

**Kidz in the Hood:**  
Designing Child-Friendly Neighbourhoods

by

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in partial fulfillment of the requirements for the degree of

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## **ABSTRACT**

This thesis investigates urban housing design and reform from the point of view of the daily life of children. More specifically, this thesis critically examines the appropriateness of the residential high-rise as a housing type for families with children in North America – particularly families of limited means – and explores strategies for amending existing suburban high-rise neighbourhoods, with the wellbeing of children in mind.

Drawing on a variety of examples and lessons learned, the design portion of this thesis addresses Toronto's Rexdale neighbourhood by examining different ways tower complexes might be modified to create safer, healthier and more vibrant places for children.

For a variety of reasons, high-rise rental housing has been subject to residualization. As they age, even towers built by the private sector for the middle class have been increasingly directed to poorer families with children. In Toronto, these towers comprise the bulk of the affordable housing stock, resulting in notorious suburban ghettos like the city's Jane and Finch neighbourhood. As such the problem of “kidz in the hood” is still very much with us – as much the legacy of reform as that of neglect.

## **ACKNOWLEDGEMENTS**

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## DEFINING KEY TERMS

**apartment tower** residential high-rise buildings of twelve-storeys and over.<sup>1</sup>

**child** describing the age range, generally between birth and 14 years of age. During this age range their safety and well-being are more dependent on constant supervision and safeguarding.

**child-friendly** describing where young people feel safe, secure, honoured, nurtured, and valued.

**eyes on the street** street and neighbourhood design in which residents are able to properly view the street and the street is sufficiently busy to support this.<sup>2</sup>

**family** “a social group, an institution, and an intergenerational group of individuals related by blood, adoption, or marriage/cohabitation.”<sup>3</sup>

**low-income area** defined as such when at least on in five households falls below the poverty line.<sup>4</sup>

**mixed-demographic neighbourhood** area in which there is a range of cultures, education, income, disabilities, mobility, home ownership, employment status, etc.

**mixed-use neighbourhood** area consisting of some combination of multiple functions such as commercial, residential, office, recreational, etc.

**residualization** process by which the least desirable housing falls to those least able to afford it.

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#### NOTES

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## **INTRODUCTION**

Concern for the welfare of children has long been the focus of urban reform movements – related to the notion that civilized societies have an obligation to protect their most vulnerable members. The well-being of children caught within increasingly crowded, dirty and disease-ridden industrialized cities was a key concern of socially minded architects and urban reformers in the late 19th century. In London and New York – the world’s largest cities at the time – reformers struggled to find alternatives to the limited and increasingly distressed stock of housing available to families of modest means. Moderate to low-income families with children have –and will continue to have – the most difficulty finding housing as they have both the fewest resources and the greatest needs with respect to space and security.

This thesis investigates urban housing design and reform from the point of view of the daily life of children. It looks at how housing reform led to the use of the high-rise apartment tower for families and its appropriateness in this position.

In the process of seeking an alternative to the industrialized late 19th century city, both in London and New York,

philanthropic organizations took the lead. To address affordability while augmenting quality, these philanthropic organizations advocated the construction of housing at the scale of the block. In addition to advantages of economies of scale, building out entire blocks at the same time enabled designers to incorporate secure, mid-block spaces in which children could play.

Reformers universally acknowledged that meaningful change required a rethinking of the form of the city, not just the form of individual buildings. The thesis looks at three approaches in particular: philanthropic housing in the late 19th century, the garden apartment type epitomized by Stein and Wright's Sunnyside Gardens, and the widely spaced high-rise blocks proposed by Le Corbusier and Walter Gropius in the 1920s. In different ways each of these models turned away from the street and embraced what became known as the "superblock." Among the arguments for closing streets and/or enclosing play spaces in the centre of blocks was the need to create continuous spaces for children – a kind of collective back yard for the families living in adjacent units.

In hindsight many of these new approaches to urban housing proved as problematic as the tenements and row housing they were designed to replace (albeit for different reasons). In particular, the modernist "tower in the park" approach

was particularly ill suited to low-income families – especially given the terms of reference under which many housing towers were forced to operate. By the late 20th century the focus of urban reform had shifted from a rejection of the street to a denunciation of the superblock – and the high-rise housing that frequently occasioned it.

This thesis primarily draws from and agrees with the theories of critics like Jane Jacobs and Oscar Newman. They persuasively demonstrated that modernist strategies not only did not create stimulating and secure environments for children, but frequently aggravated anti-social behaviour. Not only did housing authorities stop building tower complexes by the 1970s, but most stopped building housing altogether. That said, a significant amount of the high-rise housing constructed in the post-war period has remained in operation, frequently as affordable housing for households with children.

Having reviewed the legacy of housing reform in the 20th century, the thesis turns to contemporary issues, namely how best to deal with the aging post-war high-rise housing stock. Much of this housing is in need of major life-cycle reinvestment, raising the difficult choice of whether to replace it or to retrofit it in order to keep it in operation for another 40 years.

Based on the literature reviewed through this thesis I have gained a better knowledge of what constitutes family-friendly housing. Families should live close to the ground plane, internal common spaces should be avoided, all units should have direct access to proprietary outdoor spaces which – along with other exterior spaces – should be monitored informally by those living and working around them. Where low-income families are concerned the neighbourhood should include a demographic mix of households, a mix of uses and be well connected to public transit and with surrounding communities.

The site used for the design investigation portion of this thesis, part of the Etobicoke neighbourhood of Rexdale, was selected due to its location in a troubled neighbourhood, its overall density, and the fact that it demonstrates many of the negative characteristics associated with aging modernist apartment tower neighbourhoods. The area around the site is also characteristic of many of the apartment neighbourhoods throughout the Greater Toronto Area, being along a natural green system as well as abutting low-rise single family housing.

Using the ensemble of post-war towers present on the site, the design portion of the thesis explores a number of

the challenges at play. Again, the focus is on whether and, if so, how best to retrofit and reconfigure the complex to accommodate the majority demographic it serves, namely lower-income families with children.

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### **Note on Methodology**

The idea for this thesis began with a general interest in the development of child-friendly neighbourhoods. I began by doing a literature review of the history of neighbourhood development, slowly gaining knowledge and an understanding of the limitations and scope of such a project.

Although I initially began my research focusing more on sociological aspects of a neighbourhood, I decided to move more within the confines of the built environment. While I do acknowledge that social aspects play a big role in the validity of a design and its success, this thesis looks strictly at how architects and designers altered built environments to be child-friendly. Focusing on the physical to the exclusion of sociological aspects limits the likelihood of comprehensive solutions and results. At the same time, however, it narrowed the project scope, making it more manageable and comprehensible on its own terms.

# THE RISE 1

In great part, Modernism rose in response to the industrialized city of the late nineteenth century. Rapid growth coupled with casual labour, created overcrowded living conditions, spawning disease and crime. The effects of such conditions were especially troubling where children were involved.

In 1893, Andrew Mearns, a congregational minister published a pennysaver pamphlet entitled "The Bitter Cry of Outcast London." Mearns wrote to inform the privileged classes of the horrid state of affairs in the slums. He described black, grimy walls, broken windows filled with rags, and scarce furnishings. He told of overcrowded rooms and of neglected children eating off of floors.<sup>1</sup> Mearns described the plight of the poor in such a way as to motivate people to action. The pamphlet led to the appointment of the Royal Commission of the Working Classes in 1884, which pursued social legislation.<sup>2</sup>

For Mearns the root of the problem was that those living in these squalid conditions were too overwhelmingly poor, with no real means to better their lot.<sup>3</sup> The majority were casual labourers forced to live in slums in order to have a chance at earning an honest living. Others, including children, were matchbook makers and trouser-menders, earning very little for long, arduous hours of work.<sup>4</sup> Mearns believed that the majority of the people living in these conditions were moral and decent human beings, and that nothing short of State intervention could effect any meaningful change.<sup>5</sup>

Philanthropic organizations in both London and New York attempted to step in, creating new models of housing to accommodate the poor. By-laws in London required that all speculative housing be built as terraces of attached, single-family dwellings, each with a small back garden. This was to prevent the construction of back-to-back row housing that was dark and airless. In New York, philanthropists built apartment buildings configured around courtyards. Replacing slums with lower density housing, however, exacerbated housing shortages, shifting problems to nearby neighbourhoods. Philanthropic housing was unpopular due to its severity and the cumbersome regulations to which residents were subjected. With rents too high for most slum dwellers, this housing brought only short improvements, leaving some areas worse off than before. The average tenant had less room than was mandated for prisoners, and mortality rates were extremely high, especially for children.<sup>6</sup>

Similar fears of urban immorality abounded in late nineteenth century America. Many believed that the poverty, crime, socialism, corruption and waves of immigrants, associated with the city, threatened the very existence of American democracy.<sup>7</sup> Through 1900, prominent people, journals, and newspapers wrote about the low moral quality of immigrants and the alarmingly high death rates of over fifty-seven percent.<sup>8</sup> Philanthropic reformers in New York reacted in a similar way to their London counterparts. As a result of the 1900 Tenement House Commission, legislation was passed in 1901 outlawing the construction of what became known as Old-Law or dumbbell tenements.

Philanthropic projects in New York were few in number compared with the huge number of tenements constructed in the second half of the nineteenth century. Socially minded architects drew upon innovative aspects of London projects, such

as those of Peabody Trust and Waterlow, incorporating things like gallery access stairs, as well as combining stairs and water closets in rear extensions. These new constructions were generally more thought-out and socially-conscious than their private sector counterparts.<sup>9</sup>

The streets of both London and New York became less and less safe as places for children to play. Among the issues were increases in traffic resulting in a rapid rise in the number of horses in the city, which produced hundreds of tons of dung each day. A key strategy in the search for alternate places for children to live and play was to develop housing by the block rather than lot-by-lot as most speculative builders did. Building out entire blocks at the same time enabled reformers to incorporate large, communal mid-block spaces where children would be sheltered from the evils of the street. Such projects were constructed on the near periphery, on land being opened up by new transit lines. The advantages of block-by-block development included economies of scale and lower per-unit land costs, which allowed for the provision of a higher quality of affordable housing.

In 1877, philanthropist Alfred T. White commissioned William Fried to design the Home Buildings, a pair of six-storey structures containing forty families each. The designs borrowed heavily from the Waterlow housing in London, with open stairs, gallery access, and protruding wet areas. The plans of these buildings were luxurious compared to the standard New York tenements. The Tower Buildings, built adjacent to the Home Buildings in 1879, incorporated an internal courtyard that included a lawn, laundry drying racks, a gazebo and pathways.<sup>10</sup>

White's projects were among the first examples in New York in which communal

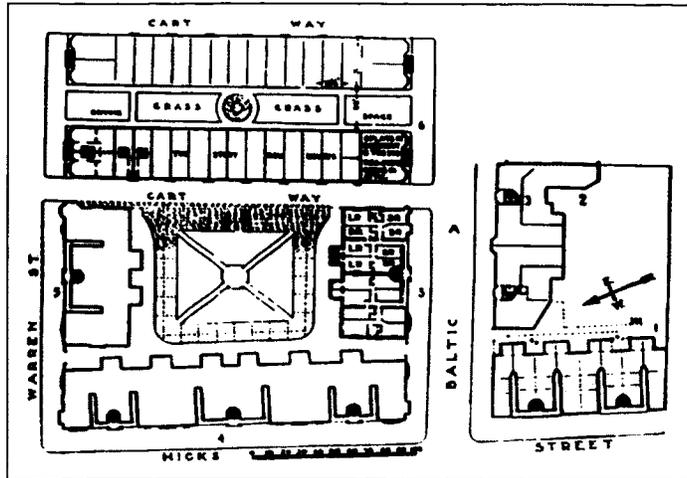


Figure 1  
White's Home Buildings (1 and 2)  
and Tower Buildings (3, 4, and 5)

outdoor space was provided for families of a modest income. It's important to note, however, that the families that benefitted from these innovations were not among the most needy. Philanthropy, largely created transitory housing for the future middle-class. Rather than elevating the poor, this housing provided a steppingstone for those already on their way up the rungs of society.<sup>11</sup>

In 1890, White built the Riverside Buildings, his last philanthropic project. It was a six-storey perimeter block building, using the same Waterlow-inspired plans as the earlier Tower Buildings. The plans weren't modified because White felt that the Tower Buildings had proven so successful that changing what was working didn't



Figure 2  
Internal garden of the Riverside  
Buildings (1890)

make any sense. The Riverside Buildings contained two hundred and eighty units in nineteen storeys. It also incorporated an internal courtyard that covered almost half of the site – an unprecedented semi-public space in which there were weekly music performances in the warmer months, trees, swings, sand areas, a gazebo and fountain. Spaces such as this were unheard of in pre-World War I philanthropic housing and rare in private developments. White's housing was a precursor to the “garden apartment” type that replaced tenement housing in the outer boroughs – especially during the 1920s.

Le Corbusier took a radically different approach to the issue of housing. He envisioned a perfect city built according to a very specific and organized set of rules and guidelines. Each individual function occupied its own sector, a necessity Le Corbusier believed would allow for speed and order. He believed that his “Ville Contemporaine” should be the blueprint for all cities built thereafter.<sup>12</sup>

Essentially, Modernists wanted to take dirty, grimy and thoroughly unhealthy industrialized cities and transform them into healthy, idealized places in which to live and raise children. They rejected everything the 19<sup>th</sup> century city stood for. Transforming the way cities were designed was approached in two ways: by opening the centre of the block and by redefining the scale of the block, creating larger blocks with a looser relationship between buildings and streets.

In both cases, advances in street rail, low fares and frequent service allowed less expensive land on the periphery to be purchased and developed several blocks at a time, as White had done in Brooklyn. The most characteristic multi-unit housing of the 1920s was shallow perimeter block buildings surrounding a landscaped interior

courtyard. Given White's success, and the perceived salubrious benefits of mid-block space, his model, became the standard template for multi-unit housing in the 1920s, having been endorsed by the New York State Reconstruction Authority.

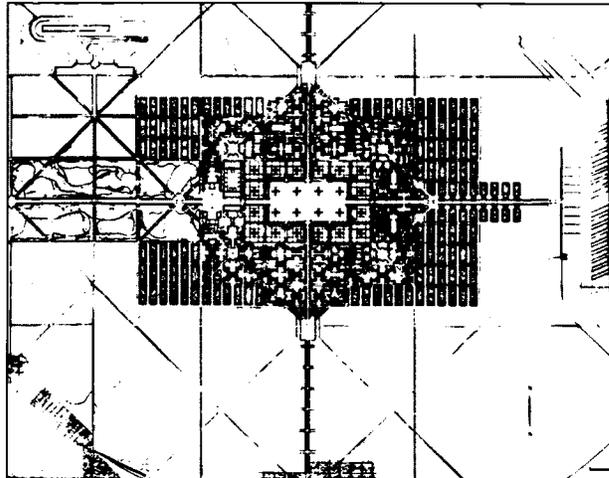


Figure 3  
The plan of Le Corbusier's  
ville Contemporaine

In the 1920s, Le Corbusier began to promote the idea of 'tower-in-the-park' urbanism. He expressed this vision through his publications regarding the Ville Contemporaine, a hypothesis of the modern city.<sup>13</sup> The city is comprised of regular geometry, tall towers, expansive green space, and a multi-level central circulation artery. Le Corbusier's main point, which he expressed through this utopian vision, was that high-density housing should exist hand-in-hand with abundant open space and fresh air.<sup>14</sup> His work was the complete antithesis of the traditional street-oriented city, which he deemed to be a threat to the health of society. Le Corbusier saw himself as an agent of universal change. He believed buildings should be raised on pilotis so as to accomodate uninterrupted greenery, which would give everyone access to

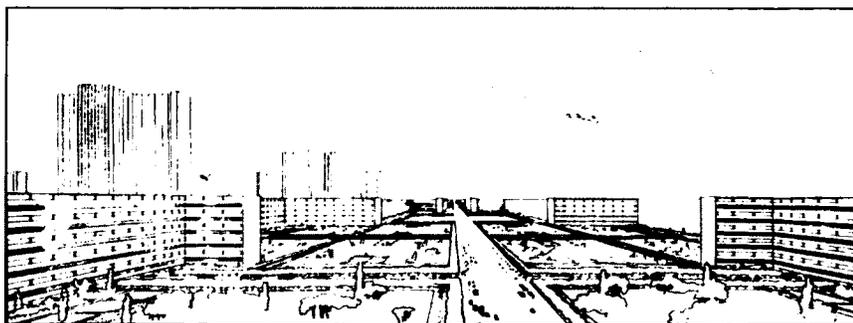


Figure 4  
ville Contemporaine  
Apartment Blocks

'nature'.<sup>15</sup> While Le Corbusier's ideas for the city remained fundamentally utopian, the idea of the tower in the park trickled down through the work of other International Style architects such as Walter Gropius. Gropius proposed long rectangular block buildings within a green setting based on extensive calculations to ensure that no building would cast a shadow on another.<sup>16</sup> This model of housing was much

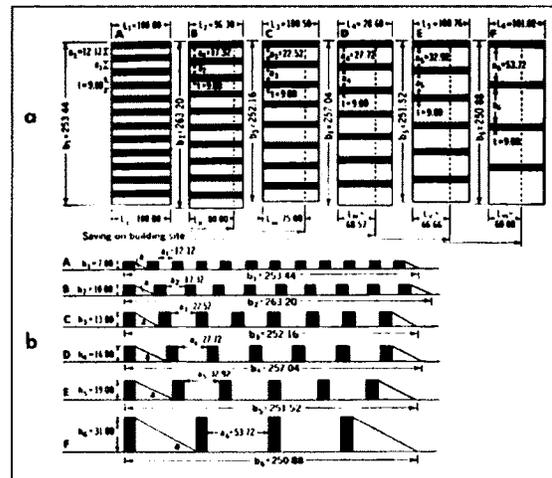


Figure 5  
Walter Gropius' 1931 study  
relating to building heights

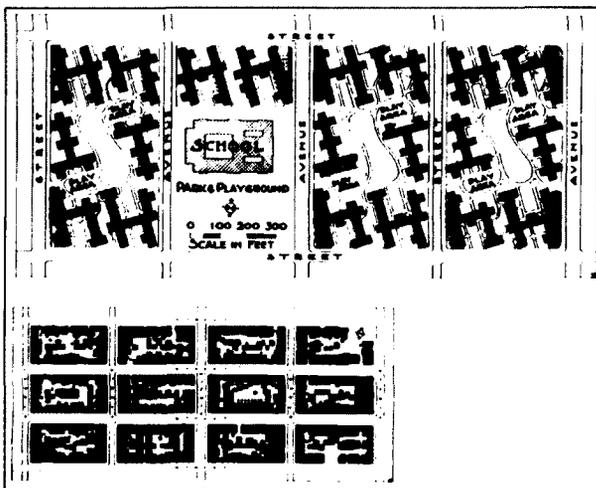
cheaper to build than perimeter block garden apartments. The International Style was introduced to North America in 1932 when the Museum of Modern Art exhibited works of CIAM (Congres International d'Architecture Moderne) architects.<sup>17</sup>

In 1925, Ernst May was invited to Frankfurt as city architect. In this post he gathered a group together to develop ideas to address housing shortages. The new models he produced were astonishing because, on top of being compact and semi-self-sufficient, he equipped them with things that contributed to family life and child development: playgrounds, schools, theatres and washing areas. Having spent time in England studying under Raymond Unwin, May's work was strongly influenced by the Garden City movement.<sup>18</sup> He eventually concluded that the pure concept was unrealizable and began creating satellite cities, separated from the city by a narrow greenbelt. May also broke away from the British tradition of garden cities by employing

modernist design principles. Although he concurred with the Modernist emphasis on green space and access to light and air, May had issues with Walter Gropius' predilection for high-rise housing slabs. He preferred simple, pre-fabricated concrete and brick low-rise three and four story buildings.<sup>19</sup>

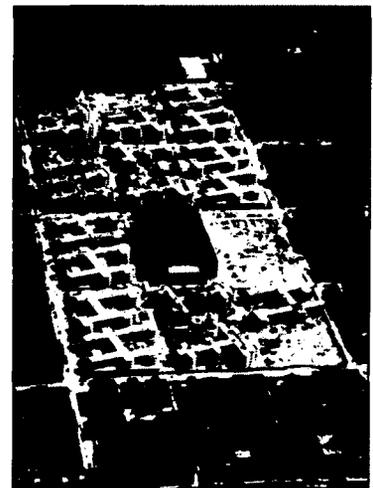
In 1933 the Public Works Administration (PWA) was created as a part of Roosevelt's New Deal. The PWA's housing division was given the opportunity to build public housing in cities. Among the PWA's earliest projects was the Williamsburg Houses in Brooklyn, completed in 1935. The project covered ten standard city blocks, for which inner streets were closed to create three 'superblocks.'<sup>20</sup> The buildings, which cover a third of the ground plane, are comprised of twenty H- and T-shaped buildings set at a 15° angle to the block. While the modernist approach, shape and placement of the buildings leaves them disconnected from their surroundings, the Williamsburg Houses were acclaimed in their time for being an oasis of open space with comfortable buildings amidst a blighted slum.<sup>21</sup>

In the 1920s Alexander Bing founded the Regional Planning Association of



**Figure 6 (left)**  
Final site plan for the Williamsburg Houses (above); Original Site before demolition (below)

**Figure 7 (right)**  
Aerial view of Williamsburg Houses in surrounding context



America (RPAA), with the goal of bringing the garden city to America.<sup>22</sup> The architects of the RPAA were Clarence Stein and Henry Wright, whose major contribution was

the plan for Radburn New Jersey, developed in 1928, Prior to Radburn, however, they completed a pilot project, namely, Sunnyside Gardens. Built between 1924 and 1928, Sunnyside Gardens was a scaled-back version of what the team ultimately hoped to achieve, reflecting the constraints set by the New York City grid.<sup>23</sup> The location of Sunnyside was key to its success, being located in the Borough of

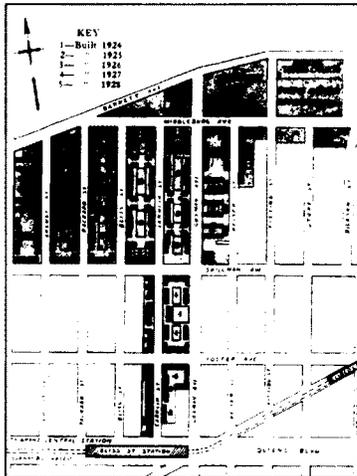


Figure 8 (left)  
Overall Site Plan of  
Sunnyside Gardens

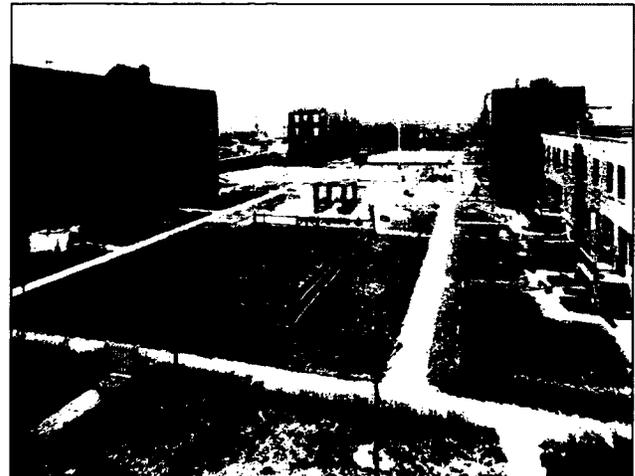


Figure 9 (right)  
Interior block in the  
first development  
(1924)

Queens close to transit and Manhattan's business centre. The team used Sunnyside Gardens as a laboratory, designing each subsequent block to create a more and more refined plan. Stein and Wright were trying to create housing at as low a price as possible, while also demonstrating that it was conceivable to build housing with ample open space at a lower cost than the many other housing options available.<sup>24</sup> Ultimately, Sunnyside Gardens adhered to the garden apartment type: block-by-block construction of ensembles that left large spaces open in the middle of blocks. After completing Sunnyside in 1928 the RPAA moved on to their most famous development, Radburn. Although the construction of Radburn was interrupted by the Great Depression, its two superblocks were a prototype of what became known as the 'Radburn idea.' Stein and Wright felt strongly that American cities in the 1920s were thoroughly unsafe for children due to the car; there were more deaths and injuries due to vehicles than war casualties in a given year.<sup>25</sup> The Radburn plan

demonstrated an approach to living 'in spite' of the car by incorporating five key elements: superblocks, roads built for single uses, separation of pedestrians and automobiles, living spaces in the back, and a continuous park joining everything together.<sup>26</sup> To reduce the negative impact of vehicles, they created an articulated system of roads in which lanes accessed buildings, secondary roads surrounded the superblocks, a main road connected town areas and express roads linked Radburn to surrounding communities. Radburn deployed innovative design to create a more salubrious place to live, especially for children. One of the major ways Stein and Wright achieved this was with continuous mid-block green pathways that enabled children to walk from home to school and recreational centres without having to cross streets. In instances where street crossings were inevitable, grade separated crossings were used. Stein and Wright envisioned Radburn first and foremost as a town for children, in which playgrounds, pathways and parks were part of a safe environment in which they could grow up with a sense of freedom and security.<sup>27</sup>

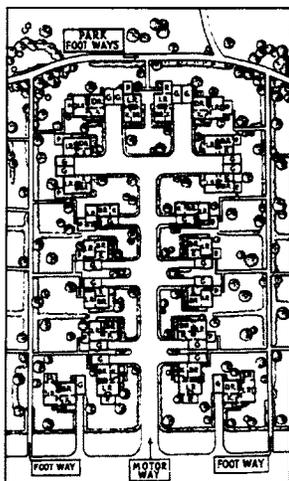


Figure 10 (left)  
Plan of a typical 'lane' at  
Radburn

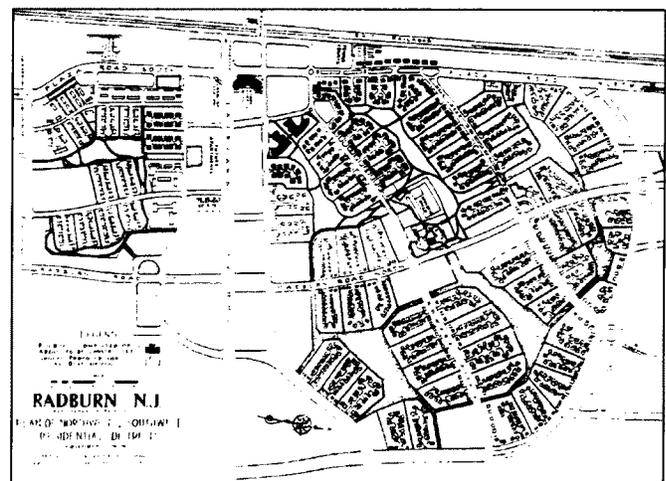


Figure 11 (right)  
Plan of the residential  
districts at Radburn  
(1929)

All of the above projects and architects questioned how modernism might be used to reform the structure of cities to create more salubrious conditions for children. While they approached this in different ways and with different methods, they all advocated a turning away from the street and all had a predilection for the

superblock. These methods were all in turn heavily criticized in the years following World War II.

After World War II, housing was in poor shape and in short supply in both North America and Europe. Because North America had not been the site of active conflict, its landscape was unscathed, allowing the United States and Canada to take a “bottom-up” approach to addressing shortages. This “bottom-up” approach was greatly facilitated by federally insured mortgages for buyers and loans for builders. This made it possible for the North American private sector, which had seen production thrive throughout the war effort, to invest a lot into housing. The cheap mass-producible housing that had been developed during the war was scattered across cleared and well-drained farmland available around most cities. In turn, the government built the necessary roads to service the new communities. Longstanding anti-urban sentiment meant that people were not opposed to living in the suburbs.

In Europe, by contrast, the vast devastation left by bombs necessitated a “top-down” approach to housing and urban development. With the private sector crippled, governments were forced to take charge. Because planning controls, such as Britain’s 1947 Town and Country Planning Act, were put in place to regulate the amount of land available for development, high-densities were essential, to address shortages. Anti-sprawl sentiment, coupled with low percentages of car ownership in Europe, meant people were open to the idea of urban living.

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## **Conclusion**

Both philanthropists and modernists reacted to the slums created by the

industrialization of the nineteenth century city. These cities were plagued by overcrowded living conditions, disease and crime. The streets in cities like London and New York became less and less safe places for children to play. In London and New York City alike, philanthropists like Alfred T. White introduced communal outdoor spaces that were envisioned as a safe-haven from the ugly streets surrounding them. Subsequently, modernists such as Le Corbusier and Stein and Wright reacted to the same issues by advocating superblocks and protected green spaces. The Modernist Tower in the Park became accepted as an economical and salubrious form of housing and throughout America and Europe superblock neighbourhoods sprouted up. With the help of government subsidy and initiatives they became the face of public housing and began tackling the ever-present and all-important task of designing child-friendly neighbourhoods.

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27. Stein, 17.

## THE DEMISE **2**

In 1949, the Federal Housing Act set the standard for public housing in the US. Title I of the Act provided funding to clear slums for middle-class housing, while Title III funded the building of more than 800,000 public housing units. Both programs swept away low-rise Brownstones and tenements, replacing them with modernist towers. As per the visions put forward by Le Corbusier two decades earlier, these towers were surrounded with unlandscaped 'parks' that disrupted the area's traditional relationship with the street. Progressively, public housing became simply 'housing' at the lowest possible cost, which the tower-in-the-park was the most cost-effective option.<sup>1</sup> In addition, the tower-in-the-park, like the garden apartment type, was conceived as a means of providing extended spaces in which children could play free from threat from cars. Modernists utilized both Title I and Title III, along with the perceived benefits for children, to promote the build out of the radical new urban visions that had been developed in the 1920s. Towers were also used as a means to increase density in the exurban New Towns of Scandinavia and Great Britain as well as in suburban areas of some North American cities, such as Toronto.

Almost as soon as this housing appeared, a series of critiques emerged. Among the most vocal critics were Sir Patrick Abercrombie, William Whyte, Jane Jacobs and Oscar Newman. Patrick Abercrombie, an architect and planner, was one of the leading urban planners for London during and after the war. He prepared two plans during the Second World War to ready London for post-war redevelopment. These were the County of London plan in 1943 and the Greater London Plan in 1944. In the

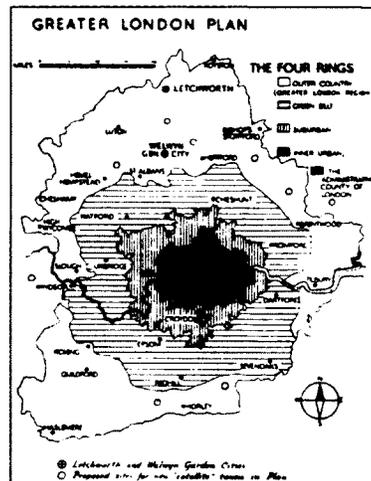


Figure 12  
Abercrombie Plan for  
Greater London, 1944

Greater London Plan, he advocated for densities of either 70 or 100 people per acre so that all families could reside in houses unless they wanted to live in apartments.<sup>2</sup> Abercrombie recognized that housing families with children in apartments was significantly less desirable than accommodating them in houses with back gardens.<sup>3</sup> This was in direct contrast to the prevailing Modernist idea that everyone could and should live in apartment towers. Unfortunately, placing all families in houses would have required that three-quarters of the population in a given area move somewhere new. Accordingly, the 'magic' density for London was set at 136 persons per acre, with 33% of people in houses, 67% in apartments, and about a third of the population rehoused elsewhere.

William Whyte was an American urban planner and journalist. In 1969, he worked with the New York City Planning Commission, using direct observation to evaluate the effectiveness of urban spaces.<sup>4</sup> After sixteen years of observations he published 'City: Rediscovering the Center' in which he described what did and didn't work in cities. His most important insight, reinforced in each chapter of the work, was that people want to be around other people. This idea is in stark contrast to the modernist notion that people want as much private space as possible. Whyte believed that Title I was

as much the cause as the solution to blight to the extent that areas descended into blight after being labelled as blighted.<sup>5</sup> With this in mind, areas that were cleared may have been viable neighbourhoods that could have survived. Whyte found it intriguing that many of the projects implemented in New York were never analysed to determine what worked and what didn't. This is what inspired his venture into observing the city.<sup>6</sup> In Whyte's mind six design principles were necessary for a well-functioning city: there should be places to sit, things to look at, spaces should be used differently at different times of the day, and there should be an on-going management of these spaces. He felt that attempts to separate vehicles and pedestrians wound up sucking the life out of streets. In addition, any type of exclusion tactics such as spikes and enclosures made areas less desirable and more dangerous.

Jane Jacobs is arguably the most eloquent and outspoken critic of the modernist planning sensibility. Like William Whyte, she felt it was ridiculous that city builders were not learning from and adapting their strategies based on the outcomes of their projects. In the introduction of her book 'The Death and Life of Great American Cities' she states that:

Cities are an immense laboratory of trial and error, failure and success, in city building and design. This is the laboratory in which city planning should have been learning and forming and testing its theories. Instead the practitioners and teachers of this discipline (if such it can be called) have ignored the study of success and failure in real life, have been incurious about the reasons for unexpected success, and are guided instead by principles derived from the behaviour and appearance of towns, suburbs, tuberculosis sanatoria, fairs, and imaginary dream cities – from anything but cities themselves.<sup>7</sup>

She goes on to describe the basic requirements for creating safe and vibrant streets, among which is the need for an abundance of stores and other public spaces that are used at all times of the day.<sup>8</sup> She knew that a well-used and occupied

streetscape leads people to feel safer and to use it more themselves. Moreover, she was very outspoken about having residential entrances face onto streets. This would enable residents to establish a meaningful connection with the streets on which they lived. As such there would be 'eyes on the street', meaning that there would be a constant sense that the street is being surveyed, making it a much safer place in which to be. In short, Jane Jacobs was an advocate for a return to the street; she observed that well-designed streets in mixed-use, high-density neighbourhoods are markedly safer and more suitable places for children than wide-open green spaces at the feet of housing towers. For Jacobs it was the connection of buildings to streets, coupled with the connectivity of networks of streets, that provided the greatest security and potential for sociability. As the saying goes, "it takes a village to raise a child."

Finally, Oscar Newman presented the concept of defensible space in his book of the same name. He describes the concept as follows:

Defensible space is a model for residential environments which inhibits crime by creating the physical expression of social fabric that defends itself. 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.<sup>9</sup>

Newman felt that the form of the city, as restructured by the modernists, was the root of the problem, plaguing social housing projects with high incidences of crime. The form of these projects was the criminal's best weapon.<sup>10</sup> He demonstrated this theory by comparing two New York City projects, the Brownsville and Van Dyke Houses. These projects were directly adjacent and almost identical in size, with the same density. Where they differed, however, was in the physical form of the buildings and the spaces around these buildings. The Van Dyke Houses were comprised of

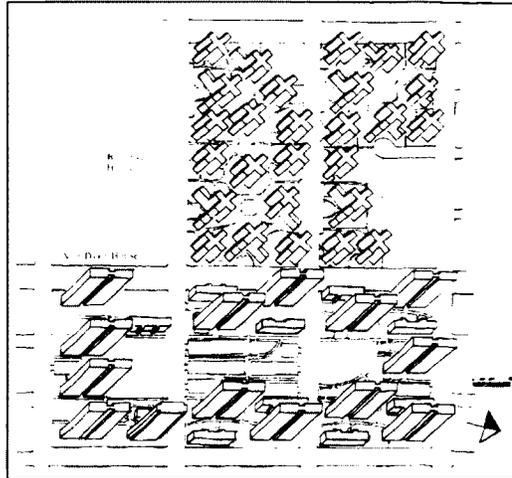


Figure 13  
Site plan of Brownsville  
and Van Dyke Houses

thirteen- and fourteen-story slabs set independently throughout the site while the Brownsville Houses were constructed of three- to six-story buildings clustered throughout the site. The Van Dyke project demonstrated many of the characteristics of non-defensible space, including the fact that none of the entrances faced the public street, access to buildings was through a single, small entrance serving over one hundred people, making it nearly impossible to identify legitimate tenants.<sup>11</sup> In contrast, the Brownsville buildings had divided floors, multiple entrances and circulation cores that served fewer people. In this way it was easier to identify and know if someone belonged to the housing community.<sup>12</sup> According to Newman these physical distinctions made all the difference; the Van Dyke Homes had a much higher incidence of criminal activity than the Brownsville project. More specifically, the Van Dyke project had 2.6 times more robberies and 60% more felonies, misdemeanours, and other offences than Brownsville.<sup>13</sup> This was especially surprising given the fact that in theory, it's much easier to break-in to a low-rise building. Like both Whyte and Jacobs, Newman felt the high-rise form was used because of pressures to increase density, not because it was proven to work better.

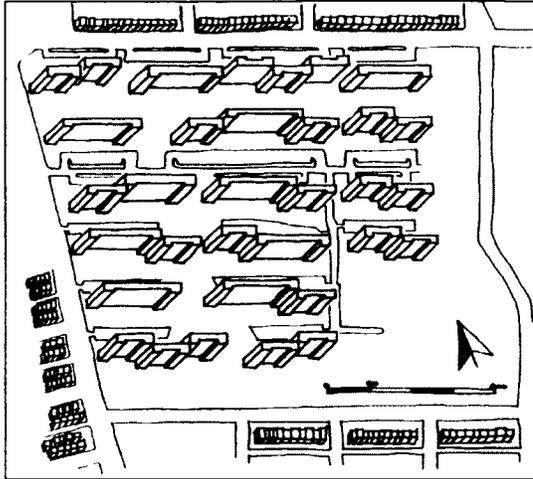


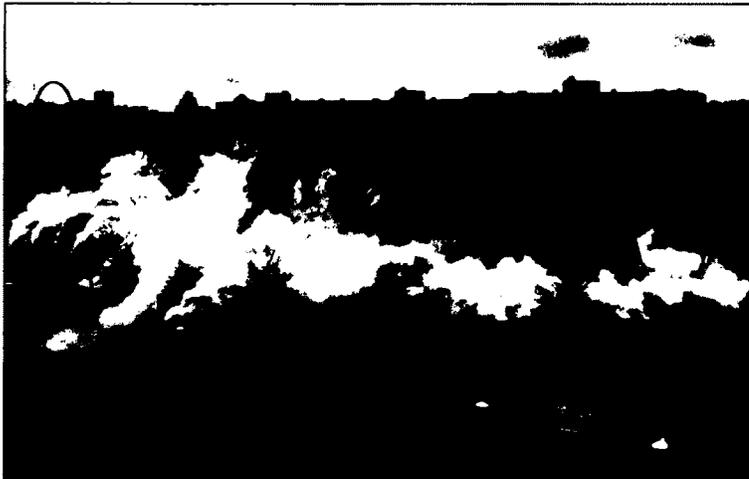
Figure 14  
Site plan of Pruitt-Igoe



Figure 15  
Artist's rendering of  
Pruitt-Igoe gallery area

Oscar Newman first considered the concept of defensible space while living in St. Louis and observing the plight of the Pruitt-Igoe housing project.<sup>14</sup> It was designed by a notable architect and adhered closely to Corbusian principles. While the project was built at only 50 units per acre, it was comprised of 11-story buildings. Elevators stopped at every third floor on which there were communal spaces such as laundry, garbage and social rooms.<sup>15</sup> According to Newman, most of the problems associated with this project were due to the fact there was no defensible space. Because the vast spaces around the buildings were completely disconnected with the buildings, tenants couldn't associate with the landscape; as a result it became abandoned and unsafe. Common spaces within the buildings were also dangerous and frequently

vandalized. This was attributed to the fact that too many people shared common spaces.<sup>16</sup> Never having been more than 60% occupied, some floors were shared by only two families and in these cases, the common spaces were much better kept and cared for. Due to extremely low occupancy and unheard of deterioration, decay and violence, in 1972, only 16 years after its completion, Pruitt-Igoe was imploded. While the form of Pruitt-Igoe was by no means the only issue, form, as Newman



**Figure 16**  
Implosion of Pruitt-Igoe

demonstrated, does matter. For a variety of reasons the high-rise type was shown to be exceptionally bad for families of limited means. Primarily, it had to do with the amount of common areas over which there was no possibility of direct supervision.

Due to insurmountable problems and faced with harsh criticism, the US Government abandoned the construction of public housing construction in the early 1970s, moving to a voucher system. The voucher system relies on the private market to provide housing for low-income tenants. The government then subsidizes the rent so that these families can afford to live outside of 'projects'.

As seen through the above critiques, several related issues led to the demise of the modernist "tower in the park" approach. Firstly, the forms of the buildings proved

to be a huge issue, as demonstrated in the studies of Oscar Newman. By comparison with lower buildings that accommodated an identical demographic, Newman showed that high-rise buildings with long corridors were breeding grounds for vandalism and violence in buildings. Low-rise buildings with point access circulation had a much greater chance of success due to a direct connection to the surrounding area and knowledge of who belongs. Secondly, the land in which the building sits plays a huge part as well. A large block of unlandscaped 'park' doesn't provide individuals a feeling of ownership or responsibility for the land around their buildings, leaving these areas underused and dangerous. In a more street-oriented site where buildings front directly on public streets, occupants of buildings feel like the areas around their building are a part of their space and are more inclined to use and watch over them. It is also imperative that the form of housing is appropriate for the demographic or mix of demographics it accommodates.

Siding with the aforementioned theories of Jacobs and Newman, and drawing on Newman's studies of public housing complexes in New York and St. Louis, I believe the high-rise apartment tower presents many challenges to the daily life of families with children. This is especially true for low-income families for whom unsupervised common areas and the distance from individual units to accessible outdoor play areas poses particular challenges. This disadvantage is less prominent for families of higher means as they are in the position to afford a caregiver who could accompany young children to parks, or, alternatively, hired help to complete household chores while the parent goes out with the children. While low-income families might not prosper in apartment towers, Newman did find, throughout his research at both the Van Dyke and Brownsville Houses, that the low-income elderly do very well in these same apartment towers, especially if they are the sole demographic in them.<sup>17</sup>

Coming out of World War II, there was a dire need for housing. Governments in both Europe and North America met this need by building extensive superblocks of towers-in-the-park. Critics like Jane Jacobs and Oscar Newman were quick on their tails contending that this wasn't the right type of housing for families of limited means. Reinforcing their statements were well-respected housing advocates like Catherine Bauer and Elizabeth Wood. In a personal letter to Wood, Bauer stated:

"I am more prejudiced than ever against the romantic-aesthetic-Le Corbusier-ism that dominates all our brightest young planners and architects... It is all very well that the intellectuals do not personally like to look at the 'sprawl' made by row-houses, but if dwellings at ground level just are the best homes for families with small children, then it's up to the architects to find a way to design them so they won't be dreary."

Wood, the first Executive Director of the Chicago Housing Authority had originally argued for high-rise housing in light of the potential benefits and uses of the open-space around them.<sup>19</sup> By the 1950s she had completely changed her tune, condemning the use of high-rises for housing low-income families. She also argued that attempting to bring low-rise benefits to the high-rise, such as was attempted at Pruitt-Igoe, was also not a successful substitute.<sup>20</sup>

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## **Conclusion**

Almost as soon as modernist housing appeared, critics like Jane Jacobs and Oscar Newman began vocalizing their thoughts; they both had much to say opposite the Modernists. Jane Jacobs argued for a return to streets, whereas modernists had removed them in favour of superblocks filled with vast swaths of greenery. She knew from her experiences and observations that densely developed mixed-use neighbourhoods, scattered with small parks, worked best for children. Jane

Jacobs felt that these traditional streets fostered community behaviours in which everyone looks out for each other and each other's children. Oscar Newman also felt strongly about the benefit of a more traditional neighbourhood composition. He felt it allowed for the creation of defensible space, which is key to the safety and vitality of a neighbourhood. Newman used both the detonation of Pruitt-Igoe and a comparison of the Brownsville and Van Dyke Houses to prove and illustrate this point. Ultimately, the critics were right and many of the post-war high-rise projects became plagued with crime. In subsequent years this stock of apartment towers was torn down under HOPE VI in the US, as will be discussed in the following chapter.

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## THE LEGACY **3**

Despite the compelling criticism levelled against the modernist tower-in-the-park, by the time governments stopped building it, a lot had already been built. The demographics of tenants changed as did the terms of reference associated with the management of many complexes. The housing became prone to residualization because it was so thoroughly undesired by those who could afford to make different housing choices. Residualization refers to a phenomenon where the least desirable housing ends up being inhabited by those least able to pay for it and in many cases, that type of housing is least suited for the demographic.

This housing stock also became increasingly economically and socially unsustainable. Economically, the amount of rent that could be asked for a unit was decreasing due to the degradation of the buildings. Due to reduced cash flow, rents no longer covered the operation costs of buildings. Socially, as stated above, the demographics of tenants living in these buildings became increasingly unsustainable because the form of the buildings didn't meet tenants' needs. Many buildings reached a tipping point about forty years after construction in face of the need for major lifecycle repairs (replacement of roofs, windows and mechanical systems, etc.) Different approaches to life-cycle reinvestment can be seen through the HOPE VI program in the US, the Regent Park Redevelopment in Toronto, and the Bijlmermeer Redevelopment in Amsterdam.

## **HOPE VI**

The US Housing and Urban Development (HUD) instituted the HOPE VI program (Housing Opportunities for People Everywhere) in the early 1990s through recommendations by the National Commission on Severely Distressed Public Housing (NCSDPH). HOPE VI is the largest revitalization program in the US, having awarded over 600 grants totalling approximately \$6.7 billion from 1993 to 2010.<sup>1</sup>

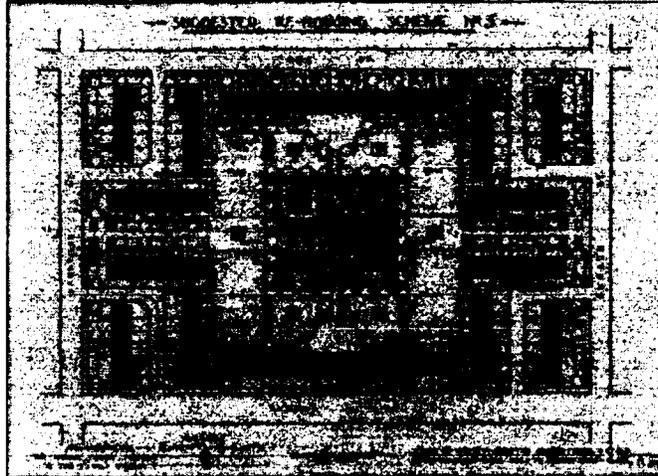
The emphasis of the program was on the federally funded high-rise family housing built in the 1950s and 1960s. These were among the worst public housing projects and were highly neglected, as well as being racially, economically and geographically segregated.<sup>2</sup> The HOPE VI program developed a five-prong approach to the revitalization of these. Firstly, the program addressed physical issues. Through demolition and revitalization grants that removed, replaced or otherwise revitalized severely distressed buildings. Secondly, the program sought to reduce concentrations of poverty. This was attempted by introducing a mixed demographic into the neighborhood. The private sector was invited in to build market housing on land owned by the housing authorities with the stipulation that all housing authority units that were occupied at the time of the demolition to be replaced. Depending on the complex this was more or less of an issue; a number of housing towers in Chicago, for example, were only 20% occupied. Deconcentration was also aided by changes in policy that removed income caps on residents living in public housing. Their third objective was to provide support services to help deal with the problem of poverty not just of the residents' inability to afford housing. The fourth and fifth objectives were to form partnerships and to compel standards of personal responsibility.<sup>3</sup> According to these fundamental premises, it's possible to improve the lives of the people living in these neighbourhoods either by relocating them to better communities or by creating

a new, healthy and positive environment on the current site.<sup>4</sup>

The strategies employed by the HOPE VI program have produced mixed results. Based on the HOPE VI Panel Study, the program has benefitted a great number of public housing families, especially those who were relocated, through the voucher system, to more diverse communities.<sup>5</sup> The fundamental problem with HOPE VI, however, is its lack of impact on residents' economic abilities. The larger goal of HOPE VI was to transform distressed, publicly owned single-demographic ensembles into mixed demographic communities, leveraging the value of the land to attract private sector partners. This strategy was used as a means of replacing severely distressed high-rise family units with units that were more family-friendly.

## **REGENT PARK**

In 1932, Lieutenant-Governor Herbert Bruce convened a group of experts to produce a report on the state of slums in Toronto. The so-called 'Bruce Report' suggested that a huge area of downtown Toronto be bulldozed and replaced. Bruce explained that although there had been gains in the 1910s with slum clearance, problems had resurfaced and problem areas needed to once more be cleared and replaced.<sup>6</sup> The area in question stretched from Dovercourt to the Don River and South of College Street. Although these areas were considered slums and horrible places to live by outsiders, residents felt differently.<sup>7</sup> The new plans put forward by Eric Arthur and Anthony Adamson echoed many of the ideas set forth in Radburn as well as those being promoted by modernist German architects such as Mies van der Rohe.



**Figure 17**  
Regent Park North plan drawn up by Arthur and Adamson as a suggested scheme under the Bruce Report (1932)

This new approach was based on a superblock surrounded by row houses and low-rise apartments, in the centre of which was a large open space. This model greatly influenced the eventual redevelopment of Regent Park North in the 1940s.



**Figure 18**  
Plan of Regent Park North that comes closest to what was built in 1948. Actual construction included several six-storey buildings

Although the 1948 revitalization of Regent Park North implemented all the current theories, winning awards and international recognition, it was not sustainable as a long-term solution. After about fifteen years, many problems reappeared.<sup>8</sup> As planning began to question the effectiveness of clearing large swaths of land for public housing, media coverage of Regent Park became increasingly more negative.

An article from *Maclean's Magazine* in 1965 noted:

Regent Park is not the model of progress it was supposed to be when it opened. Instead, it is a paradox – financially and socially more of a success than a failure, but not one that even its defenders would want to repeat. It has an institutional character you don't find in most neighbourhoods. In some people's minds a stigma attaches to anyone living there.<sup>9</sup>

Today, Regent Park is once again in the process of being redeveloped. The current redevelopment is tackling many of the same issues planners were attempting to address in the 1950s. The current strategy is to return the neighbourhood to a pre-World War II urban pattern, embracing many of the concepts modernism rejected: subsidized units located primarily in low-rise buildings that engage the street, and in which individual units have separate entrances and street addresses. The current redevelopment has also reopened many streets through the area and added new ones to change the scale of the urban fabric. The plan draws on the scale of the adjacent neighbourhood of Cabbagetown, an area that remains untouched. Retail will be introduced into the site, as will commercial and community spaces, and a significant number of market houses and condominiums. The redevelopment will be at more than double the 1950s density. Construction is now in its second of six phases and the 'new and improved' Regent Park has been positively receive both by its new residents and the media. Upon completion in 2016, Regent Park will house 12 500 people in 5115 units.

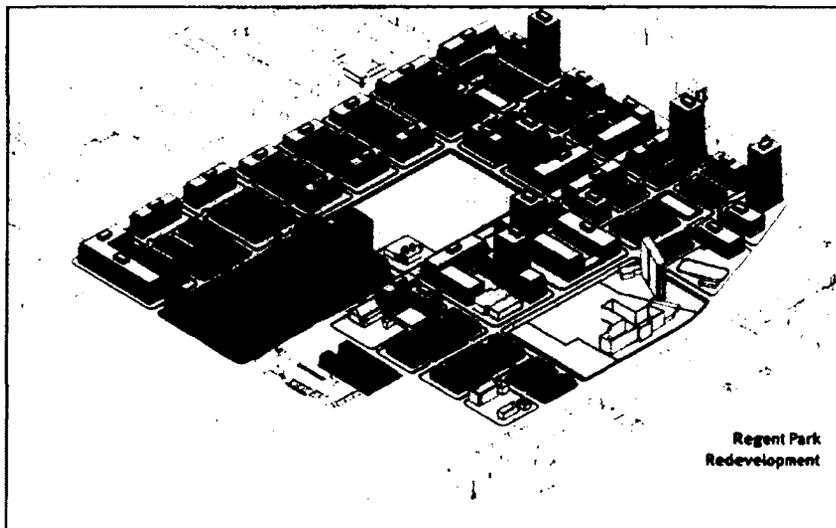


Figure 19  
Current Regent Park  
Redevelopment Plan

## BIJLMERMEER

The Bijlmermeer is a housing estate located in South-East Amsterdam. Built between 1966 and 1975, its design was strongly guided by the tenants of the Congrès international d'architecture moderne (CIAM). The application of CIAM ideals – a strict segregation of uses such as living, working, recreation and transportation zones,<sup>10</sup> tall towers surrounded by expansive green space – initially generated significant interest in the project. The plan included 12 500 units in 31 eleven-storey gallery apartments.<sup>11</sup>

While initially in high demand, people's opinions about the complex changed as it was built out. The units proved to be out of synch with the evolving preferences of middle-income families.<sup>12</sup> As a result, the majority of the people for whom Bijlmermeer had been intended opted instead for smaller-scale low-rises in New Towns and

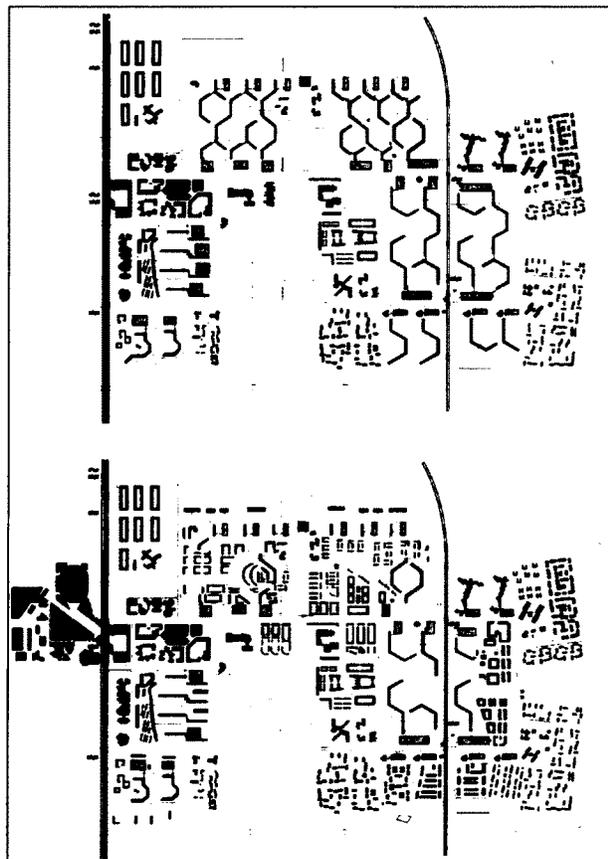


Figure 20  
Aerial view of  
original Bijlmermeer  
development

commuter villages around Amsterdam.<sup>13</sup> By voting with their feet, the middle class, in effect, rejected the modernist approach to housing that had so dominated the post-war period. Like many similar, modernist tower-in-the-park projects, the common spaces were felt to be unsafe, especially the covered walkways connecting the housing blocks to the raised transportation system. Surveys conducted among residents confirmed the negative stigma.<sup>14</sup> In an article published in BRI (Building Research & Information), a leading international reviewed journal, Frank Wassenberg notes that

although the Netherlands is known rarely to demolish rented social housing, “in the Bijlmermeer the majority of the population supports these interventions.”<sup>15</sup>

By 1985, one quarter of units were unoccupied, despite housing shortages across Amsterdam,<sup>16</sup> and plans for reconstruction were drafted. Rem Koolhaas was among the first to suggest ideas; he believed that the architecture was being unfairly



**Figure 21**  
The site plan of Bijlmermeer in 1992 (above) and in 2010 (below), before and after physical renewal

accused and recommended that the amount of programmed areas be increased.<sup>17</sup> Although Koolhaas opposed tearing down the buildings, the process was started when, in October of 1992, an El Al Boeing 747 Cargo plane crashed into one of the large monolithic apartment blocks.<sup>18</sup>

The current renovation objective is to better support low-income and vulnerable

residents while including better housing for more economically stable residents. Initial plans called for the demolition of all the apartment towers but a small group of 'Bijlmer believers' protested and 6000 of the original units were spared. The towers that remained were upgraded, especially the first two floors, which were converted to luxury 2-storey units.<sup>19</sup> These buildings are fondly known as the "Bijlmer Museum."

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## **Conclusion**

Cities throughout North America and Europe, including Toronto and Amsterdam, have begun looking for solutions to the legacy left by the Modernist tower-in-the-park vision for urbanism. These solutions look to address the physical, sociological and economic issues that plague these housing projects. The HOPE VI programs in U.S. cities, Toronto's Regent Park Redevelopment and the Bijlmermeer Renovation in Amsterdam all employ different tactics in search of more sustainable solutions.

Learning from what did and didn't work in complexes such as Regent Park and Bijlmermeer, and drawing on the critiques of Jane Jacobs and Oscar Newman, I have gained a better understanding of the issues at play in creating child-friendly neighbourhoods. Families should live close to the ground plane, internal common spaces should be avoided, all units should have direct access to proprietary outdoor spaces and all those spaces and any other exterior spaces should be monitored informally by those living and working around them. Where low-income families are concerned, the neighbourhood should have a mixed demographic and mix of uses as well as being well connected with public transit and surrounding communities. These key ingredients, if used in the right context and application, have the potential

to strengthen the “child-friendliness” of neighbourhoods.

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# THE CASE OF TORONTO 4

To the untrained eye, the City of Toronto may seem very haphazard and unplanned. If you take a closer look at the vast swaths of protected natural land, at the transit infrastructure, at the parks and community facilities, they show a very different story. In reality, Toronto's growth was incredibly affected by regional modern planning.

Around 1907, W.F. Maclean, the founder of Toronto World and a member of parliament, predicted that Toronto would be unlike any North American City, in that with the help of government intervention, Toronto would not grow up, but out. He felt that a sprawling Toronto would allow it to not be congested.<sup>1</sup> In order to facilitate this dream they subsidized transit fares to encourage development farther out. This attempted to remove any financial drawback to commuting into the city for work.<sup>2</sup> Although a lot of effort was put into this, too much money was lost and rapid expansion plans were put to a halt. As a result, Maclean's sprawling prediction was not entirely accurate and Toronto expanded compactly well into the twenties.

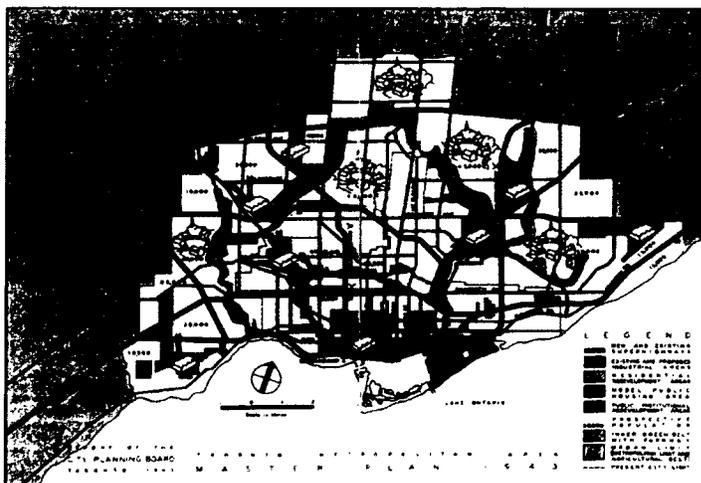


Figure 22  
1943 City of Toronto  
Master Plan

In 1943, the first official plan for Toronto was prepared and presented by Eugene Faludi, a prominent planner of the time. The plan encompassed an area about three times larger than what was then the City of Toronto. The thirty-year plan included slum clearance, an extensive network of 'superhighways' and new neighbourhoods with low-density targets of four units per acre.<sup>3</sup> Although this plan didn't build on the strengths of the compact, mixed-use city, it was the first publically funded regional plan in North America.<sup>4</sup>

Toronto had, in 1954, become a metropolitan government.<sup>5</sup> The goal of the metropolitan government at this time was to create an official plan that encompassed not only what was then Toronto proper, but 480 square miles of surrounding jurisdictions. This gave Metropolitan Toronto the ability to make planning calls for all the encompassed jurisdictions because they didn't have the planning resources necessary.<sup>6</sup> The new Metropolitan Toronto was a result of the partial amalgamation of Bill 80. The amalgamation was a merging of thirteen districts, including the City of Toronto and excluding the Township of Toronto, which is now known as the City of Mississauga. This amalgamation included that of all the districts' infrastructure that caused it to improve immensely but it also created the biggest sprawl yet to be seen in the region.

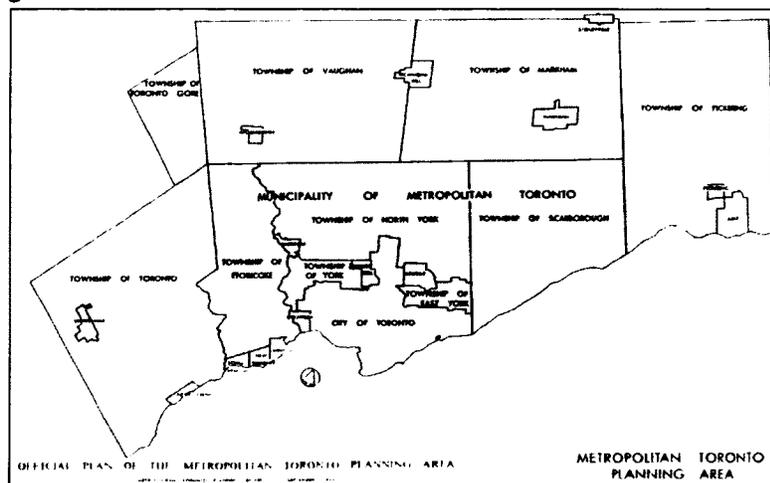


Figure 23  
Boundaries of  
Metropolitan Toronto

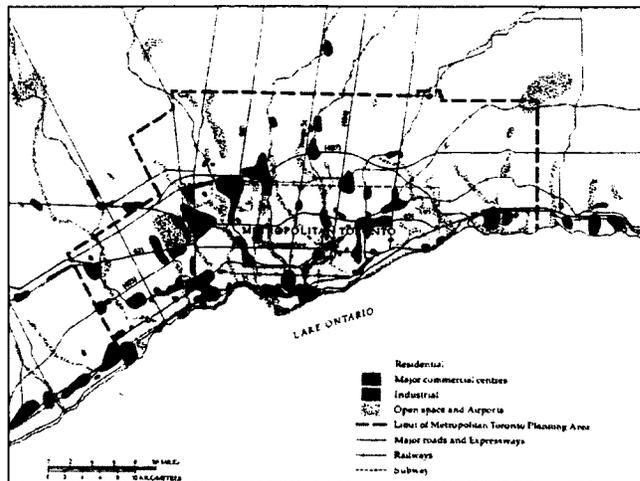


Figure 24  
1959 Toronto Official Plan

The Official Plan of 1959 stressed that all construction should attempt to fill in the borders and leave all land outside untouched.<sup>7</sup> The density targets set were much higher than those set by Falaudi in the 1943 official plan. Planners set them high because they understood that to support the Toronto transit system, high densities were required. Although this plan was never officially accepted, its principles and ideas led to some very interesting and modern building tactics. The most prominent of these tactics was the creation of high-rise apartment nodes and communities that were built in order to make Metro's infrastructure feasible.<sup>8</sup> These towers helped for two reasons: one, by significantly increasing densities and two, by having a good supply of rental options among the homes for purchase. This changed the distribution of renters and owners in both the urban and suburban contexts.

Toronto's huge stock of concrete towers was built primarily in the sixties and seventies, with 30,000 high-rise units built in 1968 alone.<sup>9</sup> Located among all of what are now Toronto's inner suburbs, these towers met a continuously increasing need for rental units. The increased need was due, in part, to floods of new immigrants coming to Canada as a result of relaxed immigration laws.

The modern and unique suburbs aligned themselves with natural resources, transit systems and the edges of bungalow colonies. This created many situations such as what was seen at Bathurst and Steeles in the 1960s. Then, 30-story towers existed at the edge of Metro Toronto; on the other side of which was, in effect, a greenbelt that used to surround the city. In a 2007 article for the Globe and Mail, reporter John Barber made an intriguing observation of the location of these 30-story towers from an archival photo:

Not since the first bird's-eye views of the Italian Renaissance has a city looked so coherent: the densely human, heavily built-up urbe ending abruptly – and totally – at an ancient wall heavy with meaning, the Arcadian rus rolling unbroken to the horizon in striking contrast... Although the wall surrounding 1960s Toronto was made of policy, not stone, the meaning was still there. No other city in North America built high-density suburbs like these during the long postwar boom. Few modern cities in the world, if any, were better planned than Metropolitan Toronto.<sup>11</sup>



**Figure 25**  
Apartment towers at Bathurst  
and Steeles (1960s)

The form these new Toronto suburbs took was far different from any other sprawling North American model. Architects such as Buckminster Fuller deemed them to be much more progressive and able to accommodate the future than the unplanned, lower-density sprawl associated with most cities in the US.<sup>11</sup> What did end up happening was that municipalities surrounding the Metropolitan Toronto area,

in the so-called '905,' began taking advantage of subsidies offered by the provincial government. These subsidy programs encouraged low-density development, in this undeveloped land just outside Metro's boundary, by providing funds for them to construct their own water and sewer infrastructure. The urban reformers within Toronto were influenced by European growth models as well as the ideas proposed by Jane Jacobs, who lived in Toronto from 1968 until her death. What frustrated the reformers as well as the residents of Metro Toronto was that the majority of their provincial taxes were funding the development and expansion of the '905' instead of being put toward City of Toronto improvements and education.<sup>12</sup> One major outcome of this lack of funds coming to Metro Toronto was that they never managed to extend their subway and rail infrastructure throughout the region, which left many of the tower complexes poorly served by public transit.

In any case, the unique development of the City of Toronto's inner-suburbs has left us with an interesting housing stock. While most American suburbs are looking for ways to combat sprawl and increase density, in Toronto it's not quite the case. Toronto has a remarkably large high-rise apartment stock in relatively dense neighbourhoods. Among the issues facing this vast stock of residential towers is that it has almost become invisible. The buildings are not spectacular, and people tend to drive past

them unknowingly.<sup>13</sup> In fact, there is a notion that Toronto is fearful of high-rise buildings, while Toronto is home to the most high-rise buildings – second only to New York.

<b>North American High-Rise Buildings:</b>	
<small>High-rise* buildings of all types, two-to-stories-and-over within metropolitan areas as of 2000. An estimated 1,000 high-rises in the Toronto area are the apartment buildings in question.</small>	
New York	5,568
<b>Toronto</b>	<b>2,047</b>
Chicago	1,076
Vancouver	614
Miami	535
Los Angeles	467
Montréal	447
San Francisco	436
Honolulu	431
Philadelphia	336
Houston	331
Ottawa	284
Washington DC	272
Dallas	241
Edmonton	237

Data from Emporis

**Figure 26**  
Number of high-rise buildings in North American cities

This invisibility is largely due to residualization. Toronto's tower housing stock was built with the

intent that it house the middle class, in particular as starter units for young families. The idea was that as they establish their careers and families, they would move up to neighbourhoods and housing better suited to families. When the towers were built there was also the premise that all tenants would own and use a car on a regular basis. While the towers remained desirable, the above premises remained valid; but as the towers aged, the intended demographic began refraining from living in them. The majority of these towers, mostly privately held, now account for a significant percentage of Toronto's affordable housing due to their current state, although they were not built for the purpose of social housing.

There are several issues related to the current state of many of Toronto's apartment towers. Firstly, the low-income demographic that currently claims occupancy are not in housing that is well-suited to their needs. The high-rise form has a longstanding reputation for being a bad place to raise a family. The real issue, in the case of Toronto, is how these neighbourhoods are situated vis-à-vis the larger metropolitan area. As previously discussed, the transit system was never fully or properly expanded, leaving many of these communities cut off and isolated from the rest of the city. Furthermore, the areas surrounding the towers generally don't have amenities within reach, and because many tenants don't have access to a vehicle, they are forced to cross busy and dangerous streets to get simple necessities such as groceries.

Another issue related to Toronto's apartment towers is that owners are increasingly unable to cover operating costs. This is because the buildings are able to accrue less and less rent for the units as the building ages and the cost of utilities is consistently rising. What compounds this issue is that the towers' construction system is one that left exposed slab edges and poorly insulated walls. This is becoming more crucial

today as many buildings have reached their forty-year lifecycle and, on top of the already dire financial situation, need many major upgrades. These upgrades include replacing the roof, windows and mechanical systems.

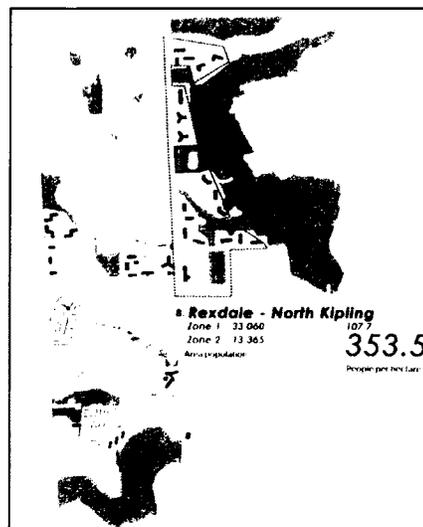
There are three 'normal' ways the above issues are rectified. One way is that buildings are torn down when they can no longer pay for themselves. A second option is that the buildings be converted to condos with the sale of the units going to cover the cost of the major upgrades needed. The last possibility is that the building be sold off to Toronto Community Housing or another similar not-for-profit group, which would allow the required upgrades to be covered through donations and government grants.

Although the 'normal' course of events solves the problem of economics, it creates other issues. With respect to the first two options, large amounts of affordable housing, and rental units in general, are lost. The third option is only really a possibility if the buildings are purchased at a low enough cost to allow for the necessary improvements to be afforded. Realistically though, TCHC is unlikely to be able to or want the headache of the incredible number of towers in the same situations across the city. A more sustainable and less top-down solution is therefore needed.

Toronto, like many other North American cities, has had to contend with the notion and the task of redevelopment and rejuvenation. New plans became popular in Canada when, in 1917, the majority of Halifax burnt down in an accidental explosion. Although this was a major disaster, whole communities perished or were destroyed, it did achieve a great amount of slum clearance and gave planners a blank canvas with which to work and imagine. By the end of WWI, Ontario was struggling to figure

out what to do with a decaying housing stock.<sup>14</sup> New plans, such as what was built in Halifax, became popular ideas.

In September 2008, the former mayor of Toronto, David Miller, proposed the implementation of the Tower Renewal program, an endeavour researched by E.R.A Architects in conjunction with the University of Toronto. They identified 1189 multi-unit residential buildings (MURBs) built between 1945 and 1984.<sup>15</sup> This housing stock is an interesting asset to the city. Although these towers have now reached their lifecycle and are economically and ecologically inefficient, the ideas put forth by the Tower Renewal program propose to retrofit them and the neighbourhoods surrounding them. The retrofits look to increase the energy performance of these buildings, which would help bridge the gap between rental revenue and operation costs. Since 2009, pilot sites have been put in place to determine the effectiveness of such strategies. The studies have shown that with the proposed retrofits and changes there can be dramatic improvements to the efficiency, effectiveness, and liveability of these towers and their surroundings.<sup>16</sup>



**Figure 27**  
Density analysis of Kipling and Steeles in North Etobicoke

One of the Mayor's Tower Renewal pilot sites is located in the Etobicoke neighbourhood of Rexdale. They specifically look at two buildings: 2667 and 2677 Kipling Avenue. Many different forms of research were implemented to get a grasp on what these buildings were facing. These included a community design charrette in which a varied group of architects, planners, building managers and tenants came together to build a set of ideas and tactics to improve the site.<sup>17</sup> A walkability study was conducted as well in order to determine any flaws in circulation throughout the area at large.<sup>18</sup> Moreover, ways to improve water efficiency and to save energy were enumerated and they began to implement them. Among a few other endeavours, they developed and supported resident groups in order to help improve the quality and enjoyability of life in the buildings.<sup>19</sup>

Although findings from the pilot sites were generally positive, it is very important to note that there are still many barriers to the full success of this program. Some of these barriers rest with the city and some with the property owners. Part of what can make any neighbourhood sustainable and liveable is having amenities close-by. Therefore, having broader land use zoning would allow for the creation of retail and service shops within walking distance. Another barrier is the private ownership of the majority of these rental buildings; this means that the city needs to work hand-in-hand with these property owners, giving them incentives to go along with the rejuvenation plans, rather than leaving things as they are.<sup>20</sup> Only time will tell how successful this program can be, but it's positive to see programs such as this one finding ways to take the housing stock that exists and turning it into something that can be used for years to come.

We must endeavour to address what can be done to allow for the economic and social sustainability of Toronto's apartment tower neighbourhoods. We only need to be concerned about the plight of the tower neighborhoods to the extent that their disappearance, or conversion into condominiums, would decrease the overall stock of affordable housing. We should assume that children of disadvantaged families will continue to be housed in these tower complexes, despite not being the most suitable or ideal environment for raising them. This thesis is looking for various approaches that can be taken in order to create the safe and healthy environment most wanted for our children.

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**Possible Strategies**

There are four main strategies that will help move these tower complexes towards the economic and social well-being they desperately need. The first strategic option for revitalizing the towers would be to find a source of money, be it from government grants or loans, to allow the private owner to repair the buildings in order to keep them running for the next forty years. Our current state of affairs merely proliferates the problem. The same low-income demographic would continue to live in isolated towers, and history would most likely repeat itself, leaving the neighbourhood in as bad a state as it originally was. Economically speaking this option doesn't really benefit the owners of the building because at the end of the day, they still end up with a building costing them more than the rents it can gather. Socially, without any changes in the demographics or environment, the inhabitants of these towers would continue to have little change, opportunity or motivation to better their lot, leaving their children, ultimately, to suffer the consequences of that.

The second strategy would be to convert the existing high rises to condos, retaining a percentage of units for seniors and/or special need housing, and replace the affordable family housing with new housing elsewhere on the site. The advantages of this approach, as seen previously, are that high-rise living is better suited to middle- to upper-class households and to young couples and seniors, than it is to low-income households with children. The preference of the elderly to apartment towers was shown through Oscar Newman's studies in which the elderly prefer living in single-demographic elevator housing.<sup>21</sup> Having the ground plane densified with family housing would most likely create a more lively community environment, replacing sterile, underused land with the hustle and bustle of family life. This approach would also bring a mixture of demographics to the sites that had been missing for many years. The challenges with this option are replacing enough of the converted units with the family-friendly housing on the ground plane. Another challenge would be creating something enticing enough to attract the middle- and upper-class buyers necessary to make this successful.

The third strategy would be to reparcel the land, allowing for the land around the towers to be sold and developed in order to raise funds for all the necessary building upgrades. This option leads to many of the issues associated with the first strategy. Firstly, although money would be available up-front for upgrades and repairs, without a set plan or strategy to better life in the area, things could very easily revert to their original state. Secondly, by selling parcels, you wouldn't be guaranteed that they're developed well, with appropriate housing, or at all. Economically, this scheme doesn't build a sustainable system that ensures the health of the buildings or their inhabitants. What it does do is allow owners to repair and replace what's needed to give the buildings forty more years of life. Socially, although there's potential for

diversity, there's less chance than option two because there's little control over what the new owners of the plots do with their land.

The fourth strategy would be to fix up and adapt the ground plane to function better in order to suit the needs of the current tenants. These adaptations and additions could be done in ways that allow them to work in conjunction with many of the above strategies. Possibilities could range anywhere from bike paths to social gathering spaces to creative demonstrations. All these various types of connections with the site create more and more possibilities for positive social interactions, social awareness and community.

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#### NOTES

1. Snijman 5-6
  2. Snijman 12
  3. John Sewell, The Shape of the Suburbs: Understanding Toronto's Sprawl (Toronto: University of Toronto Press, 2008), 21.
  4. Sewell, The Shape of the Suburbs, 34.
  5. Graeme Stewart, "Toronto's Modern Suburbs and the Concrete High-Rise," Concrete Toronto: A Guide to Ontario Concrete Architecture from the Fifties to the Seventies (Toronto: Coach House Books, 2007), 212.
  6. Sewell, The Shape of the Suburbs, 36.
  7. Sewell, The Shape of the Suburbs, 37.
  8. Stewart, Concrete Toronto, 214.
  9. Ibid.
  10. John Barber, "High-Rises: Toronto's Smart Sixties Suburbs," The Toronto Star, 1 June, 2007.
  11. Graeme Stewart, "The Suburban Slab: Retrofitting Our Concrete Legacy for a Sustainable Future," Greentopia: Towards a Sustainable Toronto (Toronto: Coach House Books, 2007), 135.
  12. Snijman 71.
  13. Barber, John, "Neglected High-Rises Hold the Key to a Sustainable Future," The Globe and Mail, May 29, 2007.
  14. John Sewell, The Shape of the City: Toronto Struggles with Modern Planning (Toronto: University of Toronto Press, 1993), 68.
  15. Tower Renewal Implementation Book (Toronto: City of Toronto, 2011).  
([http://www.toronto.ca/city-manager/pdf/tower\\_renewal\\_implementation\\_book.pdf](http://www.toronto.ca/city-manager/pdf/tower_renewal_implementation_book.pdf)) 8.
  16. Tower Renewal Implementation Book, 36.
  17. "Kipling Towers Community Design Charrette: Final Report" (2011).  
([http://www.toronto.ca/tower\\_renewal/pdf/kiplingtowers.pdf](http://www.toronto.ca/tower_renewal/pdf/kiplingtowers.pdf))
  18. Paul Hess and Ian Maczewski, "Preliminary Report: North Kipling Wakarusa Workshops," Wakarusa, or Toronto's Apartment Neighbourhoods, April 2010-20 February 2012.  
([http://aneswaki.net/assets/uploads/docs/North\\_Kipling\\_Wakarusa\\_Report\\_fina.pdf](http://aneswaki.net/assets/uploads/docs/North_Kipling_Wakarusa_Report_fina.pdf))
  19. Tower Renewal Implementation Book, 49.
  20. Tower Renewal Implementation Book, 36.
  21. Newman 194.
-



The site is comprised of seven apartment towers ranging from 17 to 23 floors. There are a total of 1513 rental units comprised of 420 1-bedrooms, 965 2-bedrooms, and 130 3-bedrooms (distribution of units based on average percentages of comparable building). All seven buildings are privately owned and were built between 1974 and 1980. There are about 42 units per acre (UPA) translating to roughly 73 people per acre (PPA) (with the assumption of four people per three-bedroom and 1.5 per one- and two-bedroom units).



Figure 30 View of current state of site

This site is the epitome of the modernist “tower-in-the-park” approach. It is comprised of tall residential slabs surrounded by expansive unused green space. There is little to no opportunity for supervision of exterior spaces because tenants are disconnected from the ground plane and have little sense of ownership or responsibility for the land around their dwellings. Fences are used to deter movement

through the site, which aggravates the problem of control. The surfeit of unpatrolled common areas both with and surrounding the housing towers makes them less than ideal for residents with children.

According to the 2006 Canadian Census, visible minorities make up about 80% of the population and, although currently most of this is made up of South Asian and Black populations, this is not a demographic profile that will most likely remain the same for the next 40-50 years, unlike certain ethnic suburbs throughout the GTA. This area also has a much higher percentage of children and youth, with just about half the population of the area classified as dependents. Of the families with children, a single parent heads 25% of them. This neighbourhood also has a higher than average number of low-income families with the apartment towers housing the largest concentration.<sup>1</sup>



Figure 31

**LAND-USE MIX**

- Commercial
- Institutional
- Residential
- ▣ Parks and Open Space

The site has several schools and strip-malls close by, but many necessary services are not within easy access. Many services and amenities, such as fresh food, are not within proximity, and for a lot of residents, this means relying on public transit to access these services. This site faces many of the same issues as Toronto's other tower neighbourhoods. In this way, the site is rather prototypical. The majority of the strategies used here could very easily be transferred to another site.

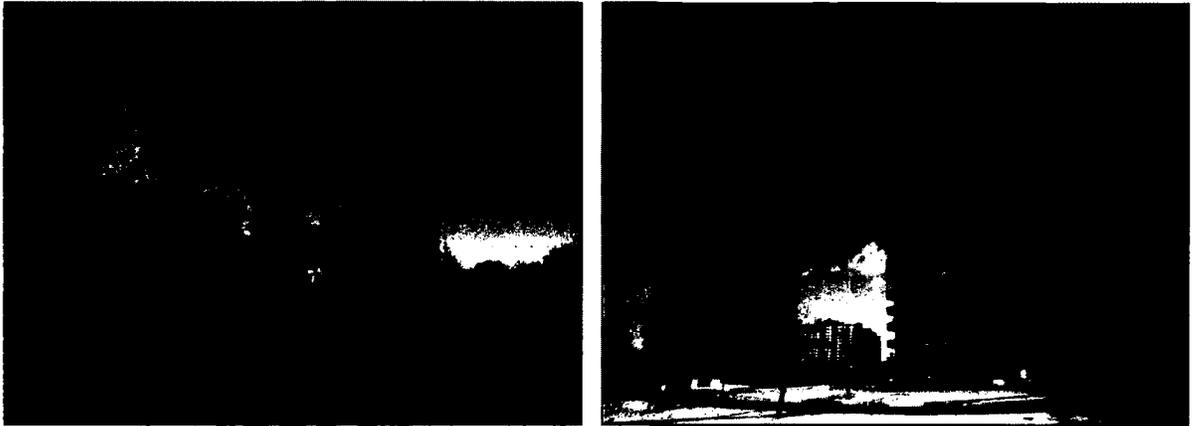


Figure 32/33 Examples of buildings currently on the site

The seven buildings on the site are all at very similar stages of their lifecycles and are all dealing with very similar issues; the most prominent being their thermally inefficient exterior walls. Beyond that, they are also facing many social issues in that they currently house some of Toronto's most impoverished residents. In the *Mayor's Tower Renewal Opportunities Book*, they state: "Aging Apartment Neighbourhoods sit at the centre of two of the greatest challenges facing Toronto: environmental sustainability, and social inequity."<sup>2</sup>

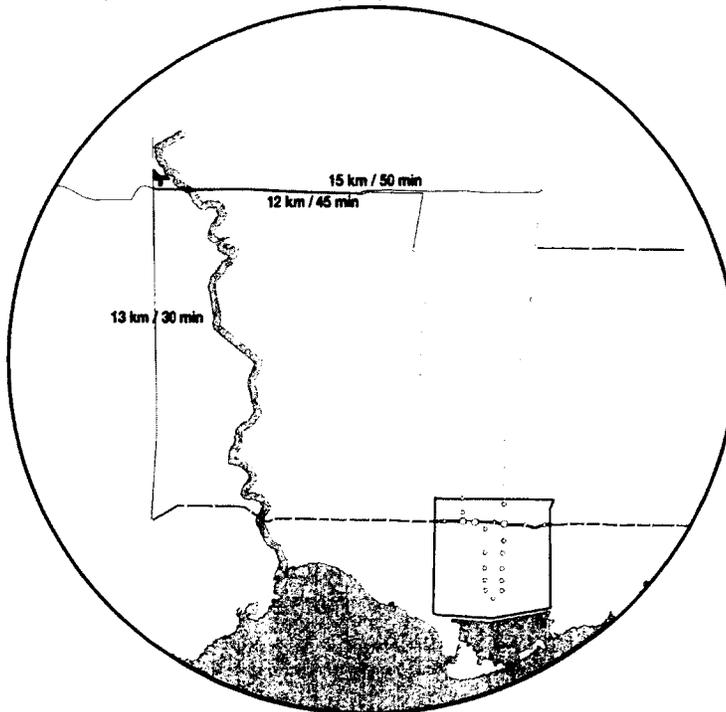


Figure 34  
Distance/Time on buses to get to closest rapid transit stations

There are a variety of approaches to be taken in the revitalization design of this site. They are all used in conjunction with one another to create a positive change on the site.

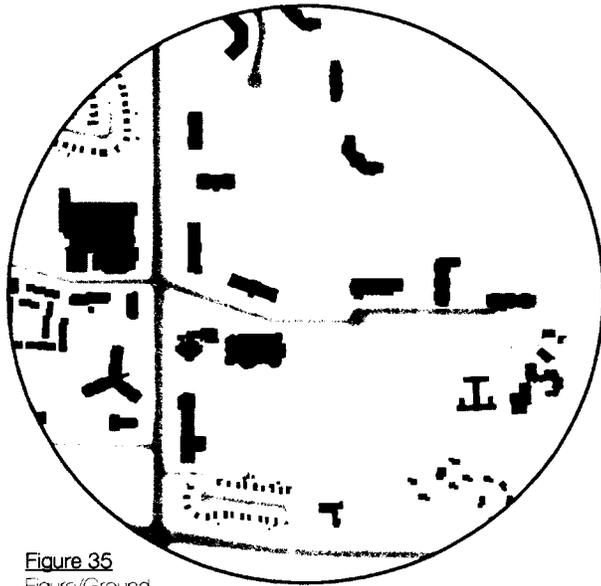


Figure 35  
Figure/Ground  
Plan

**Construction on empty land.**

By leveraging the vast amount of land surrounding the current apartment towers, an increase in density, amenities and other uses is possible.

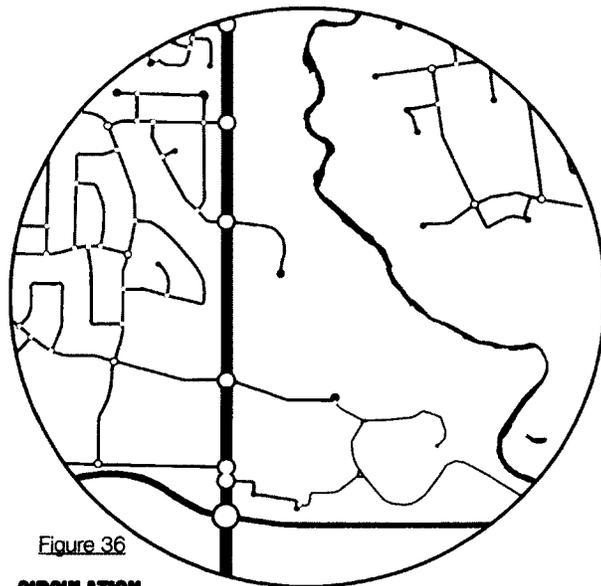


Figure 36  
**CIRCULATION**  
■ Primary Road  
— Local Road

**Introduction of streets.**

One of the greatest downfalls of the modernist tower-in-the-park concept is the unused 'park' space created by the superblock. By introducing a comprehensive street network that keeps the majority of vehicular traffic on main thoroughfares, the site can be made more accessible, secure and usable – without compromising the safety of children.

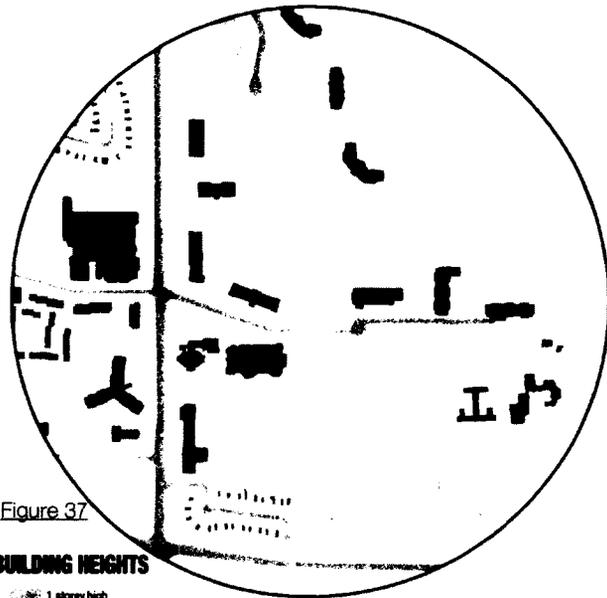


Figure 37

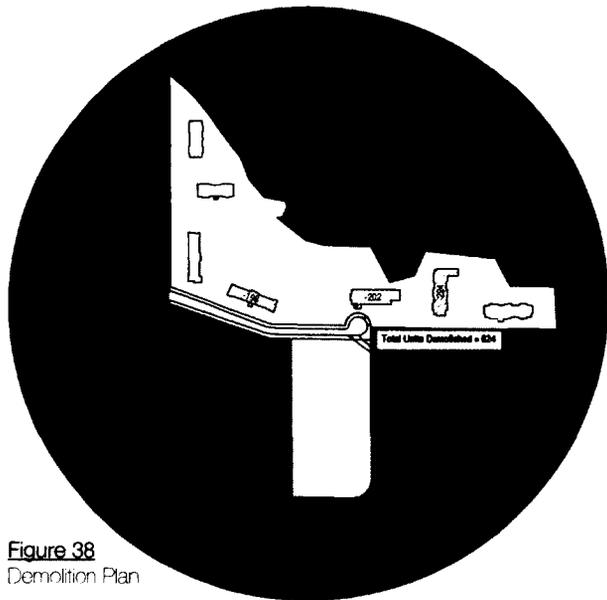
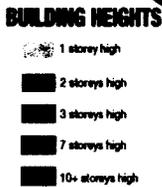


Figure 38  
Demolition Plan

**Convert high-rises to condos, retaining a percentage of units as affordable rentals for seniors and/or special needs residents.** There is an extensive body of research (Bauer, Wood, Jacobs, Newman, etc.) that suggests that high-rise apartment living is ill-suited to low-income families with children. By converting some or all of the existing buildings to condos or rentals exclusively for the elderly and/or special needs, it remains achievable to keep as many original buildings as possible.

**Strategic teardowns.** Although not necessarily the most economically or environmentally sustainable approach, tearing down some of the buildings could bring opportunities for higher density and for a more cohesive design scheme. This strategy was extensively deployed in both HOPE VI redevelopments and Regent Park in order to create environments better suited to families and better integrated into surrounding communities.



Figure 39

**RESIDENTIAL MIX**

- Single Family
- Low-rise
- High-rise



Figure 40

**OPEN SPACE NETWORK**

- Park
- Protected Green Spaces

**Integrate mix of uses, building types and demographics.** By introducing new housing types, stores, restaurants, and other commercial and entertainment facilities, the site will become more self-sustaining and attract a broader demographic.

**Create clearly-defined park areas.** Creating clearly-defined park areas fronted on all sides by residential buildings will improve surveillance and safety through Jane Jacob’s concept of ‘eyes on the street’. Within the scale of a neighbourhood, smaller pockets of parks (complementing the large swaths of open land adjacent to the site) can prove to be safer and more usable than ill-defined and unprogrammed open space. The protected parkland adjacent to the site allows for exploration and discovery (walking trails and bike paths) in which supervision would take a different form.

**Address edge and border vacuums.** All sides of this site have issues with what Jane Jacobs described as border vacuums. Along the protected parkland to the East, the site literally falls into the river. In this case it's important to create visible links connecting to the Humber River and its intricate paths and beauty. Along Kipling, there is currently no connection with the street. Here, there should be buildings right up against the road.

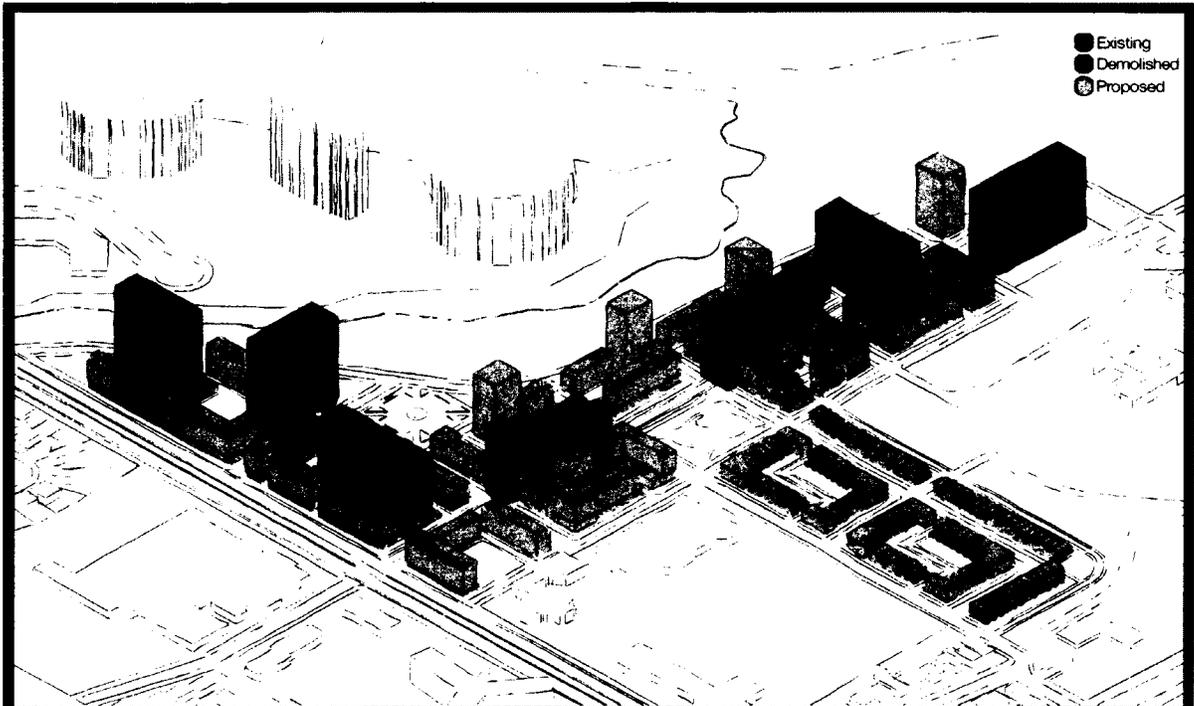
**Support informal economies.** Creating spaces in which markets or exhibitions can be held, allows residents to sell things they've grown or made. These forms of informal economies, in turn, bring a sense of pride and community, helping to socially vitalize the area. Rent-subsidized commercial spaces should be included in the mix to incubate businesses.

The following targets were set in order to ensure all residents be accommodated and satisfied.

**PROPOSED TARGETS**

Target	Basis	Assumptions
Provide 400 affordable family units with direct access to the exterior.	As seen previously through the study of the precedents as well as the theories of Jane Jacobs and Oscar Newman, we find that units for families - especially those in a low-income bracket - function more effectively close to the ground.	The 400 units assumes around 70% of the existing 2- and 3-bedroom high-rise units are occupied by low-income families which should have the opportunity to remain on the site.
Have about 200 units cater to the elderly – maintaining one building for this.	As seen through the observations of Oscar Newman, the low-income elderly prefer apartment towers, especially if they are the sole demographic residing in them.	Owner of the building will agree to the conversion.
Convert remaining existing units to condominium units.	Middle-class condos will fare better in the remainder of the existing towers.	Middle-class will respond to marketing and buy units.
Introduce non-residential uses along Kipling such as grocery and corner stores, pubs, shops, and dry cleaners.	Creating a mix of uses on the site will allow better access to daily necessities and increase the traffic to the site.	Appropriate retailers will lease space on the site. The increased density of the site will help support retail.
Achieve a minimum density of 63 UPA.	63 UPA is the density required by LEED-ND to achieve a Platinum rating.	Achieving at least this density will help ensure the creation of a vital, walkable neighbourhood development.

Figure 41. Table showing proposed targets for neighbourhood design



**Figure 41** Amending a High-Rise residential district through selective demolition and insertion of a lower-scale housing ensemble that "converses" with the existing buildings, and reestablishes urban connections, and connections to the landscape.

This graphic presents a massing of the proposed design – showing the relationship between new, existing and demolished buildings. In order to function correctly from a human and social standpoint, the existing tower ensemble – the towers and open spaces – was modified and nuanced by a low scale neighbourhood.

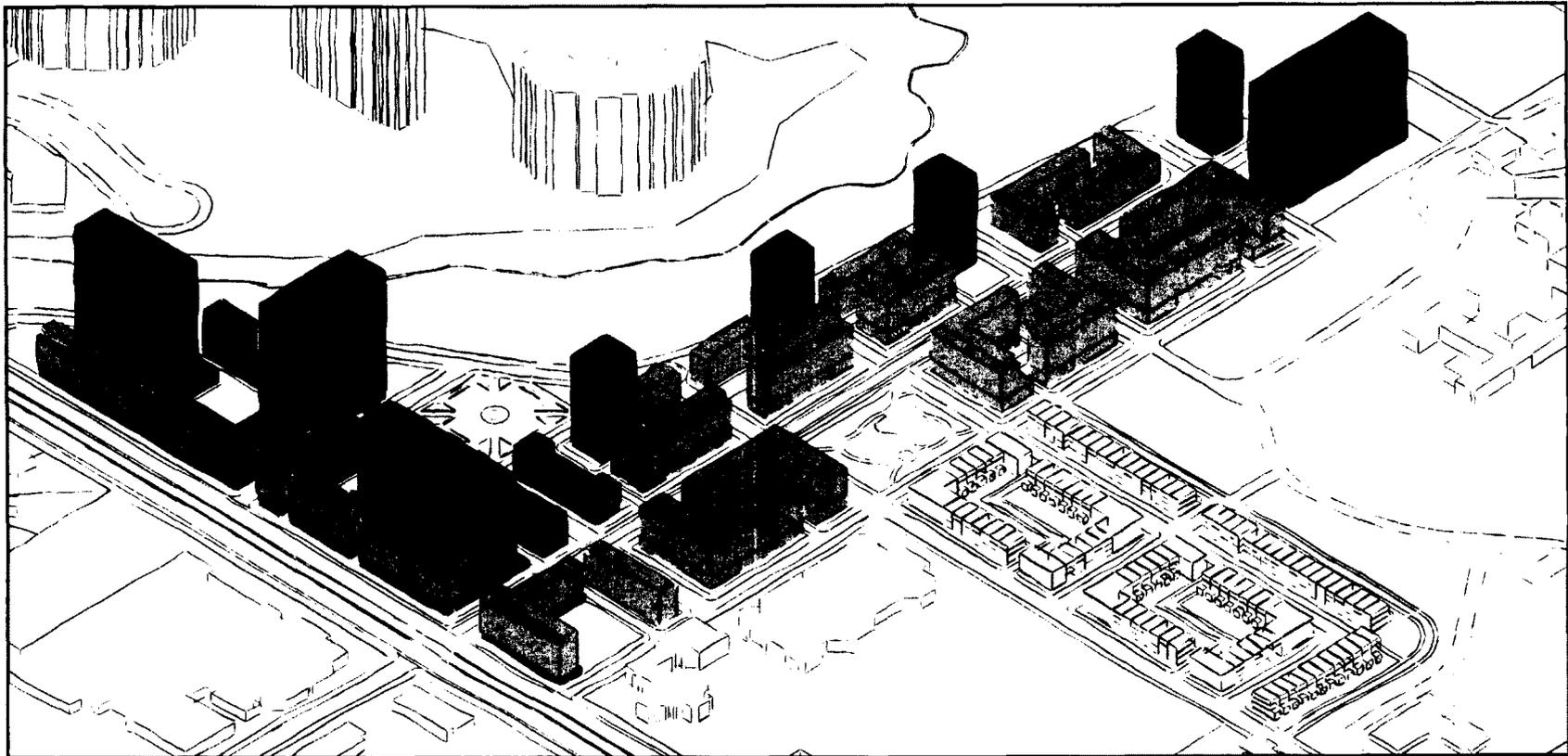


Figure 43 view showing different uses

### Building Distribution

- Commercial
- Existing Towers
- Point Towers
- Mid-rise Residential
- Townhouses

## **Proposed Strategy**

When considering how to modify the site, several important assumptions were made. First and foremost, a political, financial and regulatory framework would have to be put in place to enable the transformation. This would include a change in zoning to allow for a greater proportion of land coverage and a greater integration of uses. The transformation also implies a mechanism whereby the private owners agreed to pool energy and resources based on incentives provided by the government. Lastly, that there would be some sort of provision that assured that affordable units are not lost in the process.

It should be noted, however, that what is being proposed for Kipling and Finch is an experiment. Even if it were possible to find the resources, mechanisms and political will to effect the proposed transformation, mixed-demographic communities are a relatively new idea in suburbia – especially those of mixed tenancy. Experience also teaches us that it is difficult to predict outcomes. While the driving force behind the proposal is to create a community that better serves the needs of the many low-income families with children that reside there, the history of housing reform strongly suggests that this is difficult to do. Due to many external and social factors present, although all of the above outlined approaches were addressed, this is an experiment and the results may not bear the desired outcome of a child-friendly neighbourhood.

Among the most apparent changes to the site are the reintroduction of streets and the build-out of empty land. A grid-like street network has been introduced to create smaller, more manageable blocks. This new block structure, in turn, provides a framework into which to accommodate additional amenities and increase the overall density of the site.

The major goal of this redesign was to create a more secure and salubrious

environment for children. As high-rises are ill-suited to families, three of the seven existing towers were demolished. The decision about which towers to remove was driven by the desire to impose a more logical and comprehensive block and street pattern. One of the remaining four towers would be converted to units exclusively for the elderly while the others would be extensively renovated and converted to market condominiums.

The issue of the border vacuum was addressed by making stronger connections with surrounding areas. Along the Humber River protected parkland, the road winds until it reaches a parking lot on the eastern edge of the site, where it connects to a path that meanders down to the river's path system. To the South a road leading to Finch was introduced to increase the site's connection with the surrounding areas. Along Kipling is where the most evident changes occurred. Here, the road was lined with appropriately scaled mix-use buildings creating a comprehensive street wall.

The introduction of commercial along Kipling brings much-needed amenities to the site. This site, along with the adjacent communities, has a significant population that can support a vibrant commercial centre. Bringing essential amenities to the site will eliminate many of the transportation challenges that current residents face.

As discussed throughout this thesis, especially through the works of Stein and Wright, mid-block spaces have been a choice tactic in the pursuit of creating child-friendly neighbourhoods. When I began designing the blocks there were several questions and factors to consider:

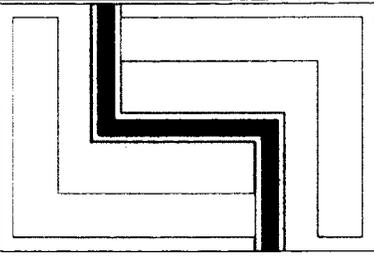
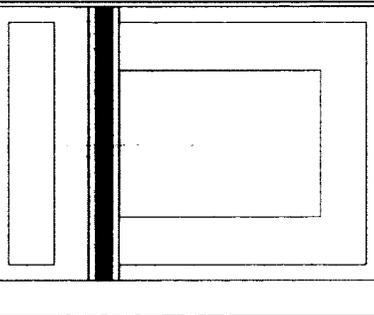
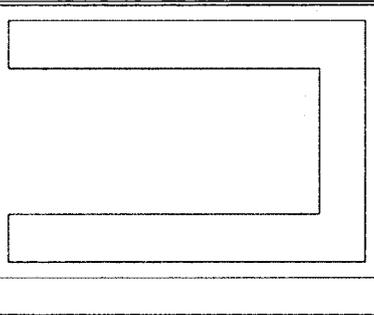
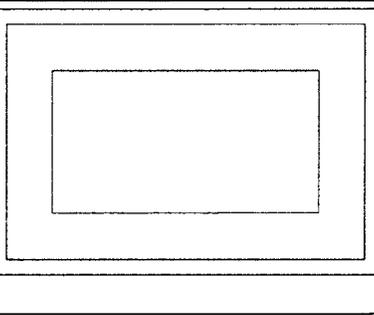
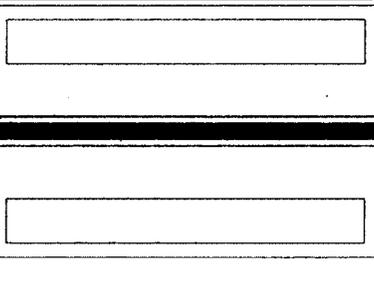
- How much access, if any, do cars have into the blocks and in what manifestation?
- What configuration of buildings lends itself best to the needs of the site?
- What spaces are private and which are shared?

To address the first question of vehicular access, I felt that in the interest of creating direct frontage on the street, parking, for the most part, should happen at some point in the centre of the block. Looking at the case of the townhouse blocks, this would appear in the form of laneways with parallel parking. For this reason, a fully enclosed block was out of the question.

The block shape that was ultimately selected in the project was the L-shaped buildings with a Z-shaped laneway through it (see table on page 62). This selection was made because I felt the ability to park by the back entrance of your unit, the street safety created by the shape of the laneway, the access to private backyard (although limited), and the opportunity for supervision of all exterior spaces, made for a child-friendly block. In this configuration, from the back of each unit, each family has a private area extending 6-8 metres. The remaining 3-5 metres would be classified as semi-private, in which all families are entitled to inhabit. This change in ownership allows for a transition from the private dwelling to the public street.

Within the densely re-developed neighbourhood, an array of plazas and parks has been scattered. They are placed in areas surrounded by residential units, giving them the security they need from the many 'eyes on the street.' These spaces could very easily be used and converted to support informal economies such as exhibitions and markets.

There will exist a difference between the uses of the larger park spaces - filled with playground equipment, gazebos, benches, and sports courts – and the use of the mid-block spaces. While frequenting the larger park areas might require a planned outing when it comes to younger children, the mid-block spaces allow for daily supervised play within the sight-line and ear-shot of parents or caregivers. These spaces also allow for barbecues, picnics and other small-scale outdoor activities.

Block Shape	Advantages	Disadvantages
	<ul style="list-style-type: none"> <li>- plenty of laneway parking for tenants</li> <li>- supervision and safety inherent in scale of spaces and design of road</li> </ul>	<ul style="list-style-type: none"> <li>- limited types of activities can occur due to spatial arrangement</li> </ul>
	<ul style="list-style-type: none"> <li>- interior space very protected from surrounding</li> <li>- scale of open space lends itself well to a variety of activities</li> </ul>	<ul style="list-style-type: none"> <li>- limited parking available on laneway – remainder must occur either on the street or underground</li> <li>- straight laneway is more dangerous due to speeding cars</li> </ul>
	<ul style="list-style-type: none"> <li>- interior space very protected from surrounding</li> <li>- scale of open space lends itself well to a variety of activities</li> </ul>	<ul style="list-style-type: none"> <li>- parking must occur either on the street or underground</li> <li>- very open access from street</li> </ul>
	<ul style="list-style-type: none"> <li>- interior space fully protected from surrounding</li> <li>- scale of open space lends itself well to a variety of activities</li> </ul>	<ul style="list-style-type: none"> <li>- no access to space from street</li> <li>- parking must occur either on the street or underground</li> </ul>
	<ul style="list-style-type: none"> <li>- clear sightlines between blocks</li> <li>- plenty of laneway parking for tenants</li> </ul>	<ul style="list-style-type: none"> <li>- no enclosed/protected spaces</li> <li>- straight laneway is more dangerous due to speeding cars</li> </ul>

**Figure 44**  
Table comparing different block configurations

<b>AREA</b>		
	<b>Existing</b>	<b>Proposed</b>
Overall area of built space	243,543 m <sup>2</sup>	367,090 m <sup>2</sup>
Overall area of residential	243,450 m <sup>2</sup>	344,438 m <sup>2</sup>
Overall area of non-residential	93 m <sup>2</sup>	22,652 m <sup>2</sup>

<b>POPULATION</b>		
	<b>Existing</b>	<b>Proposed</b>
Overall persons living/working on the site	2605	6059
UPA (Units per acre)	42	85
PPA (People per acre)	73	170

<b>UNITS</b>		
	<b>Existing</b>	<b>Proposed</b>
Number of residential units	1513	2989
Number of units with direct access to grade	76	500
Number of other units	1437	2489

**Figure 45**  
Table comparing existing and proposed

The new plan boasts a significant increase in the total number of units, going from 1513 to 2989. Low income families would be relocated into 400 new affordable family units close to the ground plane, leaving an additional 100 market family units. The majority of the affordable units are located in the South section of the plan, organized as townhouses, while the rest are in the lower levels of the mid-rise buildings. The tower at the northern most part of the site is envisioned as affordable rental for elderly residents and contains 210 units. The remaining 2729 units are intended market units. As redeveloped, the site would contain 20% affordable units and 80% market units. Increasing the total number of units will increase the density to 85 UPA (about 170 PPA – assuming 4 people per family units, 1 person per elderly unit, and 1.5 per market unit.) Although some thought has been given as to who goes where the precise way in which demographics and tenancies will be mixed has not been fully worked out.

All of the above strategies and targets were influenced by all the critiques and examples of dealing with the modernist legacy previously discussed in this thesis.

By understanding the issues at play and assessing what has and hasn't worked, the proposed strategies are intended to create the basis for a diverse and vital community. The project specifically addresses the larger thesis question of accommodating children because it transforms a neighbourhood dominated by families in failing high-rise towers. Through the process of redevelopment, all of these families will be able to reside in close proximity to the ground plane. This new plan is also beneficial to children to the extent that its new form will foster a more lively street life and community cohesion – a new mixed-use, mixed-demographic neighbourhood replete with opportunities to learn and grow.

---

### **Other Possibilities**

While the above describes one version of a redesign of the site there remain several other possibilities. In terms of the existing site conditions instead of removing only three buildings, I could have removed all of them to have a clean slate or kept all of them and have a more weaving and meandering road system. As an alternative to moving all family units to the ground plane, I could have proposed a series of 'partner buildings' to join towers with vertical outdoor spaces; the possibilities are endless. I ended up with the version I described above because I found that by demolishing the three buildings I could create a very logical and grid-like street system. I also found that the dichotomy between new and existing, created very interesting moments of intersection and discovery.

---

### NOTES

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  2. ERA Architects, [Mayor's Tower Renewal Opportunities Book](#) (Toronto: City of Toronto, 2008), 51.
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## Phasing

In executing a project of revitalization, in which people must be relocated during construction, it is important to have a clear phasing plan in place that invokes the least amount of disturbance to the daily lives of residents.

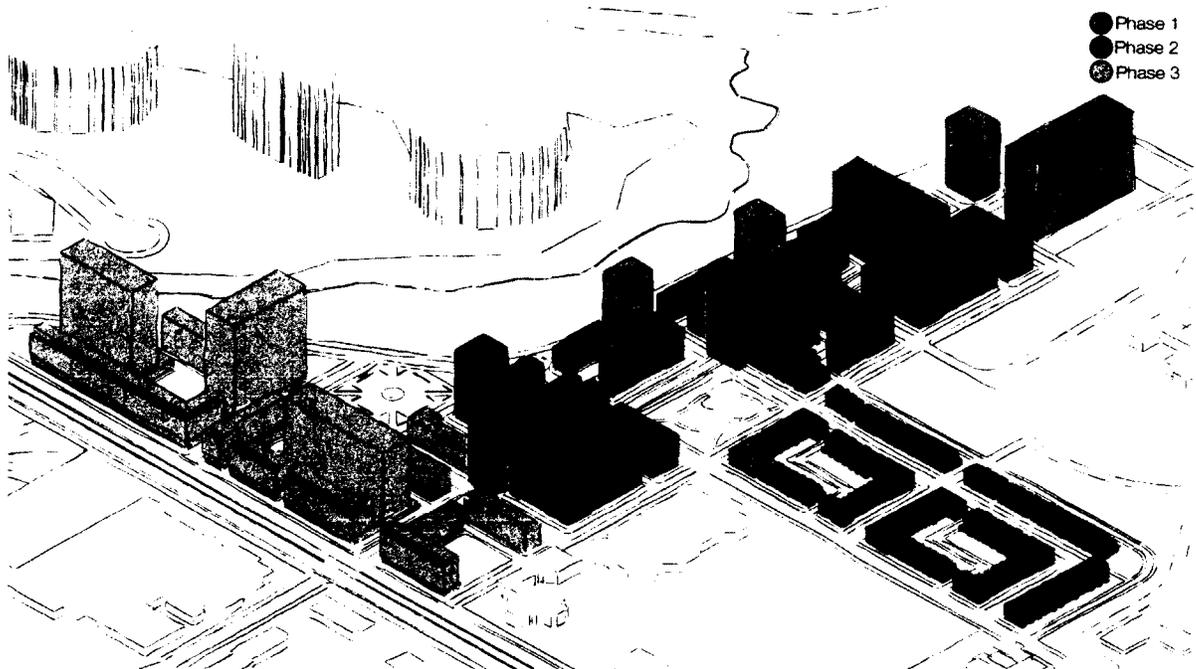
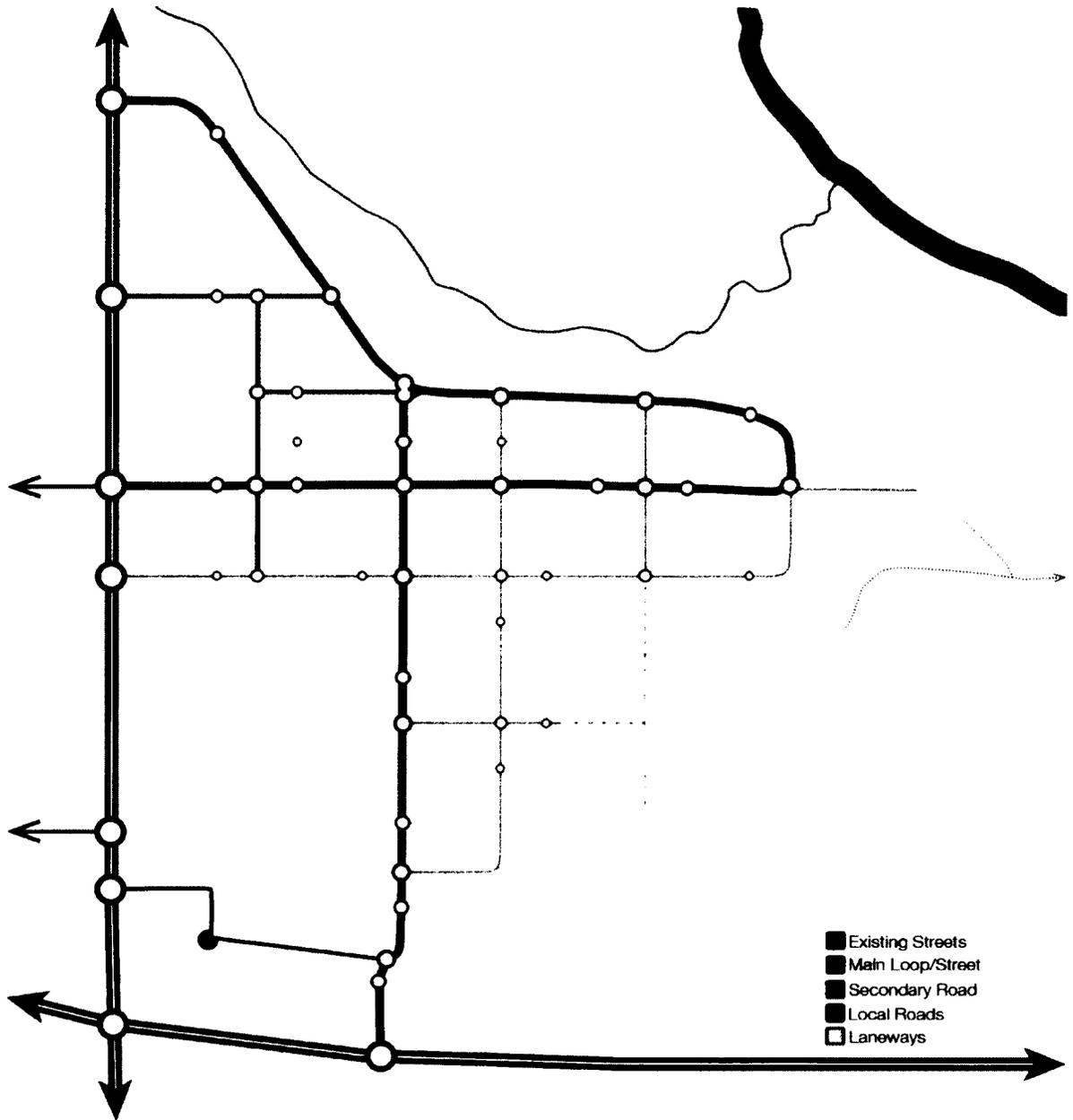
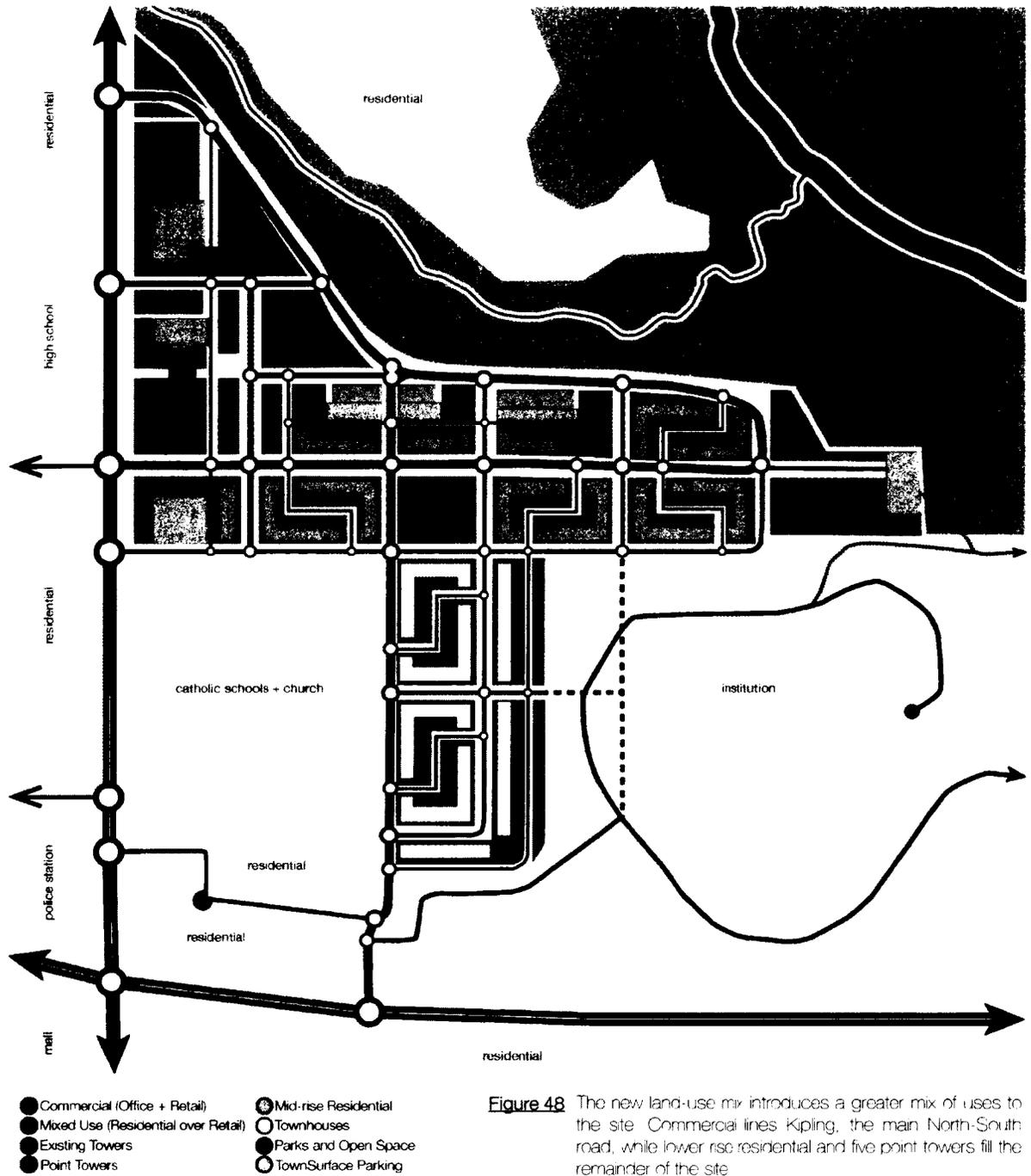


Figure 46  
View showing different phases of construction

- Phase 1:
- New townhouses to South of site constructed.
  - Residential-only blocks at North of site are constructed, except two that have existing towers (to be demolished) going through them.
  - Existing tower at West of site (to be retained) begins renovations.
- Phase 2:
- Three existing towers at centre of site are demolished and the tenants are relocated to newly built buildings from phase 1.
  - Remainder of residential-only blocks are constructed.
- Phase 3:
- Mixed-use buildings are constructed.
  - Three existing towers (to be retained) along Kipling are renovated.
-



**Figure 47** The new circulation replaces what was previously a single street and replaces it with a comprehensive street network that keeps the majority of vehicular traffic on main thoroughfares, leaving the local streets to be much calmer and appropriate for children



**Figure 48** The new land-use mix introduces a greater mix of uses to the site. Commercial lines Kiping, the main North-South road, while lower rise residential and five point towers fill the remainder of the site.

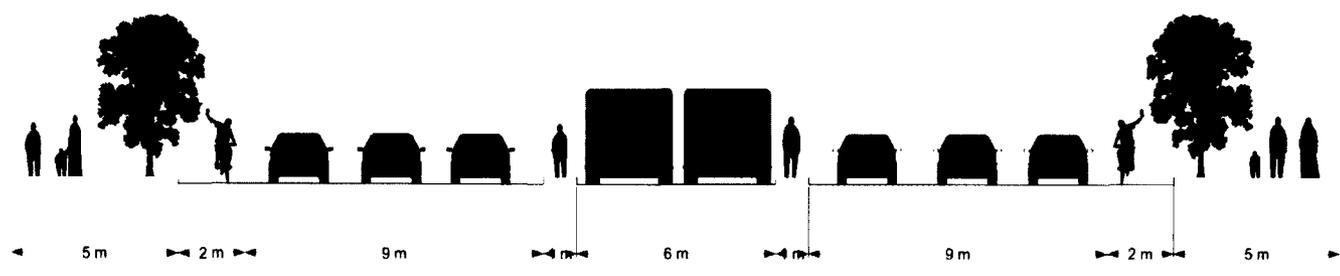
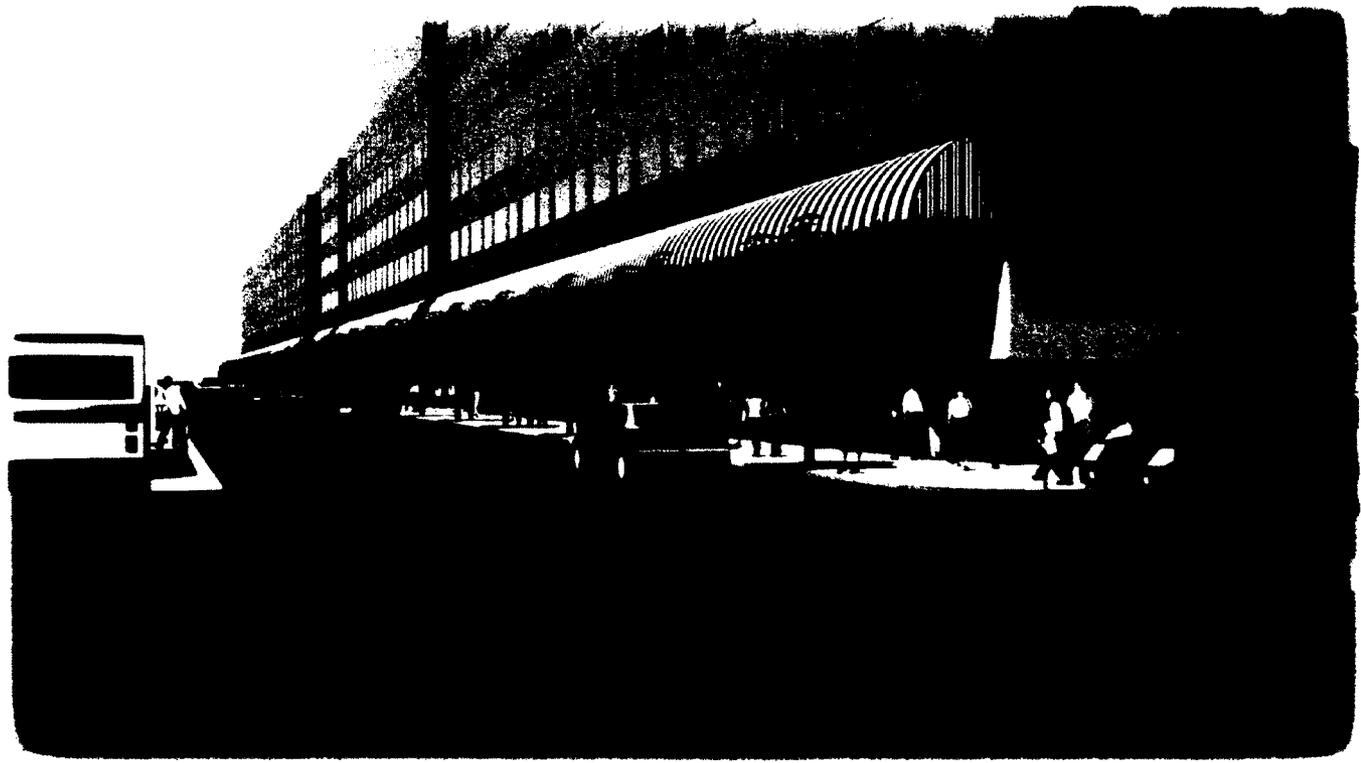


Figure 49 Street section and view of newly redesigned Kipling Avenue

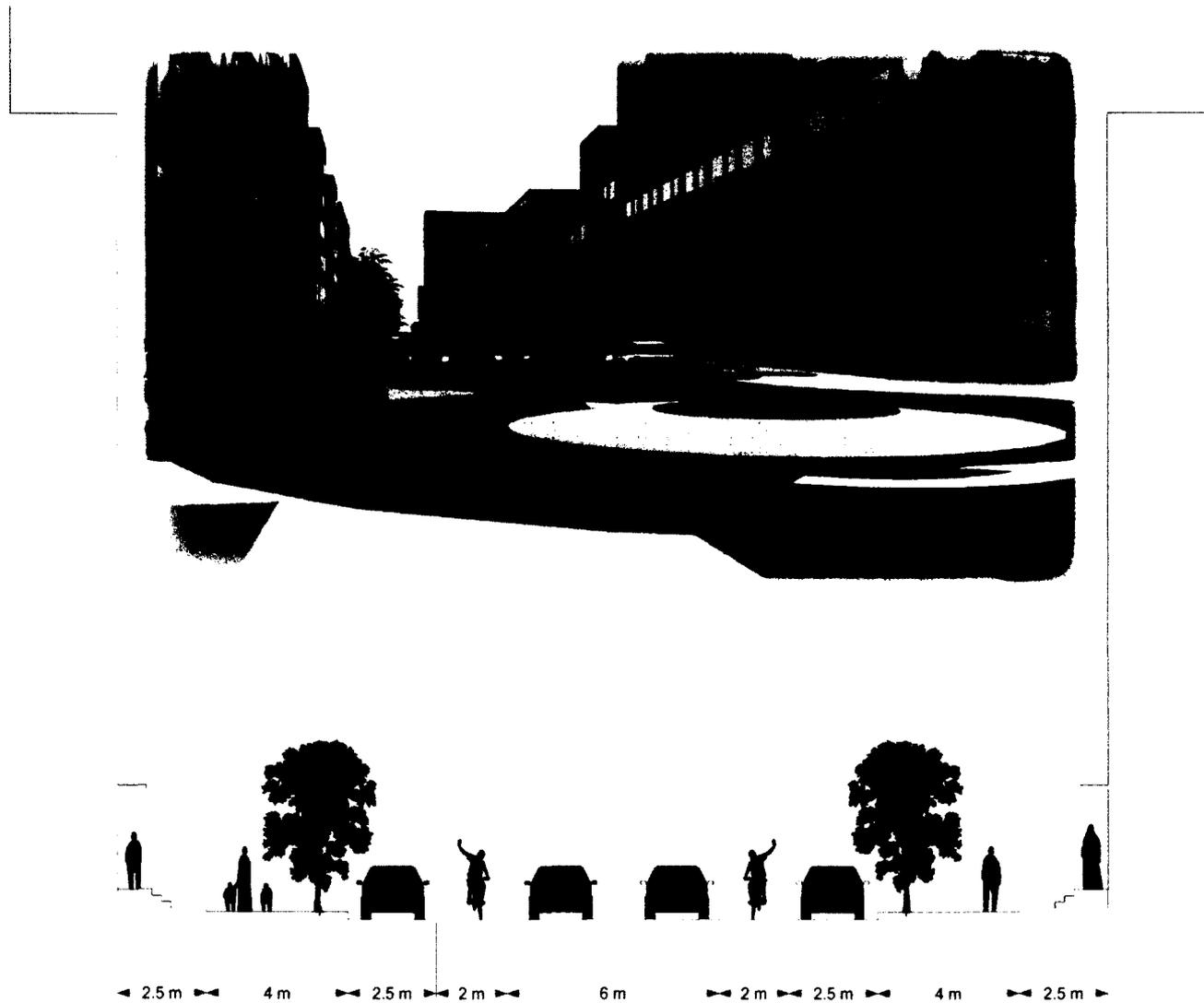


Figure 50 Street section and view of newly designed Main Street

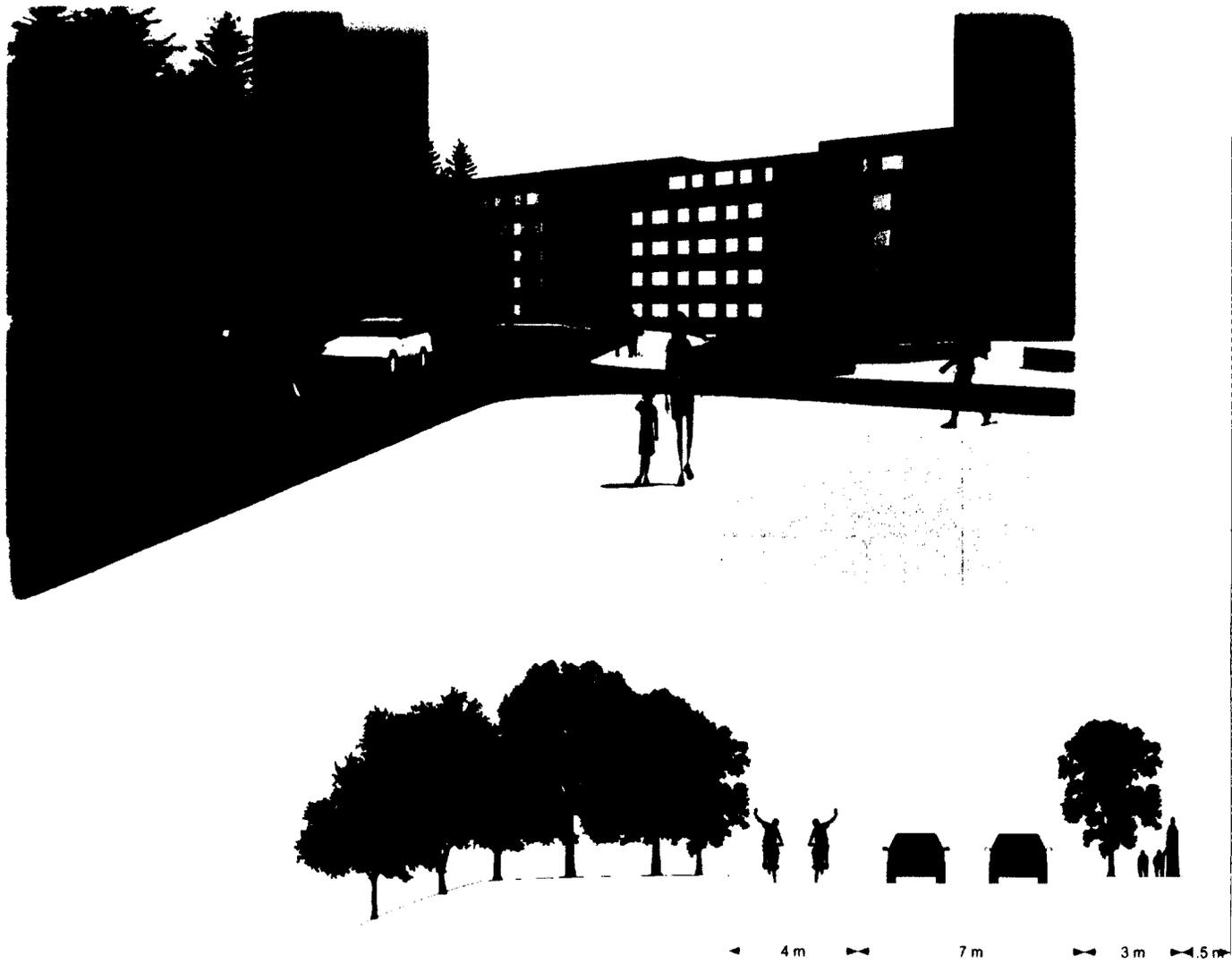
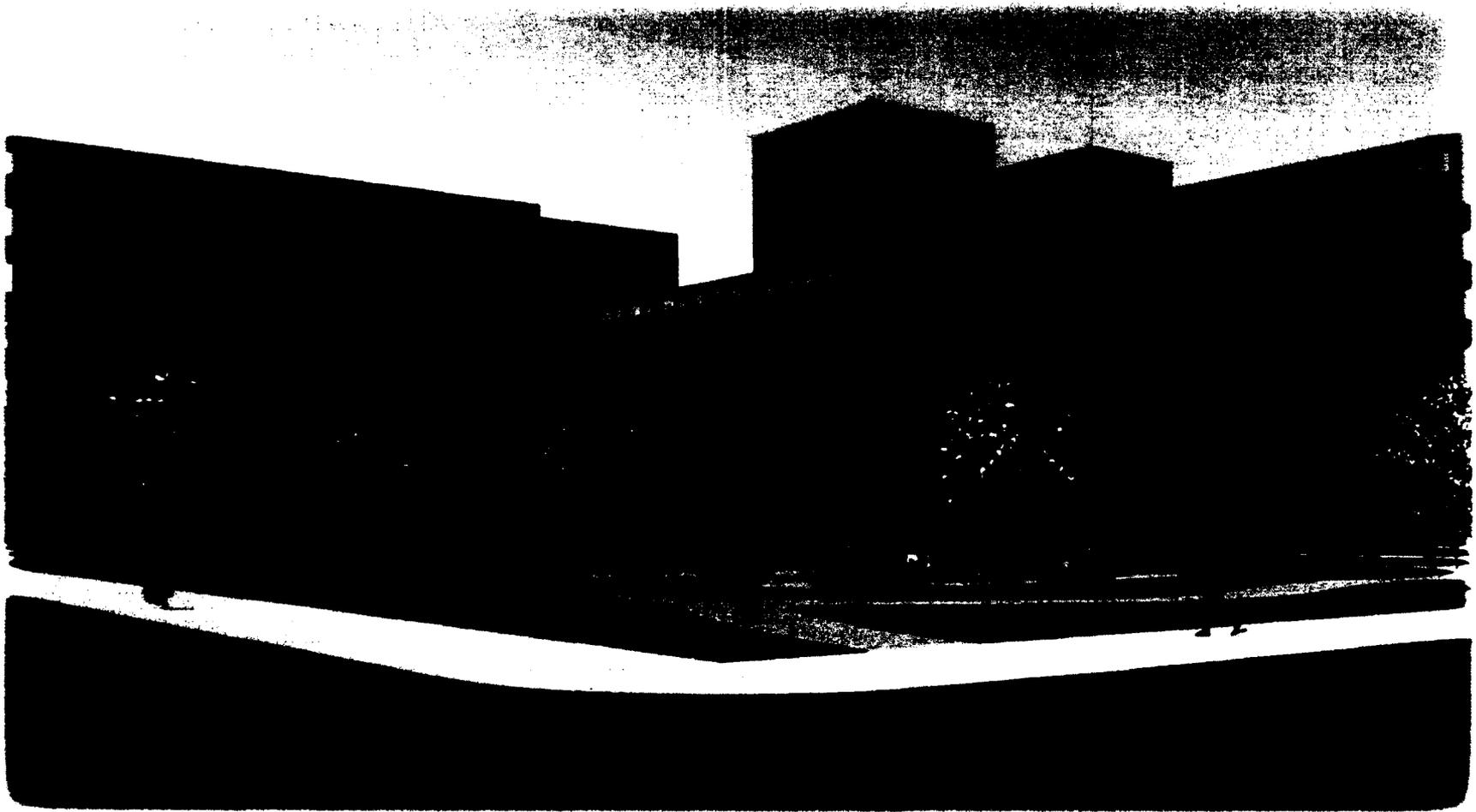


Figure 51 Street section and view of newly designed parkway



Figure 52 Street section and view of newly designed residential street



## **CONCLUSION**

This thesis sought to address the relationship between urban housing and design reform and the need to protect children. By looking at the origins, critiques and repercussions of the infamous 'towers-in-the-park', an attempt was made to rectify the problems and create tangible solutions for the future. This thesis explored the changes in thought and principle of how a child-friendly neighbourhood should be developed. The changes proposed by the project therefore have the ultimate goal of creating child-friendly neighbourhoods.

The thesis also acknowledges the ongoing role of residualization in capitalist societies, in that it is a recurring issue. This recurrent trend toward residualization leads to shortages of suitable housing for those with the fewest resources. Addressing this issue is difficult, as more suitable housing tends to be more expensive unless government subsidies or programs are in place to ensure its affordability.

Jane Jacobs and Oscar Newman both proposed and suggested many strategies to cultivate child-friendly neighbourhoods. Jane Jacobs argued for a return to streets, whereas modernists had removed them in favour of superblocks filled with vast swaths of greenery. She knew from her experiences and observations that densely developed mixed-use neighbourhoods, scattered

with small parks, worked best for children. Jane Jacobs felt that these traditional streets fostered community behaviours in which everyone looks out for each other and each other's children. Oscar Newman also felt strongly about the benefit of a more traditional neighbourhood composition. He felt it allowed for the creation of *defensible space*, which is key to the safety and vitality of a neighbourhood.

The project, whose framework is based on these concepts, showed some of the many approaches that can be taken to improve and revitalize Toronto's apartment tower neighbourhoods. I based the design of the Rexdale site on the following:

- developed at a density to effectively support public transit
- road network is legible, easy to navigate and exhibits clear hierarchy
- blocks are of modest dimension to encourage interaction
- buildings are integrated into and support the street network and contribute to the definition of streets and public spaces
- streets are designed to support different modes of transit
- there are multiple smaller parks integrated into the neighbourhood

In addition to this, maintaining the affordable housing stock and making it child-friendly was key in my decisions so any previous low-income family units were replaced with units close to the ground plane.

These approaches, although tailored to the specific site, could easily be applied to the many similar complexes throughout Toronto

and its surrounding areas. As always, the welfare of children should be the primary concern when considering how to produce or safeguard a pool of affordable housing. With this in mind we can endeavor to create environments that are good and healthy places for children to live and grow-up in, we can create child-friendly neighbourhoods.

---

### **Final Note on Methodology**

For the purpose of this thesis I focused my research on the built environment – specifically how architects and designers altered built environments to be child-friendly. Isolating my research in this way narrowed the scope of the project, making it more manageable but it also dismissed knowledge and understanding of crucial sociological factors.

Broadening the scope of the research to include social issues and environmental factors would have produced a much more convincing and successful design. If time would have allowed I believe integrating a portion of social research – be it through interviews, observation, or more quantitative methods – would have added to the validity of the overall research project.

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