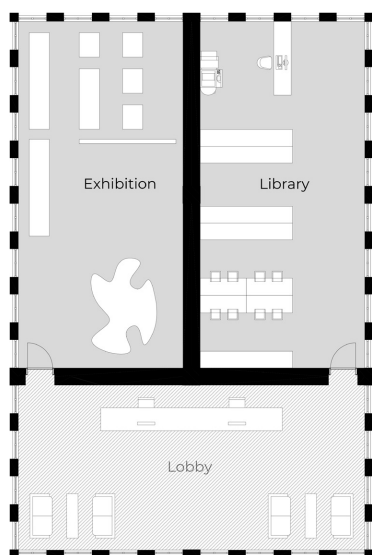
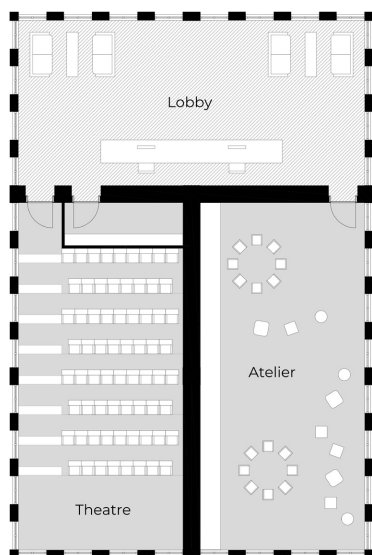
Ground Floor Plans of the Small Pavilions in the Center
Source: Plan by Author.

LANDSCAPE



Self-Determination through the Flexibility of Modularity
Source: Created by Author from Sketchup and Placemaker Plugin

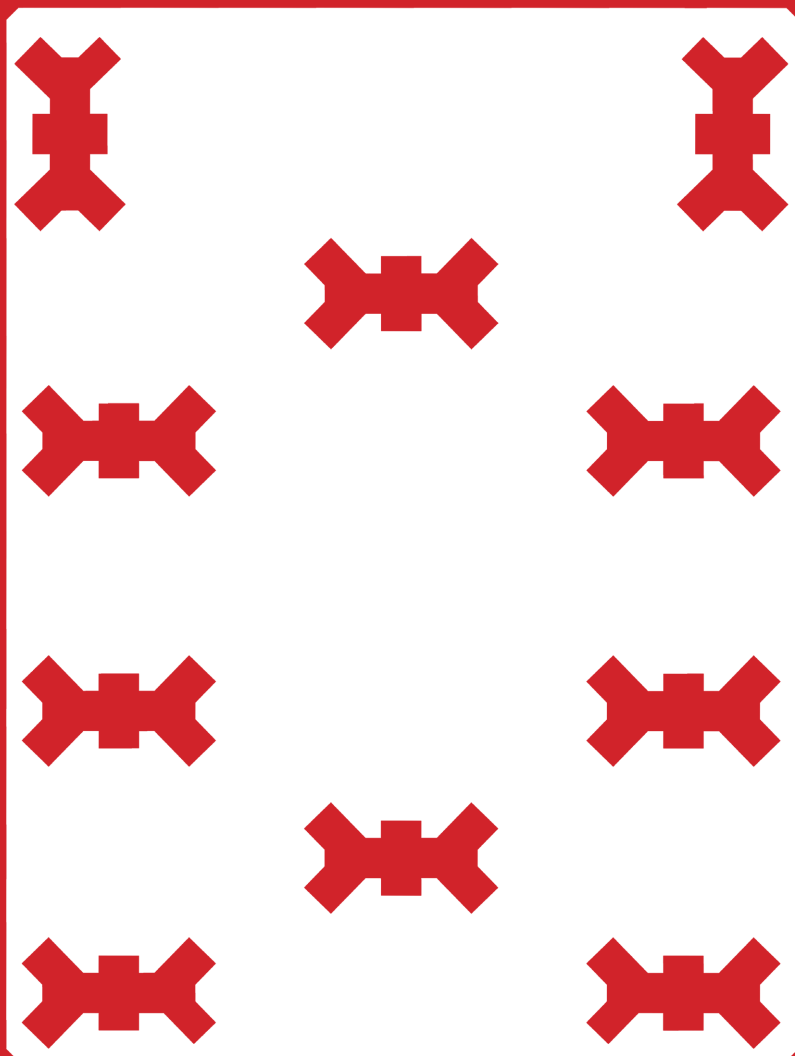
D E T A I L S

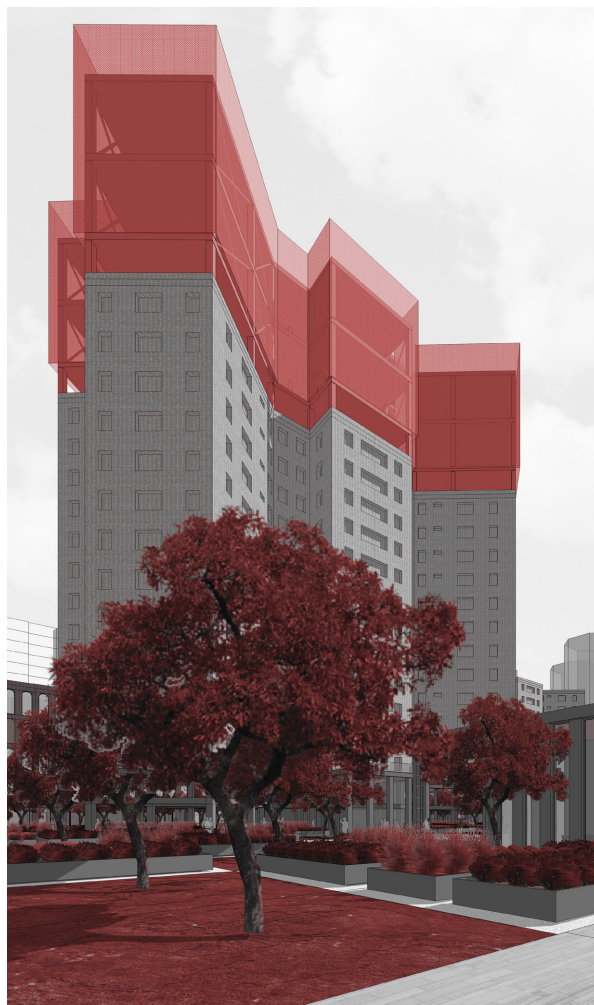


Ground Floor Plans of the Larger Pavilions in the Center
Source: Plan by Author.



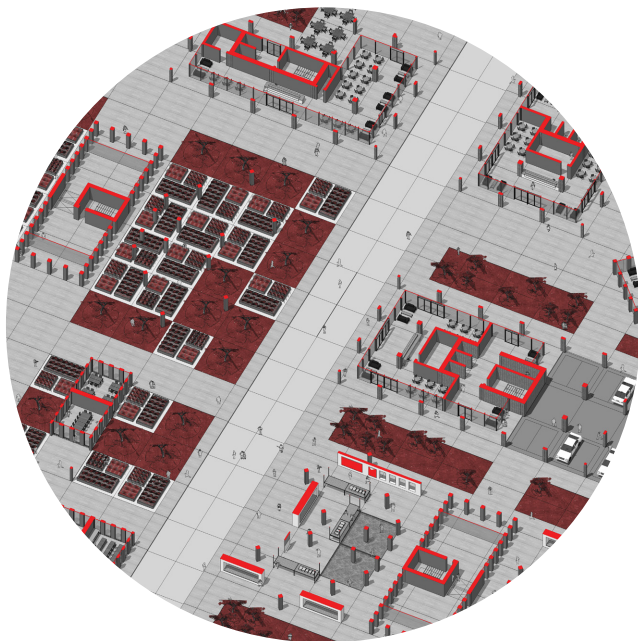
AWAKENING THE "SOUL"





Perspective of a Center Tower in the King Towers Project
Source: Created by Author from Sketchup and Placemaker Plugin

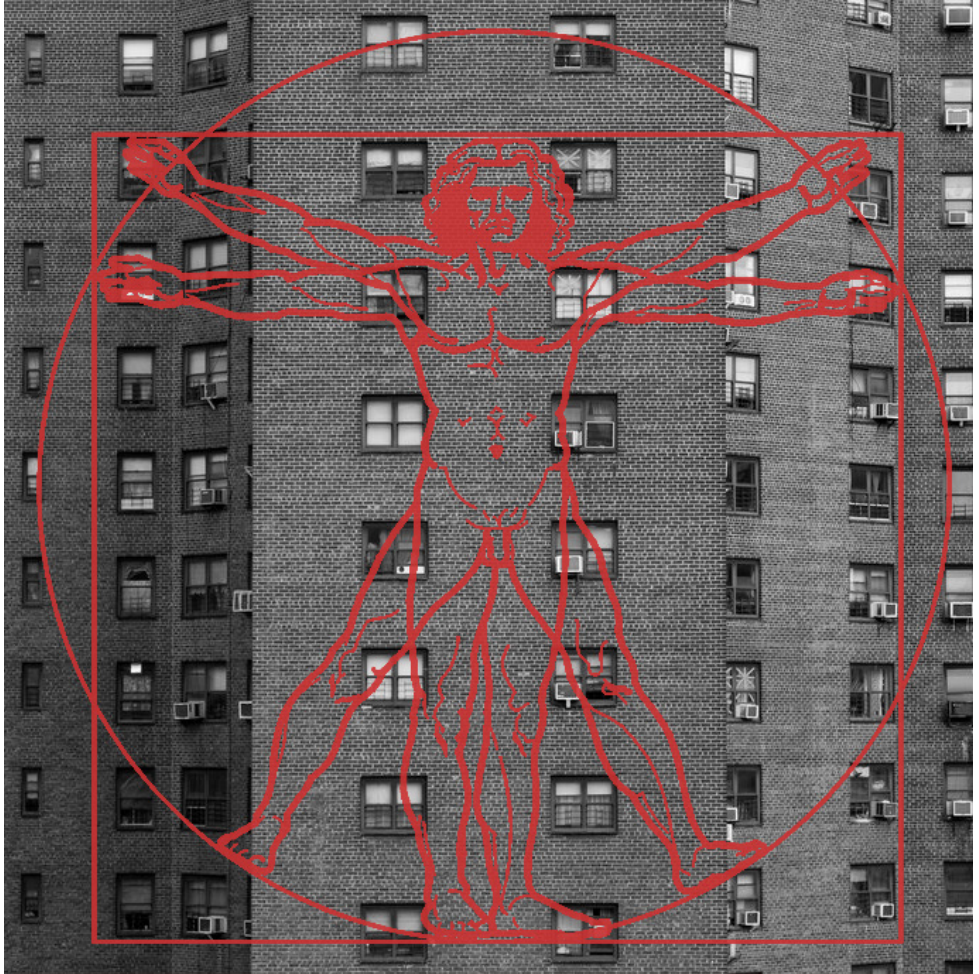
OF THE SOCIAL HOUSING PROJECTS



With the design of the intervention explained in detail, it is time to take a step back to comprehend the spatial effects that this project will create for the inhabitants of the social housing projects, as well as the neighborhood itself. It is important to recognize the impact this will have on the people who will (and will continue to) live in East Harlem, because the transformational grid proposes such a dramatic paradigm shift

To understand the full power of the design proposal, there must be a compare and contrast with the original situation of King Towers. How does each intervention factor answer both the research questions, and the criticism of NYCHA projects? What does this mean for the current and future inhabitants of the intervention? What type of change will the design proposal bring, and is it really for the better?

CHAPTER STRUCTURE



Finding "Soul" in the Social Housing Projects
Source: Photo taken by Andriy Prokopenko, Edited by the Author

1. EFFECTS OF THE PROJECT

Zoom-in on the paradigm shift created by the intervention, and the implicit improvements from the original situation.

2. INCREASING THE QUALITY OF LIFE

The implicit change and impact made on how inhabitants will now live in their new environment.

3. CONCLUSION OF THE THESIS

A summary of how the transformational grid provides a solution for all NYCHA projects.

4. REFLECTION ON THE THESIS

A look back at the work process, the lessons learned, and the knowledge attained while working on this thesis.

5. BIBLIOGRAPHY

An overview of the texts and data sets used in the development of this thesis proposal.

6. APPENDIX

An in depth explanation of the design methods and philosophies of housing inside the grid.

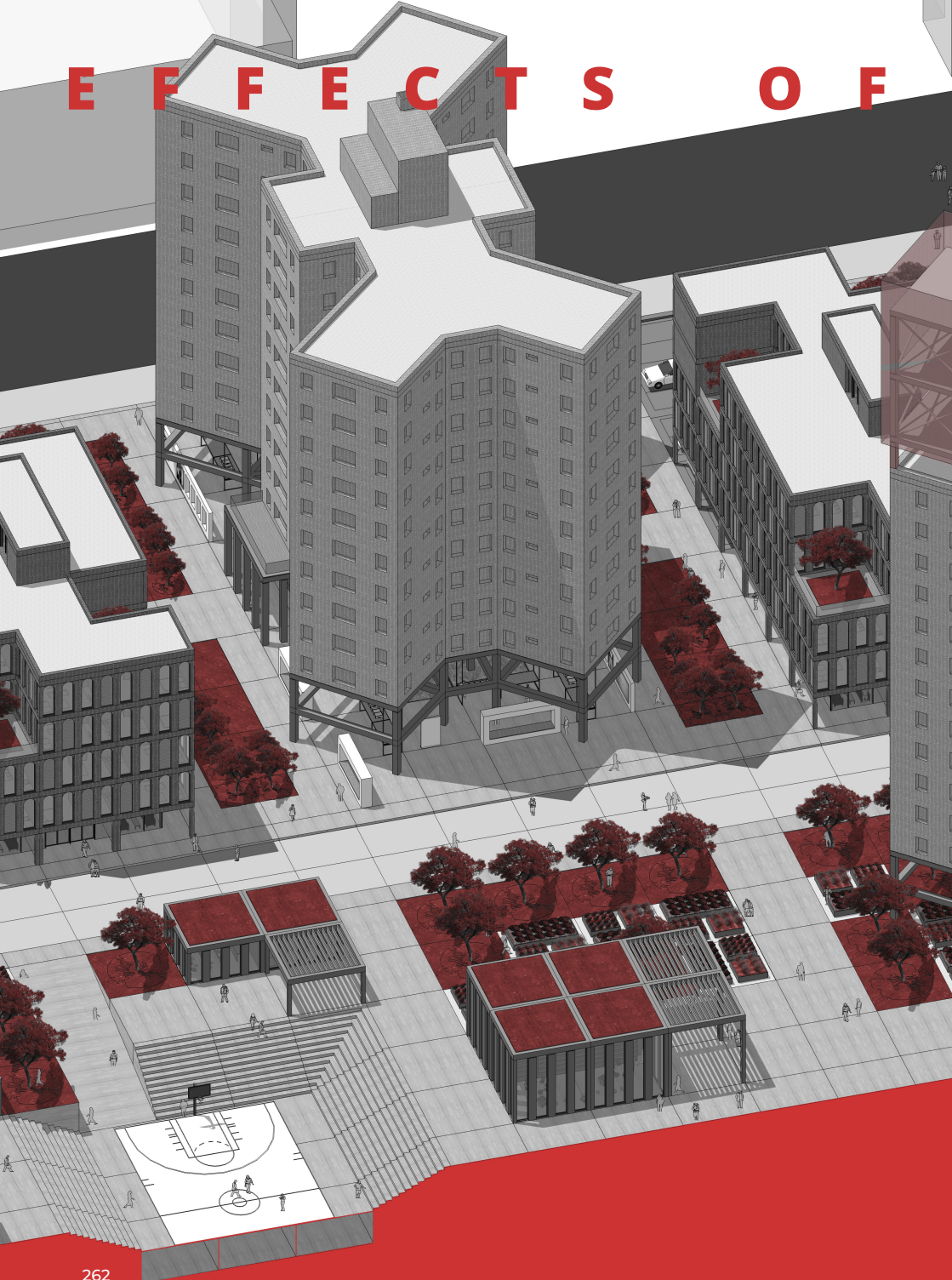
3.1 THEORY PAPER

3.2 GRADUATION PLAN

7. ADDITIONAL MATERIALS

A biography and curriculum vitae of the author of the thesis proposal.

E F F E C T S O F



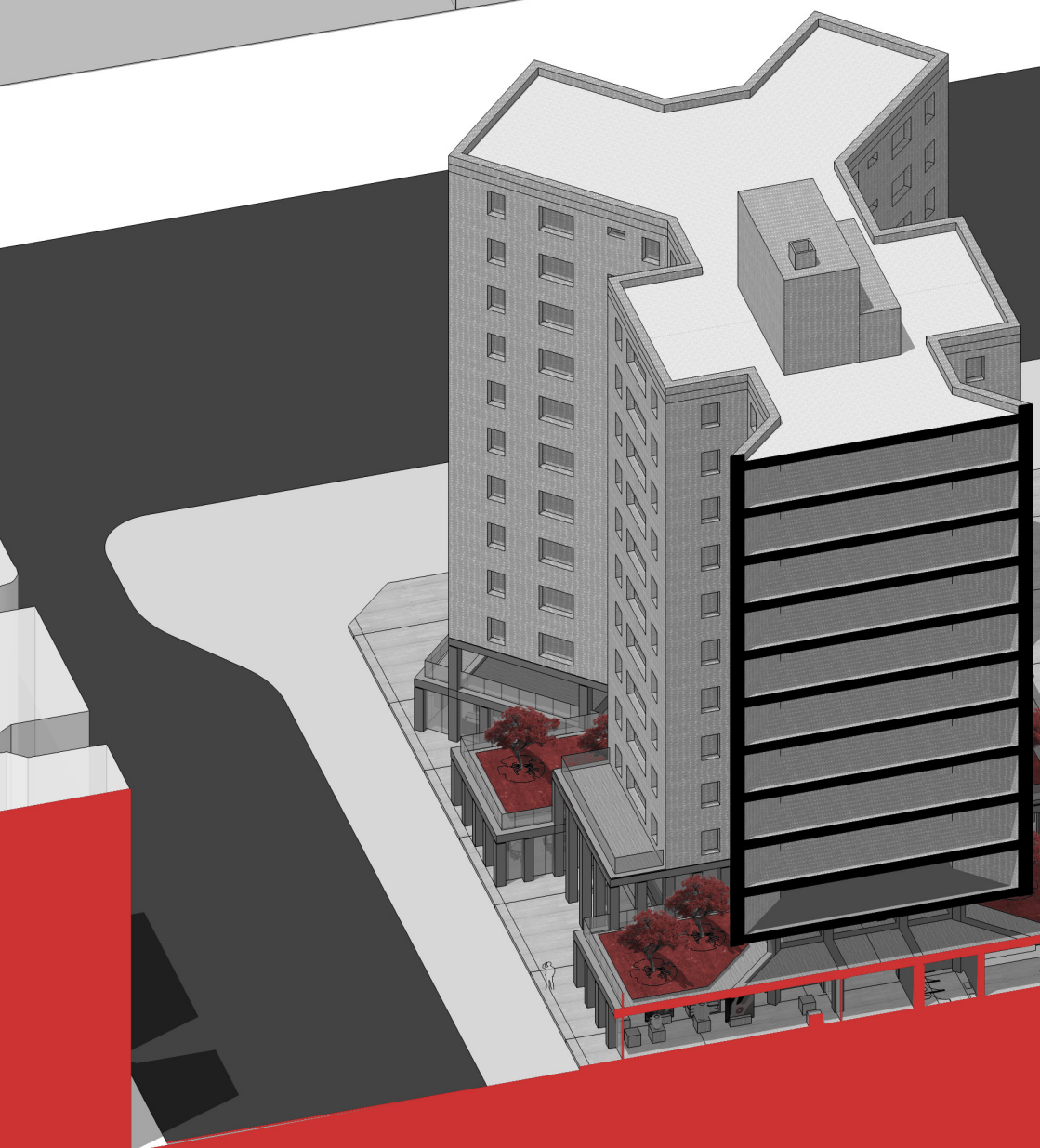
THE PROJECT

An architectural rendering of a city block renovation project. The image shows a complex of buildings with various rooflines and facades. A prominent feature is a large, dark, rectangular structure with horizontal lines, possibly a new building or a renovation of an existing one. The surrounding area includes existing buildings with many windows, some with red roofs, and a mix of green spaces with trees. The overall style is a detailed architectural drawing with a focus on form and space.

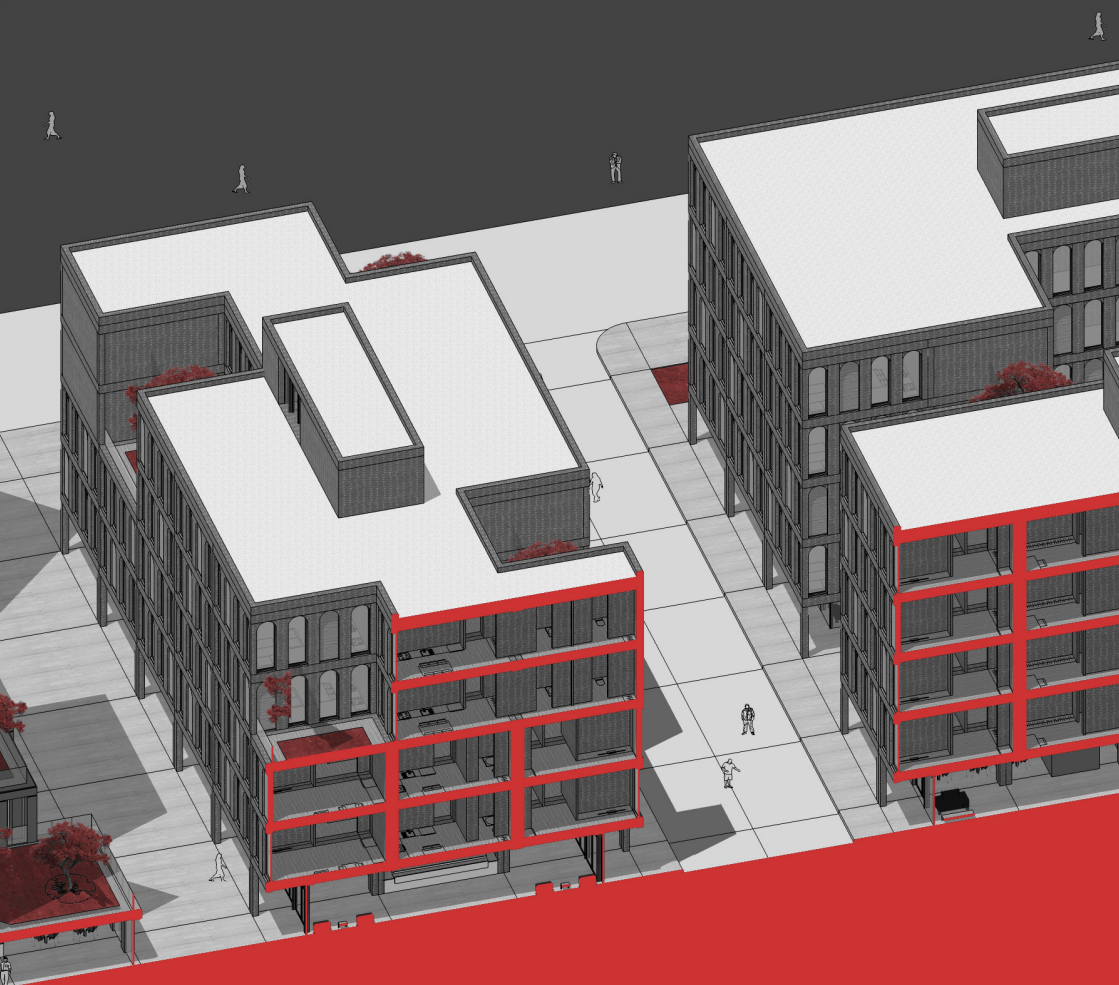
A PARADIGM SHIFT

The major change that the transformational grid provides is a clear separation of public and private. This powerful change removes the confusion that existed when green areas were fenced off due to ownership issues. This clarity will bring a greater variety of functions, which will in turn create more public activity.

E F F E C T S O F



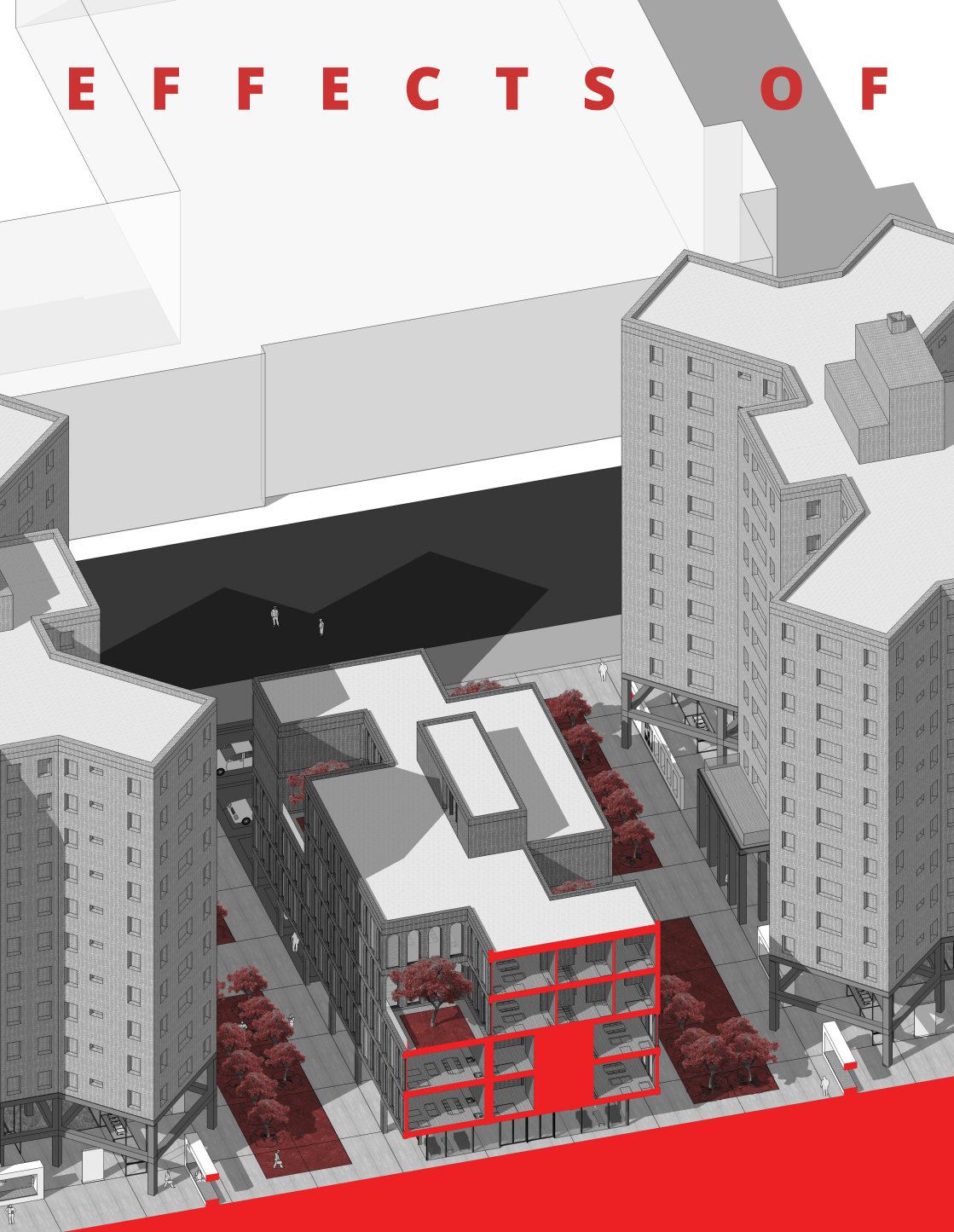
THE PROJECT



INSERTING VARIETY WITH PALIMPSEST

Implementing palimpsest within the transformational approach to the design proposal allows for new and dynamic forms to coexist with the preexisting towers. This is essential for creating a spatial hierarchy within the neighborhood, which in turn creates a better connection between the inhabitant and their community.

E F F E C T S O F



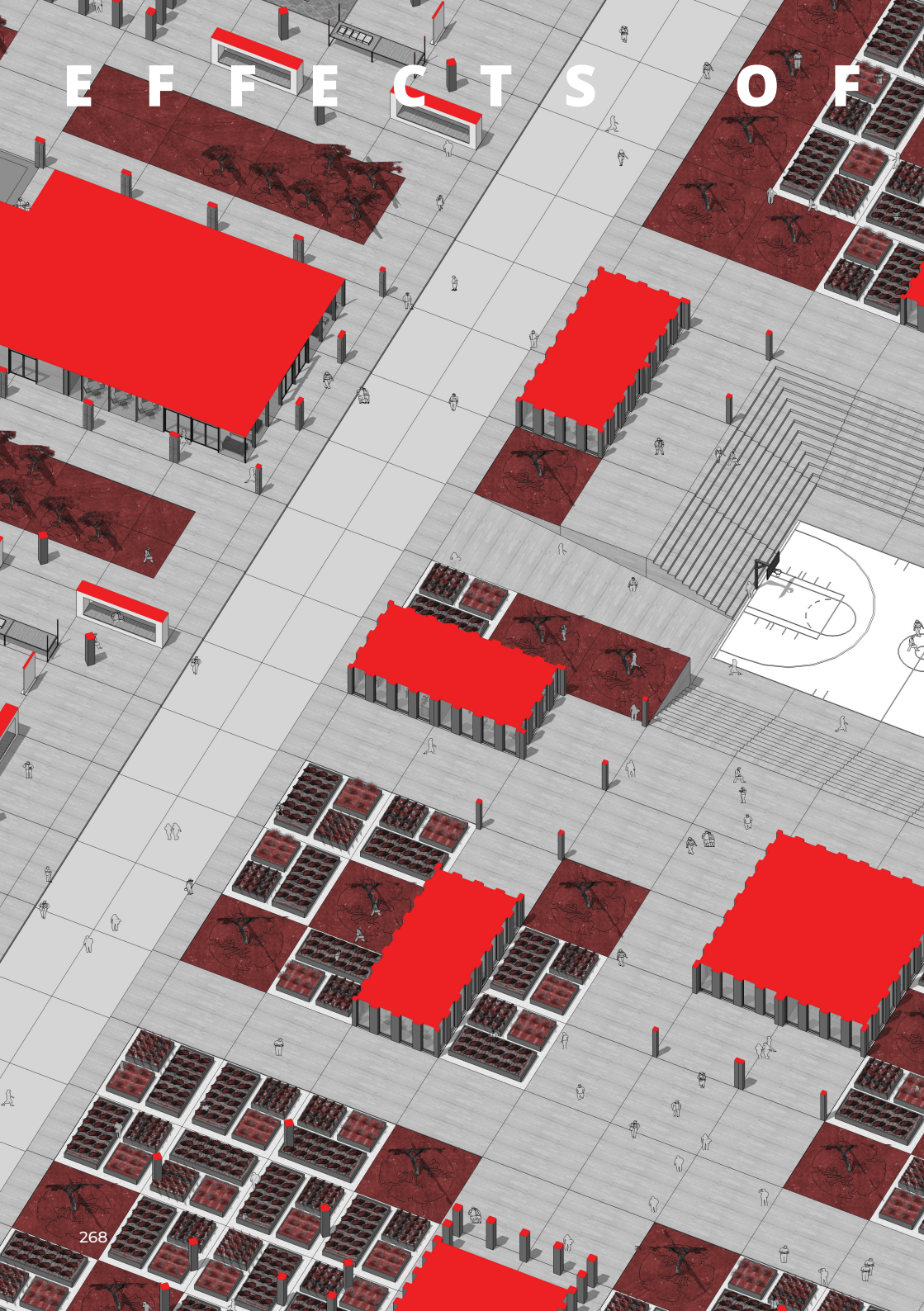
THE PROJECT



INCREASING ACTIVITY

The new apartment buildings implement arcades around the entire entrance floor of the housing blocks. These residential properties contrast greatly to the preexisting towers, which only had one door to enter it. This increases activity on the ground, and makes the program of the ground floor more flexible. Palimpsest interventions in the towers achieves the same goals by providing large entrance lobbies, in combination with open spaces that adapt to the wishes of the inhabitants.

EFFECTS OF



THE PROJECT

An isometric architectural rendering of a city grid. The grid is composed of light gray squares. Several buildings with bright red, flat roofs are scattered across the grid. The buildings vary in size and shape, some being rectangular and others more irregular. The walls of the buildings are made of dark gray vertical panels. In the spaces between the buildings, there are numerous small, stylized human figures, some standing and some walking, to provide a sense of scale. On the ground, there are several large, dark red rectangular areas. Within these areas, there are black silhouettes of dinosaurs, including T-Rex and Triceratops, suggesting a theme of paleontology or a museum. There are also smaller, square areas with similar dinosaur silhouettes. In the bottom left corner, there is a white circular area with a black outline, possibly a plaza or a fountain. The overall style is clean and modern, with a focus on geometric forms and a monochromatic color palette of red, gray, and white.

EMBRACING FLEXIBILITY

Since all new structures are based on a regulated grid, and are constructed on a modular system, they are very adaptable to change over time. The functions and forms can adapt to the needs of the community with ease. Using palimpsest approaches to integrate the towers to the grid permits this adaptability to happen freely.

E F F E C T S O F

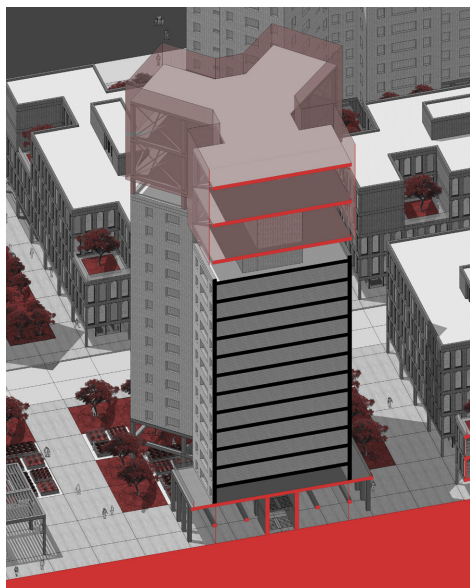
THE IMPACT CREATED BY THE PARCEL

The transformational grid would not be successful without the form generating rules that were applied to the parcels on the site. The various types of program overlays from the zoning would determine the function of the parcels, then the rules would take care of the rest. The main objective for all the rules was to create a clear separation between public and private, and that motivation can be seen in an three parts of the design proposal.

Applying a palimpsest approach to the towers helped get apartments off the ground floor and away from the public eye. This allowed the creation of a large new, double sided, entrance lobby that enhances the connection between the inhabitants, and their community as a whole.

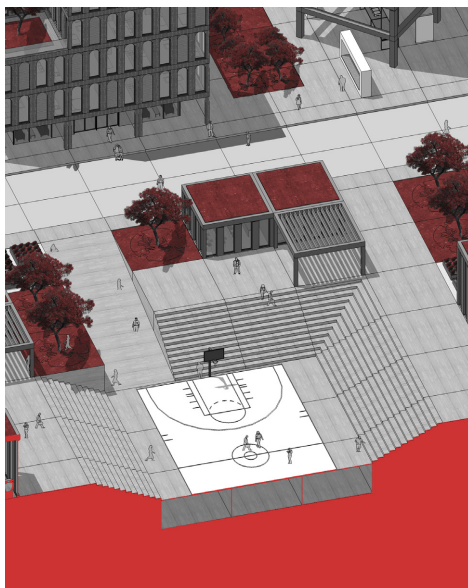
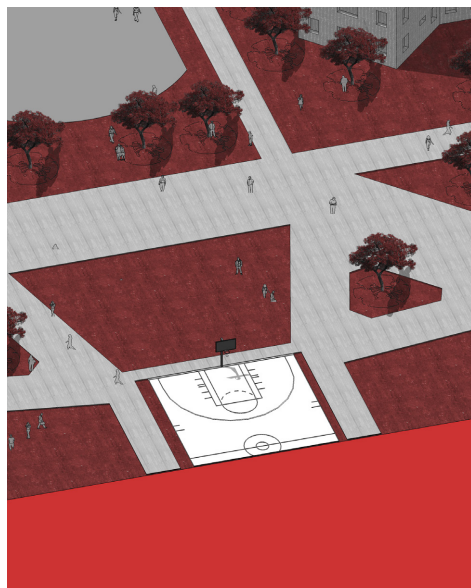
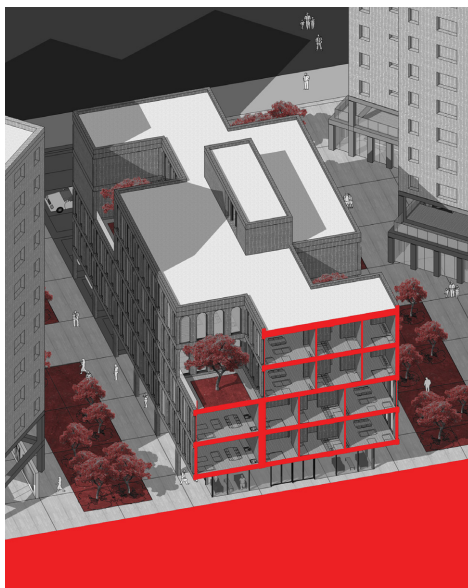
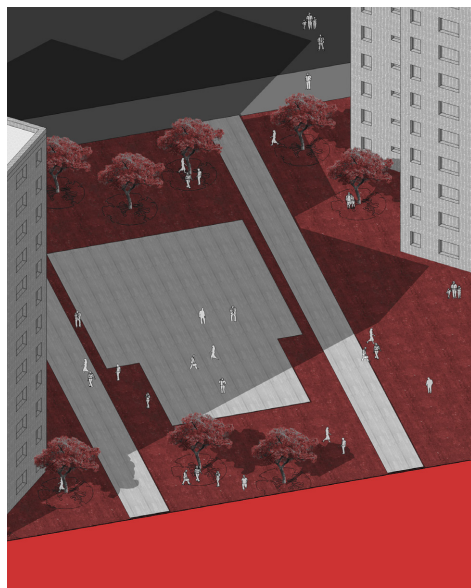
The same principle can be used for the new housing blocks. An arcade was implemented at the ground floor to create spatial hierarchy in the shared public space. It also creates an omni-directional entrance that motivates various approaches to the housing block. Roof-top green terraces are also implemented as a way to add more semi-public spaces to the project.

The rule of submerging the basketball court provides much needed additional seating, but also acts as a water square to collect rainwater, making the project circular and sustainable.



Implementing Palimpsest onto the Preexisting Towers
Source: Created by Author.

THE PROJECT

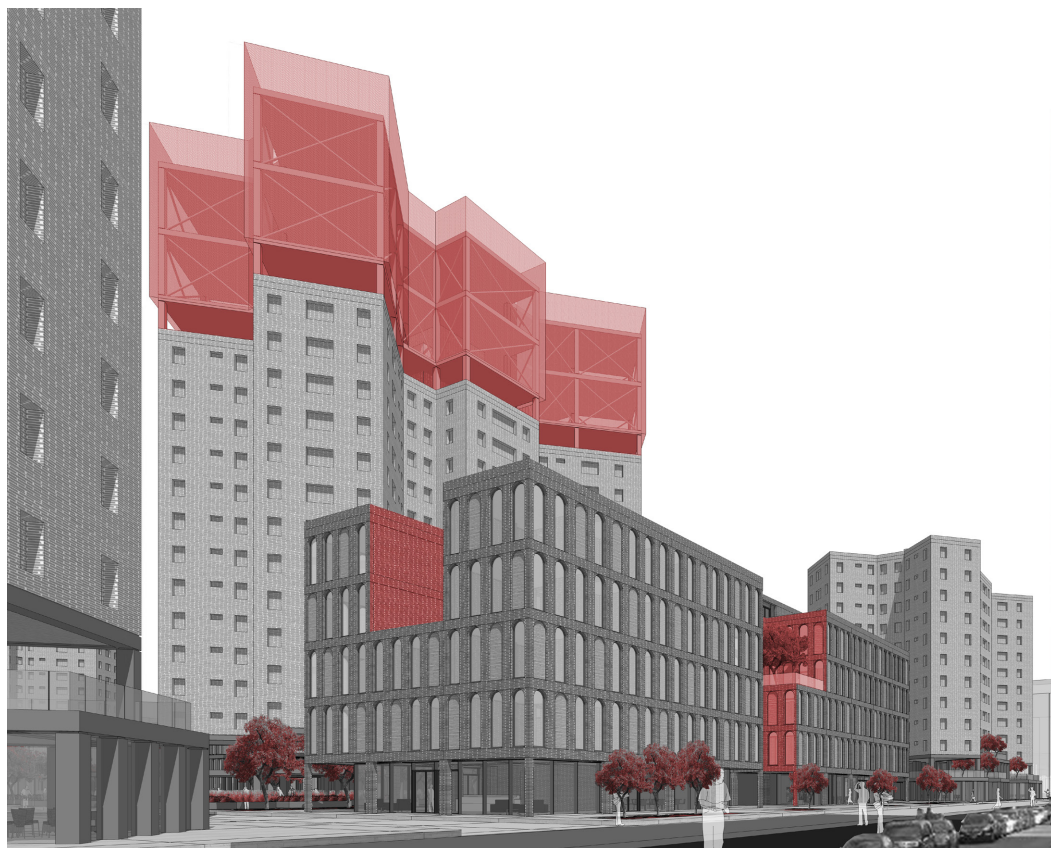


Enhancing Space through Placemaking and the Power of the Arcade
Source: Created by Author.

INCREASING THE

RECREATING THE STREET WALL

The organization of the new housing blocks are placed strategically in order to merge the urban fabric typologies of the tenement infill, and the floating brutal towers of the social housing projects. This adds familiarity for both the inhabitants of NYCHA, but also for the buildings surrounding them. This not only enhances spatial hierarchy for the inhabitants, but also adds the necessary density and program to make the project feasible. This hybridization of morphological identities therefore allow for residents to be more connected to their community. The NYC road grid is the connective tissue that binds a living people in the city, so it's spatial hierarchy must be maintained when possible.



QUALITY OF LIFE



Repairing Spatial Hierarchy by Bringing Back the Street Wall
Source: Created by Author. Photo from Google Maps Street View.

INCREASING THE

CREATING AN ACTIVE LANDSCAPE

One of the main problems of the social housing projects is deeply rooted in the functionality of the landscaping. The preexisting concept behind the greenery is based on the modernist “Towers in a park” approach. Though it may have been appropriate at the time, this binary relationship between public and private is outdated. Like our society, layers of complexity are needed to add diversity of people and functions.

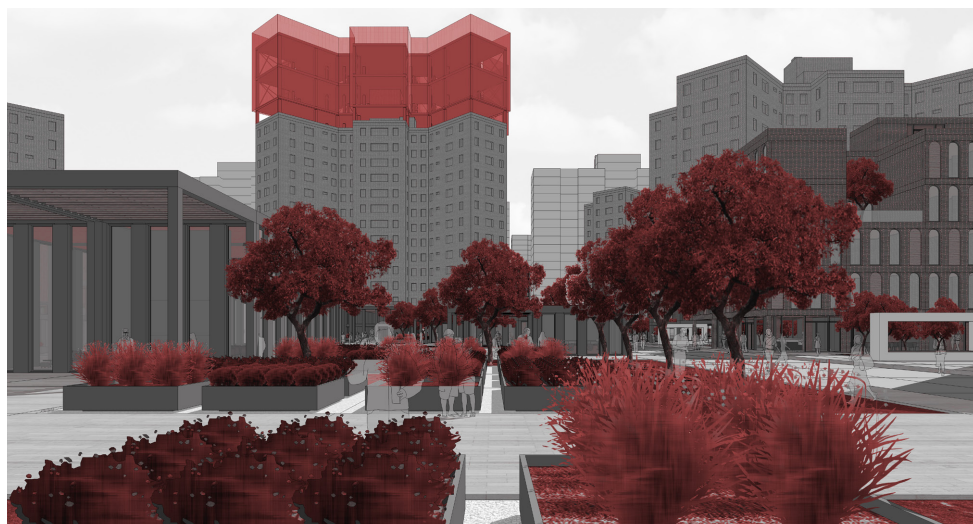
Therefore, the goal of the transformational framework is to create an active landscape that is free to the public realm, instead of being fenced off like it is now. One way to achieve this was to add urban gardening to the landscaping, where residents and locals alike can come and grow what they want. Doing so will also strengthen the bond between the resident, and their neighborhood.

QUALITY OF LIFE



Current Situation of Public Space at the King Towers

Source: Picture from Redflux Architecture, Design, and Planning. Edited by Author.



Transforming a Passive Landscape to a Productive One

Source: Created By Author.

INCREASING THE

THE BOND BETWEEN PUBLIC AND PRIVATE

Another major problem in the social housing projects is the spatial hierarchy that inhabitants travel through in order to get home. Currently, they walk on windy paths through a large and green park. They see the large, red, brick towers that their apartment is in, and they approach a single door. From a public space as large as the ones found in the projects, it is odd to fathom that this little door is an entrance to the homes of hundreds of people.

In order to solve this issue, thanks to the palimpsest intervention, the apartments on the ground floor are removed, and in its place is created a double height entrance lobby. This adds a layer of semi-public space that is quite necessary for this design proposal. Wherever zoning allows it, open space is left underneath the towers to promote more activity, as well as create the clear separation between public and private.

QUALITY OF LIFE



A Mother and Daughter Entering One of the Social Housing Towers

Source: Photos by Anna Beeke - <https://urbanomnibus.net/2013/05/portfolio-alfred-e-smith-and-vladeck-houses/>



Enhancing the Entrances to the Towers as a Transition Space Between Public and Private

Source: Created by Author.

C O N C L U S I O N

A CRITICISM OF SOCIAL HOUSING IN THE U.S.A.

Social housing started off as a good and logical way to help people who are in need of a proper place to live, but as macroeconomics shifted demographics of people away from cities and into suburbia, their maintenance structure could not hold itself up. This is because these projects relied on revenue from rent, as they were originally designed for low to middle income citizens. As people in poverty moved into them, the social housing degraded into a state of disrepair, and then politicians started blaming these poor and impoverished people for their own failure. Politicians need to take responsibility for the state in which inhabitants of the projects live in. They deserve better, and it is for this reason that a transformational framework to provide positive change is necessary. Threats of gentrification and speculation are rampant, and these inhabitants need protection.

A FRAMEWORK FOR FIXING NYCHA

The project incentivizes the development of various forms of program that will enhance self-awareness. This will, in turn, make the housing projects safer and healthier for all. It also protects the inhabitants right to access the city, which is also under threat, as rent prices climb and forcibly push locals outside their own neighborhood. The methods necessary to awaken the “soul” of public space involve the “New Three C’s.” Approaches to Palimpsest, Fractal Planning, and Power Projection all play key roles in enhancing the three design elements of the proposal, which are the new housing blocks, the preexisting towers, and the landscaping itself. Both the structure of the theoretical framework, and the interventions, are modular in both form and function, allowing the design proposal to be future-proof.

BENEFITS FOR ALL STAKEHOLDERS INVOLVED

The thesis proposal aims to fix the dysfunctional public space within the social housing projects. However, it needs to be financially viable, which means various stakeholders need to be involved. Creating a win-win situation for all involved can make this thesis proposal into an agent of change throughout the entire NYCHA system. Zoning is the fire underneath the stakeholders that motivates them to create change in our cities. With NYCHA selling off their land that does not include the towers, enough funds can be generated to make investments that rehabilitate the social housing projects, especially when it comes to maintenance. To make this project into a reality, it will need the cooperation of all stakeholders involved, and they must strictly follow the design brief set out by the transformational framework.

O F T H E T H E S I S



Social Housing and the Failure of America
Source: Created by Author.

REFLECTION

THE RELATIONSHIP BETWEEN RESEARCH AND DESIGN

The work-flow of this thesis can be characterized by a constant struggle between finding new issues in the research, then trying to solve them using both architectural and urban design approaches. Then, after providing a designed solution, going back to the research to try and validate it, both practically and philosophically. The process could reverse as well. Multiple times I have had to learn about rules and regulations for zoning and parcel management in New York City just so I could design the development rules and phasing of this project.

Another important aspect I learned in this perpetual struggle is that one cannot go without the other. Too much research can leave you adrift in a sea of indecisiveness because there is a lack of an explicit goal that needs to be met, or a question that needs to be answered. Too much design work will do the opposite. You will get lost in the details of a project, which prevents you from looking at your work with perspective. The relationship between research and design is a delicate balance between producing a result, and giving that result meaning and purpose. Depending on the context of the research question, that meaning and purpose can be found in the history of said problem, as you can track and understand the twists and turns an idea took to get where it is today.

THE RELATIONSHIP BETWEEN THE THEME OF THE GRADUATION LAB, THE URBANISM TRACK, AND THE SUBJECT CHOSEN BY THE STUDENT WITHIN THIS FRAMEWORK (LOCATION/OBJECT)

The History and Heritage Lab was a very useful perspective in which to look at the problem I wished to solve. Social housing in the United States is relatively unique in just how spectacularly it failed the way it did. In order to truly understand how it happened, it was critical to go back in history and attempt to understand the populist and progressivist political and economic landscape that shaped social housing as preferred policy to fight poverty and crime. In doing so, I had inadvertently found the manifesto on which I would base my design philosophy on. This approach ended up defining what needed to be designed in order to solve the research questions I created as a result of analyzing and observing the plight of the poverty stricken inhabitants of the social housing projects in New York City.

ELABORATION ON RESEARCH METHOD AND APPROACH CHOSEN BY THE STUDENT IN RELATION TO THE METHODOLOGICAL LINE OF INQUIRY, REFLECTING THEREBY UPON THE SCIENTIFIC RELEVANCE OF THE WORK

The path on which I chose to take in order to answer my research question involved a two step approach. The first step involved analyzing the deficiencies and problems regarding the current situation that the social housing projects of East Harlem find themselves in. I then implemented an analytical framework that broke down these deficiencies into singular negative aspects that are rampant in these social housing projects. The framework then took these problems and turned them into goals that would provide the design motivations of the thesis project. For example, if there is no hierarchy or variety in public space, and there is no human scale quality to the spatiality of the said space, then the design motivation would be to add variety of spatial interventions in order to increase the human sense of connection to its environment.

ON THE THESIS

The approach of taking observed problems and breaking them down to their elemental issues in order to create clearly defined design goals was a very interesting method for me to learn while working on my thesis project. I believe I learned this process in the methodology classes at the beginning of the thesis process, as the assignments and lectures forced me to implicitly create arguments and logics - in a way forcing me to see the truth. Sometimes when I am designing or researching in depth, I can get too caught up into what I am doing, and I will assume people around me know about the ideas behind the issues I am trying to solve. It is a difficult habit to shake off, but I am aware now that I sometimes take my thought processes for granted.



The "Soul" of Social Housing in America is Locked in Time
Source: Collage Created by the Author

REFLECTION

ELABORATION ON THE RELATIONSHIP BETWEEN THE GRADUATION PROJECT AND THE WIDER SOCIAL, PROFESSIONAL AND SCIENTIFIC FRAMEWORK, TOUCHING UPON THE TRANSFERABILITY OF THE PROJECT RESULT.

When I was first looking for my thesis topic, I was primarily focused on trying to solve the macro scale issue of mass housing projects and how they negatively impact the socio-spatial urban fabric of our lives. It seemed lofty and significant at first, but then during a presentation in the History and Heritage Lab, I was forced with a heavy dose of truth - is the topic I am going after a "real" problem? Stuck in our bubbles of architecture and design, sometimes we lose touch with what an actual problem might be. This truth that I was faced with forced me to find a subject that would have a true and intrinsic social value.

When I discovered the social housing projects of New York City, I found them accidentally because I was doing research on the social housing projects of Turkey, and it was difficult to find negative criticism of them. I realized that the ones in Turkey do not have a real problem - they are just ugly and out of scale - and has no impact on the quality of life the inhabitants of the social housing projects in Turkey. Since their construction and maintenance is still a top priority for government officials as they continue to give adequate funding and support to their existence. However, this is not the case for the people living in the social housing projects of New York City, and then I realized I had found a real problem to try to solve.

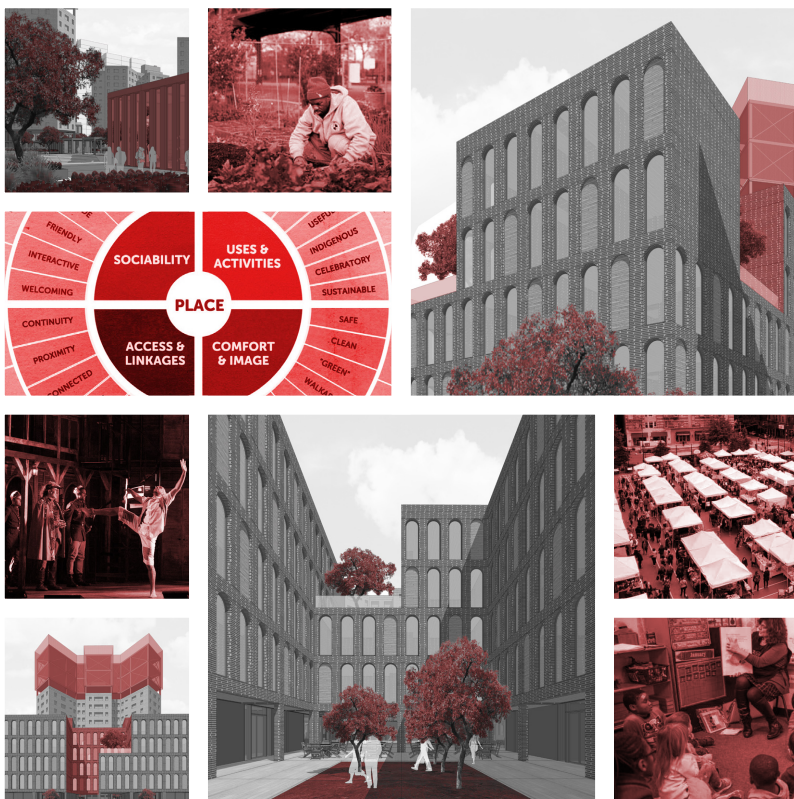
I had no idea the housing crisis was as bad as it is publicized. People are hurting in these social housing projects in New York City, and it is shocking considering the city holds a vast amount of wealth, which can be observed by all the new construction projects going on in the city. This socio-spatial manifestation of the problems regarding our neo-liberal reality motivated me to really pursue this thesis. I wanted to produce something that could be used by others in a way that could help raise the quality of people's lives. Hopefully a transformational framework such as the one I propose can be used on other social housing projects around the United States. Social housing was never a bad idea, and it is not the reason why it failed. It just never evolved.

DISCUSS THE ETHICAL ISSUES AND DILEMMAS YOU MAY HAVE ENCOUNTERED IN DOING THE RESEARCH, ELABORATION OF THE DESIGN AND THE POTENTIAL APPLICATIONS OF THE RESULT IN PRACTICE.

From the perspective as both an architect and an urban designer, a major ethical dilemma ensues when the land value of the site is eventually increased due to the designing of a better quality of socio-spatial life. I feel that regenerating these social housing projects will create a new level of attractiveness, and their identity will inherently evolve because of it. Even though the apartment towers will be protected in my proposed transformational framework, it is difficult to predict what will occur immediately around the project site area. Combine the overall lack of affordable housing with the fact that the location of the site is very close to Central Park, and it is not hard to use deductive logic to realize that East Harlem is a ripe target for gentrification.

ON THE THESIS

In addition to this dilemma, the developers who will help in regenerating these neighborhoods will need a large source of capital in order to not just purchase land, but also creating the buildings as well. This reliance upon wealthy stakeholders and public funding from the governmental structures of New York City creates a heavy top to bottom relationship between themselves and the residents of the projects. Such an endeavor will naturally have developers motivated for the largest profit margin possible, and the needs of local inhabitants could potentially be ignored. Providing a system of checks and balances, such as making requirements of developers to provide socio-cultural functions and apparatuses so that the community can continue to thrive while the developers are free to make their profits.



The “Soul” of Social Housing Brought Back to Life
Source: Collage Created by the Author

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A P P E N D I X

1. THEORY PAPER

Research Paper Entitled "Finding "Soul" in the Void" for the class AR3U023 - Theories of Urban Planning and Design.

2. GRADUATION PLAN

Form Prepared for the Board of Examiners at TU Delft.

Finding “Soul” in the Void

A History of Social Housing Projects in New York City, and Their Contribution to the Paradox of Public Space

AR3U023 Theories of Urban Planning and Design
MSc Urbanism, Delft University of Technology

Osman Ural - 4512596 - December 5, 2018

Abstract – Social housing projects of New York City were born out of what was seen as a social necessity, which was to cure horrid living conditions resulting from the ‘industrial city’. The poor of New York cramped into small living spaces where disease, safety, and other social ills were rampant. These issues were brought to light by a book entitled *How the Other Half Lives: Studies Among the Tenements of New York* by late 19th Century photographer Jacob Riis (1890), who documented and exposed the squalor of these communities. This helped spur on radical change as slums were demolished at large scales to make way for the cure - state of the art modern housing high-rises for all with great access to green space and light. This was one of the first movements in urbanism to be used to solve social problems, but it also manifested a new set of problems - more specifically in the realm of public space.

Though this approach quickly provided quality and financially viable housing to the masses, it unintentionally created a discrepancy between the scales of the buildings and the public space that surround them. In the lecture *The Ghastly Tragedy of the Suburbs* by James Howard Kunstler (2004), he stated that the inadvertent byproduct of these projects was the loss of the human scale in the public realm. He angrily lamented the mono-functionality of these projects, arguing that public space lost its humanity and richness in hierarchy. In *The Death and Life of Great American Cities*, Jane Jacobs (1961) would agree, adding that economic and social diversity should bring a sense of vitality that is fundamental in making successful public spaces. This paper aims to explore theories and a fields of research that could help provide social housing projects a better quality of life through the redevelopment of their public spaces.

Key words – New York, neoliberalism, progressivism, social housing, public space, sociospatiality, re-development

1. Introduction: More is Less

New York, like many other metropolises around the world, is going through a construction boom. Land values are increasing, money is being poured into various projects, and neighborhoods are becoming gentrified. This trend has led to a housing crisis for the city, as rising rents are reducing the amount of available affordable places to live. According to an article in the *Architectural Record* by Ronda Kayesen (2018) entitled *The Housing Crisis in New York*, rents for dwelling went up 31 percent in the past 8 years. The huge spike in rental costs has forced middle-

class inhabitants to relocate to the periphery, and has even contributed to an increase in homelessness (Kayesen, 2018).

In the face of this socio-spatial inequality, the current Mayor of New York Bill de Blasio has led an aggressive push to create more affordable housing for the city by both partnering with and financially motivating private developers. This is being achieved by altering zoning laws to allow for larger developments (and therefore profits), and in return making it a requirement for the developer to make a certain amount of affordable housing in their projects (Kayesen, 2018). Though this approach has produced an

influx of new and affordable places to live for many middle-class citizens who can afford the new rents, the poor residents of the city still struggle (Kayesen, 2018). New developments like these can also bring the risk of speculation, gentrification, and marginalization of the neighborhood that the city thinks it is helping (Kayesen, 2018).

These problems disparaging low-income inhabitants in these developing neighborhoods are complicated, as larger scale socioeconomic issues also need to be considered. In an article published by the SAIS Review of International Affairs entitled *Neoliberal Urbanism: Models, Moments, Mutations*, Jamie Peck, Nik Theodore, and Neil Brenner (2009) explore these issues by explaining that the social programs that produced public housing was born out of an old economic model called Keynesian-welfarism. As this system started showing signs of collapse in the late 1970's, Neoliberal ideologies were introduced to markets as a political response to this failure of government and public regulatory institutions (Peck et al. 2009). With this new philosophy, cities transitioned to incentivizing growth through corporate investment, privatization, and deregulation of urban housing markets (Peck et al. 2009). The transition towards the free market dictating development has spawned speculative growth at large scales, leading to the sociospatial polarization of the urban fabric (Peck et al. 2009).

The ramifications of this type of approach to economic growth were that social housing projects slowly began to decay as public investment evaporated from political pressure for change. In an article written by Mark Jacobson (2012) in *New York Magazine* entitled *The Land That Time and Money Forgot*, social housing projects had over time developed a reputation for being dangerous and undesirable areas. After the white flight out of the city and into the suburbs, more low-income minorities moved into the housing projects in order to fill up the empty apartments (Jacobson, 2012). In doing so, the demographic of the inhabitants in social housing shifted more towards low-income families, bringing in poverty that in turn increased criminal activities and other social ills (Ferré-Sadurni, 2018). This trend took place in public housing projects all over the country, and unfortunately

coincided with the rise of neoliberal policymaking. The social housing projects became symbols of both wasteful spending and the failure of welfare policies (Jacobson, 2012). One by one, infamous large scale projects all over the United States, such as Pruitt-Igoe (Figure 1), were torn down in defeat and submission to public and political pressures (Jacobson, 2012).



Figure 1: The second, widely televised demolition of a Pruitt-Igoe building in April 1972. Source: The U.S. Department of Housing and Urban Development

In spite of all these issues, large scale affordable housing projects today still exist in New York, but are only barely enduring due to the reliance low-income families have on them to survive. According to a recent article from the *New York Times* by Luis Ferré-Sadurni (2018) called *The Rise and Fall of New York Public Housing: An Oral History*, 400,000 (according to

Jacobson's article, some unofficial reports claim up to 600,000) poor residents reside in these aged dwellings that unfortunately display a variety of maintenance issues. There are health and safety concerns ranging from heating and mold problems, to 15-20 minute waiting times just to use the elevator to get up into their homes (Ferré-Sadurni, 2018). Due to both a lack of funding and mismanagement issues plagued by the New York City Housing Authority (NYCHA), the reputation of the projects have also become synonymous with poor living standards (Ferré-Sadurni, 2018).

When you consider that these dilapidated social housing projects exist side-by-side to the current wave of new high quality private (re)development happening in the city, this phenomena is literally the spatial manifestation of the ever increasing economic divide between the rich and the poor. What is even more ironic is that the original aim of these social housing projects was to provide disenfranchised people a safe and healthy place to live (Ferré-Sadurni, 2018), but the opposite ended up being the reality. To better understand this paradox, the history of what motivated these projects to be built must be considered. Doing so will shed light on the reasoning behind their existence, and the sociospatial implications of these large scales of public housing.

2. Brief Background: Slums and Squalor to Broad and Taller

So blatantly apparent is this disparity of living conditions in New York, that experimental architect Lebbeus Woods (2010) wrote about it in his personal blog in a post entitled *Slums of New York*, 2 years before his death. In it, he states that the poor living conditions of the late 19th century never really went away, and that it just manifested itself in the social housing projects of today. Woods makes a plea to our society that we should remember the humanistic qualities of welfarism in the face of the prevailing neoliberal attitudes to the treatment of our fellow man. He reminds us to show compassion for all people in our society by “securing physical place for each person within a communal structure that enables us all to live with dignity” (Woods, 2010). It is this

approach helped lay the philosophical foundations of the national public housing program in the United States as a tool to fight through the Great Depression (Woods, 2010). This movement was however a reaction to a more practical problem: the slums and squalor of the industrial city.

Woods ends his post with a story about a Danish immigrant named Jacob Riis, a reporter turned social reformer who would in great detail bring to light the plight of people living in the slums of late 19th Century New York City. According to a biography written for an exhibition by the Library of Congress (2015) entitled *Jacob Riis: Revealing “How the Other Half Lives”*, Riis got firsthand knowledge of the slums as a homeless immigrant spending 8 years to find steady work. Once he became a writer for the *New York Tribune*, he worked as a police reporter at night to understand the underbelly and dynamics of tenement life (Library of Congress, 2015). His background and experience provided the material necessary for his influential book titled *How the Other Half Lives: Studies Among the Tenements of New York*, which is best remembered for his pioneering use of low-light flash photography (Figure 2) which helped him expose the conditions of squalor of the slums (Library of Congress, 2015). The success of his book helped him become a predominant voice in the struggle for urban reform, and paved the way for other progressive movements of the time to force governmental institutions to provide reform to their constituents (Library of Congress, 2015).



Figure 2: Crowded lodging in a tenement. Source: *How the Other Half Lives: Studies Among the Tenements of New York* by Jacob Riis

The progressive movement would push for the implementation of New York's first regulations of the urban form. In a sub-chapter entitled *Planning the modern metropolis* under the entry for New York in the *Encyclopædia Britannica*, the editor and historian George Lanevech (2018) explains that the out of control housing conditions of the slums were brought to heel by the Tenement House Law of 1901. This legislation demanded that old buildings be retrofitted with ways for inhabitants to escape if there is a fire, and even install toilets where there were once none (*Encyclopædia Britannica*, 2018).

It also made new residential structures be limited to 6 floors that were required to have kitchens, indoor plumbing, and windows in all rooms - which we all take for granted in the dwellings of today (*Encyclopædia Britannica*, 2018). In the City Zoning Ordinance of 1916, controls would be put in place in order to manage how the urban fabric is shaped through the use of density controls, land use zoning, and setback requirements that would allow daylight to seep into the city streets (*Encyclopædia Britannica*, 2018). It can therefore be understood that the progressive movement birthed the modern city as we know it.

The progressive movement also influenced the first experiments with affordable public housing in New York. In a book titled *Renewing Black Intellectual History: The Ideological and Material Foundations of African American Thought* by Adolph Reed Jr. and Kenneth W. Warren (2010), it is explained that these efforts began as philanthropic endeavors which took place in order to combat racist and unfair rent practices. This struggle for better housing practices were led by the advocate group called the New York Urban League, which aimed to help fight discrimination practices against African Americans in Harlem by convincing both landlords and developers of the time to provide decent affordable housing (Reed Jr. et al. 2010). A result of these efforts was the building of the Dunbar Apartments in 1928, which was financed by John D. Rockefeller Jr., and was advertised as a cooperative that would have renters eventually transition to the ownership of their apartments (Reed Jr. et al. 2010). Unfortunately, the project was small and did not make the impact it hoped

to create due to the relatively small amount of units available in relation to what was available in Harlem's housing market, combined with rents being too unaffordable as the Great Depression began a year later after construction.

A housing crisis brought on by the Great Depression transformed urban reform into a nation wide policy. In an article written by Charles L. Edson (2011) for the *Journal of Affordable Housing & Community Development Law* entitled *Affordable Housing—An Intimate History*, he explains that this expansion had been initiated by the New Deal programs that U.S. President Franklin D. Roosevelt pushed through in order to combat extreme unemployment and poverty in the country. These programs included the creation of the United States Housing Authority (USHA), later called the United States Public Housing Administration (USPHA), whose goal was to provide financial support to local public housing authorities (Edson, 2011). There were a couple of driving forces behind these programs were to provide construction jobs for the unemployed, while eradicating the slums (Figure 3) at the same time (Edson, 2011). Housing programs such as these helped organizations like the New York City Housing Authority (NYCHA) provide social housing projects on a massive scale.

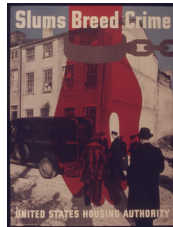


Figure 3: Slums Breed Crime. United States Housing Authority, between 1941 - 1945. Source: U.S. National Archives and Records Administration

Founded in 1934, NYCHA went on a campaign of slum clearance by the grid, then new construction in order to provide needy families affordable homes to live in (Ferré-Sadurni, 2018). Urban planners achieved this through the implementation of the ideals of the international movement, which was seen as a cost efficient and quick solution to the housing crisis caused by the Great Depression. According to a research article written for the *Journal of the European Architectural History Network* by Rixt Woudstra (2018) entitled *Exhibiting Reform: MoMA and the Display of Public Housing (1932-1939)*, the international style was popularized in the United States during this time, due in part to multiple exhibitions done at the Museum of Modern Art (Figure 4) throughout the 1930's. The scale and efficiency of the planned projects displayed influenced urban planners and politicians alike, therefore directly influenced the form of how social housing projects in New York would manifest itself (Woudstra, 2018).



Figure 4: Housing Section of Modern Architecture: International Exhibition, February 9, 1932-March 23, 1932. Source: Digital Image © The Museum of Modern Art/Licensed by SCALA/Art Resource, NY.

With the ideologies of the international style now firmly in the auspices of NYCHA, the mandate now was to quickly demolish problematic slums and make the space for social housing at a previously unseen scale in New York (Ferré-Sadurni, 2018). According to an article in *Metropolis Magazine* entitled *A Brief History of Affordable Housing in New York City* by Anthony Paletta (2016), not only did this approach to urban regeneration erase complete sections of neighborhoods and displace local residents, but it also dismantled the organizing grid system that had defined New York since the beginning of the

19th Century. Instead of a morphology based on urban blocks defined by the grid, then new projects are arranged within themselves while their buildings float in green space (Paletta, 2016). This change in both size and scale marks a massive shift in the identity of how inhabitants of the city experience public space. In order to understand how the perception of public space has changed in New York, we must look at how the grid came to be and how public space became an issue for the city.

3. Breaking the Public Space of the Grid

The significance of the grid system and its relation to public space is explained in an article for the 2012 Congress of European Research in Architecture and Urbanism (EURAU) titled *New York: the revitalization of public space* by Ana Morcillo Pallares (2012), who explains that the grid system first appeared in the masterplan of New York with the introduction of the Commissioner's Plan of 1811. At the time of its implementation, New York was considered a chaotic place, and the urban grid was seen as a practical approach to reduce congestion problems of the city by providing a rigid system of roads and parcels which can also regulate land values (Pallares, 2012). The original grid plan displayed a sparse amount of public spaces, except for a couple of small squares combined with specialized areas such as a military parade ground and a place for markets (Pallares, 2012). The lack of planned recreational space resulted from the increased land values of Manhattan, combined with the fact that the spaces along flanking rivers of the island were considered adequate enough for the inhabitants of the city (Pallares, 2012). Therefore, most of the public realm existed in the spaces in-between the infill of urban fabric regulated by the grid.

What made the grid system so successful for New York was the fact that it was really flexible to change to the needs of the city, such as realizing the need for more recreational spaces, avenues, and other public goods (Pallares, 2012). With the creation of the large public housing projects by the NYCHA, the parameters that made the grid successful were broken as the new

developments ignored the infill system defined by the streets. This was evidenced by the mass produced buildings of the projects, which float within super blocks formed by the slum clearances (Figure 5). Though this guaranteed light and open space to the new housing towers, the public space around the buildings became empty and recreational places for its inhabitants.



Figure 5: An aerial view of the Gaiety District (pictured on the top), which, in the 1940s, was cleared to make way for Stuyvesant Town (on the bottom). Source: Hyperall - Flickr <https://www.flickr.com/photos/hyperall/45344758842>

In her book *The Death and Life of American Cities*, Jane Jacobs (1961) explains that this blurring of public and private space a major problem in terms of safety for the inhabitants of the projects. According to Jacobs, safety is an issue because the high-rise buildings and the large spaces between them do not display a clear separation of public and private (Jacobs, 1961). In addition to this, a vast majority of people living in the projects cannot look to see what is happening on the street level, while the mono-functionality of the residential projects decreases the activity on the street level, allowing more opportunities for vandalism and crime because of a lack of pedestrian density that could prevent such activities to happen (Jacobs, 1961). She therefore argues that an essential part of a community is the control of public behavior through self-

awareness, combined with a public space that motivates conversation and liveliness throughout the day (Jacobs, 1961). Jacobs also laments the green spaces that surround the buildings of the social housing projects. She complains that the lack of diversity - both social and programmatic - prevents the neighborhood park from becoming active and dynamic (Jacobs, 1961). Destroying the grid diminishes the potential for these sorts of qualities to exist in the social housing projects, and helps contribute to the crime problems they experience.

Another problem with the public space around the buildings of the social housing projects involve the actual physical scale of the public space itself. Since it is made up of one uniform texture and scale, the space exhibits a lack of hierarchy or variety (Figure 6). In a lecture called *The Ghostly Tragedy of the Suburbs* by James Howard Kunstler (2004), he angrily laments that the design approach of the social housing projects are too radical a rejection of urban ideas of the past, as the mechanical design processes that created their residential high-rises caused a loss of the human scale in the public realm.



Figure 6: Stuyvesant Town: Built by Metropolitan Life Insurance Company in 1943. Source: <https://www.stuyvestown.com/about-nyc-apartments/nyoch-history>

He argues that the organic way in which cities used to grow in provided a variety of public spaces that allowed inhabitants to experience a richness of humanity (Kunstler, 2004). He claims that there was an informal but implicit hierarchy between various forms of public space, helping to

create meaningful places that reflect "the physical manifestation of the common good" (Kunstler, 2004). He therefore argues that the recreational space in designs such as social housing projects are only provided in order to hide the de-humanizing size and scale of their buildings (Kunstler, 2004).

Taking these problems into consideration, it is clear that the international site in which social housing projects in New York were built went against all preexisting ideas of how public space functions. The poor sites in which the projects are in are not just the result of political and economic issues, but a more complicated amalgamation of sociospatial dimensions that exist as a byproduct of the design approach of the projects themselves. According to the book entitled *Public Places - Urban Spaces* written by Matthew Carmona (2003), this trend can be reversed by restructuring these inactive public spaces that exist within the social public housing projects that answer the issues brought up by Jacobs and Kunstler. In order to understand how to activate these spaces, methods for countering the issues of monofunctionality, scale, and safety, must be found. Doing so will allow for the phenomena of social segregation and fragmentation to be reversed, and in return increasing the quality of life of the residents living in the projects (Carmona, 2003).

4. Methods of Finding "Soul" in Public Space

Carmona (2003) frames this reconstructing of public spaces as a set of needs that need to be met in order to achieve meaningful and "souful" places. He references these needs from multiple sources, but two stand out in relation to the public housing projects in New York. One source involves a set of human components that were identified by American psychologist Abraham H. Maslow (1968) in his book *Towards a Psychology of Being*, and the other being a book by Andrew M. Stone, Leanne G. Rivlin, Mark Francis, and Stephen Carr (1992) entitled *Public Space*, which lists a set of needs that public space should meet in order to serve its users. When these are synthesized together, a framework in which public spaces need to be designed can be formed.

According to Maslow (1968), there is a hierarchy of needs that exist in the form of a tiered system where once the most basic needs of people have been met, more nuanced and complex needs can be considered that increase the quality of life for inhabitants of the city. This takes form in the shape of a pyramid (Figure 7) that portrays a structure of human motivation that could help inform how public spaces should function. At the base of the pyramid exists basic physiological needs like warmth and comfort, followed by safety and security needs. The middle of the pyramid houses affiliation needs such as belonging to a community, then esteem needs have to be met so people feel valued by others. Finally, at the top of the pyramid exists self-actualization needs like artistic expression and fulfillment (Maslow, 1968). When you consider the current state of public housing projects in New York, it can be stated that the base of the human motivational pyramid have been compromised due to the lack of maintenance, combined with sociospatial issues created by the design of the projects themselves. Therefore, in order to provide the residents of the social housing projects a better quality of life, spatial interventions must be done in order to satisfy the basic needs of Maslow's pyramid of human motivation.



Figure 7: Maslow's Hierarchy of Needs. Source: <https://www.ampsychotherapy.com/maslow.html>

In their book *Public Space*, Carr et al. (1992) provides a list of five characteristics that can be implemented into the design of public space which would satisfy the needs identified by Maslow. According to Carr et al. (1992), by meeting more than one of these characteristics

can help provide proper public spaces and increase the quality of life of the inhabitants who live around them. These spaces need to at least provide these people feelings of "comfort" and "relaxation," a "passive" or "active engagement with the environment," and a sense of "discovery" (Carr et al., 1992). "Comfort" involves protecting users from environmental factors such as heat and wind, sufficient seating, and a degree of safety in which people feel that they can spend a proper amount of time in public space without feeling threatened (Carr et al., 1992).

"Relaxation" refers to the function of public space as a place to get away from the pressures of the city where the person experiencing the public space can be at ease and unwind (Carr et al., 1992). A "passive engagement in with the environment" is an explanation of the feeling people experience when they feel they are being a part of something through observing the activities and interactions of other people around them, and recommends providing places in which this type of observation can happen (Carr et al., 1992). An "active engagement in the environment" refers to a more direct interaction between all peoples experiencing public space, by providing compressed places where the possibility of face to face interactions can occur (Carr et al., 1992).

By combining all of these characteristics and motivations, a theoretical framework in which to solve the issues of the social housing projects can be proposed. In the handbook *Placemaking and the Future of Cities* by the Project for Public Spaces (2012), an endeavor funded and created by the UN-HABITAT Sustainable Urban Development Network (SUD-Net), provides a set of guidelines that encapsulates the sociospatial needs defined by both Carr et al. and Maslow. The Project for Public Space (PPS) calls this list of guidelines "Ten Ways to Improve your City," and is comprised of as follows (Project for Public Spaces, 2012):

1. Improve Streets as Public Spaces
2. Create Squares and Parks as Multi-use Destinations
3. Build Local Economies through Markets
4. Design Buildings to Support Places
5. Link a Public Health Agenda to a Public Space Agenda

6. Reinvent Community Planning
7. The Power of 10 - Concept to Kickstart Placemaking Processes
8. Create a Comprehensive Public Space Agenda
9. Lighter, Quicker, Cheaper: Start Small, Experiment
10. Restructure Government to Support Public Spaces

These fundamental steps are technically oriented to developing countries with public spaces issues in residential areas which are socially and economically problematic, but, all of the aforementioned steps could be applied to help the quality of life in the social housing projects of New York. By combining all the needs that have to be met to solve sociospatial issues regarding public space with the guidelines developed by the PPS, designers can have a good framework (Figure 8) in which to redesign failing public spaces.



Figure 8: What makes a Successful Place? Source: Article from <https://www.pps.org/article/guidebook>

5. Conclusion

In summary to the issues regarding the inhabitants of the social housing projects of New York, architect David Adjaye (2014) in his article *Contextualizing Approaches to Urbanization* makes the argument that in order to deal with the pressures of the reality of neoliberalized globalization in the development of our cities, the processes in which urban design happens need to shift. Adjaye (2014) calls for innovative typologies of public space, new hybrids of social functions within ordinary architectures, and more

contextually sensitive approaches to site context analysis. If we take his ideas to heart, and apply it to the projects, we should learn from both the reasons why they were built in the first place, and the failures that followed them. We should appreciate the progressive movements that fueled the manifestation of social housing, but we need to understand that the over-correction created anomalies in the urban fabric of New York, and created problematic voids within its flexible grid. We need to realize that even though the projects are completely out of scale, they are part of New York's history as an attempt to provide all levels of society a proper place to live. Instead of ignoring them, like the city is doing now, they need to be appreciated and redeveloped to provide a sense of dignity for the inhabitants of the projects. By doing so, the objective of which the social housing projects were created to complete can finally be met.

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Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

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Personal information	
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Studio	
Name / Theme	History and Heritage
Teachers / tutors	Teake Bouma, Luisa Calabrese
Argumentation of choice of the studio	My thesis is based on the social housing projects of New York. To better understand the state in which they exist today, the history of why they exist in the first place needs to be examined. By doing so, an understanding of their cultural and historical significance can be constructed. This will increase the value of the social housing projects, which are currently ignored and being left to rot to a point beyond repair. The studio will provide both a research field and a set of methods in which to understand what do with culturally and historically sensitive urban tissues such as the social housing projects of New York.

Graduation project	
Title of the graduation project	Finding the "Soul" of Public Space in Harlem's Social Housing Projects
Goal	
Location:	East Harlem, New York, U.S.A
The posed problem,	The current functionality of public space in the social housing projects of East Harlem are passive, low in activity, and has no variety in space and function - propagating problems of health and safety that the low-income families of the projects face on a day-to-day basis. In order to help these inhabitants attain a higher quality of life, their public space needs to be redeveloped through a design brief which incentivizes developers to

	add social and programmatic elements that will help bring more activity, self-awareness, and diversity without displacing the current inhabitants of the projects. This needs to be done within the current boom of construction going on in New York, allowing the people living in the projects to be better positioned to protect themselves from future gentrification and preserve their community. Finding the "soul" of their public space will prevent further isolation from the city, a state that the projects currently find themselves in.
research questions and	<p>In what possible ways can the passive public spaces of social housing projects in East Harlem be redeveloped in order to provide their inhabitants with a better quality of life, while keeping the community intact and protected from an increasingly gentrified New York?</p> <p>Is there a zoning or legislative system that can be implemented which would motivate developers to help provide the necessary investment required to redevelop the public space of the projects?</p> <p>Can the community of the projects increase the quality of public space and still be protected from the effects of gentrification?</p> <p>How can improving the quality of public space in the projects provide a better quality of life?</p> <p>What kind of needs or requirements will be provided in the design brief for the public space of the projects? How can this be enforced on the developers who will be responsible for redeveloping the public space?</p>
design assignment in which these result.	A "design brief" that informs and regulates a "development plan" which provides a framework of zoning and regulation that can help in providing a better quality of life to the public spaces of social housing projects in New York.
The design assignment for the thesis is the re-development of public space at the base of the high-rise buildings which make up the social housing projects in New York. It is an exploration of two parts, one being a "design brief," and the other being a "development plan." The design brief will allow ideas of public space regeneration to be tested and conceptualized, while the development plan will take these ideas and give a framework that can be used make this regeneration of space a reality.	
The project location chosen to be the test site of the design brief and parameters	

which will be defined is on the East side of Harlem, which exists in the North of Manhattan Island. The project site is made up of four social housing projects: Jefferson Houses, Johnson Houses, Taft Houses, and King Towers. There are multiple reasons for this selection, but one of the most motivating factors is that its a continuous super block of social housing projects which happen to exist at the corner of Central Park. The spatial realization of social inequality is apparent in this case when one considers how some of the most expensive real estate exist around Central Park. From a morphological standpoint, the project area is a massive interruption in the planned grid of New York, and sits isolated around the infill tenement morphology that defines the city. There are also different typologies of residential blocks on the site, and has a good potential to connect to the waterfront with Central Park.

These projects are also a good sample set of the health and safety issues that plague other projects that are controlled by the New York City Housing Authority (NYCHA). When looking at recent stories in the news like residents in the Jefferson Houses had to threaten to sue NYCHA just to clean up their basements which had flooded with sewage water, which was reported by Nolan Hicks (2018) in the New York Post in a story titled *NYCHA Cleans Up Sewage in Basement After Residents Threatened Lawsuit*. Crime is also a major issue at the Jefferson Houses, according to Greg B. Smith in his story titled *Spike in Violent Crime in Housing Division where Slain NYPD Officer Randolph Holder Worked* published by the New York Daily News. In the report, he explains that in 2015 there were 7 murders in Police Service Area 5 (PSA 5), which is responsible for protecting 30 NYCHA projects in Harlem. The Jefferson Houses accounted for 3 of those murders, including Officer Randolph Holder, and is considered the housing project with the most amount of crime in PSA 5. By implementing the design brief in this area, the thesis aims to help alleviate these problems that plague the project location.

Process
<p>Method description</p> <p>The methods and techniques of research and design that will be used in this thesis are to help produce a "development plan" framework in which passive public spaces in the social housing projects of New York can plausibly be regenerated, combined with a "design brief" that will test spatial theories that will increase the quality of life in these spaces and not gentrify them at the same time. By providing the "development plan" first, zoning rules and regulations can be discovered, which in turn can provide parameters and limits that can inform the framework of the "design brief."</p> <p>The "design brief" will have a "research by design" approach that implements concepts and guidelines from multiple scholarly sources that criticize and suggest elements in the planning and use of public space. The site needs to be analyzed at a macro scale to first understand issues of circulation, access to public goods, surrounding functions, and other issues of context. Next, data needs to be gathered at a smaller scale, such as the plans of the buildings in the social housing projects, in order to better understand the interaction between the ground floor of the buildings and the public space that surrounds them. This knowledge will also provide a</p>

<p>structure that can be manipulated in order to make a functional new public space possible. Another level that needs to be considered are the wants and needs of the residents. This data needs to be collected somehow, either by interviews of local inhabitants, or a questionnaire done previously by a reputable source.</p> <p>The "development plan" framework will therefore be born out of the "design brief" that is produced. The parameters and ideas extracted from it will be codified in typologies that can be implemented as part of the zoning regulations defined by the City Council of New York. Based on these regulations, potential developers will have to abide by the rules defined in the zonal coding. These rules will not only be limited to morphological regulations, such as set backs, heights, et cetera. But also, percentages of available potential development, and a bonus system that rewards developers for meeting certain benchmarks which help the passive public spaces of the social housing projects attain a better quality of life for their inhabitants. A key component to this approach will be preventing gentrification and preserving the community that lives within the projects, yet developers need to be incentivized to improve these public spaces in the first place.</p>	<p>meaning to the inhabitants that use it. The current literature fields and sources are:</p> <p><i>The Death and Life of Great American Cities</i> by JACOBS, J. (1961) - A book that takes an in-depth look at the relationships between the people, the built environment, and the public space around them.</p> <p><i>The Ghastly Tragedy of the Suburbs</i> by KUNSTLER, J. H. (2004) - A lecture about the failures of modern urban planning, and the public spaces which resulted from them.</p> <p><i>New York: The Revitalization of Public Space. Recent Interventions in the Manhattan Grid</i> by MORCILLO PALLARES, A. (2012) - An article that explains the history of public space in New York, and the major implications that the urban grid had on the city.</p> <p>3. Nourishing the "Soul" of Public Space</p> <p>This field provides potential guidelines and approaches that can be taken in order to improve the quality and functionality of public space. Though not specific methods, there are suggestions and recommendations made from multiple sources that, when looked at comprehensively, can help provide a framework for designing public space. The current literature fields and sources are:</p> <p><i>Public Places, Urban Spaces: The dimensions of Urban Design</i> by CARMONA, M. (2003) - A book that tackles a broad range of ideas and theories about the use and design of public space in the urban context.</p> <p><i>Public Space</i> by CARR, S., FRANCIS, M., RIVLIN, L. G., & STONE, A. M. (1992) - A book explaining the link between civic space and public life, and offers approaches that need to be considered when designing public space.</p> <p><i>Placemaking and the Future of Cities</i> by Project for Public Spaces (2012) - A handbook advocating that public space is an important key to building inclusive, healthy, functional, and productive cities.</p>
<p>Literature and general practical preference</p> <p>The search for the "soul" of public space in the social housing projects of East Harlem is a combination of three fields of knowledge that need to be studied in order to produce the "design brief" and the "development plan:"</p> <p>1. Social Housing in New York City</p> <p>This field involves the history and current situation of the social housing projects in New York. Not only does this provide reasoning to the overall understanding why they are important to not only the residents of the projects, but also to the urban morphology of the city and the implications of their development. The current literature fields and sources are:</p> <p><i>The Rise and Fall of New York Public Housing: An Oral History</i> by FERRÉ-SADURNÍ, L. (2018) - An article which describes both the history, and the current health and safety issues which have plagued the social housing projects of New York.</p> <p><i>The Housing Crisis in New York</i> by KAYSEN, R. (2018) - An article about the challenges New York is experiencing in providing affordable housing to its residents, and how the city is trying to meet them.</p> <p><i>A Brief History of Affordable Housing in New York City</i> by PALETTA, A. (2016) - An article which describes the processes that took place in order to develop and build the social housing projects of New York.</p> <p>2. Deficiencies of Public Space</p> <p>This field deals with the criticisms of the planning processes that have produced the contemporary city, more specifically on the degradation of public space and its</p>	<p>Reflection</p> <p>Relevance</p> <p>Societal and Ethical Relevance</p> <p>The social housing projects of New York are isolated morphologically, but also socially as well. Since low-income families live in the projects, there tends to be issues of unemployment, crime, etc. Since the "White Flight," social housing has been seen as a place of undesirable and this sentiment continues to this day. Though the Mayor of New York has tried to provide affordable housing to the masses, it really only effects people who can actually afford decent rents. As the city develops with new residential towers, the social housing projects have been sliding into disrepair as neo-liberal economic and governmental approaches have deemed them obsolete. The motivation behind this thesis is to recognize that the people living in these projects</p>
<p>have a right to the city, and do not deserve the quality of life that they are living through now. What is the most ironic is that reason why the slums were cleared in order to make way for the social housing projects was to eradicate poverty and other social ills, but history just ended up repeating itself.</p> <p>Scientific Relevance</p> <p>The most relevant scientific aspect to this thesis might be the psychological implications regarding the connection between public space and the people who use it. This can be acknowledged by asking questions such as:</p> <p>Does improving public space really improve the quality of life? What makes users more connected to public space? How does public space affect the way people interpret the world?</p> <p>Time planning</p> <p>The timeline of the project will be as follows, and is divided by the two products which are the "design brief" and the "development plan:"</p> <p>By P2:</p> <p>For the "design brief:"</p> <p>Potential design interventions should be in the process of being explored. Preparing the base files, plans, and other information necessary for the design intervention should be in the process of being finalized.</p> <p>For the "development plan:"</p> <p>Potential incentives to developers should be in the process of being explored. The research and defining of all potential stakeholders in the re-development of public space in social housing projects should be ongoing.</p> <p>By P3:</p> <p>For the "design brief:"</p> <p>Potential design interventions should be in the process of being finalized and transitioning to a finalized design intervention. The research into the design characteristics that can be implemented in public space should be in the process of being finalized. The development of potential parametrics needed for the development plan should be ongoing.</p> <p>For the "development plan:"</p> <p>Research about NYC zoning regulations should be ongoing.</p>	<p>Research about NYC legislation and processes required in development should be ongoing.</p> <p>The gathering of data about the needs of the inhabitants in the social housing projects should be ongoing.</p> <p>By P4:</p> <p>For the "design brief:"</p> <p>The development of potential parametrics needed for the development plan should be finalized.</p> <p>The design interventions planned for the public space should be finalized.</p> <p>For the "development plan:"</p> <p>The zoning options for the public space of the social housing projects need to be finalized.</p> <p>The legislation needs to make redevelopment of public spaces possible need to be finalized.</p> <p>By P5:</p> <p>Final touches and feedback based revisions should be done.</p>

H E L L O !



QUICK OVERVIEW

Born on 12/06/1988 (30 years old)
American + Turkish (Dual) Citizen

Fluent in English and Turkish

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B I O G R A P H Y

I am a 30 year old, married, American student at the Technische Universiteit of Delft (TU Delft), and I am on track to finish my master's degree in Urbanism. Though my age is probably too advanced to be in a position such as this in my life, I think one could argue I have taken the long road in order to get where I am today. Therefore, in order to explain why I decided to pursue advanced studies in Europe, I must first explain the path that I have traveled the past couple of years.

"Where are you from?" This question has always been a difficult question for me, because my father worked for General Electric, and our family had to move every 4-5 years. I was born in Bloomington, Indiana. We then moved to Istanbul, Turkey when I was 5 years old. Then I started 1st Grade in Lahore, Pakistan. I attended high school in Raleigh, North Carolina. This constant flux of change, combined with an exposure to different cultures and urbanities, gave me a set of experiences that allows me see the world through many various perspectives that not many people can. It laid the foundations as a designer, which is why I decided to pursue an Architecture degree at the University of North Carolina at Charlotte. It is also the reason why when I graduated in 2011, I made a decision to leave the U.S and find another place to pursue my career as an architect.

Back then, the States were still reeling from the 2008 financial crisis, and it held the entire construction industry to a grinding halt. This made look towards an environment that was booming with exciting and new projects, which is why I decided to move to Istanbul. I would go there during my summers, and it seemed untouched by the global financial crisis. This gave me a significant advantage over my peers, because I could become a licensed architect immediately with my bachelors degree in Turkey. Demand for architectural services was so incredibly high at the time, which allowed opportunities for young architects that are almost impossible to see in the West. There was also a robust culture of national design competitions, which would allow for my ideas to emerge from the status quo.

I worked in this rich and dynamic environment for 6 years, with the vast of the majority of the time being spent at ABOUTBLANK Architecture and Urban Design, which I helped start up in 2012 with friends I met at Emre Arolat Architects. During my time there, I lead and managed many design competitions, and these projects exposed me to new ideas and processes. This was an intense period in my life, as it involved 70 hour work weeks and conceptual debates among the other team members of the office. I developed a strong comradery with my partners, and all the effort put into these projects helped define the designer I am today. However, as the political and socio-economic landscape in Turkey deteriorated, interesting projects became increasing rare to come by, and I felt like I was not growing anymore as an architect/urban designer.

That is why I left the office in 2017 to pursue my Master's degree, as I thought and felt it was a great time to look outward in search for new opportunities. I also felt disconnected from the theoretical and scholarly side of my profession, which seemed to not be so important in the commercial practice of architecture. During this transition period, not only did I meet my wife, but pursuing my master's degree exposed me to new perspectives that force rigorous dialect within analytical frameworks that primarily exist in an academic setting such as TU Delft. After experience in both North America and the Middle East, Europe seemed the ideal environment to develop holistically as a designer. In the future, after working a year at a prestigious architectural firm in the Netherlands, I hope to move back to the U.S to work, this time with a world's worth of experience under my belt.

OSMAN URAL - CV

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ACADEMIC

Technische Universiteit Delft

MSc in Urbanism

Delft, The Netherlands

08/2017 to 08/2019



University of North Carolina at Charlotte

BA in Architecture

Charlotte, North Carolina, U.S.A

08/2006 to 05/2011



WORK

TU Delft Faculty of Architecture - Urbanism

Editor for the Urbanism Editing Service

Delft, The Netherlands - 09/2018 to 09/2019

My job involved reviewing scientific journals and research papers developed by faculty members who needed their work to be revised before being sent out for publication. Working here not only exposed me to the most current research being done at school, but it even helped some of my own work get published. This can be found on-line at: <https://www.mdpi.com/2071-1050/10/12/4740/html>

ABOUTBLANK Architecture and Urban Design

Project Director / Architect

Istanbul, Turkey - 05/2012 to 05/2017

During my time at ABOUTBLANK, I lead and managed many design projects and competitions. It is a firm based on both collective production, and the belief in a design process that is truly dependent on the parts of its sum. The design process involves the constant struggle of competing perspectives within a flexible design framework. My work involved creating architectural concepts at a variety of ranges and scale. I generated high detail 3d project models, and rendered them using Cinema 4D + V-Ray. I produced plans and sections for buildings in AutoCAD. I prepared animations for client presentations using both Lumion and Premiere Pro to edit and render them. I also compiled diagrams and exploded axonometrics using Sketchup and Illustrator.

Emre Arolat Architects (EAA)

Junior Architect

Istanbul, Turkey - 08/2011 to 05/2012

At my first job as an architect, I solved design problems for multiple projects using Sketchup and AutoCAD. While gaining valuable experience with all the workings involved in a large office, I also participated in various design charrettes and projects. I built and detailed 3D models for various projects, ranging from a mall, to a mosque, while having daily exposure to one of Turkey's most prominent architects.

AWARDS

09/2015 - Istanbul, Turkey

Beylikdüzü Valley of Life Bridge Design -3rd Place-

07/2015 - Istanbul, Turkey

Maltepe Gulsuyu Alevi Complex -Honorable Mention-

09/2014 - Bishkek, Kyrgyzstan

Bishkek 2040 Strategic Masterplan -Honorable Mention-

10/2014 - Malatya, Turkey

Mehmet Kavuk Mosque Competition -3rd Place-

07/2014 - Gökceada Island, Turkey

Gökceada High School Campus Masterplan -3rd Place-

12/2013 - Izmir, Turkey

Izmir Development Agency Headquarters -1st Place-

04/2013 - Lüleburgaz, Turkey

Lüleburgaz Bus Station Terminal -3rd Place-

03/2013 - Uşak, Turkey

Uşak Municipal Services Building -Honorable Mention-

06/2012 - Uşak, Turkey

Uşak İsmetpaşa Street Design -Honorable Mention-

INTL. EXPERIENCE



WORKSHOPS

Infrastructure Ecologies and Forms of Life
IUAU University of Venice
Venice, Italy - 05/2018

This workshop was part of the Extensive Program 'The Port and the Fall of Icarus' of the Dutch Pavilion in the 16th International Architecture Exhibition, La Biennale di Venezia 2018 – 'Free space'. The program, curated by Hamed Khosravi, Taneha K. Bacchin and Filippo laFleur, allowed us to research and design a project based on the topic of logistics and their architectural, territorial, social, and political implications.

Sarajevo Green Design Biennale
National Gallery of B&H
Sarajevo, Bosnia and Herzegovina - 10/2015

The aim of this biennale was to capture trends and realizations of innovative sustainable solutions and investigate their further evolution. It was a five day lecture series, with our presentation displaying how ABOUTBLANK attempts to create projects that are sustainable not only in form and structure, but with use as well.

Skopje Architecture Week - Supercity 2.0
The Macedonian National Opera and Ballet
Skopje, North Macedonia - 08/2012

The theme of this festival centered around connective patterns that prove knowledge is inseparable from action in urban discourse. The lecture series featured practices from around the world, which included Kengo Kuma, Enota, Nuno Brandão Costa, and ABOUTBLANK. Current political issues with architecture in the region were discussed, and the role of ecology in design was also debated.

TECHNICAL

SketchUp	<div><div></div></div>
Photoshop	<div><div></div></div>
Indesign	<div><div></div></div>
Lumion	<div><div></div></div>
AutoCAD	<div><div></div></div>
Cinema 4D + V-Ray	<div><div></div></div>
Illustrator	<div><div></div></div>
Premiere Pro	<div><div></div></div>
Revit	<div><div></div></div>
Rhinoceros	<div><div></div></div>
Grasshopper	<div><div></div></div>
MS Office	<div><div></div></div>
GIS	<div><div></div></div>

EXHIBITIONS

Port City Futures
BK Expo at TU Delft
Delft, The Netherlands - 05/2018

This was part of a workshop that showed the past of harbor-city relations and imagined their possible futures, which were based on intensive cooperation between the port and the city of Rotterdam. My reserach group's proposal for the regeneration of a section of the Port of Rotterdam in Merwe-Vierhavens (M4H) was selected to be displayed in the closing exhibition of the event.

"Open-Source Architecture: Open-Cube"
2nd Int. Antalya Architecture Biennale
Antalya, Turkey - 09/2013

This biennale dealt with accelerating technological developments that create a major force behind globalization, causing radical transformations in all spheres of life. This was ABOUTBLANK's first open-source architecture experiment that allowed users to activate cubes according to their needs and desires, and in doing so defying the logic of predetermined functions.

"Fabrika" Exhibition
Milli Reasürans Art Gallery
Istanbul, Turkey - 02/2011

This exhibition gave a look into the design of the Ipekyol Textile Factory. The architect, Emre Arolat, was awarded the Aga Khan Award in 2010 for it because it uses a spatial strategy that integrates both production goals and the well-being of its employees. I was responsible for making a detailed 3D model of the factory, which was originally supposed to be for an animation. However, I had made the model so detailed that Mr. Arolat decided to have the entire model be put on display so that it can be readily explorable for all the visitors of the exhibition.

EXPERTISE

Urban Planning	<div><div></div></div>
Infrastructure	<div><div></div></div>
Office Architecture	<div><div></div></div>
Religious Architecture	<div><div></div></div>
Residential Architecture	<div><div></div></div>
Landscape Architecture	<div><div></div></div>

REFERENCES

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I would like to thank Teake Bouma and Luisa Calabrese, who are great mentors who challenged me every day. They dared me to question, and always gave me insightful comments on my work.

I want to also shout out to the Aboutblank crew: Hasan Sıtkı Gümüşsoy, Erhan Vural, Özan Özdilek, and Gökhan Kodalak. These guys gave me my foundations, and my confidence to become the architect + urban designer I am today.

I would like to also mention my Wasted Landscape Crew: Anubhuti Chandna, Danny Janse, and Jingxuan Xie

