

## ABSTRACT

Title: NEW HOUSING IN TENLEYTOWN  
Alan Zapatka, Masters of Architecture 2005

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Architecture

Tenleytown, the second oldest neighborhood in Washington, DC (after Georgetown) was founded in the 1790's at the intersection of River road and Wisconsin Avenue. Long before the grid of Washington was platted, this crossroads settlement, which includes the highest elevation in Washington,<sup>1</sup> was founded by John Tenally, a blacksmith.<sup>2</sup>

Historical highlights include Dolly Madison et al seeking refuge there while watching the federal city burned down by the British in 1814, and Union soldiers standing guard at Fort Reno thwarting an attack by Confederates from the North in 1864.<sup>3</sup>

Currently, Tenleytown is a vibrant area comprising many single-family houses, a few apartment buildings, a Metro stop, schools, churches, movie theaters, office buildings, restaurants and retail.

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<sup>1</sup> Washington Post, April 27, 1984

<sup>2</sup> Washington Post, October 17<sup>th</sup>, 1987, Rene Sanchez

<sup>3</sup> Washington Post, June 23<sup>rd</sup>, 1990 Molly Sinclair, Real Estate

Despite Tenleytown's strong character and history, there are surprising gaps in its development. Specifically, across from the crossroads of River Road and Wisconsin Avenue there is a large block zoned for an allowable building height of 90' and an FAR of 4.5. Currently there are thirteen one and two-story, non-descript retail establishments, a five story office building and a lot of asphalt parking. Clearly this site is underutilized.

This block presents a rich opportunity to build multi-story mixed-use buildings which would capitalize on the scenic views of the site, integrate existing and new retail establishments at the ground level, and most importantly, add more housing with pedestrian access to the Metro. This would help alleviate the "chronic housing shortage" in Washington;<sup>4</sup> moreover, it would enhance the visual character of the neighborhood while further animating the streetscape.

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<sup>4</sup> Washington Post Express, January 10, 2005

NEW HOUSING IN TENLEYTOWN

By

Alan Zapatka

Thesis submitted to the Faculty of the Graduate School of  
the University of Maryland, College Park, in partial  
Fulfillment of the requirements for the degree of  
Masters of Architecture  
2005

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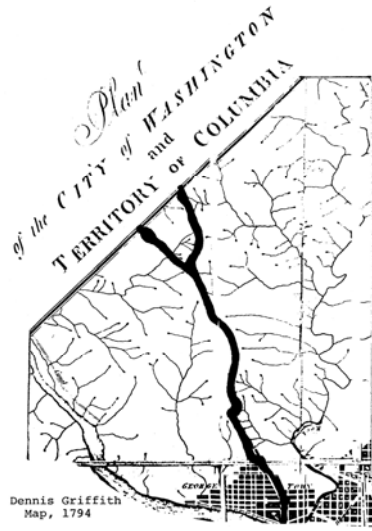
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## 1: Site History:

Tenleytown, the second oldest neighborhood in Washington, DC, (after Georgetown) was founded in the 1790's at the intersection of River road and Wisconsin Avenue. These two roads, known then as "the Road of Great Falls" and the "Road to Frederickstown," respectively, were first formed as paths by the Piscataway Indians who occupied the area until the 1690's. These two paths both led to the Potomac River (River road to the North and Wisconsin to the South—Georgetown) and would be used by the Piscataway tribe to move goods such as soapstone, to barter with Northern Indian tribes.<sup>5</sup>



**Figure 1: Detail Map of Washington, DC 1794<sup>6</sup>**—River Road branches West of Wisconsin Avenue which originates from Georgetown. The undeveloped area of Northwest Washington contrasts sharply with the regular grid of downtown Washington.

In 1634, the Colonists appropriated the Tenleytown area and included it in Calvert's Maryland County. It subsequently became part of Charles County (1658-

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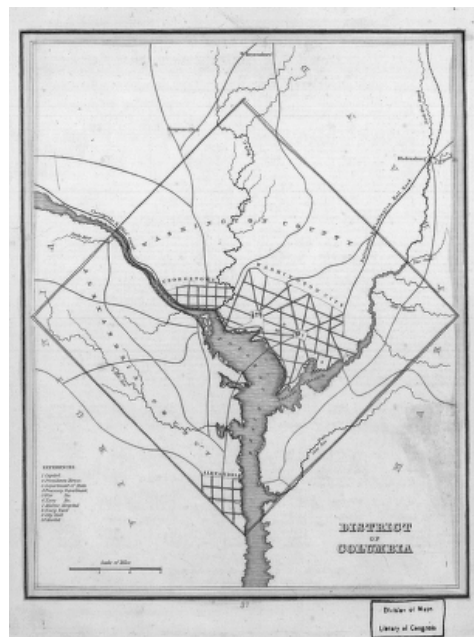
<sup>5</sup> Helm, Judith Beck, Tenleytown, D.C. Country Village into City Neighborhood, 1981, p. 1-9

<sup>6</sup> Ibid, p. 7

1695), Prince George's county (1696-1748), Frederick County (1748-1776), and Montgomery County (1776-1791).<sup>7</sup>

When Washington, DC was formed in 1791, the Tenleytown area was included in its borders. Thus, Tenleytown was never incorporated as its own village; it was only a settlement.<sup>8</sup>

John Tenally, a blacksmith<sup>9</sup> or a tavern owner<sup>10</sup> according to different historical sources, strategically placed a proprietorship at this major crossroads.



**Figure 2: Map of Washington, DC 1802<sup>11</sup>**—this diagrammatic map shows Wisconsin Avenue and River Road stemming from the regular grid of Georgetown.

In 1814, when a British regiment attacked Washington, residents such as Dolly Madison fled the main part of the City to Tennallytown. “The local farmers and Tennallytowners began to take these refugees into their homes.”<sup>12</sup>

<sup>7</sup> Ibid, p. 10-17

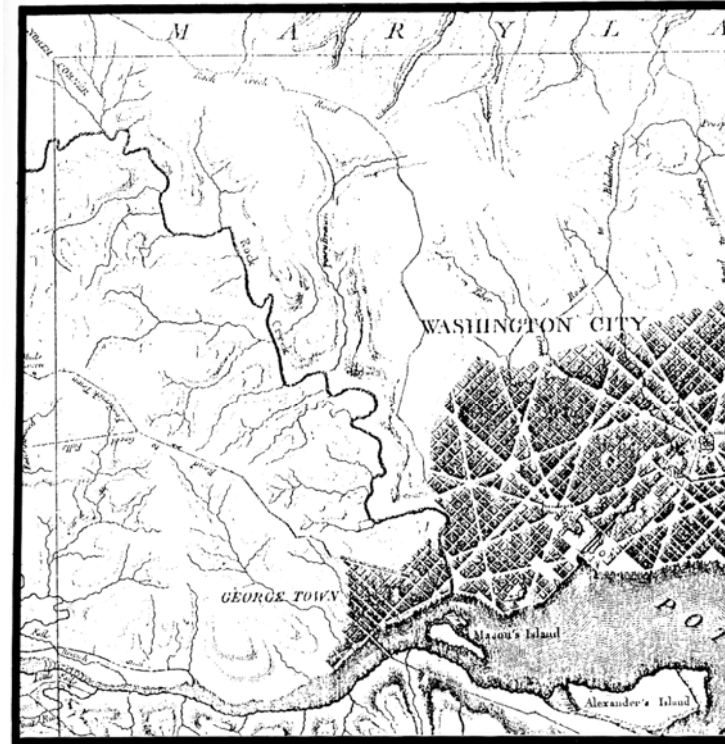
<sup>8</sup> Ibid, p. ii

<sup>9</sup> Froncek, Thomas, Editor, The City of Washington: An Illustrated History / by The Junior League, 1977

<sup>10</sup> Helms, op. cit., p. 40

<sup>11</sup> [www.ushistoricalarchive.com/statemaps/dc/index.html](http://www.ushistoricalarchive.com/statemaps/dc/index.html)

<sup>12</sup> Helms, op. cit., p. 68



(1815 map drawn by Andrew Ellicott, eng. by Tardieu, Paris. National Archives)

**Figure 3: Map of Washington 1815<sup>13</sup> showing the continued predominance of Wisconsin Avenue as the Northwest route from Georgetown.**

During the Civil War, “thousands of troops were stationed in and around Tennallytown, and Fort Reno, one of the approximately twenty forts forming a perimeter defense around Washington, was built. This site’s elevation of 430,’—the highest in Washington—proved to be valuable in allowing Union soldiers to spot Confederates attacking from Silver Spring, and to signal fellow soldiers to thwart the attack. After the Civil War, many freed slaves settled in the Tenleytown area in the “Fort Reno Settlement.”<sup>14</sup>

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<sup>13</sup> Ibid, p. 44

<sup>14</sup> Ibid, p. 131

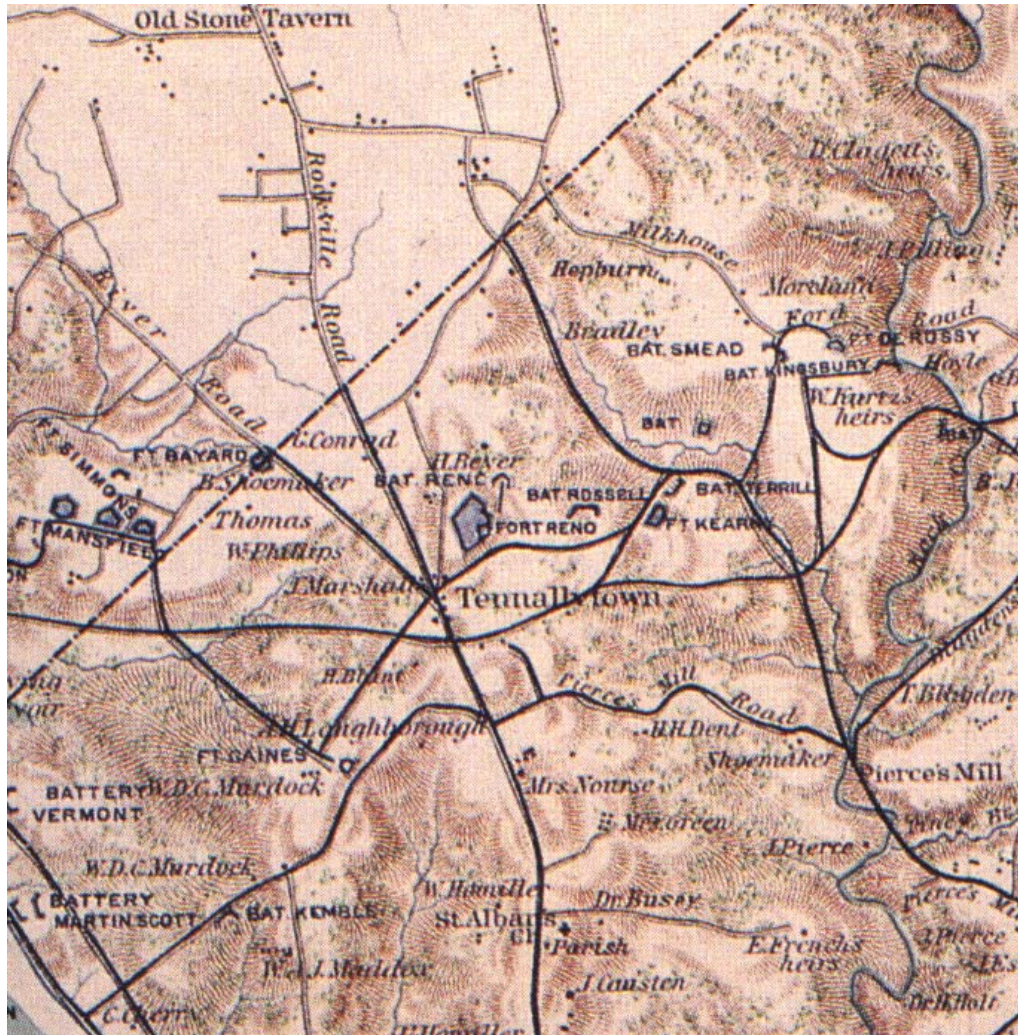


Figure 4: Map of Washington 1865<sup>15</sup> (detail)—showing the shape of Fort Reno’s plan

In the 1890’s, the grid of Washington was extended, and roads major roads such as Wisconsin Avenue were widened. Tenallytown was developed as a residential community.<sup>16</sup> In the 1930’s and 40’s a trolley line was installed and public transportation proved it’s importance in shuttling people back and forth from Tenleytown to Georgetown.<sup>17</sup>

<sup>15</sup> Froncek, op. cit.

<sup>16</sup> Ibid, p. ii

<sup>17</sup> Froncek, op. cit.



*Georgetown Public Library, the Peabody Room*

**Figure 5: Trolley Car on Wisconsin Avenue<sup>18</sup>**—during the 1930's and 1940's, trolley cars would travel from Georgetown to the Maryland border. Note the “Tenleytown Road” title painted on the side of the trolley.

In 1984, Tenleytown Metro was opened and reestablished the name of the area, which had been somewhat forgotten.



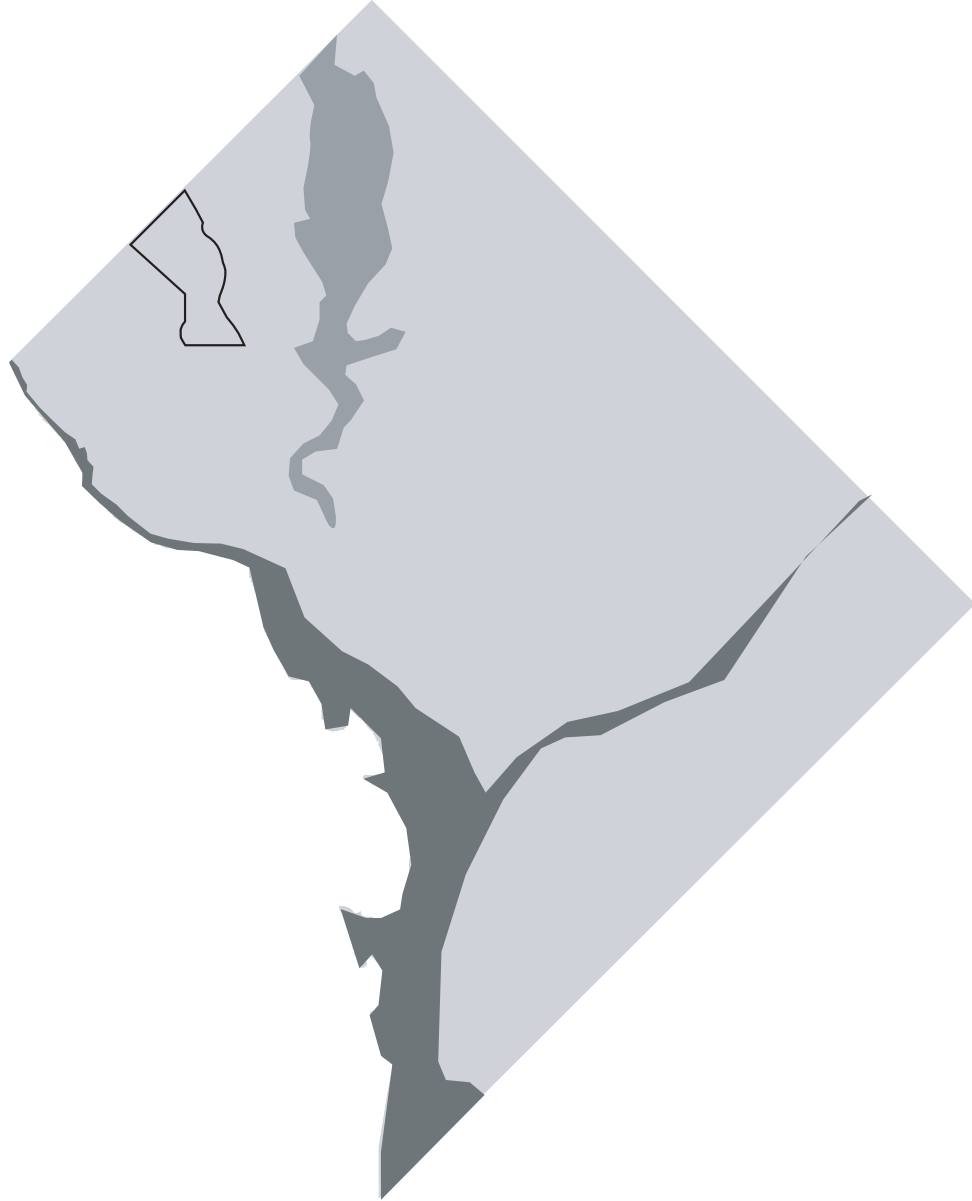
Photo and scan 1999 Wayne L. Whitehorn

**Figure 6: Tenleytown Metro Station<sup>19</sup>**—opened in 1984

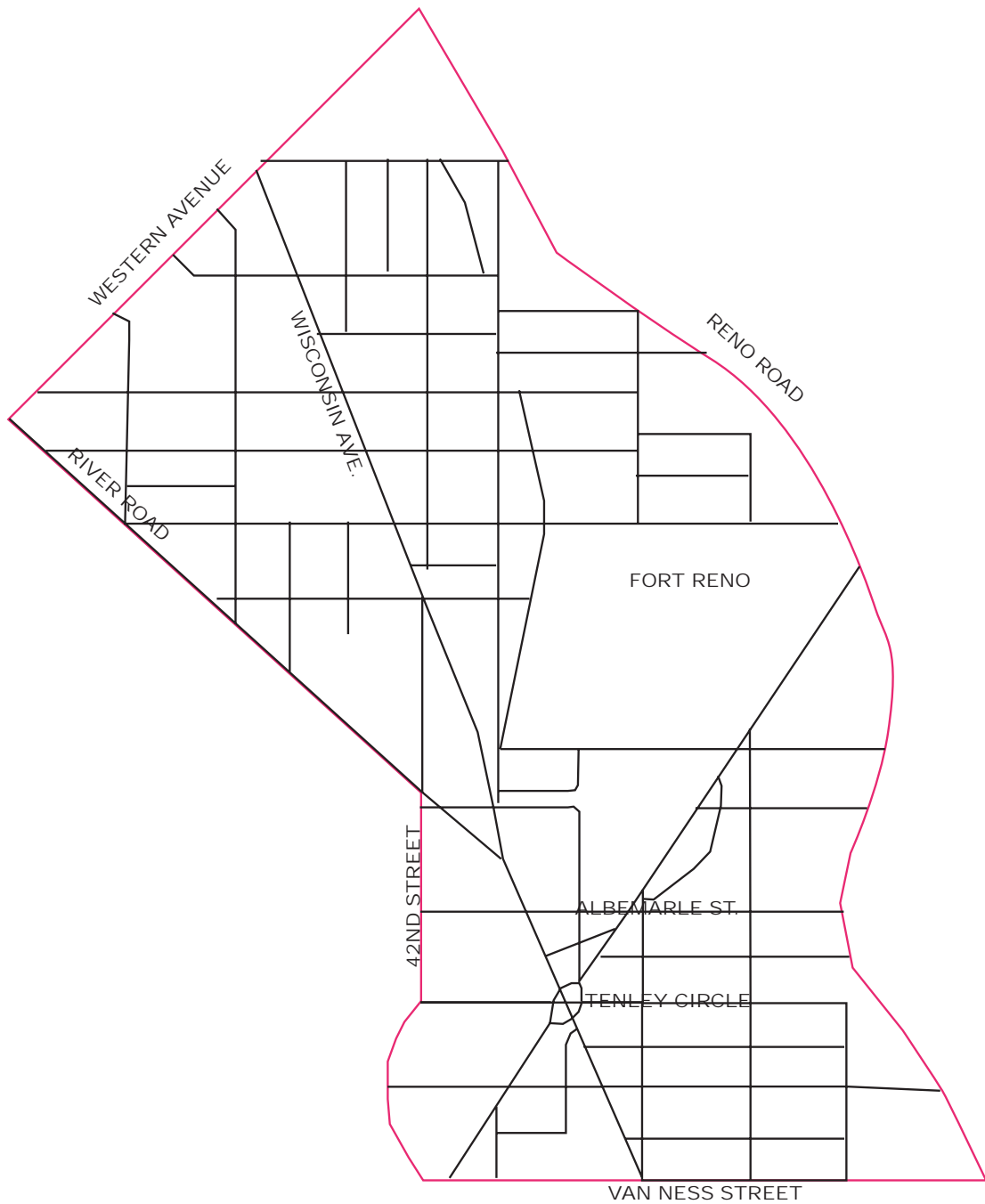
<sup>18</sup> Froncek, op. cit

<sup>19</sup> [www.world.nycsubway.org](http://www.world.nycsubway.org) > United States > Washington, D.C. > WMATA Red Line

## 2: Site Analysis



**Figure 7: District of Columbia Site Diagram**—displaying Tenleytown outlined in black, located in the Northwest quadrant of Washington, DC.



**Figure 8: Tenleytown's Boundaries:**<sup>20</sup> Western Avenue (North), Van Ness Street (South), 42<sup>nd</sup> Street and River Road (West), and Reno Road (East)

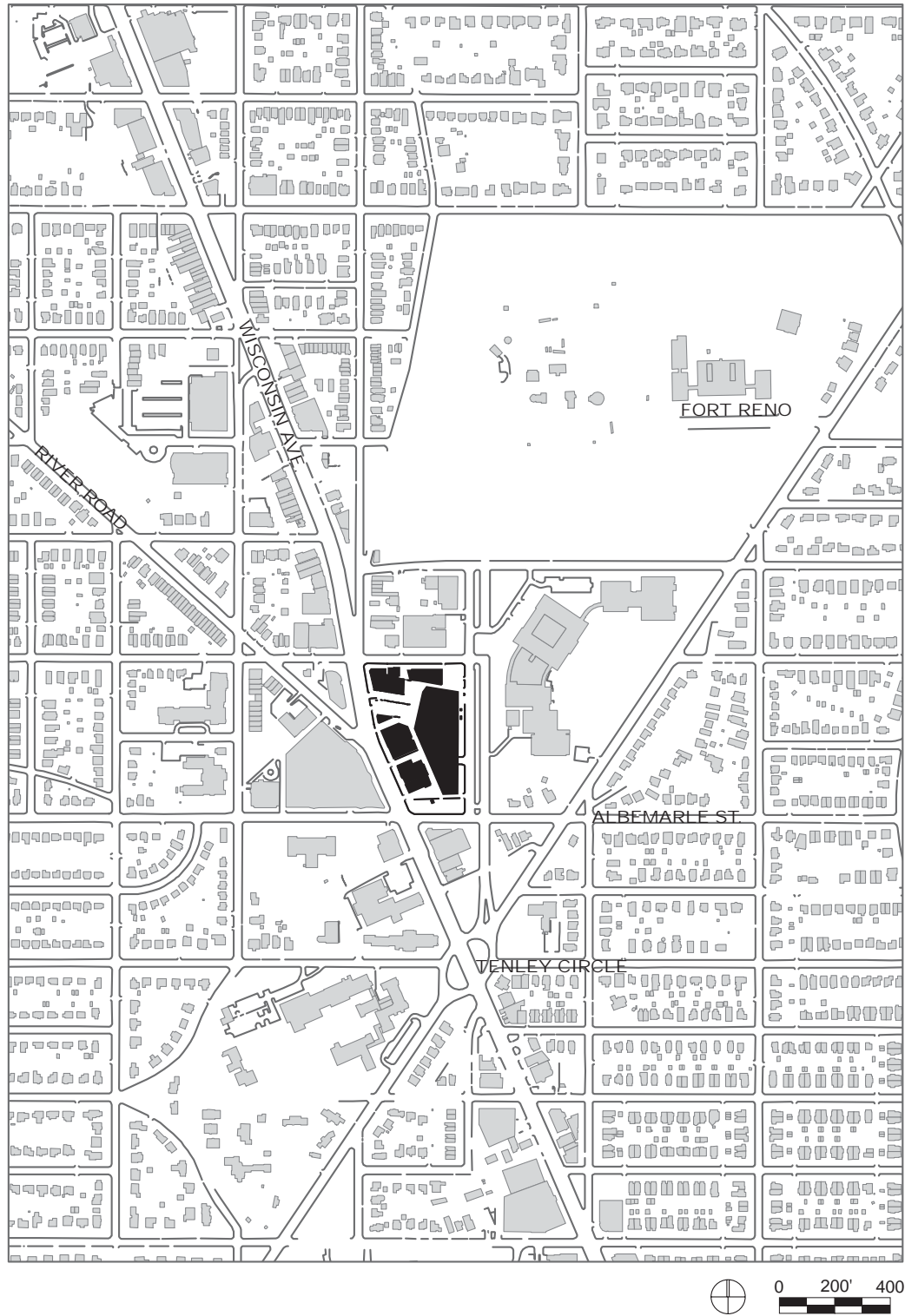
<sup>20</sup> District of Columbia Office of Planning, *Neighborhood Cluster 11 DC Strategic Neighborhood Action Plan (American University Park, Friendship Heights, Tenleytown)*, Summer 2002



**Figure 9: Aerial Photograph<sup>21</sup>**—displaying the distinctive cross roads of Wisconsin Avenue and River Road, the vast trapezoidal park of Fort Reno, and the block (site) which is being considered.

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<sup>21</sup> District of Columbia Office of Planning



**Figure 10: Site Map**—displaying the block (site) which is being redesigned. It reveals the residual, unplanned space of the block as well as the haphazard placement of buildings on the block.



**Figure 11: West Elevation of site (Wisconsin Avenue)**—showing a barren development on a site with rich potential, due to its high elevation and views, proximity to local walking-distance amenities and downtown, and its access to public transportation (both bus and subway). Currently, there are thirteen one or two story buildings separated in four clusters by vast amounts of hard-scape, much of it intended for vehicles. Because the buildings are so low and non-continuous, they do not form a street edge. The result is an irregular, pedestrian non-friendly, non-urban sidewalk. The dearth of vegetation adds to the wasteland effect, which is pronounced during the hot summer months.



**Figure 12: East Elevation of site (40<sup>th</sup> Street)**—showing an equally barren development. Yet this time, the street elevation is composed of a continuous wall of a large parking garage, with exposed parking trays and a large unglazed, “big box,” service side wall of a grocery store. A service alley separates the wall from a five story office building. The result is again, non-urban, non-tree lined and pedestrian unfriendly, not because of the lack of continuity, but because it has the character of an alley. Indeed, at night, it’s eerily quiet on this street. This is accentuated by the after hours quiet of the high school across the street. Rather than treating this quiet as a liability, this quiet could be a great amenity for housing. Moreover, this quiet street has the potential to become an elegant promenade to the nearby Fort Reno park one block North.



**Figure 13: South Elevation of site (Albemarle Street)**—showing the one and two story buildings on the West, and the three story parking garage and grocery store divided by an alley. The Metro station entrance is almost invisible, marked only by a kiosk and a large number of newsstands. The radio towers on the Northern horizon contribute to visual clutter, and the low hedges and solitary tree don't do much to relieve the disorder. A taller building would mostly conceal the towers from this angle.

Good landscaping as well as some type of architectural marking device could celebrate the Metro Station, and the bus stop on 40<sup>th</sup> Street, making this a major public transportation node for Tenleytown.



**Figure 14: North Elevation of site (Brandywine Street)**—showing a six-story office building set back about thirty feet from 40<sup>th</sup> Street, and a few two story structures. Since this street ends at 40<sup>th</sup> Street, which edges the East side of the block, it's less used and therefore quiet. This presents an opportunity to create a private, less-busy side, amenable to housing.



**Figure 15: Five and Ten Minute Walking Radii Diagram**—displaying the proximity to public and private amenities including parks, schools, churches, libraries, and commercial establishments.



**Figure 16: “Cityline” Housing and Retail**—located on the West side of Wisconsin Avenue and Albemarle Street, directly across the street from the site, scheduled for completion in 2005. The housing is curved for a number of reasons. It clearly marks a distinction between the old art-deco, retail, masonry first story building which was once Sears and Roebuck, and the contemporary, metal housing structure to be opened in 2005-2006. The curve defers to the direction of River Road which branches from Wisconsin, and it allows for views downtown and uptown.



**Figure 17: “Tenley Hill” Housing and Retail**—located on the East side of Wisconsin Avenue, two blocks north of the Site, and completed in 2000. The expensive and quickly occupied structure negotiates the steep grade with a two-story retail and office base.



**Figure 18: View of sidewalk on West side of site**—this shows a successful part of the site. The sidewalk is very wide, and trees, tree boxes and outdoor furniture encourage people to walk, sit and interact in a communal public space mixed with successful private enterprise. The use of Neon lighting occurs in a number of places in this neighborhood.



**Figure 19: View of internal alley looking towards Wisconsin Avenue**—the alley is intended as a thruway to the grocery store's parking garage. Note the safety features for pedestrians, such as the painted crosswalk and STOP sign, as well as the railing placed on the sidewalk edge, due to the somewhat dangerous configuration of the alley.



**Figure 20: View of cross alley and entrance to parking garage**—displaying the unpleasant and slightly dangerous open spaces of the site.



**Figure 21: View of parking looking towards Wisconsin Avenue**—displaying the unplanned, automobile dominated, residual space shown in plan.



**Figure 22: View looking South on Wisconsin Avenue**—at the junction of River Road. The National Cathedral is seen at eye level; a two-story view or higher would be better. The change in grade is also apparent.



**Figure 23: View looking North on Wisconsin Avenue**—showing the five story office tower placed at the junction of Wisconsin Avenue and River Road.



**Figure 24: View of Median Strip between Fort Reno Drive and 41<sup>st</sup>** –the site is located on the right of the picture.



**Figure 25: Tenleytown Public Library**—located diagonally across from the site on Wisconsin and Albemarle Streets. It's currently under renovation and expansion.



**Figure 26: Alice Deal Junior High School**—located in Northeast Fort Reno Park. The top of the Fort Reno tower is visible on the left.



**Figure 27: Woodrow Wilson Senior Public High School**—located across the street and East from the site block.



**Figure 28: St. Ann's Roman Catholic Church**—view looking South on Wisconsin Avenue



**Figure 29: Eldbrooke Methodist Church**—on River Road behind the 'Cityline' Condominiums



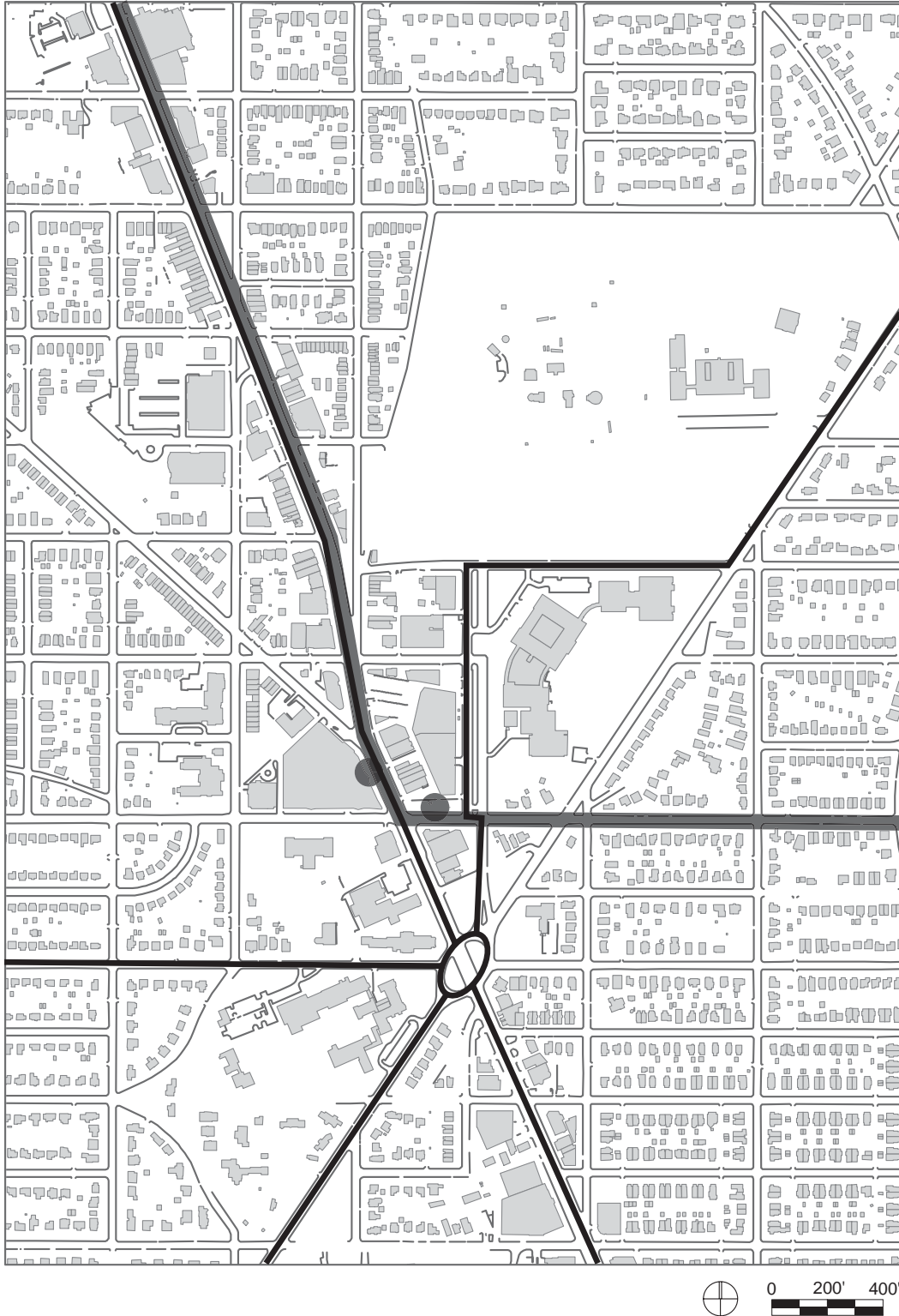
**Figure 30: Radio Towers**—Street level view from Wisconsin Avenue and Brandywine Street. The towers are placed unusually close to the sidewalk. The closest in View, was intended for HDTV broadcasting, but, unfortunately was not completed due to pending litigation. The concrete cylindrical structure is known as Tenley Tower built in 1947 by the Western Union Telegraph Company. During the Cold War, it was a relay point for national security networks.<sup>22</sup>



**Figure 31: Radio Towers seen from Fort Reno Park**—the towers with their red lights and industrial forms create a unique and dynamic landscape not seen anywhere else in the city.

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<sup>22</sup> <http://coldwar-c4i.net/index.html>



**Figure 32: Public Transportation Diagram**—displaying the subway line (thick grey line), subway stops (grey circles), and bus lines (thin black lines). The site is surrounded by public transportation.



**Figure 33: Tenleytown Metro Stop West Side**—the entrance is subsumed by the building. The kiosk is the only clear indicator of the stop.



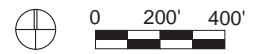
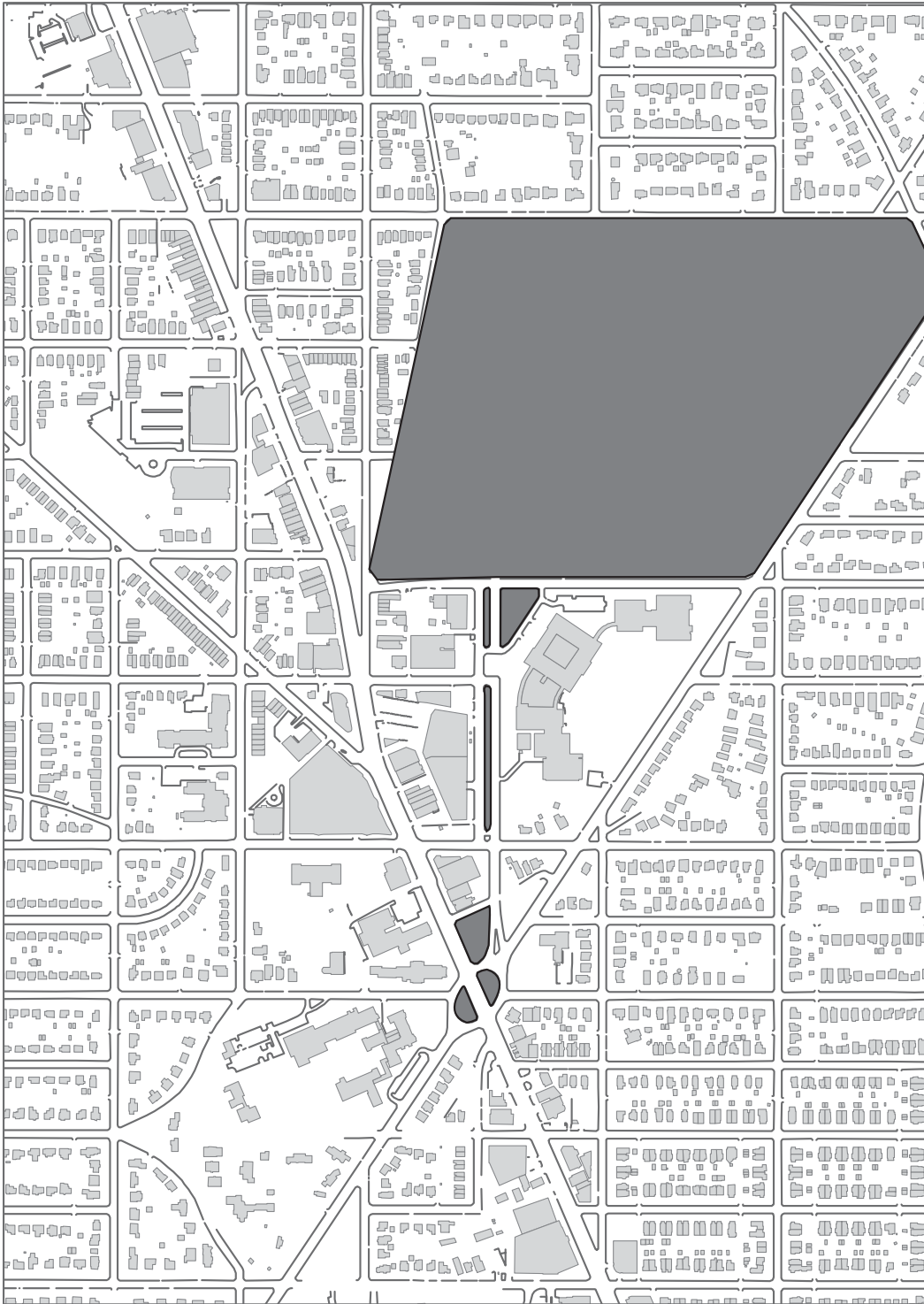
**Figure 34: Tenleytown Metro Stop East Side view looking South**—the entrance is marked only by the kiosk and abundant newsstands.



**Figure 35: Tenleytown Metro Stop East Side view looking West—the entrance is evident by the cluster of newsstands and the uncovered escalators.**



**Figure 36: Bus Stop on 41<sup>st</sup> Street, East side of the site block**



**Figure 37: Public Green Spaces**—displaying ample available public space near the site. This suggests that any space carved by buildings on the site could be dedicated to residents and therefore be private.



**Figure 38: Fort Reno**—showing one of the towers of the fort placed on the highest elevation in Washington—430.’



**Figure 27: Fort Reno Park**—showing the legacy tower of the fort as well as a number of miscellaneous structures owned by the DC government and a reservoir owned by the DC Water and Sewer Authority



**Figure 39: View Northwest on Fort Reno Park**—the considerable slope is apparent as well as the pastoral quality of parts of the park.



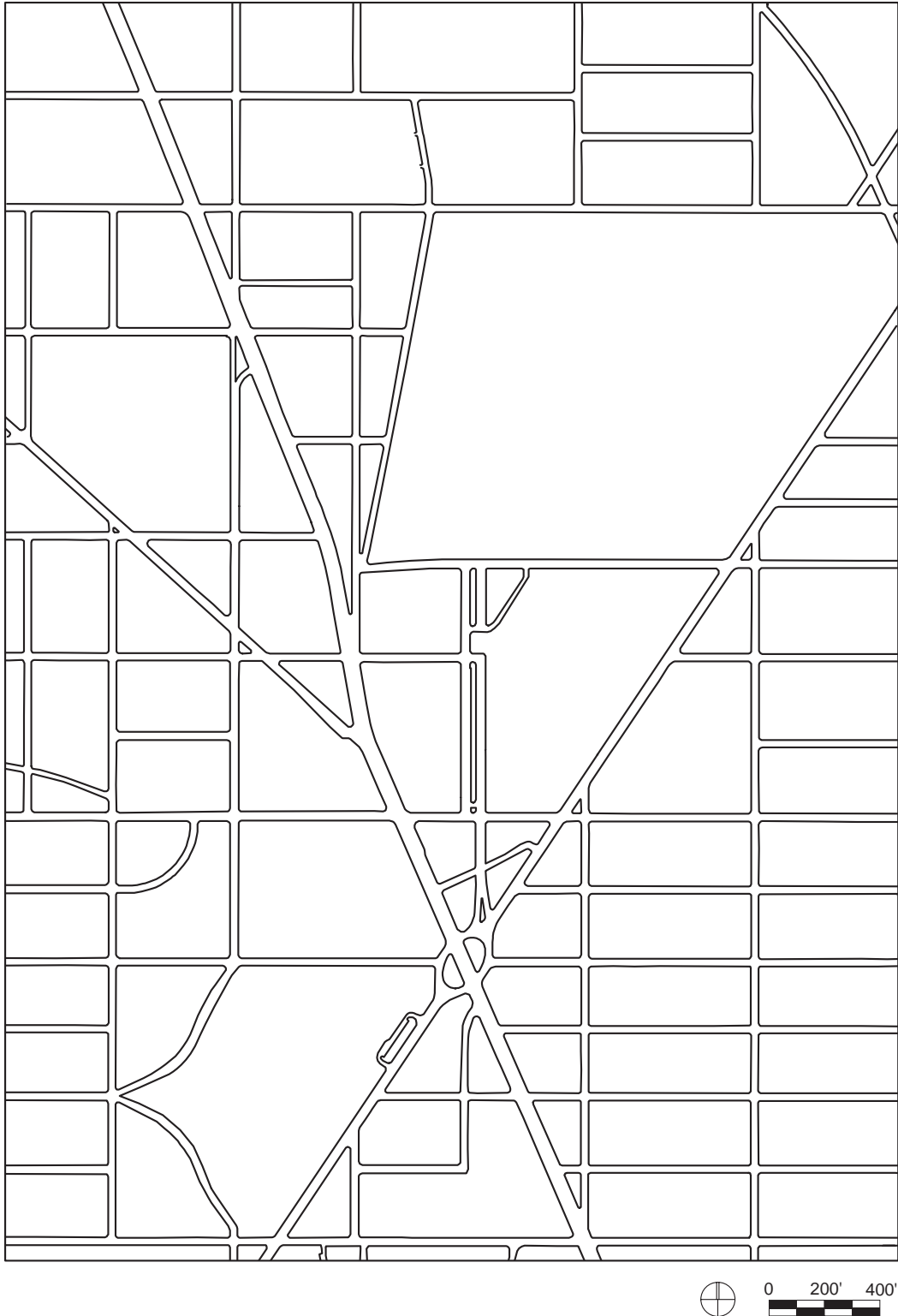
**Figure 40: View West from a high point of Fort Reno Park**—Tyson's' Corner, in McLean, Virginia is visible on the horizon. The fourth large building visible from the left, with the "shopping bag" profile is Philip Johnson's Tycon Tower.



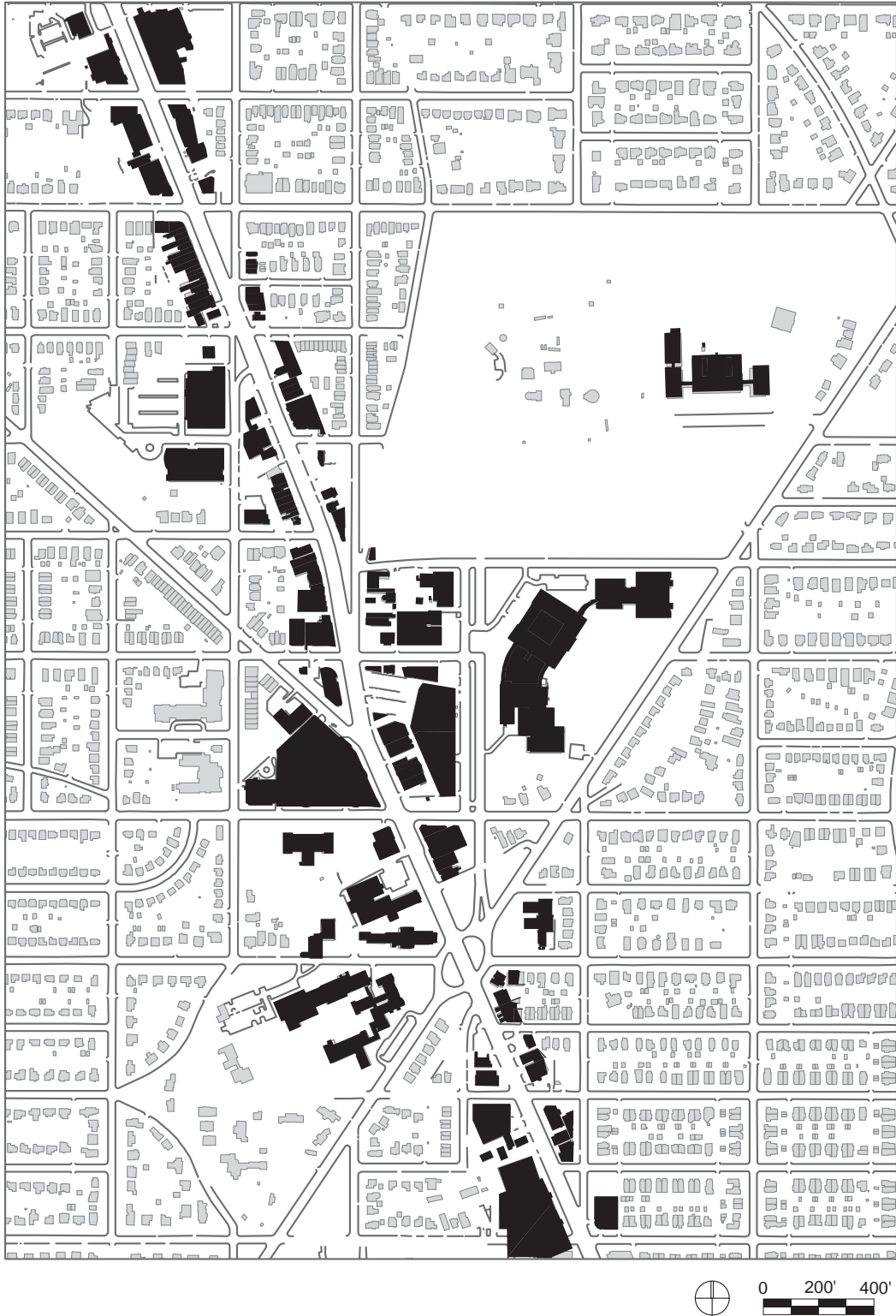
**Figure 41: Figure Ground Diagram**—displaying the unusual shapes of the buildings and blocks on and around the site. It also displays the “popcorn” fabric of the single family houses surrounding the not-very-big, nor densely spaced commercial buildings on Wisconsin Avenue.



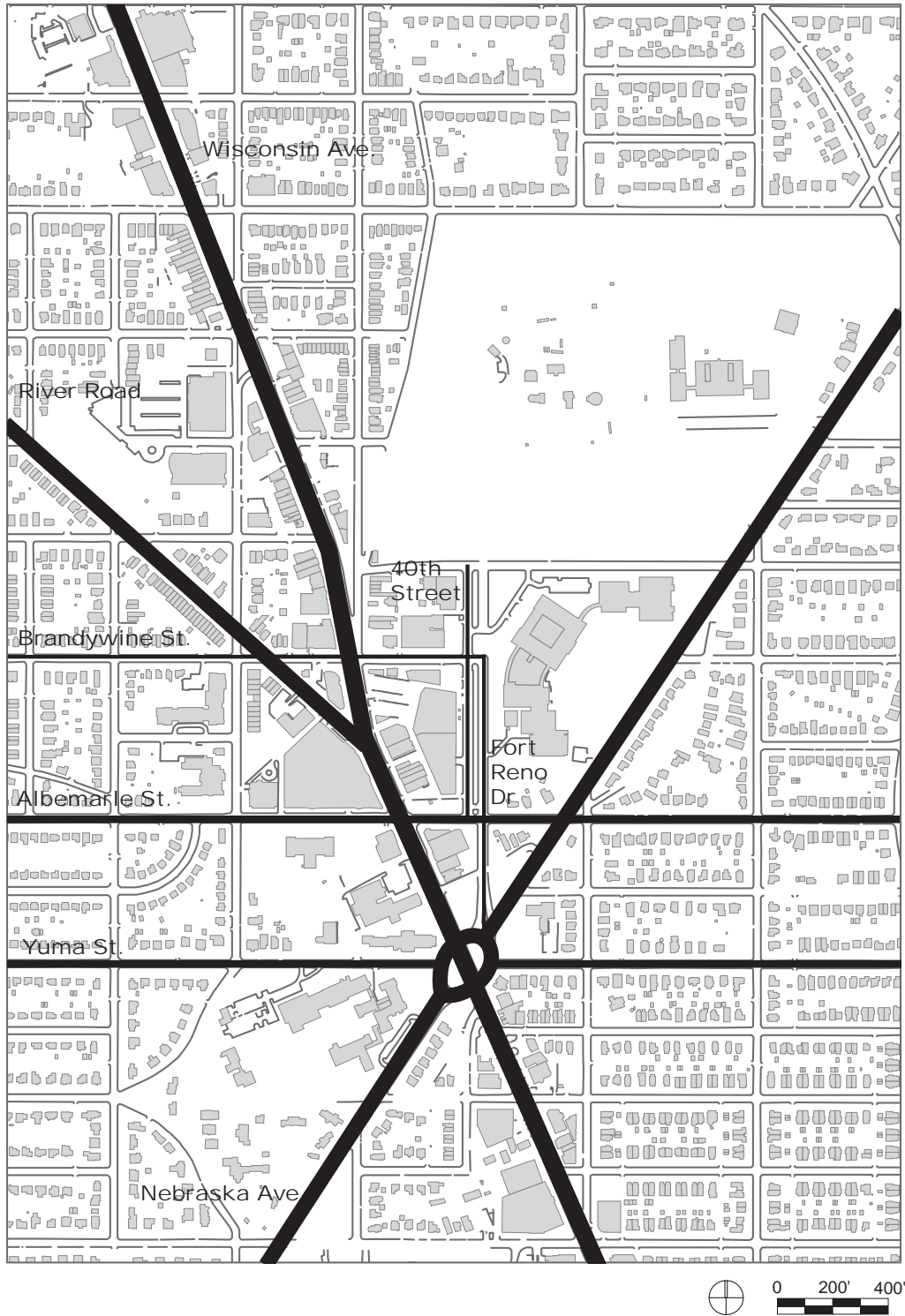
Figure 42: Proposed Figure Ground Diagram



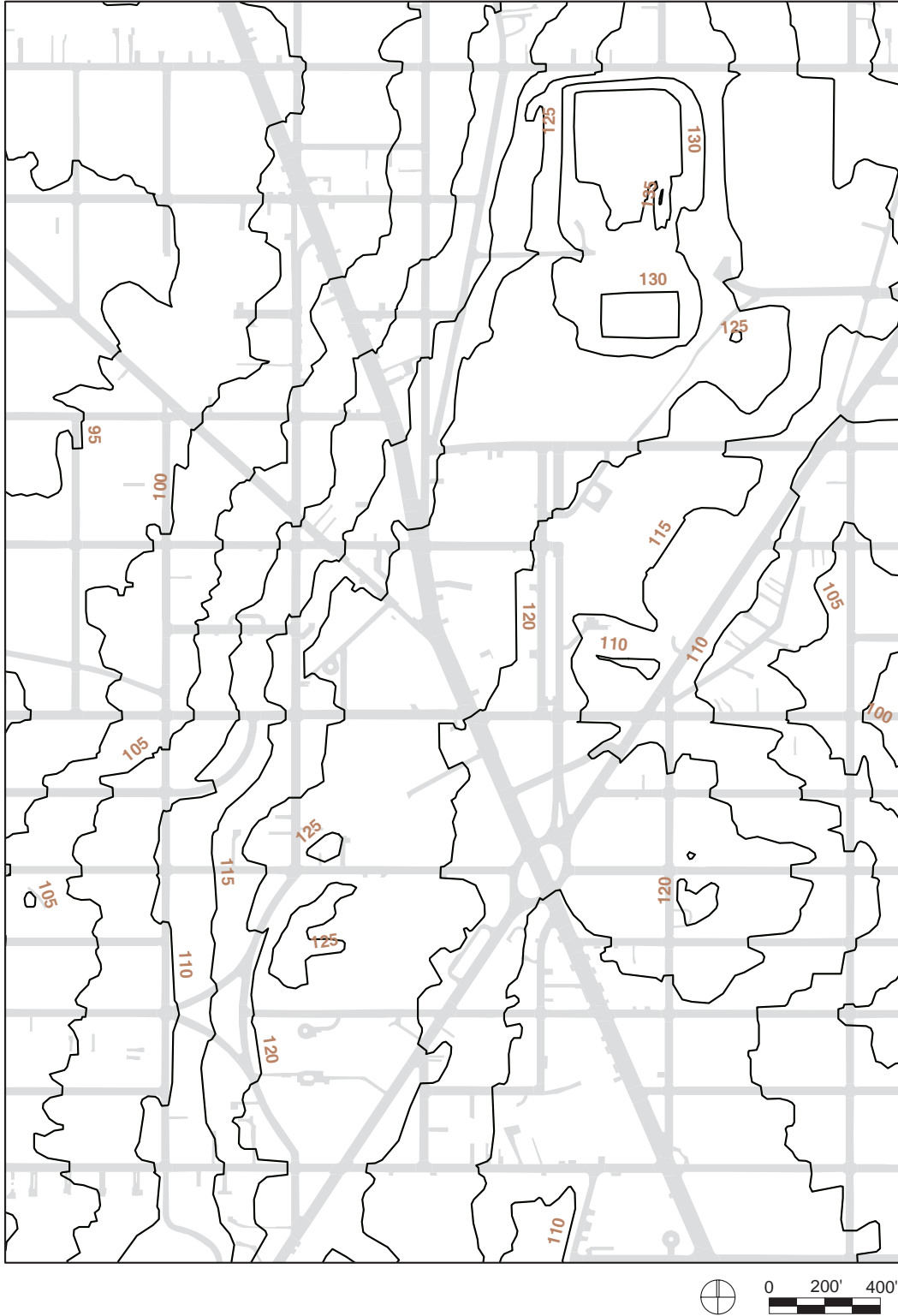
**Figure 43: Street Grid Diagram**—displaying some exceptions to the L’Enfant grid: 1) the large trapezoidal shaped park surrounding Fort Reno, 2) River Road, which preceded the grid, and 3) Wisconsin Avenue (formerly Frederick Road), which has been integrated into the grid, was once an Indian path that led to the Potomac River.



**Figure 44: Commercial and Civic Buildings Diagram**—displaying the close concentration of commercial and civic structures along Wisconsin Avenue.



**Figure 45: Street Hierarchy**—Wisconsin Avenue is the primary diagonal street which borders the West edge of the Site. River Road stems from Wisconsin and is on axis with the center of the site. Nebraska Avenue, the other primary diagonal street intersects Wisconsin at Tenley Circle. Brandywine St., bordering the Northern edge of the site, is a tertiary street, with metered parallel parking. 40<sup>th</sup> Street, bordering the Eastern edge of the site, also has metered parking and runs one-way South. It forms a loop with the parallel Fort Drive, a tertiary street with metered parking, which runs one way North.



**Figure 46: Topographical Diagram**—displaying the highest elevation in Washington at Fort Reno, and the ridge that the site sits on. A steep drop-off is shown where River Road stems from Wisconsin Avenue.

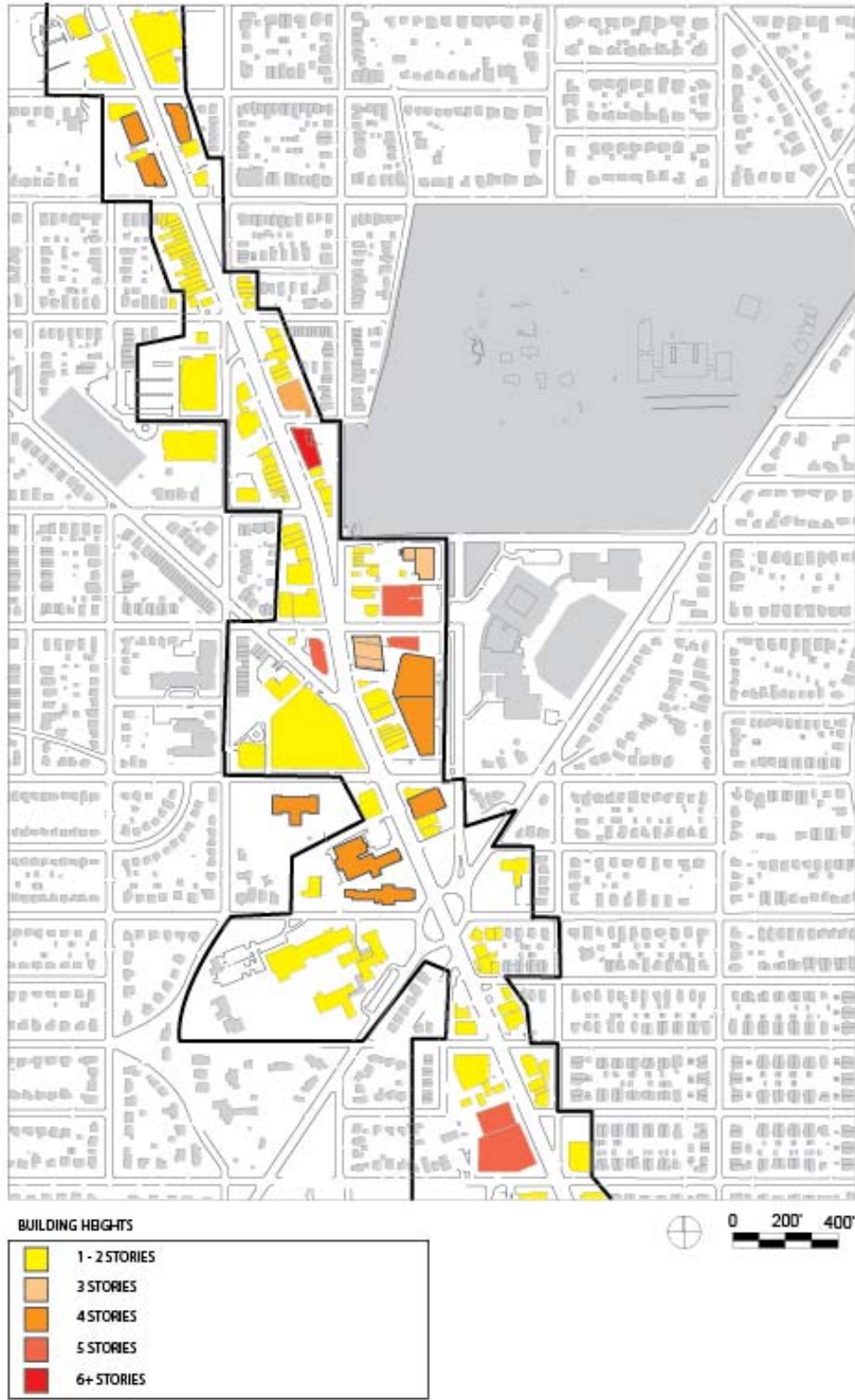


Figure 47: Existing Building Heights

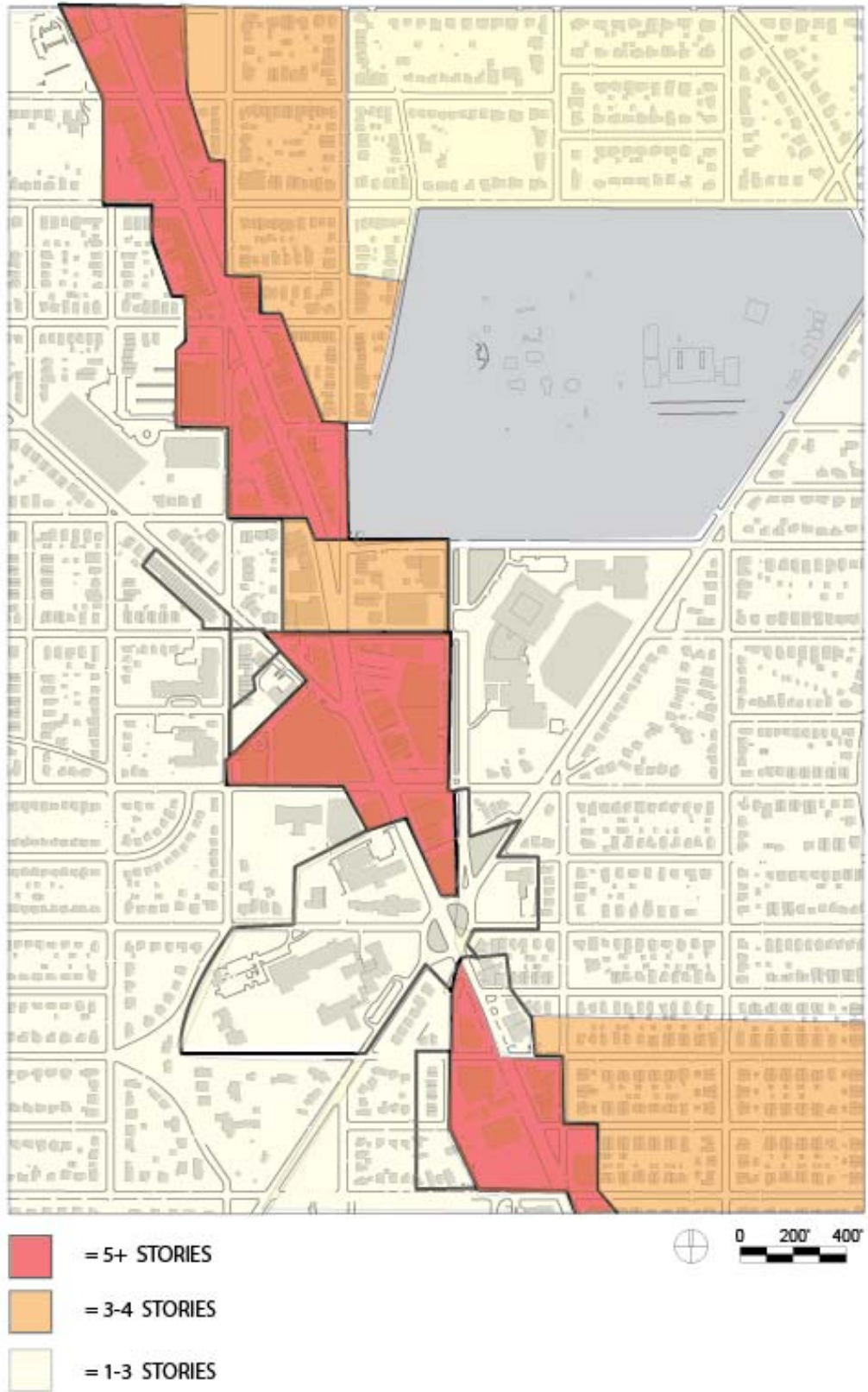


Figure 48: Allowable Building Heights

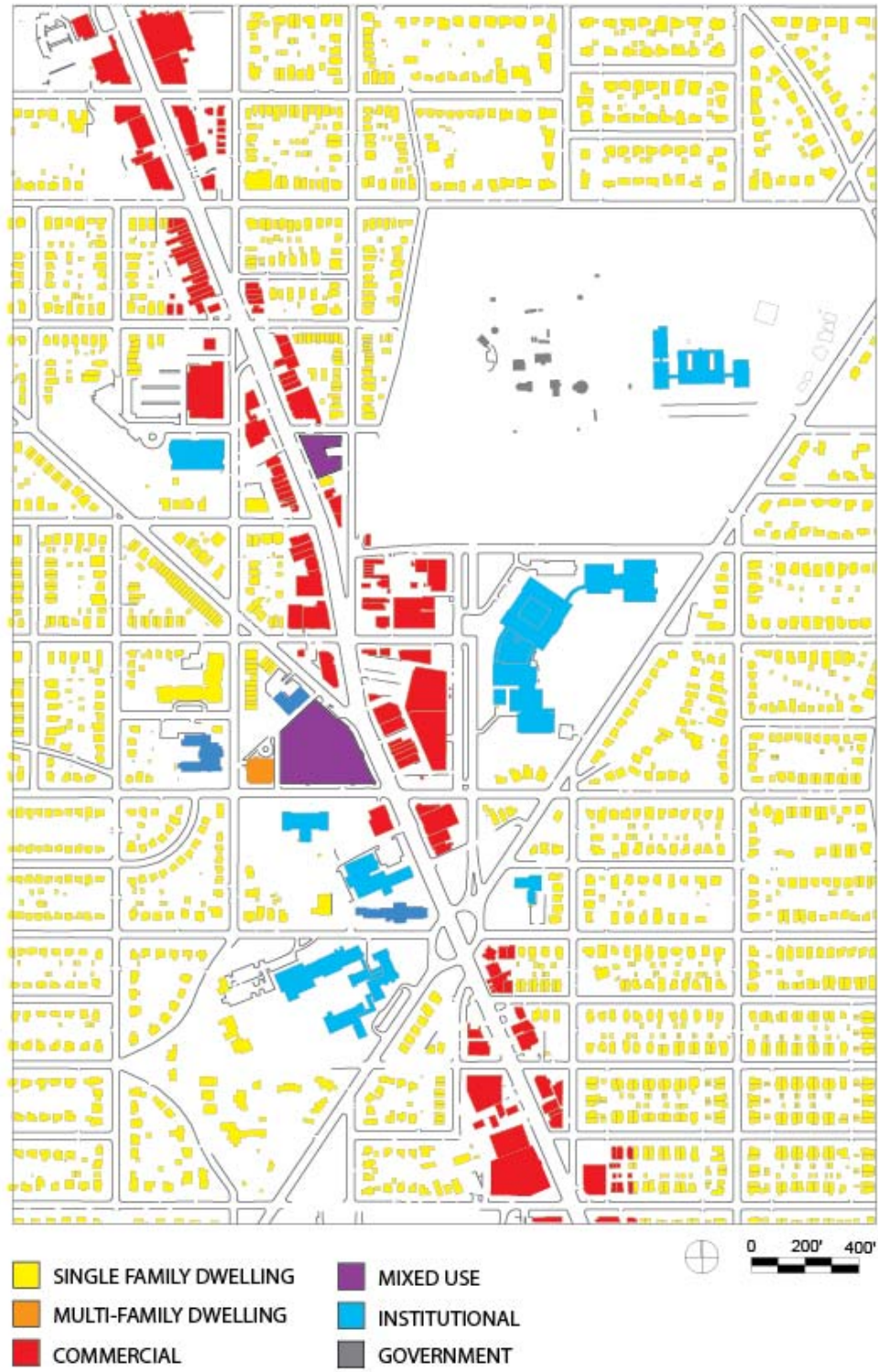
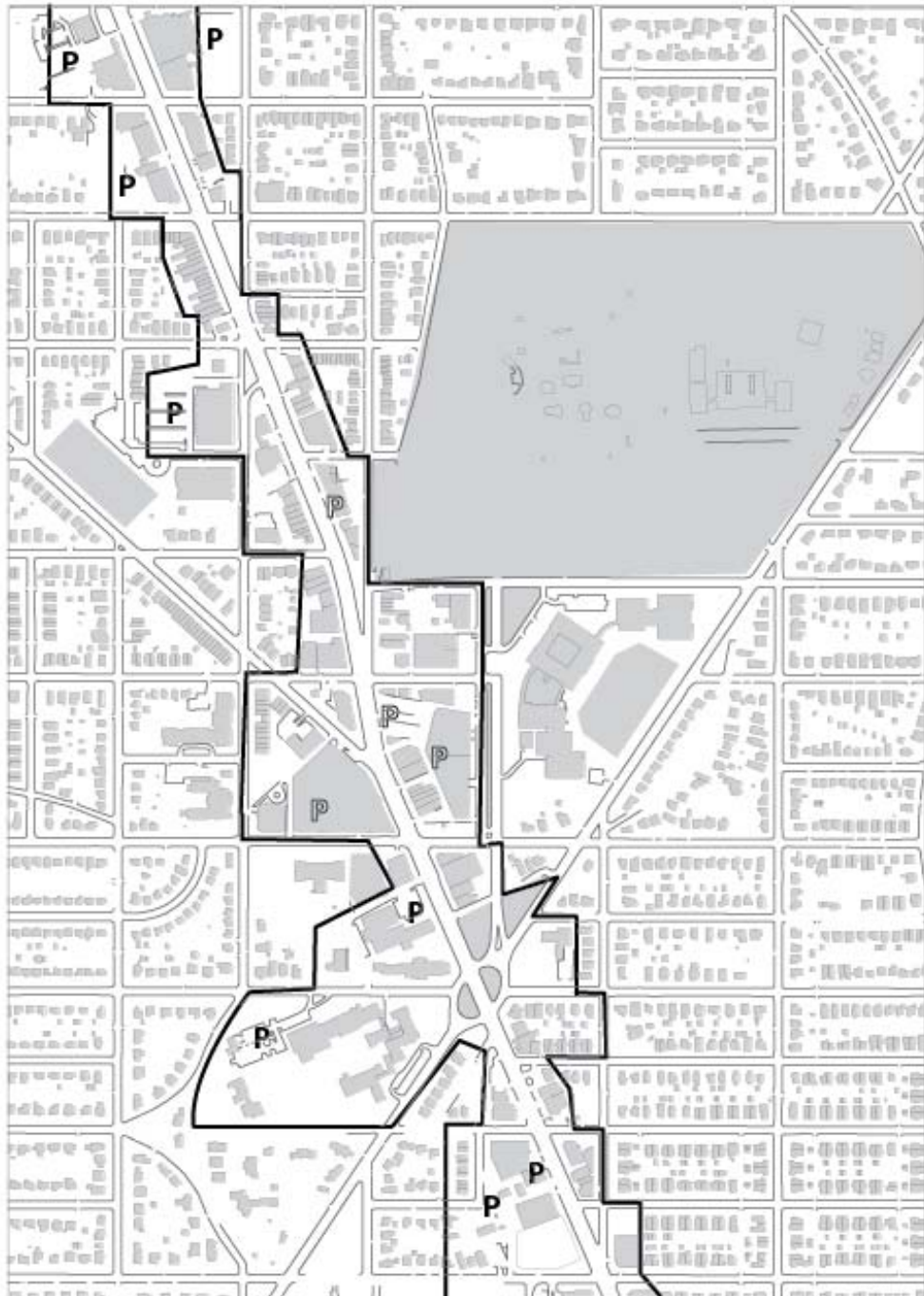


Figure 49: Existing Land Use



Figure 50: Proposed Land Use



**P = Surface Parking**

**P = Garage Parking**

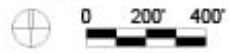


Figure 51: Parking

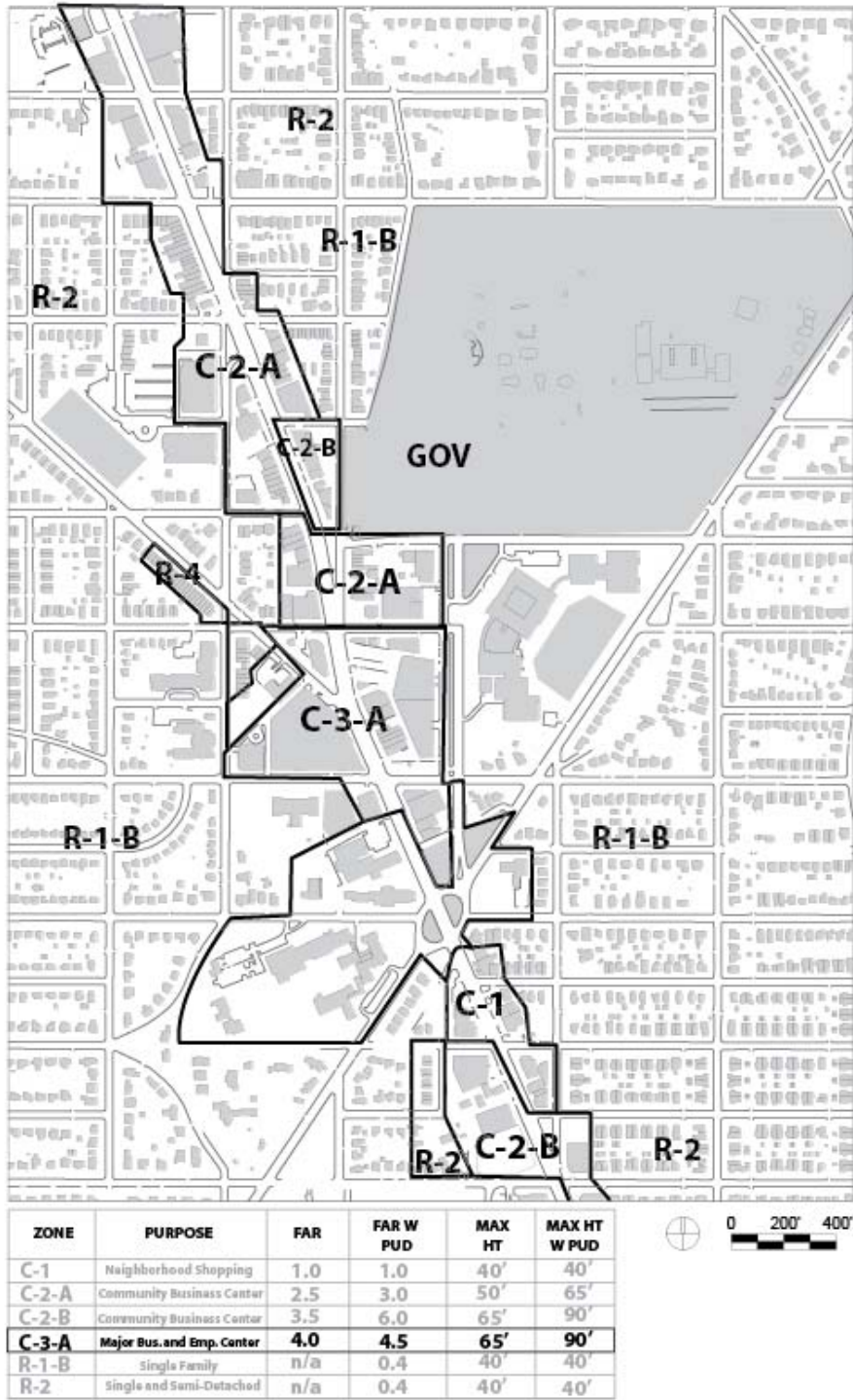


Figure 52: Zoning

### **3: Program**

The mixed use housing and retail project will be composed of at least two large buildings with a defined outdoor space for use by residents. These will replace all existing structure. The approximate total size will be 500,000 sf, with about 30,000 sf of commercial space.

About 400 dwelling units will be offered in different configurations to encourage a diverse mix of residents. These will include one, two and three bedroom apartments as well as studios. Approximately seventy percent will be more than 1000 sq ft.

The dwelling units will be designed to have at least two exposures to obtain as much light and air as possible. Additionally, dwelling units will be positioned to take advantage of interesting views of Fort Reno to the North, the National Cathedral to the South, Rock Creek Park to the East, and the rapidly developing streetscape to the West. Higher units will have views of downtown Bethesda, MD downtown DC, Rock Creek Park, and McLean, Virginia respectively.

Each dwelling unit will have one parking space; about 100 spaces will be provided for visitors.

Commercial space will include a grocery store, a large “big box” retail space and four or five spaces for retail and/or restaurants.

## Specific Design problems and issues:

### Climate:

All four seasons are distinctly experienced in Washington, DC (Latitude: 38.83 N Degrees) winter tends to be mild, but can be quite cold in December, January (on average the coolest month) and February with occasional snowstorms; the lowest recorded temperature was -10 degrees F in 1982. Spring is quite temperate with lots of rain in May (maximum average precipitation—see below). Summer is hot and humid with occasional thunderstorms; July is the hottest month on average; the highest recorded temperature was 104 degrees F in 1999. Fall is also temperate.<sup>23</sup>



Figure 53: Average Monthly rainfall in Washington, DC

Chart obtained from [www.weather.com](http://www.weather.com) 05.10.05

<sup>23</sup> Data derived from [www.weather.com](http://www.weather.com)

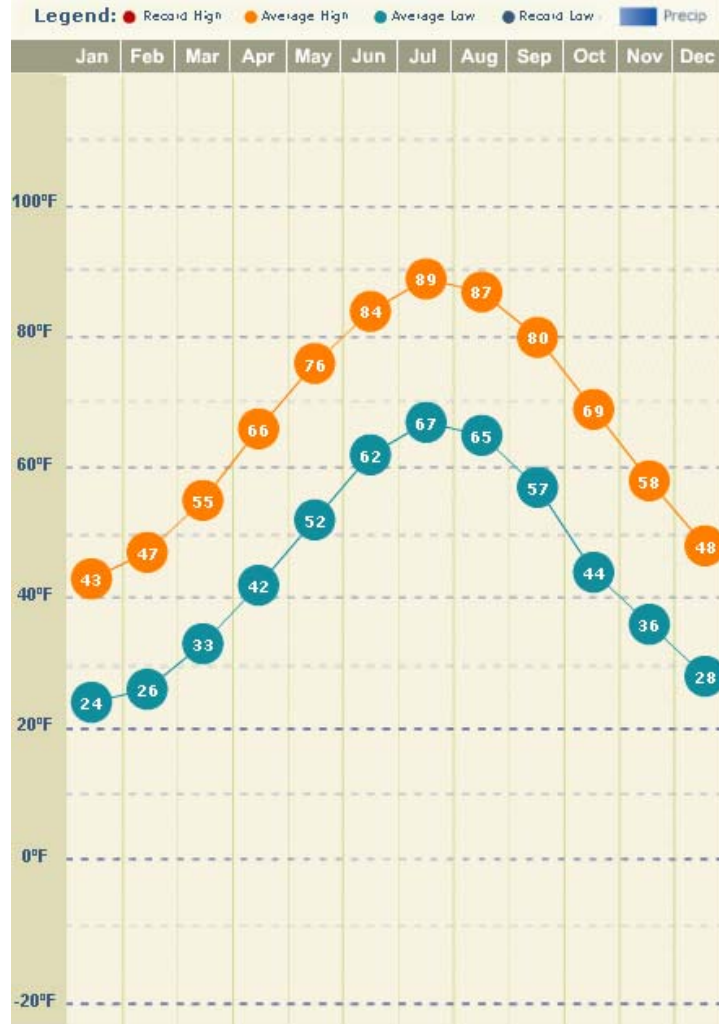


Figure 54: Average Monthly Temperatures in Washington, DC<sup>24</sup>

**Soil:**

“The Piedmont Plateau, extending from the foothills of the Blue Ridge Mountains, is a rolling heavily forested area of rocky ground. The Atlantic Coastal Plain is flatter, closer to sea level, with a softer, sandier soil. Tenleytown is on the last terrace west of the Rock Creek, which was formed by water falling from the rocky Piedmont highlands to softer coastal soil.”<sup>25</sup>

<sup>24</sup> [www.weather.com](http://www.weather.com) 05.10.05

<sup>25</sup> Helms, op. cit., p. 6

“A Washington Metro Area Transit Authority geological report of the area, prepared in 1973, shows that the first five geological strata in the area are fill dirt, clay, silt, sand, and gravel, and the sixth stratum down is rock. It is this layer of rock that the subway tunnel penetrates.”<sup>26</sup>

### **Other Site Constraints:**

Because of the block configuration, the longest side of the block site faces southwest. The building will have to be designed to benefit from the sunlight in the colder months, and to shield some of the sunlight in the warmer months.

The project will exist on the same block as the Metro stop. Any underground construction, parking, for example, will have to accommodate this.

Two of the roads bordering the block—Wisconsin Avenue and Albemarle Street—are well traversed. The other two—40<sup>th</sup> Street and Brandywine—are not. An obvious way to plan the block would be to treat 40<sup>th</sup> and Brandywine as service roads. However, with an insertion of a street (or streets) through the block, it’s possible that their use would change from the current status of seldom used to frequently used.

### **Character, Expressive Language, and Material Considerations**

According to Kim Williams of the District of Columbia Historic Preservation Office (May 2005), Tenleytown does not have enough “building fabric that remains from historic periods” to warrant historic district status. This status and the fact that the new mixed use complex would be the first of its kind on the site, and the third instance of this type in the neighborhood, (Cityline 2005-*Figure 33* and Tenley Hill

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<sup>26</sup> Helms, op. cit., p. 569

2000-*Figure 34*) suggests that there is a wide range of possible material choices and massing configurations. The neighborhood and site offer a number of unique features to respond to: Fort Reno tower, Fort Reno Park, the radio towers on the block to the North, the new mixed-use, metal-clad, curved-condominium-structure-mounted-on-an-historic- art-deco, angular, former Sears building, the frequent use of Neon signs throughout the neighborhood, the Metro stop on the site, the red-brick school across 41<sup>st</sup> Street, the height of the block in relation to the rest of the city.

### **Sustainability**

Currently, most of the site is impervious. A large proportion of the site is paved with asphalt or concrete, and all of the buildings have conventional roofs. The only vegetation is made up of a few patches of grass, a few hedges and a few sidewalk trees. The introduction of a large interior outdoor space or spaces would provide an opportunity to add a lot of vegetation, and any new roofs would either be sod covered, or reflective and light colored. Every effort would be made to capture all rainwater from the entire site footprint, and use it to irrigate the new vegetation.

Cost effective geothermal pumps would be installed for heating and cooling provided that they would not interfere with the subway below. All materials used would be non-toxic, with low-embodied energy.

## 4: Precedents

### *Precedent 1: Roman Insulae at Ostia circa 200 AD*



**Figure 55: Photograph of Model of a Roman Insula**—displaying the first floor retail story, with housing stacked above. It also shows the use of an atrium space. Both of these concepts—mixed use and atrium spaces—have proven their value over time. Mixed Use, allows pedestrians to save money and time to walk to work and shopping. It also provides Jane Jacobs “eyes on the street” security. Atrium spaces allow for light, air and privacy in the center of a building.

(Photo obtained from: [http://academic.reed.edu/humanities/110Tech/Roman\\_Life\\_gallery/pages/07-Ostia\\_model\\_Insula\\_jpg.htm](http://academic.reed.edu/humanities/110Tech/Roman_Life_gallery/pages/07-Ostia_model_Insula_jpg.htm))

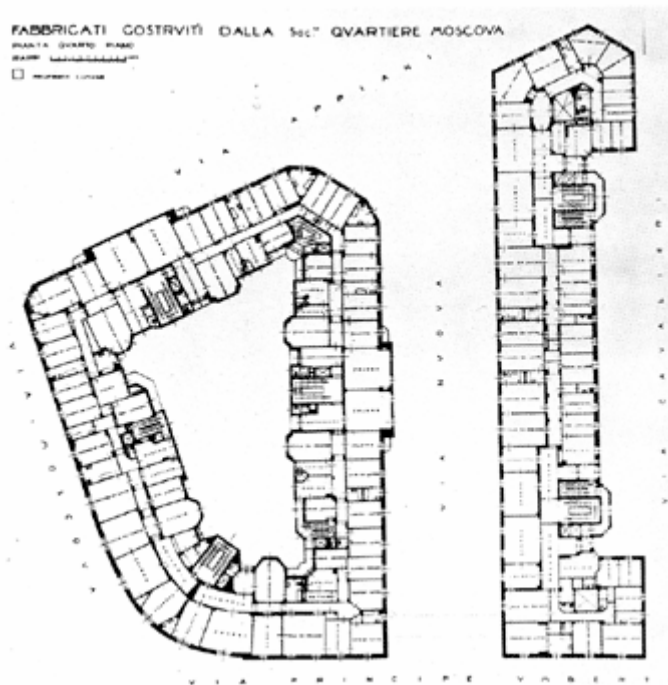
“...the great majority of the middle-class citizens lived in apartments. Some of these were situated over rows of shops, with separate entrance stairways from the street. Many of them were grouped together in multi-storied apartment blocks (insulae), with the shops at street level and a central courtyard from which one or more flights of stairs led up to several floors of self-contained apartments.”

(Ward-Perkins, John Bryan, *Roman Architecture*, Harry Abrams, Inc., Publishers, New York, 1912)

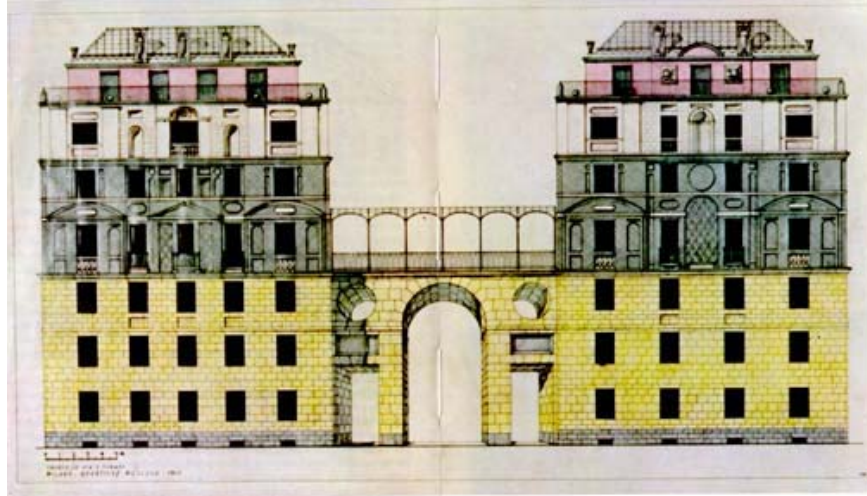
**Precedent 2: Ca' Brutta, Housing, Milan, Italy, 1919-1923, Colonnese, Vittorino, Giovanni Muzio, Pier Fausto Barelli (all images obtained from [www.housingprototypes.org](http://www.housingprototypes.org))**



**Figure 56: Ca' Brutta**



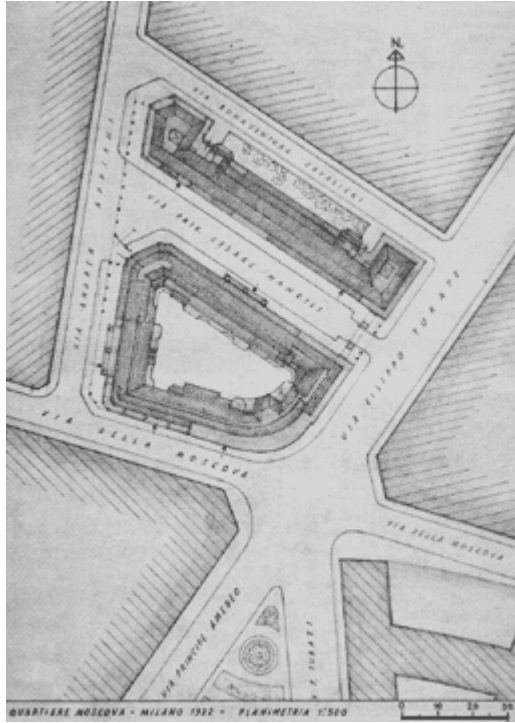
**Figure 57: Ca' Brutta plan**—showing two buildings, one “donut,” and one “bar,” joined virtually by a shared pedestrian street. Both the courtyard and the pedestrian street are features which could be used for the Tenleytown site.



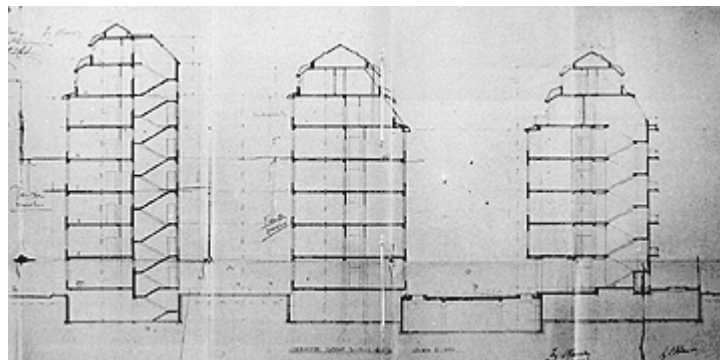
**Figure 58: Ca' Brutta Elevation Drawing**—showing a Serliano gateway to the pedestrian street. It serves to join the buildings physically, and to celebrate the pedestrian street between them.



**Figure 59: Ca' Brutta photo**—showing the convex corner



**Figure 60: Ca' Brutta Site Plan**—the freestanding aspect of the buildings as well as the uniform and narrow width allows for much light and air



**Figure 61: Ca' Brutta Section**—showing the equivalent spacing of the courtyard and the pedestrian street, and the buildings themselves. This results in a solid-void-solid-void-solid rhythm.



**Figure 62: Ca' Brutta perspectival photo**



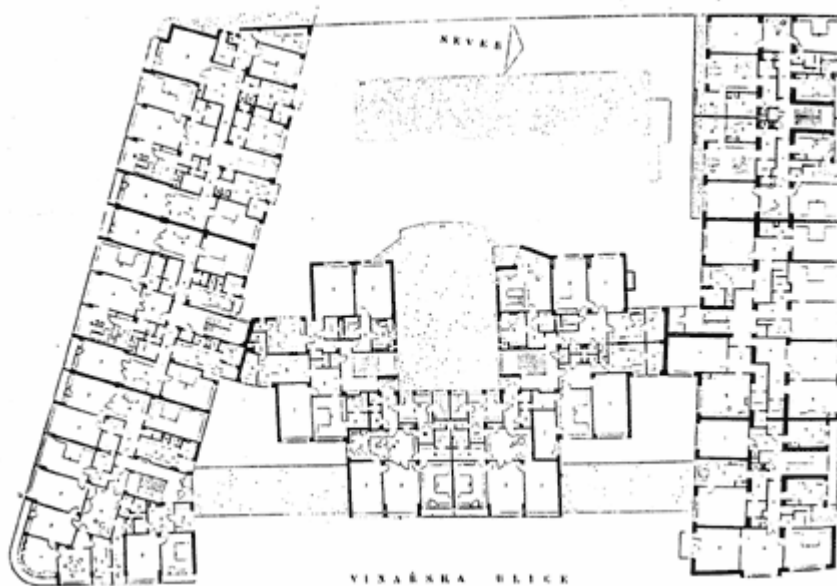
**Figure 63: Ca' Brutta, Serliano Gateway**

**Precedent 3: Kriska, Stockar-Bernkoph, Jaroslav & Josef Solc, Prague, Czechoslovakia, 1938-1939, Seven Floors, 160 dwellings and shops and cinema.**

*(all images obtained from [www.housingprototypes.org](http://www.housingprototypes.org))*



**Figure 64: Kriska, Perspectival photo**—showing a mixed use project deftly turning a corner by calling attention to the retail establishment on the ground level, while providing, well glazed, interesting spaces for the dwelling units above.



**Figure 65: Kriska plan**—showing a “dumbbell” parti. The two double loaded corridor wings allow for plenty of light and air. They form a public, entranceway courtyard facing the street, and a large, private courtyard on the other side.



**Figure 66: Kriska private courtyard**—showing a space that looks better in plan than in realization



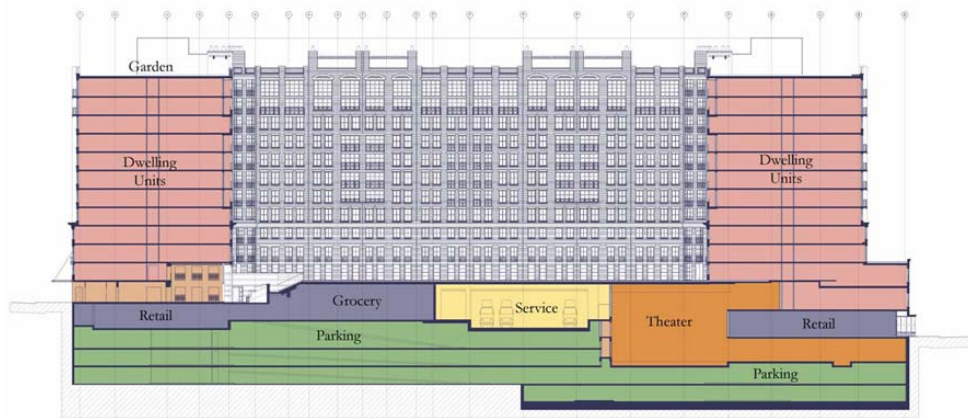
**Figure 67: Kriska public courtyard**—showing an effective public entrance with a marquee for a movie theatre.

**Precedent 4:**

*The Jefferson at Penn Quarter 7th and D Streets, NW, Washington DC, 2005,  
Esocoff & Associates Oehrlein & Associates (preservation architects)*



**Figure 68: The Jefferson at Penn Quarter**—displaying one of the densest housing structures in downtown Washington (616,000sf composed of 35,000sf of retail and about 428 apartments). Although it comprises this density, its massing doesn't overwhelm the street. On the contrary, the housing has been skillfully set back from the three and four story buildings, not only to allow the historic buildings to be read in their full form, but to create a more human scale and to allow more sunlight to reach the street.



**Figure 69: The Jefferson Section**—displaying the large private courtyard for use by residents. The courtyard is raised above street level in order to allow for more commercial space below.



**Figure 70: The Jefferson courtyard**—displaying serpentine planters with plenty of trees. It’s a very agreeable space, which I saw firsthand.



**Figure 71: The Jefferson courtyard seen from an upper level apartment**—showing the only outdoor space viewed by some apartments



**Figure 72: The Jefferson “E” Street Ground level plan**—showing one of the ground level plans, due to the grade change between “D” and “E” Streets. All of the retail fronts the busier 7<sup>th</sup> Street, and the apartments are separately and discretely entered on the quieter “E” street.



**Figure 73: The Jefferson “D” Street Ground level plan**—showing the entrance to The Woolly Mammoth Theatre, and the second levels of the preserved, historic retail buildings.



**Figure 74: The Jefferson Second Level Plan**—displaying the first level of housing, and the second story courtyard. The circulation armature is revealed, showing double loaded corridors where the apartments face the street and single loaded corridors where the apartments face the alley. The alley side apartments’ chief exterior view is the courtyard, which requires it to be a pleasant space. The saw-toothed pattern on the alley side allows for light and air, and views down the alley.

## 5: Partis

*Existing Conditions:*



Figure 75: Existing condition plan

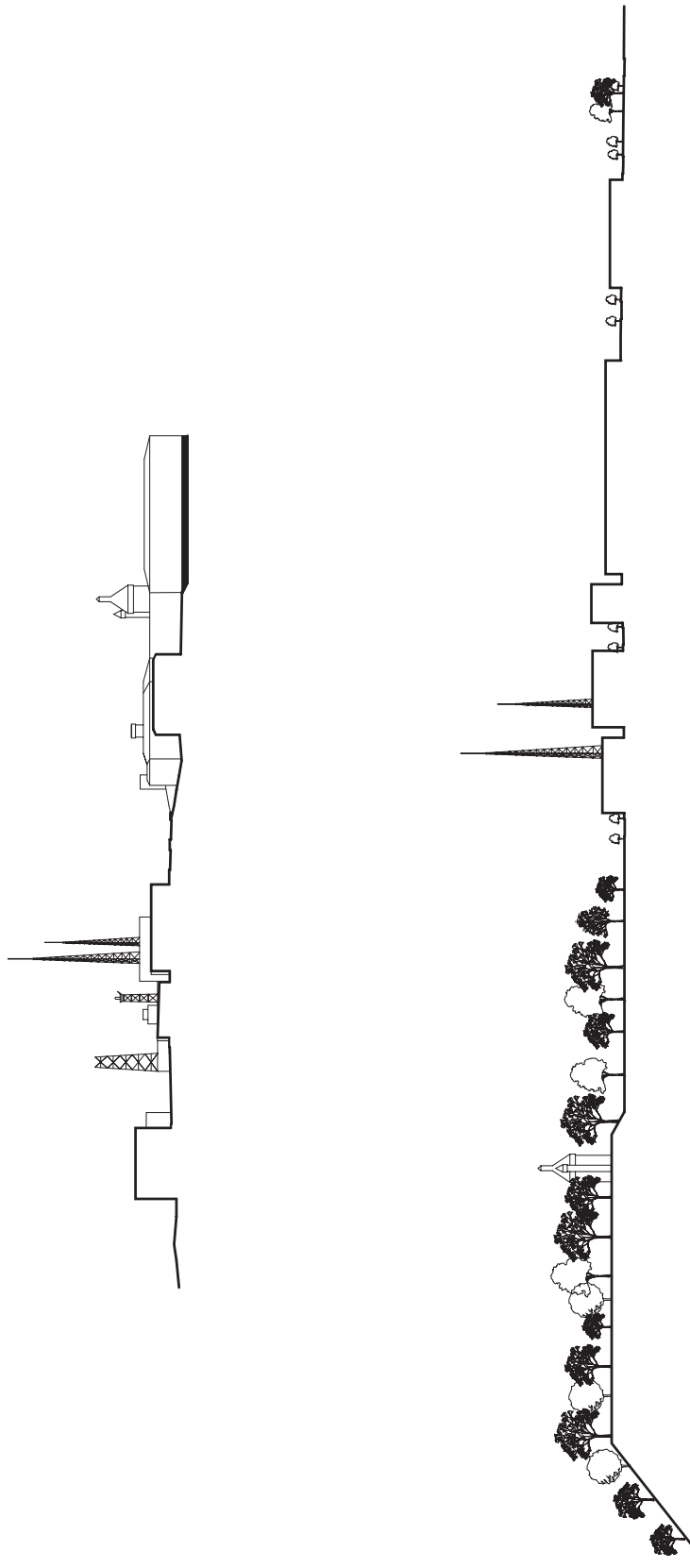


Figure 76: Existing Condition Section

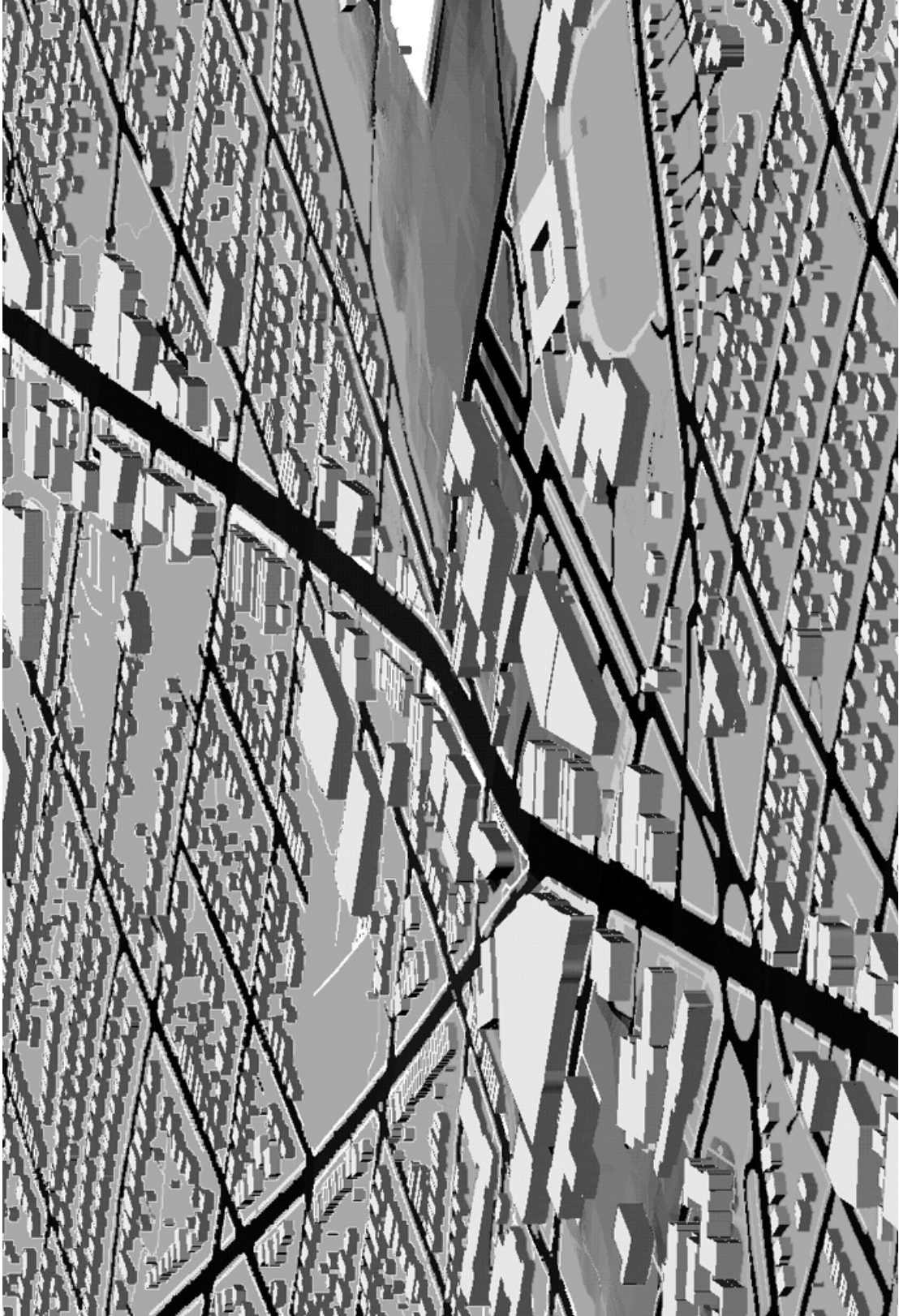


Figure 77: Existing Condition Axonometric looking North

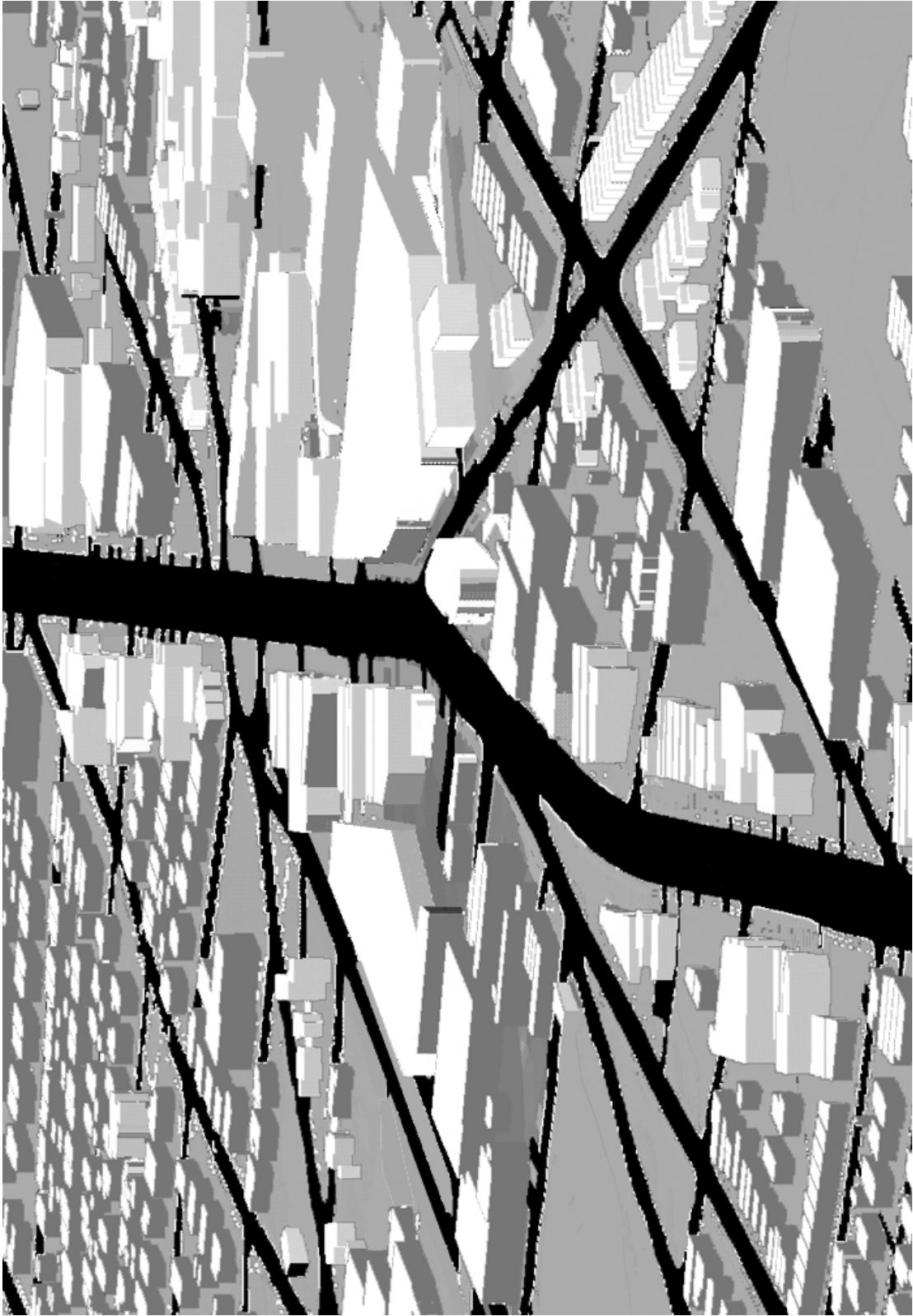


Figure 78: Existing Condition Axonometric looking South



Figure 79: Condition Axonometric looking Due North

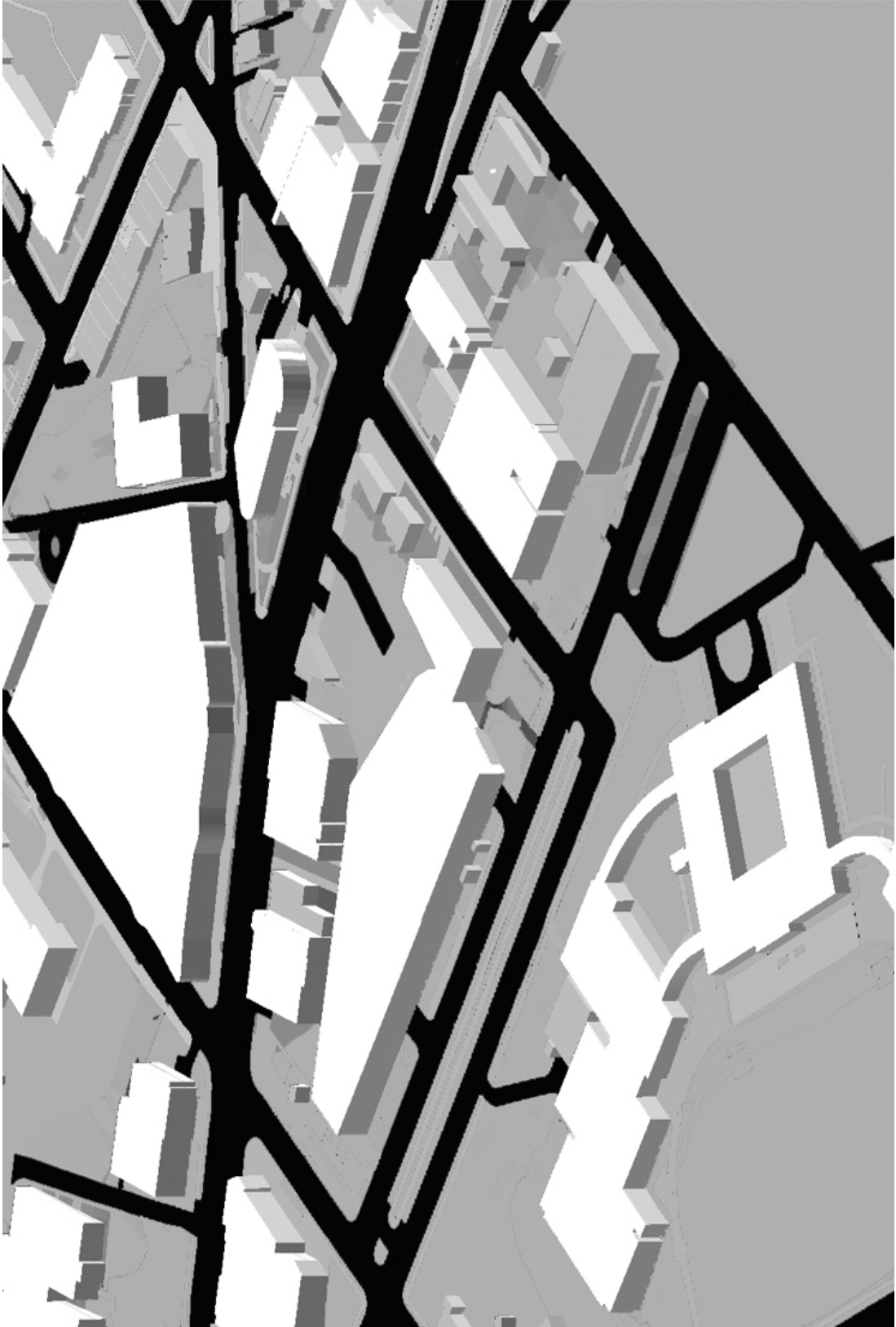
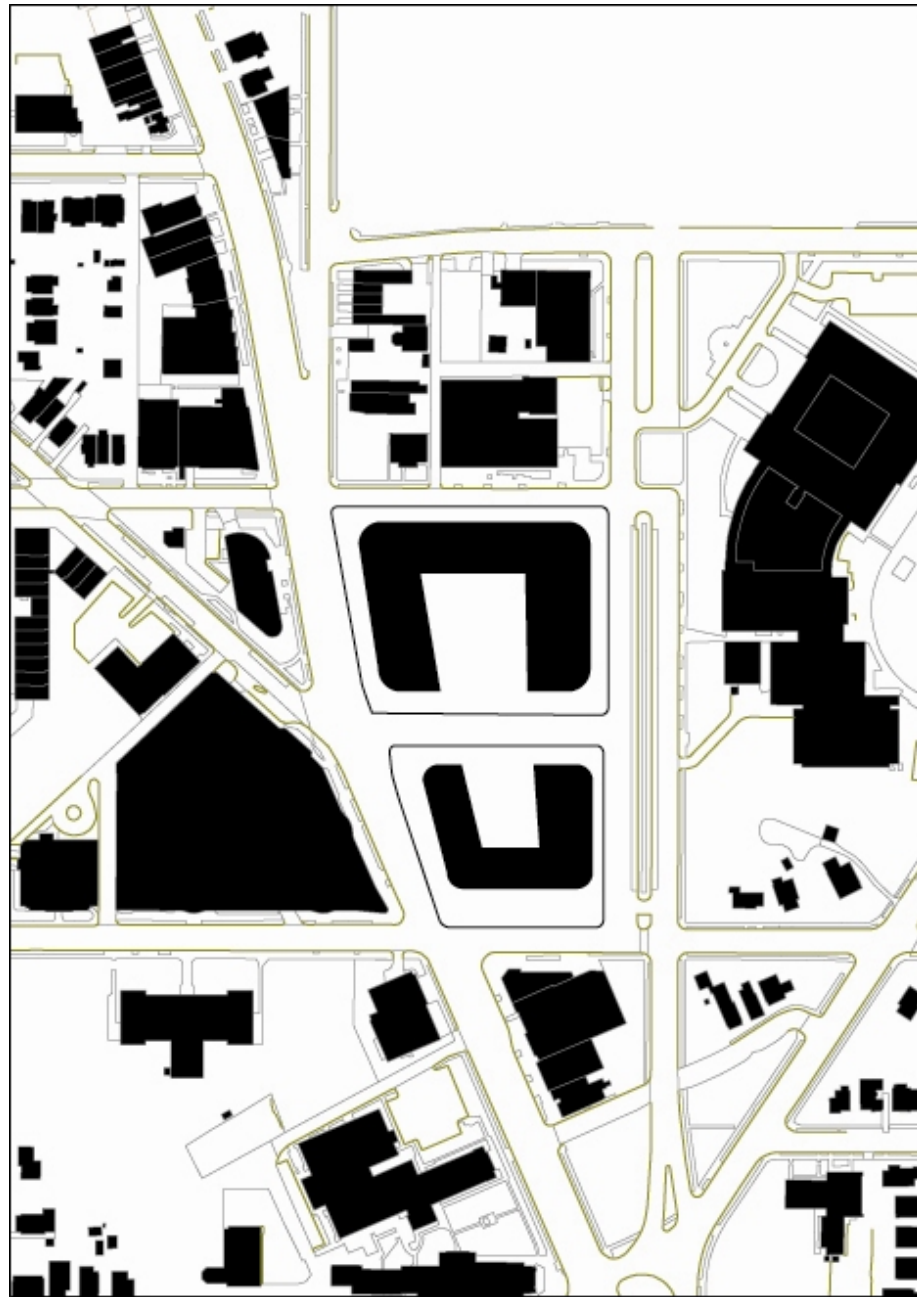


Figure 80: Condition Axonometric looking West



**Figure 81: Parti 1** In this parti, the block is divided into two blocks by a street which completes the intersection formed by River Road and Wisconsin Avenue. The two “U” shaped buildings form a private space which could be part a paved courtyard in the fashion of the Kennedy Warren Apartment Building. Space would be left for the Metro stop on the South of the block.

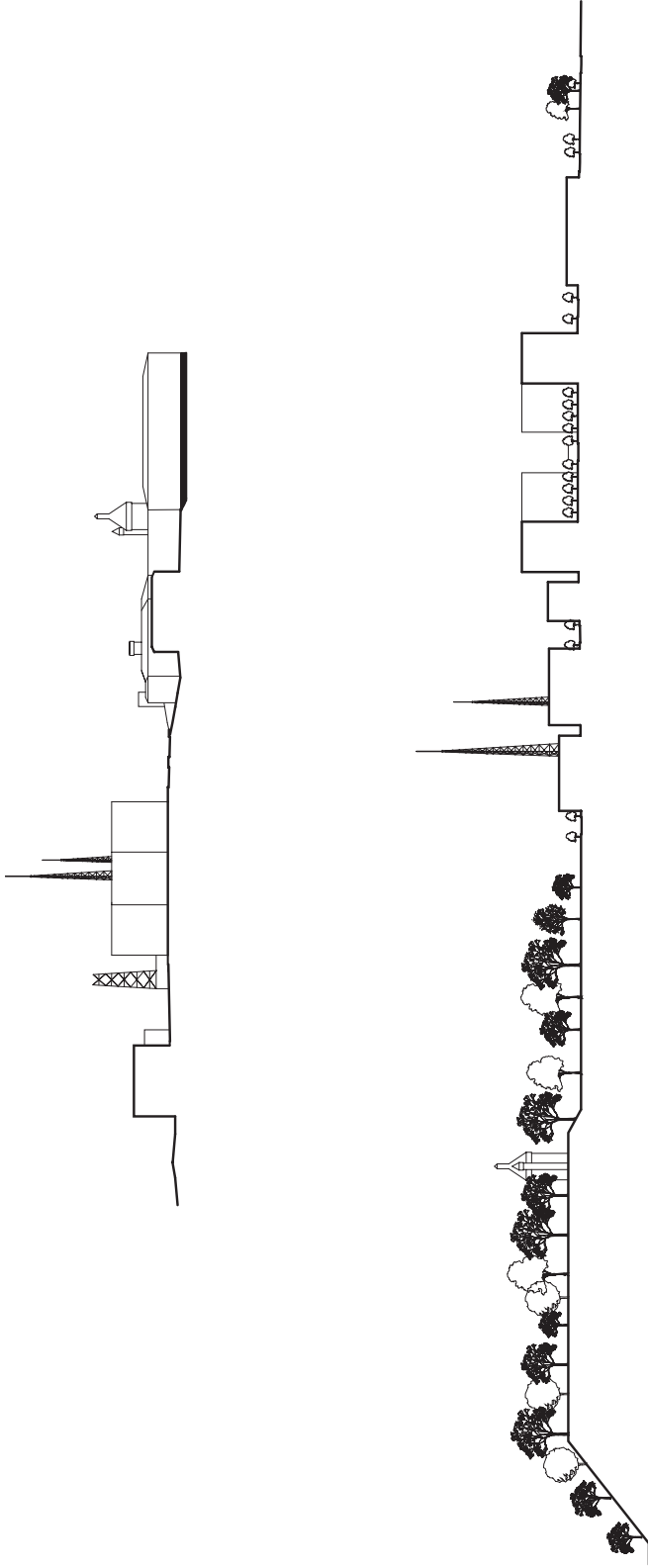


Figure 82: Parti 1 Section

*Parti 2*



**Figure 83: Parti 2** In this parti, the entire block is covered by one large structure punctured by two distinct, private figural spaces inside. Even the Metro stop is subsumed in the building.

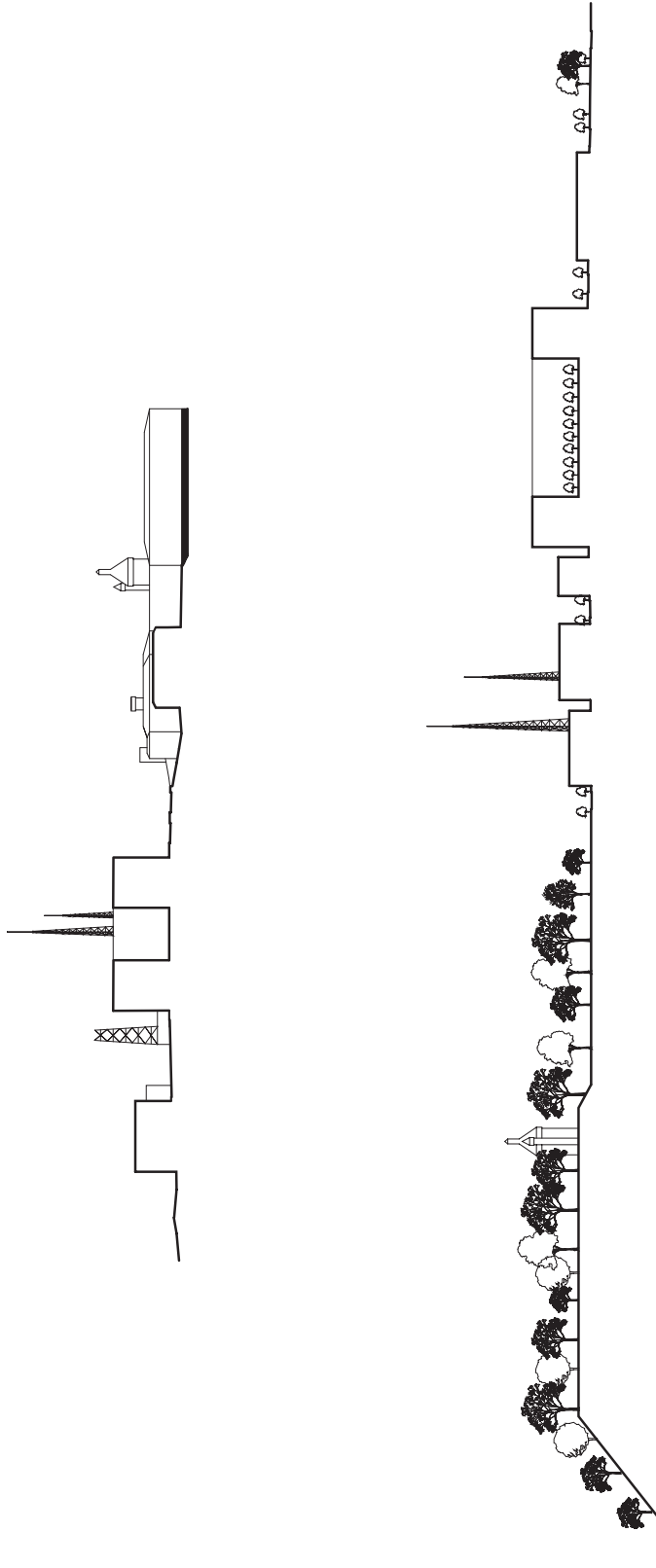


Figure 84: Parti 2 Section

*Parti 3*



**Figure 85: Parti 3** In this parti, the block is comprised of two polygonal structures separated by a diagonal pedestrian street, which provides a view corridor to Fort Reno. The Metro stop is celebrated by a marker at the Southwest corner and two concave sections of the buildings.

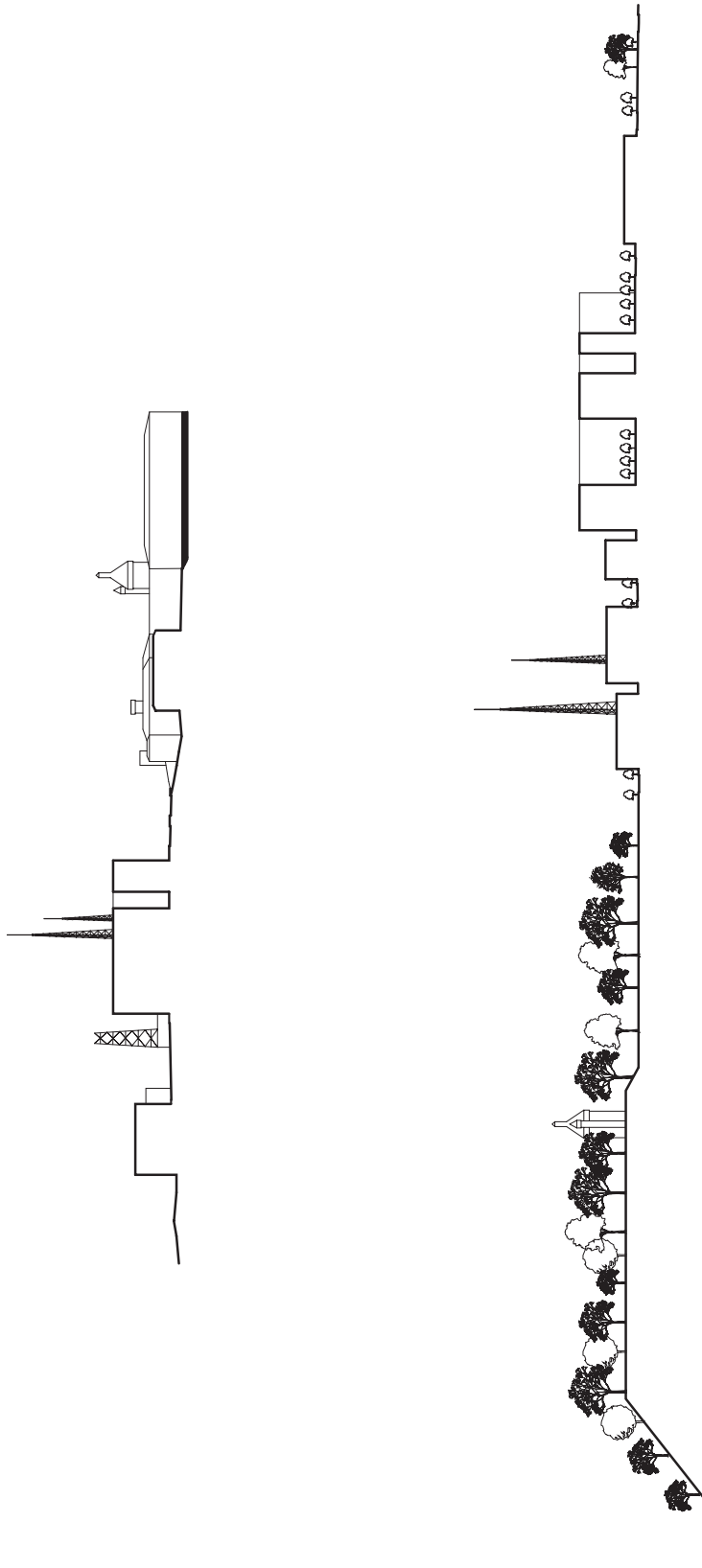
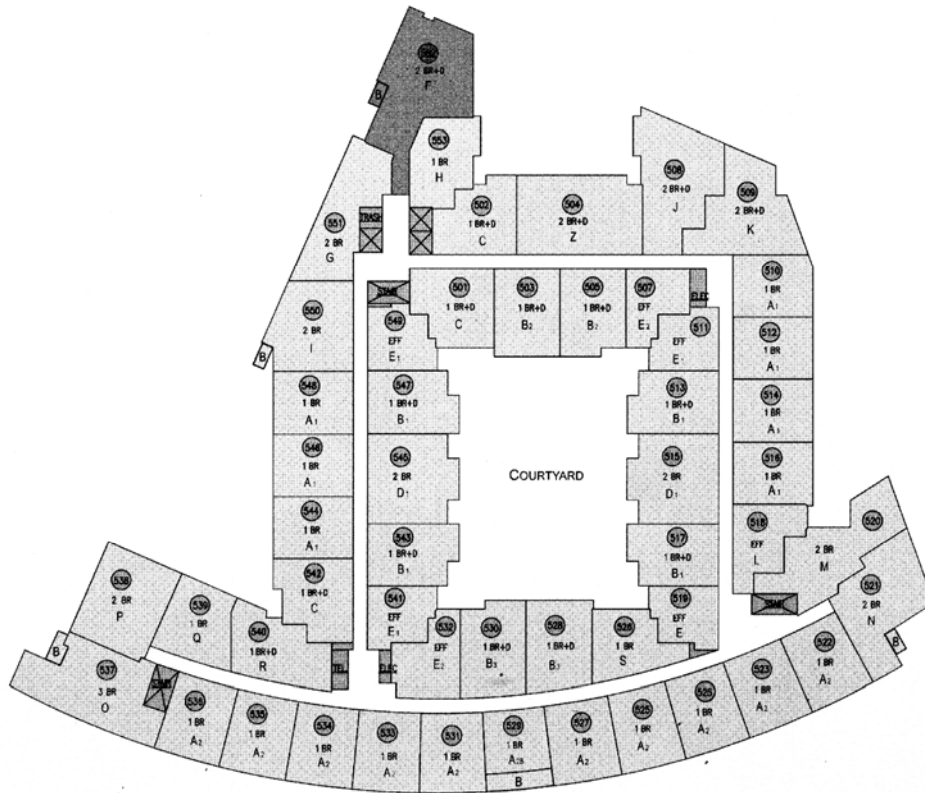


Figure 86: Parti 3 Section

## 6: Conclusion

During Site Analysis, I looked closely at the new condominium building across the street.



**Figure 87: Cityline Condominiums Plan**

While admiring its urbanistic qualities (it's set back from the sidewalk, not overwhelming, and respectfully differentiated from its historic base) and it's architectural qualities (high end apartments with good views and in some cases multiple exposures), I noticed some characteristics for which I want to suggest alternatives.

First, the double-loaded corridors, which are typical for this kind of development prevent through ventilation in each apartment and produce long, windowless corridors. Aside from being unpleasant, this system perpetuates a reliance on mechanical ventilation.

Second, due to the double-loaded corridors, the courtyard is smaller than it could be and becomes a light well rather than a usable space.

Thus, instead of following the conventional developer model, which typically values the the highest number of dwellings, I'm placing a priority on giving two exposures to every apartment. Instead of designing apartments for a certain income level, I'm providing a wide range of apartments. This would total four hundred apartments with forty-three duplexes (2400 sf and larger), 107 two-bedroom units, 125 one-bedroom units, and 125 studio apartments. The 30' x 40' module allows for a flexible division of one-bedroom and studio apartments and other types as well.

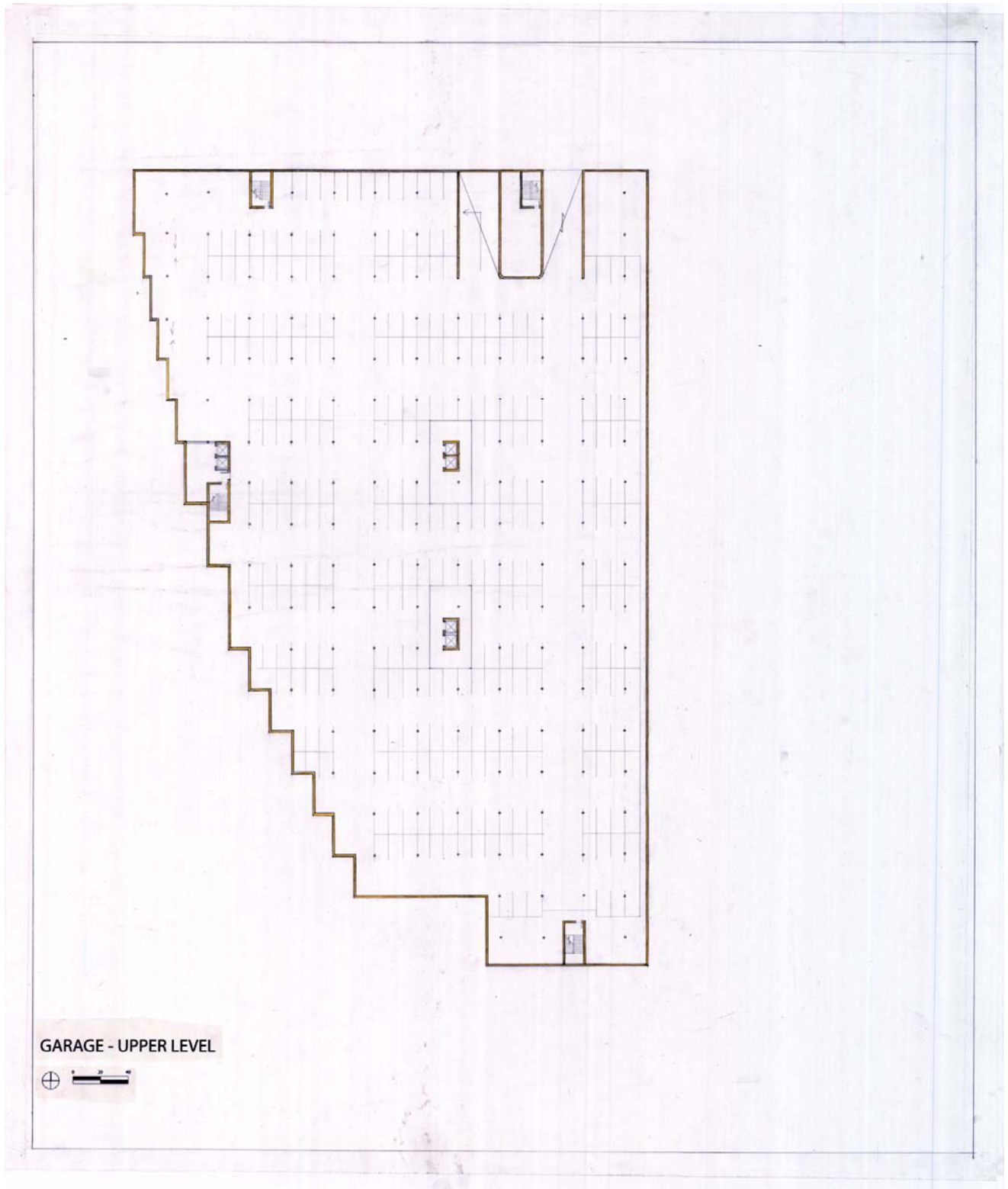
The two buildings I'm proposing are courtyard types with two levels of parking below grade, retail at the ground level, commercial offices on the second level, and six levels of housing above—the top two levels are composed of duplexes. The raised courtyard is a green roof over the retail space in the middle, and the building steps down on the 41<sup>st</sup> street side with a roof accessible from the fifth floor. A series of maisonettes fronts the 41<sup>st</sup> St. elevation of the building, and the courtyard is accessible from their second level.

Entry to the housing is provided on a new street, which divides the two buildings. (The two new blocks form a more pedestrian friendly condition, because they allow for only one vehicular crossing thru the site as opposed to the four existing curb cuts) Vertical circulation is provided from the lobby and the apartments are accessed from an open gallery. Elevators provide access from parking to the units, commercial and retail space.

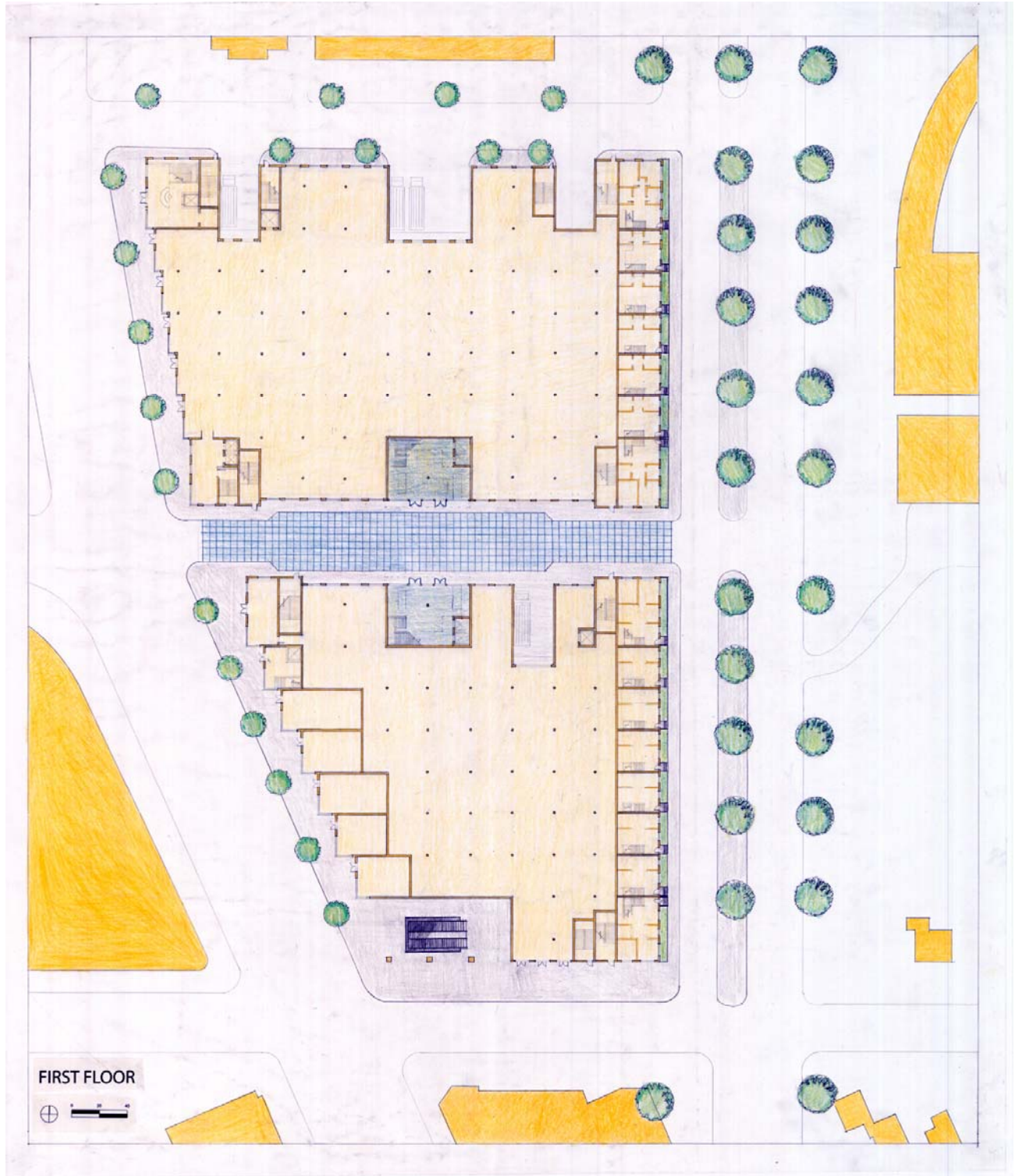
The building is structured with reinforced concrete columns and a precast concrete framing system. It's clad in yellow brick, evocative of the many yellow brick Modernist apartment buildings seen in Washington.



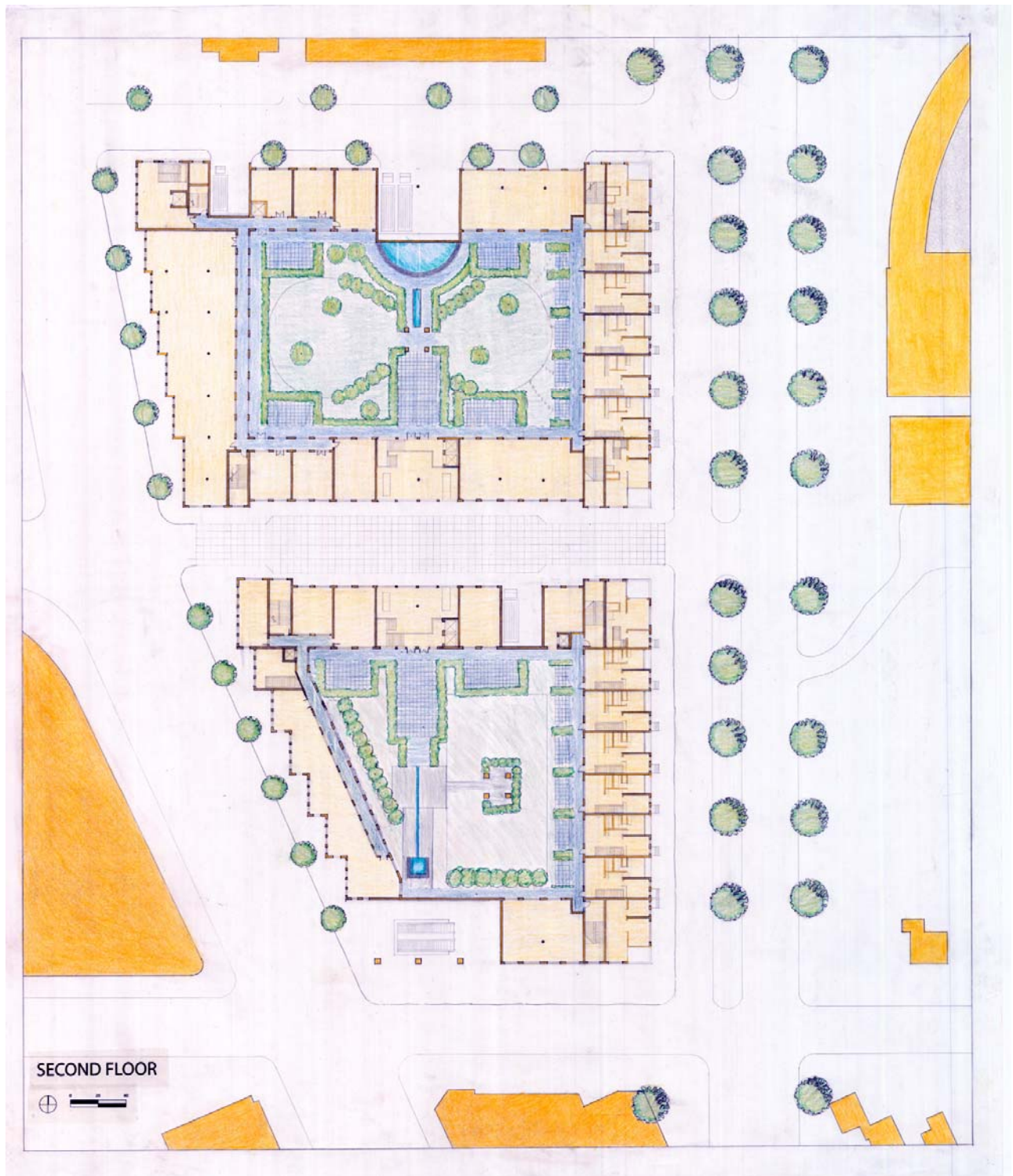
**Figure 88: Site Plan**—showing two courtyard buildings on the site with the stepped-down roof on the East Side.



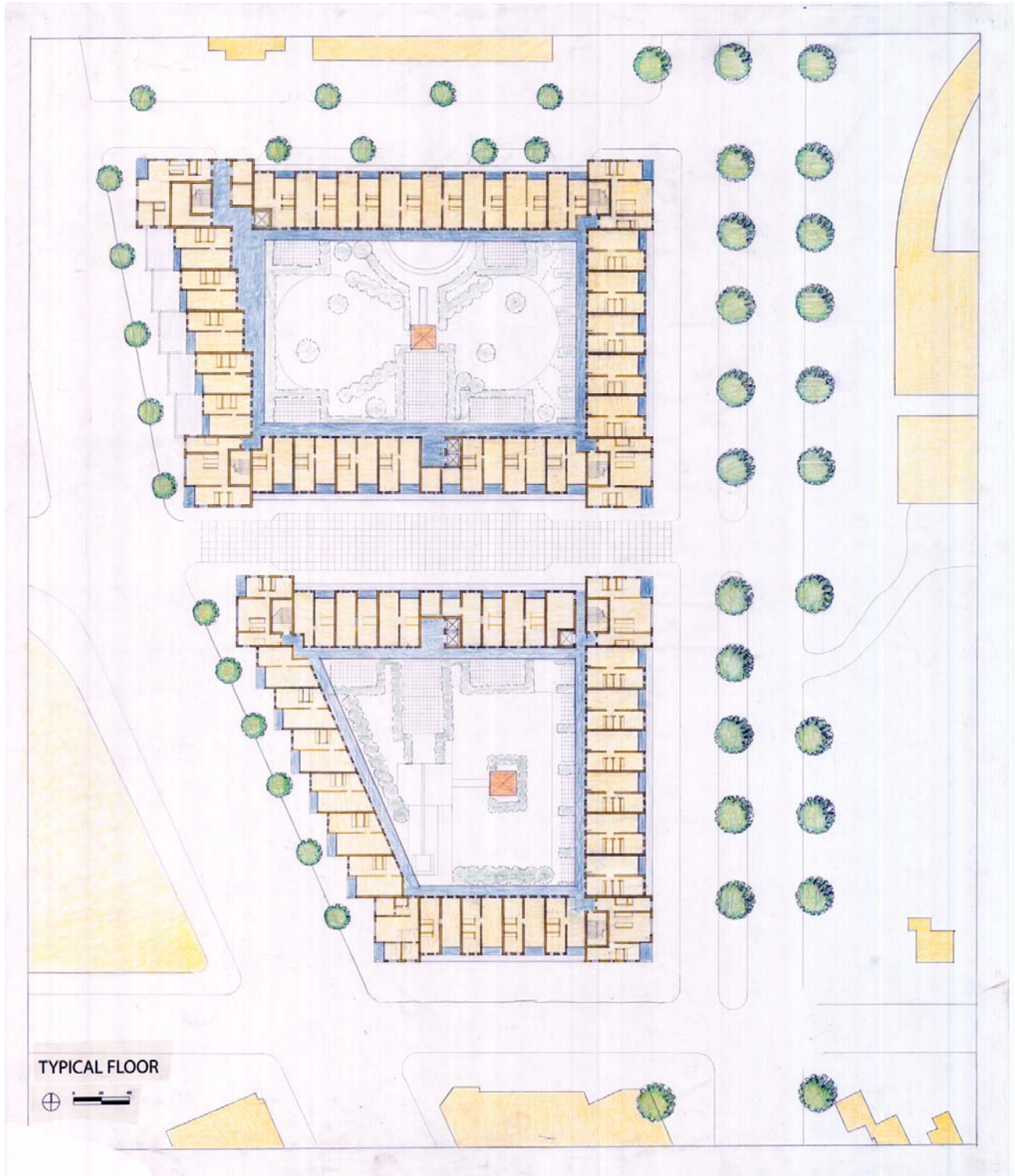
**Figure 89: Garage Plan**—showing complete lot coverage and a 30' structural bay system with six 18' x 10' parking spaces in each typical bay (three spaces back to back with three spaces which extend 3' beyond the column to allow cars to turn into space without hitting column.)



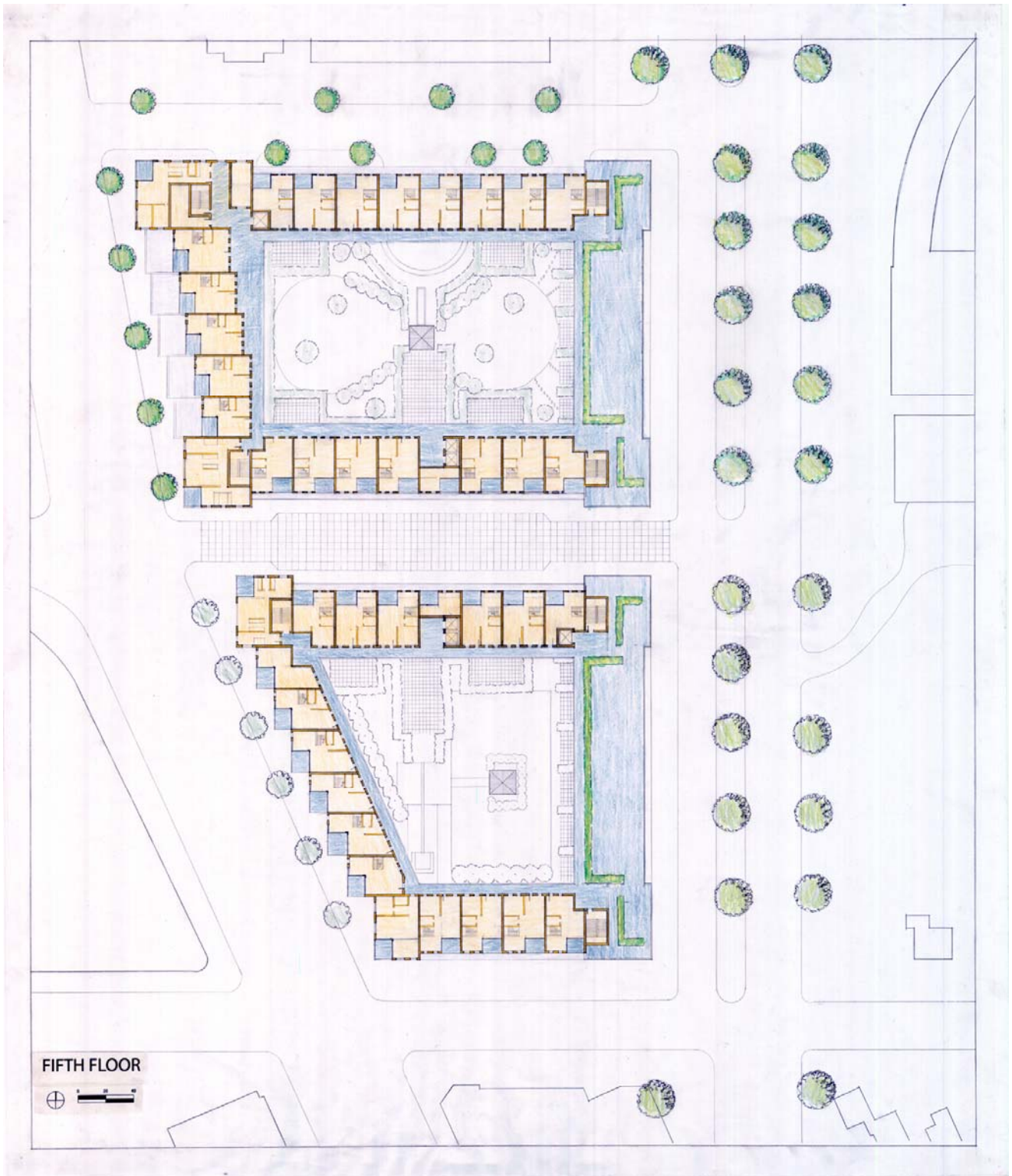
**Figure 90: First Level Plan**—showing two large big-box retail spaces (Whole Foods Grocery Store in North building). Both buildings have maisonettes on the East side accessible from the sidewalk. Residential entrances for the housing above are placed on the new street, and commercial entrances are placed on the Northwest corners. Loading docks are placed on the North ends of both buildings. The South building is setback on the Southwest corner to shelter the Metro station escalator.



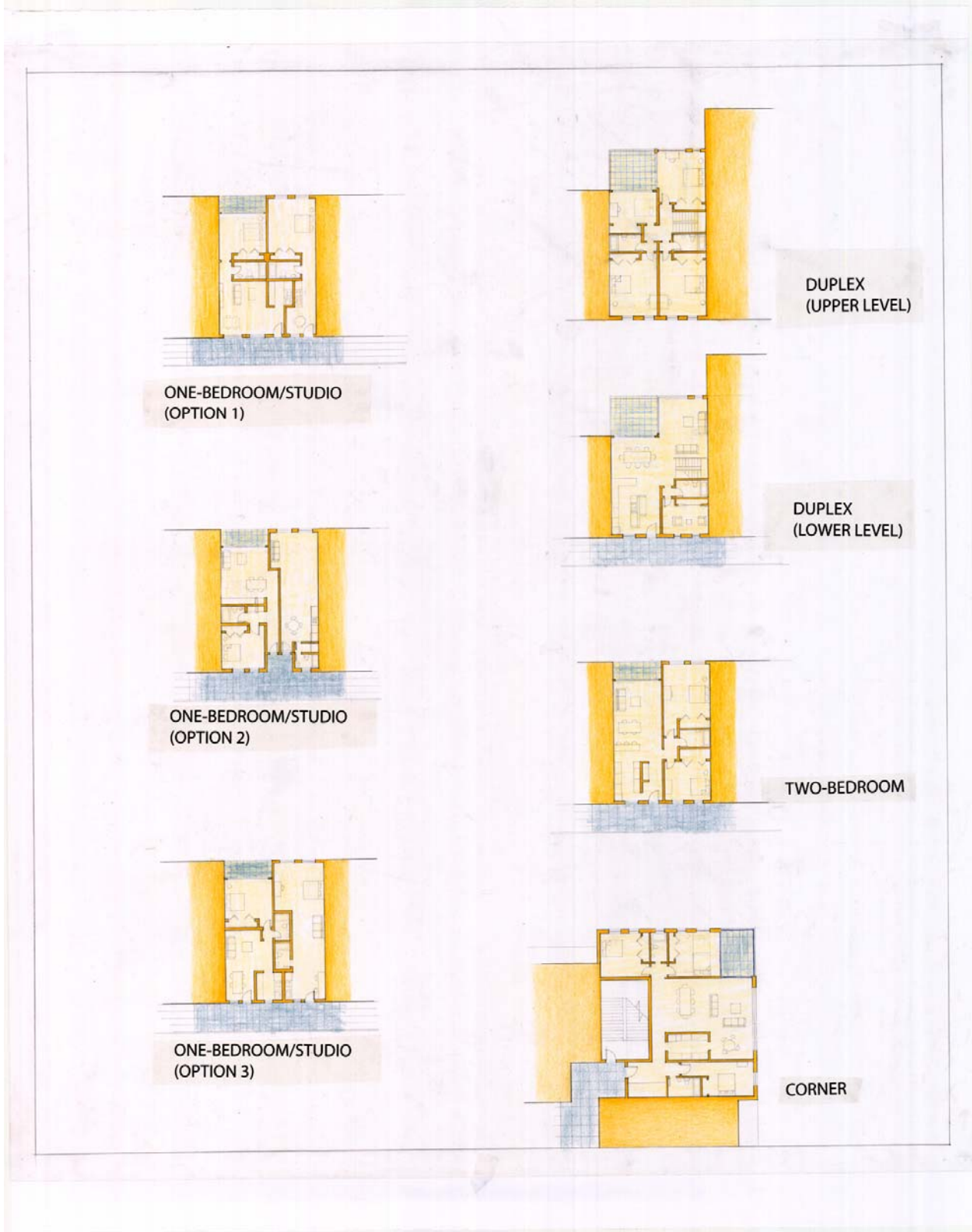
**Figure 91: Second Level Plan**—showing courtyard placed on the roof of the big-box retail. The second level of the maisonettes on the East side of each building has access to the courtyard, as well as the second level of the residential entrances to the housing above. The large spaces on the West of the building are for professional offices.



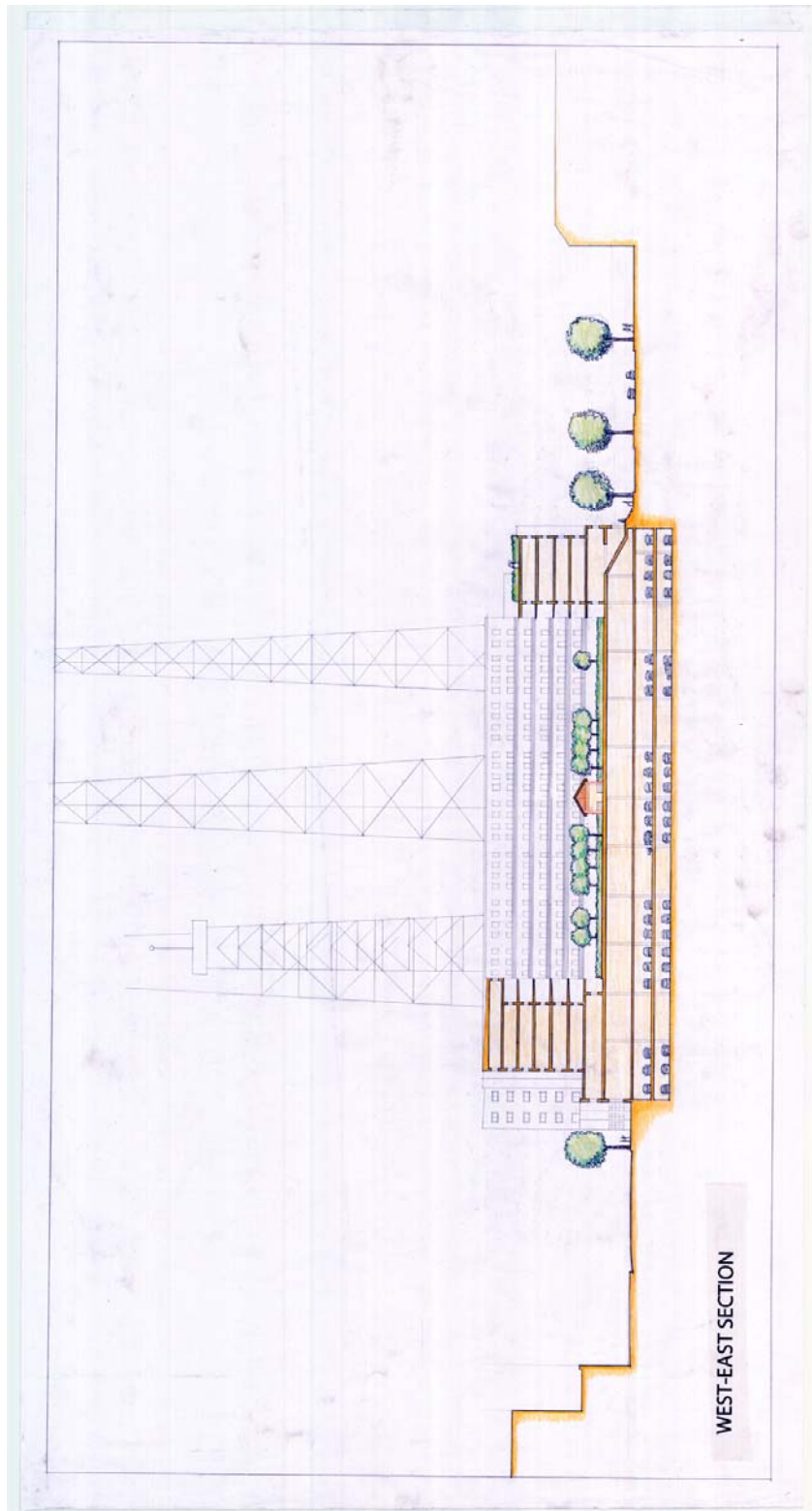
**Figure 92: Typical Floor Plan**—showing the single loaded corridor system which allows every apartment to have at least two exposures. The main elevators are visible in the same location as the main entrances on the two previous drawings, and the fire stairs are buried in the reentrant corners.



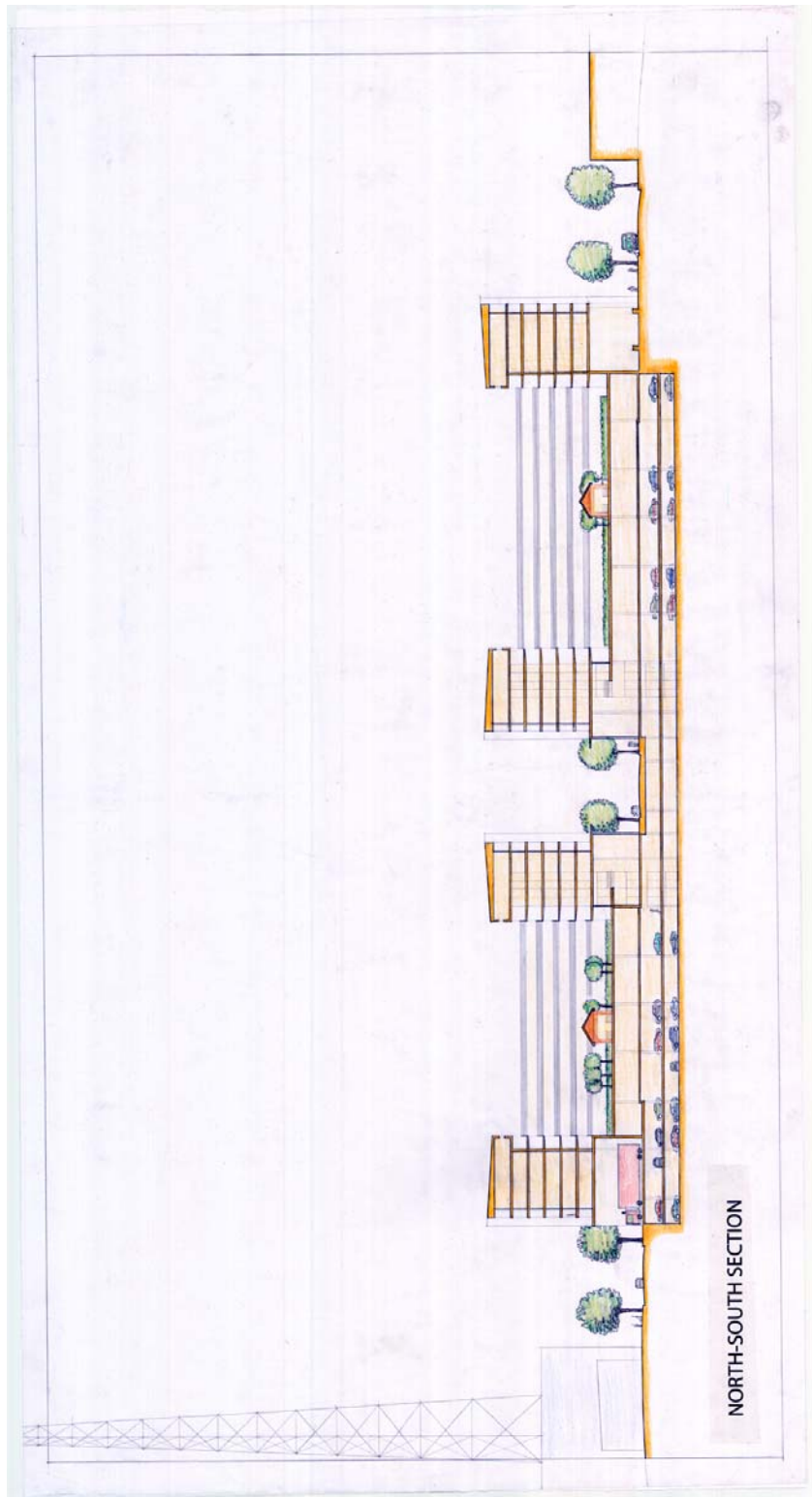
**Figure 93: Fifth Floor Plan**—showing the lower levels of the duplexes (floors 5 & 6). The terraces are larger than the balconies included in the apartments on lower floors. A roof garden on the East side of each building is accessible from the fifth floor of each building.



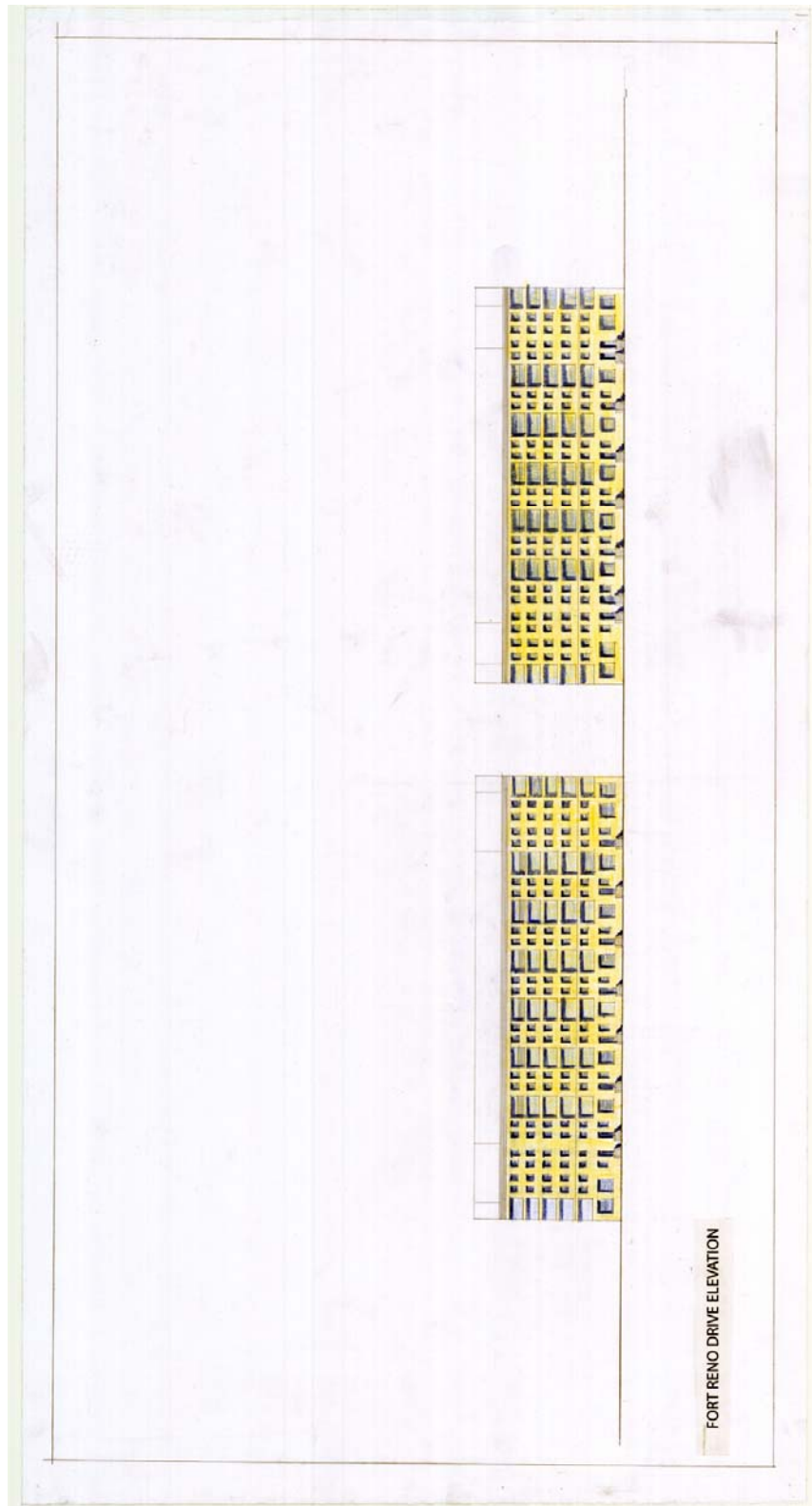
**Figure 94: Individual Unit Plans**—showing various plans which could be placed in the 30' x 40' modules



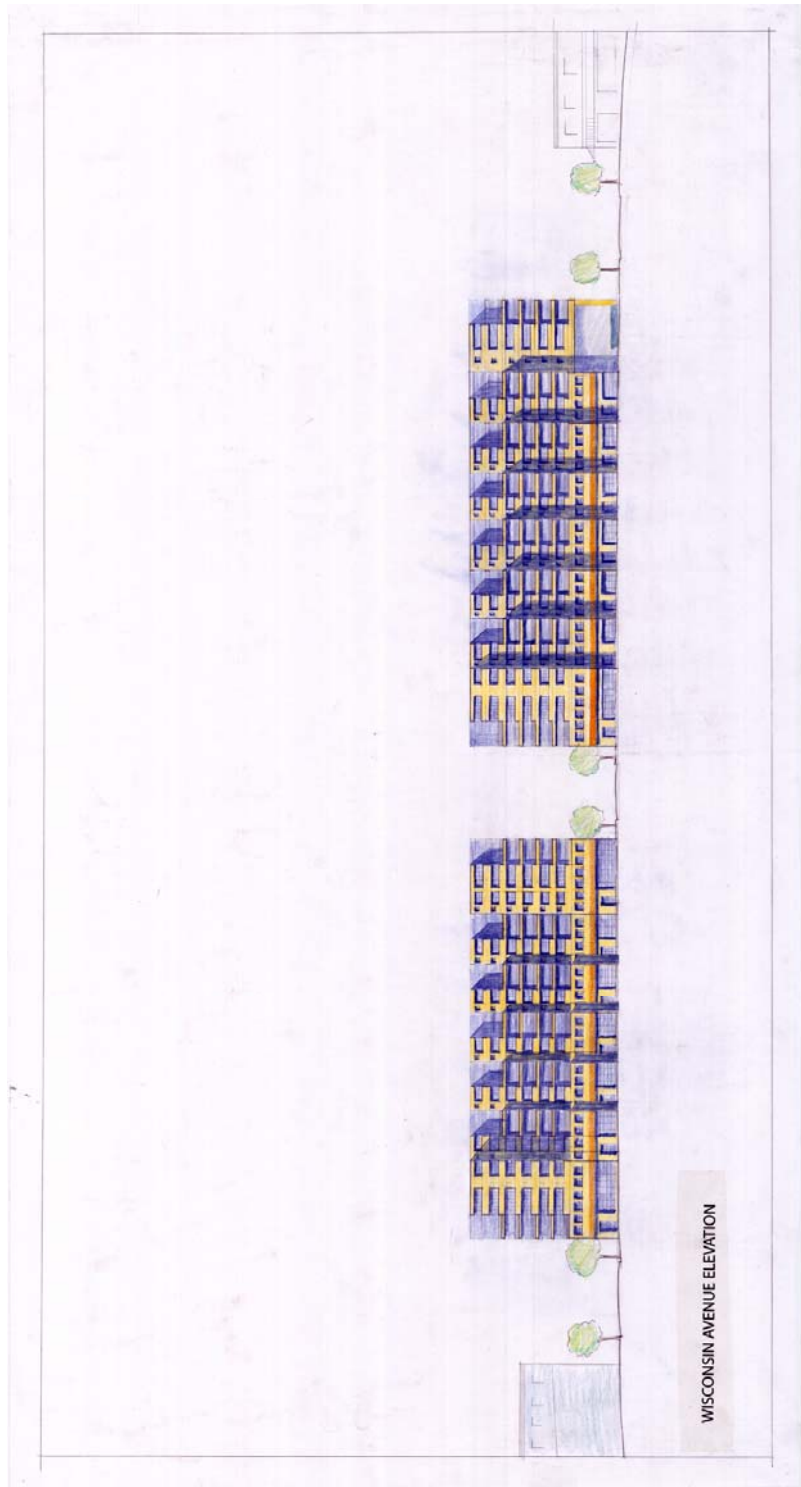
**Figure 95: West-East Section**—showing the raised courtyard and stepped down roof garden on the East.



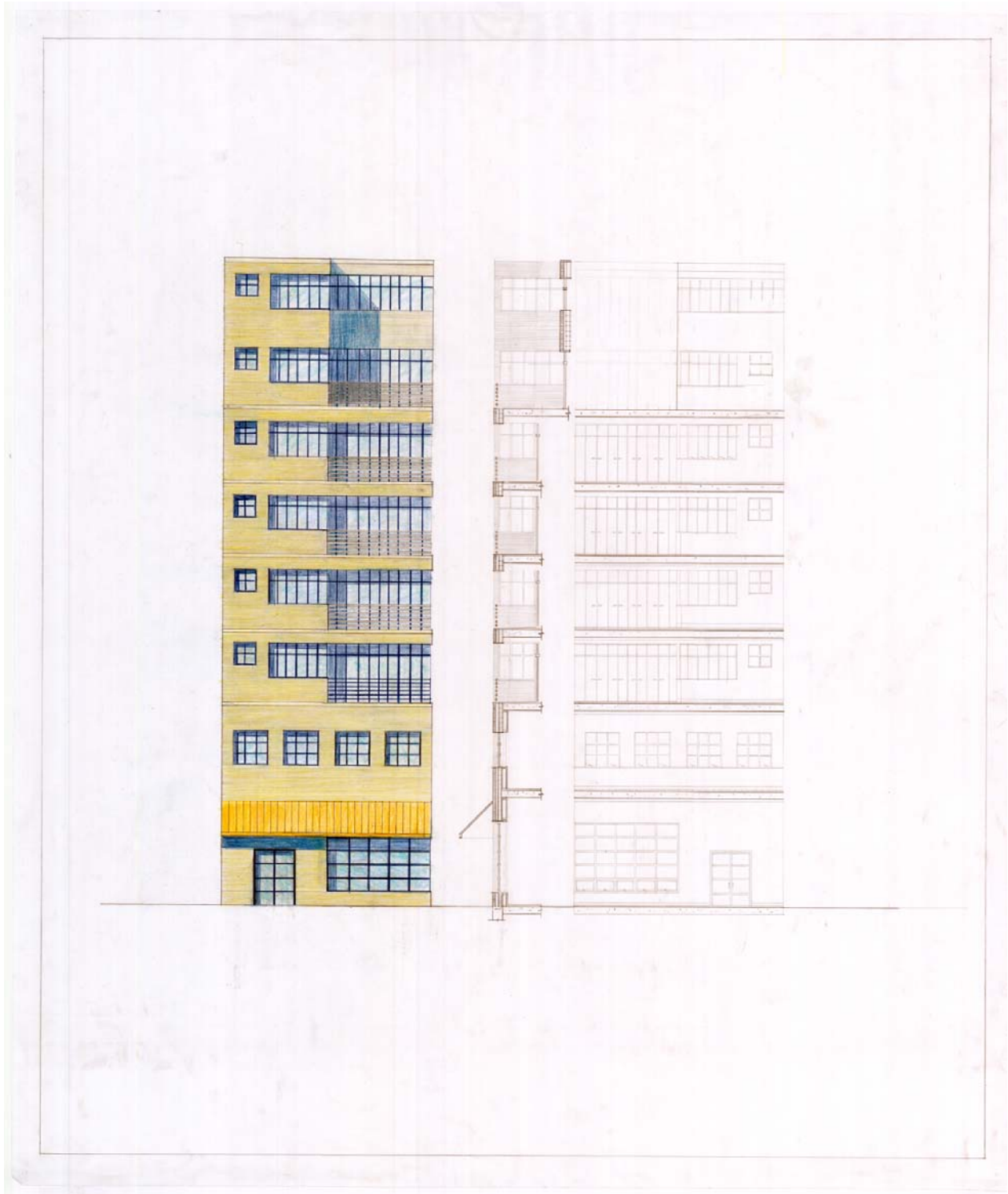
**Figure 96: North-South Section**—showing the continuous underground parking garage. Some important two-level spaces are seen, including the two major entrances to the housing flanking the new street, the space above the metro escalator and the grocery store loading dock



**Figure 97: Fort Reno Drive Elevation**—showing the lower five story elevation with stoops for the maisonnettes.



**Figure 98: Wisconsin Avenue Elevation**—showing the stepped elevations on Wisconsin Avenue. Note the deeper shadows on the South building which is placed on a steeper diagonal in plan. The terraces for the duplexes on the fifth and sixth floor are also evident.



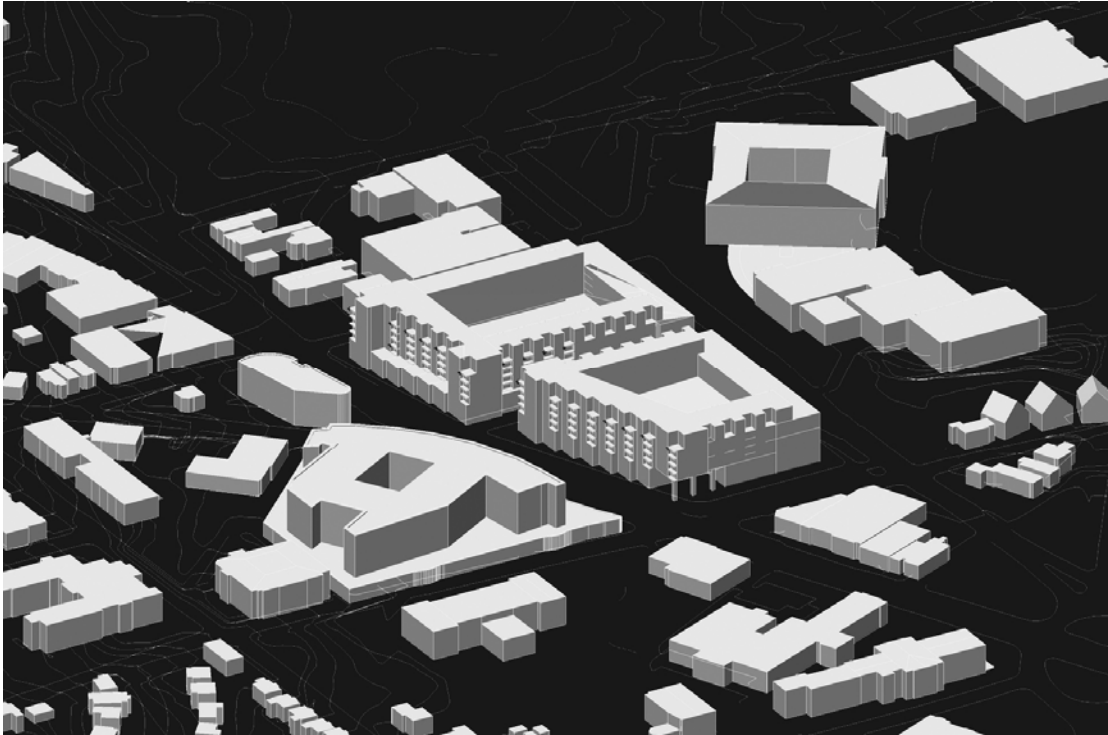
**Figure 99: Single Bay Elevation on Wisconsin Avenue**—showing the stretch windows which wrap around the corner of each stepped bay. The difference between balconies and terrace is underscored.



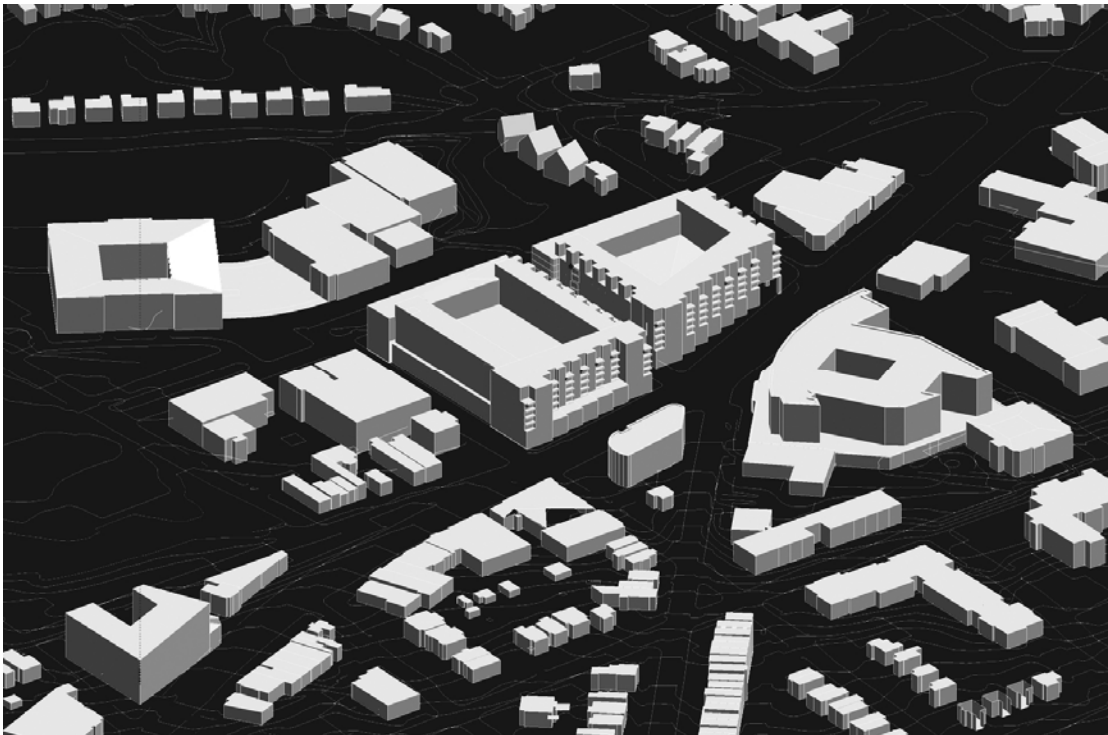
**Figure 100: Perspective of Fort Reno Drive**



**Figure 101: Wisconsin Avenue Montage**



**Figure 102: Three Dimensional Massing Study**



**Figure 103: Three Dimensional Massing Study**

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University of Maryland School of Architecture, Planning and Preservation

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