



ADDISON DUNNE

PROF NOAH RESNICK, MASTERS THESIS STUDIO 2014-2015

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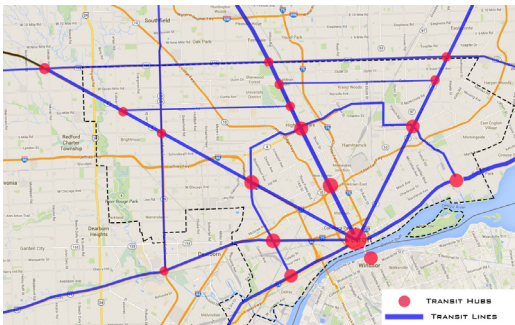
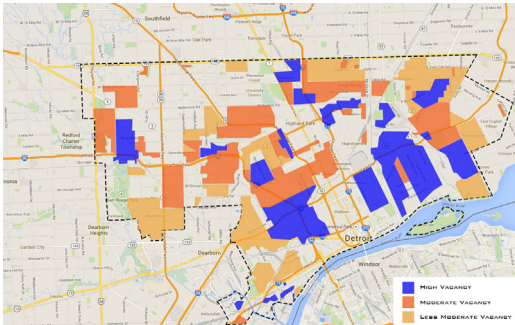
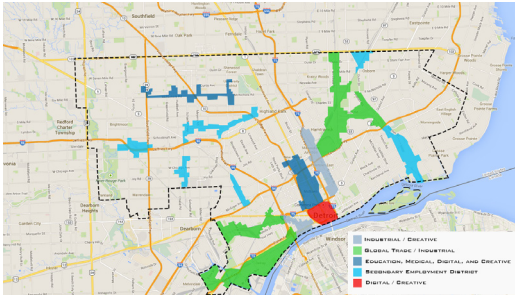
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ABSTRACT

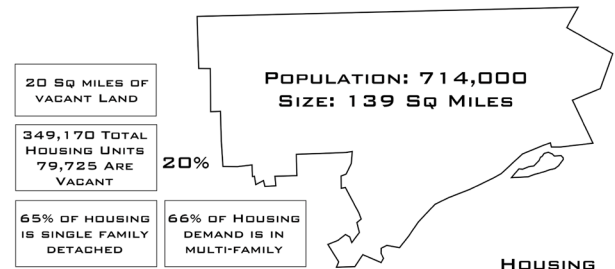
This thesis began as an investigation on how to leverage Detroit's greatest asset its' community, and provide it a space which would re-densify one of the major problems in Detroit, the fragmentation of its housing in its' communities. To do this social spaces were needed within a community to strengthen relationships and integration between members to create a stronger neighborhood, resistant to unwanted economic change.



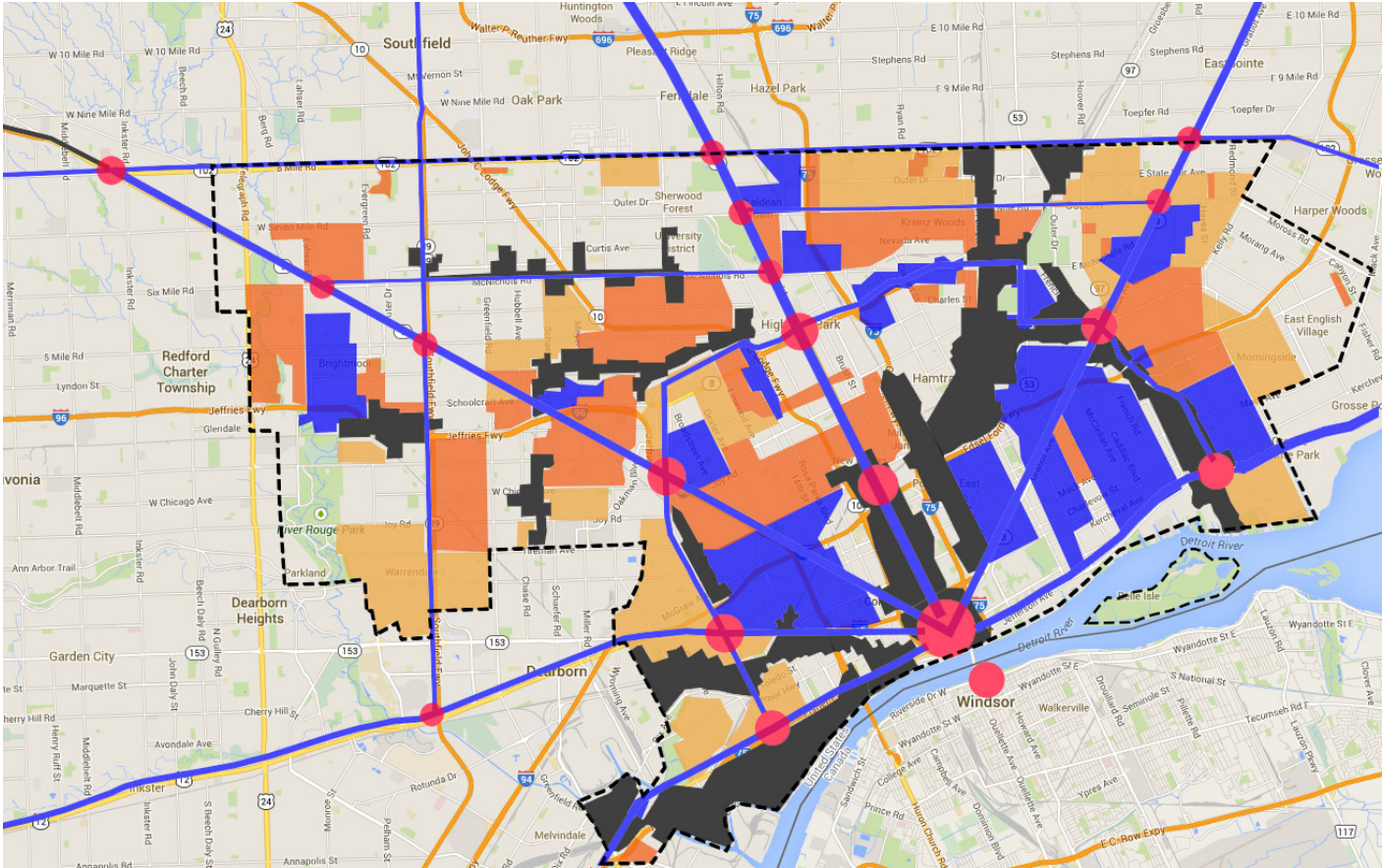
Between 1950 and 2010 Detroit lost sixty one percent of its residents. Of the 349,170 housing units in Detroit 20% of them were vacant. Those vacancies have left holes within Detroit's communities which have eroded through the city. As Detroit rebuilds in the future, vacancies will provide opportunities to restitch broken communities within the urban fabric of the city. Business will move back to the city and create employment opportunities for those within the city. Restitching these broken neighborhoods by providing new housing opportunities is something Detroit will have to do to regain its' population. If architects can utilize vacancies within a neighborhood to provide up to date housing that fits in the existing context the overall property values of the city will grow over time.



Three main conditions were studied within Detroit which would help start to narrow down areas for sites. The first condition that was looked at was the level of vacancy in the city. The areas of high and moderate density were mapped throughout the city to see the areas most effected. Next, the employment districts were mapped and their respective types of employment categorized. Thirdly, the major avenues of the city were marked, as well as where future transit hubs would pop up in the city. Future sites must be located in areas with some vacancy, but also an existing neighborhood network. Next they must be located near employment districts, as well as primary transportation avenues through the city.



POPULATION: 714,000
SIZE: 139 SQ MILES

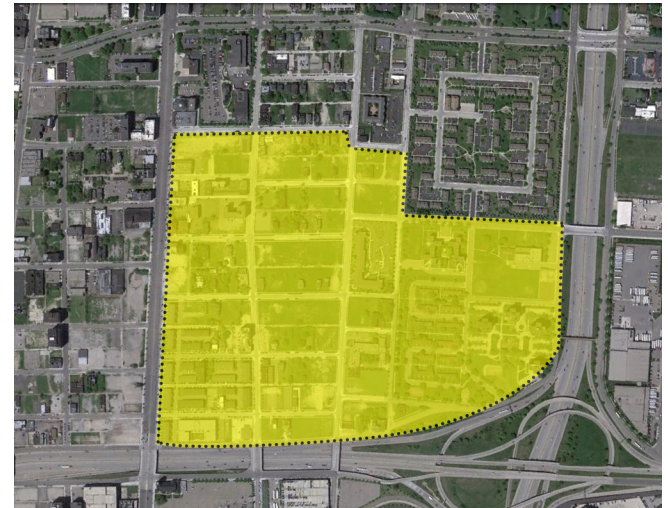


SITE INVESTIAGTION

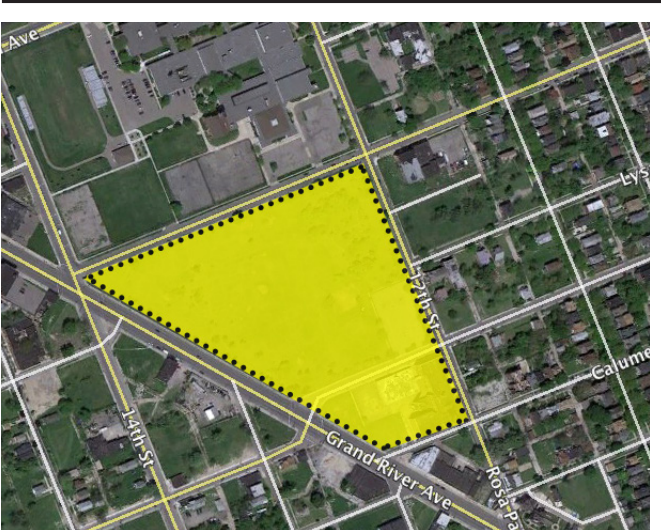
Three sites were subsequently picked for further investigation based off of design criteria from previous studies. The three sites picked are located in the neighborhood of Brush Park, Grand River and Rosa Parks blvd, and Kercheval and Alter Rd. These sites were all picked for their proximity to major transportation thoroughfares, as well as their proximity to employment districts. Density of the surrounding neighborhood was also considered to pick a site which had opportunities for growth on vacant properties.

The first site picked was that of the neighborhood of Brush Park. Its proximity to Woodward, Downtown, and I-75 make it a well connected area within the city. Brush Park is located at the lower portion of the Midtown employment district offering jobs in professions such as education, medical, digital, and creative. Brush Park was also picked because of the amount of vacant land in the neighborhood. Located at the southeast tip of Brush Park, the remains of what once was the Brewster Douglass Housing Projects stands on a demolished site. This vacant site sits next to a neighborhood of Victorian homes in multiple stages of lifespan, from being inhabited to crumbling bricks. Brush Park is located directly on the outside of the ring of highways sounding the immediate city. Lafayette Park is located to the southeast at the same distance away from the center of the city while being just outside the highway ring of the intercity.

SITE 1

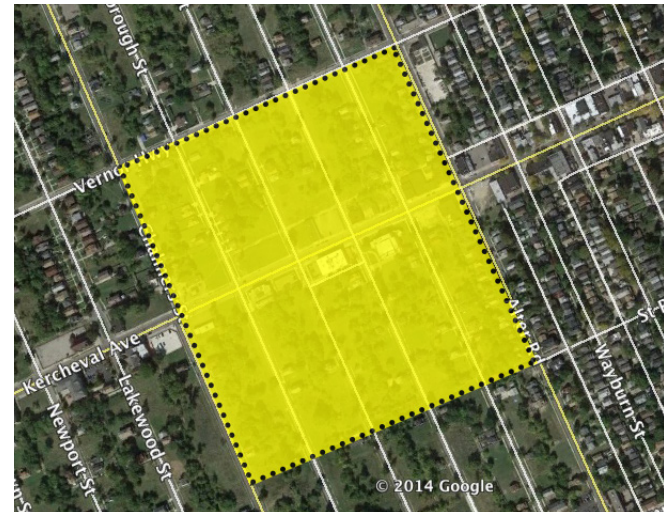


SITE 2



The second site investigated was that of Grand River and Rosa Parks Blvd. Two specific city blocks were picked for consideration of future architectural interventions. The site places itself with the Woodbridge neighborhood which is primarily made up of Victorian homes. The Woodbridge neighborhood is located in close proximity to downtown, Midtown, Corktown, and New Center. The site offered opportunities for storefront businesses along Grand River, as well as space for multi and single family homes.

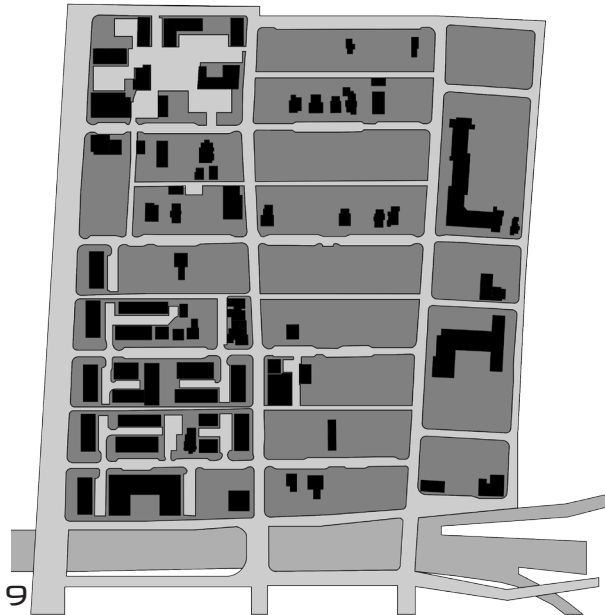
The third site picked was located at Kercheval and Alter Rd on the border of Grosse Pointe and Detroit. This site was picked because of the difference in densities from the Grosse Pointe to the Detroit neighborhood. The Detroit side is far less populated and has a much higher vacancy of land than Grosse Pointe. Apart from neighborhood vacancy Kercheval Rd offers the opportunity for a commercial storefront district to connect the Detroit neighborhood to its' Grosse Pointe neighbors.



SITE 3

BRUSH PARK

Brush Park was ultimately decided upon to be the site of further investigation because of its proximity to Woodward and downtown Detroit, as well as its historical significance and density. Brush Park today stands partly vacant with the rest of the neighborhood being comprised of apartment buildings or the remaining historic Victorian homes which call Brush Park their home. The vacant parts of Brush Park have been reclaimed by nature with overgrown grass covering desolate patches of land. This neighborhood offers Detroit a great opportunity for redeveloping land into single family and multi-family homes which compliment the Victorian architecture of Brush Park.



MIES VAN DER ROHE : LAFAYETTE PARK

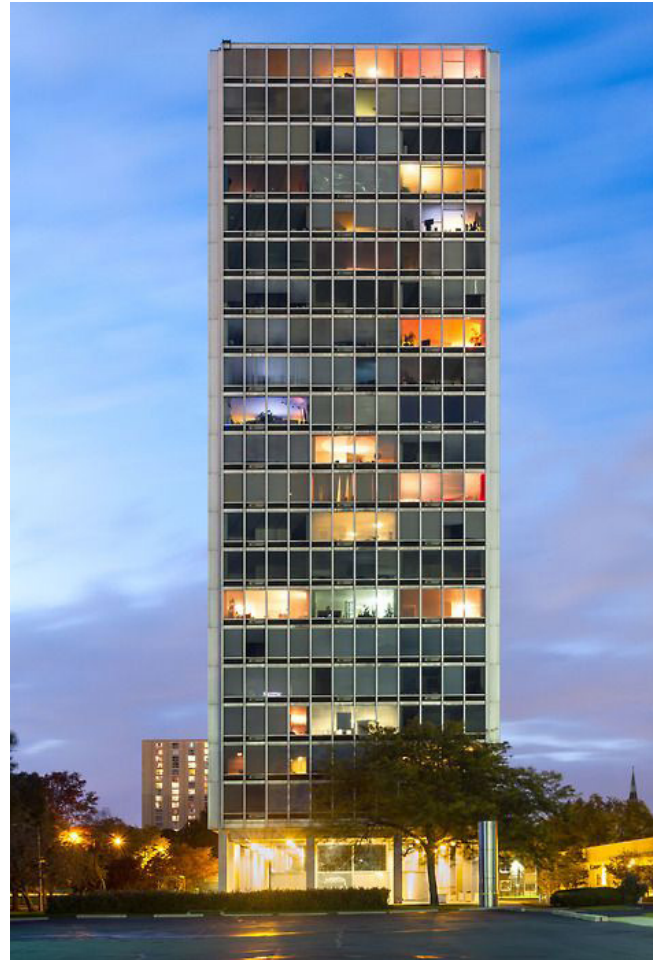
Lafayette Park was constructed in Detroit between 1956 and 1959. Mies van der Rohe was the architect on the project and worked collaboratively with urban planner Ludwig Hiberseimer and landscape architect Alfred Caldwell. It is a seventy-eight acre complex which is made up of three high-rise buildings, 162 townhouses, and 24 courthouses. The variety of housing opportunities in addition to its juxtaposition to Brush Park make it applicable as a case study.



Mies organized the housing units around open green space, which opens the housing units out onto a picturesque landscape. The transition between inside and outside happens seamlessly because of large windows which encase the units wall. Mies combines privacy of inside with the public interaction of the outside.



Combined with many different housing types, Lafayette Park offers residents many different styles of living within one neighborhood, that facilitates social interaction on the site.



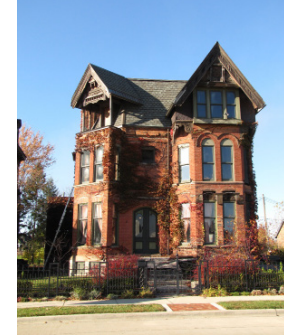
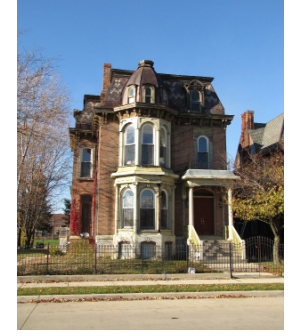
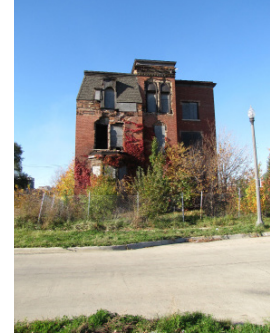


BRUSH PARK HOUSING STUDY

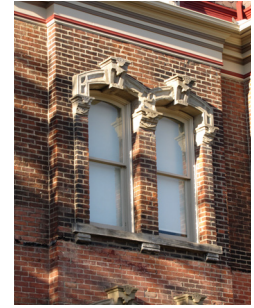




To begin analyzing the site photos were taken of the existing homes and surrounding neighborhood to document its' architectural characteristics. The Victorian homes of Brush Park often incorporated gable or mansard roofs, paired with dormers and turrets. These turrets often were the tallest element of the house and were usually centered within the composition of the front facade. The use of bay windows projected out of the front facade to create a space which reaches out to the neighborhood is commonly found. The use of oriel windows provide views which can be seen from the floor slab up through the wall. Ornamentation throughout the building facade such as dentil molding, lintels, and details within the roofs and portico are used in conjunction with brick and clapboard siding, are all essential to the viewing of a building as Victorian in style. Implementations of these architectural details can be found throughout Brush Park in its Historic Victorian single family homes, as well as historic apartments.



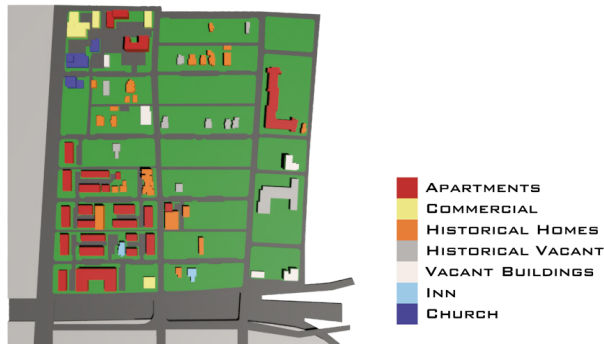






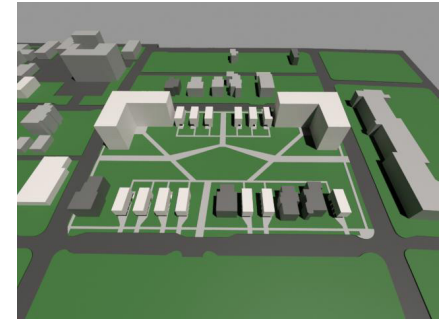
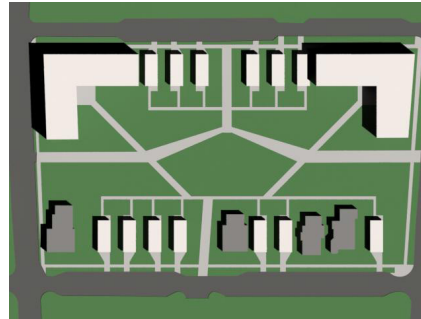
URBAN BLOCK MASSING SKETCH PROBLEM

A block was chosen within Brush Park to be used for a single family, and multi family massing plan. The site included four vacant homes of historical Victorian significance. The house located on the southwest corner of the block is the Ransom Gillis House built in 1878, and stood vacant since the 1960's. The goal of the sketch problem was to assimilate single family and multi family housing units onto the site, while still complimenting the historical architecture of the block. The city block was turned inward with the entrances to homes and apartments accessed through the interior of the block. This flipping of the block turns its inhabitants focus inwards onto the human interactions happening within the block. Pathways cut through the site allowing the existing neighborhood to flow through the site.



BLOCK MASSING 1

The first massing sketch placed single family homes in line with the others along the south side of the historic block. Two multi family buildings would bookend the site furthering the containment of the interior of the block. Between the two multi family buildings would be located more single family residences. Pathways would converge in the middle creating open green space for the members of the neighborhood.



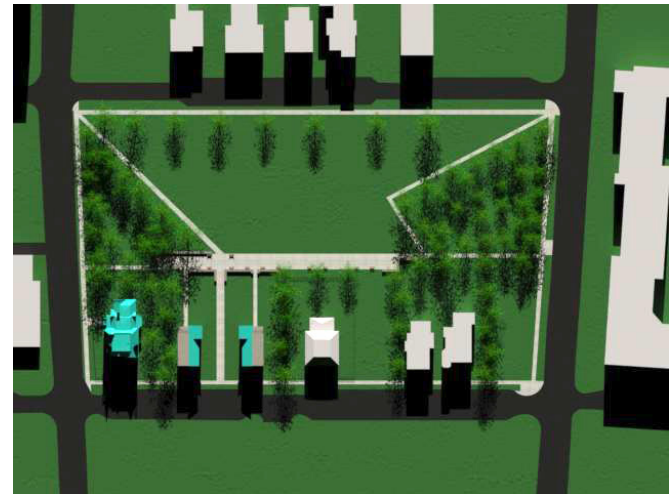
BLOCK MASSING 2

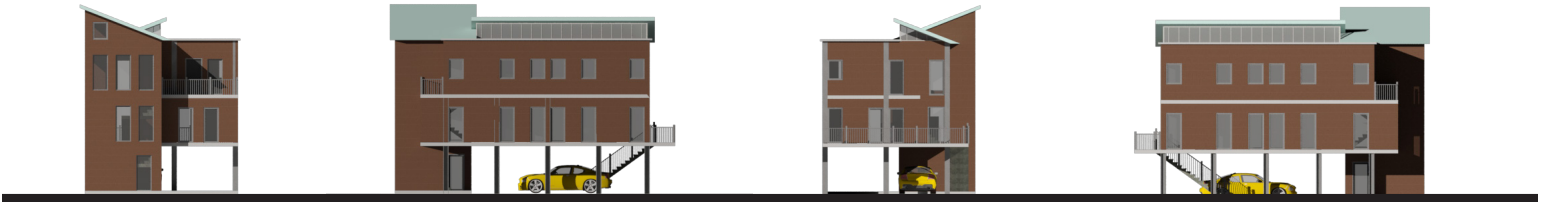
The second massing problem placed single family homes on the north and south side of the block. Three multi-family apartments were put in middle of the site creating two courtyards within the block. The single family homes create privacy along the streets while the inner portion of the block directs the travel of the multifamily residents. The inner portion of the block becomes a community space.



SINGLE FAMILY HOUSE SKETCH PROBLEM

Creating a single family house which would fit into the historic Victorian neighborhood was the next challenge. Design guidelines from the Detroit Historical Design Commission were used to focus on important elements which would help tie restored homes on the site fit to the new ones. The block is flipped in, leaving the front porch facing the middle of the block. The house is raised up on columns providing space for parking underneath the floor slabs. The entrance is located on the side of the porch in a tall rectangular space. This space contains all the stairways to navigate the house. Oriel windows were used centered around the column grid to provide views out onto the block. Balconies are used on both the front and the back of the house to create different degrees of exposure to the public. The roof features a row of windows which lets light into a two story space below. The home provides views which connects the private owner to the landscape around them in hopes of further connecting them with the community.



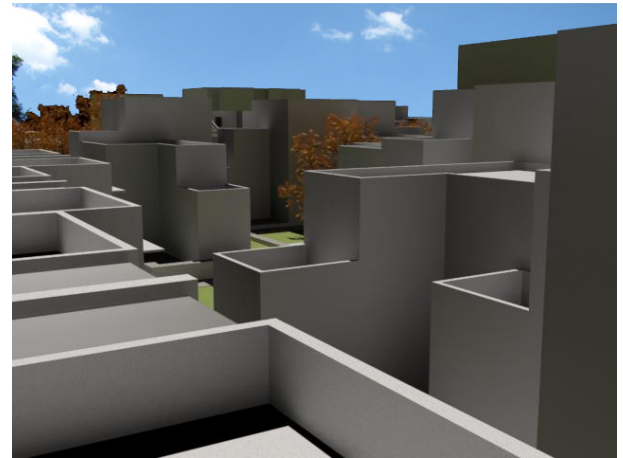




BRUSH PARK TOWN-HOUSE SKETCH PROBLEM



The town-house sketch problem focused on developing the block selected into a unified neighborhood of townhomes, and reused historic homes. The investigation began on focusing on flipping the social interaction to the interior of the block. There are entrances from both the street side, as well as the interior block side. The purpose of this was to move the front door to the inside of the block while providing patio space which connects between units. The block is organized with three bedroom townhomes on the exterior of the block, and two and one bedroom townhomes in the interior.



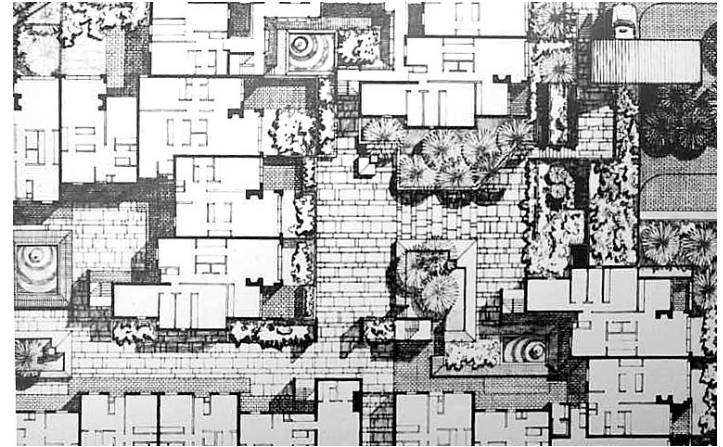
Each unit also has rooftop balcony access allowing for private outdoor terrace space. These terrace spaces offer a new level of interaction which give users a varying degree of privacy in contrast to the shared patios on the ground level.

LOUIS SAUER : PENNS LANDING SQUARE

Penn's Landing Square is located in Philadelphia facing the Delaware river. There are 118 dwellings on the site giving it a residential density of 45 units per acre. Sauer made sure to keep the existing block structure by situating the exterior units on an even set back. What happens on the interior block is shifts in distance between buildings. This creates a winding site filled with courtyards and public paths.

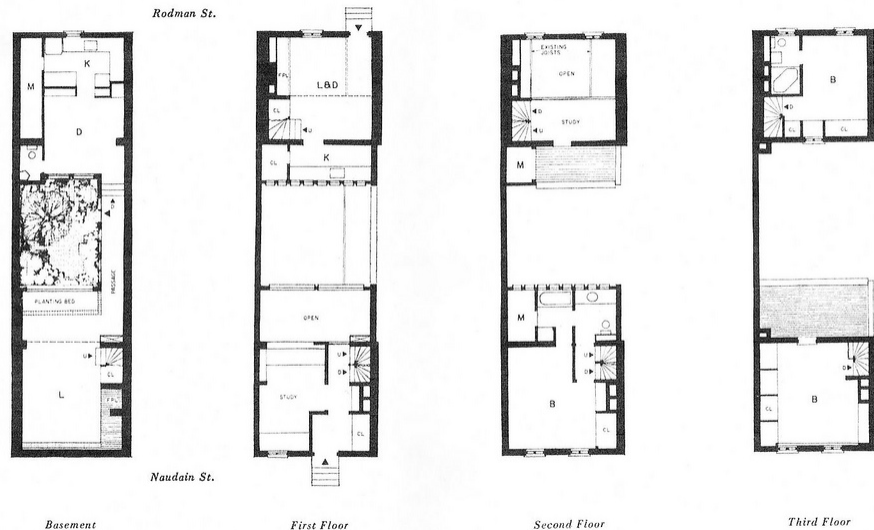
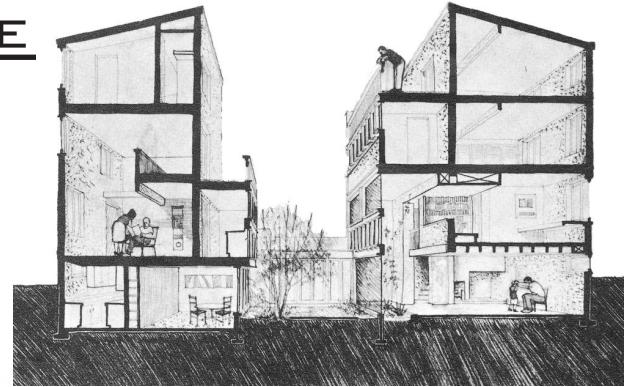


The housing units are L shaped and are centered around a courtyard which connects to the interior public space of the block. Sunken courtyards create private space for units while still maintaining relationships with neighbors. Landscape elements soften the hardscape of the interior block creating barriers between social spaces.



LOUIS SAUER : BUTEN HOUSE

The Buten House is located in a neighborhood on the west side of Society Hill in Philadelphia. The house contains a private residence that is connected to a rental unit through a central courtyard. Sauer oriented the windows of the units so that the ground spaces would remain private to each other. The courtyard brings light into the interior of the unit. Planters on the interior of the house and exterior carry the green space into the interior of the units bridging inside and outside. Sauer created a rooftop patio which overlooked the interior courtyard. The repetition and size in windows were esthetic decisions to make the space look larger.



Basement

First Floor

Second Floor

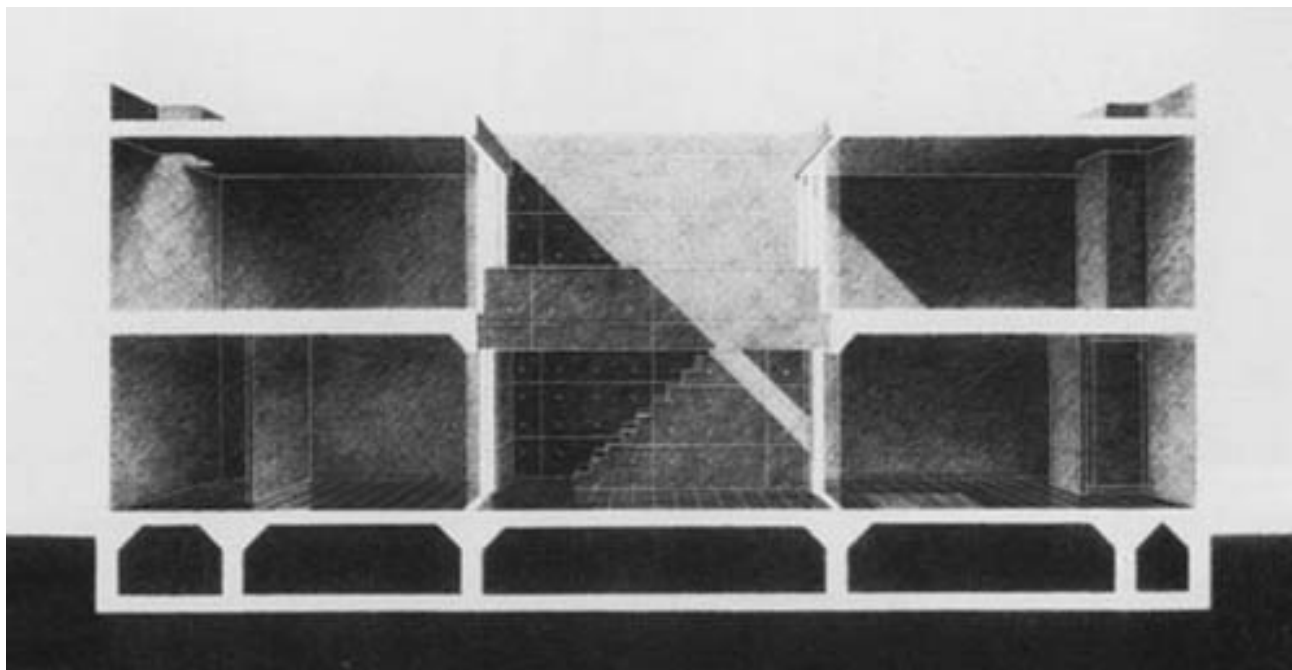
Third Floor

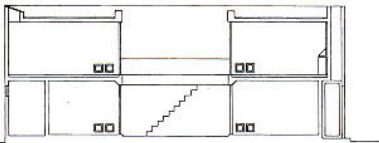
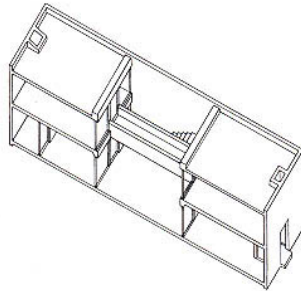
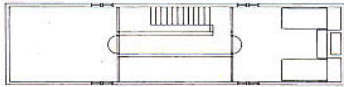
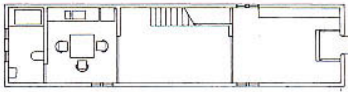


TADO ANDO : AZUMA HOUSE

The Azuma house is located in Sumiyoshi, Osaka, Japan. It is built in a city of primarily wood structures and therefore Ando decided to use concrete as the main building material. The sleeping spaces are located on the second floor, while the kitchen and living spaces are located on the ground floor. These different rooms are all centered around a courtyard which contains the circulation for the building.





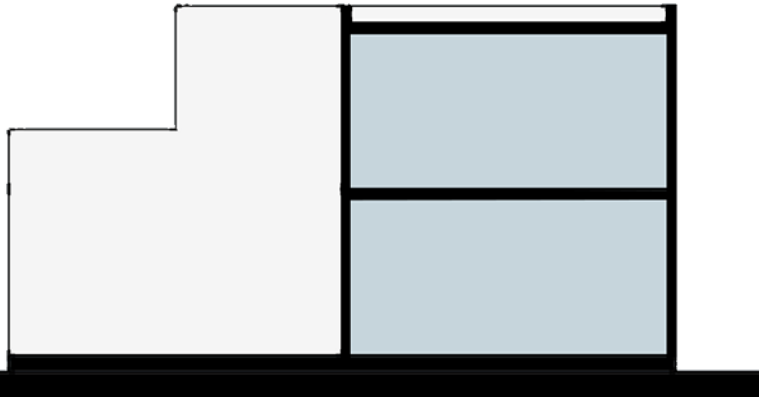
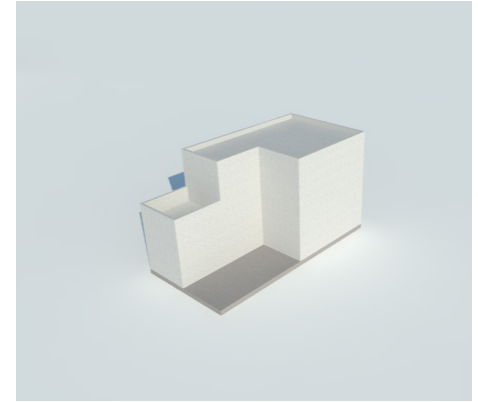


BRUSH PARK FINAL MASSING

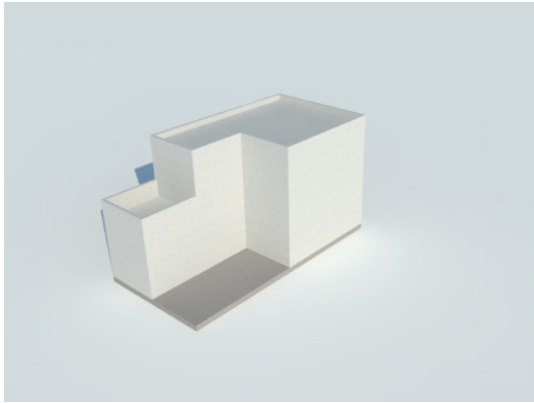


ONE BEDROOM TOWNHOME

The one bedroom townhome is an L shaped unit with a courtyard entrance on the ground floor. The kitchen and living room are located on the ground floor, and the bedrooms are on the second floor. The site contains 20 of these types of units.

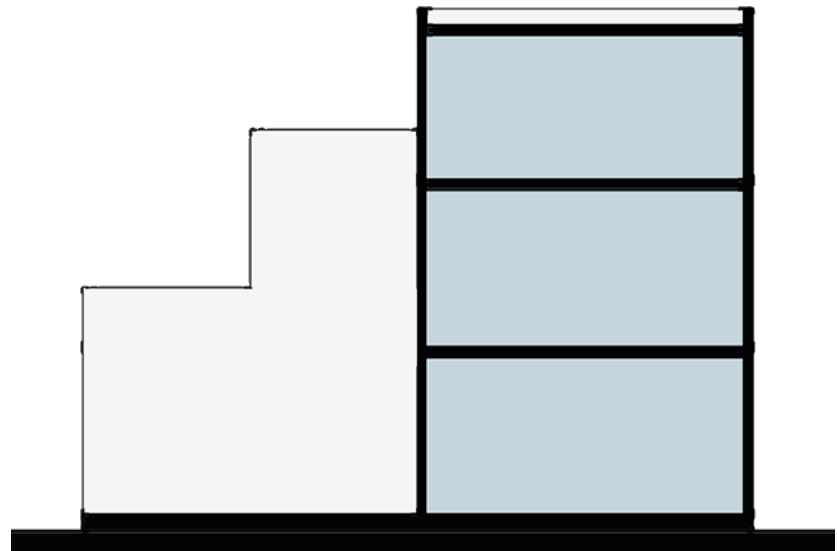


TWO BEDROOM TOWNHOME



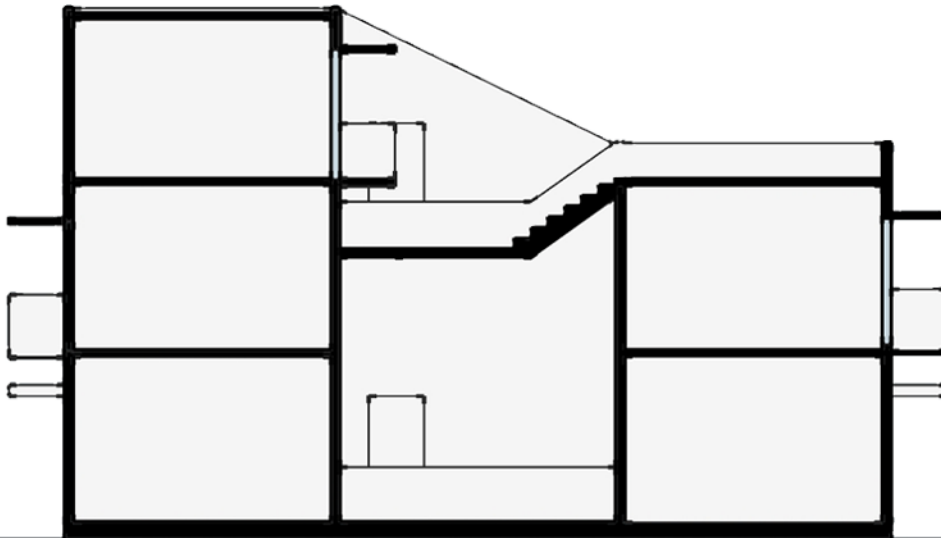
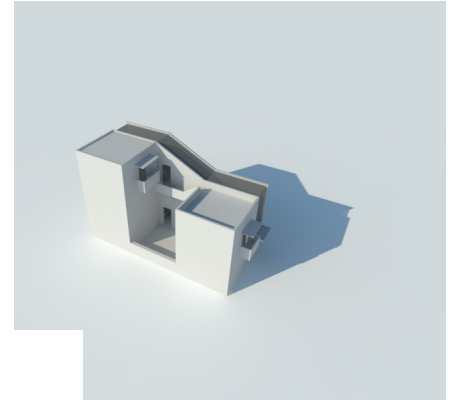
The two bedroom townhome is an L shaped unit with a courtyard entrance on the ground floor just like the one bedroom units. The kitchen and living room are located on the ground floor, and the bedrooms on the second and third floor. The site contains 17 of these types of units.

17 : UNITS



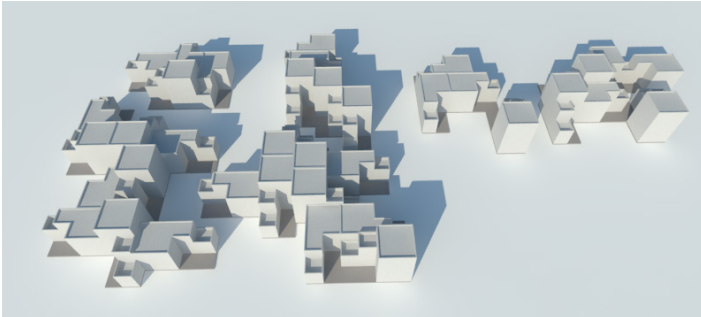
THREE BEDROOM TOWNHOME

The three bedroom townhomes are built around a central courtyard which connects to the next door unit. The kitchen and living room are located on the first floor, while the bedrooms are located on the second and third floor. A central circulation spine connects the front and rear entrance of the townhome to the rest of the block. The site contains 47 of these units.

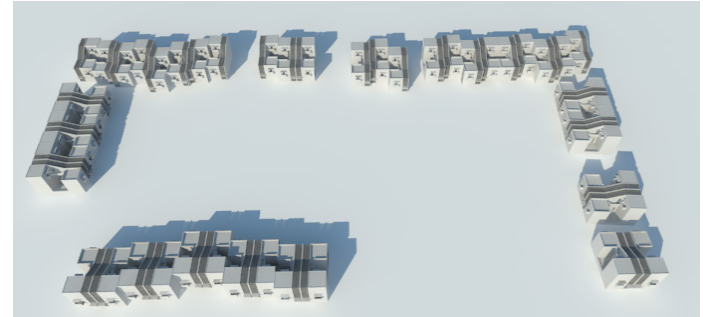




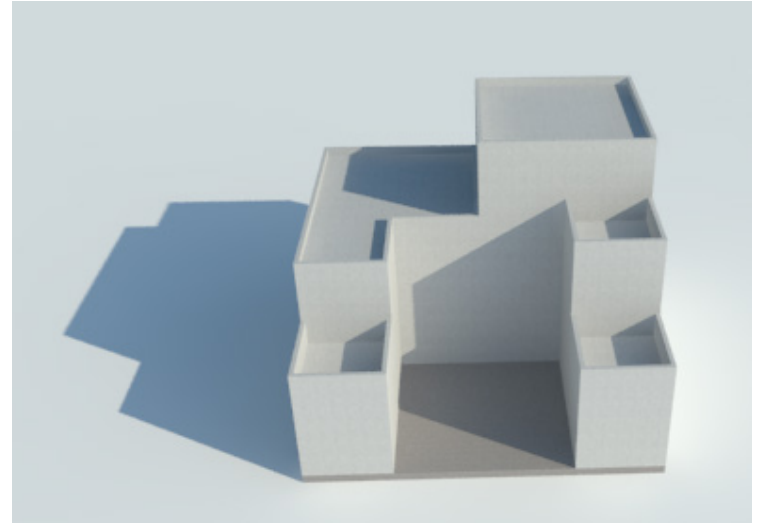
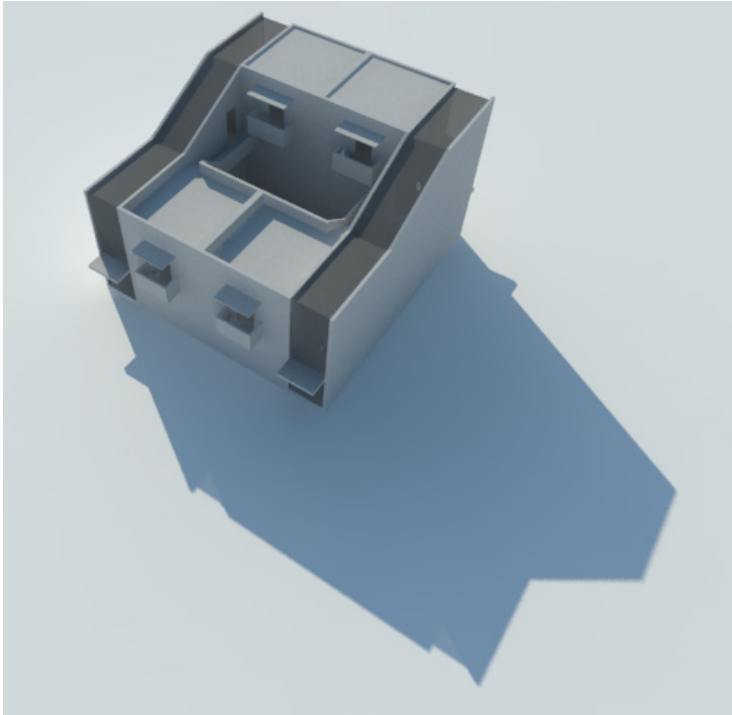
HISTORIC UNITS



ONE AND TWO BEDROOM
TOWNHOMES

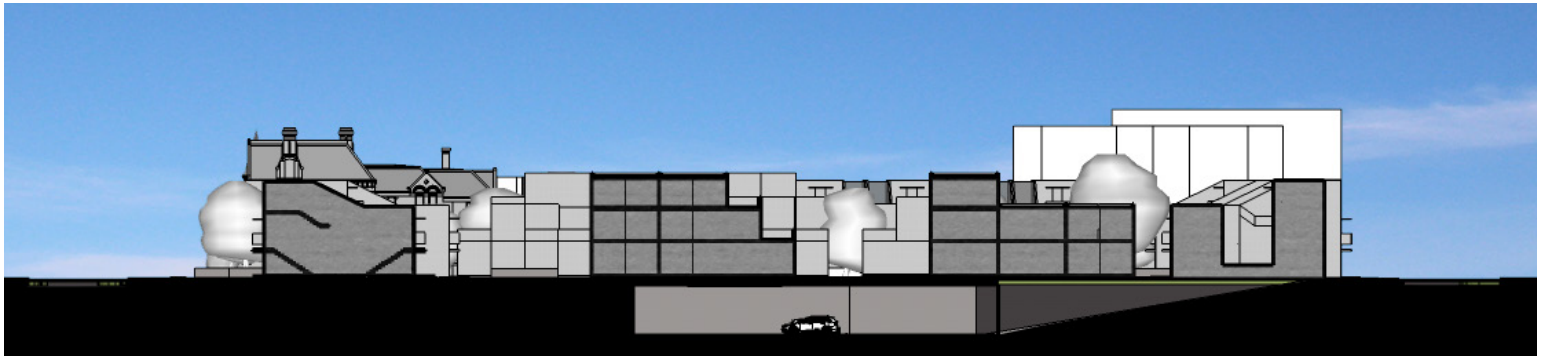
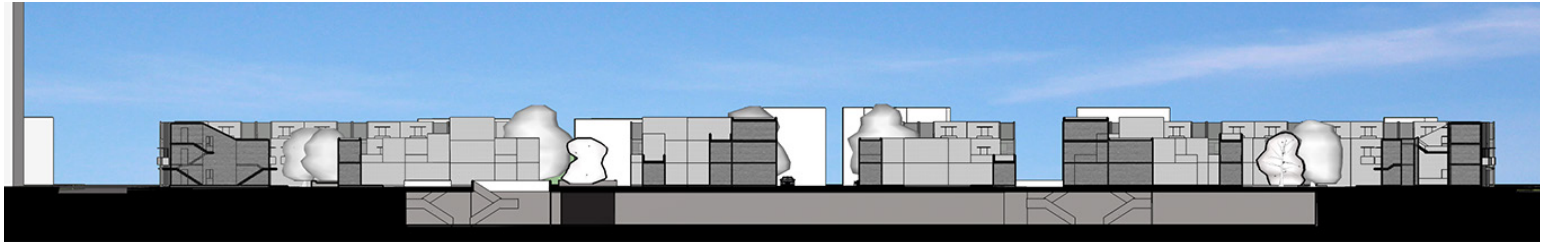


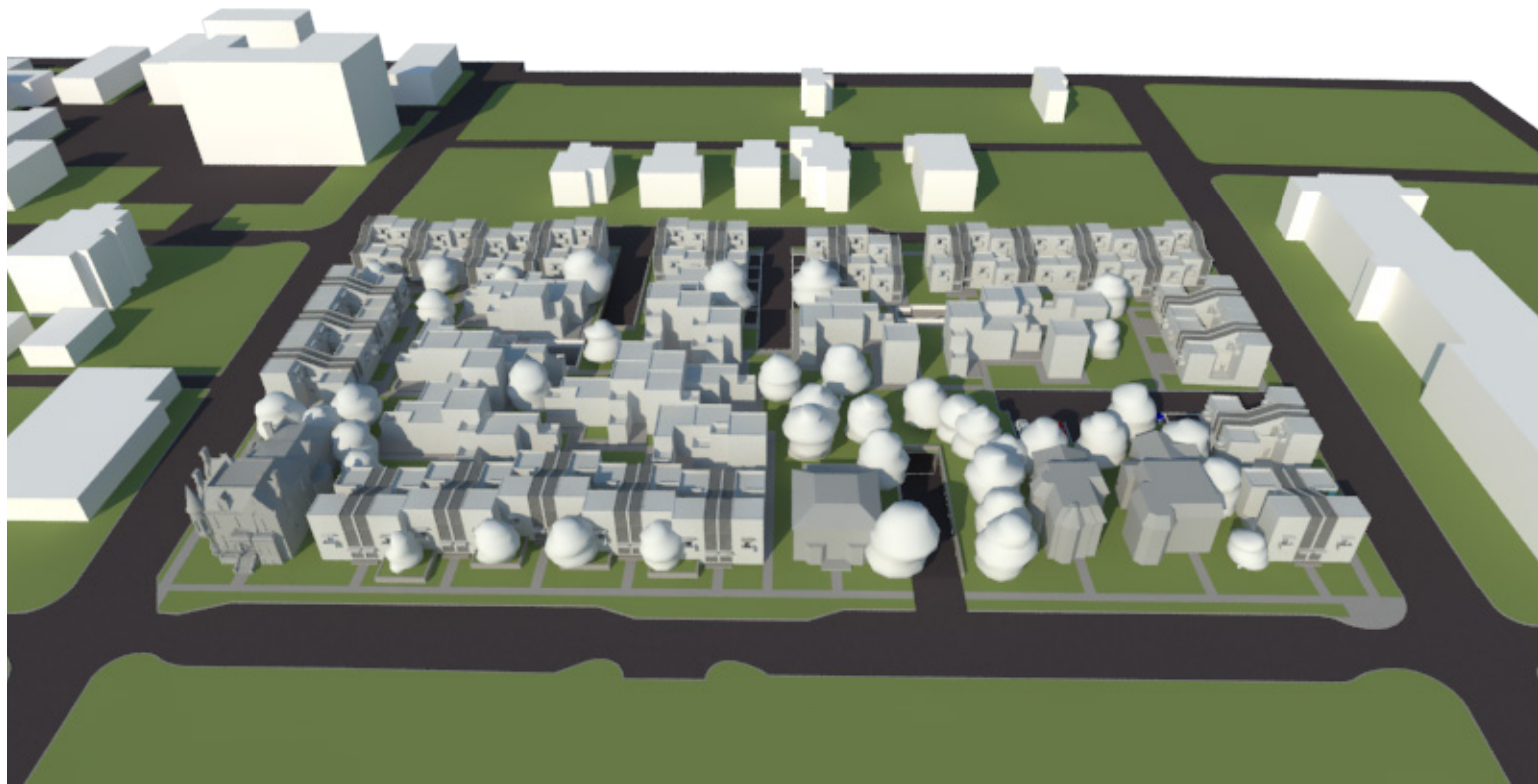
THREE BEDROOM TOWN-
HOMES



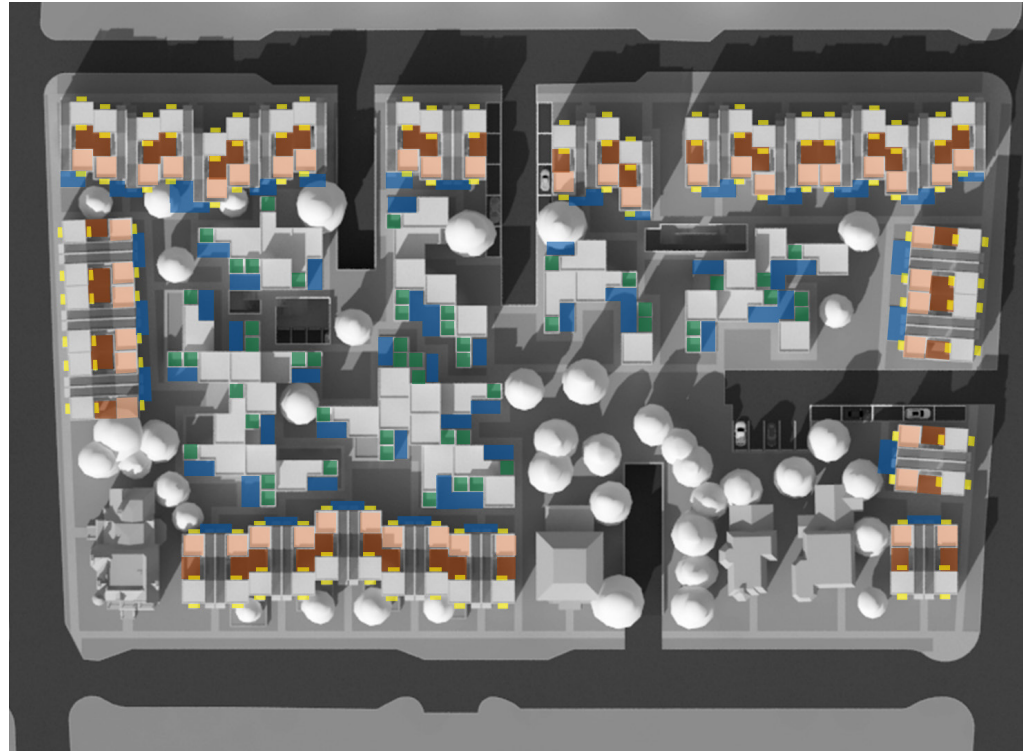
The units were designed to be mirrored over themselves to create central connected courtyards between units. The three bedroom townhomes are connected in the center with a courtyard, while the one and two bedroom townhomes pinwheel around the interior of the site creating a variety of courtyard conditions.







Each unit offers its inhabitant the opportunity to use an outside courtyard, patio, or terrace. On the ground floor central courtyards connect the three bedroom units in the middle. There is a shared patio between these units and their neighbors. On the two and three bedroom units a courtyard cuts into one side of the unit creating an entrance space as well as a semi private courtyard. The one and two bedroom townhomes have terraces which connect to the bedrooms offering a level of social space which extends from the ground.



- 3 BEDROOM TOWNHOME BALCONY
- 3 BEDROOM TOWNHOME COURTYARD
- 3 BEDROOM ROOF TOP ACCESS
- 1 AND 2 BEDROOM TOWNHOME BALCONIES
- SHARED UNIT PATIOS

