subURBAN
redefining urban residential

Steven Bugge
Spring 2011
Graduate Design Thesis
Professor Bakr Aly Ahmed

How can the essence of suburban life be captured in an urban mid-rise structure?

ABSTRACT

Suburbia is being called home to an increasing number of people living in Western societies. In the United States, more people live in the suburbs than the cities they surround, and 75% of all new construction is taking place in the suburbs, yet only 5% of these buildings are designed by architects ("The challenge of Suburbia," 2004). The effects of suburbia's stretch across the land has had a drastic affect on American society. Culturally, physically, and psychologically, the American people have developed a way of life that has become detrimental to themselves and their environment. Urban sprawl, also known as suburban sprawl or simply sprawl, has been correlated with increased energy use, pollution, traffic congestion, and oil dependency, as well as a decline in community distinctiveness and cohesiveness (Urban sprawl, 2010). In addition, urban sprawl has been linked to the increase of obesity in America and the destruction of wilderness and rural land on the fringe of the urban/ suburban borders. Yet, the people of America have lived this way for more than fifty years and many are blind to the implications that the suburban lifestyle has cost. Because the majority of American citizens are living in the suburbs, as architects and urban designers it is our duty to present a new and viable housing option to the public.

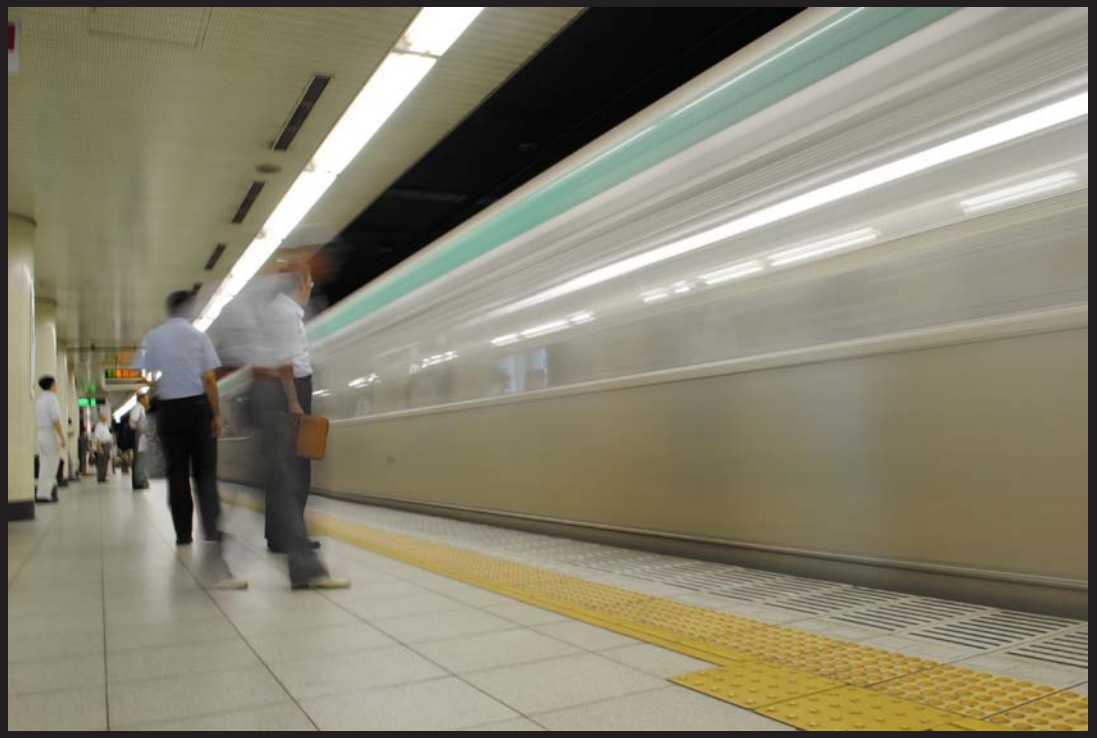
TYPOLOGY

Mixed Use Mid-Rise Structure -
20 Dwellings
Convenience Store
Private Parking
Bus Stop
Public and Private Green Spaces

Inspiration

Japan Trip 2010


浅草
SMILE




京阪電車 中之島駅
KEIHAN
Keihan Railway Nakanoshima Station


2000 miles
2500 km
© 2010 Microsoft Corporation Image courtesy of NASA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How can architecture aid in mitigating the effects of urban sprawl?

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TYPOLOGY

Mixed Use Community Development -
20 Dwellings
Grocery Store
Retail / Restaurant
Private Parking
Train Station
Bus Stop
Public and Private Green Spaces


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C
B
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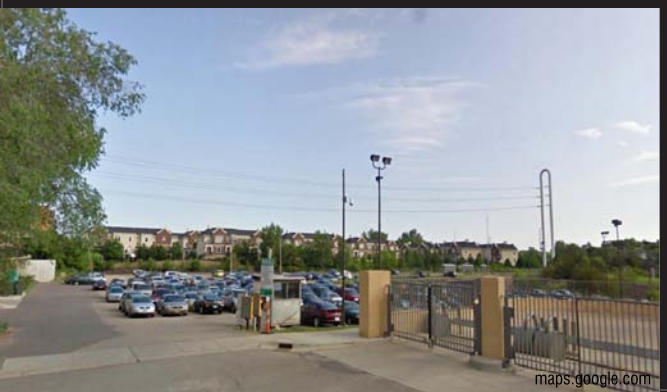
A


maps.google.com

B


maps.google.com

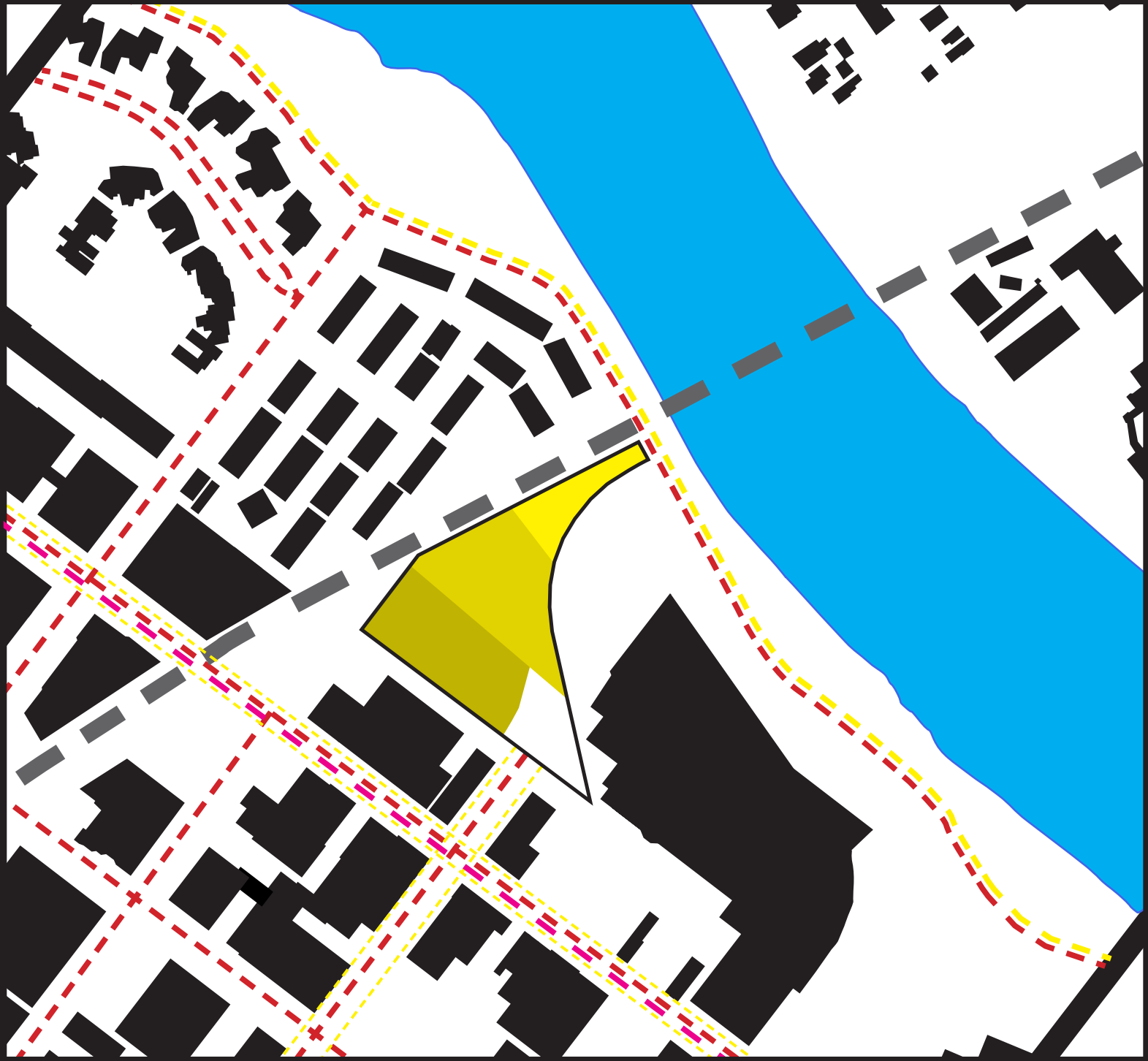
C


maps.google.com

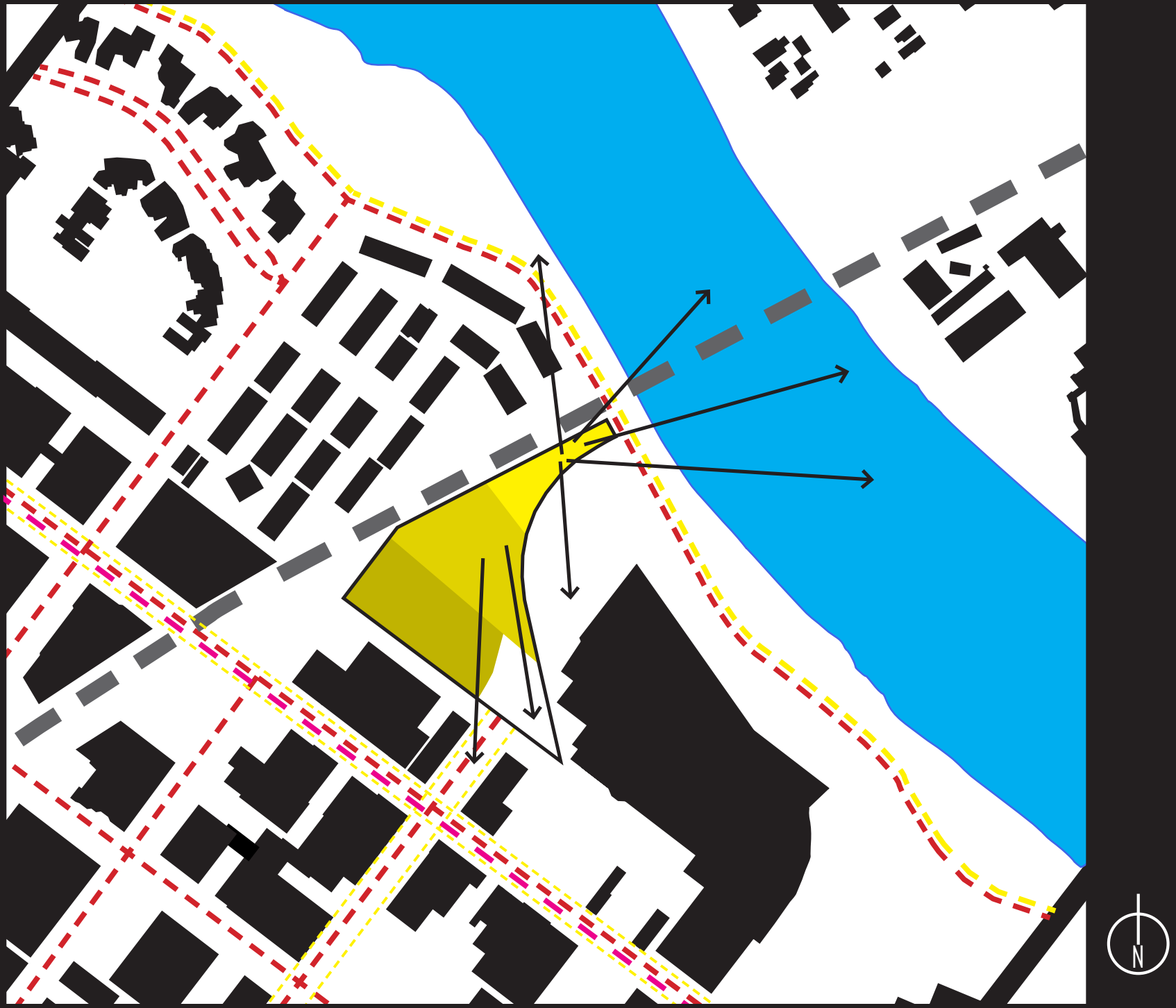
Figure / Ground

Vehicular Traffic Pedestrian Traffic 888 Rail Line 7 Bus Line

Sun Exposure: **HIGHEST** **HIGH** **MODERATE**



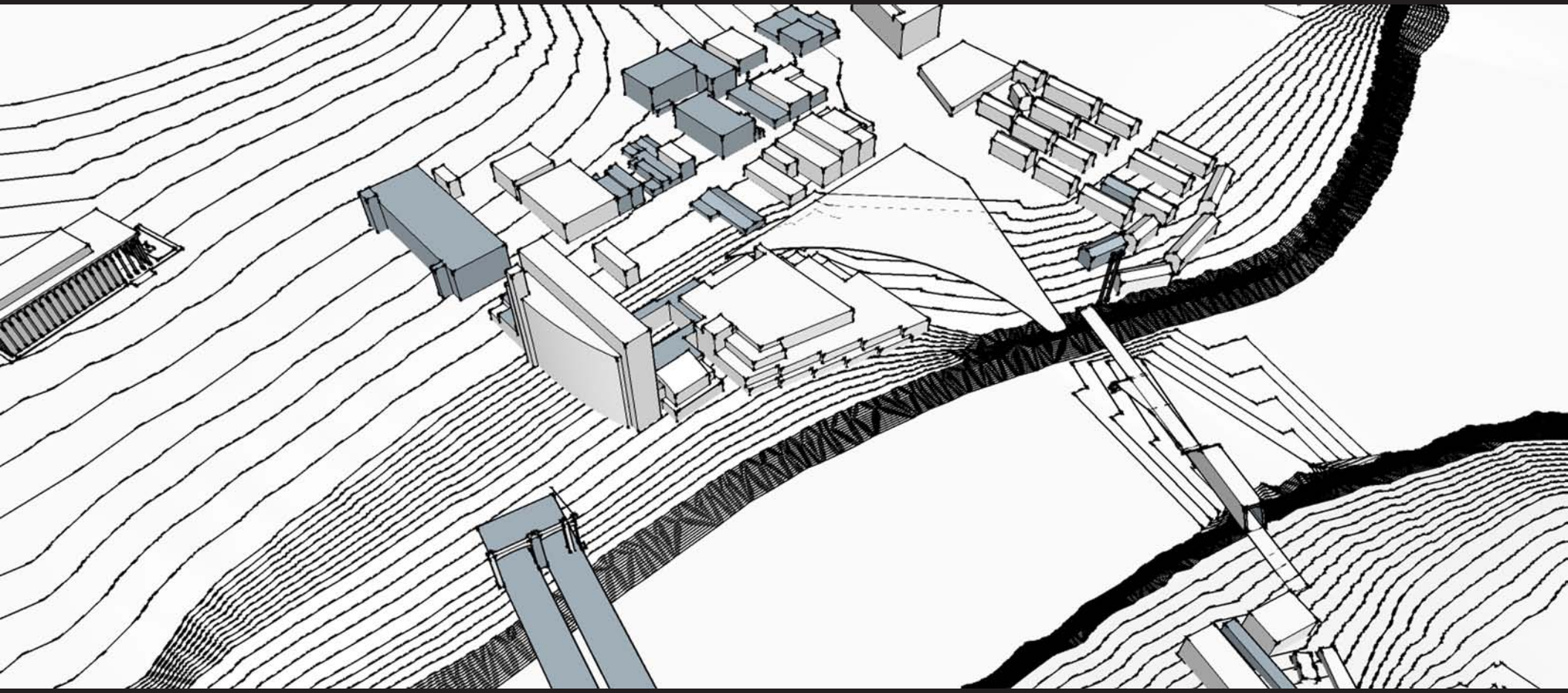
Best Views Out

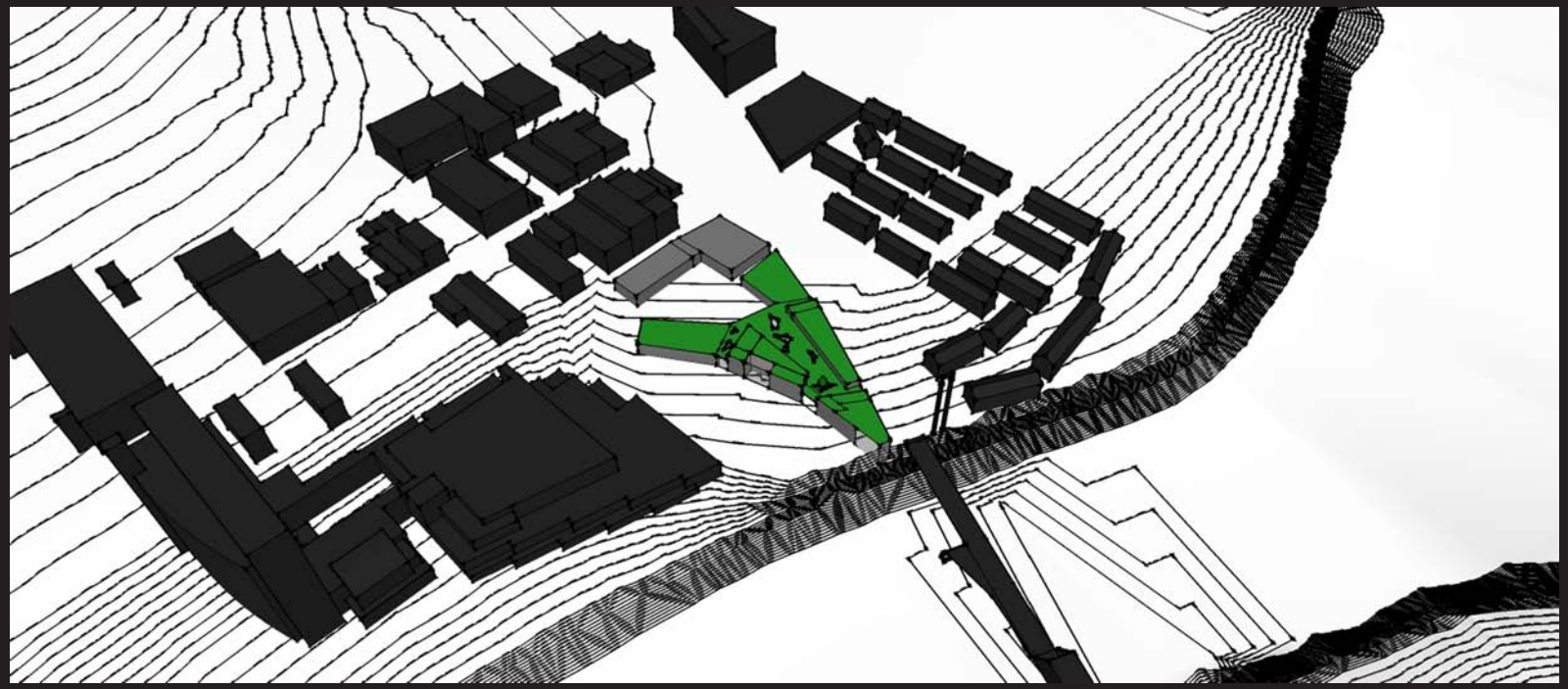


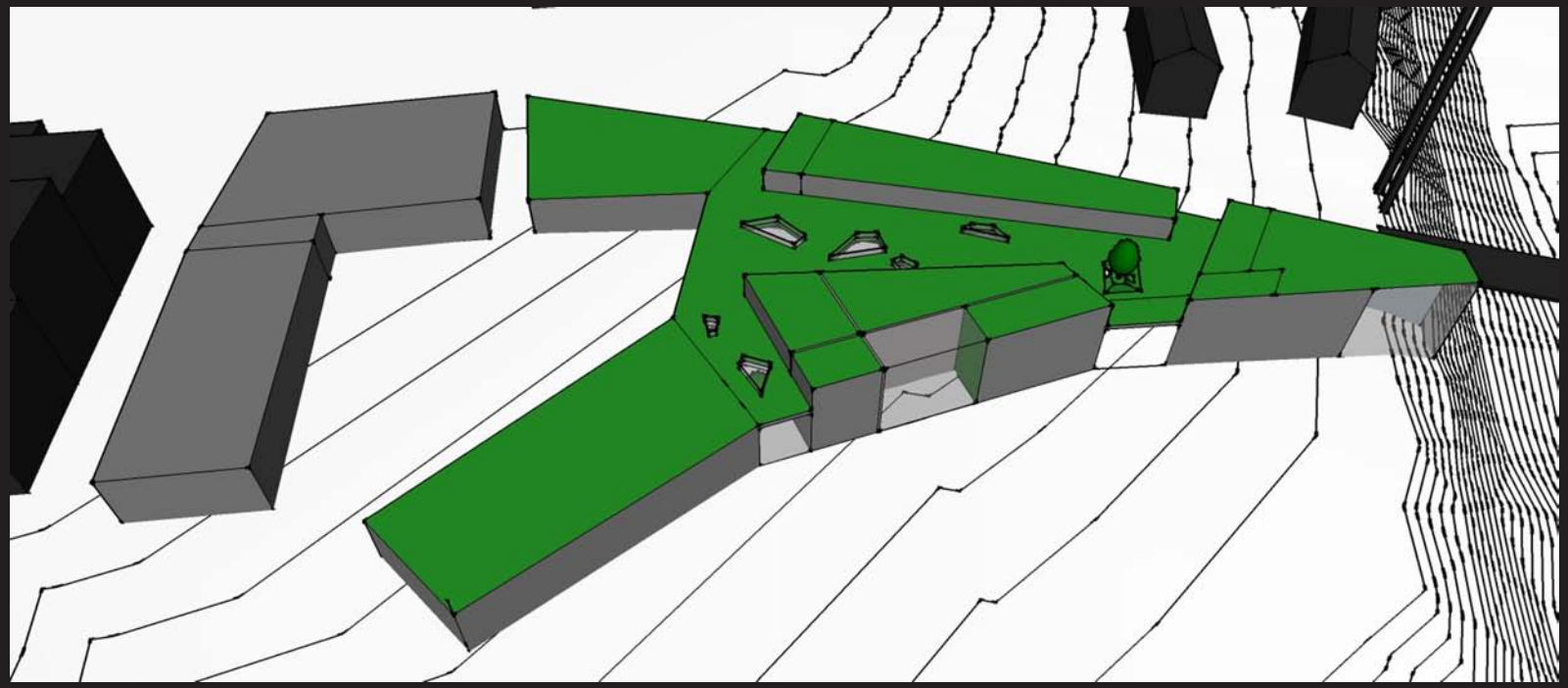
Design Phase

"... to provide continuity - not only inside each particular building but in the exterior spaces as well as interior - is the most important thing in the design of collective housing."

Manabu Chiba







PROGRAM

DWELLINGS (A)

4 Bedroom (2 x 2,400 ft²)	4,800 ft²
3 Bedroom (5 x 2,050 ft²)	10,250 ft²
2 Bedroom (5 x 1,700 ft²)	8,500 ft²
1 Bedroom (4 x 1,350 ft²)	5,400 ft²
Studio (4 x 1,000 ft²)	4,000 ft²
	32,950 ft²

RETAIL SPACE (B)

3 x 10,000 ft²	30,000 ft²

GREEN SPACES (C)

Private (20 x 1,000 ft²)	20,000 ft²
Semi-Private (4 x 10,000 ft²)	40,000 ft²
	60,000 ft²

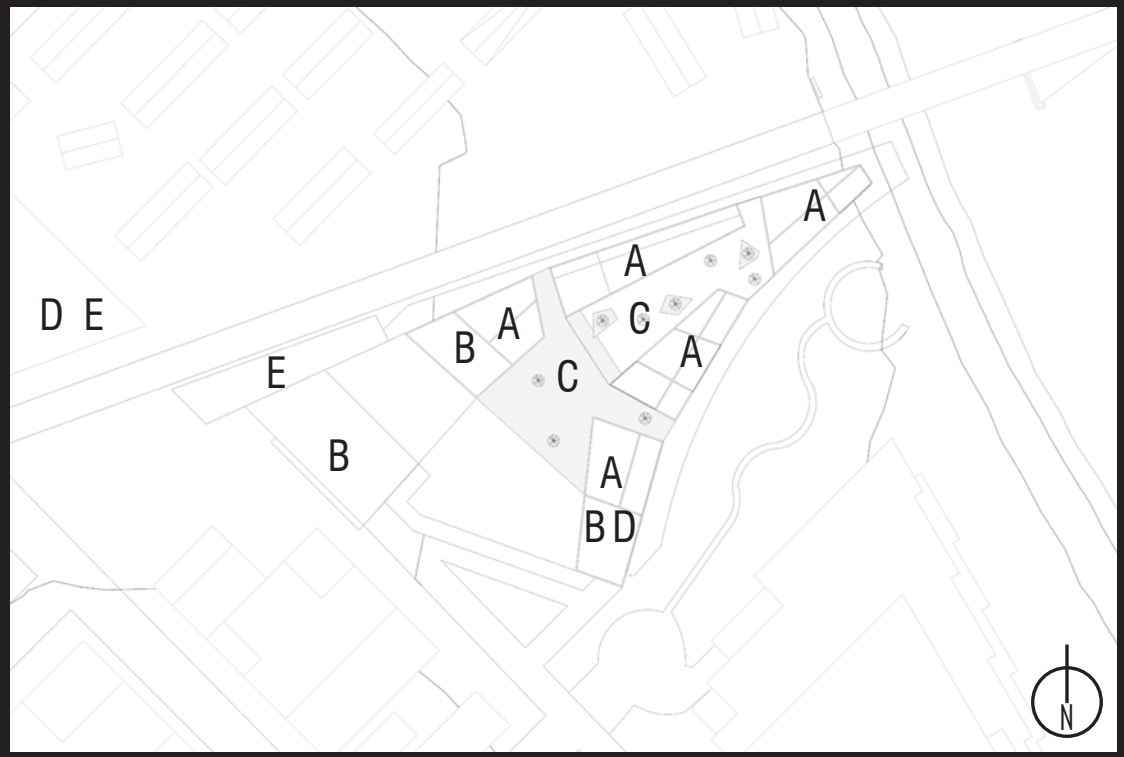
PARKING (D)

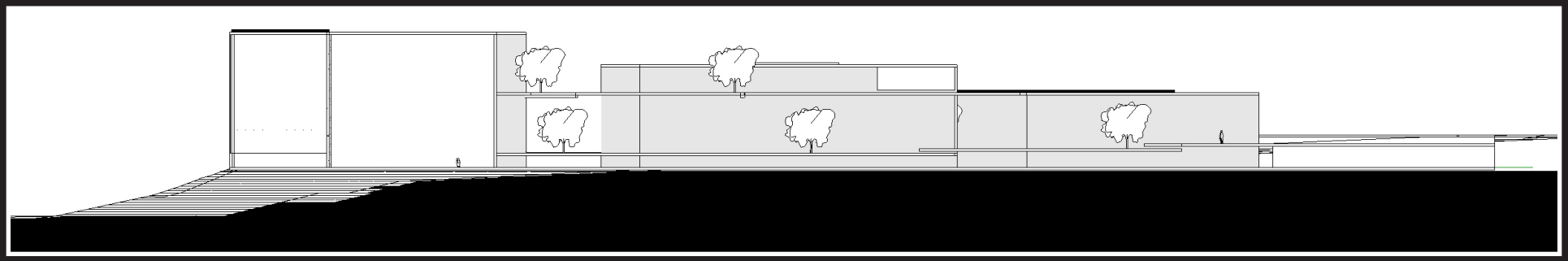
Private (20 x 200 ft²)	4,000 ft²
1 x 20,000 ft²	20,000 ft²
	24,000 ft²

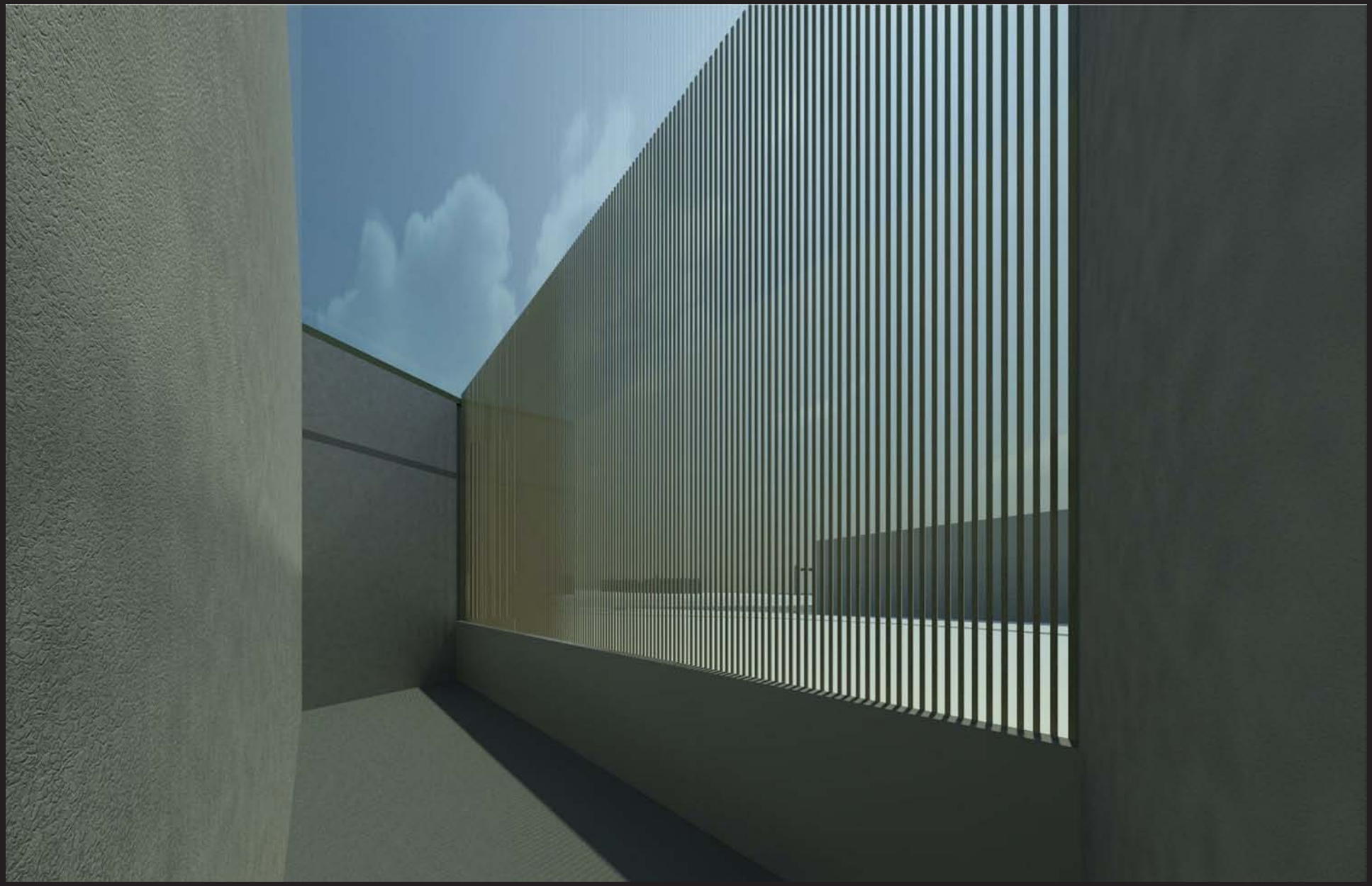
TRAIN TERMINAL (E)

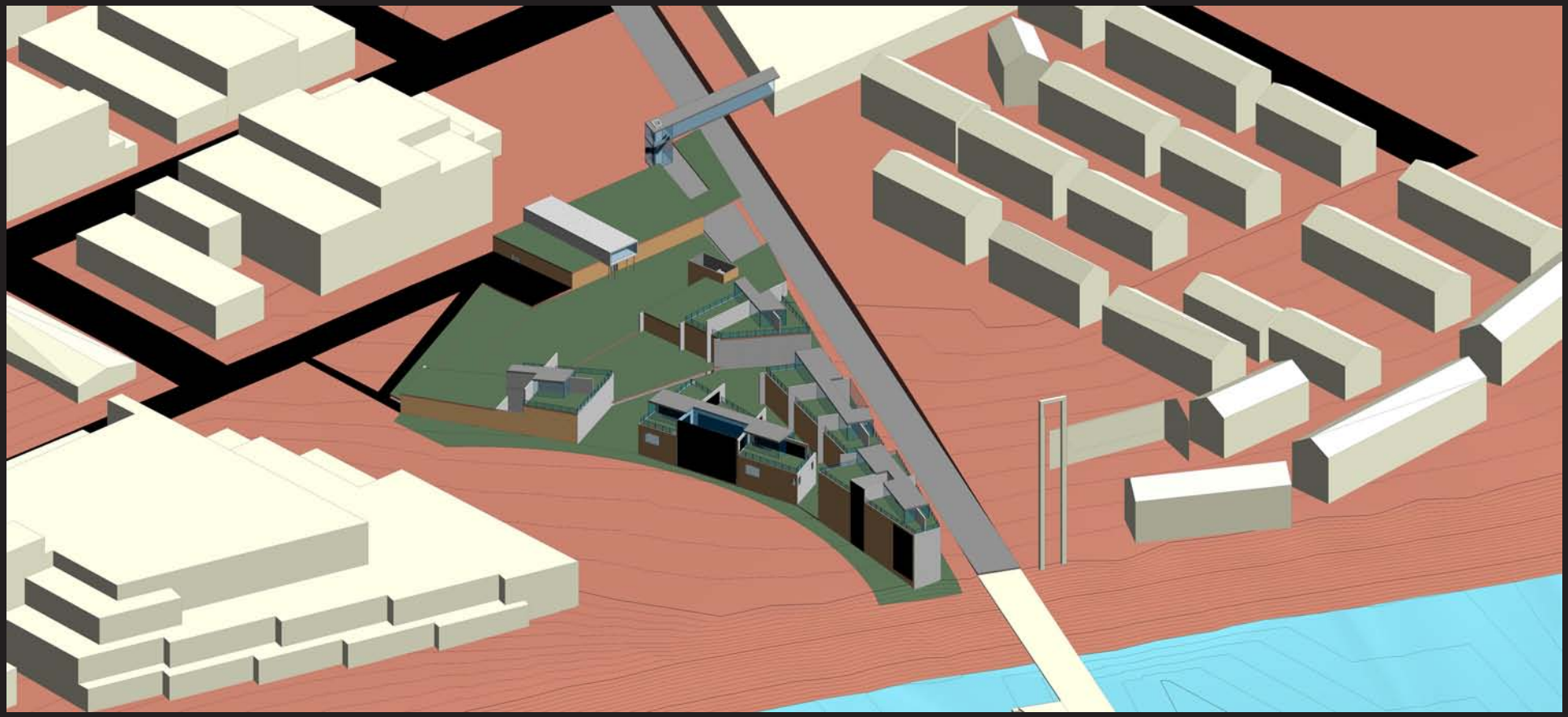
2 x 15,000 ft²	30,000 ft²

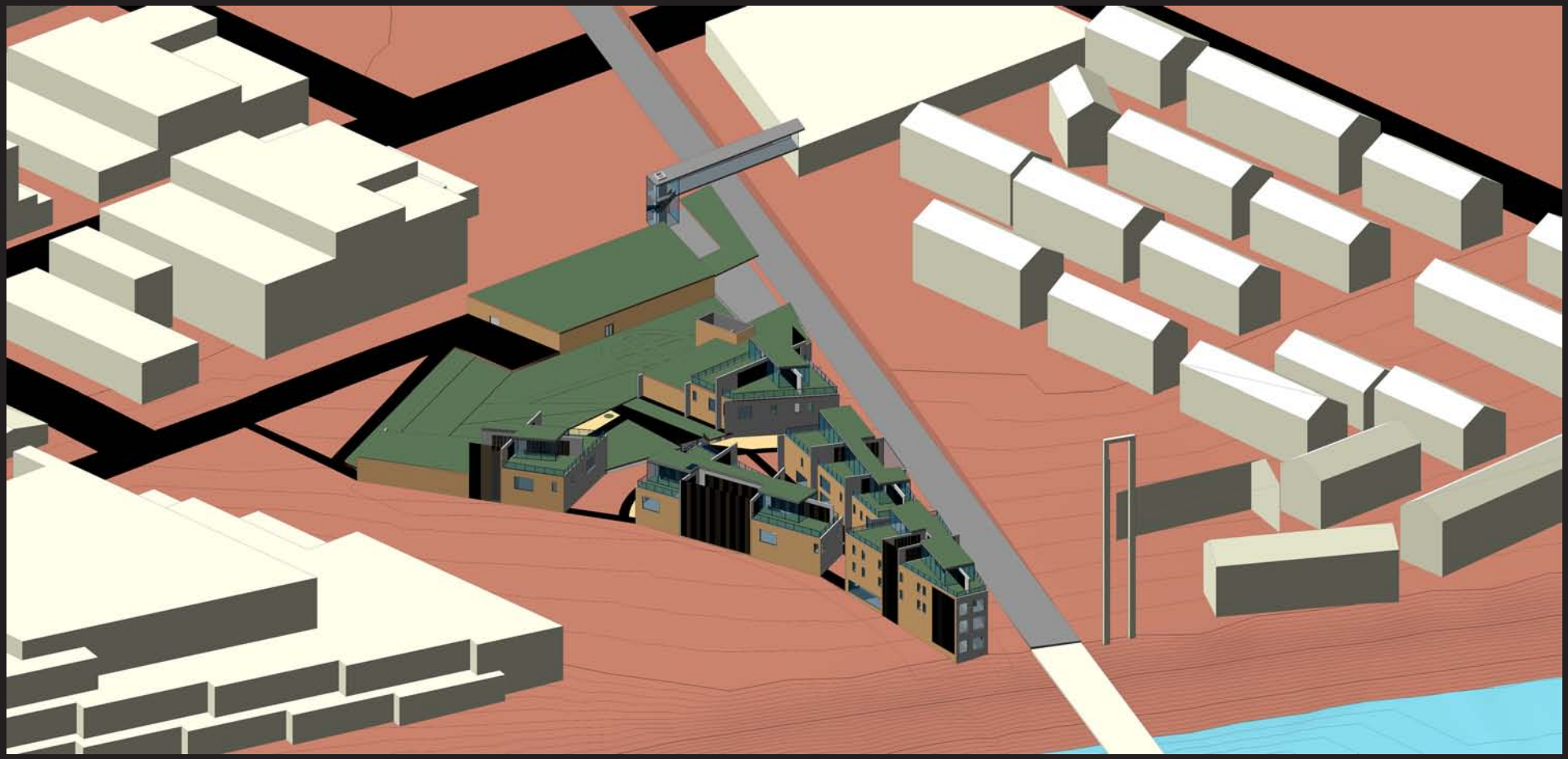
TOTAL..... 176,950 ft²











PROGRAM

DWELLINGS (1)

4 Bedroom- A -(2 x 2,400 ft^2).....	4,800 ft^2
3 Bedroom- B -(5 x 2,050 ft^2).....	10,250 ft^2
2 Bedroom- C -(5 x 1,700 ft^2).....	8,500 ft^2
1 Bedroom- D -(4 x 1,350 ft^2).....	5,400 ft^2
Studio- E -(4 x >1,000 ft^2).....	4,000 ft^2
	32,950 ft^2

RETAIL SPACE (2)

3 x 10,000 ft^2.....	30,000 ft^2

GREEN SPACES (3)

Private (20 x 1,000 ft^2).....	20,000 ft^2
Public Park (1 x 40,000 ft^2).....	40,000 ft^2
	60,000 ft^2

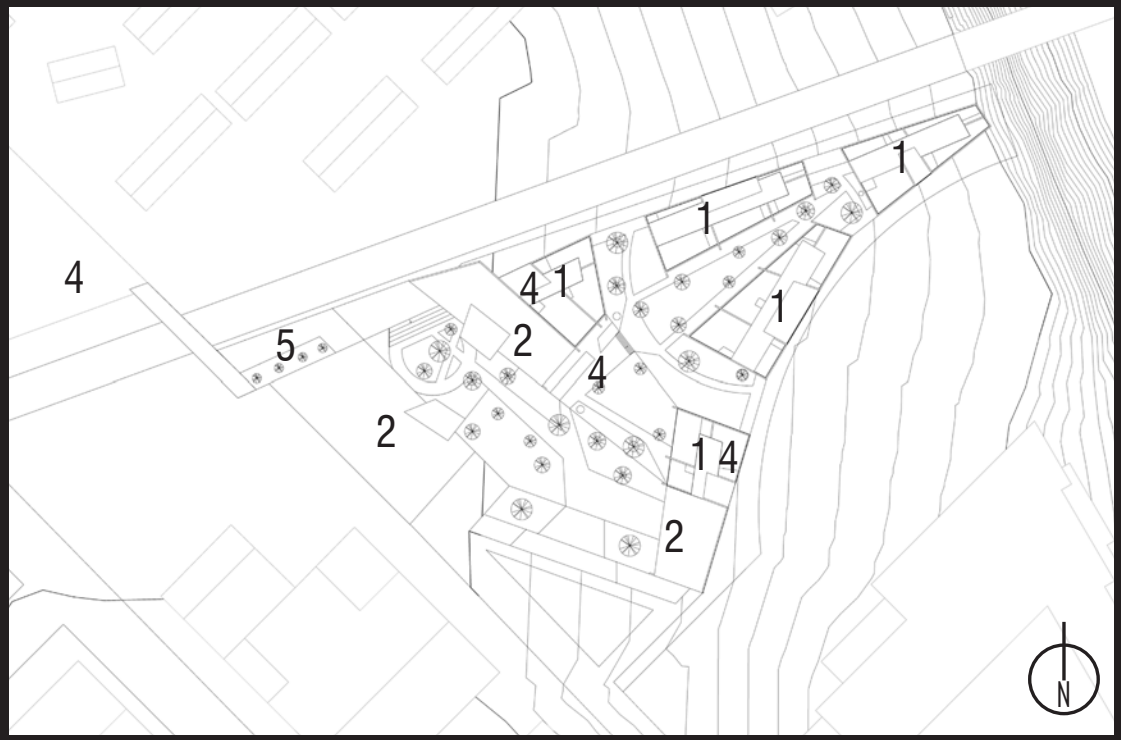
PARKING (4)

2 x 20,000 ft^2.....	40,000 ft^2

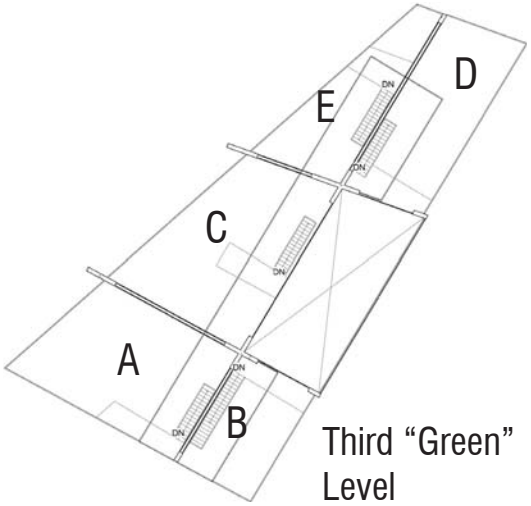
TRAIN TERMINAL (5)

1 x 10,000 ft^2.....	10,000 ft^2

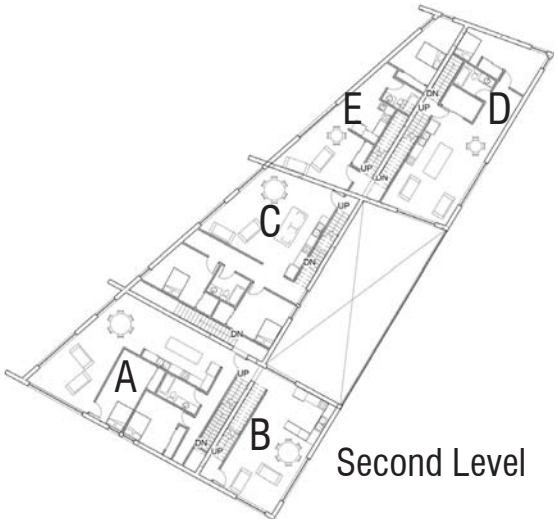
TOTAL.....	**172,950 ft^2**



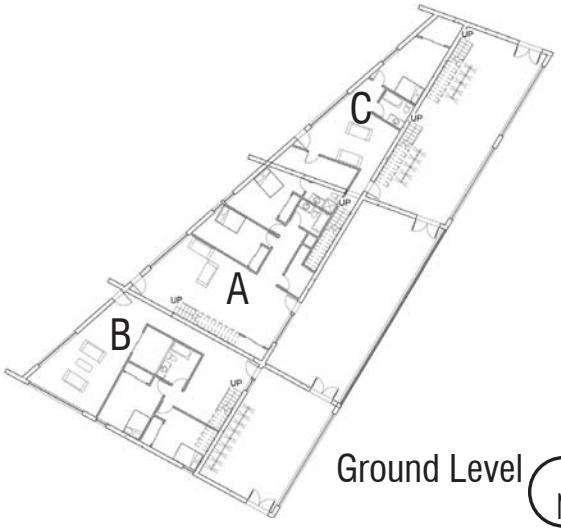
Sample Unit Breakdown: Unit Four



Third "Green" Level



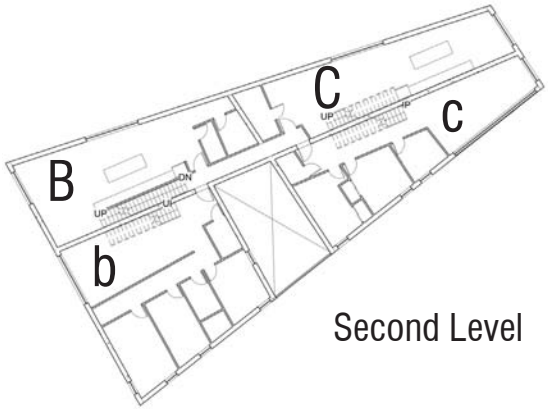
Second Level



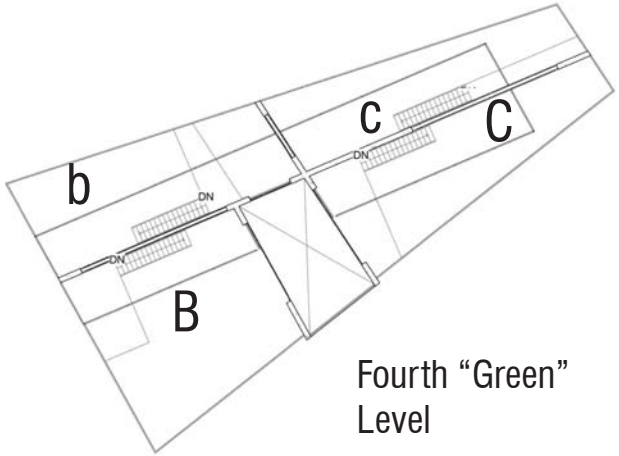
Ground Level

N

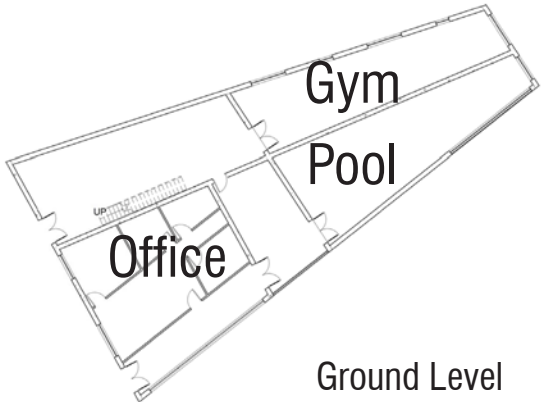
Sample Unit Floor Plans: Unit Three



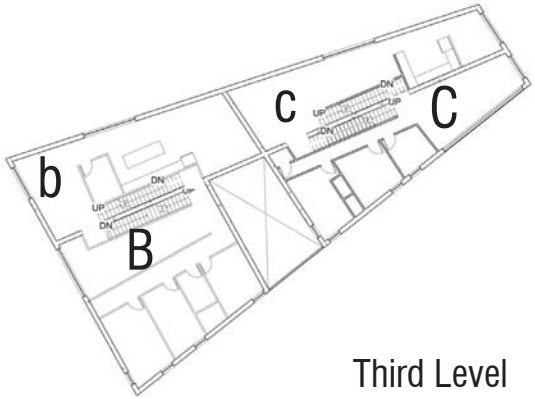
Second Level



Fourth “Green” Level



Ground Level



Third Level