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Active Density: Stimulating the Urban Domain in High-Rise Social Housing Developments

Heather Dela Cruz

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ACTIVE DENSITY

STIMULATING THE URBAN DOMAIN IN
HIGH-RISE SOCIAL HOUSING DEVELOPMENTS

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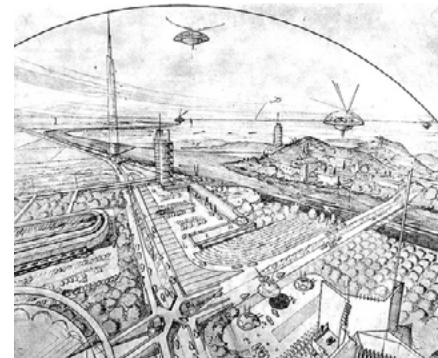# CONTENTS

FIGURE 1

FIGURE 2

FIGURE 3

"Anonymous buildings, each like its neighbor, rise from anonymous ground spaces. There is a sense of disorientation; one does not know where one is; everything is the same and one feels like a stranger in a surreal landscape. **As a result, one feels insecure, out of touch, depersonalized, dehumanized.**" [1]

INTRODUCTION

Utopian visions of urban planning proposed at the turn of the 20th century such as Ebenezer Howard's *Garden City*, Le Corbusier's *Ville Radieuse*, and Frank Lloyd Wright's *Broadacre City*, has left cities in a state of social and spatial urgency that calls for comprehensive reformulation; one that confronts the paradigm of social and programmatic segregation as a stimulus for restoring lost public space. Modeled after Le Corbusier's *Contemporary City of Three Million Inhabitants*, large-scale housing complexes were built on mega blocks designed to accommodate rising urban populations and improve living conditions for those who lived in slums. These vertical urban dwellings, situated on blocks of open landscape, were constructed "away from the streets, without small internal courtyards and with the windows looking on to large parks". [2] While the intention of these complexes, found in cities around the U.S., was to eradicate poor living conditions and promote a healthier and cleaner lifestyle, the outcome was significantly different.

As the main component of public space, streets promote social and economic interaction among the inhabitants of these neighborhoods. When lined with publicly accessible buildings, they can activate the ground plane and create a rich spatial quality that places an emphasis on human interaction. The result of these "towers in the park" was the loss of the traditional fabric of the city, which cleared smaller blocks to create super blocks. This, in combination with the relocation of the main building entrance away from the street, changed the notion of public street interaction. However well-intentioned, these urban manifestos "rarely encourage or celebrate public life". [3] Rather than being a place for gathering and social activity, the open space on which the buildings rest are underutilized and are often used as open parking lots.

1. Halprin, Lawrence. *New York New York*. San Francisco: Chapman, 1968. Print.

2. Corbusier, Le, and Frederick Etchells. *The City of To-morrow and Its Planning*. London: Architectural, 1987. Print.

3. Jacobs, Allan B. *Great Streets*. Cambridge, MA: MIT, 1993. Print.

FIGURE 1:
Ebenezer Howard, *Garden City*, 1898
www.library.cornell.edu

FIGURE 2:
Le Corbusier, *Ville Radieuse,* 1924
www.archdaily.com

FIGURE 3:
Frank Lloyd Wright, *Broadacre City*, 1932
www.flickr.com

With the construction of the towers came the loss of the spatial quality that existed with the street. Vertical residential complexes, lacking public amenities at grade, resulted in a deactivated ground plane and the significant diminishment of public life. These structures "seem to be more consistent with separation and introspection – buildings and people alone, with space on all sides – than with encountering and dealing with people regularly".[4] The minimal pedestrian street activity around the site, the thoughtless misuse of open space, along with social and economic challenges of a particular area, make public housing complexes of this type an architectural, social, and economic burden rather than an asset to metropolitan areas.

Similar to the Modernist notion of separating districts of living, working, and entertainment from one another, New York City zoning laws have controlled urban planning developments and allowed public housing projects to be built in concentrated areas. The concentration of residential units, or "warehousing the poor"[5], contributes minimal vitality to the community and are often hot spots for criminal activity.

Built during the 1940's and 50's, these modern-style housing complex typologies can be found throughout the U.S., however; through closer inspection of a specific site, problems with this type of architecture can be explored in a critical manner. An urban neighborhood that exemplifies the problematic and isolative nature of public housing developments is Brownsville in Brooklyn, NY. Home to the highest concentration of public housing projects in the United States, Brownsville has a notorious reputation of being a dangerous and unkempt neighborhood that lacks community engagement.

While it is easy to propose the demolition of these public housing projects as a remedy to the shortcomings of Modern urban planning, it is neither realistic nor sustainable to attempt to do so. Instead of resorting to demolition to solve the problem, I propose to retain the benefits of vertical housing and improve upon it by up-zoning the block and building low-rise, high-density mixed-income structures on the site's perimeter. The new construction will include public amenities that are lacking in the immediate area such as retail, restaurants, work space, and public service facilities. Through adaptive re-use of mega blocks will be reclaimed. This mixed-use approach to the expanded occupancy will also restore the diversity that was lost when the towers were first built.

According to Allan Jacobs, author of *Great Streets*, streets must be designed for the people and should not only be inviting but safe as well. By designing a dense street wall, the street can activate the ground plane and serve as a principal public space that offers social and economic engagement. Through strategic positioning of units, windows, entries, and paths of movement, new and existing development can "provide inhabitants with continuous natural surveillance of the street and project grounds".[6] With an active and porous ground plane that extends public space from the street into the built environment, "the street comes under surveillance from the building, the building entries and lobbies under surveillance of the street"[7] thereby making the community safer, including the public housing complexes. Furthermore, the privileging of the private vehicle as the primary mode of transportstion reduces the spatial quality of the ground plane such that the park is actually a parking lot. By relocating the parking underground, it creates opportunity for new development targeted towards pedestrian interaction. With careful design, a dense community that accommodates the essential and desired amenities of its inhabitants will spark economic activity and produce a vibrant public domain.

4. Jacobs. *Great Streets*.

5. Chakrabarti, Vishaan. *A Country of Cities: A Manifesto for an Urban America*. New York: Metropolis, 2013. Print.

6. Newman, Oscar. *Defensible Space: Crime Prevention Through Urban Design*. New York: Macmillan, 1972. Print.

7. Newman. *Defensible Space*. 15.

CONTENTION

Shortly after the establishment of the New York Housing Authority in 1934, a number of high-rise housing projects were constructed throughout New York City to replace older, low-rise, high-density tenements that were outdated and in poor condition. The typological model of these projects followed on the "tower in the park" principles as espoused by Le Corbusier and other European architects during the 1920's. Thought to be a more modern and forward-looking approach to urban housing, the "tower in the park" sought to relieve the perceived congestion of the typical perimeter urban block and replace it with modern apartment towers arranged in a larger, landscaped setting. However, over time, this strategy of urban housing development proved to be detrimental to the patterns of urban living, owing to a number of factors, which include:

1. The monoculture of occupancy in housing blocks isolate themselves from the rest of the community and create programmatic "dead-zones" that are unwelcoming to pedestrian activity.

2. Housing economically-challenged families into one area, also known as "warehousing the poor", creates economic and social ailments in the community.

3. The internal configuration of the blocks forces residents to enter their homes inside the block, rather than from the street. This removes pedestrians from the street, which contributes to increased criminal activity.

4. Open spaces intended for recreation became parking lots and useless green space that is fenced off from public use.

I would argue that through a process of strategic intervention, it is possible to restore the lost amenities of a mixed-use perimeter block while largely preserving the original towers. The net benefits would be:

1. **The activation of the urban terrain** through the addition of much-needed amenities for the community such as a daycare center, a venue that hosts after-school programs, and an incubator that supports local businesses.

2. **The addition of mixed-income housing units and the preservation of the affordable housing towers** that will prevent the displacement of current residents while welcoming a diverse group of people that can help stimulate the economy.

3. **The restoration of the street wall** by building up to the lot redefines the ground plane as a catalyst for an active public space and promotes community involvement.

4. **An increase in pedestrian activity** and the construction of low-rise, high-density structures that will extend public space into the built environment and foster a safer community that relies on its inhabitants to be active members of crime prevention.

5. **The creation of an engaging public green space** that modern design construction failed to accomplish.

While architecture will not singularly solve the social problems that arose from the creation of these towers, combining the benefits of both high-rise and low-rise structures will provide residents with amenities that lead to cultural and economic opportunities and foster an active and diverse urban community. High-rise developments around the country suffer from the same ailments as those in Brownsville and while each development is unique in its local condition, they can benefit from similar strategic interventions that place an emphasis in the implementation of low-rise, high-density, mixed-use developments in order to activate the public domain.

FIGURE 4:
Aerial view of public housing complexes in Brownsville, Brooklyn
lightbox.time.com

THE URBAN REALM:
A THEORETICAL ANALYSIS

Mumford, Lewis, and Donald L. Miller. "What is a City?" *The Lewis Mumford Reader.* New York: Pantheon, 1986. N. pag. Print.

"The city, as one finds it in history, is the point of maximum concentration for the power and culture of a community. It is a place where the diffused rays of many separate beams of life fall into focus, with gains in both social effectiveness and significance. **The city is the form and symbol of an integrated social relationship**: it is the seat of the temple, the market, the hall of justice, the academy of learning."

In the fall of 2013, I studied for a semester in New York City as a part of the school's study abroad program. In that semester, I gained a better knowledge and understanding of the complex relationships and interactions that are stimulated as a result of the urban environment. In my first day of class, my professor asked the class what would be one of the simplest, yet hardest questions I've ever had a task in uncovering. She simply stated, **"What is a city?"[8]**

According to American historian and literary critic Lewis Mumford, a city must be designed to fit the needs of man in the biological, social, and personal sense.[9] It is the city that should foster human expression and culture while providing amenities that not only satisfy human needs but their varying desires and imaginations as well. With its long history across the globe, cities have endured failures and successes, both as a result of its inhabitants. A city isn't merely a collection of people, structures, infrastructures, and public space. It is a community. In an ideal urban setting, one would only need to take a step outside their home and look out into the street and see everything they could want and need. In towns and villages, residents usually have to travel long distances in order to get supplies or amenities; however, in a city, spatial relationships in a community must and should be within walking distance to one another. A city is an attempt to generate form that satisfies the needs of a group of people and is a symbol of enduring social relationships. In other words, "architecture and city planning are the visible translations of the total meaning of a culture"[10].

While a city operates on a larger urban scale, it is a function of small communities that make up the whole. WIthin each community should exist all of man's needs; however, that is not always the case. In order for a city to be successful and possitively contribute to human life, these smaller communities must respond and interact with one another to provide everything people need. As hubs for culture and diversity, cities allow for social, economic, and political interaction .

WHAT IS A CITY?

8. Mumford, Lewis, and Donald L. Miller. "What is a City?" *The Lewis Mumford Reader.* New York: Pantheon, 1986. N. pag. Print.

9. Mumford. "What is a City?"

10. Mumford, Lewis, and Donald L. Miller. "The Ideal Form of the Modern City." T*he Lewis Mumford Reader.* New York: Pantheon, 1986. N. pag. Print.

FIGURE 1:
The Uffizi Gallery, Florence, Italy
tukiblack.blogspot.com

One of the most important aspects to have in a city that directly responds to man's social needs are public spaces, where people can gather and interact with one another in a way that doesn't disrupt their daily life but rather enhance it in a positive way. JB Jackson, author of "The Discovery of the Street", discusses the emergence of the street as the first notion of a public space. As villages began to create a surplus of livestock, vegetables and raw materials, came the creation of public markets located in a large, open plazas in the center of the village. Due to the high amount of traffic in these markets, narrow alleyways became widened to accommodate both vehicular and pedestrian traffic. As streets became more prominent, it began to organize the city orthogonally and also allowed the government to record and divide up their territory in a more precise and calculated way that allowed for easy taxation and also added value to land and ownership. The city, which was once only a cluster of infrastructures within close proximity to one another, became a system of public squares and streets with the development of political and economic attitudes.

As public space serves as a vital component to cities, so too are streets. Rather than just connecting one place to another, the most successful and engaging streets help facilitate human interaction and build a sense of community and a sense of place. "Streets should encourage socialization and participation of people in the community. They serve as locations of public expression. They should be physically comfortable and safe."[11] The best streets and public spaces found in the urban context not only welcome pedestrian traffic but facilitie activity so that people experience, linger and live in them rather than just passing through.

THE STREET & PUBLIC SPACE

11. Jacobs, Allan B. *Great Streets*. Cambridge, MA: MIT, 1993. Print.

PUBLIC HOUSING

Jacobs, Allan B. *Great Streets*. Cambridge, MA: MIT, 1993. Print.

"As well-intentioned and socially responsive as those [public housing] manifestos were, their results, abundantly visible by the 1960s, rarely encourage or celebrate public life. They seem more consistent with separation and introspection - buildings and people alone, with space on all sides - than with encountering and dealing with people regularly."

HISTORY OF POST-WAR HOUSING MEGASTRUCTURES

12. Von Moos, Stanislaus. Venturi, Rauch & Scott Brown: Buildings and Projects. New York: Rizzoli International Publications, 1987. 279. Print.

13. Denzer, Anthony S. "Masters of Modernism." Masters of Modernism. Web. 29 Oct. 2013.

14. Plunz, Richard. "Rich and Poor." A History of Housing in New York City: Dwelling Type and Social Change in the American Metropolis. New York: Columbia UP, 1990. 50. Print

Desperation loomed in the air. Pangs of hunger overcame the poor and the blue collar class roamed through dirt covered streets while the bourgeoisie lavished in their wealth. Differences in political and economic aspirations widened the gap between social classes and the strife between the two was palpable. Due to social unrest and the need for sanitary living conditions, architects and urban planners were inspired to study and reimagine the city. While their tactics were different, early 20th century architects had an underlying intention: a clean slate. A perfect and rational system intended to solve social and economic injustice; a system that capitalized on industry and the new age of machines as a tool for formal homogeneity; a system that seemingly strived to create an ideal environment through the separation of programs devoid of historical and contextual content; a system, that became the basis of the Modern formulation of a city.

With the development of various political theories rising at the end of the 19th century, tension between nations became increasingly evident. Along with the dramatic evolution of technology and industrial design in the early 20th century, arose a different perception of the world. Following the Second World War, people sought out to find a better life, leading to a mass immigration towards the Western World. Consequently, shortage on public housing took place and living conditions in metropolitan areas became increasingly crowded and chaotic.[12] Proposals for the reorganization of major cities to accommodate the increase in population were not only provocative but sparked an interest in architectural purity and simplicity through the new possibility of mass production.[13] As a response to the often dark, dismal, and unsanitary conditions of tenement housing, and in congruence with the realization of the steel skeleton frame, the elevator, electricity, and modern sanitation, led to the construction of the high-rise apartment in New York City and other urban centers throughout the country.[14] It was conceived that the construction of these towers that rest on an open plot of land can provide residents access to sunlight, air, and nature; an experience that was not possible in the slums.

FIGURE 1:
Image of high population density in city centers as immigrants moved west for better opportunities
iws.punahou.edu

FIGURE 2:
An example of the slums in which poor families lived
nedhardy.com

FIGURE 3:
Le Corbusier, *Plan Voisin*, 1925
www.flickr.com

Le Corbusier, a leader in the Modern movement, conceptualized a series of intensive urban planning projects such as Ville Radiuse and Plan Voisin in which a formal grid organizes the city into districts based on program. Uniform in its formal and aesthetic qualities, the city is meant to be built following the eradication of an existing city, eliminating any and all historical traces of the past. As a notable opponent of the vehicle, Le Corbusier insisted that the new ideal city be rid of any vehicular activity. Thus, large pedestrian oriented blocks that didn't cater to vehicles were conceived as a new way of imagining the city. In addition, Cartesian skyscrapers built up on piloti were meant to be occupy only a small percentage of the land on which it sits as the remaining open space would be used as a park for recreational activities. By creating these megablocks with a significantly reduced street wall, urban public life would lose its vital organ, which is the street. While his theoretical and largely utopian ideas of the city never left the paper, it was meant to phase out any social stratification through standardized architecture[15] and therefore became a model for public housing design.

One of the biggest critiques that befell Modern architects is their inability to cater to the personal preferences of each individual. With a particular architectural attitude in mind, their design aesthetics correspond to a certain propensity towards their personal desires, disregarding any social and historical context that might affect its inhabitants. Therefore, formal gestures do not necessarily correspond to the wants or even needs of the occupants. The master plans devised by Modernists almost always involved the total obliteration of an existing city, offering a clean slate in which architects gain total freedom to plan and organize a city.

While Modern ideals of urbanism had overwhelming potential and were ideologically rational, the reality of creating a master plan that involved the strategic coherence of planning, infrastructure, and transportation in such a rigid and controlled structure proved to be an impractical approach to city planning.[16] The chimerical urban ideas of Modern architects became heavily critiqued following the descent of the movement in which architects and urban designers understood the city as unpredictable and dynamic.

Lewis Mumford provided social commentary on the failure of Modernists to sufficiently comprehend ethological concerns of the 1950s and 60s and their inadequacy in applying human scale to their monumental designs. The generalization and standardization of the modern city assumes that one prototype can accommodate all human wants and needs, leaving no room for individuality.

In contrast, Mumford believes that "the city, if it is anything, is an expression and symbolization of man's wholeness – a representation in buildings of his nature and purposes"[17]. This idea states that a city is a product of and a representation of man's social, biological, and physical needs. A successful city, if one could define it, interacts with its inhabitants and provides industry, education, sustenance, and leisure in one community and is located with a certain adjacency to one another. Most importantly, a city must be accessible to everyone. In accordance to Mumford's urban theory, "if we respect the nature of man, the order established by urban planning must be an inclusive one".[18]

15. "CONTEMPORARY CITY FOR THREE MILLION INHABITANTS." Architectural World. Web. 30 Oct. 2013.

16. Von Moos. Venturi, Rauch & Scott Brown. 78-79.

**17.** Mumford. "The Ideal Form of the Modern City." 162.

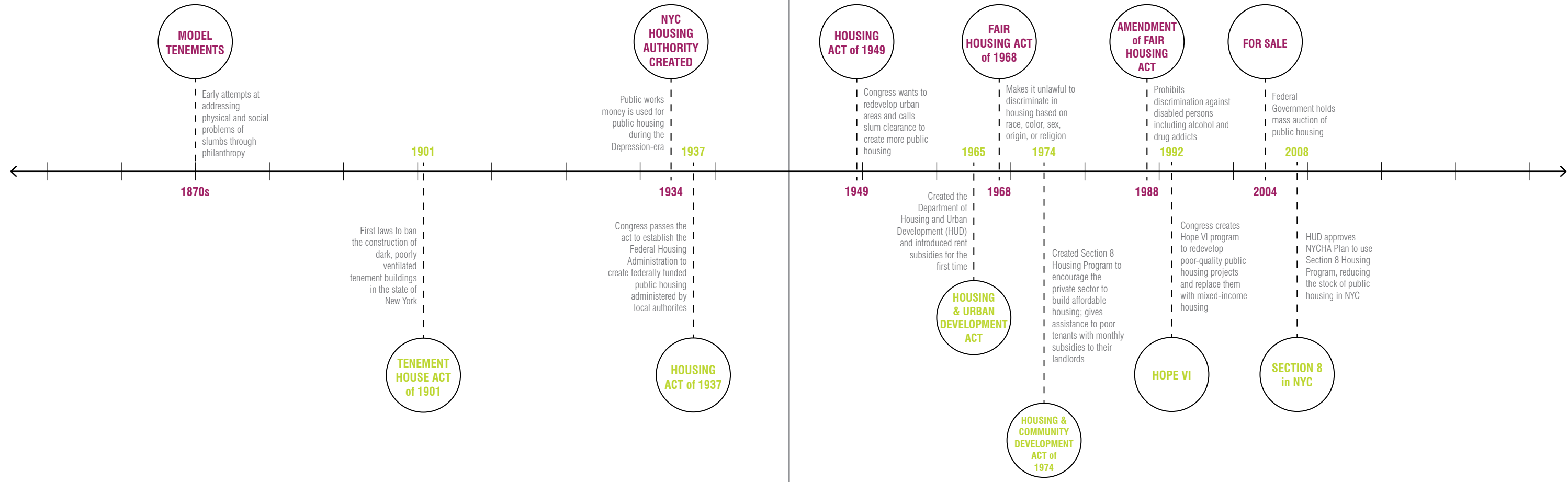**18.** Mumford. "The Ideal Form of the Modern City." 175.

Before the ailments of high-rise social housing structures were realized, cities across the country used them as models for rebuilding and reorganizing their housing sector due to the increased demand in clean, safe, and affordable housing. Founded in 1937, the New York City Housing Authority was funded by public works to provide subsidized, affordable housing for city residents. Originally intended to house those of a diverse range of socio-economic backgrounds, public housing projects became a dumping ground for poverty-stricken families when those with more affluent upbringings migrated outside of the city, into the suburbs due to cheaper land value and to get away from the African American community. In turn, social housing projects became a magnet for the poor, predominantly black community.

When the poor are concentrated in one area that lacks cultural, social, and economic diversity, crime significantly increases as little to no investment is given to the community or its members. In the case of social housing developments, they are created by bulldozing street blocks that helped to create the identity of the neighborhood. More often than not, these blocks are isolated from its community as it welcomes only those who reside in the complex. The inward design approach of the complex prevents users from entering any of the buildings from the street. This, in addition to the fact that the complexes are exclusively housing, makes the street around it increasingly abandoned as public pedestrians have no incentive to walk along the towers, especially with its green space being fenced in away from public use. Streets that are abandoned of life and vitality are deemed unsafe to pedestrians as well as its residents, instilling fear within the community regardless of its crime rate.
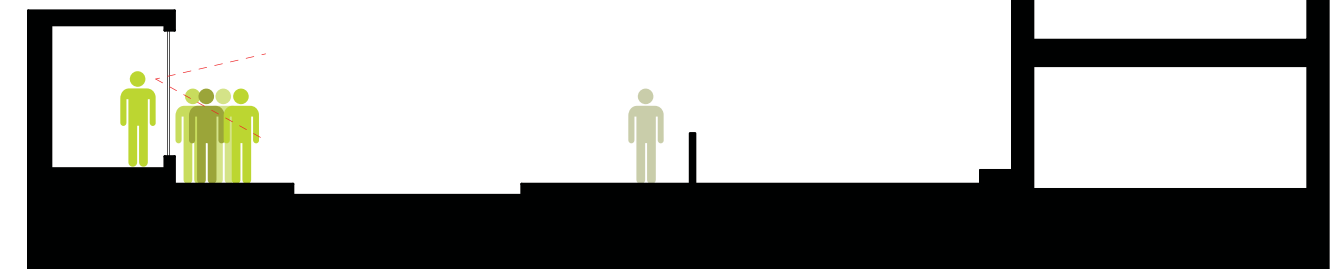
High-rise towers that are pushed away from the street and are fenced in produce minimal street activity and doesn't contribute to the vitality of the city. In addition, crime rates are higher in social housing areas as there is not natural community policing that becomes apparent when the built environment responds to the public and stimulates street activity. Even when crimes are noticed, it often goes unreported as they are higher up on the ground and feel like they can't do anything about it.

MODEL TENEMENTS

Early attempts at addressing physical and social problems of slumbs through philanthropy

1870s

NYC HOUSING AUTHORITY CREATED

Public works money is used for public housing during the Depression-era

1937

1901

First laws to ban the construction of dark, poorly ventilated tenement buildings in the state of New York

1934

Congress passes the act to establish the Federal Housing Administration to create federally funded public housing administered by local authorites

TENEMENT HOUSE ACT of 1901

HOUSING ACT of 1937

HOUSING ACT of 1949

Congress wants to redevelop urban areas and calls slum clearance to create more public housing

1949

Created the Department of Housing and Urban Development (HUD) and introduced rent subsidies for the first time

1965

HOUSING & URBAN DEVELOPMENT ACT

FAIR HOUSING ACT of 1968

Makes it unlawful to discriminate in housing based on race, color, sex, origin, or religion

1968

1974

Created Section 8 Housing Program to encourage the private sector to build affordable housing; gives assistance to poor tenants with monthly subsidies to their landlords

HOUSING & COMMUNITY DEVELOPMENT ACT of 1974

AMENDMENT of FAIR HOUSING ACT

Prohibits discrimination against disabled persons including alcohol and drug addicts

1992

1988

Congress creates Hope VI program to redevelop poor-quality public housing projects and replace them with mixed-income housing

HOPE VI

FOR SALE

Federal Government holds mass auction of public housing

2008

2004

HUD approves NYCHA Plan to use Section 8 Housing Program, reducing the stock of public housing in NYC

SECTION 8 in NYC

HOUSING TYPOLOGIES

Typical multi-family housing structures found
in urban communities such as New York City
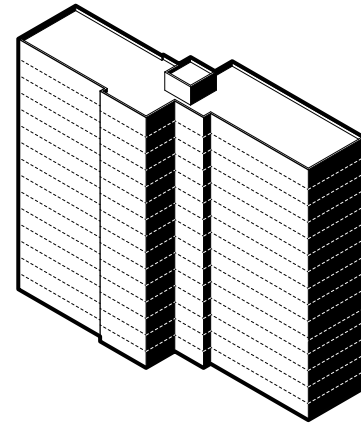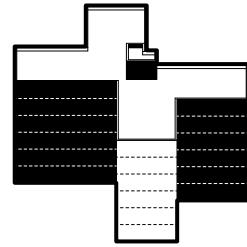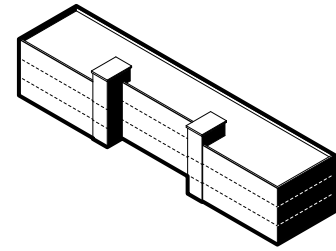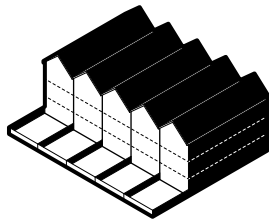
TOWNHOUSE

4-8 units per building
1-3 floors per building
Density: 12-35 units/acre

LOW-RISE HOUSING

4-16 units per building
2-3 floors per building
Density: 15-68 units/acre

MID-RISE HOUSING

60-240 units per building
5-8 floors per building
Density: 26-148 units/acre

HIGH-RISE HOUSING

60-300 units per building
8+ floors per building
Density: 60-300 units/acre
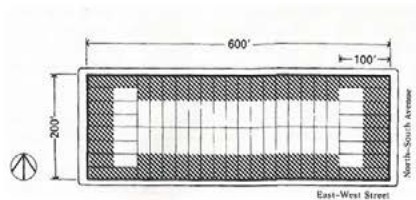
System of subdivision of New York City gridiron blocks with row houses only covering half the lots.
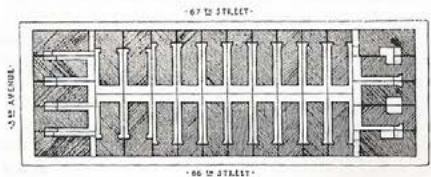
The New Law of 1901 enlarged the air shafts of the tenements.
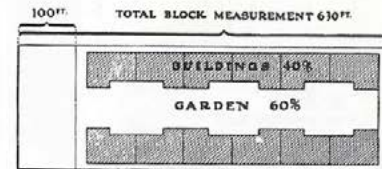
The perimeter-type block by the Queensboro Corporation, 1914.

URBAN BLOCK

City blocks with a mix of low- and high-rise buildings at high densities and a diverse set of programs read as one entity serving a community. The varying building heights and amenities make the spatial ground plane more active as users can participate with the built environment in different ways.

Public housing typologies created during the 1940's and 1950's read as objects in the field that are stark and isolated. The repetition of its size and function creates limited interaction and interest with pedestrians. Large open spaces not accessible to the public further isolate the housing complexes.

Low-rise, high-density buildings situated along the street edge create an engaging street wall. Public space, as provided by the street, becomes integrated into the buildings that face the street. Residences of these buildings can engage with the pedestrians on the street. Mixed-use buildings such as the tallest building in the diagram can still become an active participant in street life by allowing commercial programs to be situated in the ground floor of the building.

The towers in the park do little to engage with public life. Because the buildings do not facilitate public amenities, pedestrians and its inhabitants have no incentive to go to the complex unless they need to access the building. Additionally, the open spaces that surround the buildings are either fenced-in green space or parking lots.
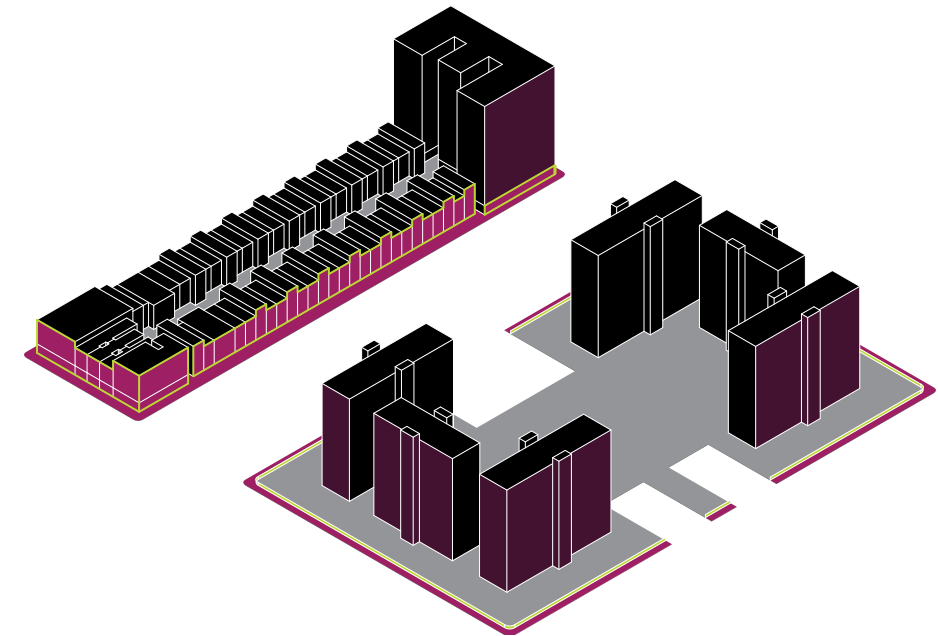
FIGURE 5:
View of low-rise apartment buildings in between
the two western towers. They are surrounded
by trees and greenery, which help bring the
community together
estudionap.blogspot.com

FIGURE 6:
Exterior view of the towers
estudionap.blogspot.com

FIGURE 7:
SIte plan showing the range of housing types and
programs in the community.
bingmaps.com
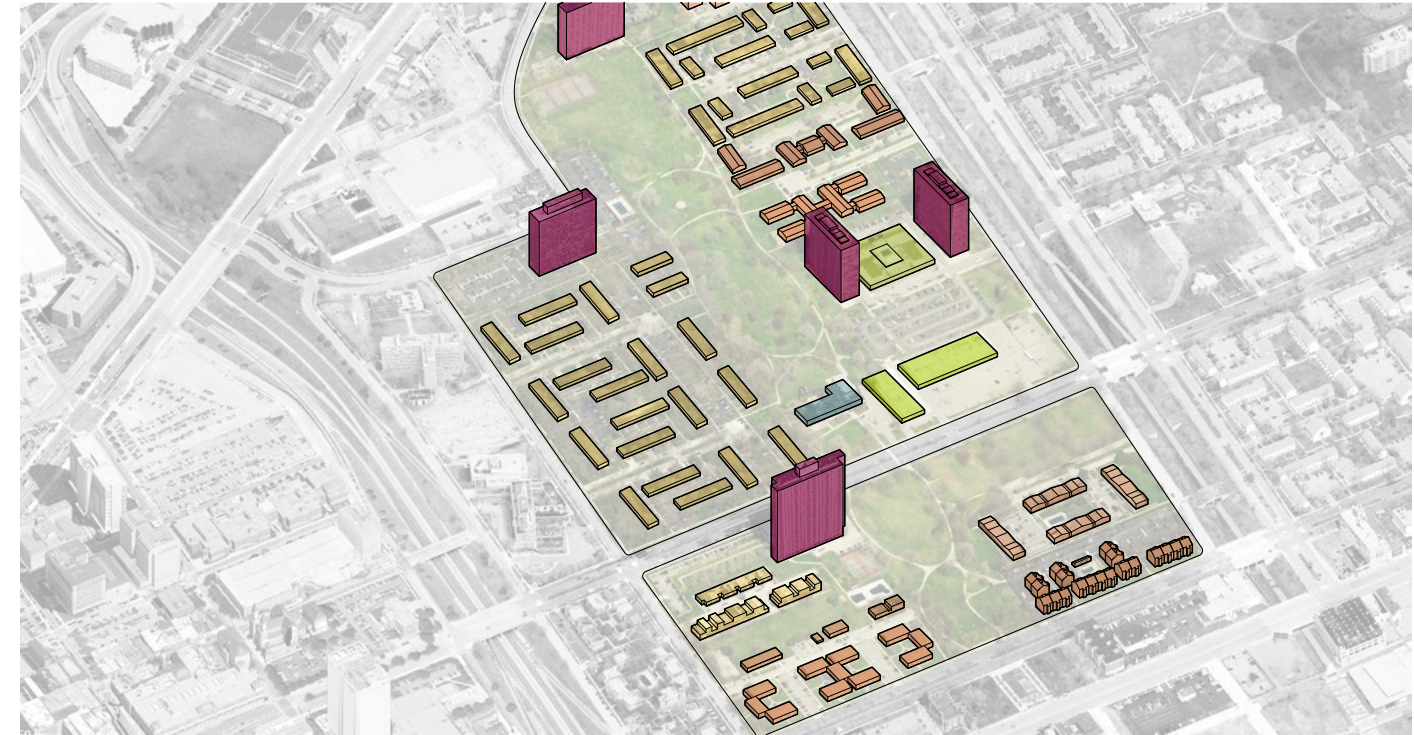
Lafayette is a mixed-income housing project in Detroit, Michigan. Known as one of the most sucessful housing projects that incorporates the "tower in the park", the mixed use of housing typologies gives the complex a feeing of a community rather than just a housing complex. Within the site are commercial programs that suit the needs of the residents. A range of single-family townhouses, multi-family apartment buildings and the towers allow for a greater diversification. While the project is not dense, it provides ample greenery that is well kept and is most importantly, accessible.

LAFAYETTE PARK
DETROIT, MICHIGAN

FIGURE 8:
Interior view of the complex, showing the fountain
en.wikipedia.org

FIGURE 9:
Exterior view of the towers
en.wikipedia.org

FIGURE 10:
SIte plan of the complex showing the repetiton of
building shape and volume
bingmaps.com

PETER COOPER VILLAGE

STUYVESANT TOWN

Located on the Lower East side of Manhattan, the site was the first of many to be bulldozed by Robert Moses' vision for New York CIty. The repeat building throughout the complex mirrors that of Le Corbusier's *Ville Radieus.* While the towers are considered a success by many due to its proximation with the mixed-development area around it, the towers still depend on its surroundings to accomodate its residents. Until recently, small grocery stores and other shops have been built around the perimeter of the lot to activate its street wall.

STUYVESANT TOWN
MANHATTAN, NEW YORK CITY

LOW-RISE APARTMENTS

- Limited open space
- Built environment interacts with public space on the street
- Maximizes the area of available lot
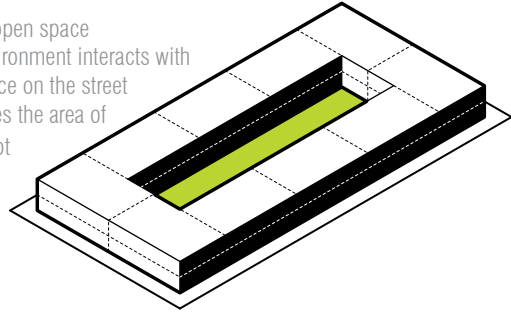
MID-RISE APARTMENTS

- Larger open space
- Pushed back from block perimeter
- Less street activity
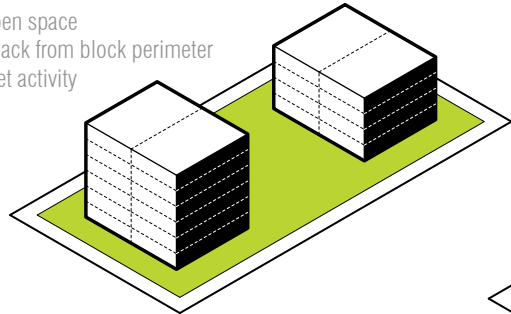
HIGH-RISE APARTMENTS

- Building only occupies a small percentage of the available lot
- Maximizes open space on the ground plane
- Provides higher views of the city
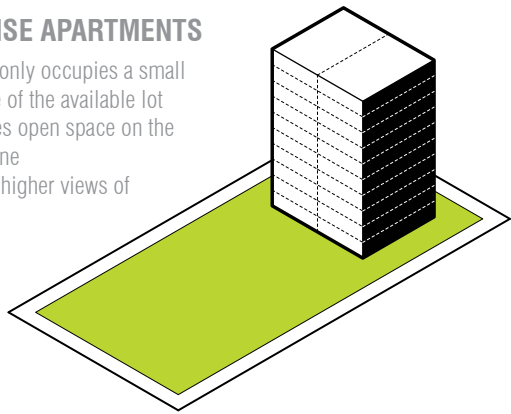
TOWER AND LOW-RISE

Combining both high- and low-rise housing typologies allows the block to have a dense and active street wall while providing a sizable open space as well as increasing the unit density of the block
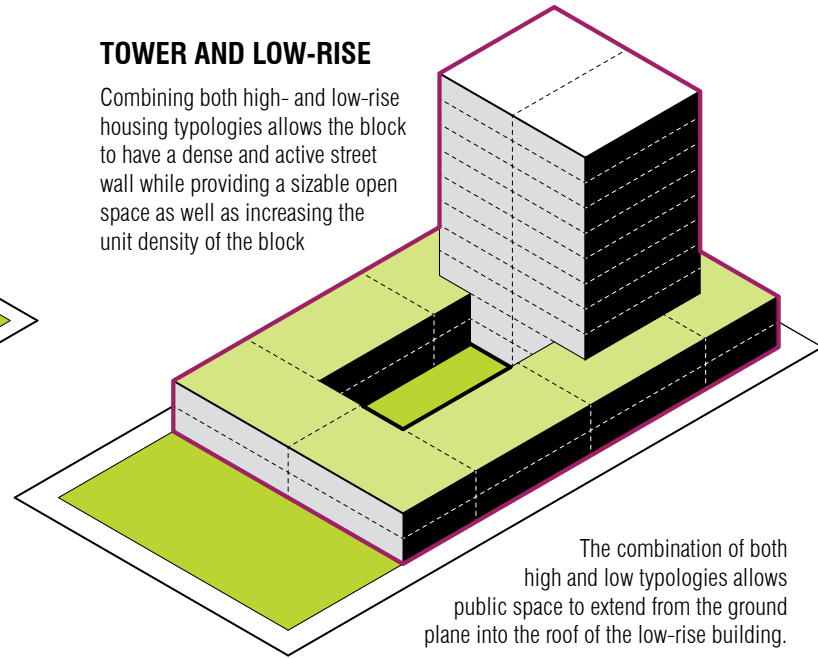
The combination of both high and low typologies allows public space to extend from the ground plane into the roof of the low-rise building.

HIGH-RISE VS. LOW-RISE

19. Chakrabarti. *A Country of Cities*.

20. Rowe, Colin, and Fred Koetter. Collage City. Cambridge, MA: MIT, 1978. Print

According to Vishaan Chakrabarti, author of *A Country of Cities*, a "city" is a community or group of communities that are dense enough to support rapid mass transit, such as the subway.[19] There are multiple configurations in a city block that can satisfy the appropriate unit density to allow for various types of public transport. In his study, Chakrabarti notes that a block that comprises of at least 30 units/acre is considered "high-density". In public housing cases, both high-rise and low-rise have been used as a model for providing clean and affordable housing. Low-rise, high-density projects such as the Marcus Garvey Housing in Brownsville, Brooklyn offer a human-scale that high-rise do not. Street interaction, and therefore public interaction, is more apparent in low-rise housing units as pedestrians activate the ground plane and increase neighborhood safety. These units, however, maximize the lot and only provide green space in internal courtyards for its residents. High-rise, high-density structures provide the same number, if not more, of units as a low-rise unit but take up a much smaller percentage of land. This allows for the opportunity to provide public space to the community although most parks become parking lots instead of being enjoyed by its residents and their community members. The tower in the park typology that public housing authorities have implemented over the years, however, are situated in their blocks usually in a random, nonsensical manner that have little to no connection with the build environment around them. The towers also disrupt the urban fabric in that it does not relate to its surroundings both in height and volume.

In order to activate the ground plane and reclaim the absence of the street wall in tower in the park typologies, a hybrid of low-rise and high-rise structures must be made and take from it, their benefits and learn from their errors. Much like Colin Rowe and Fred Koetter's approach in *Collage City*, speculative criticism of Modernist structures must be considered through the fragmentation of modern, historical, and utopian strategies.[20] By combining structures that are mere opposites of one another, you can produce a network of pocket utopias that strive to positively intervene with these urban taboos. By taking the low-rise structure's ability to generate an active and dense street wall and joining it with the tower's potential to create a dynamic open space, can the shortcomings of Modern structures be remediated.

SITE

Newman, Oscar. *Defensible Space: Crime Prevention through Urban Design*. New York: Macmillan, 1972. Print.

"All the different elements which combine to make a defensible space have a common goal — an environment in which latent territoriality and sense of community in the inhabitants can be translated into responsibility for ensuring a safe, productive, and well-maintained living space."
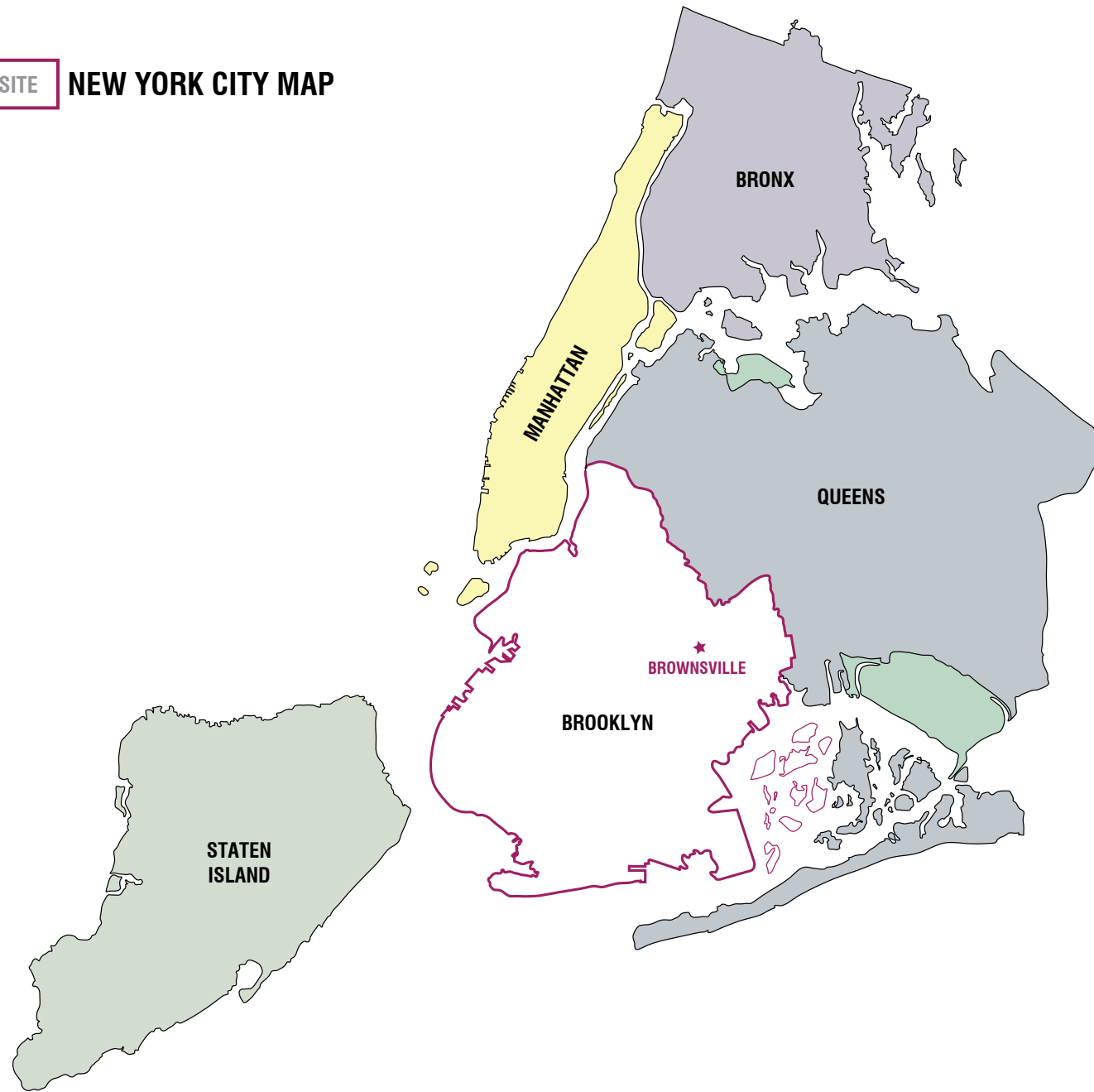
N.d. *Made in Brownsville RSS*. By Quardean.com. Web. 27 Nov. 2014

is   *s*   *giving back to it!*
"[Brownsville ~~was~~] a place that measured ~~all~~ success by our skill in ~~getting away from it.~~"

- ~~Alfred Kazin~~
Brownsville native. Author of *A Walker in the City*

SITE | **NEW YORK CITY MAP**

BRONX

MANHATTAN

QUEENS

★
BROWNSVILLE

BROOKLYN

STATEN
ISLAND

BROOKLYN MAP

1. BROWNSVILLE / OCEAN HILL (NORTH)
2. EAST FLATBUSH
3. WINGATE/PROSPECT LEFFERTS GARDENS
4. PROSPECT PARK
5. CROWN HEIGHTS
6. BEDFORD STUYVESANT
7. BUSHWICK
8. EAST NEW YORK
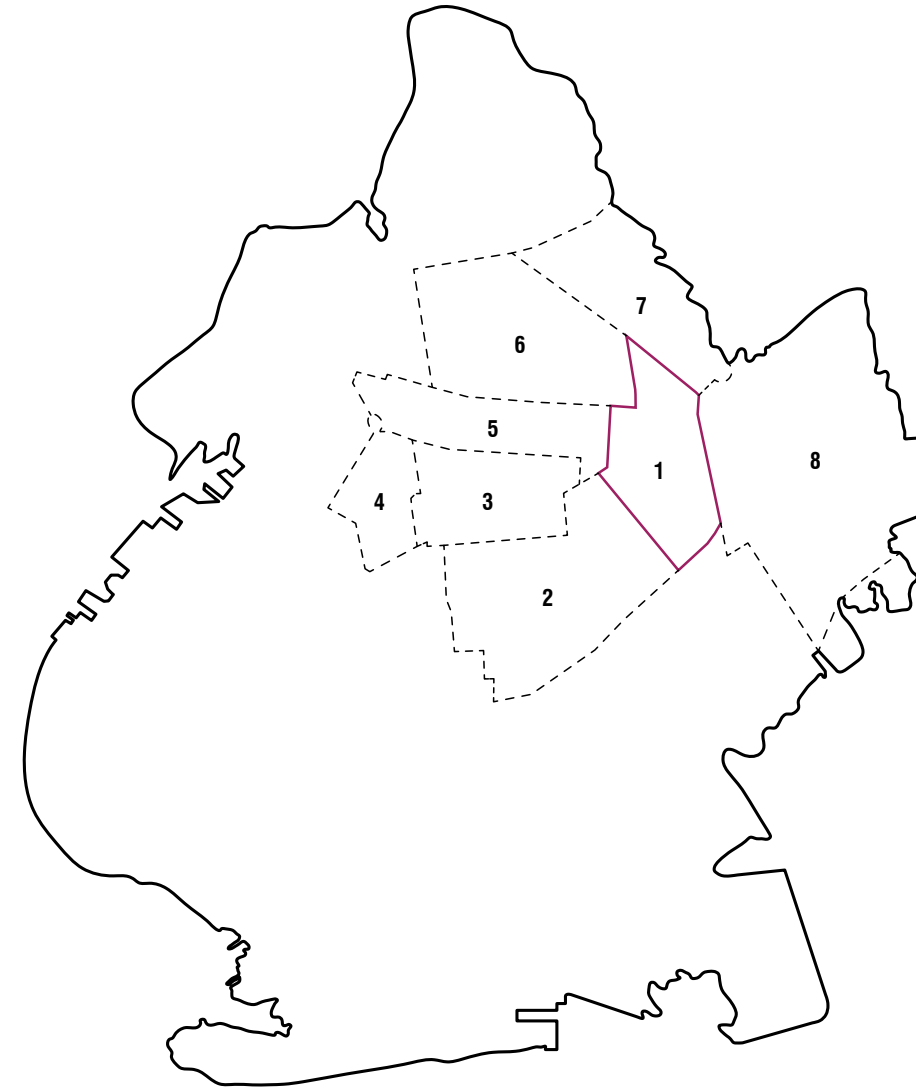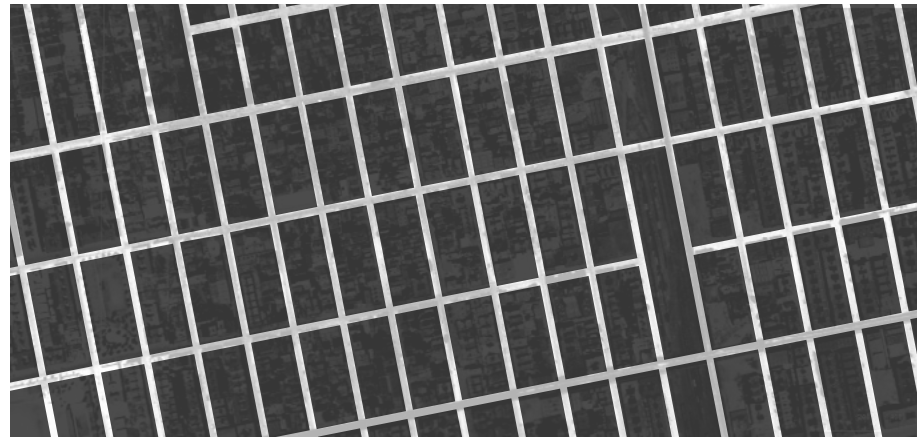
7

6

5

4   3

1   8

2
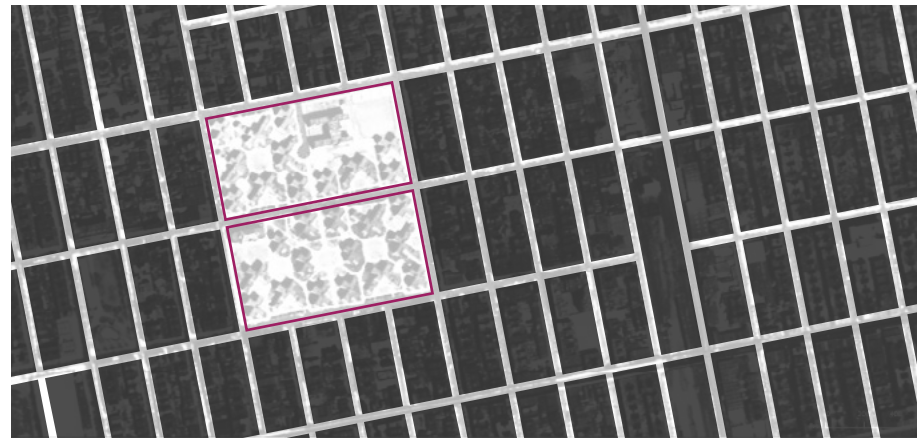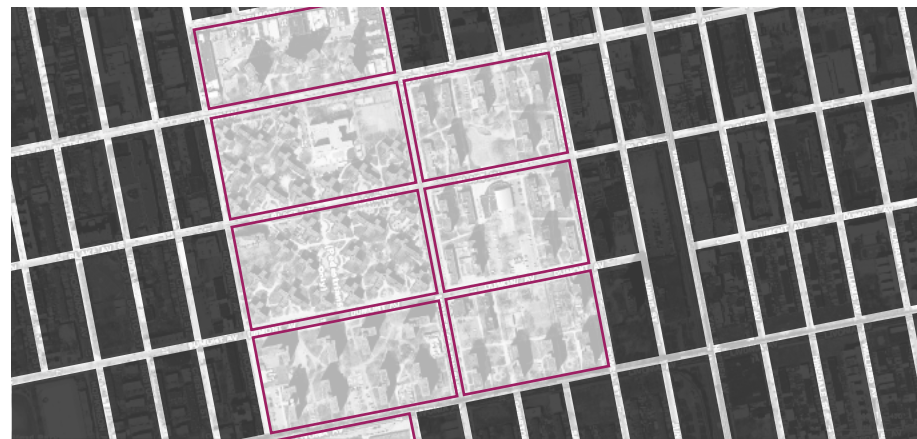
The neighborhood of Brownsville is located in eastern Brooklyn, New York City. Stretching for just over 1 square mile, it is dominated by public housing developments, the highest concentration in the United States. Originally used by the Dutch for farming, Brownsville became a primarily Jewish neighborhood from the late-1800s to mid-1900s. When Robert Moses sought out for a location where he could essentially drop the city's poverty-stricken residents away from a flourishing Manhattan, he came to Brownsville and decided that its proximity to Manhattan was far enough that the wealthy would not bother to live that area and that it would be safe against flooding because it is landlocked. Dozens of historical blocks were bulldozed in order to construct 18 different public housing projects. While crime has been decreasing in the neighborhood over the years, Brownsville still has one of the highest criminal activities in New York City.[22] Due mostly to the concentration of low-income families, the neighborhood has yet to have an urban revival much like its counterparts in Brooklyn such as Williamsburg and Bedford. Brownsville residents, while being faced with daily challenges greater than most, are eager to create a better community by creating a number of programs encourage community involvement and assist those who have greater hopes and aspirations.

BROWNSVILLE:
MISGUIDED, MISUNDERSTOOD

22. "Brownsville, Brooklyn." *Wikipedia*. Wikimedia Foundation, 12 Jan. 2014. Web. 05 Dec. 2014
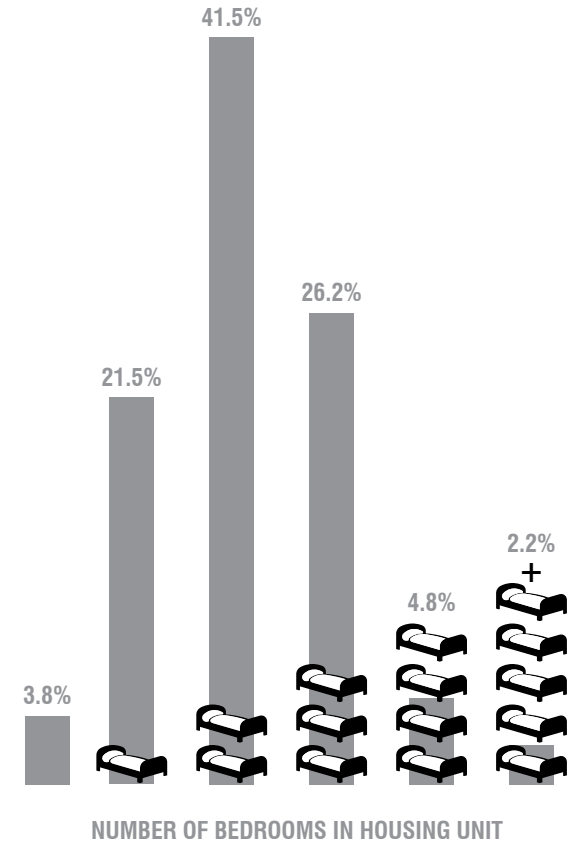
DEMOGRAPHICS

MALE POPULATION
42.5%

FEMALE POPULATION
57.5%

ASIAN 1.2%

WHITE 7%

OTHER 11.7%

AFRICAN AMERICAN
80.1%

- 35 - 64
- UNDER 19
- 20 - 34
- 65 - 84
- 85 AND OVER

34.9%

34.1%

22.1%

8.2%

0.6%

OCCUPATION

MANAGEMENT, BUSINESS, SCIENCE, AND ARTS

20.1%

SERVICE

36.0%

SALES AND OFFICE

26.7%

NATURAL RESOURCES, CONSTRUCTION, AND MAINTENANCE

6.3%

PRODUCTION, TRANSPORTATION, AND MATERIAL MOVING

11.0%

HOUSEHOLD

NEW YORK CITY
$55,246

BROWNSVILLE
$31,252

MEDIAN INCOME

41.5%

26.2%

21.5%

3.8%

4.8%

2.2%

NUMBER OF BEDROOMS IN HOUSING UNIT

AVERAGE HOUSEHOLD SIZE:
2.7 PEOPLE

89.6% OF HOUSING UNITS ARE OCCUPIED

HOUSING TENURE:
OWNER 18.8%   RENTER 81.2%

PUBLIC HOUSING IN BROWNSVILLE

104–14 TAPSCOTT STREET, 1972
1 Building, 4-Stories Tall

BROWNSVILLE HOUSES, 1948
27 Buildings, 6-Stories Tall

GLENMORE PLAZA, 1968
4 Buildings, 10, 18 and 24-Stories Tall

HUGHES APARTMENTS, 1968
3 Buildings, 2-Stories Tall

MARCUS GARVEY (GROUP A), 1975
3 Buildings, 6- and 14-Stories Tall

PROSPECT PLAZA HOUSES, 1974
3 Buildings, 12-Stories Tall, in process of being
rehabilitated

SUTTER AVENUE-UNION STREET, 1994
3 Buildings, 4- and 6-Stories Tall

TAPSCOTT STREET REHAB, 1986
8 Buildings, 4-Stories Tall

TILDEN HOUSES, 1961
8 Buildings, 16-Stories Tall

HOWARD AVENUE, 1988
5 Buildings, 3-Stories Tall

HOWARD AVENUE-PARK PLACE, 1994
8 Buildings, 3-Stories Tall

HOWARD HOUSES, 1955
10 Buildings, 7- and 13-Stories Tall

RALPH AVENUE REHAB, 1986
5 Buildings, 4-Stories Tall

REVEREND RANDOLPH BROWN, 1985
2 Buildings, 6-Stories Tall

SETH LOW HOUSES, 1967
4 Buildings, 17- and 18-Stories Tall

VAN DYKE I, 1955
22 Buildings, 3- and 14-Stories Tall

VAN DYKE II, 1964
1 Building, 14-Stories Tall

WOODSON HOUSES, 1970
2 Buildings, 10- and 25-Stories Tall

The Van Dyke Housing Projects was constructed in 1955 and consists of 22 buildings, 3- and 14-stories high with 1,601 apartments and about 4,330 residents.[21] The complex is situated on 3 adjacent blocks that run north to south. The specific block that I will be focusing on is the northern-most block that borders Sutter Ave. The lot is 337, 075 ft2 and hosts 5 high-rise units and 4 low-rise units. The buildings are of brick and masonry construction. The complex is bordered by other NYCHA housing developments. To the west of the site are the Brownsville Houses and to the north are the Seth Low houses and to the northwest of the site sits the Hughes apartments.

SITE: VAN DYKE I

FIGURE 15:
Location of site in its larger context. The neighborhood of Brownsville is in color and the surrounding neighborhoods are in black and white. The green rectangle highlights the Van Dyke I housing complex. It consists of 3 megablocks with similar building designs. The block on which I am focusing is shaded in magenta.
www.maps.google.com

21. "VAN DYKES HOUSES." VAN DYKES HOUSES. New York City Housing Authority, n.d. Web. 05 Oct. 2014.

MOTHER GASTON BLVD

CHRISTOPHER AVE

SACKMAN ST

POWELL ST

SUTTER AVE

BLAKE AVE

4 3 2 1

5 10

6 7 8 9

GREEN SPACE

PARKING LOT

RECREATION
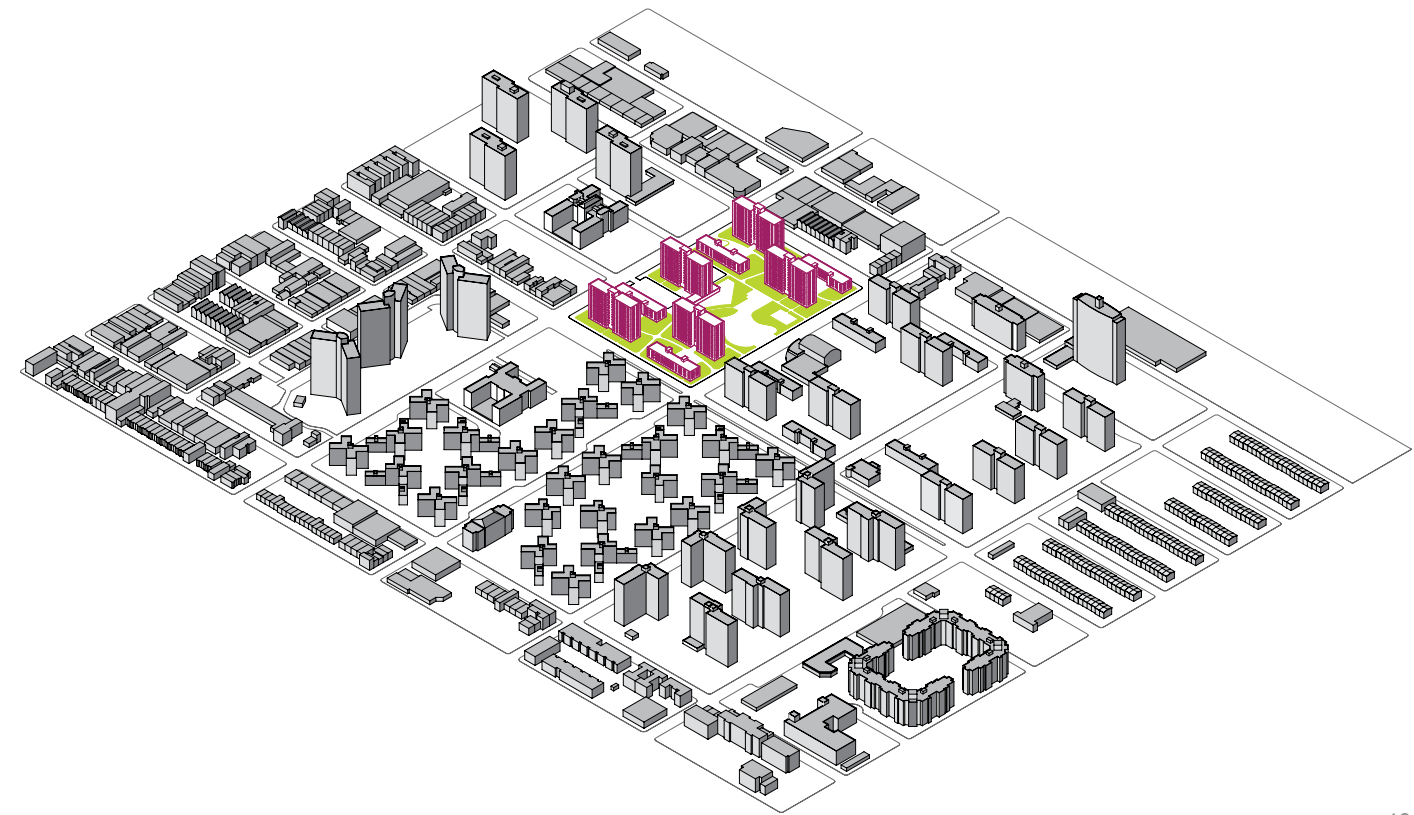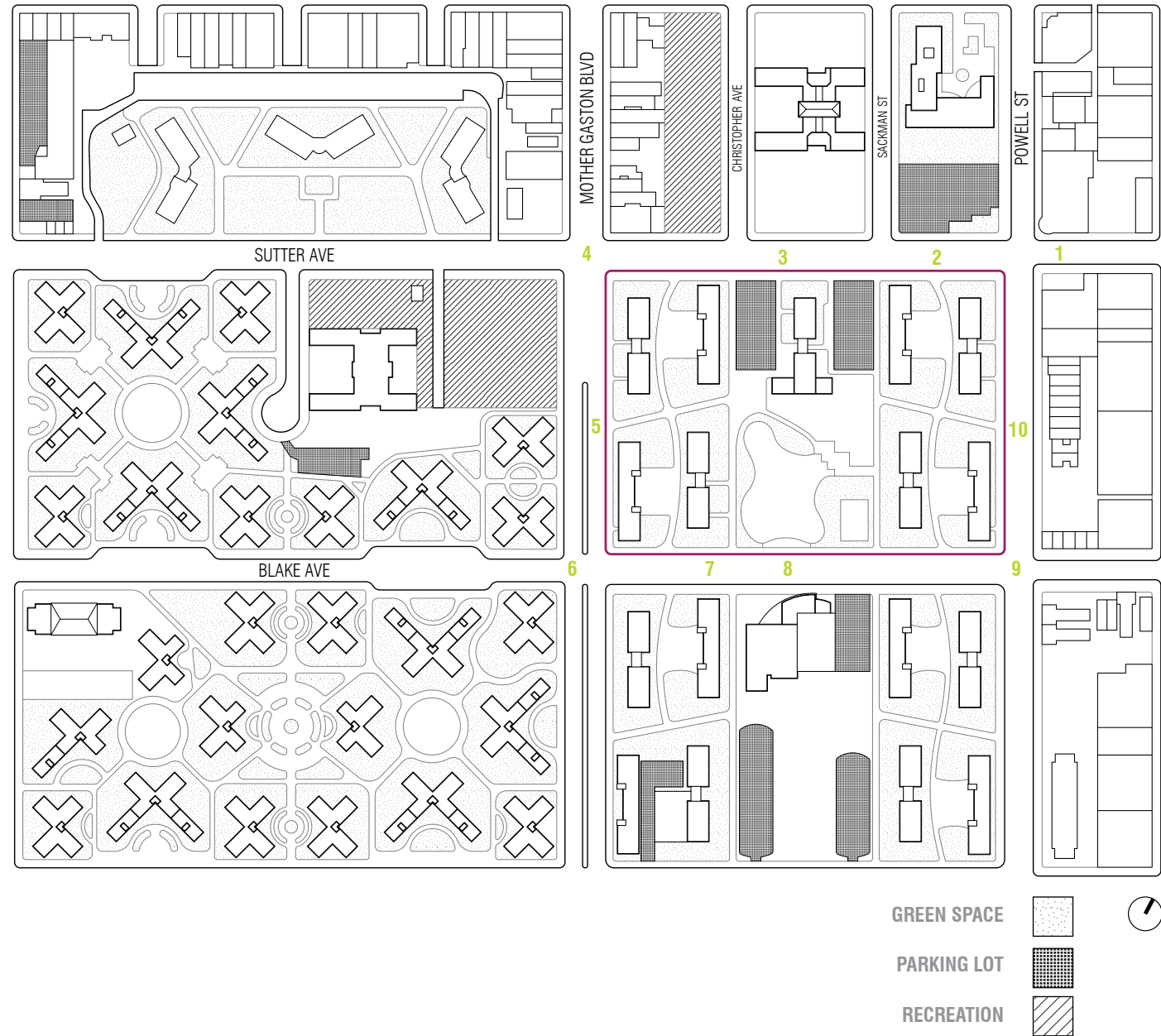
VIEW 1:
On Sutter Ave. from the subway, looking southwest towards Van Dyke Housing

VIEW 2:
On Sutter ave. looking southeat towards pedestrian entrance into the complex

Photographs taken on November 23, 2014 at approximately 11 a.m.

VIEW 3:
On Sutter Ave. looking south towards parking lot

VIEW 4:
On intersection of Sutter Ave and Mother Gaston Blvd. looking east towards Van Dyke housing block

VIEW 5:
On Mother Gaston Blvd. looking northeast towards pedestrian entrance into the complex

VIEW 6:
On intersection of Mother Gaston Blvd. and Blake Ave. looking north towards housing block

Photographs taken on November 23, 2014 at approximately 11 a.m.

VIEW 7:
On Blake Ave. looking northeast

VIEW 8:
On Blake Ave. looking northwest towards large open space in the middle of the complex

VIEW 9:
On Powell St. looking west towards housing block

VIEW 10:
On Powell St. looking northwest

Photographs taken on November 23, 2014 at approximately 11 a.m.

TOWER AND PARK CONFIGURATION

FIGURE 16:
Plan showing access to the site, both pedestrian and vehicular

FIGURE 17:
Typical floor plan of the 14-story tower in the site

VEHICULAR ACCESS ⟶

MAIN PEDESTRIAN ACCESS ⇢

BUILDING ENTRANCE ⟶
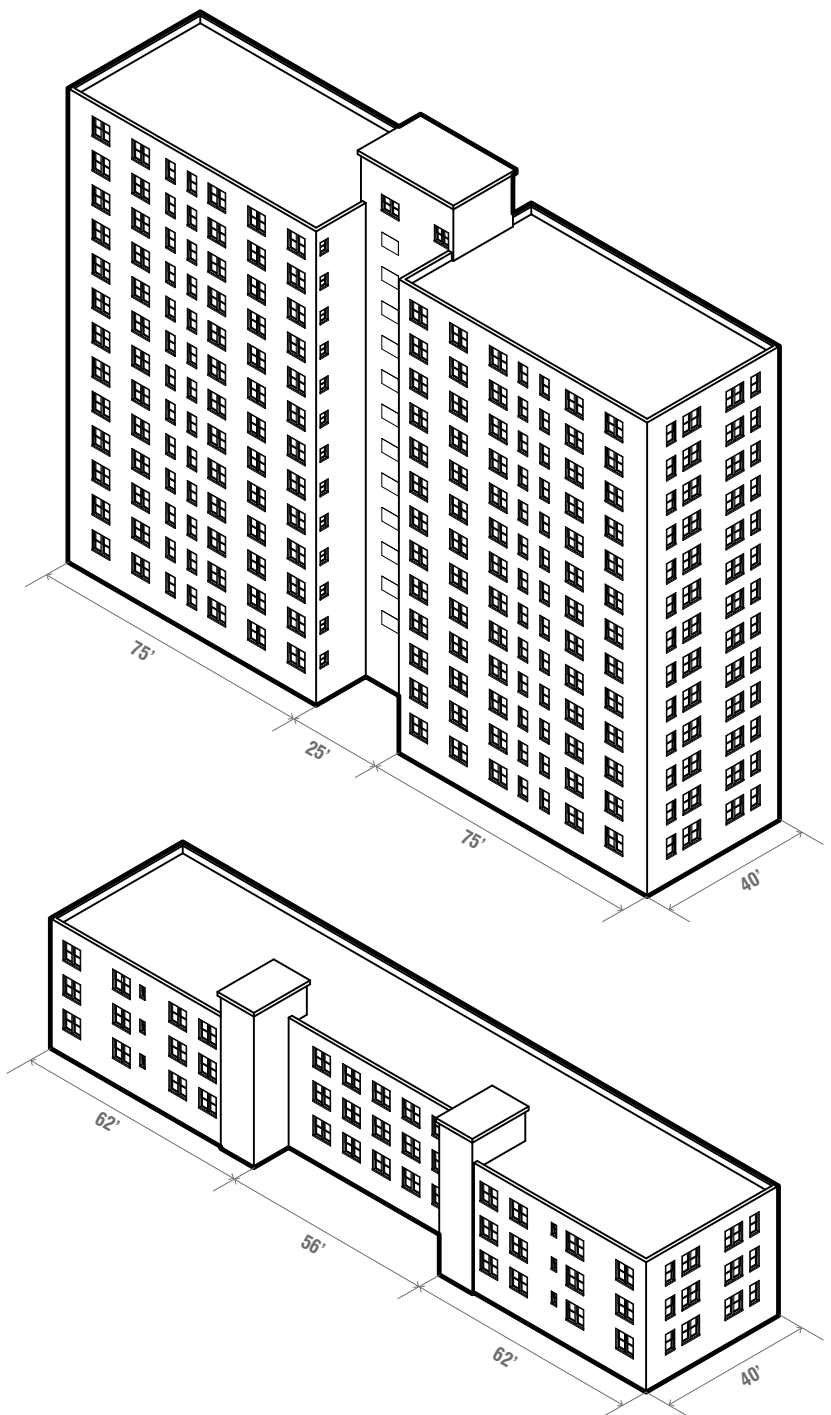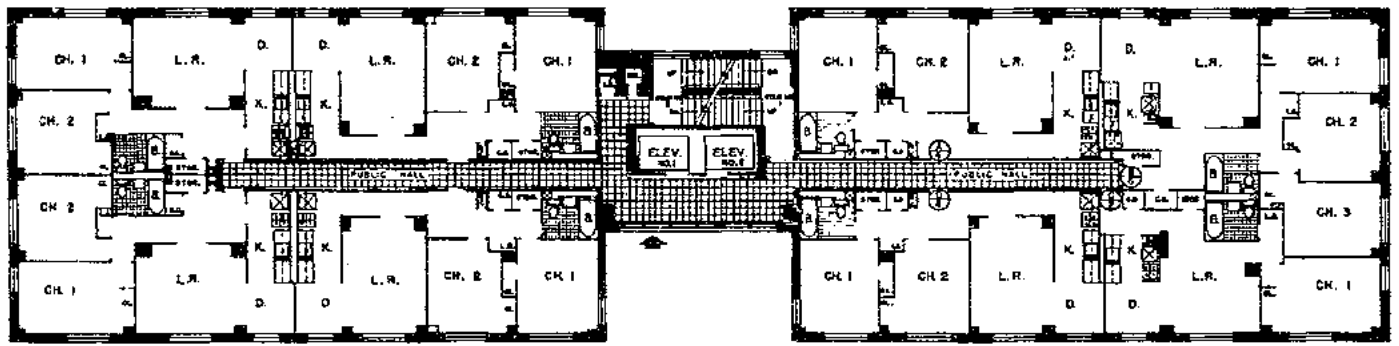
VAN DYKE BLOCK 1:
Lot = 337, 075 ft^2

5 towers and 4 low-rise

628 total units

2 parking lots, each at approx.
11, 660 ft^2
TOTAL: 23, 320 ft^2

There are 75-80 parking spots in the block

Green space is approx. 137, 310 ft^2

TOWERS:
Each unit is approx. 620 ft^2
8 units per floor
112 units per building
560 units on block

Covers 6,450 ft^2 on ground per building -
TOTAL: 32, 250 ft^2

LOW-RISE:
Approx. 17 units per building
68 units on block

Covers 6,650 ft^2 on ground per building -
TOTAL: 26, 600 ft^2
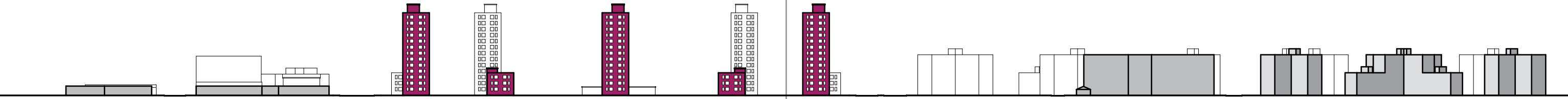
NORTH ELEVATION: View from Sutter Ave.
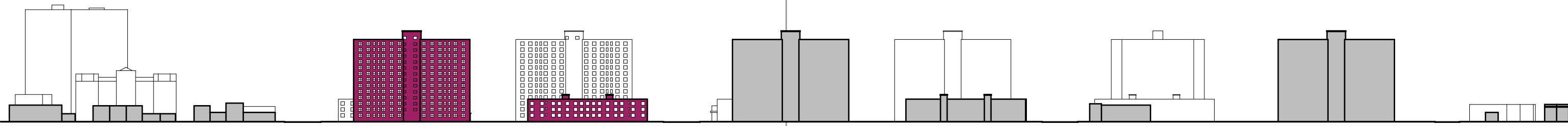
WEST ELEVATION: View from Mother Gaston Blvd.
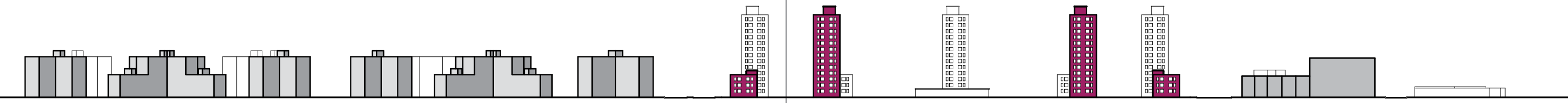
SOUTH ELEVATION: View from Blake Ave.
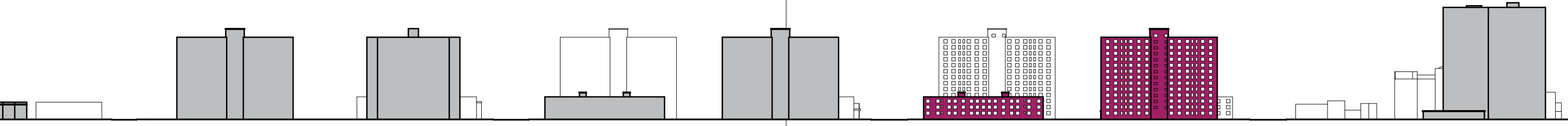
EAST ELEVATION: View from Powell St.
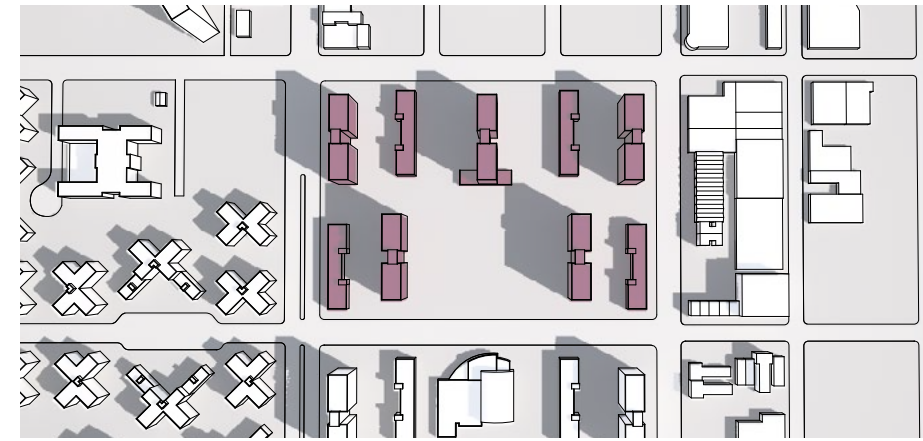
SUN PATH/SHADOW STUDY
FALL/SPRING EQUINOX:

9 A.M.
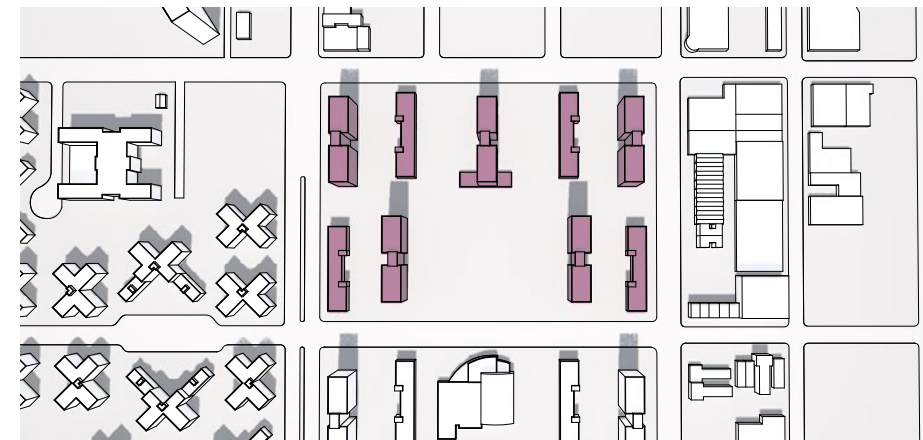
12 P.M.
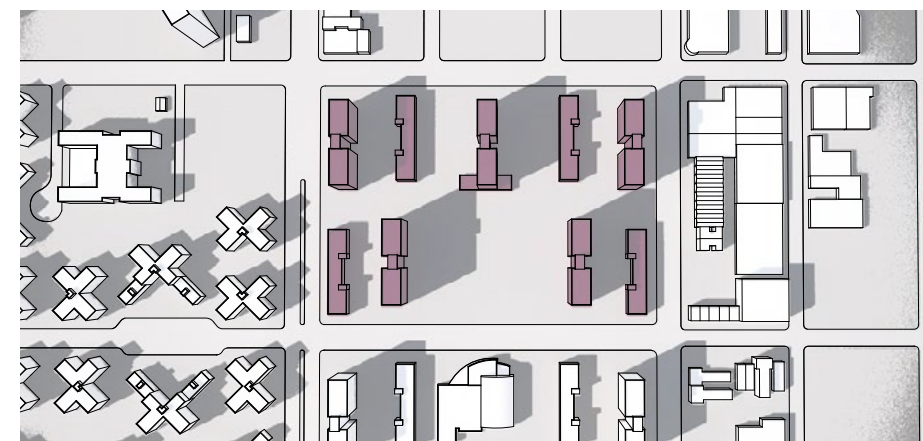
3 P.M.

SUMMER SOLSTICE:
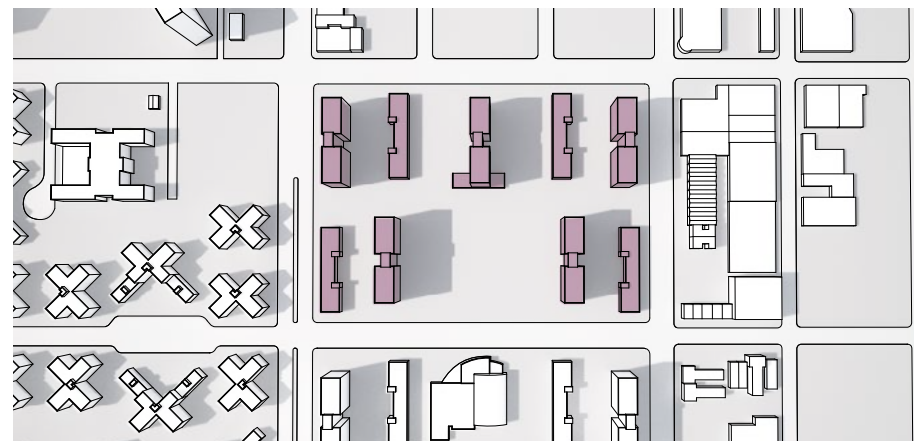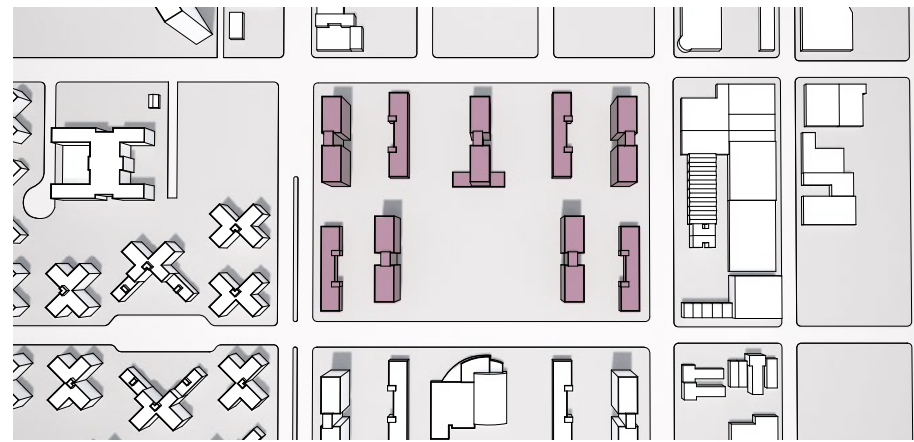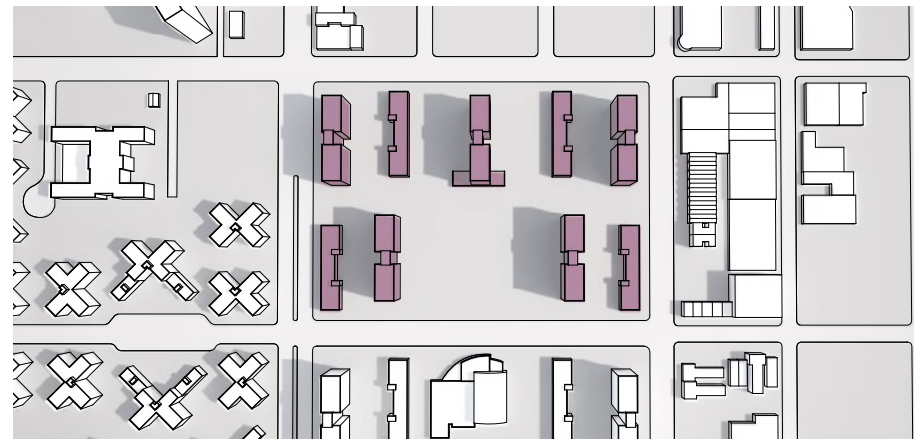
SUN PATH/SHADOW STUDY

WINTER SOLSTICE:

9 A.M.

9 A.M.

12 P.M.

12 P.M.

3 P.M.

3 P.M.

SITE ANALYSIS

FIGURE 18:
In plan, the area seems to have an abundance of green space, which is an asset to the community; however, with further examination, the green space does not contribute any life to the street or the community due to the fact that it is fenced off from public use.

GREEN SPACE

RECREATION

PARKING LOT

SITE

FIGURE 19:
The figure-ground map illustrates the network of streets and sidewalks in the neighborhood. It is clear that the public housing blocks are internally designed and that each block operates on a different network than the mixed-use blocks. Whereas the smaller, more diverse blocks have pedestrian activity around the perimeter of the block, the public housing megablocks have pedestrian activity within the complex.
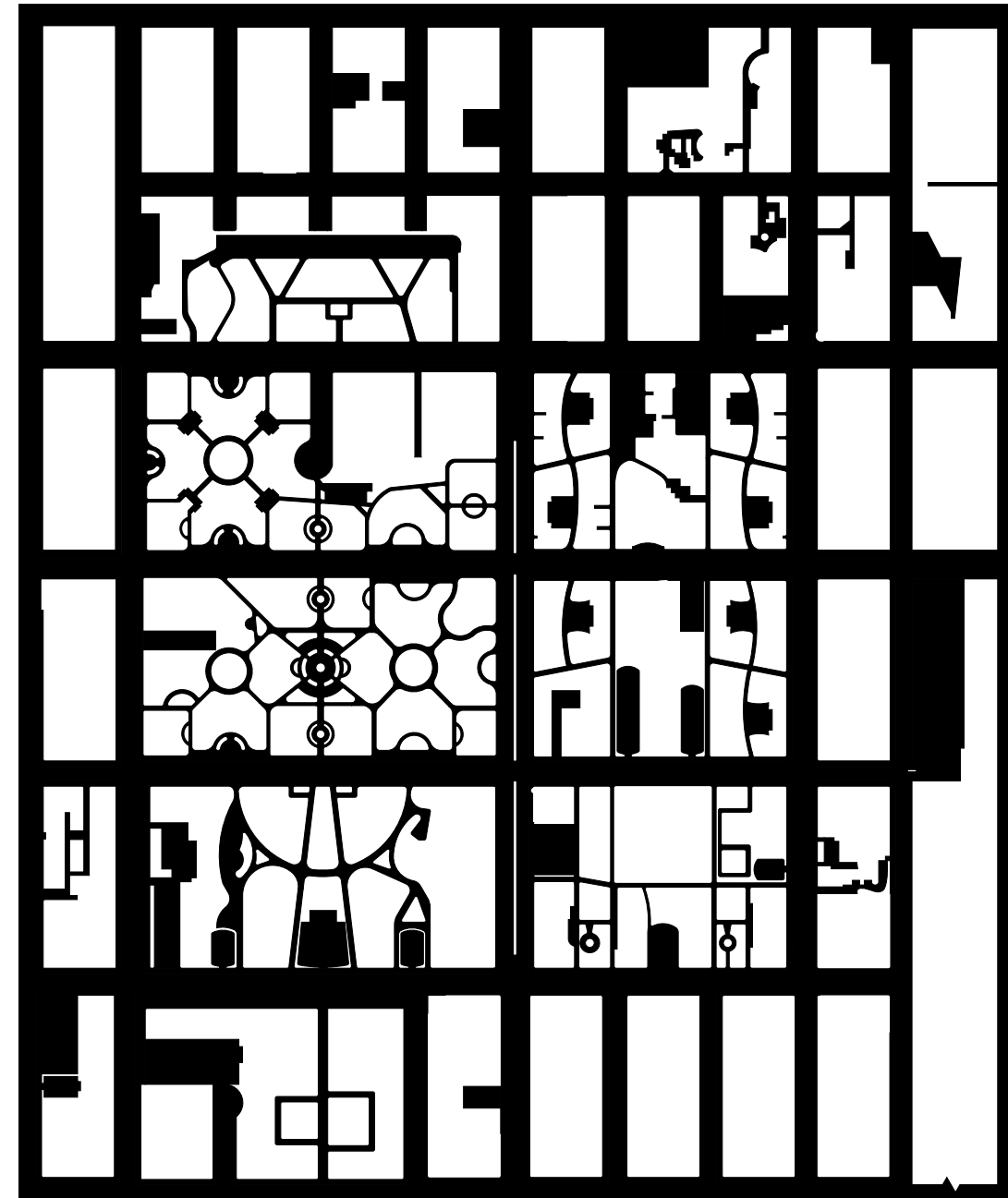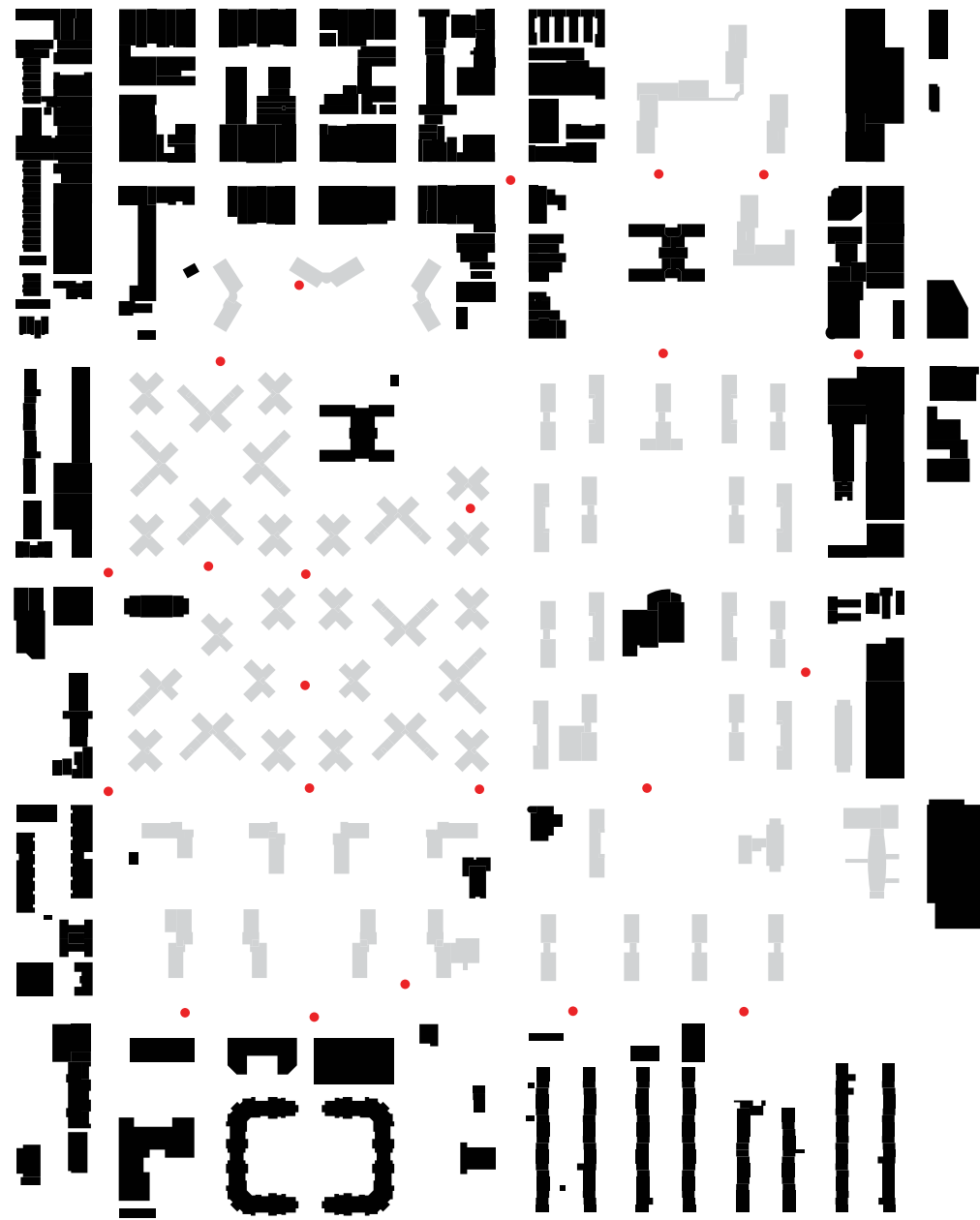
FIGURE 20:
The super blocks of public housing are limited in its diversity of public amenities. This segregation creates "dead zones" of economic and social activity within and around the blocks. Smaller blocks with a diverse set of programs and amenities are denser and attract more pedestrian activity. The public housing complexes in the figure-ground map is greyed out to show the void of public space left by these buildings.

The red circles locate crime occurrences within last month. As suggested by the map, there is a concentration of crime that occurs within direct vicinity of public housing projects. Data shows that areas with dense, mixed-use developments are safer in that there is less crime.

Data retrieved from:
http://www.trulia.com/real_estate/
Brownsville-Brooklyn/5051/crime/

PUBLIC HOUSING

ONE / TWO FAMILY RESIDENCE

MULTI FAMILY RESIDENCE

MIXED-USE

COMMERCIAL

OPEN SPACE & RECREATION

PUBLIC INSTITUTION

TRANSPORTATION/ UTLITY

INDUSTRIAL / MANUFACTURING

PARKING LOT

FIGURE 21:
Adjacent to the site are two public schools on the north and west side. The majority of commercial activity is to the northwest of the site.

FIGURE 22:
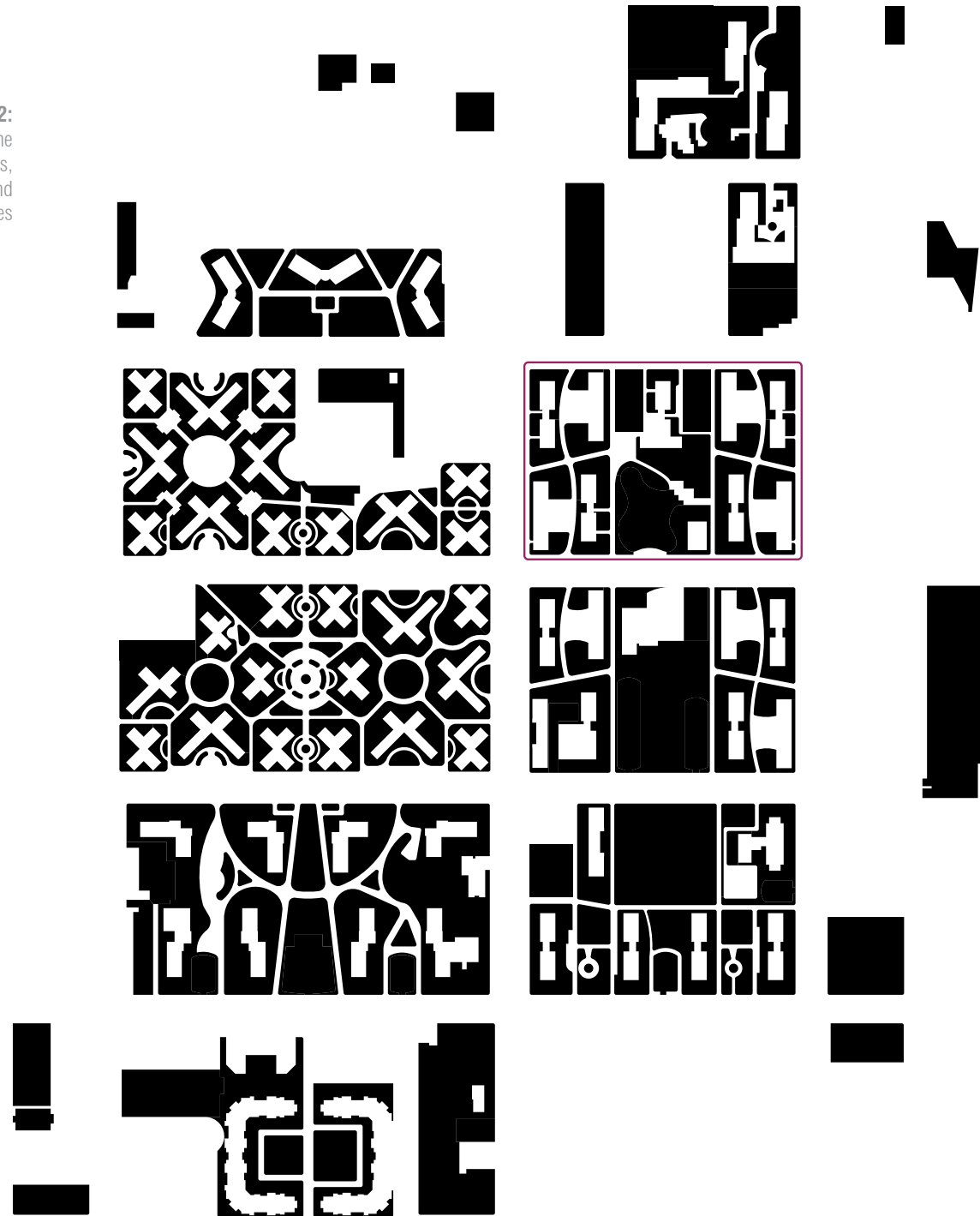Open spaces around the site, including parking lots, recreation spaces, and green spaces

FIGURE 23:
Open space available to the public after excluding parking lots and private green spaces wiithin the housing blocks. The remaining open spaces are used mostly for recreational activity including basketball courts and playgrounds. They are mostly gated off from the street so there is still a sense of isolation. There lacks open green spaces that can be used for leisure that the community can enjoy.
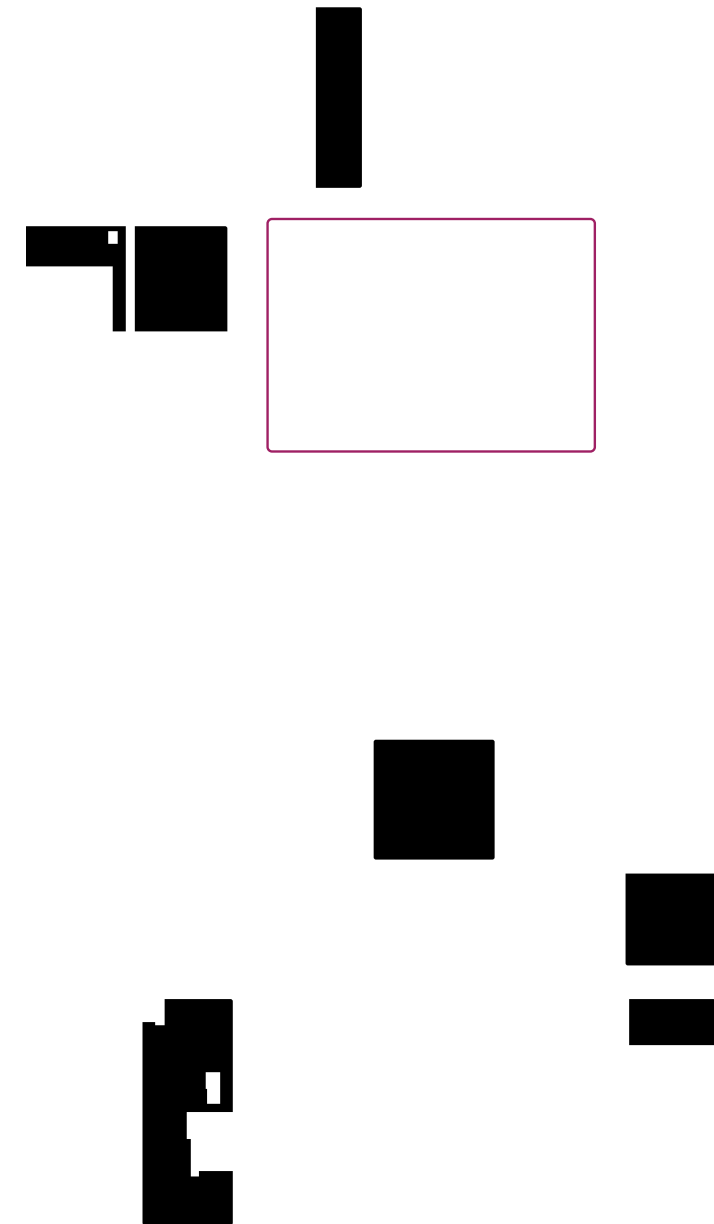
PUBLIC HOUSING

ONE / TWO FAMILY
RESIDENCE

MULTI FAMILY
RESIDENCE

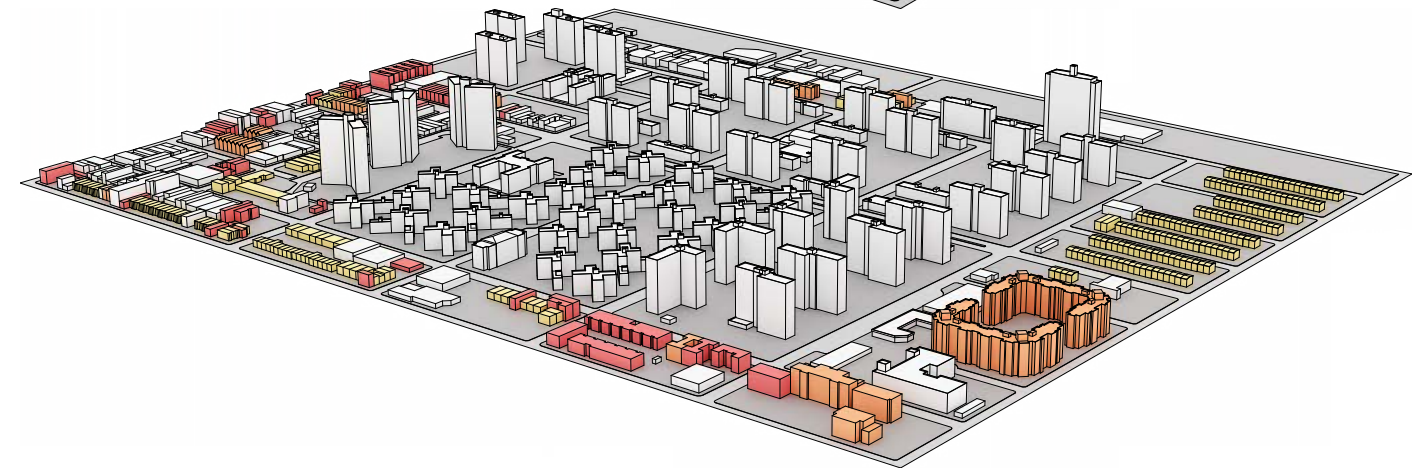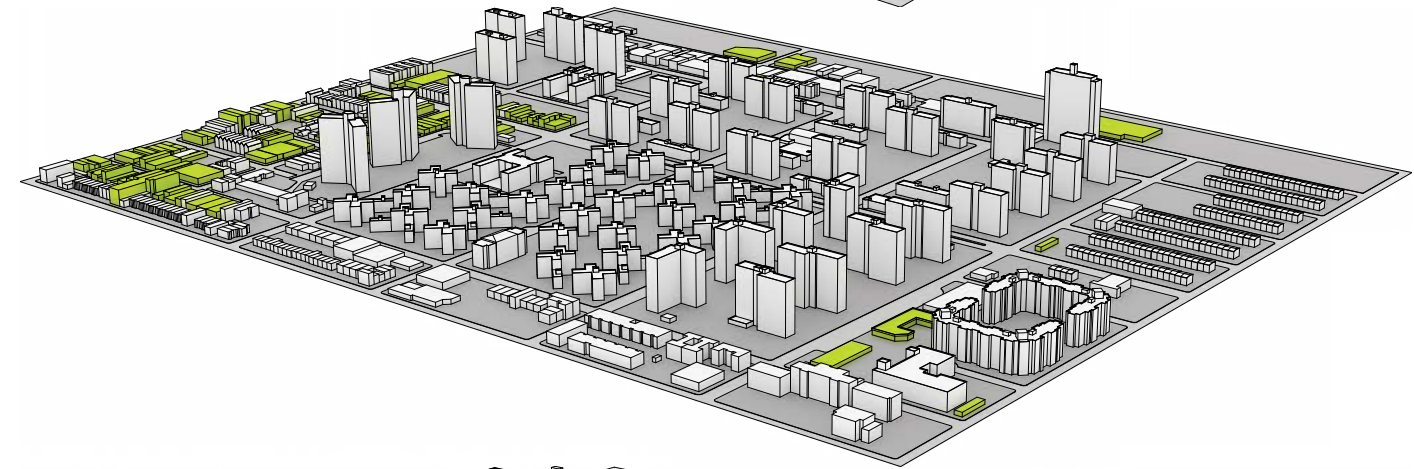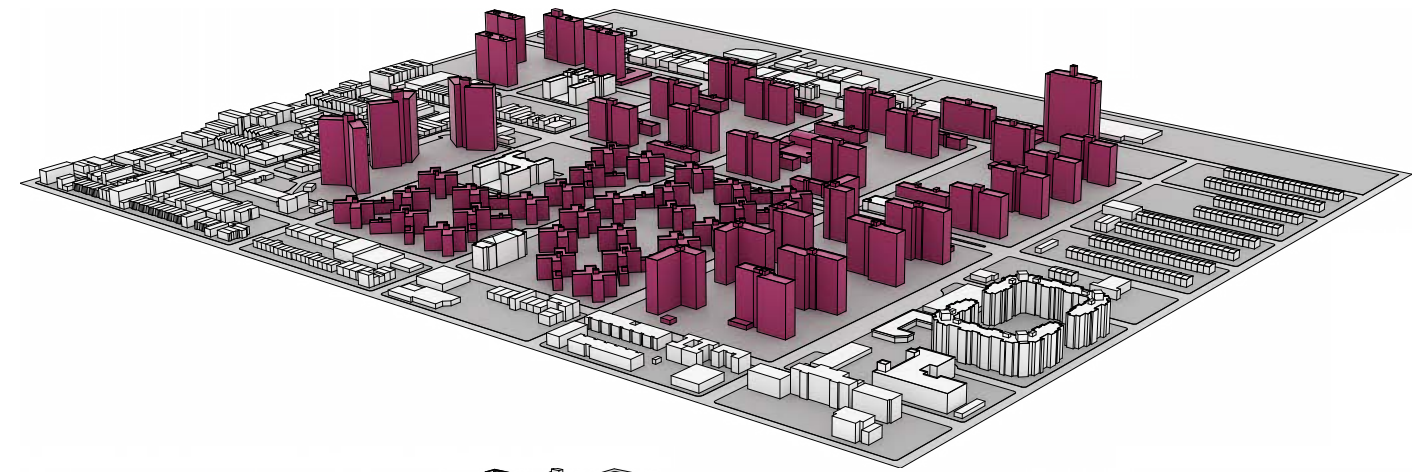MIXED-USE

COMMERCIAL

FIGURE 24:
Highlighting the numerous public housing in
the area. It can be seen that the towers disrupted
the fabric of the city upon construction. The
concentration of public housing complexes prove
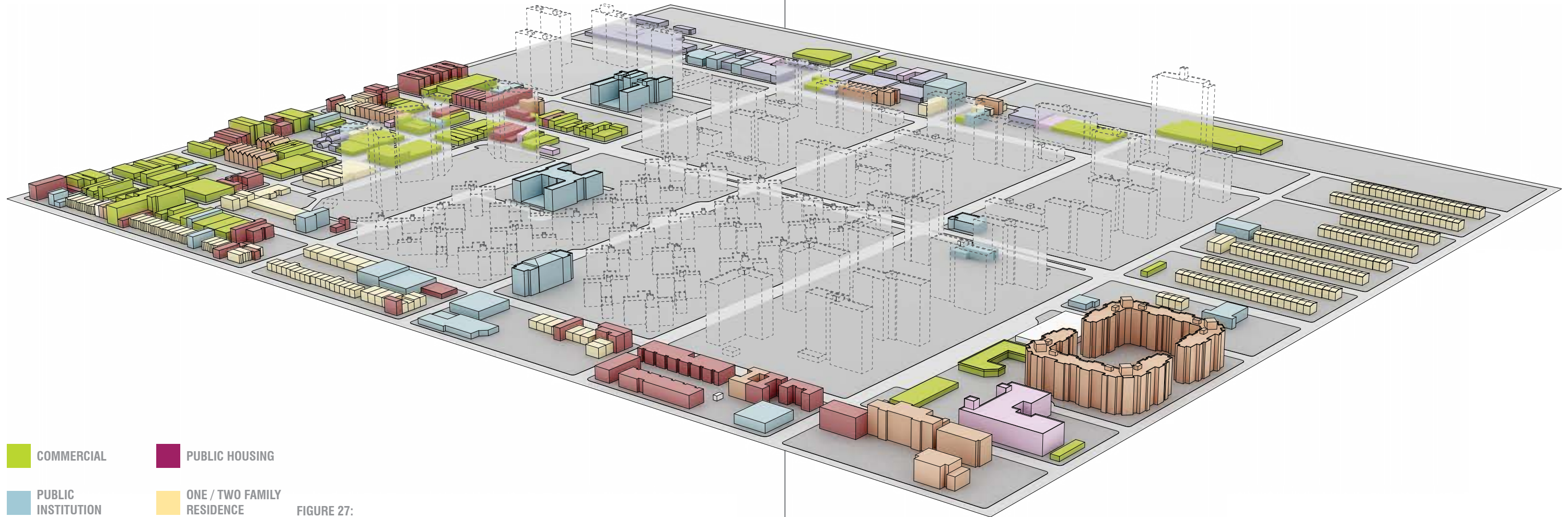to be detrimental to the neighborhood's identity
and character

FIGURE 25:
Highlighting the commercial spaces in the
immediate area of the site. The majority of
commercial spaces are clustered to the northwest
of the site. These commercial spaces are mainly
1-2 stories tall

FIGURE 26:
Low-rise housing developments mostly
comprising of row and townhouses surround
the public housing buildings. Mixed-use
developments are adjacent to the low-rise
structures further enhancing pedestrian activity

COMMERCIAL

PUBLIC HOUSING

PUBLIC INSTITUTION

ONE / TWO FAMILY RESIDENCE

TRANSPORTATION/ UTLITY

MULTI FAMILY RESIDENCE

INDUSTRIAL / MANUFACTURING

MIXED-USE

FIGURE 27:
THIS DIAGRAM SHOWS THE LARGE "DEAD SPACE" THAT EXISTS IN THE NEIGHBORHOOD AS A RESULT OF THE TOWERS. THE LARGE MEGABLOCKS PREVENT VEHICULAR OR PUBLIC PEDESTRIAN ACTIVITY TO ENTER THE COMPLEX, FURTHER ISOLATING ITSELF FROM THE REST OF THE COMMUNITY. THE ONLY PROGAMATTIC DIVERSITY WITHIN THE SEA OF TOWERS ARE PUBLIC INSTITUTIONS SUCH AS THE TWO PUBLIC SCHOOLS THAT LIE NEXT TO MY SITE

VIEW 11:
On Sutter Ave. lookin North

VIEW 12:
On corner of Sutter and Mother Gaston Blvd.

VIEW 13:
On Powell St. looking west towards housing block

VIEW 14:
On Powell St. looking northwest

Photographs taken on November 23, 2014
at approximately 11 a.m.

PROGRAM

Sanders, Alex. "Open for Business: Marketplace Led by Local Entrepreneurs Opens Friday in Brownsville." Web log post. *Community Solutions.* Community Solutions, 15 Oct. 2014. Web. 1 Dec. 2014.

"Residents have identified a lack of commercial investment in Brownsville for years. People want food and retail options, but outside companies have often been slow to notice. **This is about Brownsville's makers and artisans taking responsibility for the economic life of their community.**"

- Maygen Moore of *Community Solutions*

BENEFITS OF MIXED-USE DEVELOPMENT

23. "What Are the Benefits of Mixed Use Development?" Metropolitan Area Planning Council. N.p., 2 Nov. 2010. Web. 01 Dec. 2014.

Different communities choose mixed use for different reasons. Some see it as an excellent way to incorporate a mix of housing types on a small scale while enhancing traditional town character. Others see it primarily as a vehicle for revitalizing struggling areas and spurring economic development. Still others use it to create or enhance village centers. Listed below are some of the many benefits of mixed use development:

- Spurs revitalization

- Encourages high quality design by providing both greater flexibility and more control

- Preserves and enhances traditional village centers

- Promotes a village-style mix of retail, restaurants, offices, civic uses, and multi-family housing

- Provides more housing opportunities and choices

- May increase affordable housing opportunities

- Enhances an area's unique identity and development potential (e.g., village centers, locations near bike paths, or "gateway" areas that announce a community's strengths)

- Promotes pedestrian & bicycle travel

- Reduces auto dependency, roadway congestion, and air pollution by co-locating multiple destinations

- Promotes a sense of community

- Promotes a sense of place

- Encourages economic investment

- Promotes efficient use of land and infrastructure

- Guides development toward established areas, protecting outlying rural areas and environmentally sensitive resources

- Enhances vitality

- Improves a municipality's Commonwealth Capital score

- Embodies "Smart Growth"

- Increases revenues

Although mixed use is especially applicable near public transportation, it has advantages for other areas as well. Benefits include the preservation of undeveloped or environmentally sensitive land elsewhere in the community, opportunities for more or different housing, bicycle and pedestrian-friendly destinations, and an enhanced sense of place or sense of community.

In developing a bylaw, communities should select the advantages that best apply and structure the provisions to accomplish these goals.

LAND USAGE

FIGURE #:

The chart dispays the area of ground space each category occupies. The housing structures, both high- and low-rise, only occupy 17.4% of the available land within the lot. This leaves over 82% of open land that is mostly unused and is only accessible to its residents. The lack of diversity in programs as well as an inefficient use of land leads to a dead zone in pedestrian life and activity.

- TOWERS
- LOW-RISE
- PARKING LOT
- OPEN SPACE/CIRCULATION
- GREEN SPACE
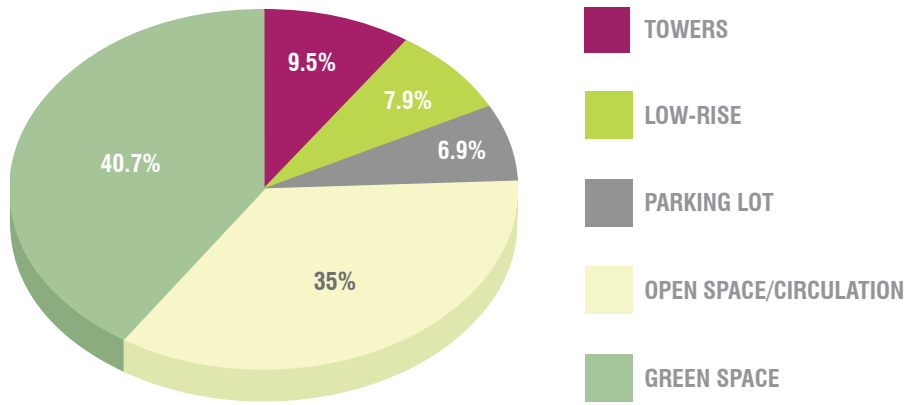
BUILDING UNITS

FIGURE #:

As shown in the chart above, the towers and low-rise housing structures occupy 9.5% and 7.9% of the lot, respectively. This means that 54.8% of the buildings in the block are high-rise and the remaining 45.2% of buildings are low-rise units. Each tower contains 560 units while each low-rise building contains a mere 17 units. In total, the towers contain 89.2% of all the units in the block, while the low-rise buildings only provide 10.8% of apartment units in the block.
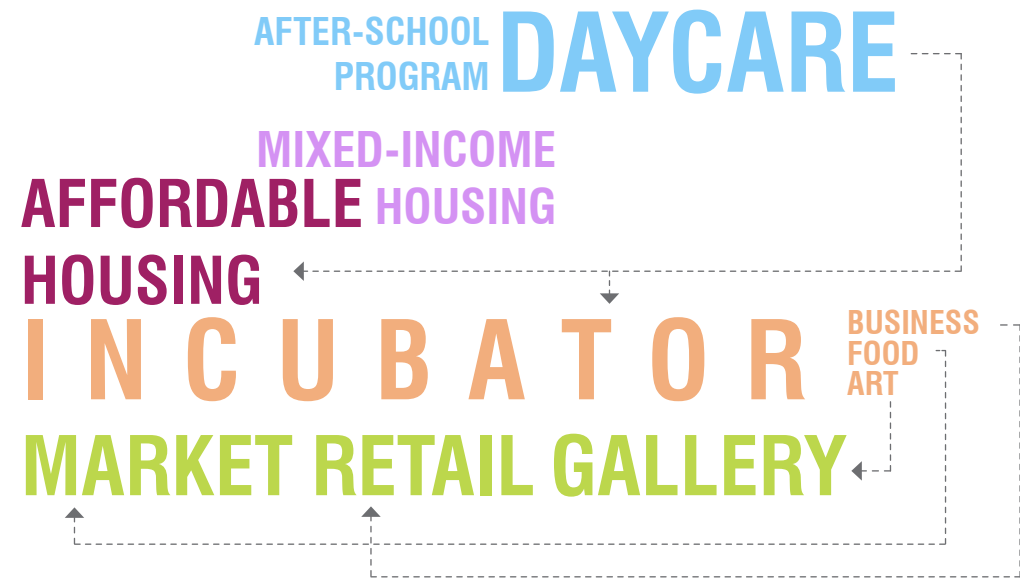

- TOWER UNITS
- LOW-RISE UNITS
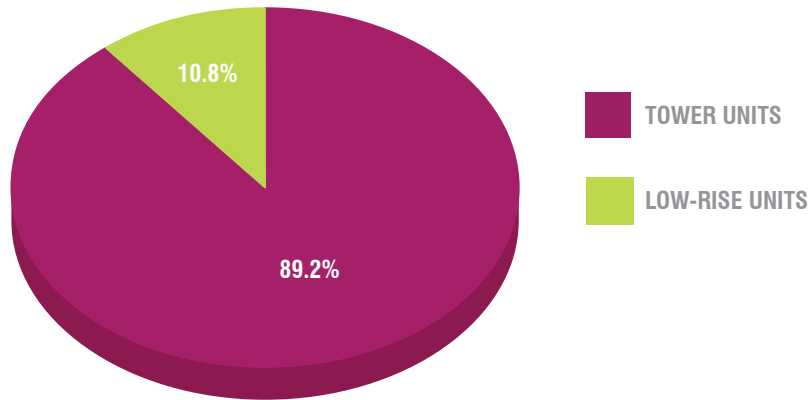
"I grew up in East New York and when I was little, this red food truck came by every Friday night - we would look forward to it. Now, there is nothing. If you want a good cupcake shop, you have to go to Manhattan or downtown Brooklyn. Why not have something similar here? I want to have my own food truck that stays in this neighborhood so people can have access to interesting food again."
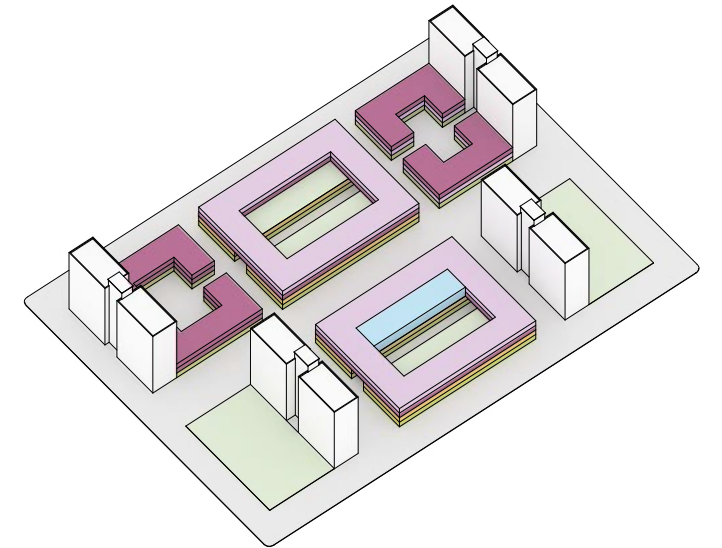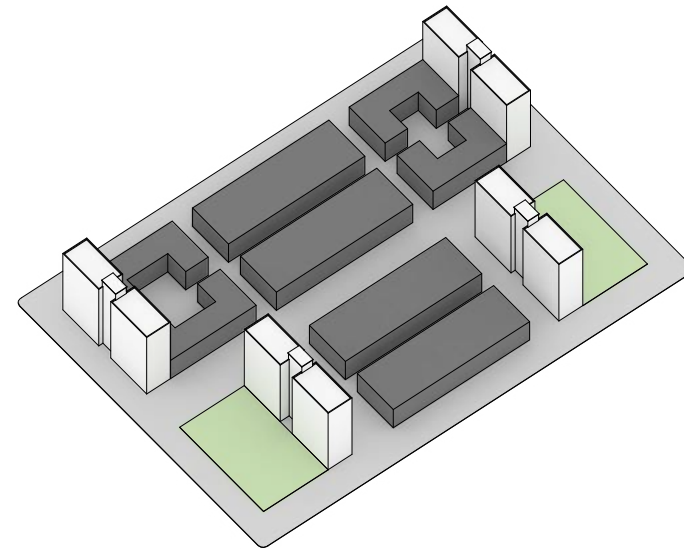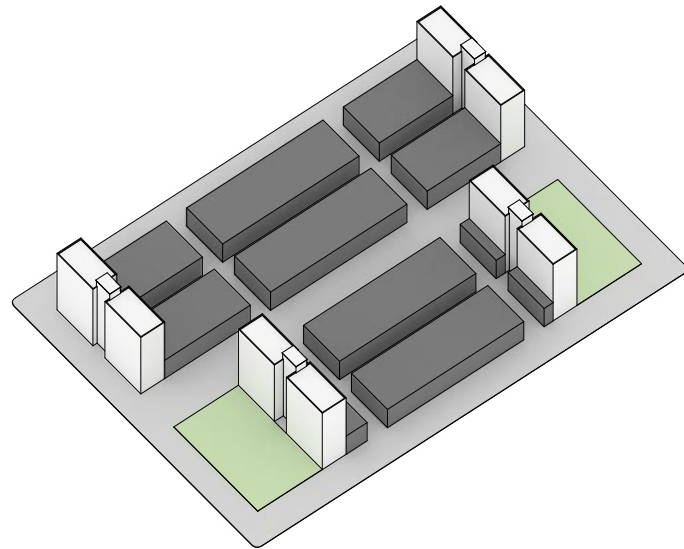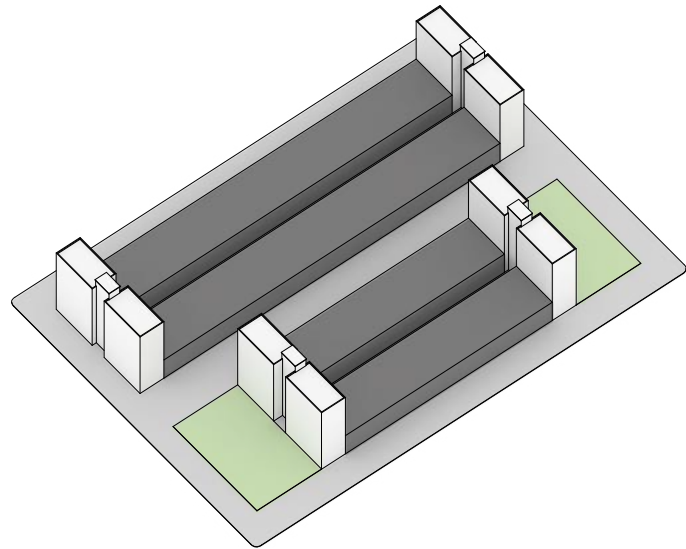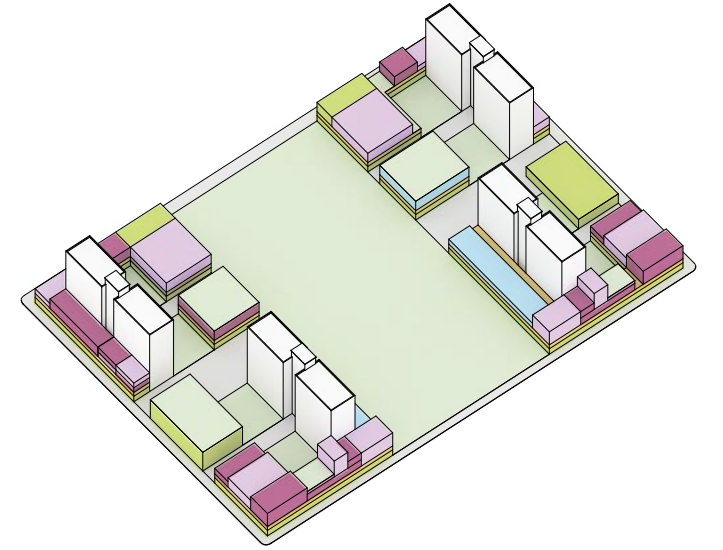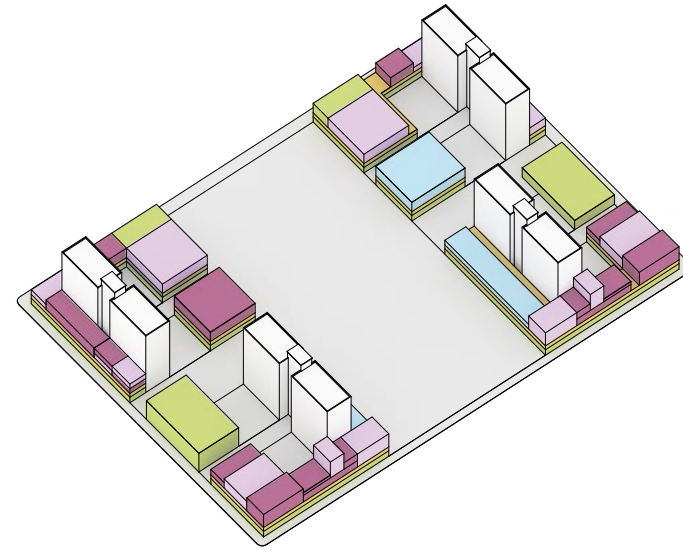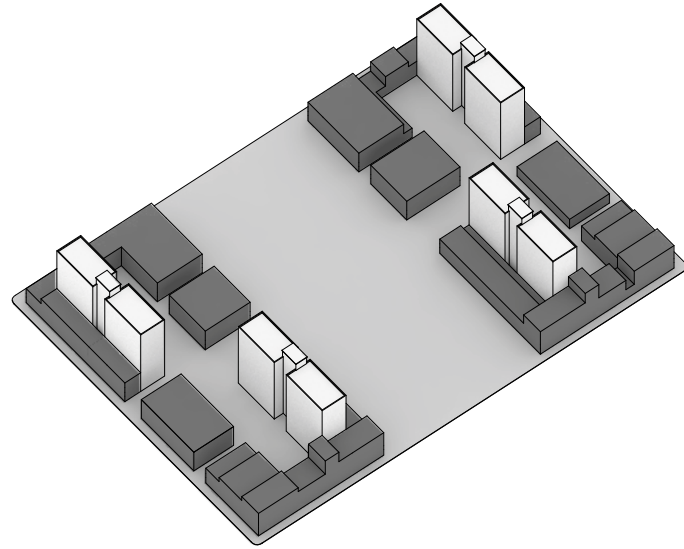
- Brooklyn resident Venus Sutton, owner of *Everything Sticks and More Catering*

- Business property in Brownsville are not "home-grown"; corporate owners more concerned with profit than engaging with the community
- Until recently, non-profits are limited to social services and health care but do not address economic development; therefore there are no entrepreneurial developments in the area
- Need to provide residents opportunity to stimulate their economy by providing resources to build or improve their businesses

PROGRAMS BASED ON ECONOMIC NEEDS

AFTER-SCHOOL PROGRAM **DAYCARE**

MIXED-INCOME

AFFORDABLE HOUSING

HOUSING

INCUBATOR BUSINESS FOOD ART

MARKET RETAIL GALLERY

PROGRAM MASSING
SITE FIT
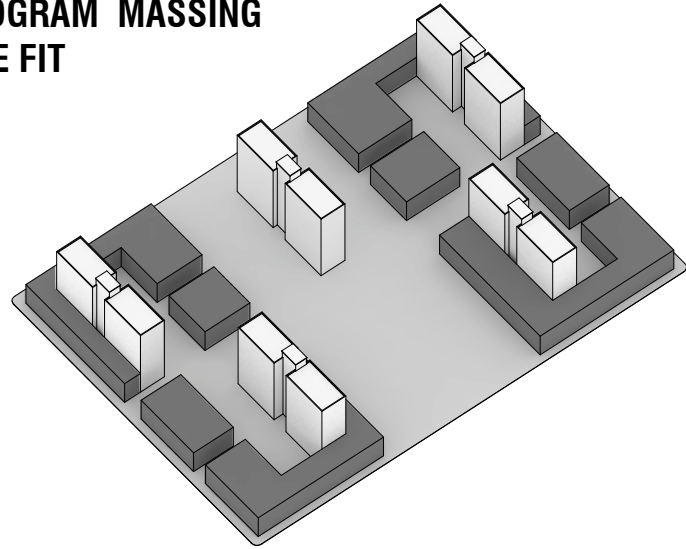
PRECEDENTS

EAST GARDENS

LOCATION:
CHANGYUAN, HENAN PROVINCE, CHINA

ARCHITECT:
URBAN SYSTEMS: OFFICE FOR
GENERATIVE ARCHITECTURE

"East Gardens." *Urban Systems*. Urban Systems:
Office for Generative Architecture, n.d. Web. 03
Dec. 2014.

FROM THE ARCHITECT: Located within our previously developed master planning framework for a new Urban District for Changyuan, Henan province, this residential development incorporates innovative architectural planning strategies for the intermixing of a range of building types, semi private courtyards and shared green spaces.

The distribution of buildings across the site is developed through digital models that balance the planning guidelines of the client brief with environmental criteria such as maximising sunlight access, views and privacy. The range of building typologies include residential towers, low-rise apartment blocks and townhouses with private access, offering a range of private and social settings to cater for a growing diversity of lower to higher income groups and lifestyle choices.

An important component to this development is significant amount of apartments for elderly citizens supported by retail, healthcare and recreational facilities. The entire development benefits from shared amenities such as clubhouses, jogging tracks and pools, and several themed gardens.

The development of the project is coordinated through detailed and flexible digital models that integrate particularities of the construction methods that will be used, aiming to construct the large parts of the project out of standardised loadbearing prefabricated concrete elements.
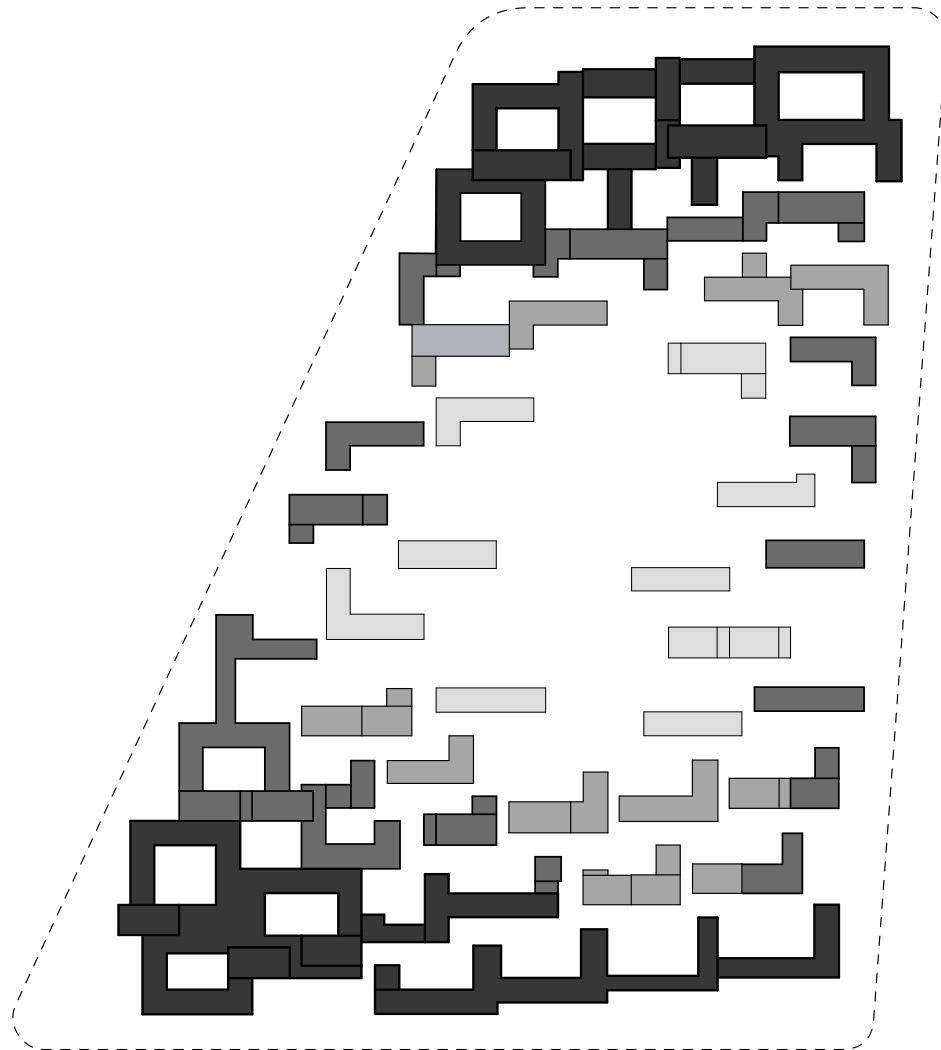
FIGURE 28:
Aerial perspective exterior view of the complex showing the combination of high- and low-rise development

FIGURE 29:
Aerial shot of complex showing the geometries of the project and the large open space in the center of the complex.

All images from urban-systems-office.com

INCREASING DENSITY TOWARD THE PERIMETER OF THE BLOCK

RUNNING TRACK/
PLAY HILL

CHILDREN'S
PLAYGROUND

GATHERING POINT

THEATRE PLAZA

WATER PARK

LOTUS PARK

ZEN GARDEN
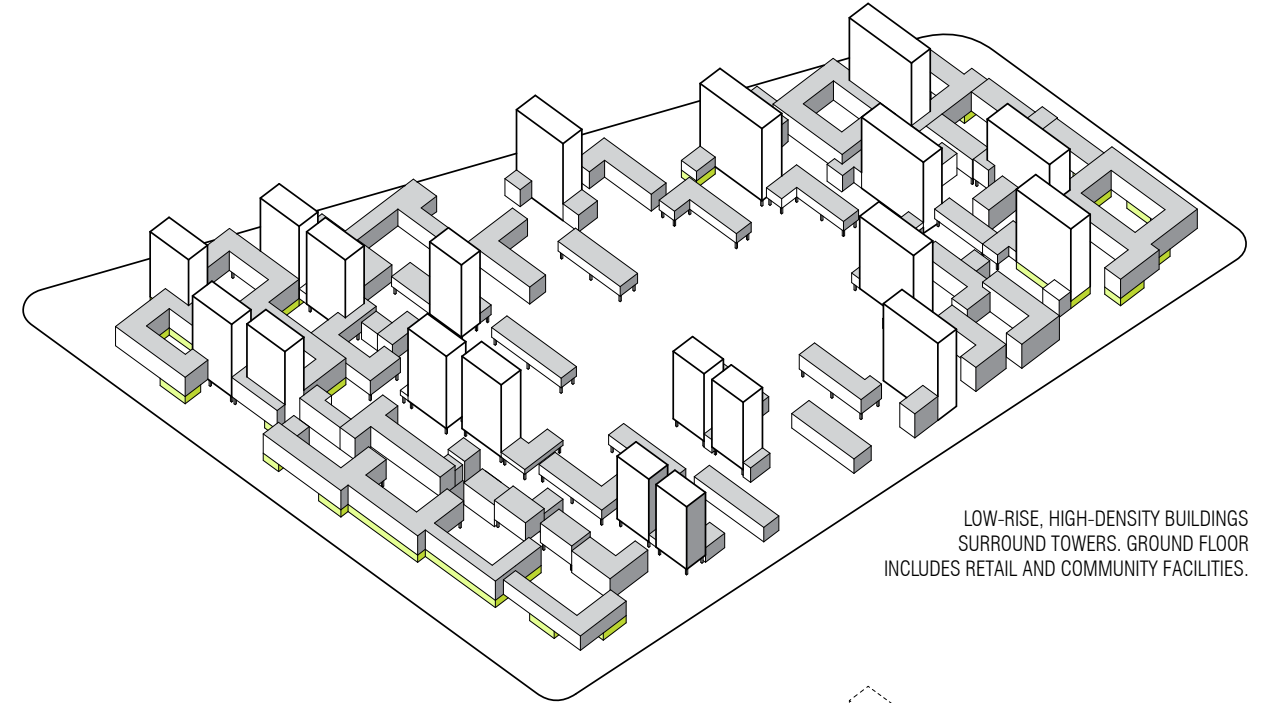
LOW-RISE, HIGH-DENSITY BUILDINGS
SURROUND TOWERS. GROUND FLOOR
INCLUDES RETAIL AND COMMUNITY FACILITIES.
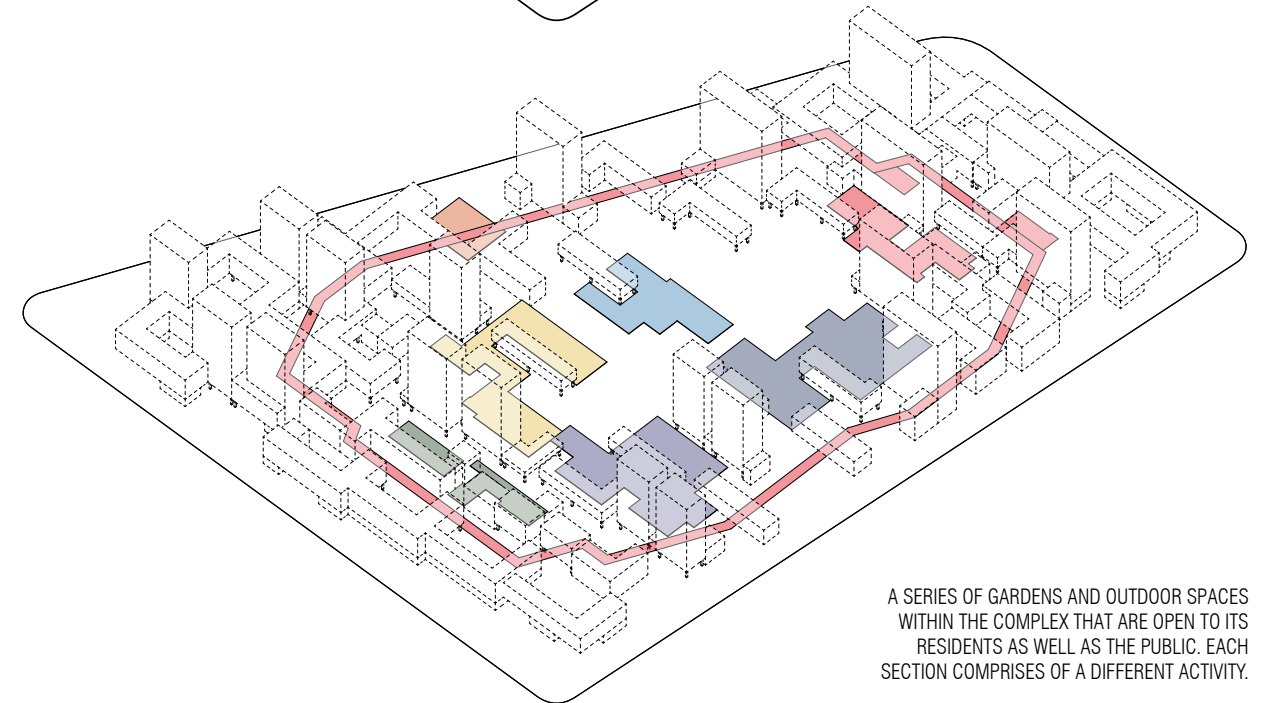
A SERIES OF GARDENS AND OUTDOOR SPACES
WITHIN THE COMPLEX THAT ARE OPEN TO ITS
RESIDENTS AS WELL AS THE PUBLIC. EACH
SECTION COMPRISES OF A DIFFERENT ACTIVITY.

FIGURE 30:
Housin Typology Precedents

FIGURE 31:
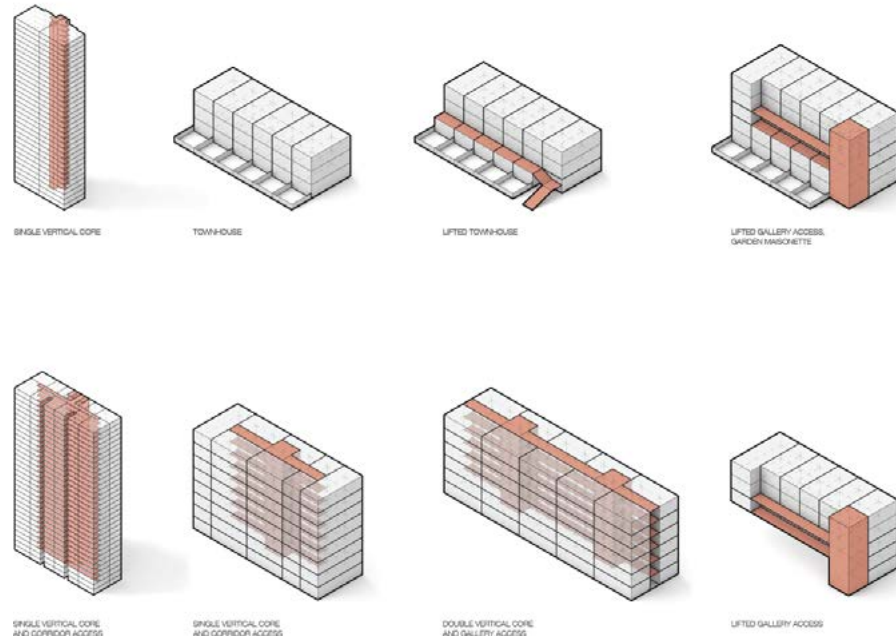Street view of the project showing how the tower and low-rise meet

FIGURE 32:
Site plan of the complex highlighting the different gardens and outdoor recreation spaces

FIGURE 33:
Rendering inside the complex adjacen to the water feature in the middle of the site

All images from urban-systems-office.com

WHY EAST GARDENS?

While the masterplan is all new construction, the urban strategy of integrating low-rise structures with high-rise towers is evident. A mixed-use development project, the complex includes both affordable and middle-income housing. Appropriately named the East Gardens, the project utilizes the open space provided by the towers and responds to its users instead of being a parking lot. The natural elements that are portrayed seem to be the kind of open space that Modern arcitects were hoping to come out of the tower in the park.

TEDA URBAN FABRIC

LOCATION:
TIANJIN, CHINA

ARCHITECT:
MVRDV

1. "TEDA URBAN FABRIC." MVRDV. N.p., n.d.
Web. 01 Dec. 2014.

The project is an urban development that comprises of 75% towers and 25% low-rise typologies. Following the old street pattern of the city that have been erased by the construction of new towns, the project sought to densify the traditional urban setting. The project mixes towers and low-rise structures as well as public space that opens up the dense pattern of the existing streets. The complex is comprised of housing and retail, with high-rise structures containing commercial amenities on the ground floor and the low-rise structures being organized into archetypal patio houses and townhouses of 3 or 4 levels. The use of the lot is maximized by using the internal courtyards as public space and placing parking garages underground. In this way a new neighborhood is recreated that echoes the character of the old streets. It combines a dense urbanity with traditional layout, creating a lively, attractive and sustainable urban area.

WHY TEDA URBAN FABRIC?

TEDA Urban Fabric is similar to my project in that both strive to regain the lost street pattern and vitality that resulted from the demolition of historical blocks. In both cases, the existing urban patterns are being erased and new towns are built without any specific links to what was previously there. The complex also combines low-rise with high-rise structures similar to my contention. Rather than integrating the low-rise structures with the towers, they are separate entities that operate independently but also interact with one another to create a dynamic, pedestrian-friendly streetscape.

FIGURE 34:
Conceptual diagram of site and massing strategy

FIGURE 35:
Site plan of the complex showing the organization of the buildings. The projects strives to preserve the old street patterns of the city by using surrounding street patterns as datum lines for the buildings and park space.

FIGURE 36:
Aerial view of the complex and street view of one of the low-rise structures found in the site.

FIGURE 37:
Exterior view showing the varying aesthetic designs within the complex. The buildings are tied together in its materiality, using brick and glass to create a contemporary urban design that integrates with its surroundings.
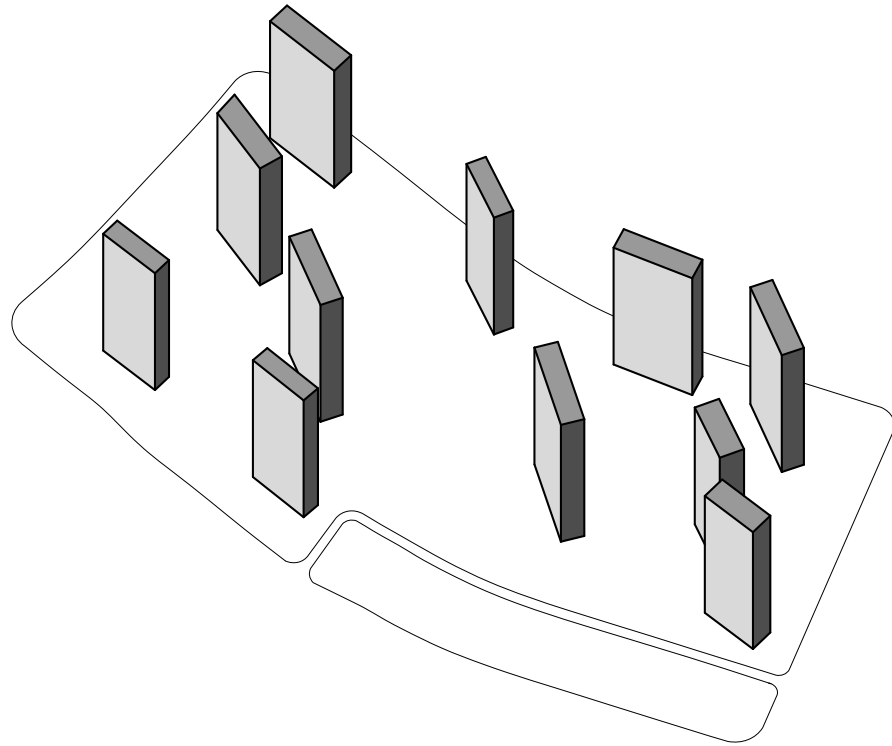
All images from www.mvrdv.nl

Figure-ground map showing the arrangement and density of the site. The buildings maximixe the lot so that it provides a high and active density while still providing ample green/open space
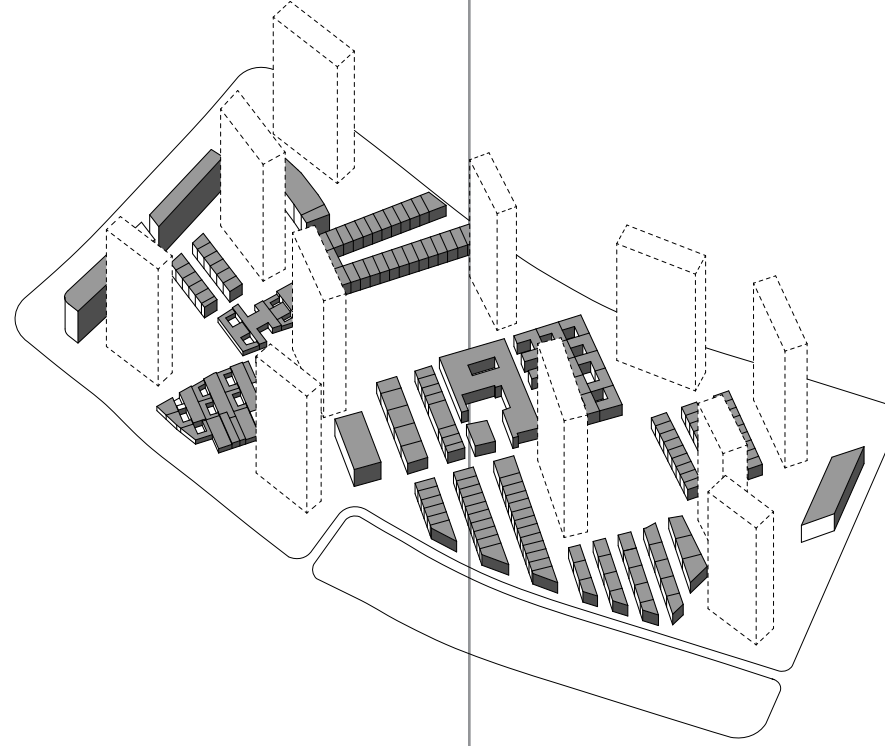
HOUSING TOWERS WITH MIXED-USE PROGRAM
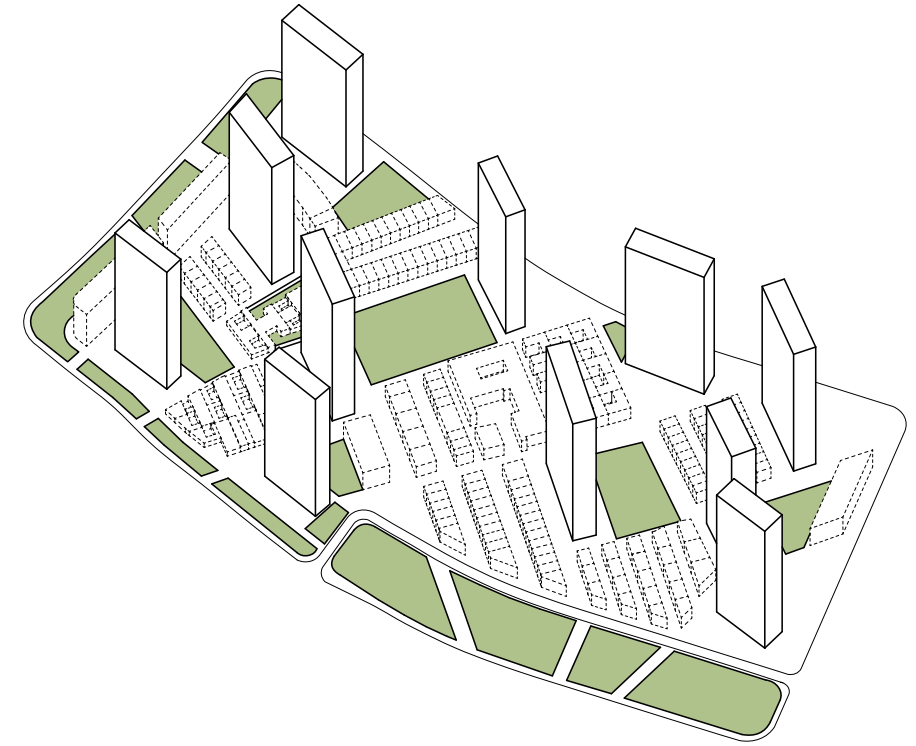IN THE GROUND FLOOR INCLUDING RETAIL

LOW-RISE, HIGH DENSITY HOUSING THAT IS ORGANIZED
TO FOLLOW THE OLD STREET PATTERNS

THE MIX OF HIGH-RISE AND LOW-RISE ALLOWS FOR OPEN SPACE
WITHIN THE COMPLEX THAT IS ACCESSIBLE TO THE PUBLIC

ESSEX CROSSING

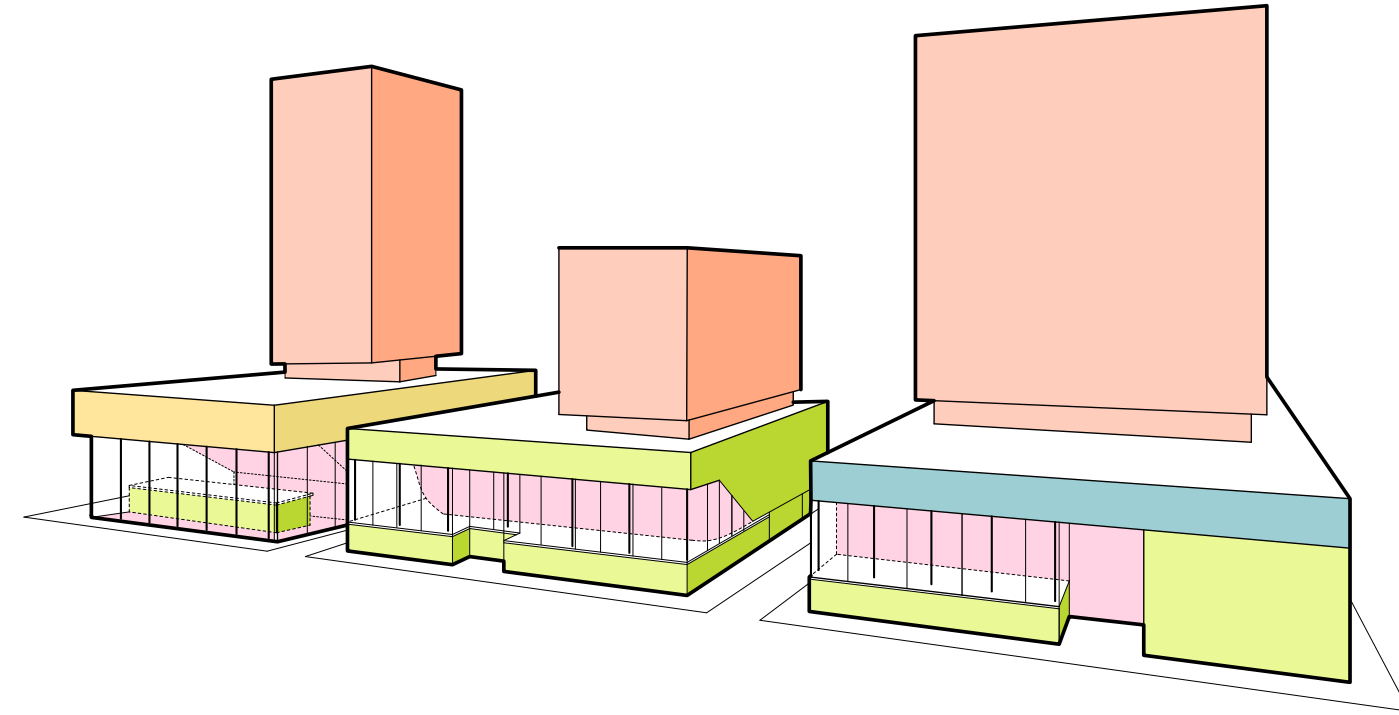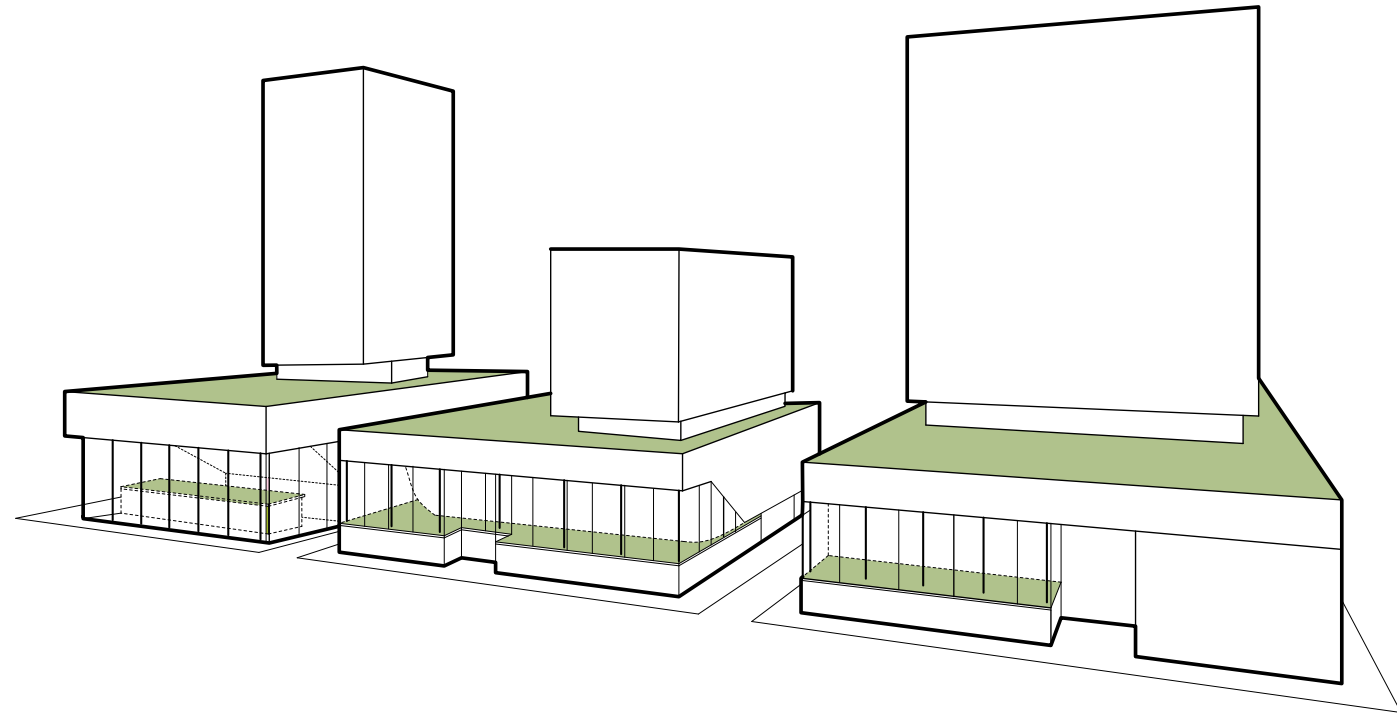**LOCATION:**
LOWER EAST SIDE, MANHATTAN, NY

ARCHITECT:
SHOP ARCHITECTS

FIGURE 38:
Broome St. section through the development that highlights the different layers of public space and commercial activity.
www.essexcrossingnyc.com

FIGURE 39:
Plan showing the nine sites of the new development. The site is adjacent to numerous public housing complexes including the Seward Park Extension Towers.

As the largest stretch of undeveloped City-owned land in Manhattan below 96th street, the nine sites of the Seward Park Urban Renewal Area (SPURA) is being developed into a mixed-use community that consists of residential, commercial, and community space. The project sets to become a vital contribution to the lower east side's diverse community. With 50% of the residential units as affordable housing, the project integrates itself into the neighborhood without displacing many of the community members. In addition, local small-businesses are welcome into the new development with the construction of incubation spaces. Cultural and communal spaces such a new Andy Warhol Museum, a new home for the Essex Street Market, and layered gardens are included to expand public space into the neighborhood and increase pedestrian activity.

ESSEX ST. MARKET

MIXED-INCOME HOUSING

THEATER

LOCAL RETAIL

OFFICE/INCUBATOR

FIGURE 40:
Aerial rendering of mixed-use development

FIGURE 41:
Aerial View of Broome St.

FIGURE 42:
Market Line Interior Rendering

FIGURE 43:
Essex St. North Rendering

All renderings from www.shoparc.com

WHY ESSEX CROSSING?

While the project is a completely new development, it mirrors the goals I want to accomplish in my project, which is to introduce dynamic mixed-use structures that will stimulate pedestrian street activity and contain amenities that benefit the local community. I also think that the mutiple levels of green space not only uses the land in an efficient and economical way in that it maximizes the use of available land, but also allows public space to extend from the ground plane.

PROGRAMS:

1,000 new rental apartments and condominium units, with 500 units being permanently affordable to low-, moderate- and middle-income households, including senior citizens.

250,000 square feet of office space, including creative and tech co-working and incubator space.

A dual-generation school run by local partner Educational Alliance will offer Head Start and Adult Education programs.

A community center operated by Grand Street Alliance will provide early childhood and senior services.

The Market Line, a natural light-filled concourse spanning the cellar level of three sites south of Delancey Street, which includes small to medium-sized vendors stalls with tenants that include retail and food-oriented uses, a culinary incubator, and a center dedicated to encouraging entrepreneurs to learn craft skills and produce and sell hand-made merchandise.

A rooftop urban farm

63 COMPTON
LONDON, UK
DOONE SILVER ARCHITECTS

1. "63 Compton / Doone Silver Architects."
ArchDaily. N.p., n.d. Web. 02 Dec. 2014.

This 4-story apartment building is located in the heart of Clerkenwell in London and replaced a 2-story abandoned electrical substation. Situated in a historically sensitive context, the design took careful consideration of the surrounding buildings and responds to their volume and materials. It was important that the design enhanced the urban realm and added to the neighborhood's streetscape. While the building contains 4 levels, it reads as a 3 level structure as it aligns with the adjacent building parapet and the fourth level being set back from the street.

"The building is constructed of insitu concrete and internally this is left exposed, with its deliberately robust character contrasted with a more refined palette of solid oak floors, Calacatta Oro marble and two warm grey tones of paint applied to plasterwork and joinery. Externally a high quality blue/red/silver glazed Janinhoff brick is used that reflects the general character of the context whilst also expressing the building as a new, crisp and contemporary contribution to the streetscape."

FIGURE 44:
North Elevation

FIGURE 45:
Street iew from Compton St.

FIGURE 46:
Detailed view of facade showcasing the different colors found in the brickwork

All images from www.archdaily.com

The blue and red coloring of the bricks respond to the surrounding red Victorian buildings and the blue/grey painted buildings in Clerkenwell

THE HEGEMAN
BROWNSVILLE, BROOKLYN
COOK + FOX

1. The Hegeman Supportive Housing. N.p.: n.p., n.d. *COOKFOX.* COOKFOX Archiects, LLP. Web. 1 Dec. 2014.

FIGURE 47:
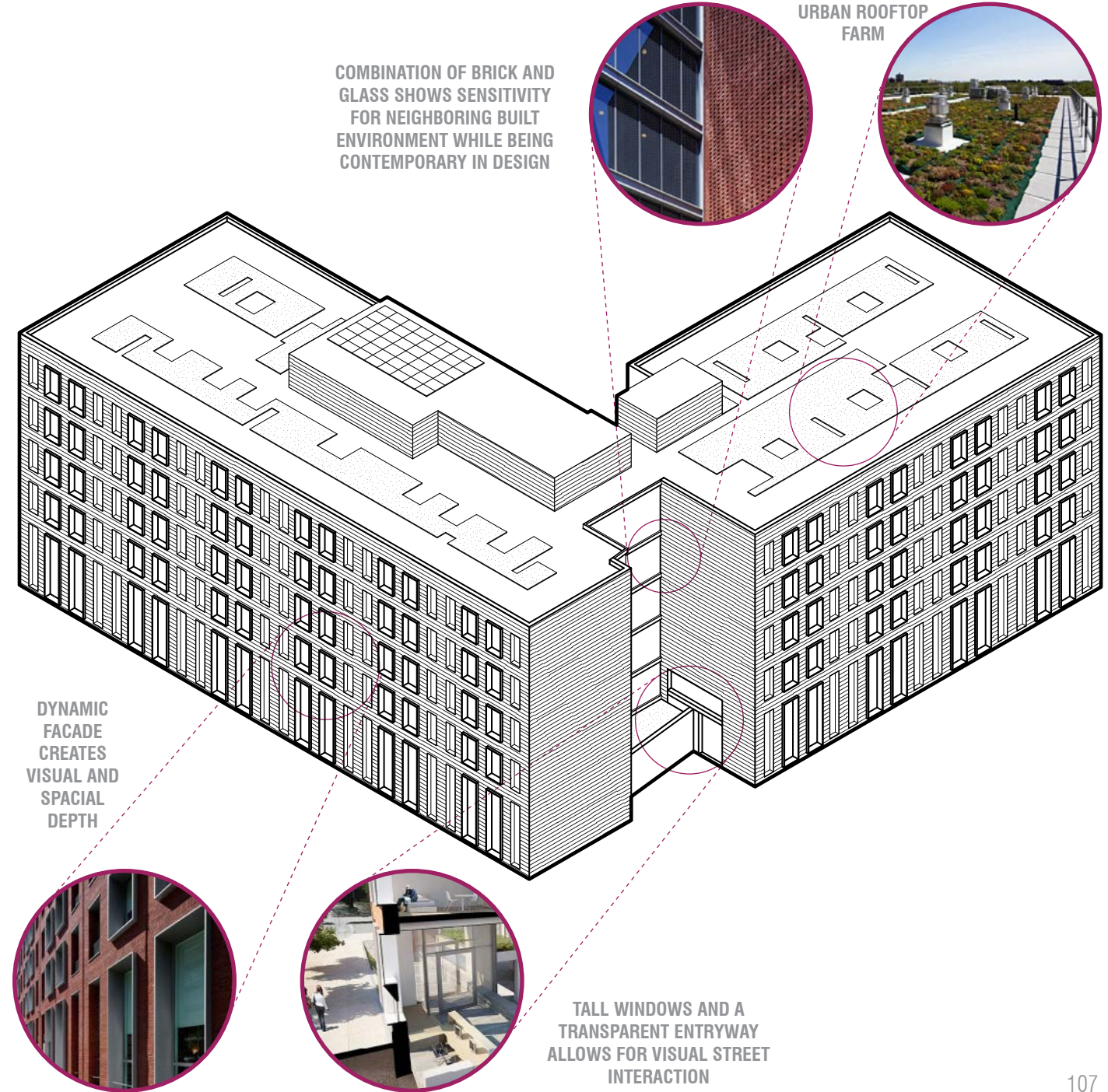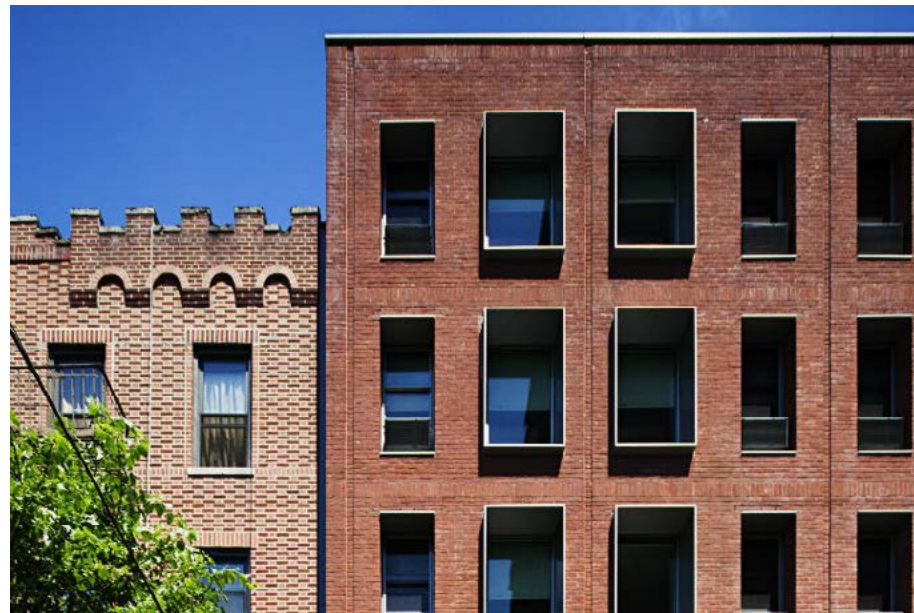Street view from Hegeman Ave.

FIGURE 48:
Partial elevation of building

FIGURE 49:
Building axon highlighting different elements of the project

All images from www.cookfox.com

Located in a residential community in Brownsville, Brooklyn the supportive housing complex includes roof gardens, urban farming, and social services that strive to end homelessness. Unlike the numerous public housing complexes in Brownsville, the project respects the surrounding neighborhood with its restrained planning, height, and massing. Traditional brickwork techniques mirror that of neighboring buildings while adding a contemporary twist that is uncommon in affordable housing.

Adding natural elements into the design was a vital component in making the project sustainable. The rooftop houses 3,400 square feet of greenery that cool the building and slow storm water run-off from the site. In addition, solar panels provide renewable energy for exterior lighting.

COMBINATION OF BRICK AND GLASS SHOWS SENSITIVITY FOR NEIGHBORING BUILT ENVIRONMENT WHILE BEING CONTEMPORARY IN DESIGN

URBAN ROOFTOP FARM

DYNAMIC FACADE CREATES VISUAL AND SPACIAL DEPTH

TALL WINDOWS AND A TRANSPARENT ENTRYWAY ALLOWS FOR VISUAL STREET INTERACTION

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