Collective Form

Infill housing and new domestic spaces in Toronto's residential neighbourhoods

by
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Authors Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

Toronto is facing a housing crisis, the symptoms of which are apparent across the city; property values are increasing at a dizzying rate, rental vacancy rates are at historic lows, poverty and displacement are being made more visible by waves of gentrification. And yet, Toronto is undergoing a boom of residential construction, with high rise condominiums changing the fabric of large parts of the city. Housing in this climate is conceived as a speculative commodity, rather than as a space of dwelling; this is a crisis not only of affordability and access to housing, but also the quality of domestic space. This condition is not simply an issue of the current supply of housing, but inherent to its production and form. The thesis proposes an alternative to the contemporary production of housing, as a critical response to the housing crisis and contemporary domestic space.

The historical evolution of residential typologies in the city makes legible policy and planning tools as well as socio-economic tendencies. The initial subdivision of large scale properties in the early city into individual residential lots and accompanying commodification of property led to the large-scale production of semi and detached single family homes as the dominant historic type in the city, creating a perceived image of Toronto as a 'City of Homes' that persists into the present. Post war development expanded this production of single family homes to the suburbs, while displacing substantial urban communities through Urban Renewal schemes and the construction of high rise towers. While larger social and economic institutions have undergone rapid changes characterised by the current tendency towards neoliberalization, domestic space is still structured around the institution of the nuclear family, and the type of the single-family home. The thesis positions itself in the tradition of urban analysis and infill typologies proposed by architects like Diamond and Myers and George Baird, and associated reform planning movements that emerged in response to these patterns in the 1970's, while imagining the possibilities of new domestic spaces that reflect contemporary living conditions.

Building upon this precedent of infill housing, the proposal contextualizes low-rise high density development within Toronto's residential Neighbourhoods; large geographic areas of single family homes currently protected from any densification. The design proposal acts as a synthesis to these ideas about the form of contemporary domestic space and the contextual nature of infill, creating increased density for reasons of affordability for residents, but also to respond to both social and ecological sustainability made possible by increased density and more efficient land use. The logic of the building form is contextually responsive, establishing a series of setbacks based on the existing structure of the neighbourhoods, as well as manipulating the forms based on subtractive planes. A resident led development model is proposed to resist the commodification of housing, while creating spaces that are more suitable for a diverse range of contemporary domestic realities with reference both to international models, as well as a long history of cooperative housing in Toronto. The internal organization of the building reinforces these social organizational structures through the provision of common spaces and the collectivization of domestic labour. The replication of these typological experiments across the urban fabric allows us to envision the production of new forms of collective dwelling as a radical proposal for transforming the city and domestic space as a right to the city.

Acknowledgements

This thesis is the culmination of a lot of time and energy, only possible because of the support and contributions large and small of a great number of people. Thanks to all the colleagues and friends who I've worked with, shared an office with, and enjoyed the last 16 months with.

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Marie-Paule Macdonald, thank you for your contributions throughout - I always enjoyed our discussions! John McMinn, thank you for reviewing the work and your insights during the defence.

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Thanks to my family for all of their support, especially throughout the thesis and the last 7 years of school.

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A CONTEMPORARY HOUSING CRISIS

Toronto is a city in the midst of a housing crisis, one that has manifested itself in various forms legible across the city. Property values are increasing at a dizzying rate, particularly amongst the city's existing stock of single-family houses. Average prices for detached homes in the city have increased at rates of between 15% and 20% year-on-year,[1] with an average price of $1,200,000 as of September 2016 and an average of $677,241 including semi-detached, rowhouses, and apartments. While housing ownership becomes less and less affordable, rental vacancy rates are also reaching historic lows—currently at 1.6%—with scarce construction of public or market rental housing in comparison to freehold or condominium ownership. The city's system of public housing provision has been subjected to chronic underfunding, particularly since the mid 1990's, with a repair backlog of $2.3 billion over 10 years and poor physical conditions of many units forcing the closure of 500 units this year, with a further 7500 expected to be closed by 2023 at current funding levels. This is in addition to a waitlist of 82,414 households for less than 60,000 available Toronto Community Housing units. Poverty and displacement are increasingly visible across the city, particularly in areas undergoing rapid gentrification, while income polarization has resulted in increasingly homogeneous concentrations of both low and high income households. And yet, Toronto is undergoing a boom of residential construction: with 132 high and mid-rise residential buildings under construction as of December 2015, and 44,000 housing units under construction in 2015.[2] The production of housing is usually seen as a technical and supply based issue; while the state has loosened regulation on new construction in some areas, though, intensification has been entirely proscribed from residential areas of the city. As development proposals for new condominiums proliferate across the city, there remains little public conversation over alternatives to the ubiquitous tower podium.[3] This crisis is not simply an issue of the current supply of housing, but also its production and form in both contemporary development and the established urban fabric.

Over the past century, Toronto has experienced a rapid and continuous evolution with profound changes to the urban landscape. Today, the resulting form of the urban fabric and residential typologies contribute to the ongoing housing crisis, prioritizing developer profit and the desires of established property owners over more democratic access to housing. These typologies cover a broad area of vital main streets and downtown residential neighbourhoods conducive to pedestrian and urban life, and extend to the sprawling automobile-centric suburbs and high-rise 'Towers in the Park,' both geographically removed from the downtown core of the city. The scale of the city now exists at these extremes: with 41% of residents living in high-rise towers and 38% in single-family houses, there are few housing options of an intermediate scale.[4]

These conditions expose fundamental contradictions within the structure of capitalist institutions, where homeownership is valorized and seen as both morally virtuous

1. https://www.thestar.com/business/real_estate/2016/09/07/toronto-real-estate-hot-as-the-weather-in-august.html

2. https://www.cmhc-schl.gc.ca/odpub/esub/64459/64459_2014_A01.pdf

3. http://developmentproposal.tumblr.com/

4. http://www1.toronto.ca/City%20Of%20Toronto/City%20Planning/SIPA/Files/pdf/H/

Figure 1.1 **Contemporary development**
The skyline of Toronto, with numerous high rise towers built in the last 20 years and many more under construction.

Development Proposal
100 Queen Street West

An application to amend the zoning by-law to permit a 50-storey residential building with 402 dwelling units and 6 levels of below grade parking with 198 spaces. The application proposes to build the tower between the wings of the existing structure. The government building would be converted into commercial uses.

STATUTORY PUBLIC MEETING
Information will be posted once meeting is scheduled

TORONTO
FILE#**22 1108246 CHE 11 FD**
For information:
www.toronto.ca/planning/developmentapplications

Development Proposal
15 King's College Circle

An application to amend the zoning by-law to permit a 12-storey residential building with 60 dwelling units and 2 levels of below grade parking with 40 spaces. The application proposes to convert the existing heritage building into residential units and incorporate its facade into the tower. The front green would be managed as a Privately Owned Public Space (POPS).

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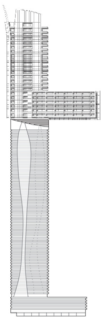
www.toronto.ca/planning/developmentapplications



Development Proposal
1 Bloor Street East

An application to amend the zoning by-law to permit a 42-storey residential building with 152 dwelling units. The application proposes to be built on top of the existing condominium, and "digging down" to create an additional 6 levels of underground parking. The upper podium will include retail/commercial uses.

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For information:
www.toronto.ca/planning/developmentapplications

Development Proposal
100 McCaul Street

An application to amend the zoning by-law to permit a 12-storey residential building with 90 dwelling units and 2 levels of above grade parking with 50 spaces. The application proposes to be built on top of the building extension, converting the upper levels into above grade parking. The main levels will continue to house the university, and remain open during construction.

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For information:
www.toronto.ca/planning/developmentapplications

Figure 1.2 **Satirical development proposals**
Reflecting both the ubiquity of residential development in Toronto, and the lack of either a critical public discussion of its relationship to the housing crisis or the proposal of alternatives, these fictional proposals

and the foundation of personal economic security, while simultaneously acting as a means of control and discipline through debt.[5] At the same time, employment has become more precarious and increasingly domesticated, permeating the previous divisions between work and leisure. As a site of reproduction, contemporary housing has failed to reflect these radical changes. These contradictions create possibilities for imagining new forms of urban life, for rethinking housing beyond conventional home ownership and the nuclear family.

5. Blackwell, Adrian. "How to Turn a Foreclosure Crisis into a Domestic Revolution." Border Crossings, June 2016.

The first chapter of this thesis addresses the development of residential typologies in Toronto, examining their role in reinforcing contemporary social institutions and their contribution to the current housing crisis. The historic role of housing and urban movements that have challenged these dominant tendencies are also examined, to contextualize the design proposal within a milieu of alternative social and typological precedents.

The second chapter examines the role of the single family home and the nuclear family as social institutions themselves, and the role of the home as the space of social reproduction. In light of radical changes to the structure of family, the welfare state, and contemporary and domestic labour, the domestic space of the home has remained remarkably static. Alternative organizational and social structures are examined, both as a means of facilitating development as well as new ways of living together.

The third chapter proposes prototypes for new kinds of infill housing and development structures in Toronto's residential neighbourhoods, focusing on sites in the city's West end. These designs seek to synthesize topics of the first two chapters, of increased density in an established context and new domestic spaces that imagine the possibility of housing beyond the family.

Figure 1.3 **Possibilities of housing beyond the family**
Perspective showing collective space within proposed infill housing, illustrating the possibilities of alternative arrangements of domestic space outside of the single family home and nuclear family.

THE HISTORICAL EVOLUTION OF RESIDENTIAL TYPOLOGIES

This contemporary crisis is no incidental or temporary condition; rather, it is the result of a series of specific and intentional policies and socio-economic tendencies which can be understood through the historical context of residential development in the city. These housing developments have resulted in a unique geography of urban adjacencies and juxtapositions: a condition of distinct fabrics and insertions of difference. The interrogation of these conditions, and their relationship to the evolution of regulatory and zoning controls, provides insight into current conditions of housing and can be mobilized to identify sites of potential opportunity and alternative development.

The present form of Toronto's downtown is a tangible outcome of the initial historical survey and subsequent subdivision of property in the 18th century. Surveyed in a rectilinear grid that provided the initial logic of subdivision and enclosure of land, the process largely ignored the city's major natural features, such as an extensive network of ravines and creeks draining into Lake Ontario. Set out in 1793, the grid survey divided the land north of the fledgling city into long rectangular plots of land oriented along a north-south axis. The boundaries between these 'park lots' were formed by concession roads: Yonge, Bathurst, Dufferin, and Keele oriented north-south and Queen, Dundas, and St. Clair east-west.[6]

6. Arthur, Eric Ross., and Stephen A. Otto. Toronto: No Mean City. Toronto: University of Toronto Press, 1986,

The local government gave these lots to prominent locals, initially as suburban estates and farms. During the 1870s and 1880s, however, the city underwent a period of rapid industrialization and growth, as it began to expand north and west into land adjacent to these farmlands and estates (development to the east was much slower, with the Don River acting as a physical barrier). This rapid expansion of the city presented an opportunity for landowners, who began to subdivide their properties into plots suitable for residential development, thus encouraging widespread property speculation. This resulted in the establishment of the standard narrow and deep plot in the downtown area, with a width of between 5 and 8 metres and a depth of between 30 and 45 metres. This process of subdivision and speculation was a fundamental expression of early capitalist commodification, and the transition from an agrarian to industrial city. Where previously agriculture was a means of realizing surplus value from the land, its commodification created an exchange value. The value of the land was now in rent that could be extracted either directly from tenants or through the appreciation of it as an asset.[7]

7. Lefebvre, Henri. The Urban Revolution. Minneapolis: University of Minnesota Press, 2003.

This subdivision also represented a new spatial logic and typology of residence: a more or less continuous street facing address, with either a private rear yard or a rear-facing lane for services (refer to page 34).[8] The resulting urban form created a hierarchy of streets as subdivision proceeded: residential streets were oriented to these long and narrow lots, while main streets ran along former park lot divisions,

8. Myers, Barton, and George Baird. "Vacant Lottery." Design Quarterly, no. 108, 6-51.

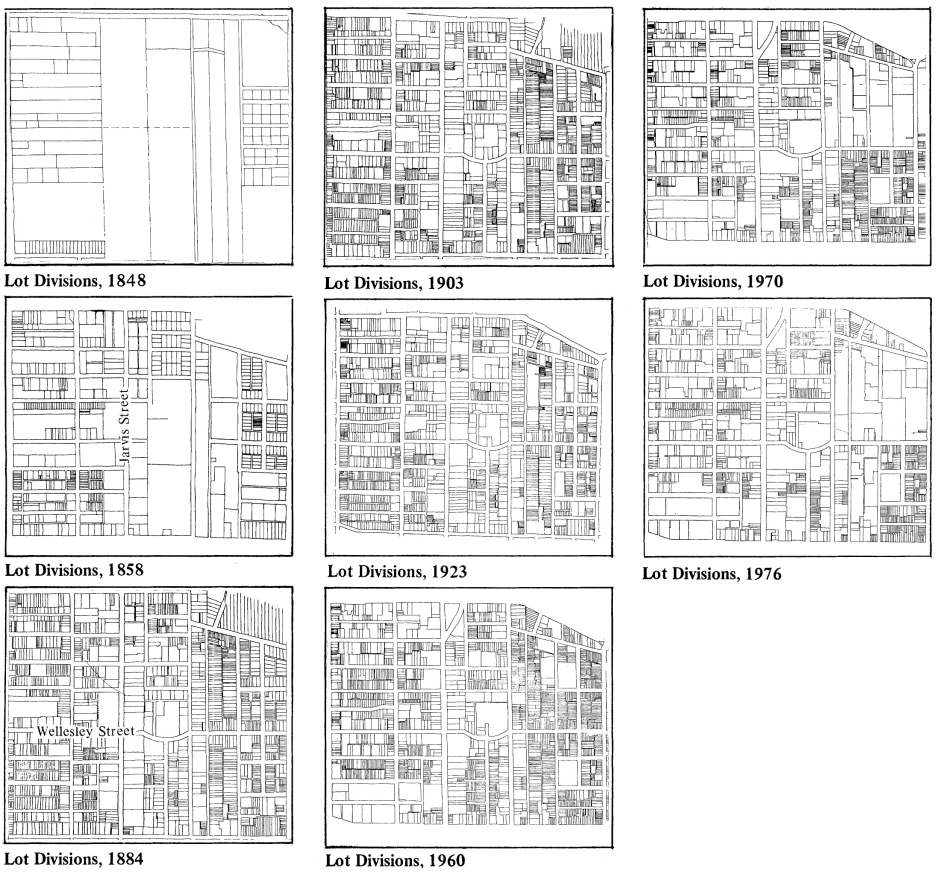


Figure 1.4 **Lot structure 1848 - 1976** Lots were subdivided by large landowners in the 19th century, before programs of urban renewal in the second half of the 20th century led to large scale land assembly and redevelopment of city centres

Figure 1.5 **Extent of the early city** As the city expanded, the centre began to become both denser and with a more fine-granied structure of streets while elements of the survey grid and large plots of land were still visible in the urban fabric. By 1878, the city does not extend north beyond bloor street or far west of Spadina avenue.

developing continuous retail and service storefronts at grade (refer to page 38). The emerging network of streetcars, with a fully electric network by 1892, served to connect ever more distant and unplanned residential suburbs to the city centre while reinforcing the importance of main streets as key public and commercial districts.[9] The city's administrative and political boundaries expanded rapidly to annex and incorporate many of the emerging peripheral developments.[10] As these new areas of the city were established, however, the construction of housing and industry typically took place in a haphazard manner with little, if any, regulation.

10. Ibid

9. Relph, Edward C. Toronto: Transformations in a City and Its Region. Philadelphia: University of Pennsylvania Press, 2014.

In 1904, the first use-based zoning controls were introduced in the city. These regulations were aimed primarily at isolating industrial uses that, until then, were often located adjacent to residential areas. The result of these adjacencies was an emerging public health issue caused by high levels of pollution.[11] Zoning controls limited non-residential uses generally to main streets, industrial areas along the periphery of the city, near rail lines or else beside Lake Ontario. While these controls had a real and meaningful, positive impact on the day-to-day lives of many urban inhabitants, they can also be understood from the perspective of rising property values in areas where industrial uses had been excluded. In 1912, restrictions were also introduced on the development of multi-unit residential buildings. This was publicly justified as a response to the proliferation of tenement-type apartment buildings and the supposed moral and health impact of overcrowded dwellings with insufficient amenities. While overcrowding and tenement-like conditions were a real concern, underlying these restrictions was the perceived threat of lower-income (often immigrant) tenants to the established landowning classes of the predominantly residential areas.[12] These restrictions limited the construction of rental units to Main streets and other limited areas of the city, typically corresponding to lower-income areas or those adjacent to undesirable uses. A set percentage of each rental lot was now required to remain as open space, effectively limiting the feasibility of these building types on many sites. The emerging regulation of land uses were deployed in order to first and foremost service the desires and well being of land owners and capital; the result was often geographical segregation based on class and frequently ethnicity. Engaging a rhetoric of moral superiority of ownership over renting, regulators sought to establish Toronto as "a city of individual homes."[13] While the construction of apartments continued until the Great Depression of the 1930s (refer to page 66), the public perception of the city reflected this single-family home vision. The implementation of land-use regulations, alongside the historic structure of land division, has thus defined the urban form and character of both the residential neighbourhoods and the main streets.

11. Dennis, Richard. "Interpreting the apartment house: modernity and metropolitanism in Toronto, 1900-1930" Journal of Historical Geography 20, no. 3 (July, 1994): 305

12. Ibid

13. Harris, Richard. Unplanned Suburbs: Toronto's American Tragedy, 1900 to 1950. Baltimore: Johns Hopkins University Press, 1996.

In response to the normative development of these neighbourhood types, new

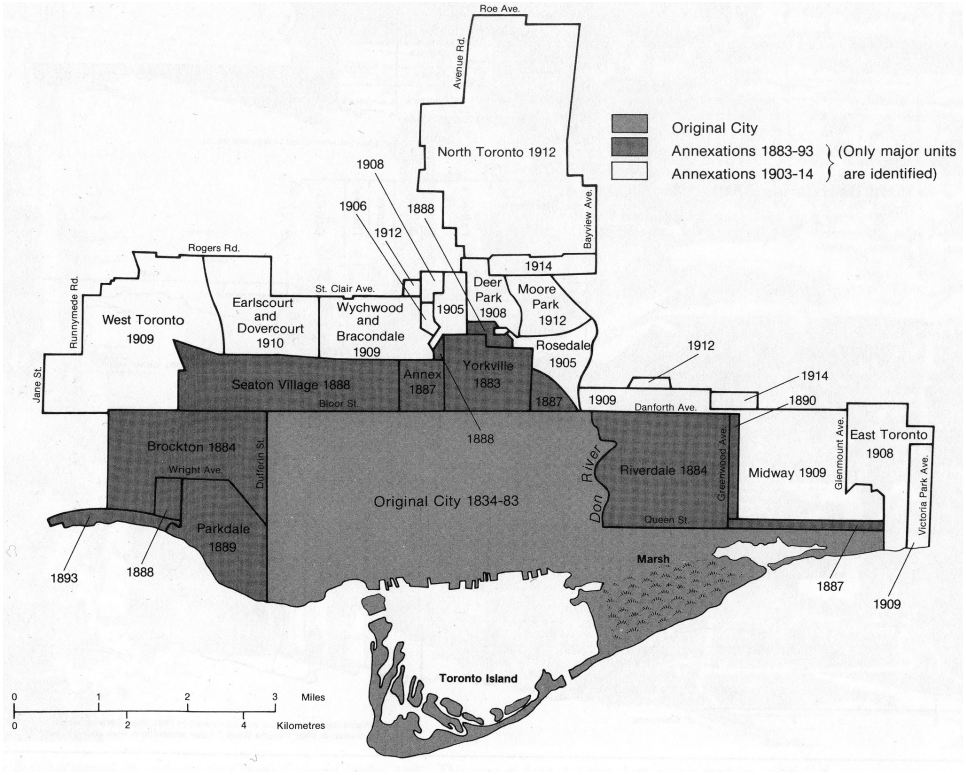


Figure 1.6 **Annexations of adjacent areas**
As small residential developments on the periphery of the city developed, they were frequently annexed or incorporated into the administrative boundaries of Toronto.

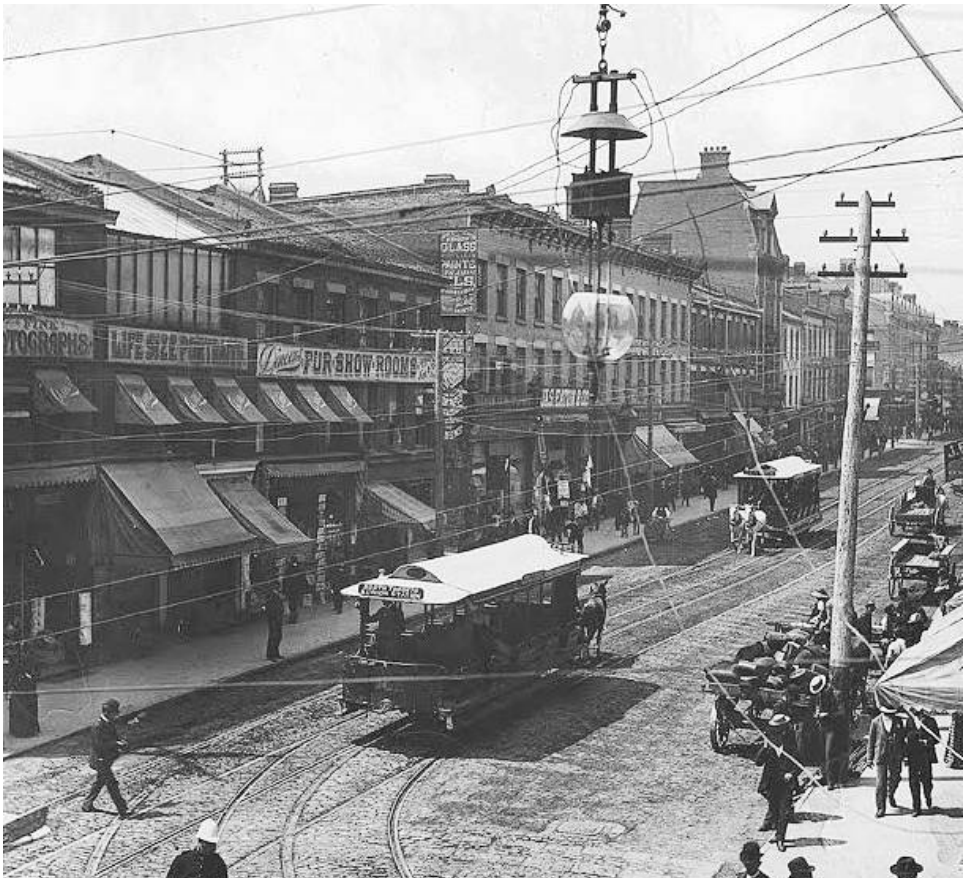


Figure 1.7 **Streetcars and main streets**
Early early zoning restrictions The map depicts areas where development of multi unit residential buildings was prohibited through regulatory tools. It generally exempts main streets and poor areas

organizations sought to establish alternatives to both the speculative development of single-family homes and the poor quality of workers' housing. Founded by a coalition of wealthy industrialists and philanthropists and supported with public funding in 1912, the Toronto Housing Company (THC) is perhaps the best-known example. The THC initiated the Riverdale Court and Spruce Court developments (refer to pages 58 and 60 respectively) the following year in 1913, with the projects completed by 1915. The development model was predicated on providing below-market rent to tenants, with the THC developing projects with funding from both the city and private investors. These projects provided residents with access to outdoor green space, as well as dwelling units with access to natural light and ventilation; they included amenities (sometimes shared amenities) such as indoor plumbing and gas stoves that were often absent in modern rental buildings. Profits for the investors were limited to a capped dividend, allowing for below-market rents.[14] However, developments were unable to sustain this financial model, eventually passing into private ownership. In response to landlord's threats to turn the development into condominiums, residents organized and formed limited equity cooperatives in each case, which are still active.

14. Bradburn, Jamie. „A Century of „Homes for the People" at Bain Co-Op and Spruce Court | Culture | Torontoist." Torontoist. 2013. Accessed June 12, 2016. http://torontoist.com/2013/09/a-century-of-homes-for-the-people-at-bain-co-op-and-spruce-court/.

By the Post-War period, a profound shift in development patterns and provision of housing had occurred, with development showing little regard for the structure and character of the downtown. The city began re-orienting itself towards the periphery, establishing huge tracts of suburban, single-family homes and high-rise towers; at the same time, many poor and working class downtown residents were displaced in a large-scale program of both privately and publicly-funded 'urban renewal'. As part of this rapid development of land at the periphery of the city and in neighbouring municipalities, in 1953 the Municipality of Metropolitan Toronto was formed as a regional government encompassing Toronto, Scarborough, Etobicoke, North York, East York, and York. This new entity aimed to rationalize the provision of city services across a broader geographic area (the Toronto Transit Commission now provided public transportation to all municipalities, for example) while enabling the planning authority to regulate development consistently over the greater region. Within this framework, a decidedly modernist and permissive approach to planning was adopted, resulting in the construction of a large proportion of the city's housing as either high rise apartment towers or suburban single family homes as the expansion of its built area continued.

New suburban developments such as Don Mills (see page 36) rejected the organizational hierarchy of main and residential streets, with an internalized structure of curving streets, dead ends and limited connections to arterial roads emphasizing the dominance of automobile-centric planning. Enabled by their connection to expressways and larger regional roads—in the same way earlier

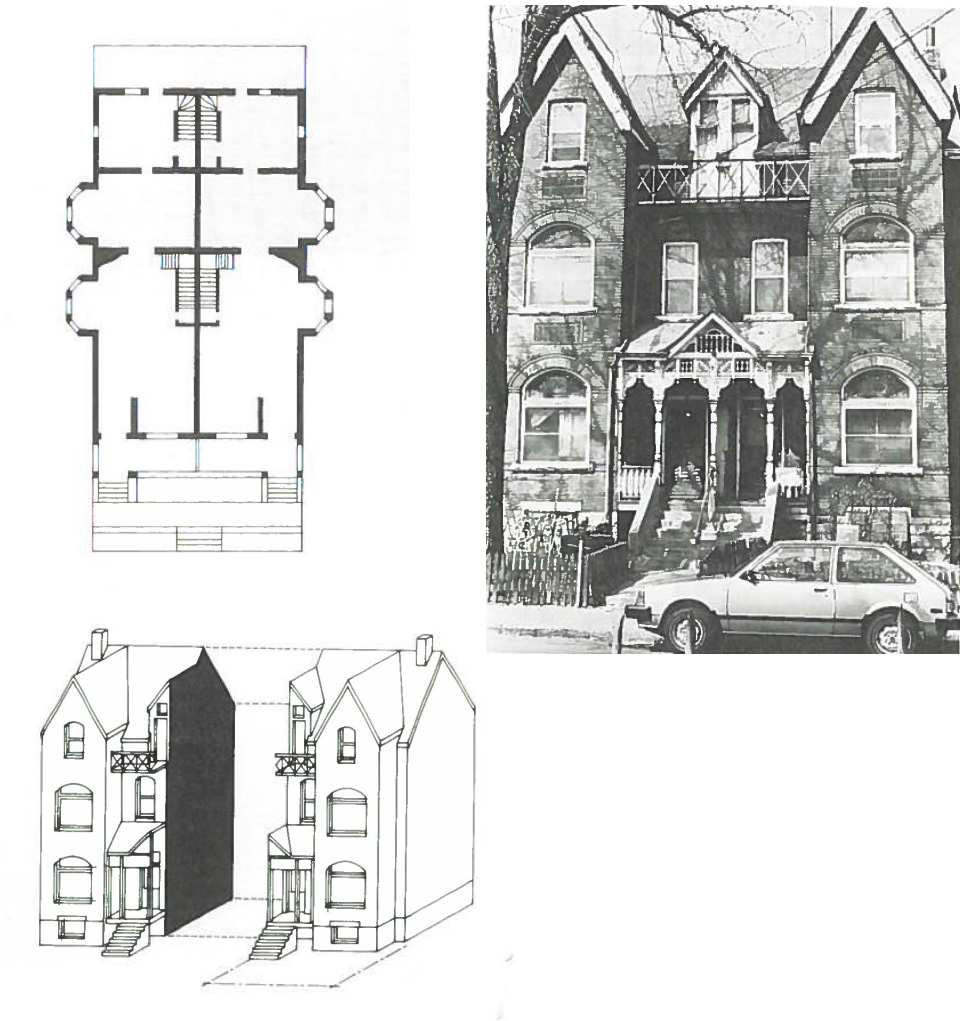


Figure 1.8 **Toronto Semi Detached House Type**
Images and drawings describing the typical Toronto semi-detached typology, emerging in the late 19th century

Figure 1.9 **Cooperative Courtyard**
Bain avenue cooperative, an early example of housing produced outside of normative speculative development

streetcar suburbs were enabled by new transportation infrastructure—these modernist suburban areas represented the general withdrawal of the state from regulating single-family residential developments. The lots were larger and the densities lower than Toronto's downtown neighbourhoods, and with parking placed at grade in the front yard, these new houses lacked a sense of address to the street. But these neighbourhoods also articulated a strong continuity of the image of Toronto as a 'City of Homes' from the Victorian era, and represented the increasing importance of property ownership to the growing middle class.[15]

Typically presented using the language of slum clearance, urban renewal projects replaced the existing city fabric and placed residents within 'Tower in the Park' enclaves set apart from the city, often presenting the technical improvement of the quality of dwelling space as justification for displacement. [16] The development of Regent Park, for example, alongside numerous smaller private projects taking a similar 'block busting' approach to land assembly, demolished much of the Victorian residential fabric of the northern end of the Cabbagetown neighbourhood, a predominantly poor working class area. Constructed between 1947 and 1954, Regent Park incorporated a mix of low-rise apartment buildings (Regent Park North) and high-rise towers (Regent Park South). Developed as public housing by the Housing Authority of Toronto and part of the emerging Canadian system of public housing provision, the management of Regent Park was eventually taken over by the Canada Mortgage Housing Corporation (CMHC) as part of an emerging welfare state. Regent Park was initially touted as a successful project for integrating a diverse range of residents, but by the late 1960s the project had begun to fall into disrepair due to chronic underfunding and insufficient maintenance; the neighbourhood became home to an increasingly racialized and marginalized community of tenants.[17] St. James Town and numerous other private developments saw high-rise Corbusian 'Tower in the Park' typologies proliferate across the downtown area (see page 68), as private developments sought to capitalize on the permissive land assembly and clearance provisions in addition to the growing demand for rental housing. These developments were required to maintain at least 50% of the site at grade as open space, resulting in the typical condition of tall buildings set back from the street on all sides.[18] Developments were frequently aided in the assembly of project land by the municipal government, who saw the developments as modernising agents and a positive source of investment in the city.

These types of projects represented a break with the established urban fabric of former residential typologies. Collectively, they made up a mixed urban fabric, in which zones of distinct typologies and developments over time emerged, all the while creating new adjacencies. They also represented a tendency of modernist

15. Relph, Edward C. Toronto: Transformations in a City and Its Region. Philadelphia: University of Pennsylvania Press, 2014.

16. Large scale redevelopment projects include Regent Park (public, 1947-1960), Alexandra Park (public, 1960-1966), High Park North (private, 1960's), St. James Town (private, 1959-1967) and Moss Park (public, 1960's)

17. Lehrer, Ute, Roger Keil and Stefan Kipfer (2010) Reurbanization in Toronto: Condominium boom and social housing revitalization, disP - The Planning Review, 46:180, 81-90

18. Myers, Barton, and George Baird. "Vacant Lottery." Design Quarterly, no. 108, 6-51.

Figure 1.10 **Towers in the park**
Toronto's development of residential towers occurred both as urban renewal projects in the downtown core, but also in large suburban developments

Figure 1.11 **Suburban form**
The development of suburban post war communities rejected the existing logic and urban form of the survey grid, with its network of main and residential streets. It instead created a hierarchy of high speed roads and smaller, circuitous or dead end streets in an inward facing enclaves.

planning to reject ideas of the context and existing urban fabric: an embrace of the urban tabula rasa.

The idea of residential infill was popularized in the 1970s as a critical response to these developments and the planning environment that enabled them. David Crombie was elected mayor of Toronto in 1972, with a majority of councillors supporting his reform agenda, motivated by contemporary dissatisfaction with the large-scale clearance and development of the downtown neighbourhoods.[19] The rise of the Reform movement also received organizational and theoretical support for its resistance to urban renewal from Jane Jacobs, newly a resident of the city.[20] This coalition was successful in effectively halting large-scale urban renewal projects by adopting a new official plan for the central area of the city, and forcing a general reconsideration of the overly permissive attitude of the city towards development with a requirement for more consultation with community groups and residents. While a diverse range of advocacy groups were represented within the Reform movement, the balance of political power was held by essentially middle-class and conservative groups, seeking preservation and conservation rather than a radical demand for housing and social equity.[21] This movement found architectural expression in the work of the firm Diamond and Myers, specifically in the projects at Dundas and Sherbourne streets and Hydro Block (see pages 42 and 44 respectively). Both developments were realized as public housing projects initiated by the city and administered by the provincial housing agency. Diamond and Myers proposed an alternative scale to both the single-family home and urban renewal projects, with a strong emphasis on the relationship of the buildings to the surrounding urban fabric.[22] The architectural expression of these projects reflects the attempt to construct a formal language integrated within their context, referencing the scale and structure of the surroundings. The contextual nature of infill was central to its theoretical proposition, with strategies for the developments either mimicking the existing block structure or infilling the rear yards addressing the lane.

The publication of On Building Downtown (1974) and Built-form Analysis (1975)[23] by the City of Toronto's planning department, and Vacant Lottery (1978)[24] by Barton Myers and George Baird as an issue of Design Quarterly elaborated on the perceived shortcomings of contemporary urban renewal models, and conducted further investigations into the evolution of residential typologies and speculation on their relationship to new development. These studies sought to provide an argument for gradual intensification and low-rise, mid- to high-density development based on an understanding of the relationship between density in both quantitative and qualitative assessments of existing urban fabrics and types. Building on the outcomes of these studies, the theoretical and design proposition

19. Ibid

20. Sampson, Barry, and Bruce Kuwabara. "Diamond and Meyers: The Form of Reform." In The City Book, edited by James Lorimer and Evelyn Ross, 78-96. Toronto, ON: James Lorimer & Publishers, 1975.

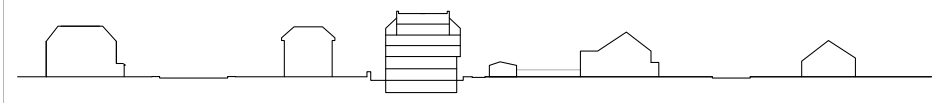
21. Kipfer, Stefan and Roger Keil (2000) Still Planning to Be Different? Toronto at the Turn of the Millennium, disP - The Planning Review, 36:140, 28-36

22. Myers, Barton, and George Baird. "Vacant Lottery." Design Quarterly, no. 108, 6-51.

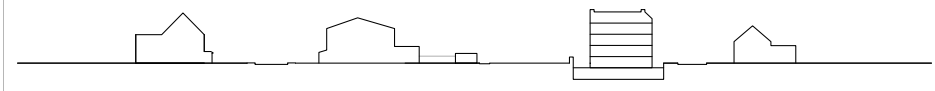
23. Baird, George, Donald Clinton, Bruce Kuwabara, Barry Sampson. Built Form Analysis. Toronto: City of Toronto Planning Department, 1975

24. Myers, Barton, and George Baird. "Vacant Lottery." Design Quarterly, no. 108, 6-51.

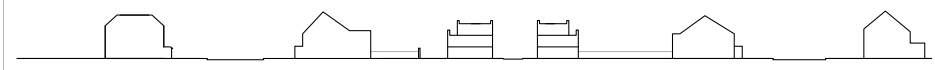
Figure 1.12 **Community engagement**
Local residents protest and succeddfully stop the demolition of Victorian homes on the future site of Barton-Myers Sherbourne lanes project



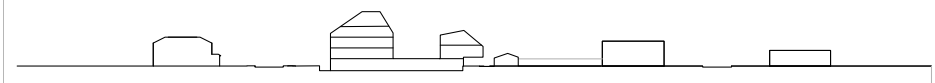
Sherbourne Lanes



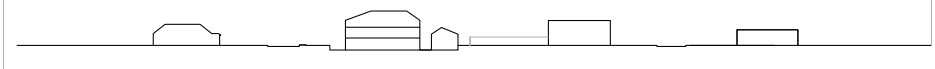
Hydro Block - Perimeter



Laneway Infill Prototype



Downtown Prototype



Suburb Prototype

Figure 1.13 **Forms of Reform**
Diagrammatic sections of infill strategies, the first three describing strategies from Barton-Myers and the final two describing the proposals expanded on in chapter 3 of the thesis.

of this thesis look to build on the related propositions, reinterpreting infill in the contemporary context and seeking to explore prototypical development strategies.

During the 1970s, the Reform council also sought to establish a model of neighbourhood-scale development within Toronto that avoided the shortcomings of former urban renewal schemes. The St. Lawrence Neighbourhood project was initiated in 1975, with the goal of redeveloping the former industrial area of St. Lawrence. The City produced a comprehensive urban plan, as well as an extensive series of parameters for the design of the buildings themselves in the Building and Block Study (1989). Central to its development were the principles of mixed uses and the preservation of the existing street grid, building on ideas of Jane Jacobs and the practical experience of the adaptability and vitality of Toronto's Main Streets. A diversity of tenures and incomes was also reflected in the proposed mix of market-rate condominiums, public housing, and limited equity cooperatives, as well as mandated unit mixes, with a high proportion of units appropriate for families (two bedrooms or more). This also marked the beginning of a program from multiple levels of government providing long-term loans for the construction of limited equity cooperatives, as well as ongoing rent subsidies for designated rent-geared-to-income (RGI) units within the cooperative. The physical form of the development was a mix of perimeter apartment blocks, with townhouses or shared outdoor space within the courtyards along the interior of the blocks. With the final building completed in 1998, the development has proven to be a successful neighbourhood, with mixed uses, a diversity of residents and cooperatives, and stability of rent and tenure lending to a lack of income polarization as seen in many other areas of the city.[25]

25. Hulchanski, John David. "Planning new urban neighbourhoods : lessons from Toronto's St. Lawrence neighbourhood" Vancouver : School of Community and Regional Planning, University of British Columbia 1990

Following a deep recession beginning in 1989, and continuing through the early 1990s, the city as a whole saw relatively little private residential development. However, the election of a Provincial Conservative government in 1995 had significant impacts on the development and provision of housing in the city. This election precipitated the forced amalgamation of Metropolitan Toronto municipalities into the political entity of present-day Toronto in 1997. While the former city of Toronto voted against amalgamation by an overwhelming margin in a municipal referendum—and the measure faced opposition from municipal leaders in other boroughs—amalgation was ultimately undertaken with the intention of rationalizing services and bureaucratic efficiencies across the region, while simultaneously liberalizing the development and planning structure.[26] At the same time, responsibility for the provision and operation of social housing was devolved from the provincial level to the municipal level, resulting in the creation of the Toronto Community Housing Corporation (TCHC). With funding assumed by the municipality, the program of 'downloading' social provision was

26. Ibid.

Figure 1.14 **New Avenues**
An image of proposed development strategies for the St. Lawrence Neighbourhood project applied to a section of Front street

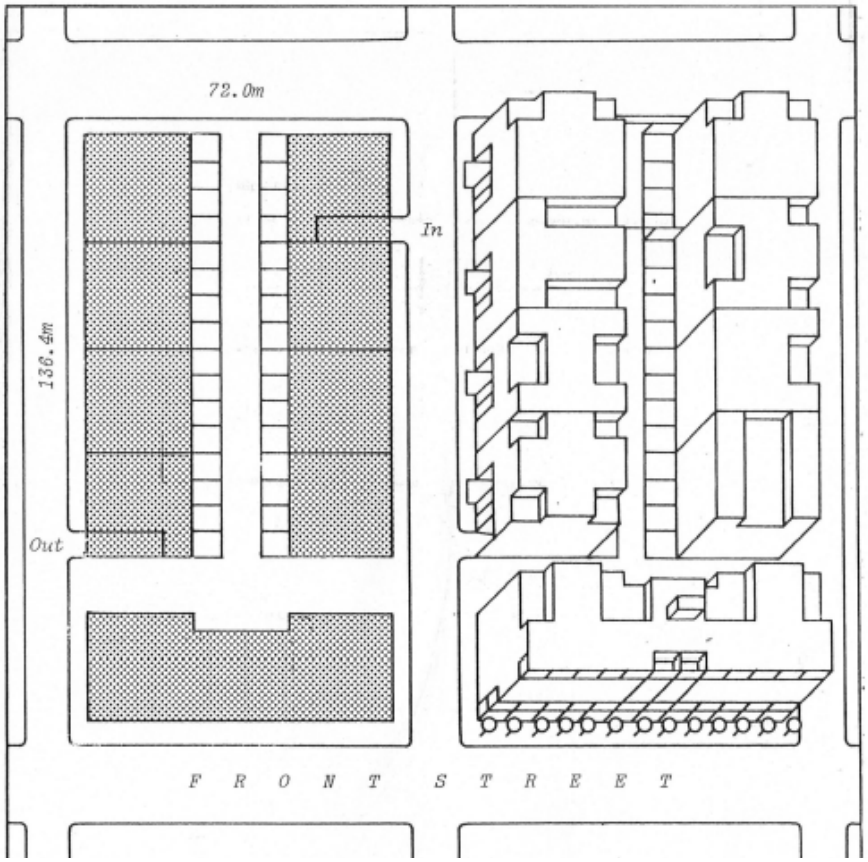


Figure 1.15 **Buildings and Blocks**
As part of the St. Lawrence Neighbourhood development, the Buildings and Blocks study examined the relationships between height, density, block depth in creating urban form and deriving guidelines for proposed developments.

accompanied by requirements for austerity (resulting in deferred maintenance and declining quality of the housing stock, as well as limiting the funding available for the construction of new units) and the introduction of market forces and austerity measures into the public provision of housing.

Today, the effects of this transition in social housing provision is evident in the large-scale remaking of the Regent Park and Alexandra Park neighbourhoods (both former urban renewal sites), where private development is now seen as a means both of 'normalizing' low-income areas and subsidizing the construction of new social housing.[27] The planned project will result in the construction of 5400 market-rate ownership (condominium) units, with a total housing mix of roughly a quarter RGI units to three quarters market housing. So while the development represents both an increase in the technical quality of the housing stock and a move away from the stigmatization of the Tower in the Park, it also risks driving gentrification and forced displacement of current residents, as well as the commoditization of formerly public land and resources. When accounting for offsite construction of new housing, the project achieves only a 1:1 replacement of the existing subsidized units at a time where the demand and waiting period for affordable housing continue to increase.[28]

The adoption of a new Official Plan by the amalgamated city in 2002 formalized many of the emerging patterns of residential development; it sought to exploit the language of re-urbanisation and Reform Planning while liberalizing the development process. It also expanded the geographic potential for new construction, encouraging development in areas with high concentrations of low-income and vulnerable residents. In this sense, it shares the historical tendencies of earlier capitalist patterns of development. However, its implementation alongside the Greenbelt (2005) [29] and the Places to Grow Act (2005)[30] meant development of suburban greenfield sites around the periphery became increasingly difficult to develop. The Official Plan now actively encourages development and private investment in the construction of new housing in low-income neighbourhoods, while insulating established prosperous areas from any new development through various planning designations.[31]

The establishment of transit-oriented development centres (refer to figure 1.17, shown in red), alongside much of the downtown core as areas in which high density development is permitted, is presented as the logical means by which to house the growing population of Toronto by many city officials and experts. This followed from the previous large-scale rezoning of formerly industrial areas such as King-Spadina and Liberty Village to allow for large-scale, high-rise development. These developments are representative of the city's emphasis on becoming an attractor

27. Lehrer, Ute, Roger Keil and Stefan Kipfer (2010) Reurbanization in Toronto: Condominium boom and social housing revitalization, disP - The Planning Review, 46:180, 81-90

28. August, Martine. "Challenging the rhetoric of stigmatization: the benefits of concentrated poverty in Toronto's Regent Park." Environment and Planning A 46, no. 6 (May 8, 2014): 1317-333. Accessed November 2016. doi:10.1068/a45635.

30. While limiting available greenfield sties, the Act mandated planners prioritize the intensification of already developed urban areas, particularly in transit-oriented areas.

29. The Greenbelt enacted protections against development in ecologically sensitive regions around Toronto, including the Oak Ridges Moraine and the Niagra Escarptment that were the next logical points of expansion for suburban enclaves and exurbs in the municipalities surrounding Toronto.

31. Lehrer, Ute, Roger Keil and Stefan Kipfer (2010) Reurbanization in Toronto: Condominium boom and social housing revitalization, disP - The Planning Review, 46:180, 81-90

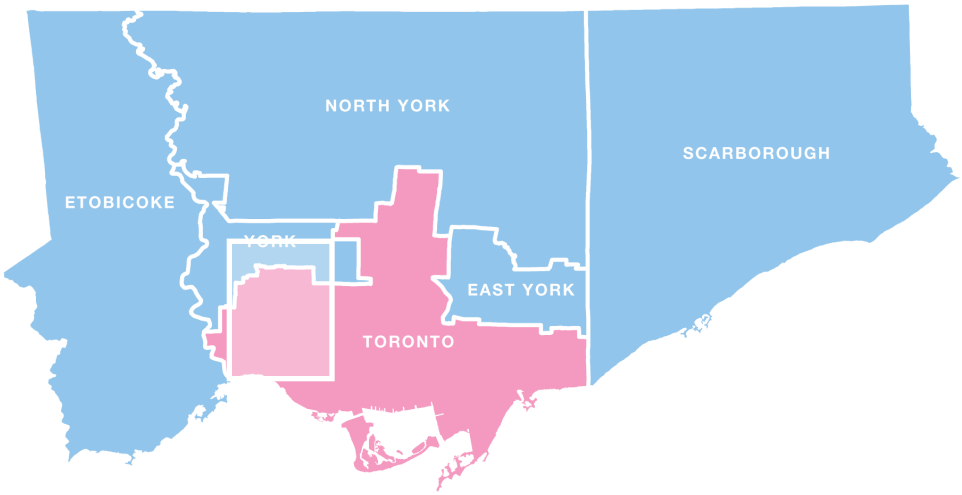


Figure 1.16 **The former boroughs of Toronto**
The creation of the contemporary city of Toronto centralised administrative functions, but has done little to change the fact that the inner suburbs have very different urban form to that of the old city. This centre-periphery divide is evident in contemporary distributions of inequality and social isolation in the city.

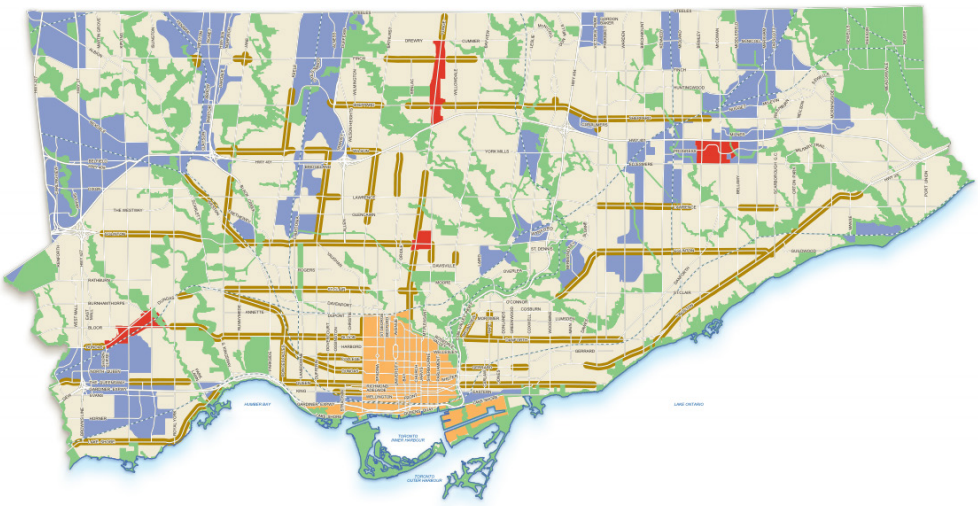


Figure 1.17 **Official plan development areas**
The map identifies the five transit oriented development centres, alongside the designated "Avenues" as areas with permissive planning designed to encourage new development

for real estate investment and the liberalization of the planning process, and have occurred alongside the development of new cultural, commercial and entertainment programs in line with the neo-reformist prioritization of mixed-use development. With many of the new developments taking the form of condominiums (a form of ownership that will be expanded on in Chapter 2), the social and economic imperative of home ownership continues to be encouraged: condos now represent a vision of Toronto as a city of homes extruded vertically. But this process of re-urbanizing former industrial areas—and ostensibly improving the quality of the surrounding urban space—has actually enabled further income polarization and encouraged gentrification in surrounding areas. These projects position government as the facilitator of development, accepting the supposedly inherent benefits of private development and growth in the city.

Toronto's Avenues Plan and Mid-rise guidelines, adopted by city council in 2010, further expanded the potential for intensification established by the Official Plan,[32] outlining a series of built form guidelines for developments at the scale of 6-12 storeys and rezoning Toronto's Avenues (formerly the Main Streets) to accept these developments as of right. Previous advocacy and a framework for development of these sites had been laid out in Building on Main Streets (1991), but guidelines were originally seen as overly restrictive by developers. The 2010 guidelines expanded the range of potential architectural typologies from the language of the tower podium, made ubiquitous by development in the downtown core. At the same time, though, the new guidelines have failed to change the overriding logic of land assembly and gentrification of low-income neighbourhoods (which provide more affordable units, and a greater potential profit) inherent in the capitalist production of housing. Ultimately, they have done little to create more affordable or accessible housing.

32. BMI/Pace Architects. Avenues and Mid-Rise Buildings Study. Toronto, ON. Toronto Planning and Development Dept., 2010.

While the state's role in housing development is popularly seen as facilitating intensification in formerly industrial and low-income neighbourhoods, at the same time it has designated many predominantly single-family house neighbourhoods—often large, geographic areas—as protected from any development. This move to preserve them in their current form, while concentrating development in low-income areas, is clearly in line with an existing historic precedent in the city, as well as the principles of both "roll out" and "roll back" of state power under neoliberal planning.[33] It centres on similar arguments used to exclude the development of apartment buildings from residential neighbourhoods at the turn of the 20th century; this primarily excluded low-income residents from occupying areas reserved for the property owning class. Today, as property values continue to increase, the displacement of low- and increasingly middle-income residents to the suburbs and exurbs has become inevitable. In Toronto's inner suburbs, the static

33. Peck, Jamie, and Adam Tickell. "Neoliberalizing Space." Antipode, 2002, 380-404.

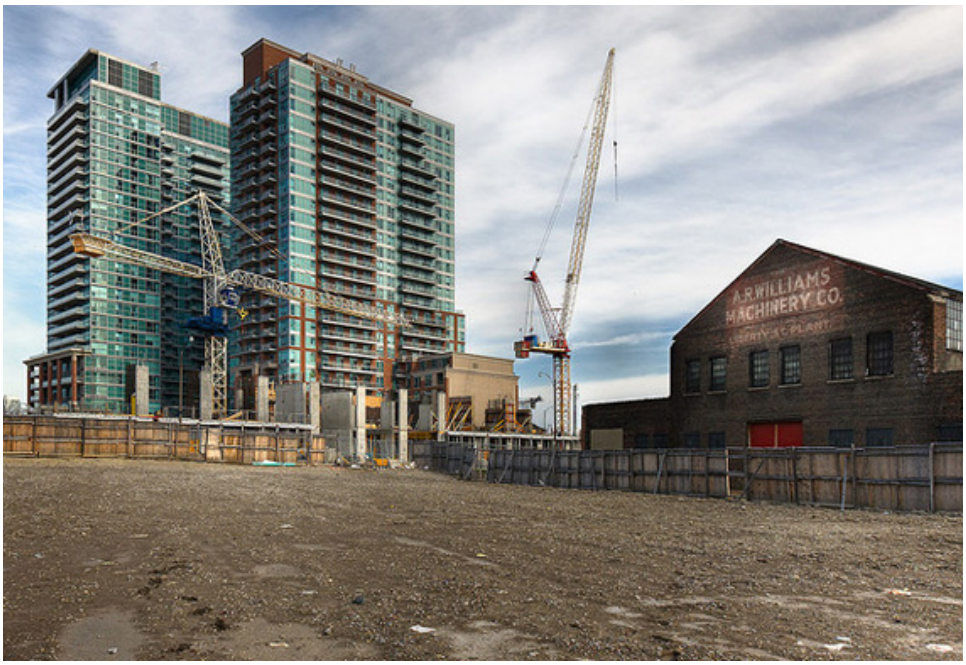


Figure 1.19 **Industrial Remnants**
Liberty Village is a redevelopment area in a former industrial district in the city's west end. It has retained and re-purposed some of the existing buildings, while constructing many new high rise residential towers.

Figure 1.18 **Enclaves of development**
CityPlace was one of the major sites of redevelopment within the downtown core, with a series of high rise podium towers constructed on former railway lands. The infrastructure of the remaining rail lines to the north (pictured) and the Gardiner Expressway to the south serve to isolate a large portion of the development from the city.

nature of single-family residential neighbourhoods compounds the problem of an existing automobile-centric fabric lacking urban quality. These neighbourhoods, both in the downtown core and suburban areas, are in fact not as the language of the official plan suggests 'stable'[34]. As demographic information from the Neptis Foundation indicates, these neighbourhoods have populations which are decreasing over time, due to a range of demographic factors including decreasing family sizes, increasing single person households, lower birth rates and delayed child bearing, and an aging population.[35] This condition not only acts against the stated goal of planning policies to promote densification and social sustainability, it further exacerbates the issue of housing access and affordability at a time of crisis. These factors make it essential to reconsider the role of these sites in rethinking housing in the city.

34. City of Toronto (2002): Toronto Official Plan. City Planning Division. 4-3

35. Burchfield, Marcy, and Anna Kramer. Growing Pains: understanding the new reality of population and dwelling patterns in the Toronto and Vancouver regions. Toronto: The Neptis Foundation, 2015. PDF. 51-54.

These patterns of development in Toronto reinforce and exacerbate existing patterns of inequality; gentrification and displacement have occurred on a large scale alongside the development of new forms of housing. These phenomena are evidenced clearly in The Three Cities in Toronto report (2007), which describes them in the context of an emerging problem of income polarization.[36] In the report, Hulchanski describes a city that, since the 1970s, has experienced dramatic shifts in the distribution of economic classes. The term 'three cities' thus indicates an income-based classification of Toronto's neighbourhoods:

36. Hulchanski, John David. The Three Cities Within Toronto: Income Polarization Among Toronto's Neighbourhoods, 1970-2005. Toronto, Ont.: Cities Centre, University of Toronto, 2010.

> "The first, which we call City #1, is a predominantly high-income area of the City of Toronto in which neighbourhood incomes have risen a great deal relative to the Toronto Census Metropolitan Area (CMA) average since 1970; these neighbourhoods are generally found in the central city and close to the city's subway lines. By contrast,City #3 is a generally low-income area of Toronto, in which neighbourhood incomes have fallen substantially over the past few decades compared to the CMA average; these neighbourhoods are found mostly in the northeastern and northwestern parts of Toronto. In between these two is City #2, a mainly middle-income area, where neighbourhood incomes have remained fairly close to the CMA average since 1970." [37]

37. ibid

The report identifies that Cities #1 and #3, low- and high-income areas respectively, have expanded dramatically while middle-income areas have generally shrunk. The geographic distribution of these three cities has also evolved over time, with the greatest concentrations of poverty now found in the urban periphery while the downtown has become almost exclusively high-income households. The distribution of these neighbourhoods corresponds closely to the price of housing, as well as its provision, with rental housing being more common in City #3, and home ownership being much more common in affluent areas.

As housing becomes less affordable and the city's population continues to grow, this income polarization will continue to grow as well. The consistent historical dominance of the single-family home and the valorization of property ownership have contributed to the crisis of affordability. These issues raise questions regarding

Figure 1.20 **Public housing and private profits**
The redevelopment of Regent Park, with a demolished public housing tower in the foreground and private condominium buildings in the background

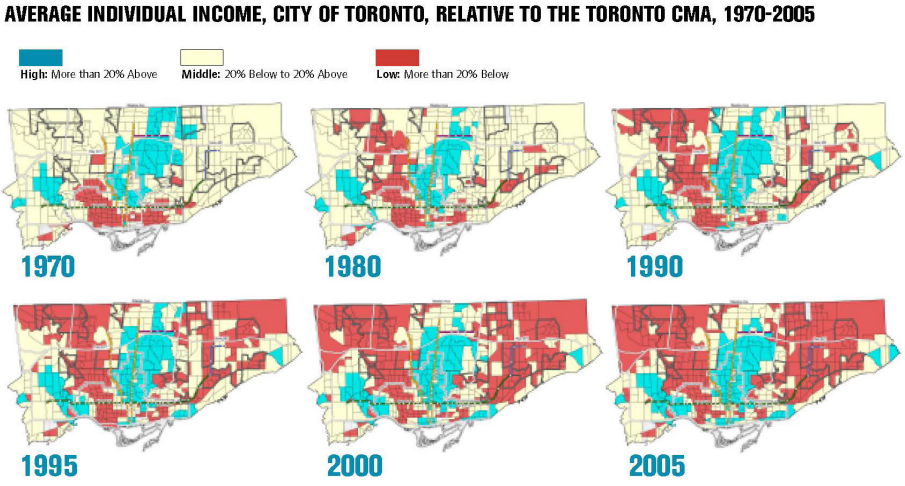


Figure 1.21 **Three cities within Toronto**
The maps show the seeming disappearance of the middle and working class from Toronto, alongside the proliferation of both high and low income neighbourhoods.

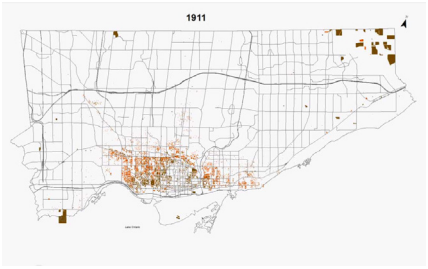
CATALOGUE OF TYPOLOGIES

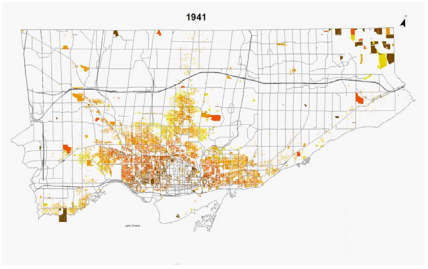
The following section is a catalogue of residential typologies found, with a study area in the West end of Toronto. The purpose of this section is not to serve as an exhaustive compilation of existing building types, but to differentiate between typologies that comprise the urban fabric of residential neighbourhoods and insertions into that fabric. The geographic distribution of these types makes legible some of the socio-economic trends described in Chapter 1; that density and redevelopment generally concentrate closer to the notional centre of the city, and that certain higher density housing types already exist within areas designated as Neighbourhoods under the official plan.

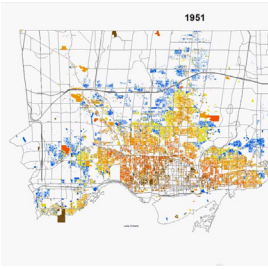
Evolution of Residential typologies

Evolving Urban Fabric

Charting the growth of the developed area of the city over time, correlating the geographic growth of the city with emergence of new typologies. This places all development in the context of the political boundaries of the amalgamated City of Toronto.







Density in units per HA

Typologies are arranged based on their relative density across the y axis, and by their chronological appearance in the city along the x axis.

Pre-Fordist **Fordist**

Preceding 1918 **1919-45** **1945-73**

955

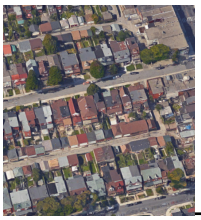
360

212

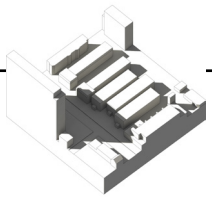
120

84

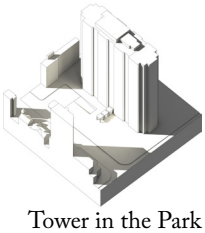
17



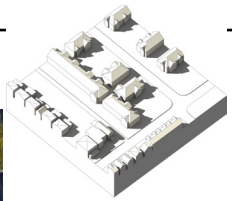
Main Streets



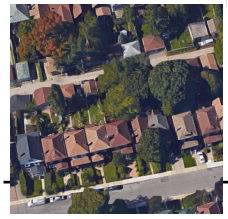
3 Storey Walk up



Tower in the Park



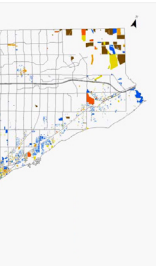
Bain Avenue Coop

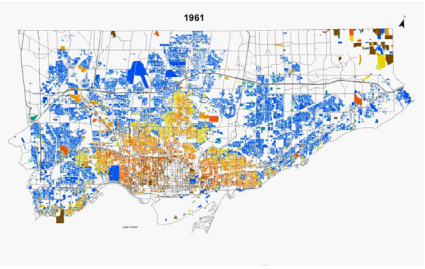


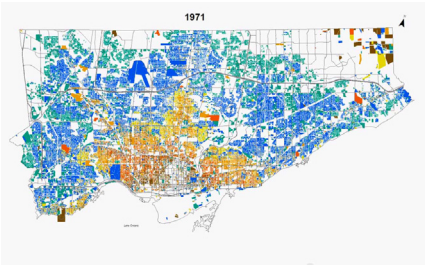
Downtown Residential Fabric

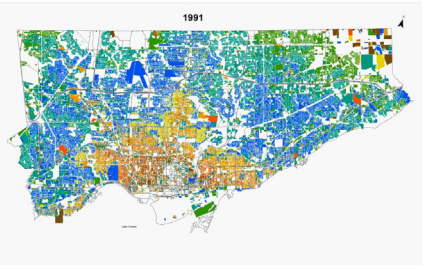
Suburban Residential Fabric

Figure 1.22 **The evolution of residential typologies**





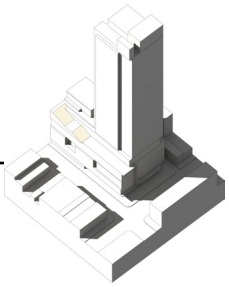


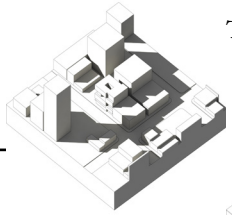


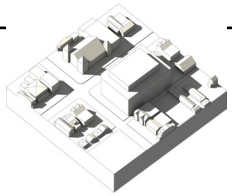
Post-Fordist

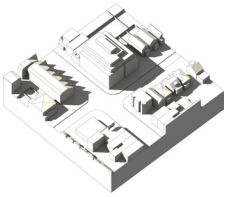
1973-96

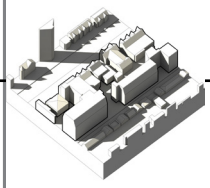
1996-Current

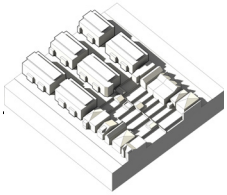

Tower-Podium

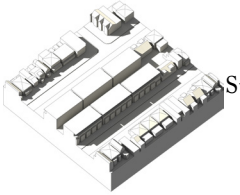

60 Richmond

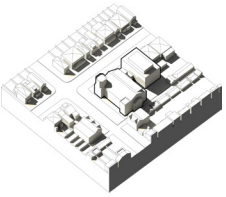

Factory

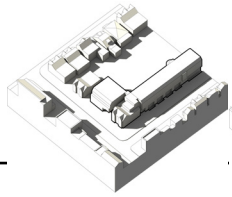

Mid-Rise

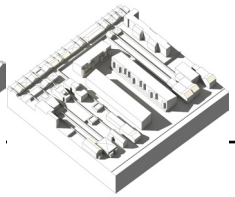

Sherbourne Lanes

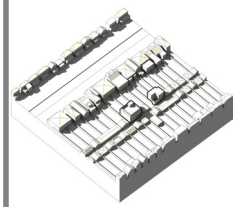

Stacked Townhouses


Rowhouses


Church


Hydro Block


Deep Lot Townhomes


Accessory Dwelling

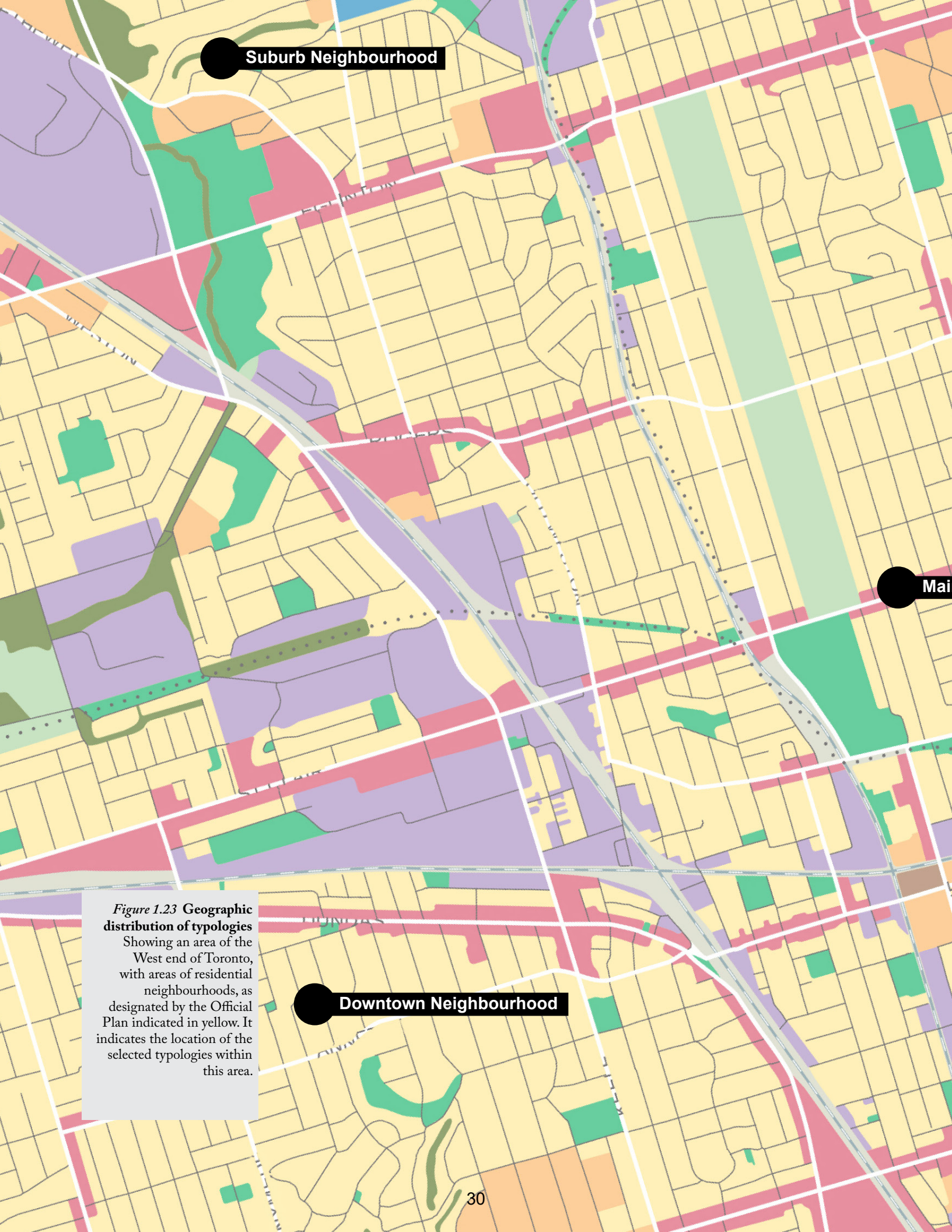
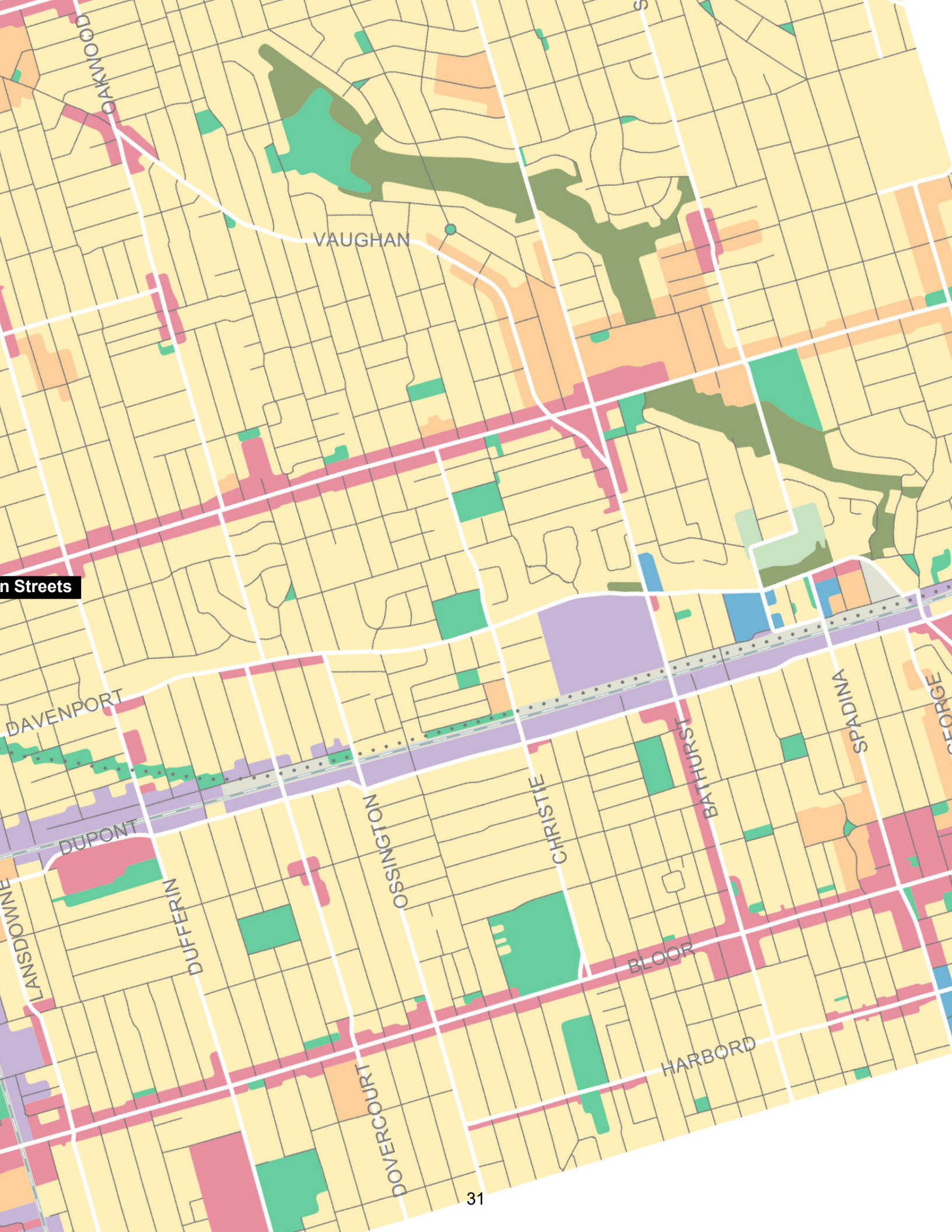


Figure 1.23 **Geographic distribution of typologies** Showing an area of the West end of Toronto, with areas of residential neighbourhoods, as designated by the Official Plan indicated in yellow. It indicates the location of the selected typologies within this area.


n Streets
OAKWOOD
VAUGHAN
DAVENPORT
DUPONT
LANSDOWNE
DUFFERIN
OSSINGTON
CHRISTIE
BATHURST
SPADINA
BLOOR
HARBORD
DOVERCOURT

Typologies Methodology

Each typology and fabric type described in the following section is described in text describing qualitative assessments of the building form or its development, statistics addressing dimensions and measures of density, and an axonometric illustration showing the building or a portion of it in its context. They provide a broad overview of the evolution of infill residential typologies across a range of scales and time periods.

The types presented here allow for conditions of adjacency and form to be examined and understood as both specific conditions and abstracted principles, these relationships with context applied to the design proposal.

Type	FAR	Coverage	Lot Size	Res GFA
Downtown Residential Fabric	0.6	35.00%	225	135
Suburban Residential Fabric	0.38	25.00%	590	225
Main Street Fabric	2.7	90.00%	220	400
Sherbourne Lanes	2	58.00%	10380	20760
Hydro Block	1.58	38.00%	8826	13239
Church Conversion	2.1	58.00%	1701	3561
Stacked Townhouses	1.68	60.00%	12634	15551
Rowhouses	1.91	68.00%	4028	7781
Accessory Dwellings	0.81	75.00%	240	200
Mid Rise	3.2	90.00%	717	2600
Bain Coop	1.03	40.00%	23140	23845
Spruce Court Coop	0.85	51.00%	5211	2685
Tower Podium	13.83	96.00%	3957	39700
60 Richmond Street East	7.7	98.00%	987	7600
Factory Conversion	4.99	85.00%	1620	8085
3 Storey Walkup	2.7	67.00%	825	2232
Tower in the Park	4.85	18.00%	7200	34920
Deep Lot Townhomes	0.99	33.00%	3400	3360

Winnipeg - Centre Village	1.23	44.00%	1260	1551
Winnipeg - Stradbrook	1.25	41.00%	664	828
Vancovuer - Union Street	0.95	56.00%	613	587

Other GFA	Storeys	Units	Units/HA
-	1	1	45
-	1	1	17
200	3	2	90
-	6	381	360
500	4	157	180
3848	4	42	248
-	4	167	132
110	3	45	112
-	2	2	84
-	6	22	293
-	3	260	112
-	2	77	147
15260	42	378	955
400	11	85	861
-	7		
-	3.5		
-	28		
-	3		

-	3	25	198
-	3	8	120
-	2.5	7	114

Figure 1.24 **Comparison of Residential typologies**

Downtown Neighbourhood

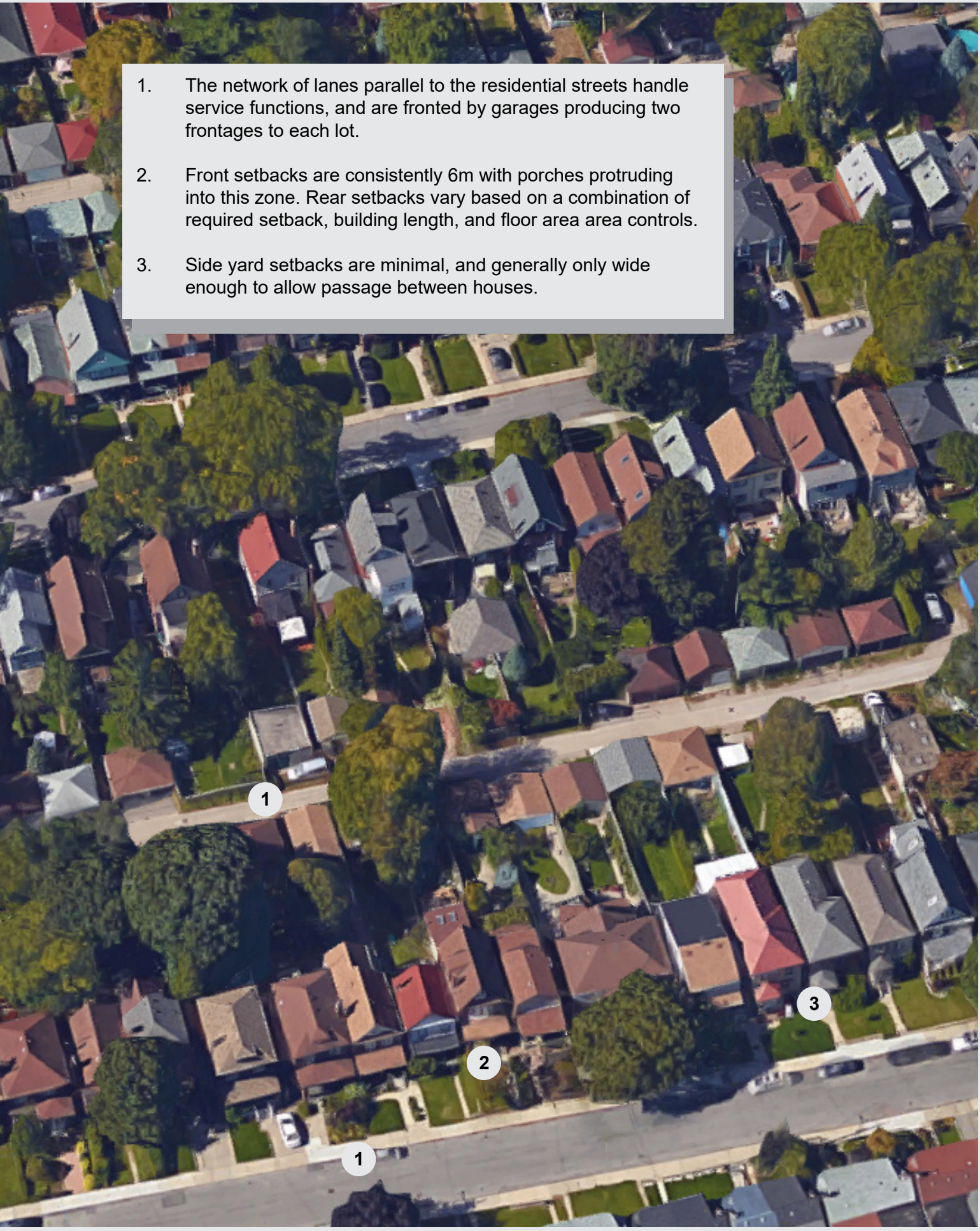
Toronto's Downtown residential neighbourhoods began to emerge in their current recognisable form in the late 19th and early 20th century. As the city expanded geographically, large landowners began to subdivide lots and sell individual plots as a base form of commodification and sepculation. The resultant form was the standard lot size; historically, 20' wide and 100' deep, serviced by a laneway between residential streets. This smaller and thus more affordable property, coupled with zoning restrictions that prohibited the construction of multi unit residential buildings in much of the city led to the proliferation of the single family home, as semi or fully detached homes, or rowhouses. They have highly regular characteristics; a consistent setback to a front porch and the residence, with minimal side yard setbacks and building heights of between two and three storeys establishing a consistent street presence. Where lanes are present, there is a typical continuous presence of garages or outbuildings fronting onto them, separating the private space of the rear yard from the public space of the lane.

This ideological decision to favour the construction of single family homes in large areas of the city has had a lasting impact on its fabric. While dense in comparison to contemporary suburban developments, they perpetuate areas of static usban space in the centre of the city that resist intensification. Through their constrained supply and static nature, these properties provide stable return on investment.

Statistics

	Single	Subdivided	
Lot Size	225		
Lot Coverage	35%		
Residential GFA	135		
Other GFA	-		
FAR	.6		
Storeys	2		
Persons per HA	135	202	270
Units	1	2	3
Units per HA	45	90	135

Figure 1.25 **Downtown residential neighbourhood aerial view - near Runnymede Road and Annette Street**



1. The network of lanes parallel to the residential streets handle service functions, and are fronted by garages producing two frontages to each lot.

2. Front setbacks are consistently 6m with porches protruding into this zone. Rear setbacks vary based on a combination of required setback, building length, and floor area area controls.

3. Side yard setbacks are minimal, and generally only wide enough to allow passage between houses.

Suburban Neighbourhood

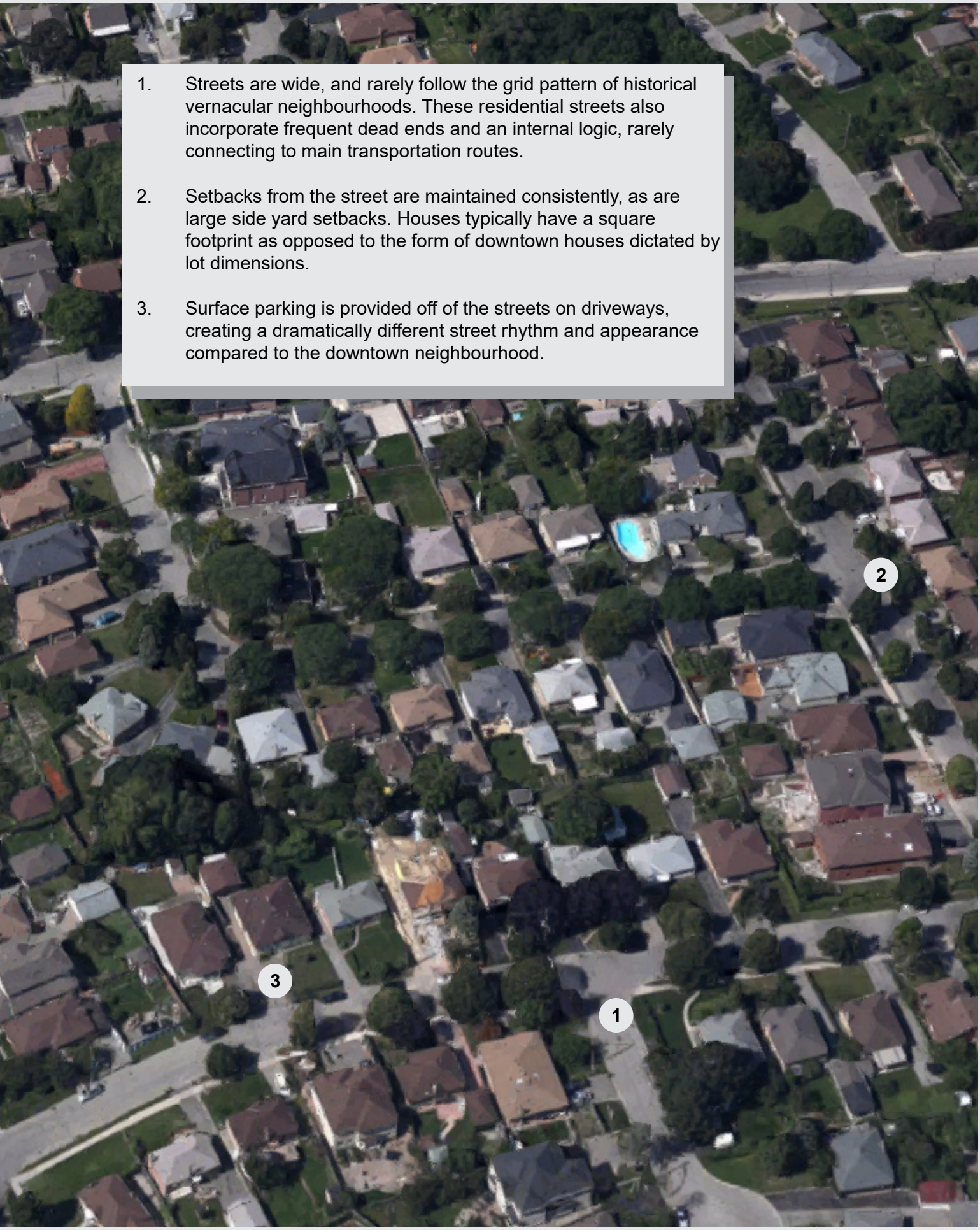
The post-war development of the city of Toronto followed two directions; that of so-called 'Urban Renewal' projects in the existing city centre, and the extension of the city through suburban development. Projects such as Don Mills established both a large scale typology of dead end streets with limited connection to major roads, as well as eschewing the previously established grid used for subdivision of land. The resultant lots were typically much wider than those seen downtown, with frontages ranging from 15 to 20 metres and comparable depths. Roads were typically wider, with larger side yard setbacks and driveways in the front yard the character of the street is substantially different.

The density realized on these sites with typical zoning is lower in terms of the FAR, but most substantially in the number of units per HA. This, combined with their auto centric nature results in a distinct lack of urban character in these areas, an insular nature which is a design feature rather than an incidental result.

Statistics

	Single	Subdivided	
Lot Size		590	
Lot Coverage		25%	
Residential GFA		225	
Other GFA		-	
FAR		.38	
Storeys		1.5	
Persons per HA		51	77
Units		1	2
Units per HA		17	34

Figure 1.26 **Suburban residential neighbourhood aerial view - near Keele Street and Eglington Avenue**



1. Streets are wide, and rarely follow the grid pattern of historical vernacular neighbourhoods. These residential streets also incorporate frequent dead ends and an internal logic, rarely connecting to main transportation routes.

2. Setbacks from the street are maintained consistently, as are large side yard setbacks. Houses typically have a square footprint as opposed to the form of downtown houses dictated by lot dimensions.

3. Surface parking is provided off of the streets on driveways, creating a dramatically different street rhythm and appearance compared to the downtown neighbourhood.

Main Streets

Toronto's Main Streets comprise a resilient and diverse fabric. Originating from the streets that divided the rural concessions on the edge of the developing city, they evolved as commercial thoroughfares with long, narrow lot sizes typically 6 metres wide by 40 metres deep. These narrow lots effectively diversified ownership along these streets, a continuous presence of store-fronts at grade and upper storeys of typically residential apartment units, occupied either by the property owner or providing a significant portion of the rental housing stock in the city. The buildings are typically of various ages and aesthetic expression, but with a consistent height of two or three storeys and a footprint occupying almost the entire lot.

The adjacency of the amenity provided by these mixed uses, as well as the variety of appearance and program implied by the diversity of ownership is key to the resilience of both the Main Streets themselves, as well as the surrounding residential neighbourhoods. The form of the streets and their density encourages pedestrian activity, and their integration with streetcar and bus networks enables access to a greater proportion than would otherwise be able to take advantage of their amenity. The small frontage of these properties, combined with strict limits on development enacted in the has also made assembly of land, and therefore intensification, more difficult with developers typically favouring large development projects as being generally more profitable. The economics of development on main streets have been altered by the introduction of the Avenues and Mid Rise Guidelines, effectively allowing for greater density and a streamlined approvals process for proposed developments along designated Avenues. This has led to a proliferation of new building types, expanded on in the entry on page 54.

Statistics

Lot Size	**220**
Lot Coverage	**90%**
Residential GFA	**400**
Other GFA	**200**
FAR	**2**
Storeys	**3**
Units	**2**
Units per HA	**90**

Figure 1.27 **Main streets aerial view - near Bloor Street and Emerson Avenue**

1. Long and narrow lots are present a continuous two to three storey street wall with commercial program at grade that has different ages, architectural styles and uses.

2. Apartment units above grade typically occupy the entire floor of a single lot building, with access typically provided through a single straight run stair from either the street or rear lane at grade.

3. A rear lane is frequently, but not always, provided to service the at grade retail as well as providing a buffer to the adjacent single family residential homes.

Mixed Urban Fabric

The post war movement towards the development of suburbs was paralleled by programs of 'urban renewal' in the downtown of the city, leading to the construction of both privately and publicly developed large scale apartment neighbourhoods such as St. James town and Regent Park. However, the tendency for intensification and new construction is also evident in areas of the city in a more dispersed pattern. It was common practice for developers to assemble multiple lots, both on main streets as well as in residential areas and often with the support of the city administration in order to develop 'Tower in the Park' type projects, or single storey retail with surface parking. These projects consistently displaced residents (sometimes relying on eminent domain) , disrupting both individual lives as well as established communities. The areas in which these developments took place were frequently low income or marginalized communities (Parkdale, Cabbagetown, and Regent park among others).

The discontinuous forms of development also disrupted the built form of these areas, along with the social disruptions to the community as a result of resident displacement have in most cases disproportionately affected low income areas. Due to the nature of these areas as assemblages of disparate typologies and fabrics, it is difficult to assign a statistical evaluation.

Figure 1.28 **Mixed urban fabric aerial view - near King Street and Cowan Avenue**

1. Existing fabric of main streets and single family homes are in places still present, but no longer appear as a continuous context.

2. Institutional and commercial low rise buildings with extensive surface parking and set back from the street

3. High rise residential buildings with large setbacks from the street add another discontinuous element to the area, occurring both on main and secondary residential streets.

Sherbourne Lanes

Tenure: Rent geared to income
Architect: Diamond and Myers
Year Completed: 1976
Address: 241-285 Sherbourne Street

Sherbourne Lanes project by Diamond and Myers was initiated as a response to the large scale developments of Urban Renewal in 1960s Toronto. A developer had assembled a series of properties with Victorian single family homes on Sherbourne, and had proposed to raze them and construct high rise towers. As a result of an intensive campaign of public advocacy and local resistance, coinciding with the election of David Crombie and the Reform council, the Toronto Housing Corporation purchased the property. Diamond and Myers developed a scheme based on their prototype schemes for low rise, high density housing; retaining the Victorian homes along Sherbourne street and renovating them to accommodate multiple units, and developing a 6 storey block of apartments facing the lane at the rear of the site, accessed through an internal courtyard space.

While the basic parameters of the project follow the principles of Diamond and Myers theoretical scheme, they vary in their dimensions and implementation. Due to imposed density targets on the site in order to maintain affordable rents the project required a relatively high density of 2 times site area. This, combined with the relatively shallow depth of the lot, required both that the courtyard be narrow at between 7 and 10 metres, with a full 6 storeys of building mass at the rear of the site creating the impression of a wall of building at the lane. This form also creates issues of privacy and access to light both within the project and for neighbours, as well as issues of address for these units at the rear. The courtyard is treated as both private outdoor space for units at grade, and circulation space for accessing units on upper floors. This juxtaposition of shared and private space combined with the tight dimensions of the space reduce its effectiveness in fulfilling either function.

Statistics

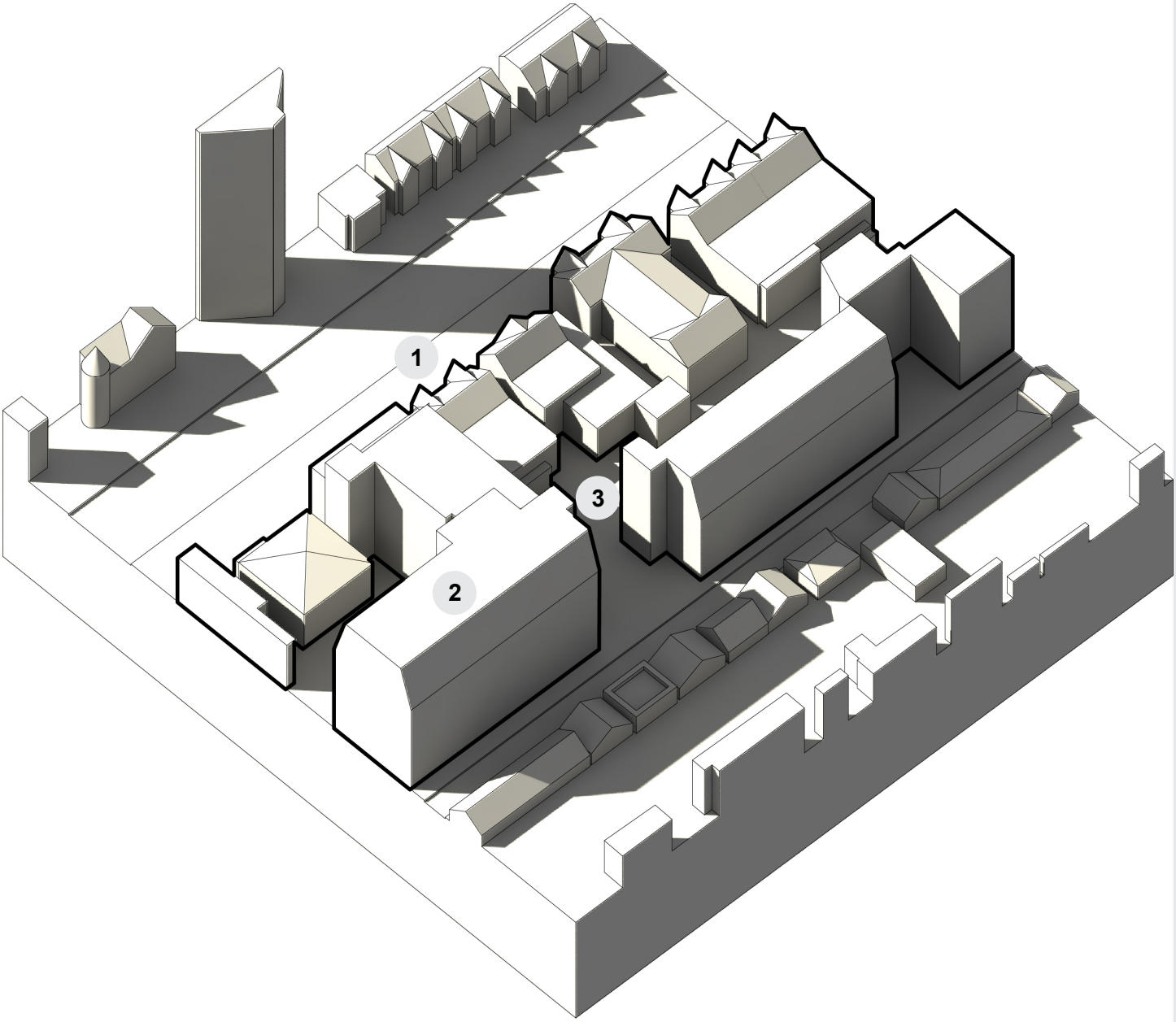
Lot Size	**10380**
Lot Coverage	**58%**
Residential GFA	**20760**
Other GFA	**-**
FAR	**2**
Storeys	**6**
Units	**381**
Units per HA	**360**

Figure 1.29 **Sherbourne Lanes axonometric illustration**

1. Existing single family homes are retained and renovated with subdivided units.

2. The newly constructed building oriented to the lane at 6 storeys is very clearly out of scale with not only the adjacent single storey garages, but also the three storey fabric of detached and semi detached homes. This creates issues of access to light for neighbouring properties, as well as privacy and overlook issues.

3. The internal courtyard space is narrow relative to the height of the buildings; no program is provided, and no adjacent areas open onto it. Vertical circulation is internal to the buildings rather than addressing the public area.



Hydro Block

Tenure: Rent geared to income
Architect: Diamond and Myers
Year Completed: 1978
Address: 6 Henry Street

Hydro Block is a development by Diamond and Myers, directly related to the policies of the Reform Council. It is a public housing project initiated by the city public housing corporation as an alternative to a proposed 9 storey hydro substation over part of the block. These plans were changed due to a strong campaign of community advocacy and opposition against the development project, and the involvement of the provincial member of parliament. The land was eventually turned over the Ontario Housing Corporation for the development of subsidized rental housing.

Much of the discourse surrounding the project is similar to that of their project at Dundas and Sherbourne, however the built form is quite different. The existing Victorian rowhouses were in poor structural condition, necessitating the demolition of all but one at the corner of site which is maintained and incorporated into the project. The scheme is a continuous perimeter block occupying approximately the same footprint as the single family homes it replaces, establishing continuity of setbacks and street elevation. The project locates units on a half basement level, with with stairs providing entry to family apartment units both above and below grade with upper floors accessed through common corridors. The use of a half basement, combined with the setback and slope of upper floors mitigates the overall height of 5 storeys. Locating the massing in order to free the space of the rear yard allows for grade oriented units with private outdoor space, as well as outdoor space shared among residents.

Statistics

Lot Size	**8826**
Lot Coverage	**43%**
Residential GFA	**13239**
Other GFA	**500**
FAR	**1.5**
Storeys	**5; 4 above grade with basement**
	157
Units	**180**
Units per HA	

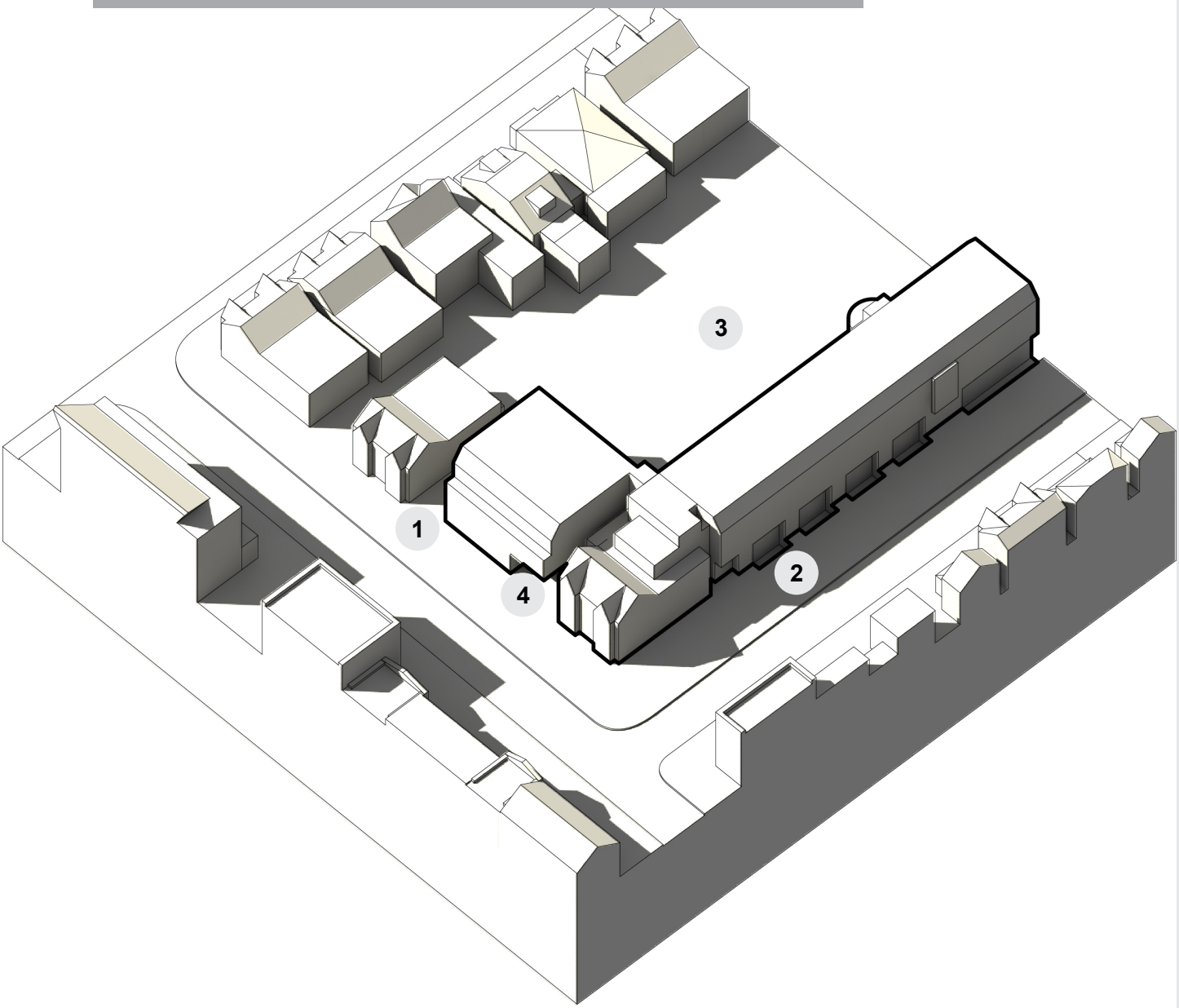
Figure 1.30 **Hydro Block axonometric illustration**

1. The newly constructed building maintains front and rear yard setbacks of the established context.

2. The building height is mitigated by creating a half basement level, as well as setbacks and slopes on the upper floor.

3. The rear yard is left open as is the case with the immediate context, avoiding issues of overlook and access to light for neighbours and allowing for both private and shared outdoor space.

4. Retail program at grade is created on Baldwin Street in keeping with the context, with the retained Victorian home on the corner serving to integrate the new form.



Stacked Townhouses

Tenure: Condominium
Architect: Kregg Fordyce Architect
Year Completed: 2017
Address: 362 Wallace Avenue

The development of stacked townhouses is largely a response to zoning and planning restrictions, and the desire on the part of developers to achieve higher project densities both in terms of units and total floor area. Units are stacked vertically up to 4 storeys, in order to maintain their classification as Part 9 buildings under the Ontario Building Code. All units have an entry directly from grade or elevated slightly, in order to avoid common vertical circulation and other implications associated with more traditional multi unit typologies. The most typical form involves two storey units stacked one on top of each other, at a minimum doubling the density of a comparable row-house development.

The result is a building form that is often closer in scale to its context, while providing more density than other comparable low rise alternatives. The economic efficiency of reducing common circulation and program generally also makes them more affordable, or at least more profitable. While the common entry at grade for multiple units could, if articulated intentionally, relate to shared or collective space it is more often simply multiple front doors grouped and accessed from a minimally sized terrace.

Statistics

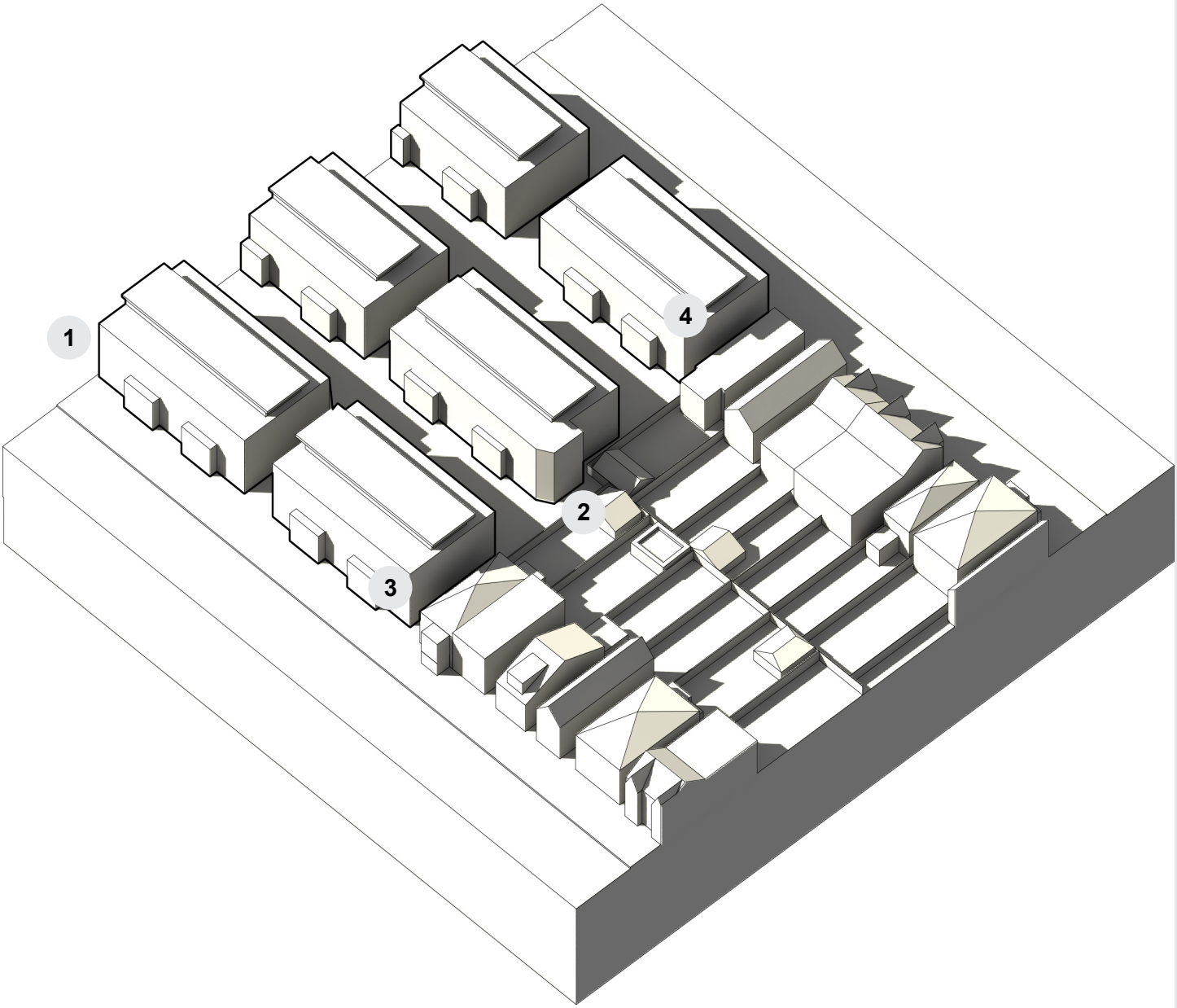
Lot Size	**12634**
Lot Coverage	**60%**
Residential GFA	**15551**
Other GFA	**-**
FAR	**1.68**
Storeys	**4**
Units	**167**
Units per HA	**132**

Figure 1.31 **Stacked Townhouse axonometric illustration**

1. Units are stacked vertically as well as back to back, such that most units only have access to daylight from one face.

2. Relative to the context, the buildings are arranged such that one is aligned to the ‘mid block’ condition, creating overlook and access to daylight issues. This is more a function of its relative location rather than its form.

3. The new construction immediately abuts the property line, and provides no step down to mitigate the change in scale.



Church Retrofit

Tenure: Condominium
Architect: Caricari Lee Architects
Year Completed: 2017
Address: 243 Perth Avenue

This project involves the conversion of an existing church building to residential condominiums and the construction of an additional four storey residential building adjacent to existing semi detached residential fabric. Both buildings have vertical circulation accessed through a shared lobby in between. In this regard it functions as a relatively typical multi unit residential building, with conventional corridor structure and units inserted into the existing structure.

The adjacency of the newly constructed building to the context is made problematic by the depth of this mass; it extends significantly into the space of the neighbouring backyards, creating issues of access to light and privacy for neighbours.

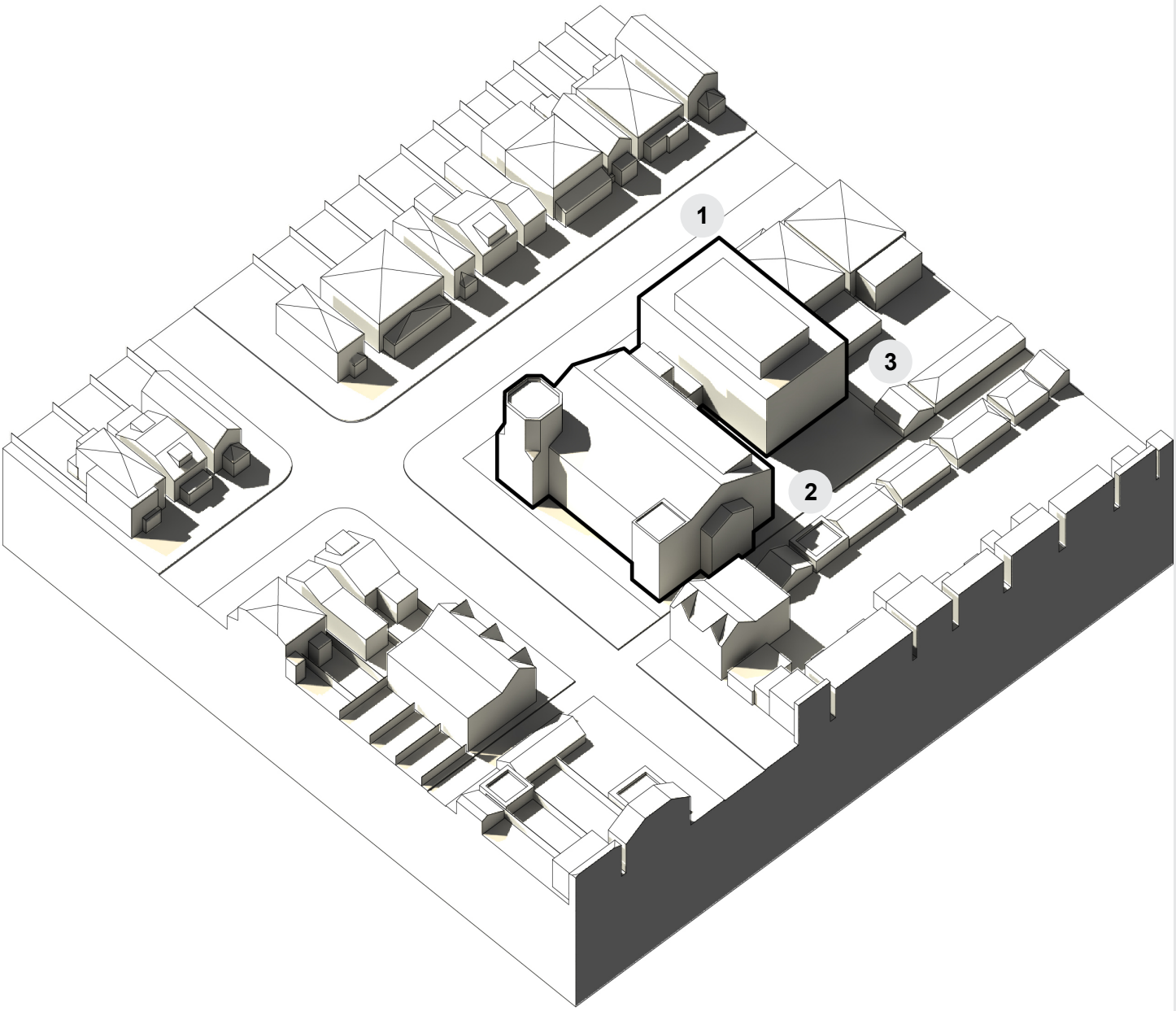
Statistics

Lot Size	**1701**
Lot Coverage	**58%**
Residential GFA	**3561**
Other GFA	**-**
FAR	**2.1**
Storeys	**4**
Units	**42**
Units per HA	**248**

Figure 1.32 **Church Retrofit axonometric illustration**

1. The newly constructed building is 4 storeys compared to the adjacent 2 and a half storey fabric while immediately abutting the property line; however setbacks at the third floor in front and on all sides at the fourth floor mitigate the impact.

2. The height of the new building closely follows that of the renovated existing church building.



Accessory Dwelling

Tenure: Freehold Ownership
Architect: Kohn Shnier Architects
Year Completed: 2009
Address: 54 Croft Street

The proposal of laneway units has a long history in planning and urban discourse in Toronto, with relatively few realized projects. This is due both to a regulatory environment that discourages laneway housing as being difficult to service and disruptive to established neighbourhoods, as well as resistance from property owners and neighbours. This has also led to resistance from the city in the form of restrictive zoning and site restrictions, requiring that any residences have an address on a named street, making it effectively impossible to develop a second unit with freehold ownership simply by severing the property at the rear of a site. Similarly, a provision prohibiting multiple residential buildings on a single property makes it impossible to construct a rental unit addressing the rear lane.

Projects that are realized typically exploit existing coach house conditions and extensive renovations, propose convoluted severances in order to create multiple properties with frontage along the street, or instead take advantage of anomalous urban conditions. Croft Lane is an example of this, in that the city regards this specific lane as being a named street rather than a service lane, enabling the construction of multiple residential units along its length.

Statistics

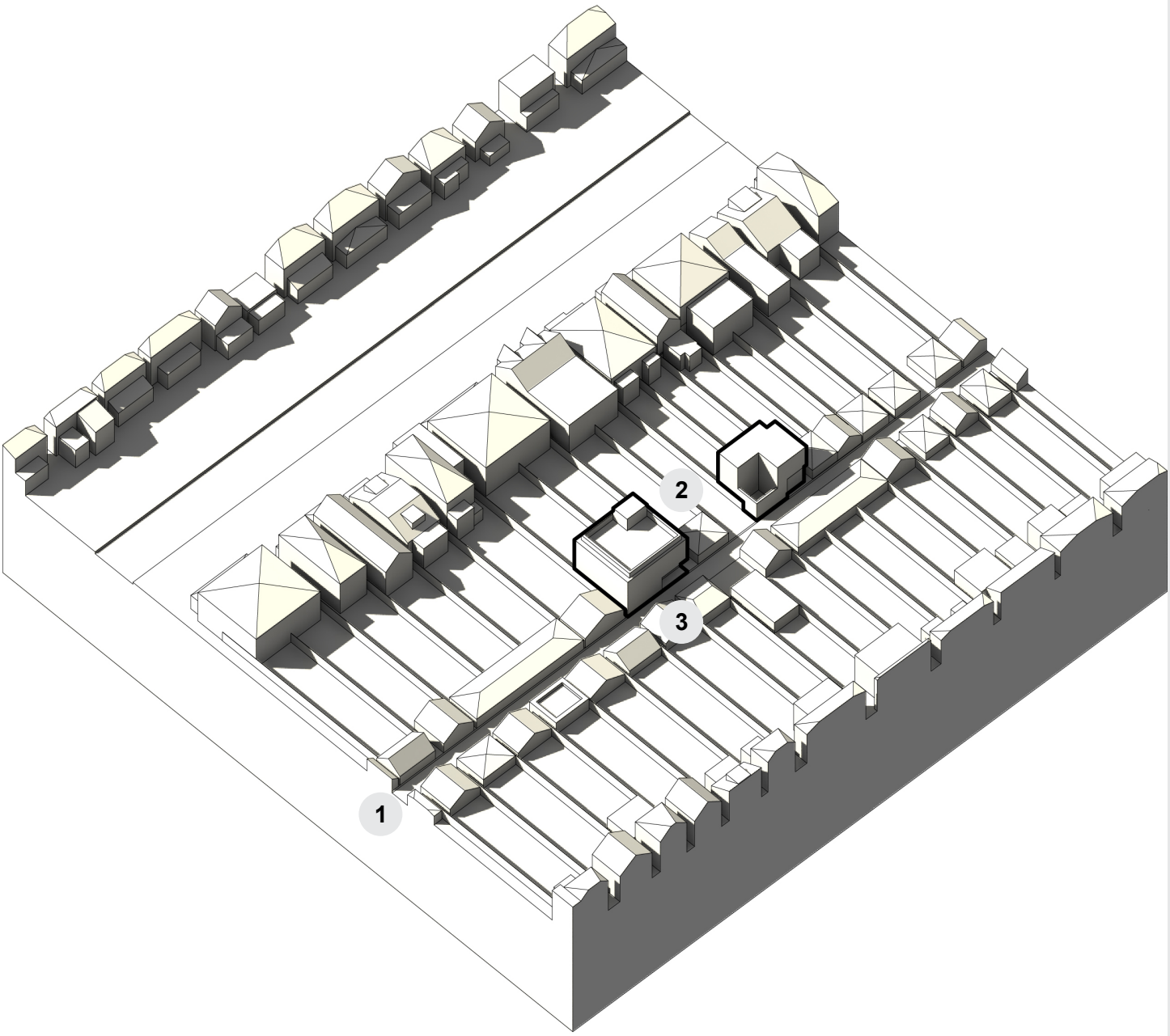
Lot Size	**450**
Lot Coverage	**60%**
Residential GFA	**370**
Other GFA	**-**
FAR	**.81**
Storeys	**2**
Units	**3**
Units per HA	**67**

Figure 1.33 **Accessory dwelling axonometric illustration**

1. Croft Lane is in fact a named street, allowing a portion of the rear yard of houses to be severed and new buildings to be developed addressing the lane exclusively.

2. The laneway structure occupies the same building footprint as a typical semi-detached home

3. The relationship to the existing homes rear yard condition is managed through limited windows on the building face, with the mass presented being now significantly larger than that of the typical garages.



Rowhouses

Tenure: Condominium
Architect: Richard Wengle Architects Inc.
Year Completed: 2013
Address: 250 Manning Avenue

While the rowhouse exists as an historical typology, this analysis is concerned primarily with its deployment in contemporary deployment an infill typology. In this context, it provides more density than detached homes while largely preserving the scale and continuity of street frontages in residential neighbourhoods and providing grade related dwelling units within a freehold ownership or condominium model of development. All of these factors make them more palatable to established residents, whose interests in maintaining their properties perceived value depends at least in part on the exclusion of multi unit dwellings from the area.

While providing an incrementally higher density than detached or semi detached typologies, it is difficult to assemble enough individual developments to realize these projects at scale. While they offer a high density in terms of FAR, they provide a relatively low density in terms of units or occupants per HA; an increasingly important metric both in terms of city planning criteria and the economics of development. By creating more units through, for example stacked townhouse typologies, developers are able to realize even greater profits.

Statistics

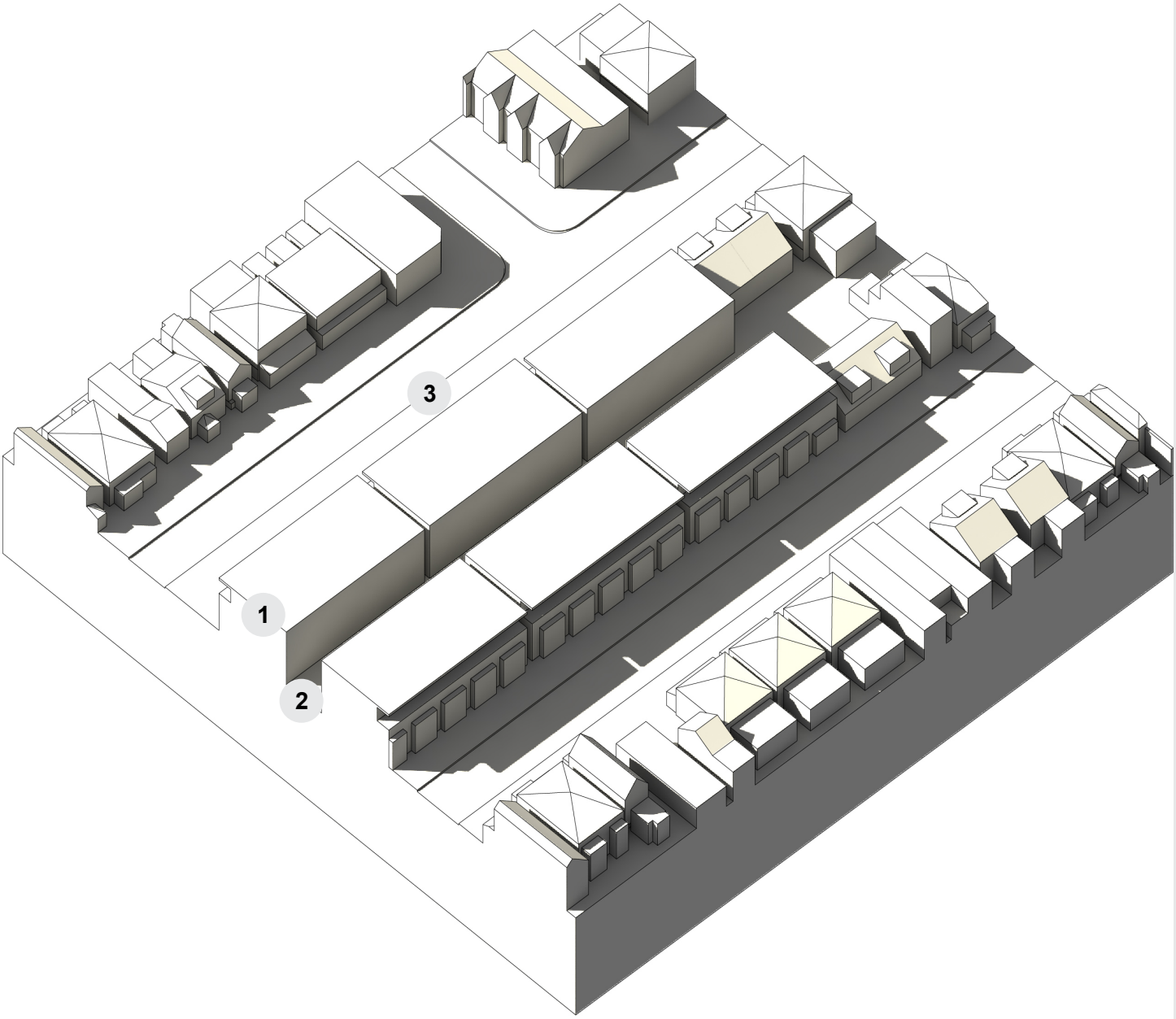
Lot Size	**4028**
Lot Coverage	**68%**
Residential GFA	**7781**
Other GFA	**-**
FAR	**1.91**
Storeys	**3**
Units	**45**
Units per HA	**112**

Figure 1.34 **Rowhouses axonometric illustration**

1. The newly constructed building conform to a 12m as of right height limit, typical for a residential neighbourhood.

2. The project is not serviced by a public lane, instead parking is provided through an internal private lane and garages located in the ground level.

3. The large scale nature of the project is a result of the site's historic use as a school, removing the difficulty involved in the extensive assembly of individual properties. Many examples of this typology are predicated on anomalous conditions and resultant large lot sizes as infill.



Mid Rise

Tenure: Condominium
Architect: RAW Design
Year Completed: 2016
Address: 998 College Street

The development of mid rise typologies in Toronto is an typology with a rich history few realized projects until recently. The introduction of the Avenues and Mid Rise development guidelines by the City of Toronto in 2010 opened the city's avenues and main streets to development of mixed use buildings at the scale of 5-12 storeys, with the maximum allowable height predicated on the width of the right of way. The transit oriented nature of many of these Avenues has made them a logical target for intensification. Previous advocacy and a framework for development of these sites had been laid out in ***Building on Main Streets,*** published in 1991. These guidelines were adopted by the city in order to encourage renewal and densification, but were seen as overly restrictive by developers and potentially limiting their profitability. These new guidelines have streamlined the approvals process, and have resulted in a formal language that seeks to fully exploit the maximum building envelope permitted. This is expressed as a series of vertical setbacks that seek both to break up the mass of the building and also minimize issues of overlook and access to natural light in adjacent residential properties.

While the formal realization of the buildings has more of a relationship to the existing character of the main streets in the context of high rise condominium development in the downtown core, they still obey the logic of market development in their focus on individual units as fungible assets, seeking to differentiate their housing product through desirable location or particular amenities. They are increasingly being realized in historically working class areas (Parkdale, the Junction), and contributing to both direct displacement of residents through demolition as well as gradual displacement through rising rent.

Statistics

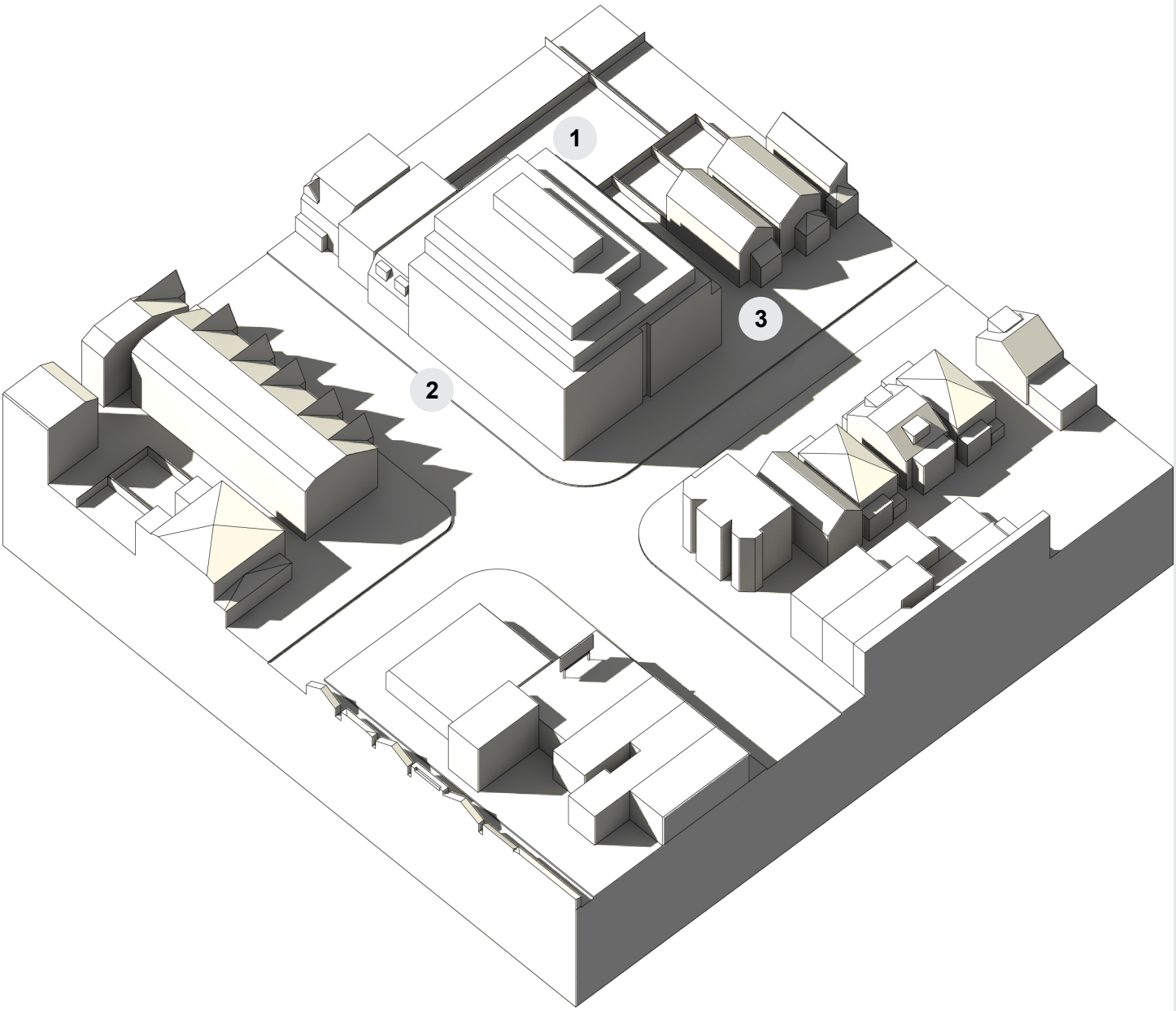
Lot Size	**1091**
Lot Coverage	**48%**
Residential GFA	**4183**
Other GFA	**408**
FAR	**4.2**
Storeys	**7**
Units	**54**
Units per HA	**493**

Figure 1.35 **Mid Rise axonometric illustration**

1. The north face of the building steps back from the adjacent residential context, in increments that are described by the Mid Rise Guidelines, with the overall building height is dictated by the width of the street.

2. The at grade setback at the rear allows for vehicular access in the absence of a public lane, as well as providing a zone of separation to the adjacent homes. It also allows for the first four storeys at the rear to avoid setbacks.

3. The new construction immediately abuts the property line along the main street, a juxtaposition that anticipates future development on adjacent properties.



Factory Conversion

Tenure: Condominium
Architect: CORE Architects (Conversion)
Year Completed: 1919, 2007
Address: 183 Dovercourt Road

The conversion of existing buildings with anomalous uses in the urban fabric into housing, most typically as 'loft' spaces, has its roots in the appropriation of these buildings as living space by artists in the 1960's. However, the typology was formalized and commodified as an understood residential typology in Toronto in the 1990's. Industrial buildings that offered high ceilings and open floor plans were subdivided and individual units sold by developers, frequently being located in areas that were rapidly undergoing gentrification (King-Spadina in the 1990's, Queen west in the 2000's, and currently in the Junction).

The building depicted represents one such case of a former industrial use in a residential neighbourhood, a five storey warehouse building renovated and with a two storey addition at the roof level. This volume is set back from the edge of the building to mitigate the effects of what is essentially a 7 storey building in a fabric of primarily two and three storey single family homes.

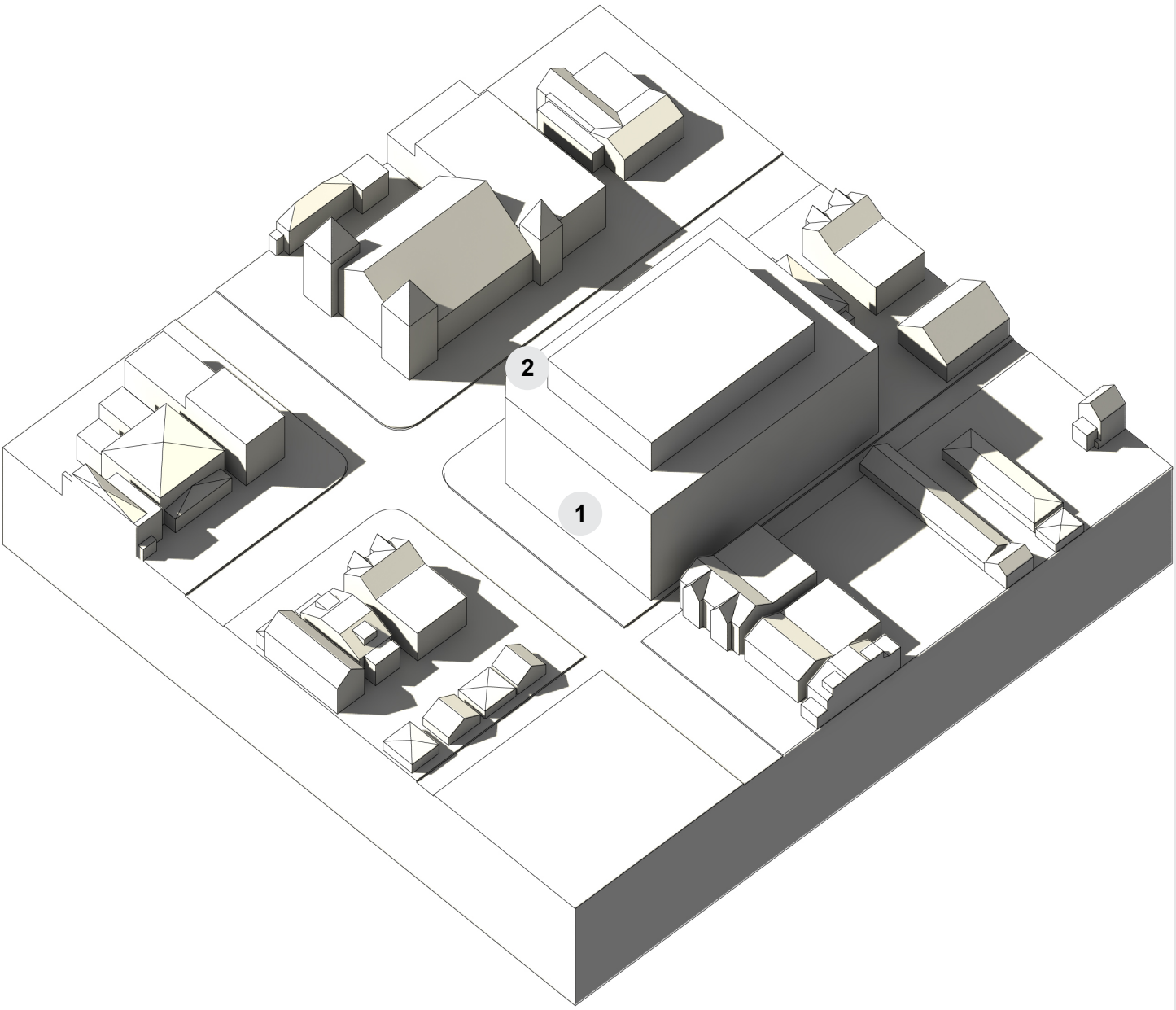
Statistics

Lot Size	**1620**
Lot Coverage	**85%**
Residential GFA	**8085**
Other GFA	**-**
FAR	**4.99**
Storeys	**7**
	-
Units	**-**
Units per HA	

Figure 1.36 **Factory retrofit axonometric illustration**

1. The existing 5 storey warehouse building is an urban anomaly, a result of inconsistently applied or historic zoning controls.

2. The additional two storey volume is set back significantly from the existing building faces, combined with its location on a corner lot this minimizes the direct impact on neighbours.



Bain Avenue Cooperative

Tenure: Limited Equity cooperative (originally private affordable rental)
Architect: Eden Smith
Year Completed: 1913
Address: 100 Bain Avenue

The Bain Avenue Cooperative was originally constructed as Riverdale Court, workers housing developed by wealthy philanthropists in 1913. Located in the Riverdale area, East of the Don River in Toronto, its construction coincided with the earliest restrictions on the construction of multi unit residential apartments in the city. and an emerging discussion about the quality of housing provision in the city. Part of the concern was related to public health issues around cramped conditions in tenement housing, as well as concerns by industrialists regarding the health and supply of a reliable labour force. Constructed as a series of discrete buildings with forms common to single family homes at the time, the buildings were arranged around street facing courtyards. The communal shared space created here was an essential part of the scheme; reflecting the contemporary interest in the 'Garden City'planning principles, and a rejection of the contemporary tenement style apartment typology. It used utopian language common to garden city schemes at the time in its promotion, emphasizing elements of the development commonly associated with single family homes at the time;

> "A cottage flat is a modern apartment with its own front door to the street. The Bain Avenue buildings of the Toronto Housing Company are arranged around three grass courts. There the small children will have ample room to play, where their parents can see them, and away from the dangers and the dust of the street..."

While originally provided to tenants at subsidized rents, as the ownership of the property changed the tenants were threatened with eviction and higher rents. This led the tenants to organize, and eventually buy out the complex of approximately 260 units. They established a limited equity cooperative, in which members were guaranteed stability of tenure at affordable rates.

Statistics

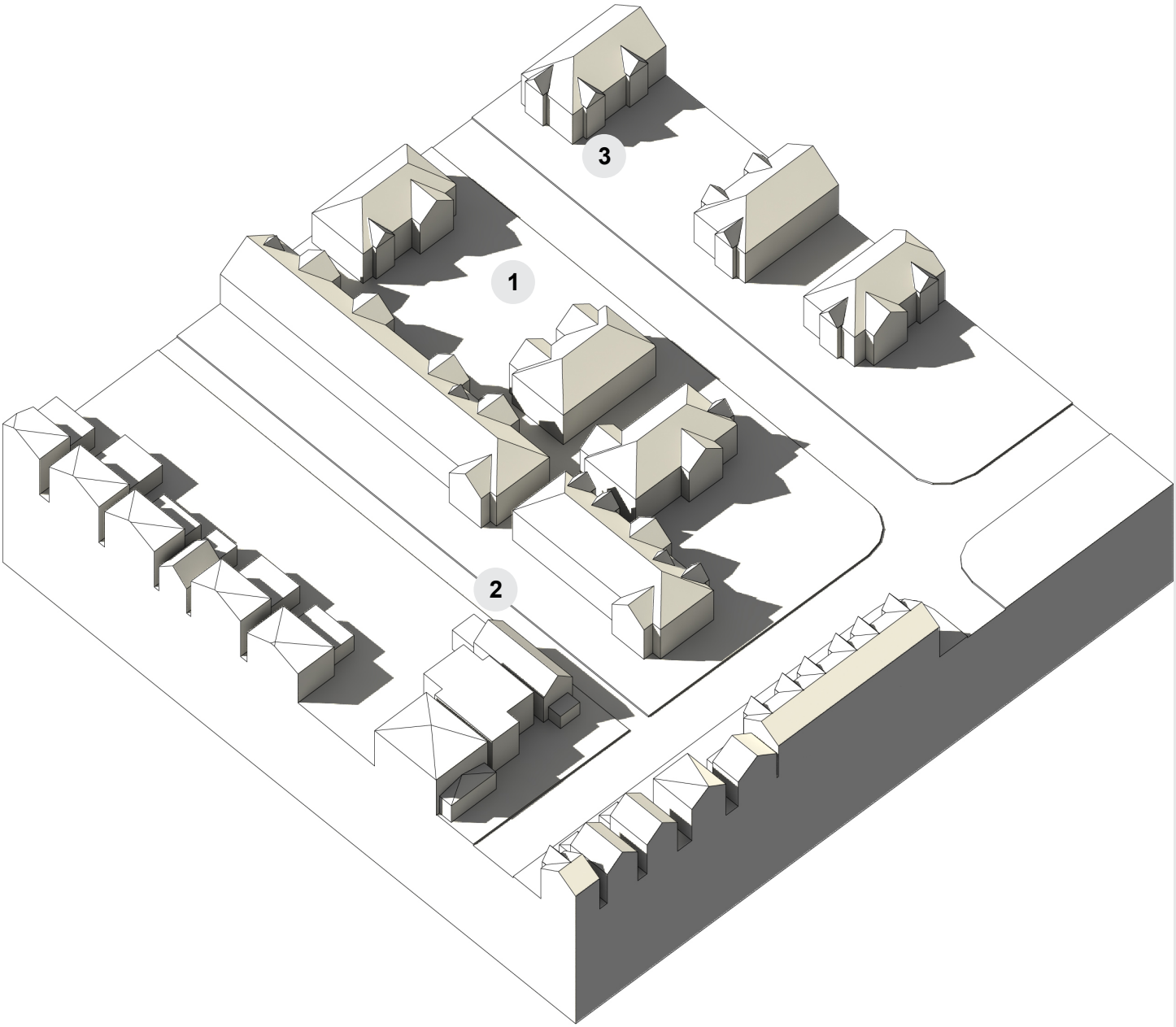
Lot Size	**23140**
Lot Coverage	**40%**
Residential GFA	**23845**
Other GFA	**-**
FAR	**1.03**
Storeys	**3**
Units	**260**
Units per HA	**112**

Figure 1.37 **Bain Avenue axonometric illustration**

1. The individual buildings are arrayed around a series of landscaped courtyards, intended as shared outdoor spaces for residents.

2. The building height closely follows that of the existing context; at three storeys and with hip roofs, the building forms are reminiscent of single family homes continuously arrayed horizontally.

3. Individual entry to units is provided at grade, with access from the courtyard and providing a shared sense of address.



Spruce Court Cooperative

Tenure: Limited Equity cooperative (originally private affordable rental)
Architect: Eden Smith
Year Completed: 1913
Address: 330 Sumach Street

Spruce Court Cooperative is located in the Cabbagetown area, just west of the Don river. Also constructed in 1913 by the Toronto Housing Company, it featured many of the same architectural and formal principles of the Riverdale Court (Later Bain Avenue) cooperative; massing that resembled adjacent single family homes, organization of individual buildings around shared courtyards, and an affordable rent structure. Haring a common developer and architect with Bain Avenue, Spruce Court provided below market rents to tenants and returned a limited dividend to investors. It is a notably smaller development than Riverdale Court, likely due to the area being more densely populated at the time of construction and with correspondingly higher land values.

After the Toronto Housing Corporations eventual demise and sale of the properties, Spruce court passed into private ownership. With the threat of being turned into condominiums and the current residents forced to either buy their units or face eviction, residents organized a limited equity cooperative structure and were able to secure funding to purchase the development. It has remained a coop since.

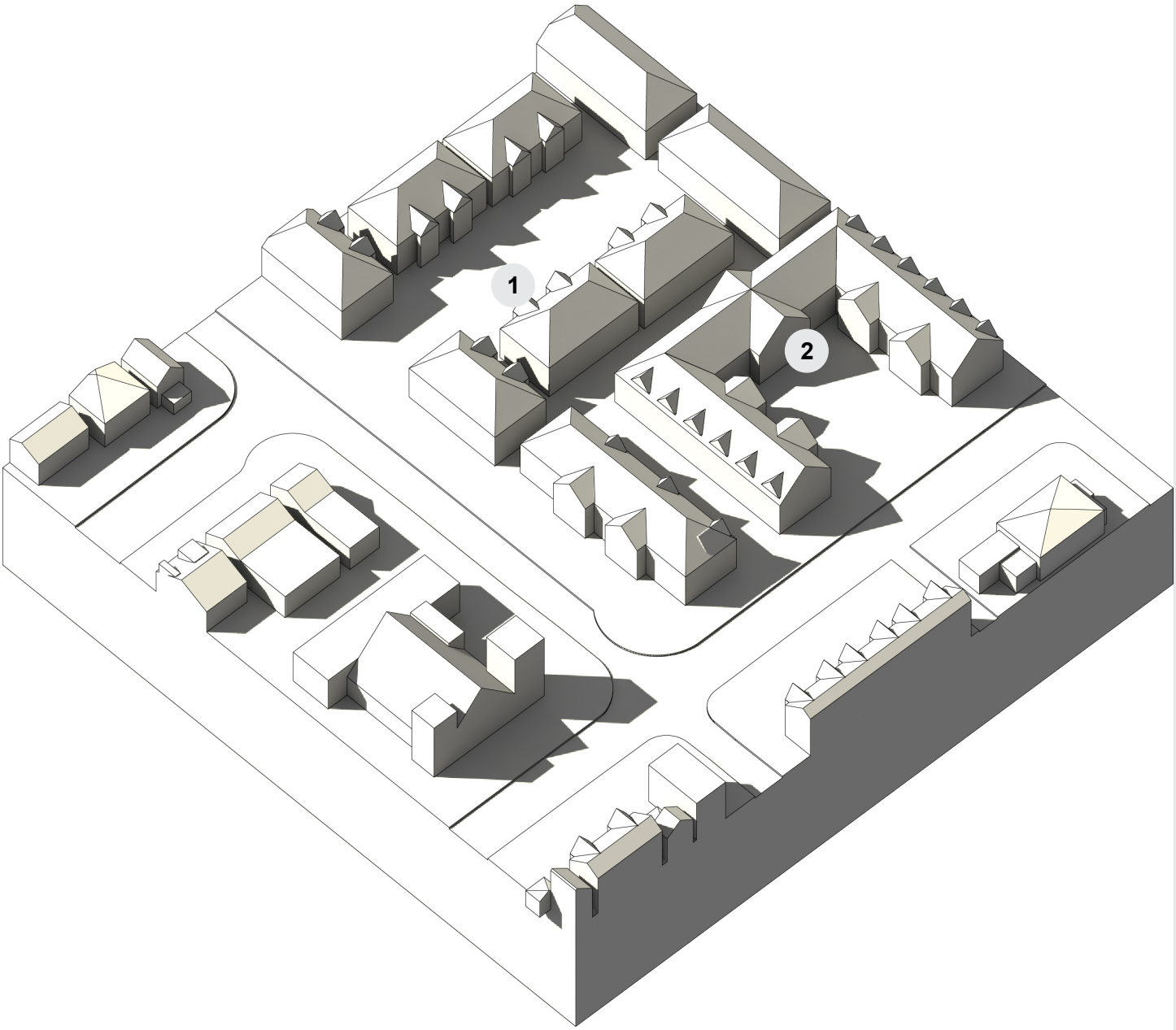
Statistics

Lot Size	**5281**
Lot Coverage	**51%**
Residential GFA	**5370**
Other GFA	**-**
FAR	**1.01**
Storeys	**2**
Units	**77**
Units per HA	**146**

Figure 1.38 **Spruce Court axonometric illustration**

1. The site area and total built area of the project are both smaller than at Bain Avenue, with a comparable density in terms of FAR but a slightly higher number of smaller units. The courtyard allows for even smaller units to have good access to natural light and ventilation.

2. Limited community and service functions are located centrally facing a courtyard.



Infill Block

Tenure: Mixed Rent geared to income and limited equity cooperative
Architect: Teeple Architects
Year Completed: 2010
Address: 60 Richmond Street East

The building form is an 11 storey corner block building with the introduction of a courtyard and vertical void allow more extensive shared outdoor spaces at multiple levels within the building, while also effectively making the floor plan much more shallow. Openings on the vertical face of the building on the south elevation act to break up the mass of the facade, but also to allow sunlight to penetrate into the space even in winter, while also allowing residents a visual connection to Richmond Street to the south from the second and sixth floor common terraces. It further eliminates the problem of narrow and deep units; combined with a mandate from the client to diversify the unit mix, the quality of dwelling spaces is generally very high. By doing this, the circulation corridors on each floor address the shared space of the courtyard and effectively reinforce the idea of the building as a shared amenity, while also providing natural light.

The Toronto Community Housing Corporation funded capital costs for the project, with planning input from the end users and tenants. Following construction, ongoing management and maintenance of the building is turned over to a housing cooperative, funded in part by a local union (hospitality workers union). The union contributes funds in order to secure a number of affordable housing for members, but also for access to training facilities and a working training kitchen and restaurant in the retail spaces at grade. In this way, the residents had both a say in the design and distribution of the residential units. The result of this is evident, through the presence of a relatively large number of three and four bedroom units, a typological rarity within market housing projects in Toronto.

Statistics

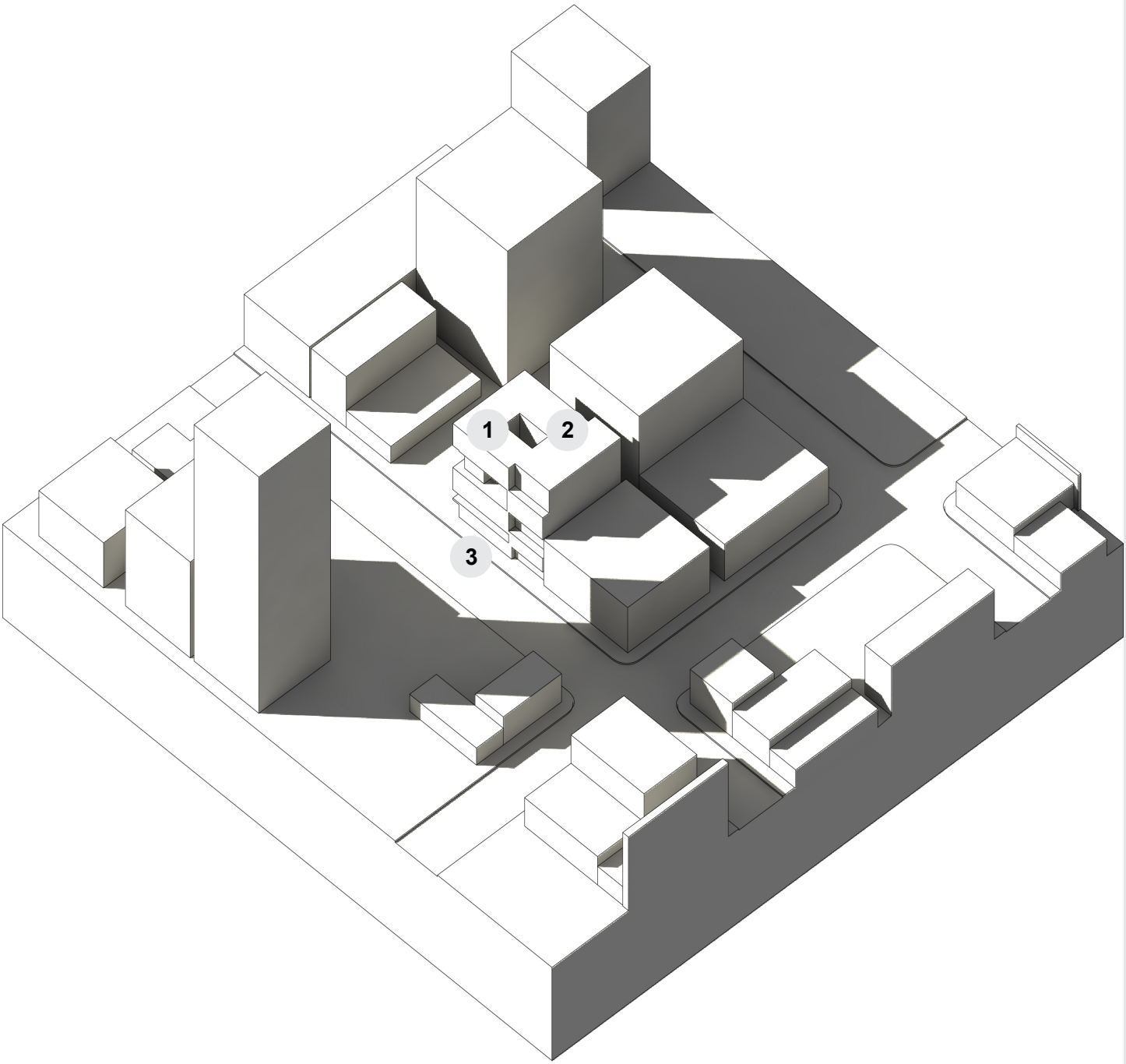
Lot Size	**987**
Lot Coverage	**98%**
Residential GFA	**7600**
Other GFA	**400**
FAR	**7.7**
Storeys	**11**
Units	**85**
Units per HA	**861**

Figure 1.39 **60 Richmond axonometric illustration**

1. The building height at 11 storeys is consistent with other developments in the area.

2. A central courtyard and numerous shared outdoor spaces are articulated in the building massing.

3. Retail programming at grade maintains the established pattern on the street.



Tower Podium

Tenure: Condominium
Architect: KPMB Architects
Year Completed: 2011
Address: 80 John Street

The Tower-podium typology has been one of the defining urban developments of 21st century Toronto. Beginning with the large scale rezoning by the city of the King-Parliament and King-Spadina areas in the late 1990's. The tower podium is predicated on the formal expression of mixed use development; with a lower height mass usually containing non-residential program, and a high rise element containing apartments. The height of the podium level and its program is typically predicated on replicating the existing urban form and streetscape, while the height and mass of the tower component is set back from the perimeter to make it less intrusive into the surrounding fabric.

The Festival tower specifically incorporates cultural programming into the podium element, provided by the developer in exchange for an increased allowable residential density and additional height of the tower element.

Statistics

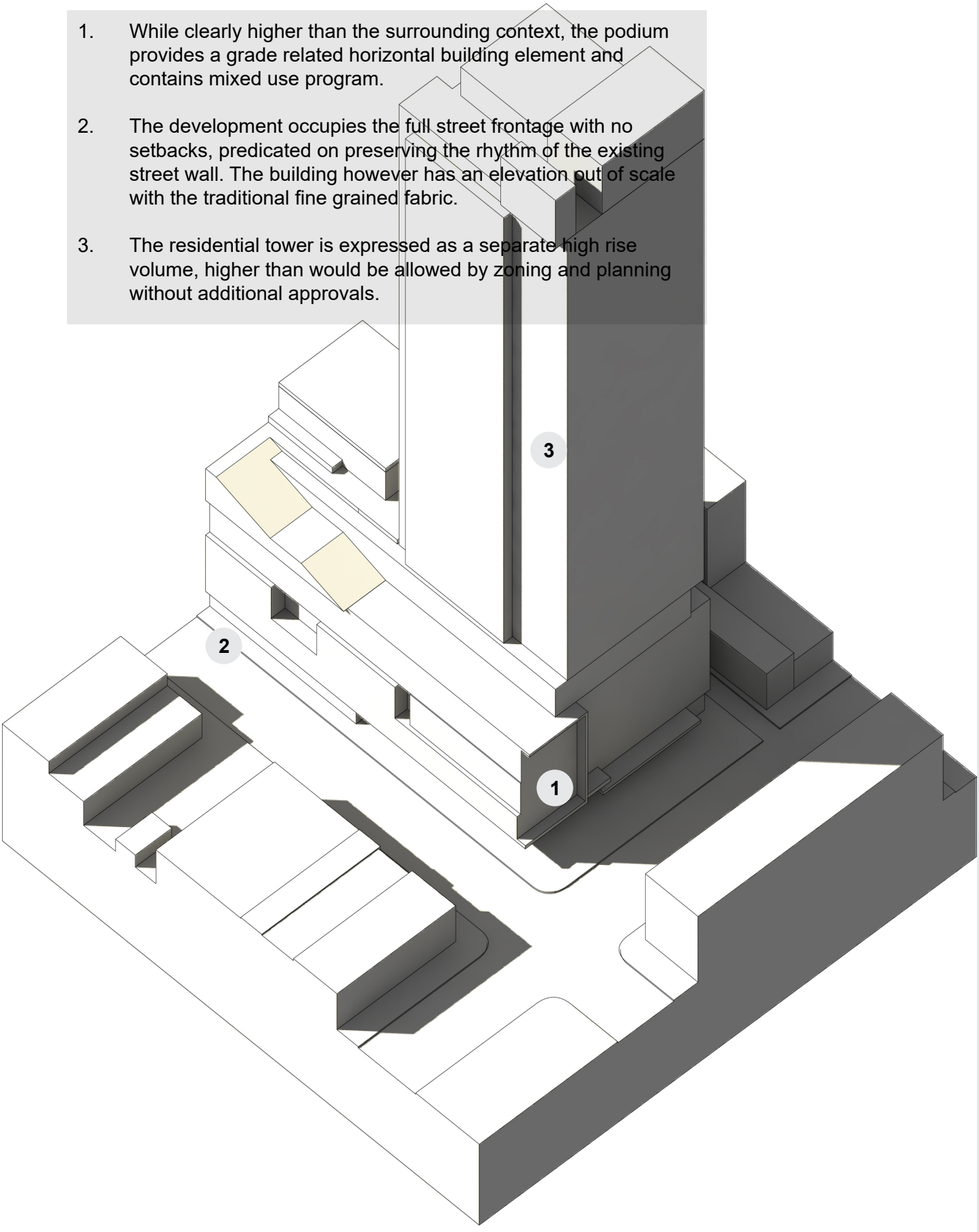
Lot Size	**3957**
Lot Coverage	**96%**
Residential GFA	**39700**
Other GFA	**15260**
FAR	**13.83**
Storeys	**42**
Units	**378**
Units per HA	**955**

Figure 1.40 **Tower Podium axonometric illustration**

1. While clearly higher than the surrounding context, the podium provides a grade related horizontal building element and contains mixed use program.

2. The development occupies the full street frontage with no setbacks, predicated on preserving the rhythm of the existing street wall. The building however has an elevation out of scale with the traditional fine grained fabric.

3. The residential tower is expressed as a separate high rise volume, higher than would be allowed by zoning and planning without additional approvals.



Walk Up Apartment

Tenure: Market Rental
Architect: Unknown
Year Completed: 1925
Address: 56 Maitland Stret

The walk up apartment building is a type that emerged in Toronto in the 1920s and 30s in response to the exclusion of apartment type buildings from most residential neighbourhoods. Typically located adjacent to or on main streets, they occupy almost the full depth of the lot and constitute units oriented to face the minimal side yard. They maximize the build-able area on typically long and narrow lots, but make significant compromises to both the quality of the dwelling spaces and the urban fabric. The individual units are arrayed along the length of an internal corridor, with windows facing the minimal side yard setback. This typically creates issues of access to light and ventilation, as well as privacy for both residents and neighbours and is particularly dependent on the buildings relationship to the adjacent context.

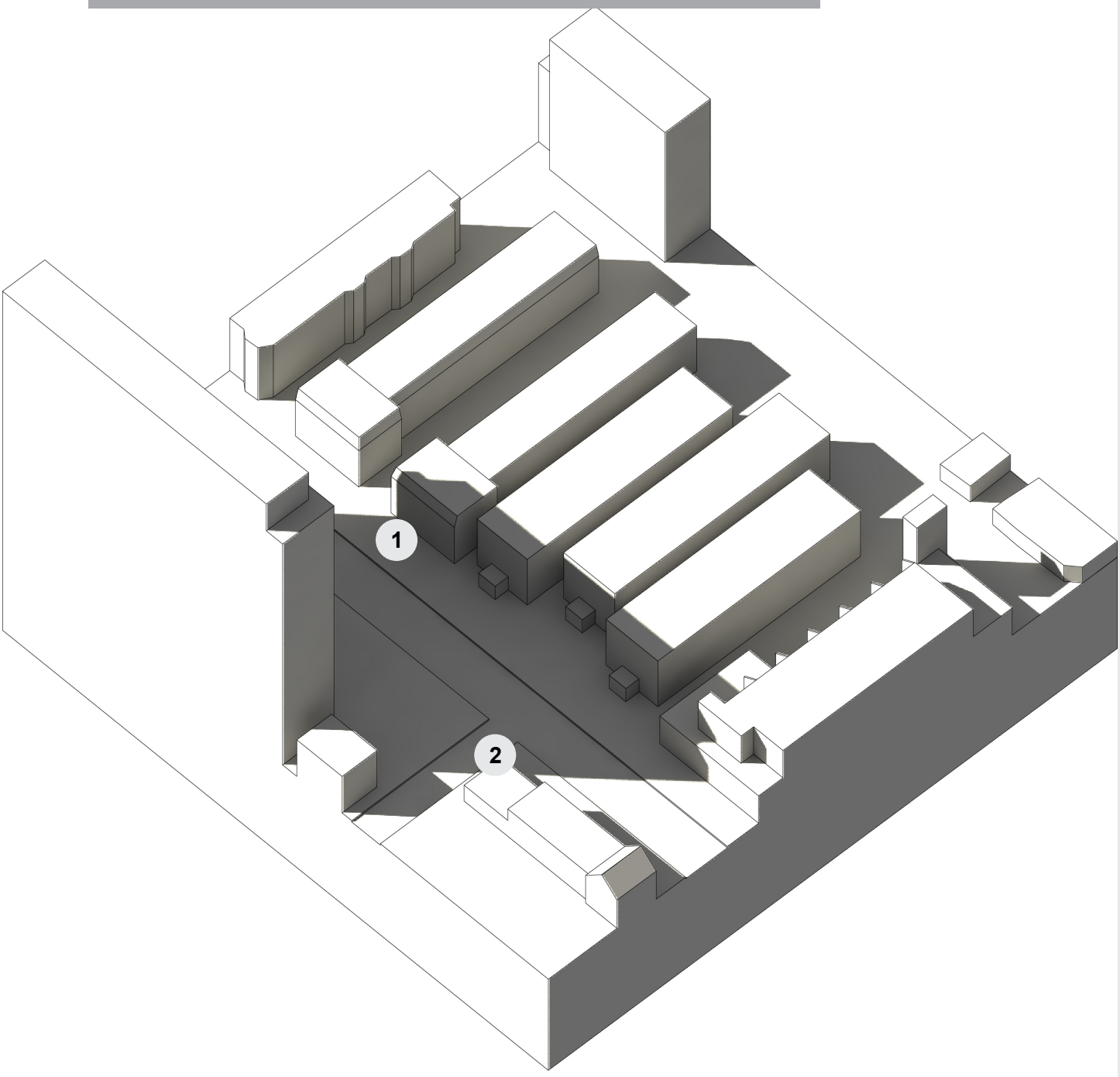
Statistics

Lot Size	**825**
Lot Coverage	**67%**
Residential GFA	**2232**
Other GFA	**-**
FAR	**2.7**
Storeys	**3.5**
Units	**-**
Units per HA	**-**

Figure 1.41 **Walk up apartment axonometric illustration**

1. The buildings typically occupy nearly the entire depth of the lot, with a front yard and minimal rear yard setback as well as minimal side yard setbacks. This causes issues of privacy and overlook for neighbours, as well as lack of access to natural light and ventilation for both residents of these buildings and their neighbours.

2. Units are typically oriented to face exclusively the side yard condition, resulting in issues of privacy and access to light both for residents and neighbours.



Tower in the Park

Tenure: Condominium
Architect: Unknown
Year Completed: 1960
Address: 100 Wellsley Street East

The development of the tower in the park, generally referring to a type initially popularized by Le Corbusier's proposal for the Ville Radieuse, became one of the primary modes of housing production for both the private sector and public housing in Toronto beginning in the 1950's. The development of St. James Town beginning in 1959, and Regent Park South typified this approach to entire districts of the city, however the construction of these buildings occurred across both the downtown core and the emerging suburbs at this time as well. The development of this type took place en-masse in the post war period, coming to symbolize progress and modernization and an emerging cosmopolitan vision of the city. In fact, the downtown developments predicated on slum clearance

It represents a very different morphology to almost any preceding typology, rejecting the pervasive logic of street address, consistent setbacks and lot orientation relative to the context, instead retreating from the perimeter of the site and creating a zone of indeterminate use as green space into which the building is inserted. This represents both a prevailing theoretical proposition at the time, but also a planning regulation requiring a minimum of 50% open space at grade for tall building developments.

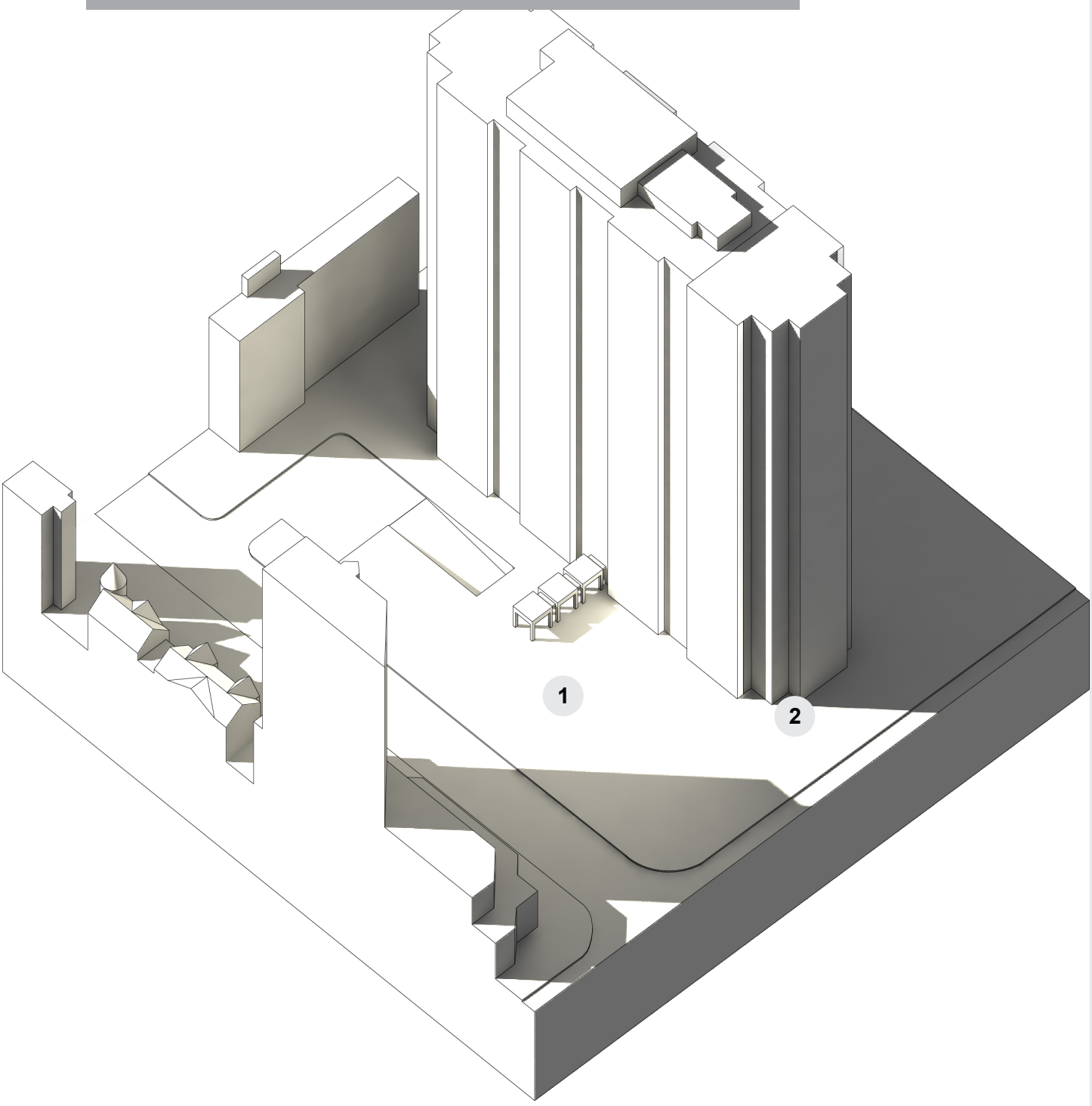
Statistics

Lot Size	**7200**
Lot Coverage	**18%**
Residential GFA	**34920**
Other GFA	**-**
FAR	**4.85**
Storeys	**28**
Units	**-**
Units per HA	**-**

Figure 1.42 **Tower in the park axonometric illustration**

1. Extensive setbacks from the street are a result both of specific architectural program of the tower in the park, as well as regulations requiring 50% open space at grade.

2. Both the height and the footprint of the building are out of scale with the adjacent context; while the height contributes to shadowing of the adjacent areas, the buildings extensive elevation and homogeneous form also set it apart



Deep lot Rowhouses

Tenure: Condominium
Architect: Unknown
Year Completed: 1985
Address: 130 Clinton Street

The development of this projects is predicated on an anomaly in the urban fabric; specifically, a block depth that is far deeper than is typical. As evidenced by the surrounding residential context, the various single family homes alternately orient themselves to address the residential street or the lane. The projects creates an internal court space perpendicular to the street and lane that provides access to the individual rowhouse units, which are, aside from their orientation relative to the surrounding fabric rather conventional. The single slope roofs are a token measure to mitigate the continuous mass of the building against adjacent residential properties. The setback of the building at grade is reserved for private outdoor space for facing units.

Statistics

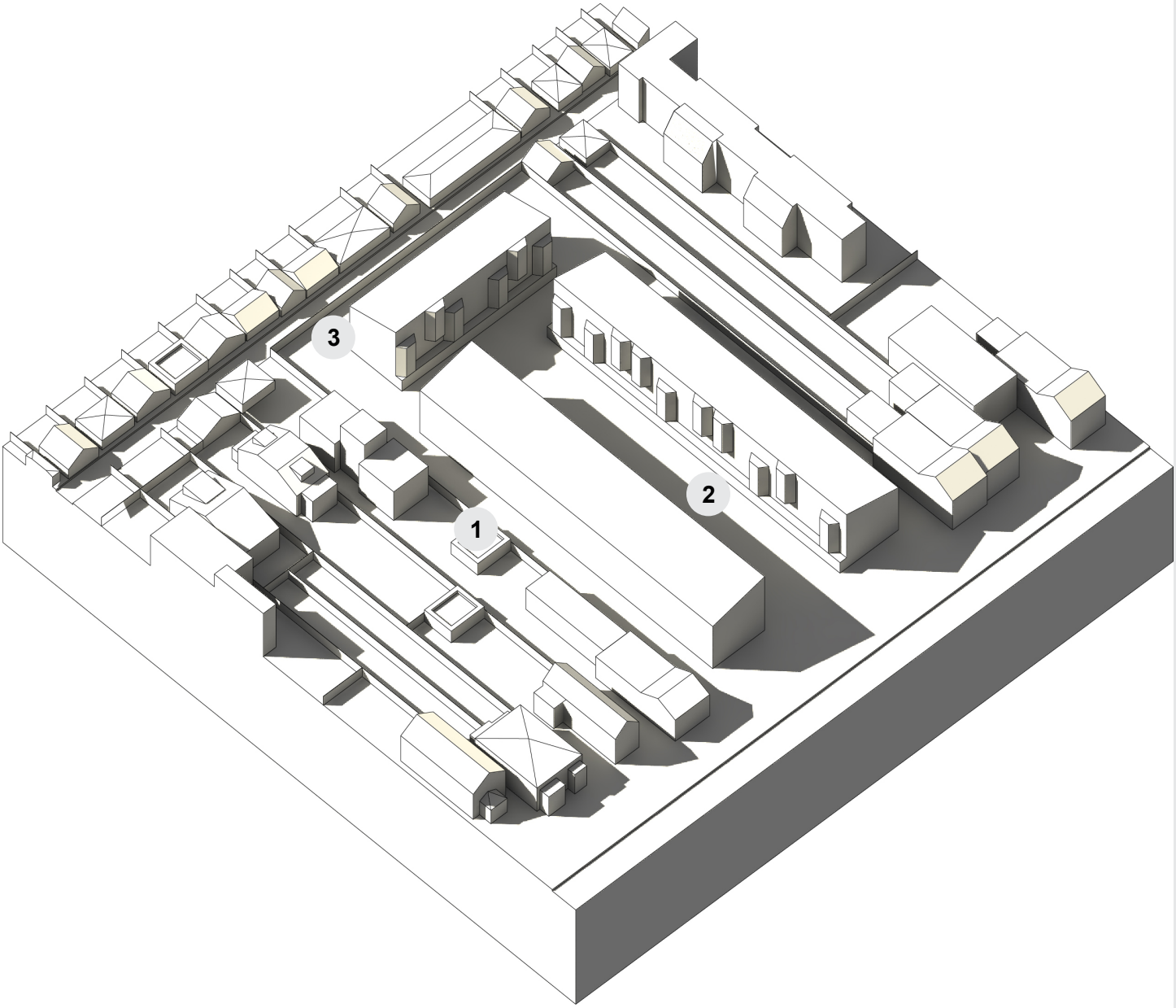
Lot Size	**3400**
Lot Coverage	**33%**
Residential GFA	**3360**
Other GFA	**-**
FAR	**.99**
Storeys	**3**
Units	**-**
Units per HA	**-**

Figure 1.43 **Deep lot rowhouse axonometric illustration**

1. The residential context is atypical in that the block depth of 140m, with a depth from the street to the laneway

2. The project is oriented around an internal court with the buildings themselves addressing this central shared space, and having private outdoor space facing the side yard condition and laneway.

3. The individual buildings are all set back from the perimeter of the site, in order to both mitigate shadowing of neighbours and issues of privacy in overlook and provide private outdoor space



Centre Village

Tenure: Affordable Rental
Architect: 5468796 Architects
Year Completed: 2010
Address: 575 Balmoral Street, Winnipeg

The creation of an internalized courtyard and pedestrian 'street' through the site is the central organizing principle; all units and are accessed and maintain a visual connection to this space. The arrangement and variety of units results in some being accessed by exterior stairs; again adding visual interest and the potential to occupy these stairs as additional outdoor space. In addition to the articulation of the façades and attempts to limit long sightlines through the spaces, the structuring of the circulation between two streets creates an environment that is somewhere between public, shared, and private.

The project was initiated with a subsidized rent to own structure, largely aimed at providing housing for recent immigrants in the community. Various factors, including the withdrawal of government funding for the project, necessitated a shift to a privately administrated affordable rental structure instead.

Statistics

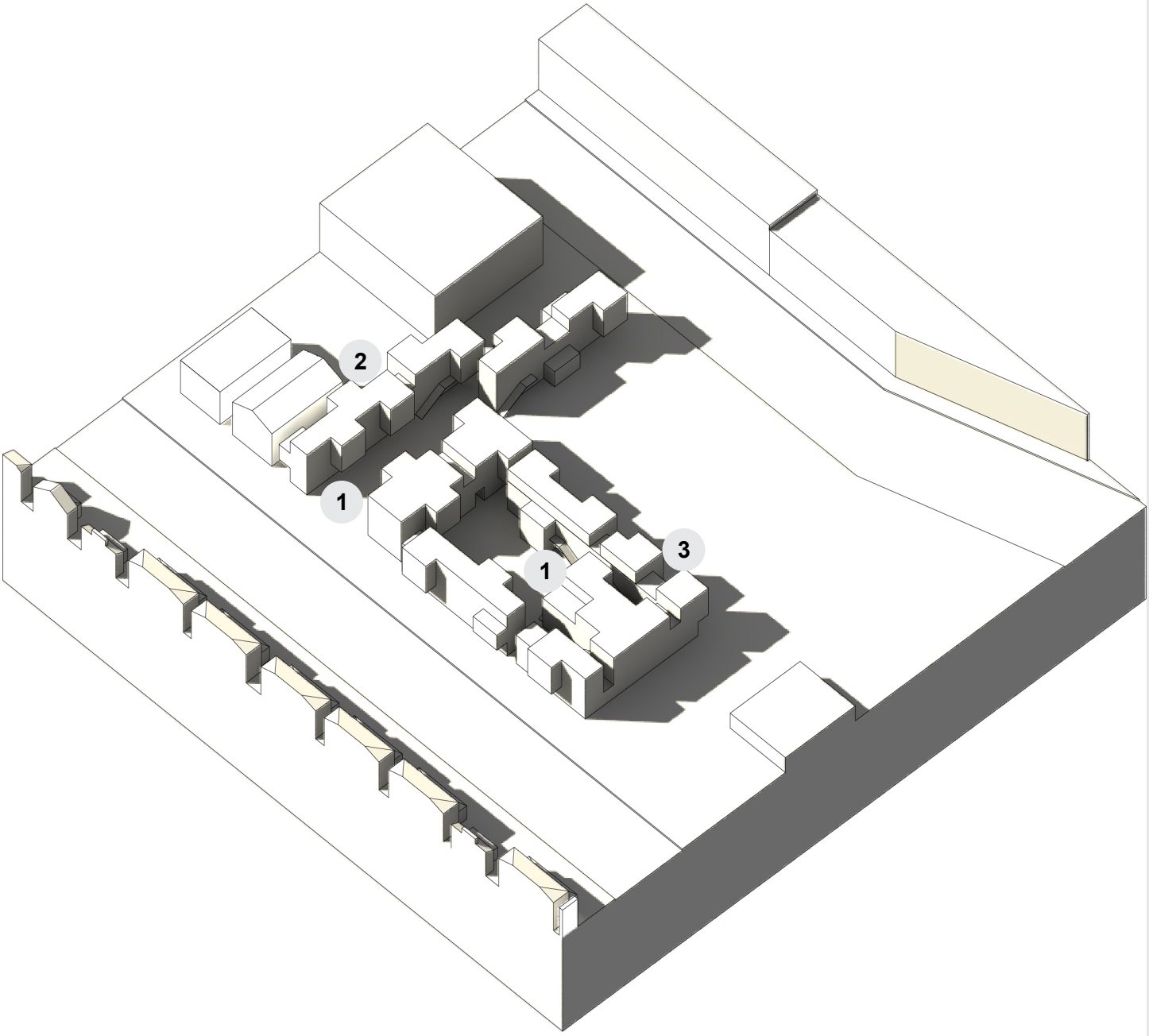
Lot Size	**1260**
Lot Coverage	**44%**
Residential GFA	**1551**
Other GFA	**-**
FAR	**1.23**
Storeys	**3**
Units	**25**
Units per HA	**198**

Figure 1.44 **Centre village axonometric illustration**

1. The internal outdoor space of the project acts in a similar way to both a courtyard and lane, providing both outdoor space for individual units and direct access.

2. At three storeys the building closely follows its adjacent residential context while accommodating a much higher density.

3. The articulation of stepped volumes reduces the mass of the volumes and improves access to light in the courtyard, as well as providing private outdoor space to some units.



Residential Infill

Tenure: Condominium
Architect: 5468796 Architects
Year Completed: 2014
Address: 575 Balmoral Street, Winnipeg

548 Stradbrook by 5468796 is an infill project in a residential neighbourhood in Winnipeg; a context very similar in built form and demographics to Edmonton. The built project inserts a far greater density into a building envelope that is similar in scale to its context. It presents three storeys at the street front with an additional storey at the rear facing lane. This effectively minimizes the presence of the building and maintains the rhythm of the street. Typologically, it is an apartment building with two egress stairs accessed from the side yard, however with a minimized circulation at each level. A combination of double height units and open spaces within them effectively reconfigure the domestic spaces and maximize internal area to the units.

The building has a simple but effective stepping strategy to minimize the mass of an additional half floor at the rear; it appears as three storeys from the street, relating to the context, with four storeys at the rear setback from the property line. The presence of a church on the other side of the lane minimizes issues of overlook and access to daylight that could be caused by locating additional building mass here.

Statistics

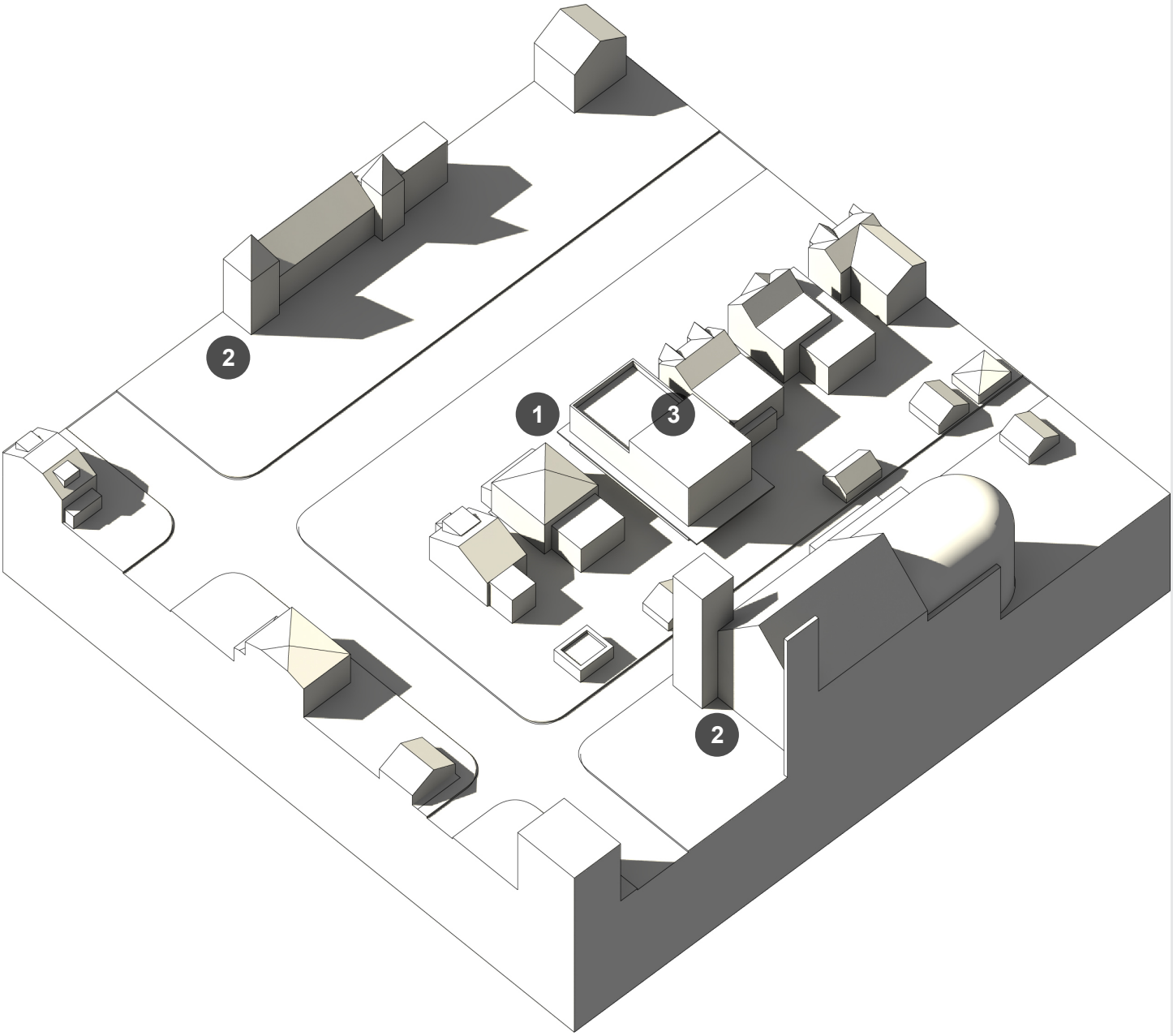
Lot Size	**664**
Lot Coverage	**41%**
Residential GFA	**828**
Other GFA	**-**
FAR	**1.25**
Storeys	**3**
Units	**8**
Units per HA	**120**

Figure 1.45 **395 Stradbrook axonometric illustration**

1. The building provides a continuous canopy for residents at the perimeter of the building, allowing access to the side entrances from either the street front or the parking at the rear.

2. The adjacency to large institutional buildings on both sides of the building lessens the impact of a larger building mass on the adjacent fabric, particularly at the rear.

3. The building is three storeys high at the street front, with four storeys at the rear resulting in a more continuous expression of the street frontage.



DOMESTIC SPACE AS POLITICAL SPACE, HOUSING BEYOND THE FAMILY

The various housing typologies described in the previous chapter emerged from a series of urban and historical contingencies through Toronto's unique development: evolving planning and zoning regulations, reactions from communities and design responses to specific urban and suburban contexts. However, these housing types also responded in a logical manner to a series of broader socio-economic factors, such as financing and ownership structures; the overarching structure and inter-relation of social institutions; and the imperative to maximize profits. These factors are illustrative of a larger pattern of development across Western cities in the 19th and 20th centuries: the transition of urban space from the mercantile city to the industrial city, and ultimately to the contemporary condition of late capitalism, characterized by Henri Lefebvre as a 'critical point.' It is this critical point, in which flows of capital and structural changes to industrial economies coincide with the emergence of urban space as a productive force, in which new possibilities can emerge.[35] In the current condition, housing is often conceived not as a space of dwelling, but as a commodity. Yet the home is also the space of social reproduction:[36] an essential, if often marginalized, element of dominant capitalist and neoliberal systems.[37] It is for this reason the contemporary city is also an inherently political site; it presents an opportunity for the exploration of alternative domestic and spatial relationships.

Beyond simply offering shelter, the goal of housing and the home is to create space in which people can cohabit to carry out the essential functions of everyday life, of social reproduction. The typology of the single-family home in its current form is a relatively recent architectural invention. Its development is closely tied to the social construct of the nuclear family, emerging alongside profound shifts in society and the nature of labour during the industrial revolution and the emergence of a 'disciplinary society.'[38] While massive changes to underlying economic systems and the relationship of labour and capital were the defining features of Industrial capitalism, it also constructed social institutions that furthered the governance of life as-such to create a population whose labour could most efficiently be exploited.[39] The typologies of modern housing in all cases seek to create generalized spatial conditions, replicable on a large scale as a means for the state and capital to manage the population. Within the home, each occupant is individuated through spaces that correspond to their role and to specific functions or moments in the daily routine—the kitchen, living room, dining room, bedrooms, bathrooms.[40]

Pre-industrial households were commonly intergenerational and sometimes interfamilial spaces, with several generations of one family and extended relatives cohabiting. Spaces were generally flexible, with little formal programming based on use and the workplace frequently incorporated into the same building alongside domestic space. Far from being the natural and obvious living arrangement it is presented as, both the apartment and single-family home are relatively new typological inventions derived from the need to house a rapidly growing urban

38. Lefebvre, Henri. The Urban Revolution. Minneapolis: University of Minnesota Press, 2003. P.15.

39. Reproductive labour, in this context refers to labour performed under capitalist system outside of the system of waged, or 'productive' labour. It is commonly seen as a necessary externality for the accumulation of surplus value)

40. Federici, Silvia, "Feminism and the Politics of the Commons" in Binna Choi and Maiko Tanaka eds. The Grand Domestic Revolution Handbook (Utrecht: CASCO Office for Art Design and Theory; Amsterdam: Valiz, 2014), 281-289.

41. Foucault, Michel. Discipline and Punish: The Birth of the Prison. New York: Vintage, 1995. Print.

42. Maak, Niklas. "Post-Familial Communes in Germany." Harvard Design Magazine, Fall 2015, 110-120.

43. Aureli, Pierre Vittorio, and Martino Tattara. "Production/Reproduction: Housing beyond the Family. "Harvard Design Magazine, Fall 2015, 100-10.

Figure 2.46 . **The 'Canadian' dream**
Has largely been conflated with the so-called American Dream, with home ownership a central element of the popular notion of personal independence and success

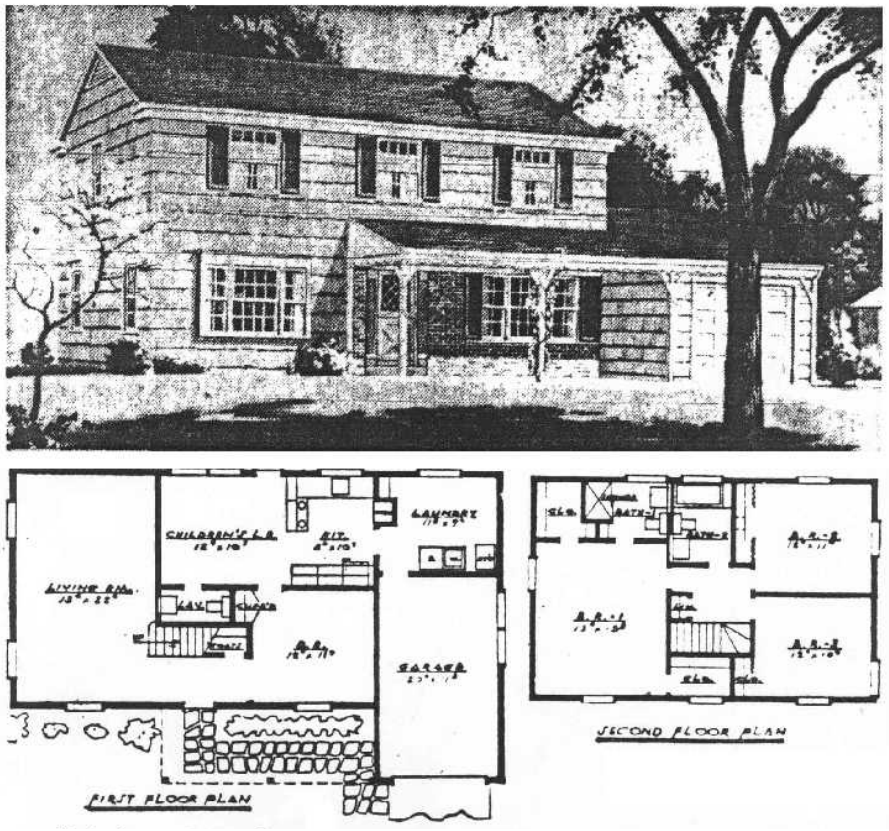


Figure 2.47 . **Spaces of social reproduction**
The single family home has a spatial logic that reproduces social hierarchies through strictly defined spatial conditions

population. Domestic life within this framework was private, seen as inherently separated from the space of public life ie. of labour, commerce, and social life outside the family. It was a space of retreat for the worker to recover from the day's work, his time outside of waged labour defined by the efficiencies demanded by industrial capitalism. In this context, the worker became a subject for whom a "small home and a yard turns … into someone who can truly be called the head of a family, a moral and prudent leader with a sense of his roots and wielding authority over his wife and children…. His house 'owns' him. It teaches him morality, settles him down and transforms him."[41] This reflects both the valorisation of ownership of private property, as well as the nature of the family as a hierarchical and patriarchal institution, with the spaces of the home reflecting the gendered nature of reproductive labour (childcare, cleaning, cooking, etc.).[42] The home thus helped to reproduce and normalize broader conditions of a social hierarchy. Within this framework, elements of the welfare state evolved to support this lifestyle. Systems of social provision such as pensions, unemployment and disability insurance, and childcare supplements all emerged as hallmarks of the Fordist welfare state as subsidies to incentivize the nuclear family and supplant the support networks of the extended or intergenerational family. Alongside these social support systems were financial mechanisms such as mortgages and preferential tax arrangements for homeowners. Aimed at increasing home ownership among the middle and working classes and backed by state entities,[43] these mechanisms further reinforced the nuclear family as the dominant domestic arrangement, and the single-family home as its dominant architectural expression. The combination of the widespread property ownership, and its accompanying burden of personal debt, are employed as disciplinary mechanisms to render workers docile subjects. This conflates the moral worth of an individual with their ability to secure mortgage financing, and thus property ownership, while at the same time demonizing those unable to maintain their payments (leading to foreclosure) as well as those incurring personal or consumer debt.[44] The structure of private property ownership as a disciplinary measure extends to tenants as well, as the economic burden of housing exists whether one pays rent to a landlord or a mortgage to a bank. It is, in fact, made more precarious through the erosion of tenant protection laws and increasingly insecure conditions of tenure for low-income residents.

Housing is inextricably linked to the real estate market, and its realization as a fungible investment. The commodification of residential property has been a defining feature of Toronto's transition from the "City that Works"[45] of the reformist planning structures of the 1970s, to the new global city of the post amalgamation era. The Official Plan of 2002 positions the city explicitly as a destination for investment capital, realized largely in the proliferation of new residential development enabled by liberalized planning policies.[46] Alongside the increasing reliance on property value to drive economic development through new construction, home ownership is usually seen by those currently owning property

44. Maak, Niklas. "Post-Familial Communes in Germany. "Harvard Design Magazine, Fall 2015, 110-120.

45. Hardt, Michael -"Production/ Reproduction: Housing beyond the Family." Harvard Design Magazine, Fall 2015, 100-10.

46. In Canada, this takes the form of the institution that would eventually become the Canada Mortgage and Housing Corporation, responsible for defining liabilities and criteria for assessing the suitability of applicants for mortgages.

47. Cochrane, D.T. "Death Grip: Scapegoating the Subprime Loser." SCAPEGOAT: Architecture, Landscape, Political Economy, no. 00 (Fall 2010): 7.

48. Insert reference to where the "City that Works" title comes from, as well as a general description of the term.

49. Lehrer, Ute, Roger Keil and Stefan Kipfer (2010) Reurbanization in Toronto: Condominium boom and social housing revitalization, disP - The Planning Review, 46:180, 83.

Figure 2.48 . **The nuclear family**
The nuclear family is central to the spatial organization of the contemporary single family home

Figure 2.49 . **Alternative family structures**
Alternative family strucures and new social relationships demand new spatial structures

as a means to financial independence. Writing in 1970, before the contemporary excesses of real estate–based finance and globalized capital flows became normalized, Henri Lefebvre asserted that "Real estate functions as a second sector, a circuit that runs parallel to that of industrial production...[it] can even happen that real-estate speculation becomes the principal source for the formation of capital, that is, the realization of surplus value. The second circuit supplants the first, becomes essential."[47] This is clearly illustrated as the rapid growth of property values in Toronto has far outstripped increases to real wages, decoupling the relationships between labour and capital (in the form of housing) and asserting the dominance of the 'second circuit' beyond traditional industrial capitalism.

50. Lefebvre, Henri. The Urban Revolution. Minneapolis: University of Minnesota Press, 2003. P.159-160.

In this context, the contemporary production of housing now focuses on luxury development, and the realization of maximum profit for developers. It has produced predominantly small 'bachelor' or one-bedroom units, predicated both on their suitability as an investment (conversion to rental units by a landlord) as well as a demographic argument based on 'desirable' residents, typically referring to younger Creative Class members or affluent knowledge-economy workers.[48] [49] The social homogeneity produced by the repetition of these unit types is evident in areas targeted for new large-scale developments, such as the formerly industrial areas of Liberty Village and City Place. This contemporary remaking of the city relies heavily on the production of condominium-type housing, which represents a legal structure rather than a specific architectural form (see page __). However, the imperatives of the market and the need to realize maximum profitability of these projects result in spaces corresponding to very specific typologies: the stacked townhouse (see page __), the mid-rise block (see page __), and the tower podium (see page __), each a distinct architectural and urban form, yet all realized with common logic and goal of creating commodified, hierarchical space. They represent housing as a cellular residential unit, and the associated methods of exclusion in the city help to alienate individuals from the communities around them. This effectively privatizes ownership of the maximum floor area, the most common means of assessing the value of the home as an asset, while assuming common ownership and maintenance of the externalities of common circulation, amenity space, and even the building envelope. Individual ownership and private property are the preeminent mode of existence in late capitalist society. Collective structures such as condominiums and neighbourhood associations exists, but only to empower and validate the individual, and are perceived as having no inherent value.[50] Both the single-family home and the bachelor apartment repeat a cellular module to define larger collective forms; both suburbs and apartment towers reproduce spaces defined by their private nature rather than any connection between them.

51. Kipfer, Stefan and Roger Keil (2000) Still Planning to Be Different? Toronto at the Turn of the Millennium, disP - The Planning Review, 36:140, 28-36

52. Lehrer, Ute, Roger Keil and Stefan Kipfer (2010) Reurbanization in Toronto: Condominium boom and social housing revitalization, disP - The Planning Review, 46:180, 83.

53. Maak, Niklas. "Post-Familial Communes in Germany. "Harvard Design Magazine, Fall 2015, 110-120.

While most contemporary housing is designed with these narrow typological constraints, many of the socio-economic determinants of the forms have changed. As domestic arrangements outside the nuclear family have been normalized, jobs

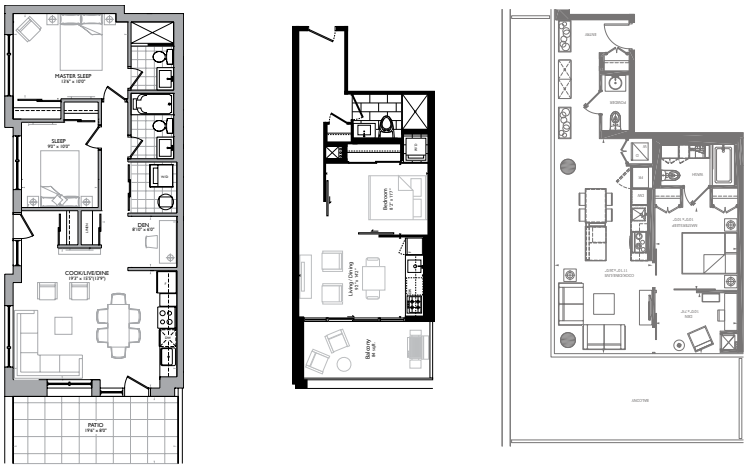


Figure 2.50 .
Contemporary domestic space
The home is reduced to commodifiable quantities; square feet, number of bedrooms, with a structure that reproduces the social structure of the nuclear family in similar ways despite widely varied typologies of building.

Figure 2.51 . **The contemporary production of housing**
A series of marketing images for recent condominium developments, with a variety of built forms. All represent the importance placed on the building as a singular object in marketing materials, a property that eschews externalities such as built context through renderings.

have shifted from away from industrialized labour with secure employment and regular hours. In its place, immaterial labour, often precarious or temporary in nature, has become pervasive.[51] Waged labour now resembles conditions of domestic or reproductive labour—work requiring personal investment, and permeating into other aspects of life.[52] The emergence of information technology and the ubiquity of entrepreneurial or contract based work has effectively broken down the separation of the home from the place of labour. These trends towards precarity and temporary employment have at the same time made incomes more variable, and placed the cost of home ownership outside the economic reach of many. These changes are also concurrent with an evolving concept of the nature of public and private space within the single-family home. Under these conditions, the previous separation of institutions into distinct spatial categories (the school, the factory, the office, the home) break down and combine. As post-Fordist labour is no longer constrained either spatially (the office, the factory) or temporally (9-5 work day, shift work), we have come to see both the house as a potential space of production, and office environments are increasingly 'domesticized,' with traditionally domestic functions such as recreation, dining, and social spaces incorporated into .[53]

While the contemporary housing crisis requires a radical reconsideration of the architecture of domestic space, it also requires a rethinking of the role of its residents and their subjective experience in housing production. New models of development and organization can decouple the production of housing from the profit motive of financialization, and provide more equitable access to housing addressing the subjectivity of individuals and enabling stronger communities.

For example, Baugruppe is a development model first practiced in Germany and Austria in the 1990s and enjoying considerable and widespread popularity that shares aspects of several other typologies already present in Toronto. In general terms, this type of development involves a group of people with a common interest in living together, making a commitment to participate in a project of developing and inhabiting collective housing. This hinges on a participatory planning process, with the residents involved alongside professionals (architects, engineers, project management) to realize housing that addresses their needs and provides collective amenities. The creation of such a community is an act of radical solidarity: a commitment to democratic decision making amongst a diverse range of people. The role of the architect in this type of development differs from that in typical development models, acting as a facilitator for residents rather than a speculative developer.[54] In this way, the architect does not dictate a new approach to domestic and collective life, but rather creates spaces that reflect the new relationships and possibilities embedded in the collective. Rather than reproducing the capitalist social relationships and institutions, this model creates space in which an alternative

55. Vishmidt, Marina , "Self-Negating Labour: A Spasmodic Chronology of Domestic Unwork" in Binna Choi and Maiko Tanaka eds. The Grand Domestic Revolution Goes On (London: Bedford Press, 2010), 281-289.

54. Immaterial labour is distinguished from material labour by its outcome; material labour has a commodifiable product from which surplus value can be extracted. Immaterial labour refers to work ranging from well paid jobs in the 'knowledge economy' or the creative class' to precarious labour in the service sector in which the service provided through labour is not a tangible product but can realize surplus value.

56. Aureli, Pierre Vittorio, and Martino Tattara. "Production/Reproduction: Housing beyond the Family." Harvard Design Magazine, Fall 2015, 100-10.

57. Feldmann, Heinz. „Housing Project in Vienna." Detail Review of Architecture, 2015, 855-67.

Figure 2.52 . **Domestic space as productive space**
Home office

Figure 2.53 . **Productive space as Domestic space**
Office as home

domestic life is possible. Residents fund the project—there is no developer or other investors—and typically provide the equivalent to 25% of the value of their total project contribution, with the rest assumed by a collective loan.[55] By excluding the profits demanded by the developer and the associated marketing and administrative costs, projects in Germany have generally realized savings of between 15 and 25% per square metre compared to market costs.[56] This is a large amount relative to the typical minimum down payment of 5% in Canada, but is closer to the typical down payment of 20% or more in Germany.

Banks in these jurisdictions, as well as credit unions, both recognize these project types as safe investments. Even if an individual withdraws from the project, the remaining members are personally invested in its realization. Financial incentives are also provided by the state in other respects, such as a drastic reduction of the land transfer tax for Baugruppe properties compared to for-profit developments, or as incentives for environmental performance and additional funding for start-up costs. Some jurisdictions, such Freiburg and Vauban, have set criteria for development on publicly held land that favour not-for-profit developments with an emphasis on social inclusion.[57] While creating the possibility for new forms of cohabitation, the development model critically positions housing, and urban life, as a collective right.

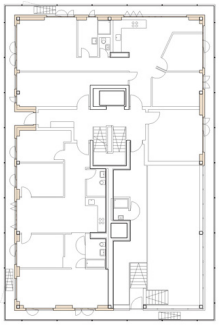
First conceived by Henri Lefebvre in Le Droit à la ville, the 'right to the city' is best understood not as a right as such, but rather as a radical demand. Since its original publication, the concept has been integrated as a central demand of numerous urban social movements. It appears in the work of David Harvey, who articulates: "The right to the city is far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city. It is, moreover, a common rather than an individual right since this transformation inevitably depends upon the exercise of a collective power to reshape the processes of urbanization." [58]
In Toronto, most urban movements have been historically liberal in political orientation in that they aim to alleviate a specific condition perceived as problematic, rather than addressing the structural causes. This was particularly true in the case of the Reform movement, in which displacement of established working and middle class neighbourhoods was the central concern. In comparison, the 'right to the city' is a revolutionary demand to remake both the city and ourselves. As we saw in the case of Baugruppe, this can manifest itself in the organization of housing collectives with the agency to achieve true transformation of a city. The design proposal described in the following term is proposed as an architecture that engages this 'right to the city', proposing a contextual architecture of collective living that mobilizes the previously mentioned Baugruppe model of development to give residents agency in shaping housing and urban space.

59. Ibid.

58. Germany. Senatsverwaltung Für Stadtentwicklung. Living in a Community from the Idea to the Joint Home. By Constance Cremer, Monika Nikolaus, Horst Pfander, and Carsten Praum. Translated by Richard Toovey. 2nd ed. Berlin: STATTBAU GmbH, 2012.

60. Eliason, Mike. „Baugruppen: Proactive Jurisdictions." The Urbanist. 2014. Accessed October 24, 2016. https://www.theurbanist.org/2014/05/14/baugruppen-proactive-jurisdictions/.

61. Harvey, David. "The Right to the City." In Rebel Cities: From the Right to the City to the Urban Revolution. New York: Verso, 2012. 4.



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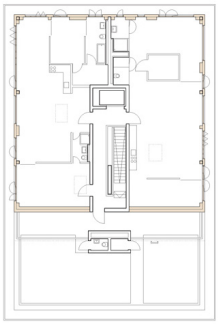


Dachgeschoss

Figure 2.54 . **Plans and images of r50 Baugruuppe project**

Residents prioritized the creation of collective spaces and a continuous, accessible outdoor terrace around the building that provides a secondary circulation, connecting neighbours.

Figure 2.55 . **Plans and images of housing project Spreefeld**

Spreefeld housing project comprises a series of buildings enclosing an open and publicly accessible courtyard. The ground floor of each building is comprised of shared program for all residents, including a kindergarten, workshop and studio spaces.

CATALOGUE OF HOUSING PROVISION

The following section is intended to act as an overview of housing provision models, and provide examples of their potential relationships to architectural form. This is relevant both in understanding from a technical perspective how housing provision, ownership, and occupation function as well as the relationship of these parameters to the spatial quality of the housing they produce.

Public Housing

Publicly subsidised housing refers to any provision in which a level of government partially or wholly provides subsidies to residents. This could take the form of housing built and administered by a public housing corporation providing rent geared to income and stable tenancies, subsidies for free market rentals to defray market rates, or grants provided to private not for profit organizations in order to secure affordable units. The most common form in Toronto is rent geared to income, where a tenant pays a set 'affordable' percentage of their income towards rent.

In Ontario, publicly subsidised housing was coordinated through the Ontario Housing Corporation up until 2001, when the Corporation was disbanded and the responsibility for the provision of public housing was transferred to municipalities. In Toronto, this has been assumed subsequently by the Toronto Community Housing Corporation. While directly providing almost 60,000 units, there is still a backlog of 82,414 households in need of affordable housing, with an average wait time of between two and twelve years depending on the residents needs with larger units resulting in a longer wait time. The mismatch between provision and demand is a result of lack of investment as a result of underfunding at the municipal level and a lack of new construction as well as maintenance, exacerbated by the increasing un-affordability of market rate housing.

Mount Dennis Apartments

The Mount Dennis apartments are a TCHC owned and operated housing complex, comprising two high rise towers and several low rise rowhouse complexes with rent geared to income units. The buildings themselves represent an aesthetic and function that reinforce the image of public housing as a minimum provision. Popular images tend to either reinforce this stigma through an association with poverty and violence, or the nature of publicly funded housing as a political issue, often the target of budget cuts

Figure 2.56 . **Image of Mount Dennis Apartments**

Limited or Zero Equity Cooperative

Cooperative housing is a form of shared ownership of housing that emerged in the 19th century, as a means of allowing for more access to affordable housing with stable tenure. The building is owned by the residents collectively through the Cooperative association, however it is important to note that no individual has an equity stake in the project. Rather, the residents collectively make decisions related to the ongoing operation and governance of the building, and pay a monthly rent based on the unit they occupy and whether they are eligible for a subsidy or a market rate. In this way the units are protected from speculation and the principles of the organization are preserved.

In this context, economic diversity amongst residents is seen as an asset in that it attracts a range of individuals and perspectives that engender a more vital neighbourhood and social life for residents.

Cooperative housing in Toronto has ranged from projects such as Bain avenue and Spruce Court, constructed with funding and planning input from the city and philanthropists, to models prevalent in the 1970's and 80's which mandated the inclusion of publicly subsidized units and were made possible by long term loans from CMHC and the Provincial Government. Much of the St. Lawrence Neighbourhood project was realized through Cooperative developments. These mechanisms of financial assistance from provincial and federal governments are no longer available, and as a result there have been few residential cooperative buildings established in Toronto in the last 20 years.

Woodsworth Cooperative

The cooperative is part of the St. Lawrence neighbourhood project, completed in 1979 and designed by Sillaste & Nakashima. It incorporates a mid rise 8 storey building facing the David Crombie Park and the Esplanade, and several low rise rowhouses. It is designed with the principles of the St. Lawrence masterplan, with collective open spaces. It has been operated by a resident owned cooperative and provides a range of market and subsidized rents to tenants since its inception.

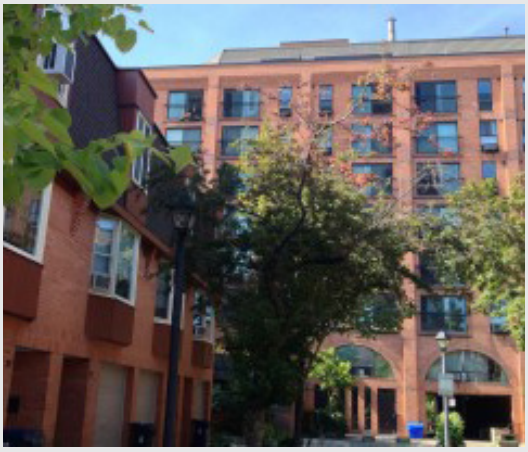


Figure 2.57 . **Image of Woodsworth Cooperative**

Condominium

A condominium is a specific legal ownership structure that combines aspects of freehold ownership and collective ownership. The condominium corporation is comprised of a board of directors and a membership made up of individual owners. The corporation is responsible for ensuring the maintenance of common spaces and the systems and exterior facade of the building. Individuals own a residential unit within this larger structure, with defined boundaries between units and common spaces. While a resident run organization could in theory provide a forum for resident interaction and collective decision making, in practice management of the building is often contracted to an external organization and residents associate their ownership of a private unit as their primary concern.

With the developer responsible for the design and construction, but not involved with the ongoing operation of the building, there is little financial incentive for them to invest in durable or sustainable building materials and practices outside of what is marketable.

‘Tableau’ 125 Peter Street

Part of the ongoing construction of new condominium projects in the downtown core, the building is a podium tower type with office space on the first three storeys of the podium and a distinct residential tower element. These two elements are operated by separate condominium corporations, one for the commercial property and another for the residential properties. This further reduces opportunities for interaction between domestic program and other uses within the building.

Figure 2.58 . **Image of 125 Peter Street**

Community Land Trusts

Community land trusts do not directly constitute a provision of housing, but rather a collective ownership of land and community involvement in the development process. They are not for profit organizations, forming partnerships between residents, local businesses, and community organisations. The essential proposition is that the Trust is able to remove land from speculation by using a leasehold system, with residents gaining secure and long term rights to use land and housing. Within this ownership arrangement, the Trust is able to control the terms over which the lease rights to the land may be bought or sold and thus preserve its affordability.

When implemented at scale and with community involvement, Land Trusts can promote long term benefits to residents in the form of stable and affordable housing, increased democratic participation in the planning and development process.

Toronto Island Residential Community Trust

The Toronto Island Residential community trust is an organization that manages and owns the residential property on the Toronto Islands. It was established in 1993, and operates a long term lease structure with residents. Households have title to the homes, but the trust maintains ownership over the land itself, with anyone wishing to buy or sell a property being required to do so through the Trust. This allows the Trust to set a value on the transaction that removes any speculation and ensures that housing remains affordable.

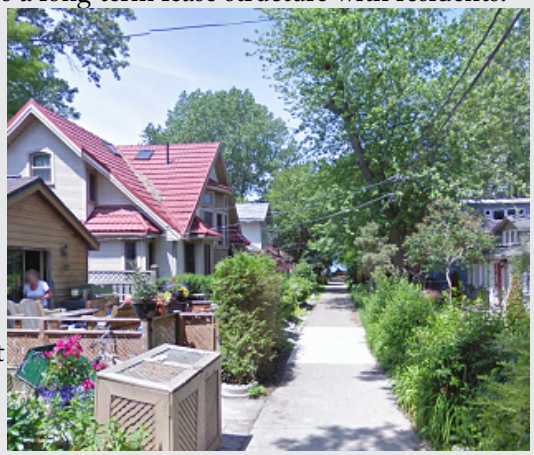


Figure 2.59 . **Image of Toronto Island Residential Community**

Baugruppe

A model originating in Germany, it combines aspects of tenant self-management, co-operative housing, and self financed construction. The essential element that sets it apart is in the resident led initiation of the project; that ultimately the future occupants themselves form an organization with the goal of realizing the development. They take on the project of assembling a group of like minded individuals, securing a site, engaging an architect and other professions and have a significant say in determining the parameters and goals of the project.

Inevitably, this places significantly more emphasis on the involvement of individuals with the project, requiring a significant investment of time, capital, and interest from all parties. Through the state run development bank, the KfW, baugruppen are provided with loans to aid with start-up costs, including involving professions and doing preliminary site work. They are also provided with low interest long term mortgages, similar to those provided to cooperatives in Toronto by multiple levels of government through the CMHC during the 1970's through the early 1990's.

Ritterstrasse 50

The project is located in Berlin, Germany and was built is run by a local Baugruppe. The building incorporates generously sized units, with a wide variation of idiosyncratic layouts that reflect the specific needs of tenants. Generous shared spaces are also located on the ground floor and roof, and accessible by all residents. The system of exterior balconies also serve as an continuous exterior circulation path for residents, allowing for further social interaction secondary to the primary vertical circulation and lobby in the buildings interior.

Figure 2.60 . **Image of Ritterstrasse 50 Baugruppe**

Freehold Ownership

Likely the most traditionally recognisable and understood model of property ownership, the idea of freehold home ownership is inextricably linked to the underlying economic and development systems in North America. The idea of home 'ownership', typically associated with a detached single family home, retains a strong social resonance in Canada. Enabled on a large scale by debt financing in the form of mortgages, their provision through a developer model has become a huge driver of economic growth and one of the main means of providing homes for a growing population in the post-war years.

That the entire provision method is premised on the resident assuming large amounts of debt over a period of 10-30 years complicates the issue of ownership. This was made particularly clear in the aftermath of the 2008 financial crisis, where large numbers of homes in the United States, and to a lesser degree in Canada, were reposessed by banks and their occupants evicted. The cause of this was mortgage foreclosure, largely on homes and people who were given increasingly unaffordable mortgages relative to their incomes; housing that they could not afford.

While the form and location of the property is independent from the method of provision, it should be noted that this includes homes ranging from single family units built in the downtown core of cities like Toronto, as well as the suburban and exurban tract homes common throughout the GTA and across North America.

Harrow Drive

The inner suburbs of Toronto are similar to many similar developments across North America. Primarily bungalows, or split level and sometimes two storey homes they are set far back from the street. The single family home is individuated through this and the side yard setbacks and driveways; it stands as a singular object, easily identifiable and associated with individual ownership.

Figure 2.61 . **Image of Freehold Suburban Toronto Home**

Shared Equity Ownership

Shared equity ownership is an emerging model for tenure, combining aspects of freehold or condominium ownership with an intention to make traditional home ownership more affordable. It relies on a not for profit developer, who enters into mortgage with the occupant rather than simply selling a unit. Typically, the not for profit developer will provide the down payment and assume a portion of the mortgage to offset the monthly payments for the resident. They retain a portion of the equity equal to the value of the down payment plus this amount, and thus the future value of the unit when it is sold or the owner assumes the full value of the mortgage. They also retain a role in the ongoing management of the building, and ensure that any units that are sold maintain their status as affordable units.

The provision model applies the rhetoric of affordable housing to perpetuate the financialization of housing. Home ownership is still seen as a means of realizing profit for individuals; frequently this is presented as a 'starter home' for those unable to afford increasingly large mortgages required for entry into the market. While it is admirable to provide more affordable homes to a greater segment of the population, it is problematic in that it continues to emphasize housing as an investment for the individual. However, in the absence of widely affordable rental housing the provision of housing ownership for lower income households can be empowering and helpful.

McPherson Place

A development located in Calgary, Alberta McPherson place is in many ways a very conventional slab block of 160 apartments units of one and two bedrooms. This seems entirely appropriate, as one of the central goals of this form of housing provision is to make individual ownership more affordable, removing financial barriers as well as designing housing that is as typologically normative as possible.

Figure 2.62 . **Image of McPherson Place**

Market Rate Cooperative

A market rate, or full equity cooperative has many similarities but important functional differences from a Limited or Zero Equity cooperative structure. Individuals have an equity stake in the project, and are able to capitalize on it fully should they choose to sell. Unlike a limited equity cooperative, where the value of shares in the cooperative is set by the organization itself, the value of shares and thus the value of property in a full equity cooperative are determined by the market. This allows individuals to profit from the sale of their shares, sometimes substantially - and removes one of the primary benefits of the limited-equity cooperative. Furthermore, as individuals have both a financial interest in their share of the cooperative, and are able to selectively screen potential owners frequently resulting in a homogeneous and relatively affluent population.

Market cooperatives are rare in Toronto, with the condominium incorporating the principles of collective management and responsibility for collective spaces alongside ownership of a tangible residential space. They are common in New York City, and are included here primarily in contrast to limited equity cooperatives.

The Dakota

The Dakota is a market rate cooperative in New York City that was built in the 19th century, and underwent several changes of ownership before becoming a market cooperative. In addition to being extremely expensive even within the context of housing in New York, it is also highly selective in other respects, rejecting potential tenants based on perceived unsuitability.

Figure 2.63 . **Image of The Dakota apartments**

Bachelorette or Rooming House

Bachelorette and Rooming house both describe typologies that are combine elements of conventional apartment units, with certain private and shared facilities. They are defined by having only one room per unit. In the case of the rooming house, this is a private sleeping room with access to shared food preparation and bathroom facilities. In the case of the bachelorette apartment, they may contain either a food preparation area or sanitary facilities with other shared facilities. These form an important element of affordable housing provision in certain neighbourhoods, such as Parkdale.

These units frequently take the form of converted single family houses in existing neighbourhoods, subdivided into the maximum number of small sub units in order to realize the greatest profits for landlords.

Junction Rooming House

The formerly single family shows few external signs of its use as a rooming house, other than an extensive addition along the side face. They are frequently contentious sites within communities; as they tend to house marginalized individuals in areas where they would otherwise be unable to find housing.

Figure 2.64 . **Image of Rooming House on Annette Street**

Subdivided or Secondary Unit

Describes a range of potential arrangements and ownership models, but the commonality is the subdivision of existing residential units into multiple individual dwellings. Examples include large houses in Downtown neighbourhoods such as the annex being turned into smaller apartments with one unit per floor, with each unit negotiating access from the ground floor. These homes were built as large single family mansions, being subdivided later as ownership changed and it became profitable for landlords to rent units, but prohibitively expensive for tenants to occupy such a large space.

Secondary units are also common in the inner suburbs, with large suburban homes incorporating basement units in areas with few other affordable rental options. This also frequently allows for owner-occupiers to increase the affordability of their housing, as a tenant effectively subsidizes their space.

In each case, these subdivided homes make up an important part of the available rental housing, particularly in areas with high demand but which would be otherwise prohibited from intensification or the construction of different housing typologies through planning and zoning restrictions.

Howland Avenue

Multiple mailboxes at the entrance to this building, along with a separate exterior entrance to a basement apartment are some of the only visual indicators that this house has been subdivided.

Figure 2.65 . **Image of subdivided large home on Howland Avenue**

MAKING COLLECTIVE FORM

The following section outlines the theoretical response of the proposal to issues of collective living and collective form as both domestic and urban propositions. It then details a specific design proposal for downtown neighbourhoods, and for suburban neighbourhoods by illustrating specific theoretical responses through specific spaces within each project.

A right to the city

This thesis engages with this idea of a 'right to the city' as a dialectical relationship, between the dynamic and changing nature of urban form and the configuration of domestic space. Increased density and intensification is proposed as a prerequisite to the realization of collective living in the project sites, in the aim of greater affordability for residents when not deployed as potential for increased profits for developers. Densification and intensification allow for both the pooling of individual financial resources, as well as the provision of greater shared amenities than would be available to individuals in conventional housing models. These processes also respond to contemporary ecological concerns, by both reducing individual transportation needs and reliance on automobiles, while requiring less land to house citizens and reducing stress on greenfield sites. 'Collective form'—based on Fumihiko Maki's work of the same name—is an additive and dependent condition; it conceives of collective form as the interaction between urban systems and the sequential repetition of forms at the scale of the building. [62]

62. Maki, Fumihiko. Investigations in Collective Form. St. Louis: Washington University School of Architecture, 1964.

Maki proposes cities can be understood as the interaction between discrete forms (aggregations of individual buildings) and articulated large forms (structural networks of property, roads and other infrastructure), creating a spatial language that describes relationships created through orientation and adjacency. The principles of 'collective form' are applied to this proposal as complementary to previous contextual studies of the city, as well as the theoretical framework of infill design in Toronto as generative tools in the design process. This formal approach is undertaken alongside a reconfiguration of the domestic landscape: the form of collective living. A series of formal, spatial, and social strategies apply these principles of agency and change at the scale of the urban fabric and the space of everyday life. In this chapter, their specific application to each site will be explored.

In this thesis, prototypical proposals suggest low-rise, high-density forms in the tradition of infill design, realizing the goal of both increased affordability and socially inclusive nature of the project as collective housing. Various formal strategies are proposed as typological experiments, and evaluated based on a methodology testing both the quantitative and qualitative impact on access to light, potential issues of privacy and overlook, and formal relationships to surrounding buildings and streets on both sites. The building forms are articulated through a series of setbacks corresponding to patterns at the neighbourhood level. Further subtractive planes are applied to the mass as a formal strategy to mitigate impact of the additional density. This language recalls dormers and hip roofs of vernacular types, but is applied based on specific parameters, reducing the appearance of the additional height from ground level, and preserving access to daylight for neighbours while creating dynamic interior spaces. The formal expression of this increased density,

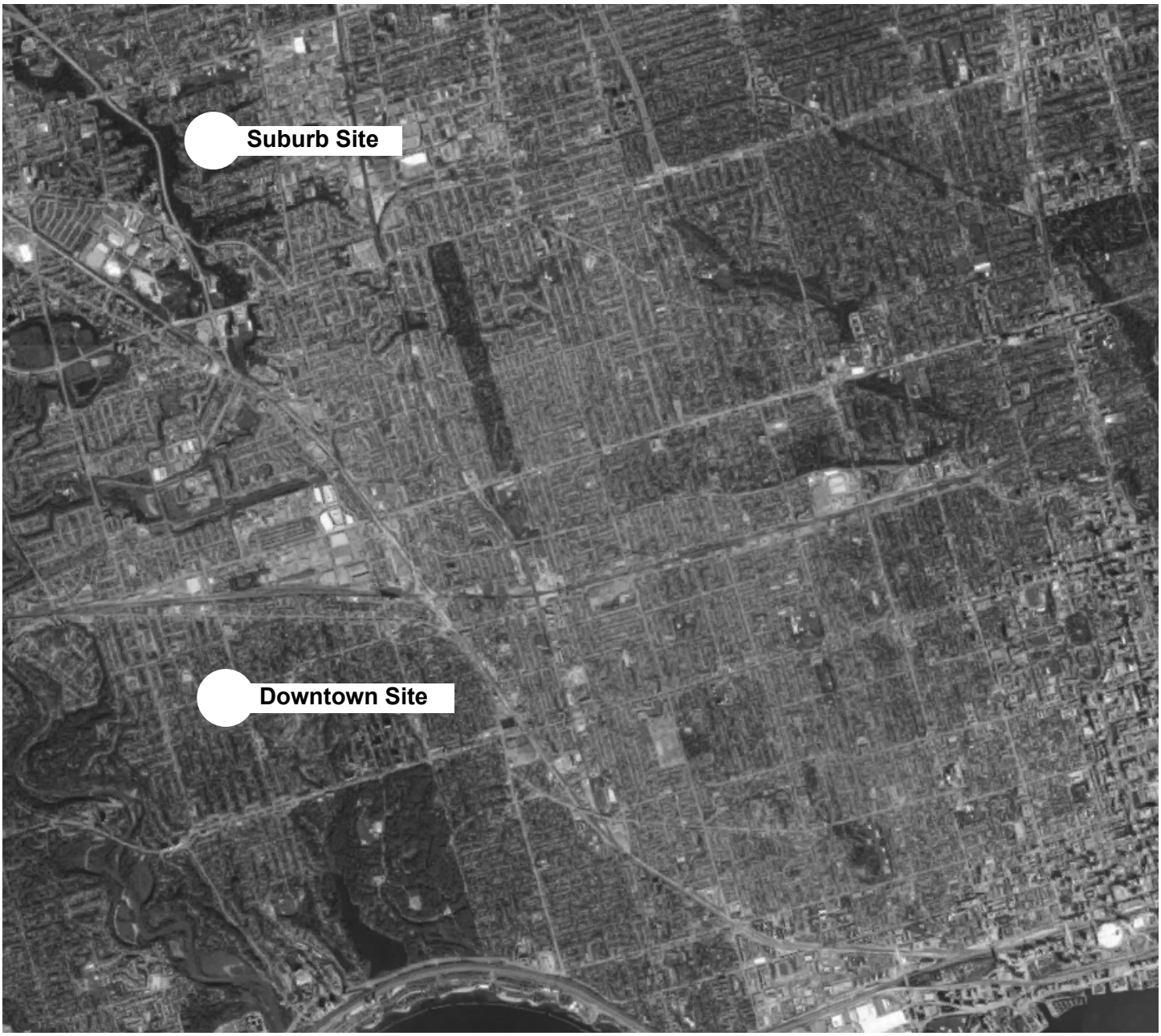


Figure 3.66 **Context and Sites**
Downtown and Suburban site for infill housing prototypes

and method of defining the building envelope are more essential to the proposal than any aesthetic or formal qualities; they are forms intended not for their own sake, but rather for how they interact with the existing formal rhythms and for their creation of more heterogeneous urban environments.

To address the changing social conditions of contemporary domestic life, it is also necessary to propose new spatial and organizational relationships amongst residents and within the larger urban fabric. This can be done through the strategic design of new common spaces. Stavros Stavrides writes: "common space is in-between space. Common space can be considered as threshold space. Whereas public space necessarily has the mark of an identity, meaning it belongs to an authority, common space tends to be constantly redefined: common space 'happens.'"[63] The free appropriation of common space by residents is encouraged through minimal programming and generous proportions; spaces where children can play, adults can converse, thus a connection is formed between residents. This interaction between occupants simultaneously creates more resilient support structures at the scale of the community within the project, while contributing to more heterogeneous and lively neighbourhoods at an urban scale.

63. Stavrides, Stavros. "Housing and the City: Reinventing the Urban Commons." In Grand Domestic Revolution Handbook, edited by Binna Choi and Maiko Tana, 100-10. Utrecht, NL: Valez/Casco, 2014.

This proposal for a collectivization of domestic labour as an emancipatory action originates in the program of the material feminists of the 19th century, yet still

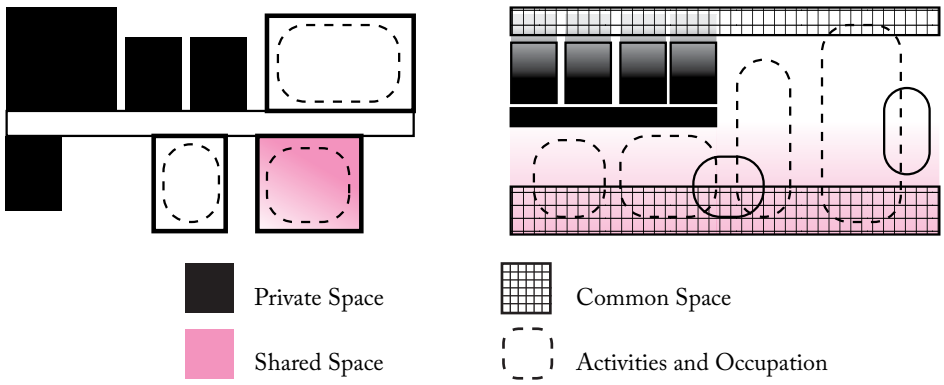


Figure 3.67 **Structures of the single family home, and proposed alternatives** The diagram on the left illustrates the rigidly hierarchical room structure of a single family home, with private spaces shown as black and public as pink and connected by a corridor. The alternative proposed at right instead shows a gradation of public space permeating a unit, with activities shown as dashed forms occuring both within the unit and a shared corridor circulation space.

it remains a radical demand in the contemporary context.[64] Though initially developed as a reaction to patriarchal structures and women's social isolation of the domestic space and the nuclear family, modernization of the home and advances in automation and technology have done little to reduce the burden of domestic labour, which still fall disproportionately on women. Contemporary neo-liberal capitalism demands their participation in the work force, while the minimal supportive infrastructure of the welfare state and nuclear family are eroded. The design proposes the incorporation of collective facilities for laundry, cooking and dining, and child care, and emphasizes the social potential of these programs through their location adjacent to common spaces. This proposal is not a nostalgic or insular structure in the tradition of housewives' cooperatives that keep domestic

64. Federici, Silvia , "Feminism and the Politics of the Commons" in Binna Choi and Maiko Tanaka eds. The Grand Domestic Revolution Handbook (Utrecht: CASCO Office for Art Design and Theory; Amsterdam: Valiz, 2014), 281-289.

labour within the sphere of 'women's work'; rather, it normalizes and engages all residents in mutual support, whether male or female.[65] By alleviating the burden on women as the 'double worker' who is responsible for both domestic and waged labour, the architecture facilitates both greater individual economic independence as well as a strengthening of neighbourhoods and communities. Alongside the purposeful removal of some functions or spaces typically considered private or personal from within the unit itself, this introduction of new types of collective and shared program encourages new relationships between residents—both necessitated and made possible through the collective nature of shared spaces.[66]

Freed from the typological constraints of the single-family detached home—and its inherent ideological relationship to the nuclear family—dwellings can be tailored to the needs of individual residents. The larger arrangement of these individual units benefit the collective as well as the individual: units for young people, couples, the elderly, and family units (whether traditional or not) can exist alongside and support each other through their interaction in these common spaces. This flexibility of spaces and diversity of residents extend to workspaces located within the space of some individual dwelling units, which create new possibilities when imagined in connection with the introduction of common space. With its nature as a homogeneous residential fabric, this introduction of new program in suburban sites in particular has the potential to change the character of the neighbourhood, providing services and interactions within the community at a walk-able scale. The thesis recognizes that to propose further conflating and formalizing labour within domestic space risks encouraging affective, all-encompassing work. However, by giving residents agency over this space and its use, this space can be empowering as opposed to coercive.

These principles of common space reflect new ideas about resident interaction, and require a reconsideration of the strict division between public and private spaces in the single-family home, in recognition of the changing uses of domestic space. The architecture manifests a gradation of spaces ranging from public (the street, laneway), to the common (courtyards, circulation space), to the shared (spaces within the unit that facilitate cohabitation, can open to common space). Service spaces (kitchens and washrooms) form a separation of these spaces from the private bedroom areas. This gradation of privacy allows for new and more flexible use within the dwellings not strictly defined by binary open or closed divisions; rather, they provide space that can change based on the needs of occupants.

65. Hayden, Dolores. The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities. Cambridge, MA: MIT Press, 1981. 160.

66. Maak, Post-Familial Communes in Germany

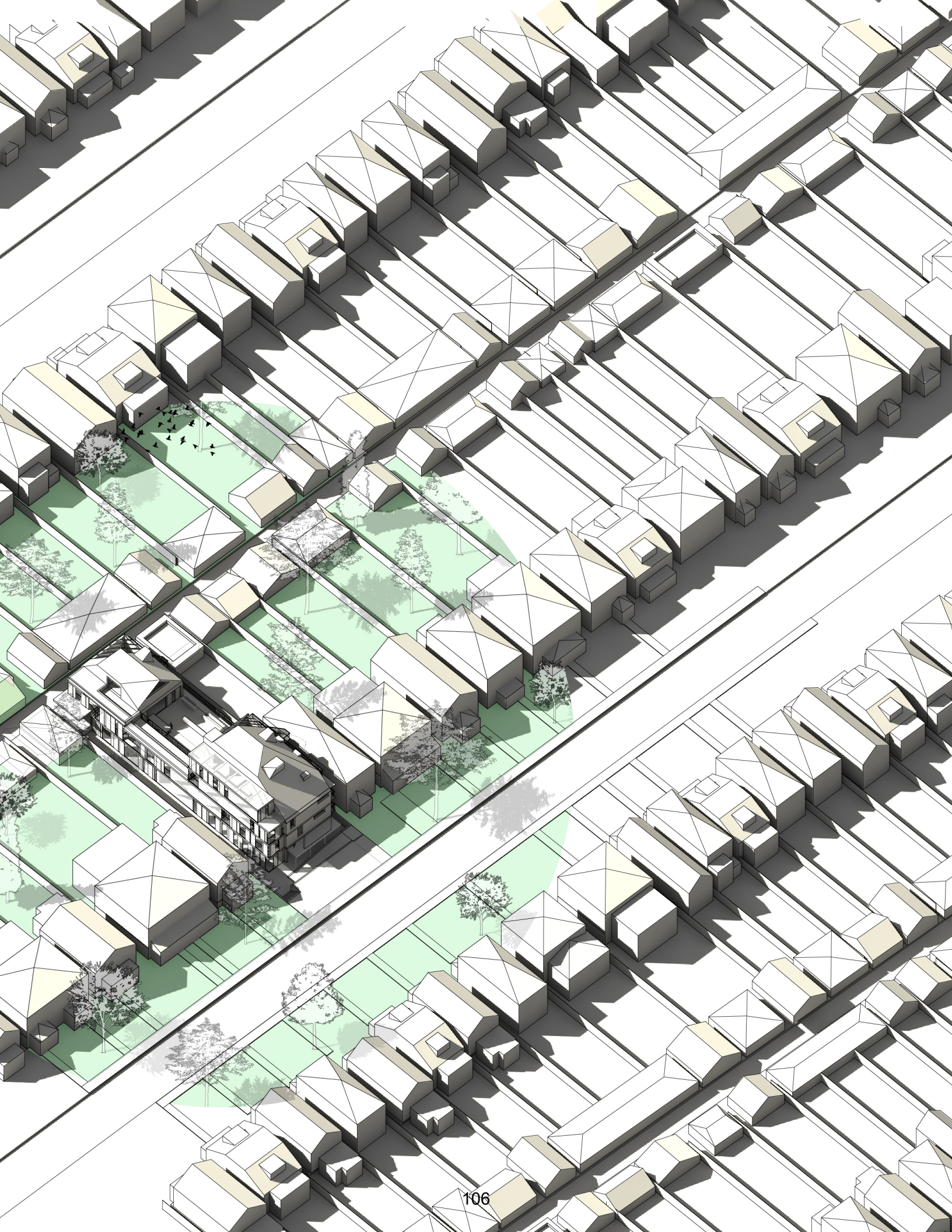


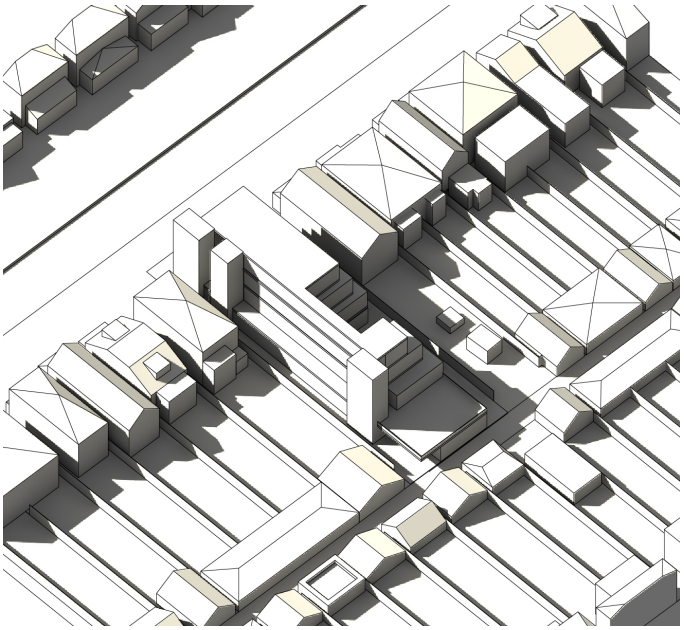
Figure 3.68
Axonometric of Downtown neighbourhood
Illustrated axonometric showing the replication of the proposed typology across the urban context

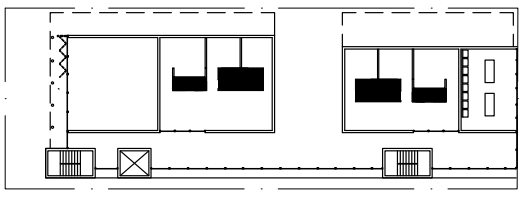
Iteration 1

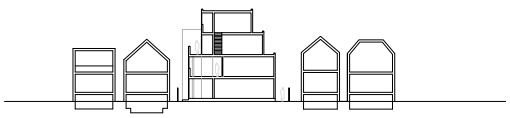
Downtown Prototype

Lot Size	**725**
GFA	**1171**
FAR	**1.56**
Storeys	**4**
Units per HA	**138**
Persons per HA	**433**

A four storey building with circulation located along the south face, the massing creates a courtyard at the rear face of the neighbouring houses, as well as a setback from the rear lane. The building has a relatively low density of 1.56 times FAR, or more than double the existing.





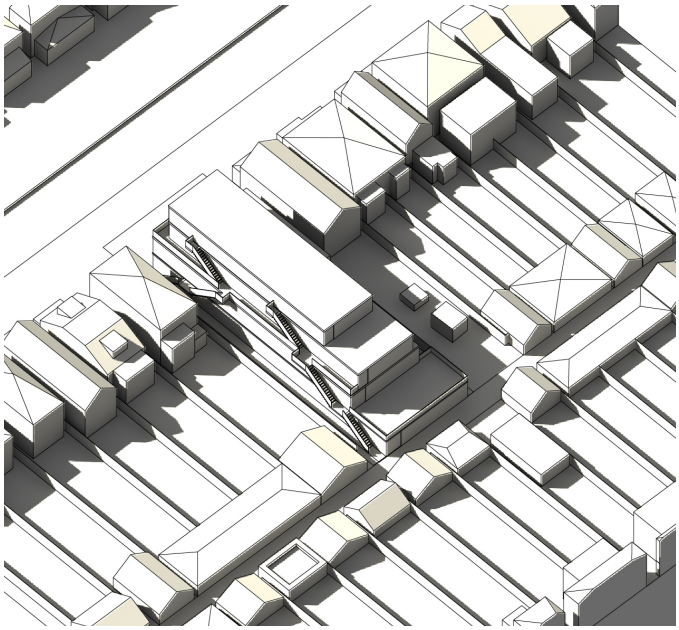


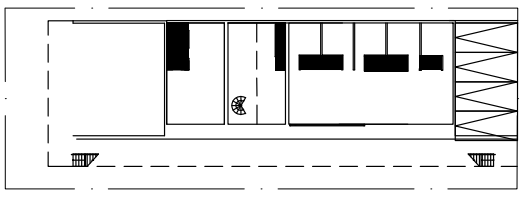
Iteration 2

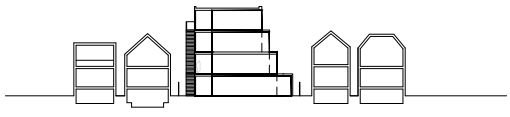
Downtown Prototype

Lot Size	**725**
GFA	**1477**
FAR	**1.98**
Storeys	**4**
Units per HA	**124**
Persons per HA	**384**

A four storey building, the circulation is located on the exterior of the south face. The North face, as well as the rear facing the lane incorporate setbacks that create terrace conditions and mediate overlook and shadowing on adjacent properties. Achieves over two times FAR.





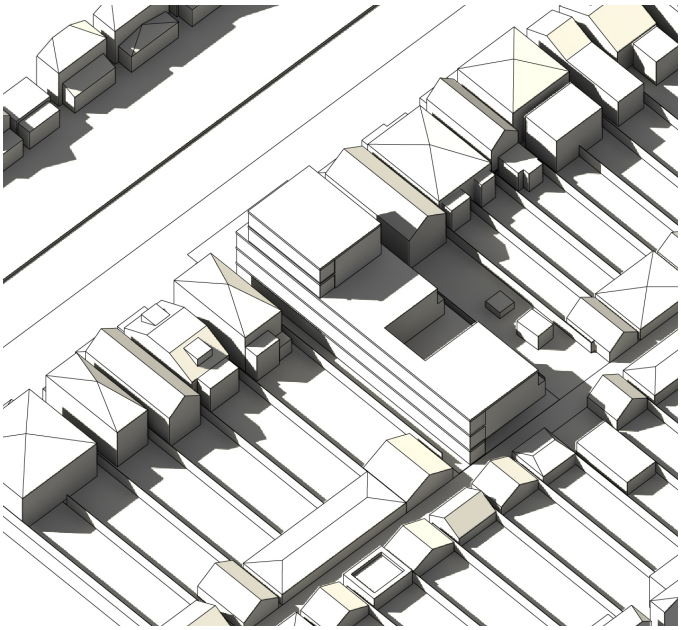


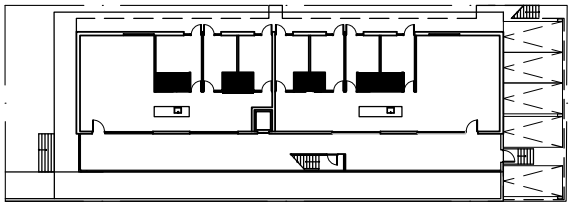
Iteration 3

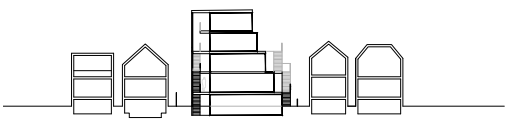
Downtown Prototype

Lot Size	**725**
GFA	**1502**
FAR	**2.0**
Storeys	**5, incl. 1 basement level**
Units per HA	**151**
Persons per HA	**486**

Five storeys at the street face, with a consistent height of three storeys. A small courtyard is created, with circulation facing south. The north face of the building steps back from the neighbouring house to mitigate privacy issues and provide access to daylight.





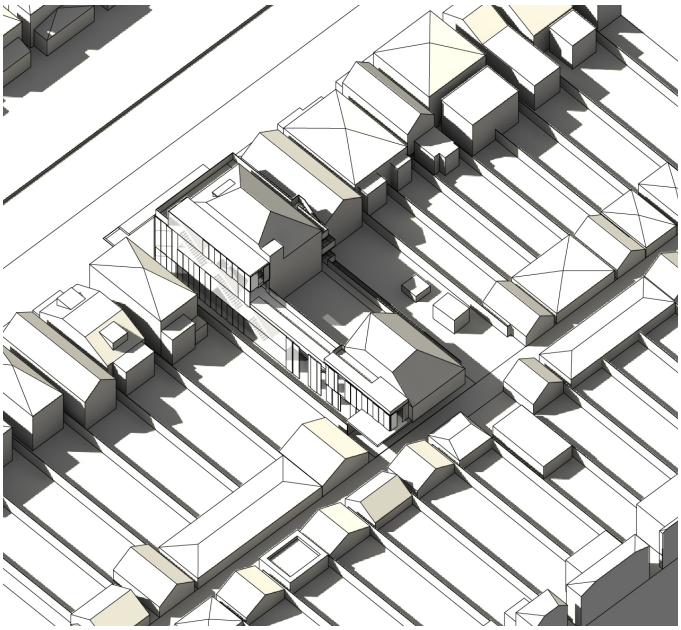


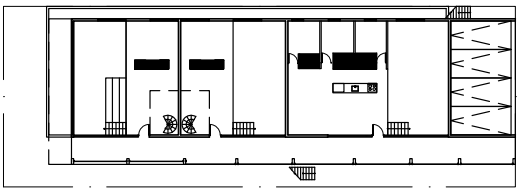
Proposal

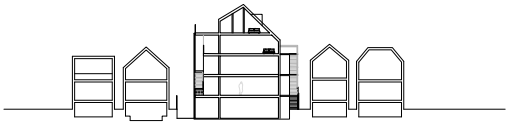
Downtown Prototype

Lot Size	**725**
GFA	**1335**
FAR	**1.78**
Storeys	**5, incl. 1 basement level**
Units per HA	**124**
Persons per HA	**384**

Five storeys at the street face, with three storeys at the lane and common circulation on the south face, and a secondary circulation to the north. The building mass is defined by the setbacks of the adjacent buildings to create a courtyard aligned with the neighbouring rear yard conditions.







Form

Downtown Prototype

The existing buildings on the downtown site are constrained by several setbacks, from the front yard, side yard, as illustrated in the first section of figure 3.6. Two properties are proposed to be assembled, and the existing buildings demolished. While the first level of the proposed building is lowered 1.2 metres below grade, these adjacent setbacks dictate the building mass above this level, creating a courtyard condition at this level and two distinct building masses. Both the front and rear facing volumes add two storeys relative to the existing context; facing the street, this results in 5 storeys to the 3 that is common while facing the laneway it results in 3 storeys relative to the single storey garages.

These additional storeys are then further manipulated formally in order to reduce their visual presence on the site, as well as mitigate shadowing on neighbours. The planes applies are based on sightlines and views from nearby locations (see section 2, figure 3.6).

Trebling the existing density on the downtown site results in a FAR of 1.8 on the downtown site.

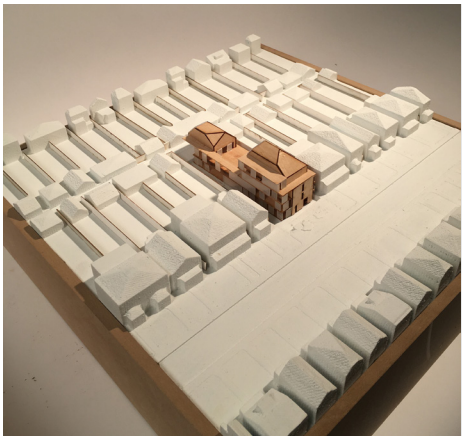
Figure 3.69 **Diagrammatic plans and Axonometric of scheme 1 (previous page)** Illustrating typical floor plan and massing

Figure 3.70 **Diagrammatic plans and Axonometric of scheme 1 (previous page)** Illustrating typical floor plan and massing

Figure 3.71 **Diagrammatic plans and Axonometric of scheme 1 (previous page)** Illustrating typical floor plan and massing

Figure 3.72 **Diagrammatic plans and Axonometric of Proposal (previous page)** Illustrating typical floor plan and massing

Figure 3.73 **Physical model experiments** Iterative formal strategies for shaping the building mass; To be included after physical models are photographed



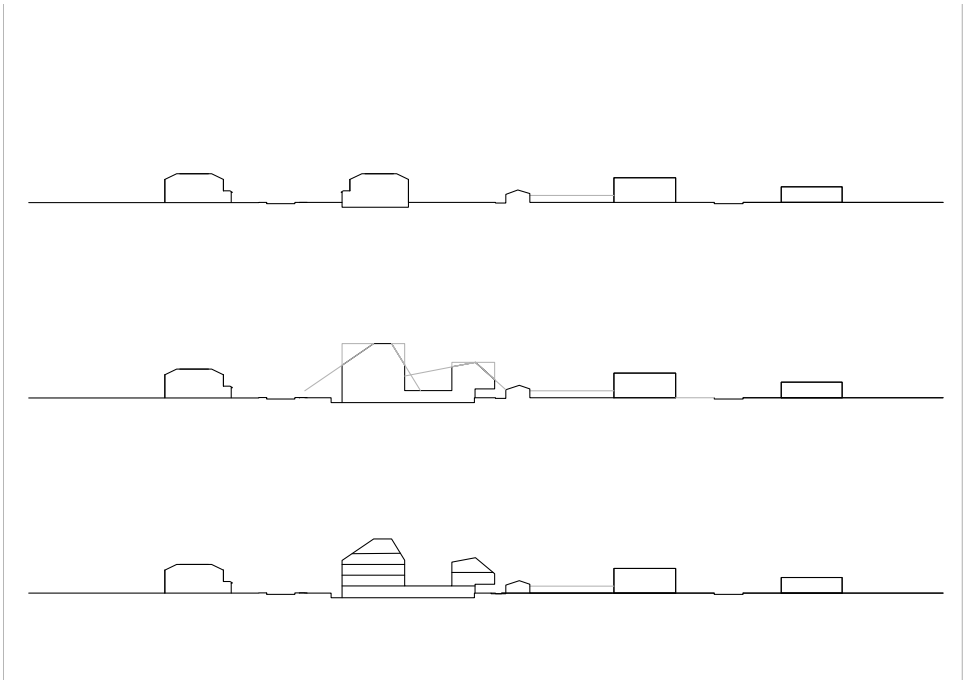


Figure 3.75 **Sections illustration of setbacks and Zoning Envelope Existing**
From Top; existing building section with setbacks and subtractive planes, resulting building form

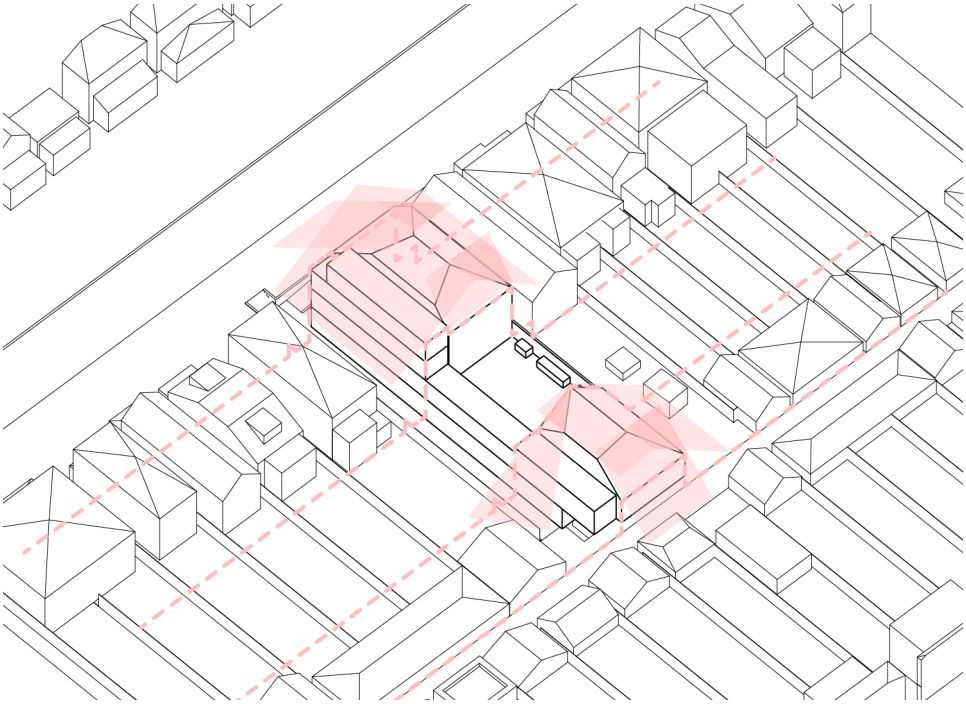


Figure 3.74 **Axonometric illustration of setbacks and Zoning Envelope Proposed**
Building footprint and formal manipulations based on context

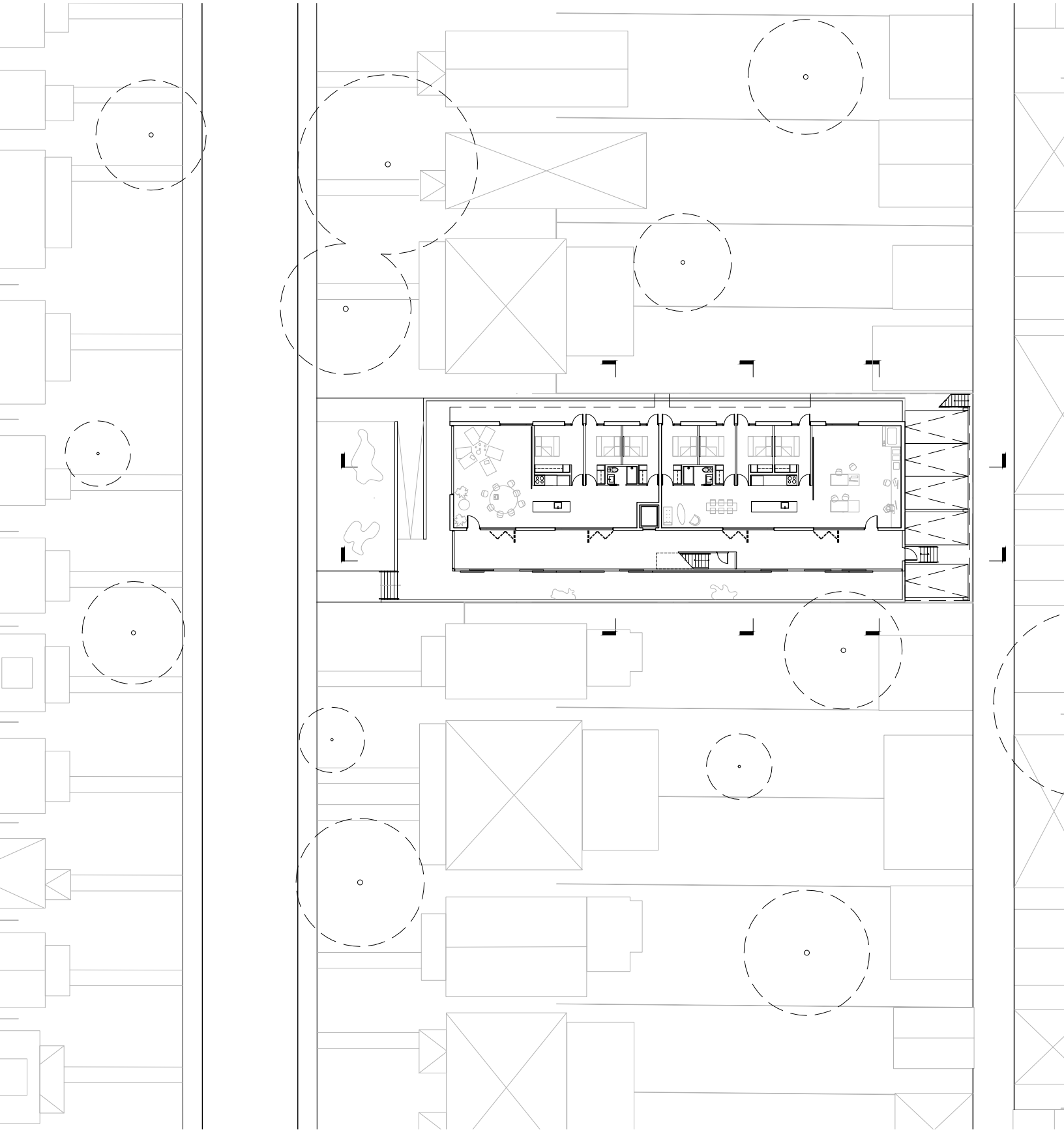
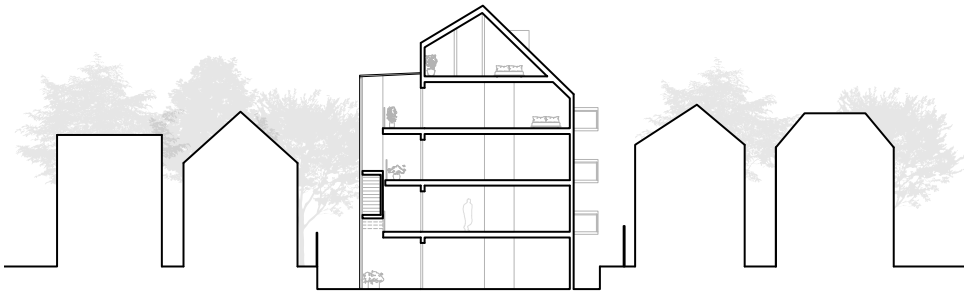
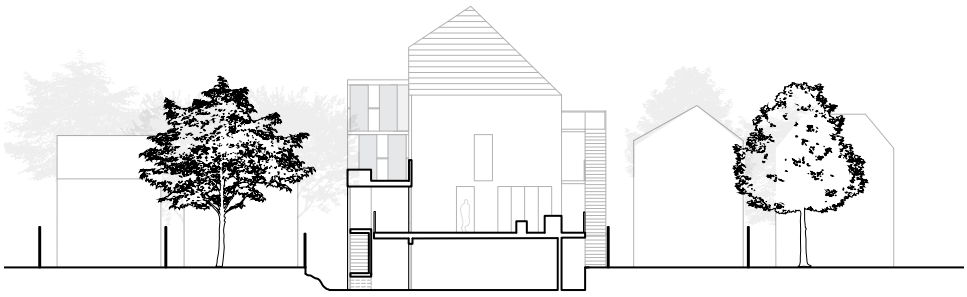
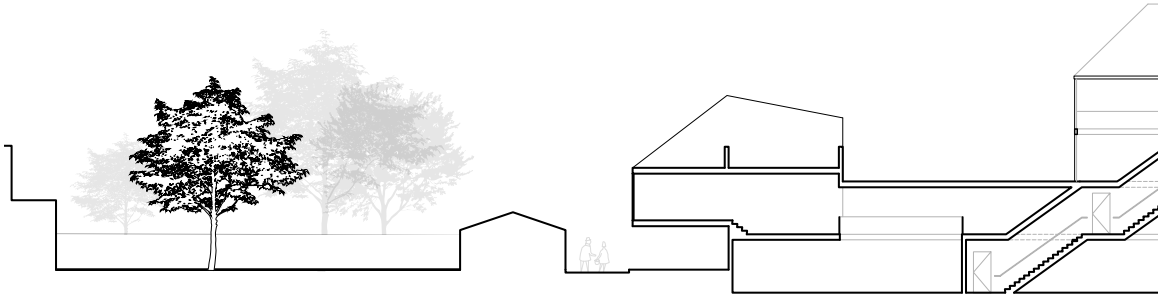


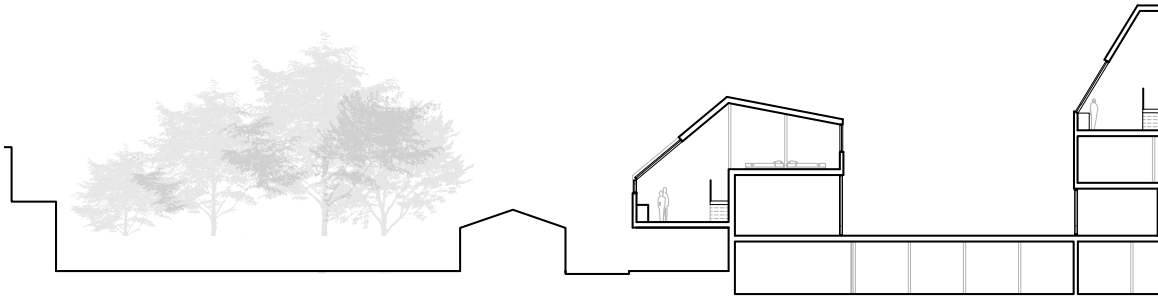
Figure 3.76 **Ground floor and context plan**

Figure 3.77 **Upper Floor Plans**
From bottom; Second floor plan, third floor plan, fourth floor plan, fifth floor plan









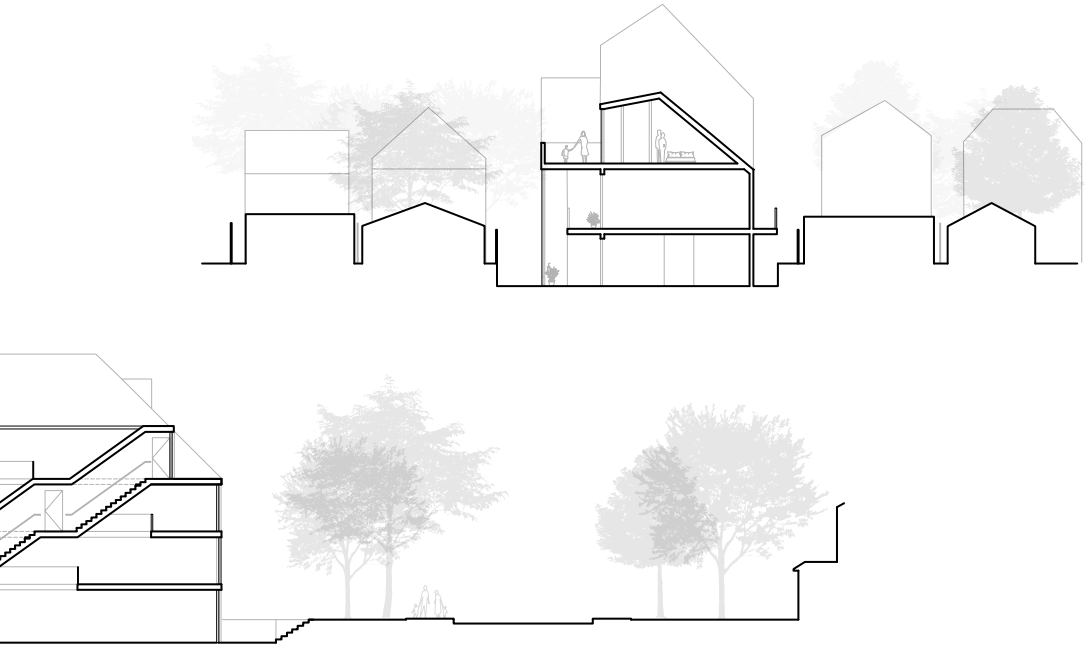


Figure 3.79 **Sections AA, BB, CC**

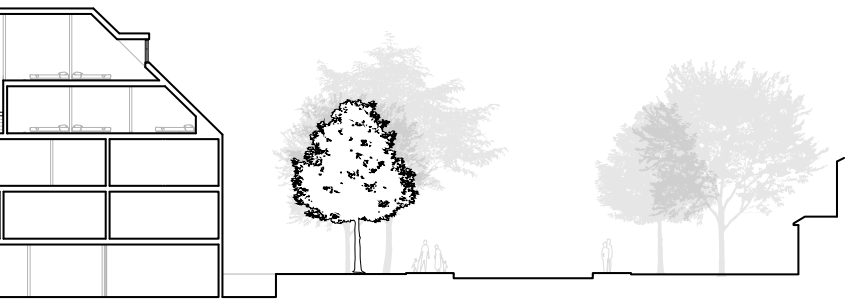


Figure 3.78 **Sections DD, EE**

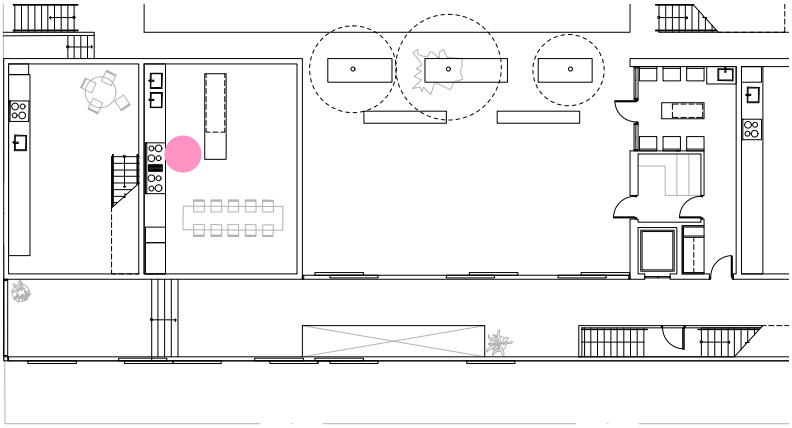


Figure 3.80 **Domestic labour as collective program and social space**
Collective space for laundry and a sauna are accessible both through the common corridor, as well as facing an interior courtyard space.

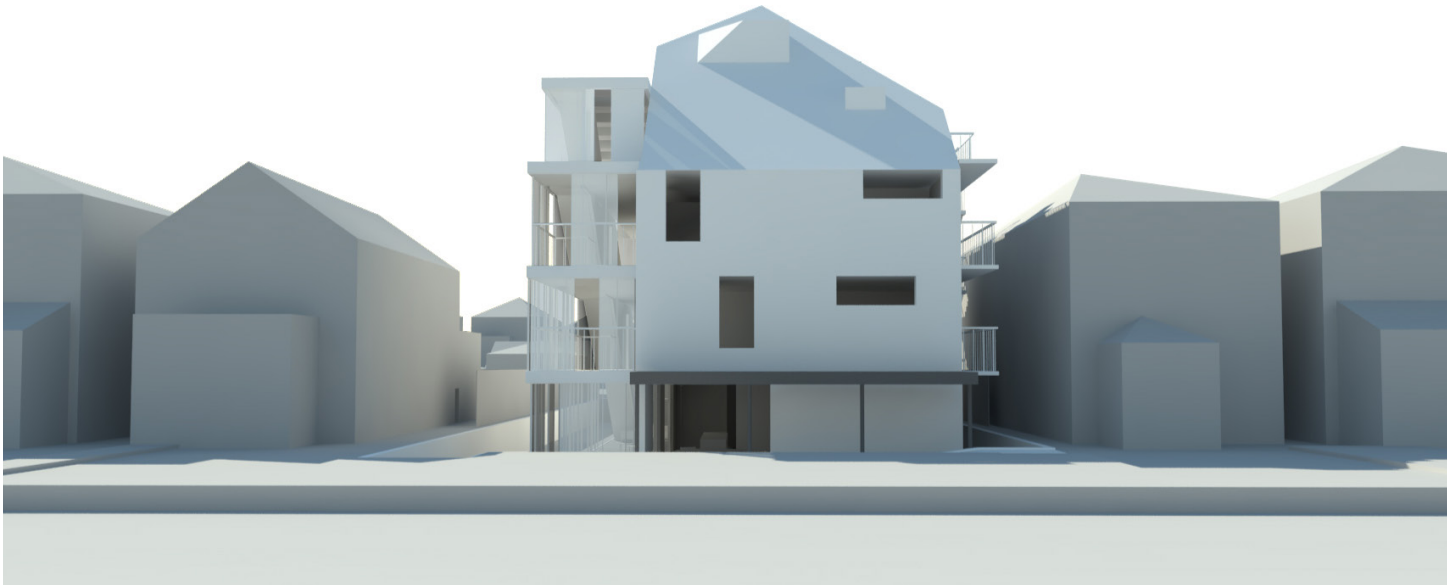


Figure 3.81 **Perspective of building street elevation**

Common Space

Downtown Prototype

The principles of common space are deployed in the downtown site through the outdoor courtyard, and the use of corridors as spaces of social interaction. The courtyard provides a central outdoor space that is open to all residents, while the south facing corridor space is sized generously and provides opportunities for areas within individual units to open to and occupy these spaces. Clad with polycarbonate, and treated as a semi conditioned space it also introduces the possibility to open individual dwelling units through foldable partitions, transforming space internal to the home into common space by removing physical separation and opening typically private spaces to them. Openings in the floors of these corridors create double height spaces and allow for further visual connection between residents in these spaces. They can functionally become extensions of the private environment within the unit, as well as providing more extensive spaces for social activity between residents and

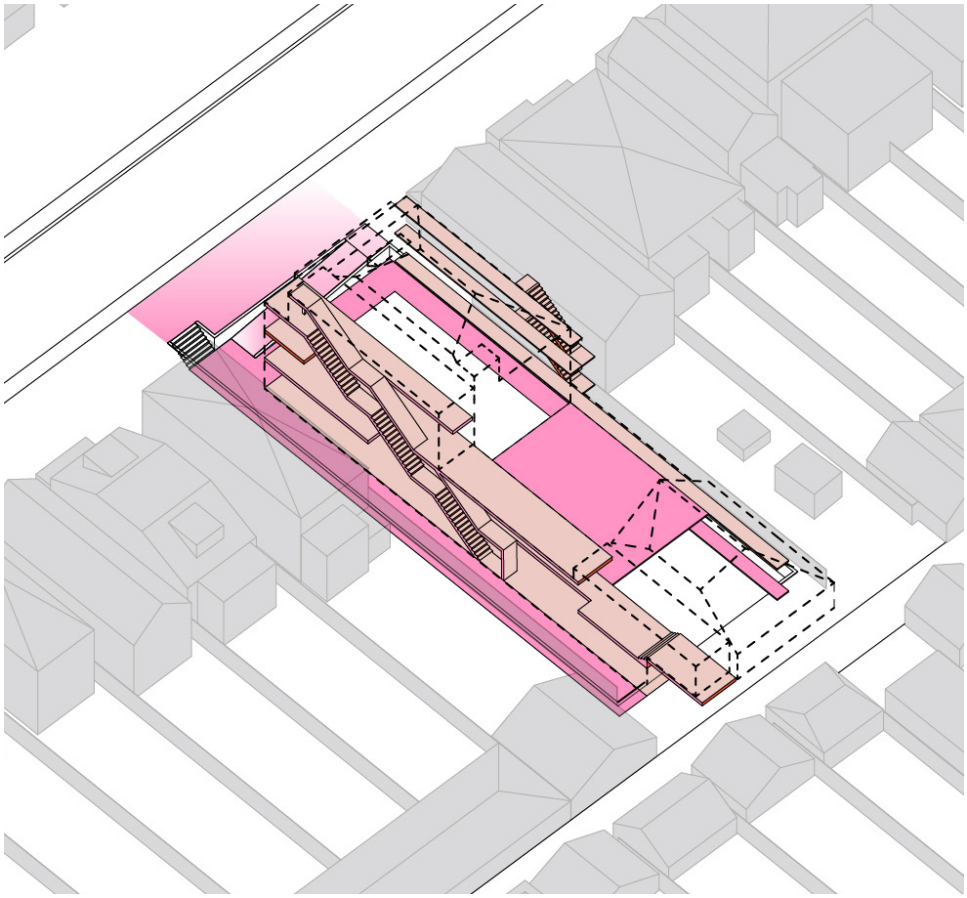


Figure 3.82 **Distribution of common space**
Individual units can open to the common corridor; a permeable separation allows for greater interaction between residents. The extra width and vertical connections between floors through double height spaces encourage the appropriation of these spaces

Figure 3.83 **Corridor space as common space Common corrido**r space is occupied by users; as play space for children, and an additional seating area for seniors.

Privacy

Downtown Prototype

The architecture conforms to a gradation of spaces ranging from public (the street, laneway), to common (courtyards, circulation space), to shared (spaces within the unit that facilitate cohabitation, can open to common space), with service spaces (kitchens and washrooms) forming a delineation of these spaces from the private spaces of bedrooms. Sectional gradations of space are also introduced in several cases; with shared spaces on a lower level and more private upper levels, while both still address a common corridor space.

Structuring these gradations of privacy are a series of operable partitions. The exterior wall of the south facing common corridor is comprised of polycarbonate panels, able to slide open to provide both views and ventilation to the exterior but also able to close and provide privacy and moderate colder temperatures. Similarly, portions of the unit walls facing these corridors are operable accordion fold panels, able to open or close based on the residents needs.

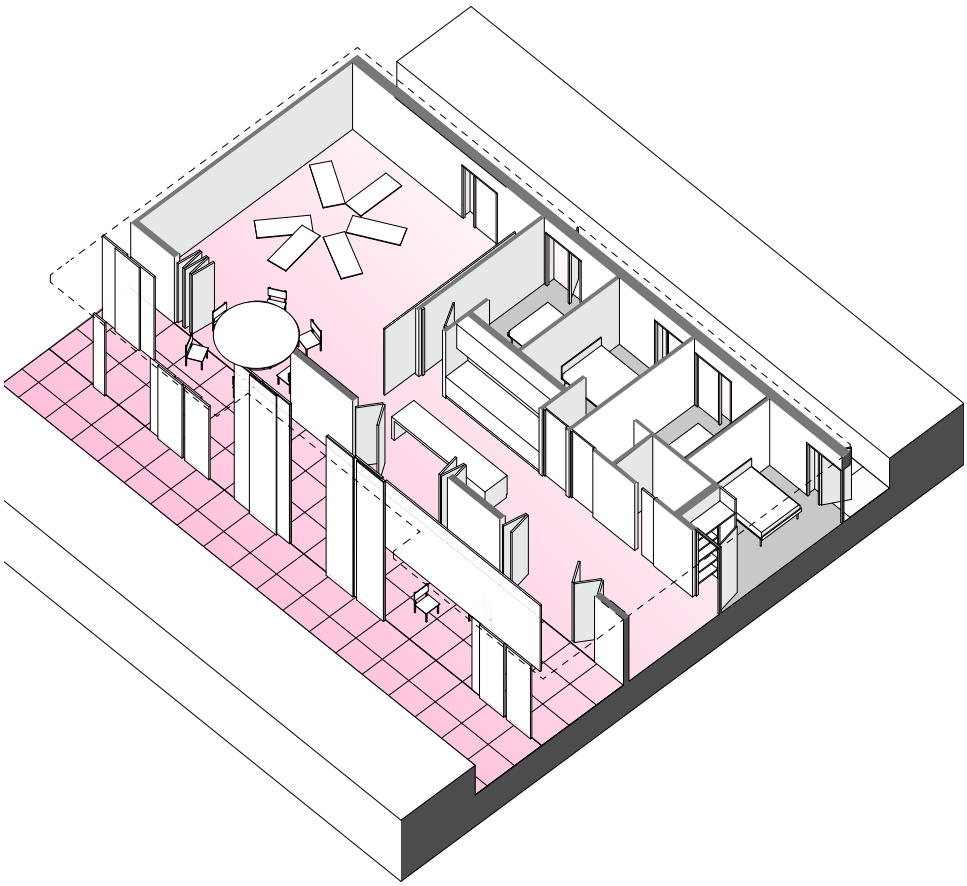


Figure 3.84 **Gradients of privacy**
The diagram shows the spatial relationship in plan and section of different levels of privacy within the project

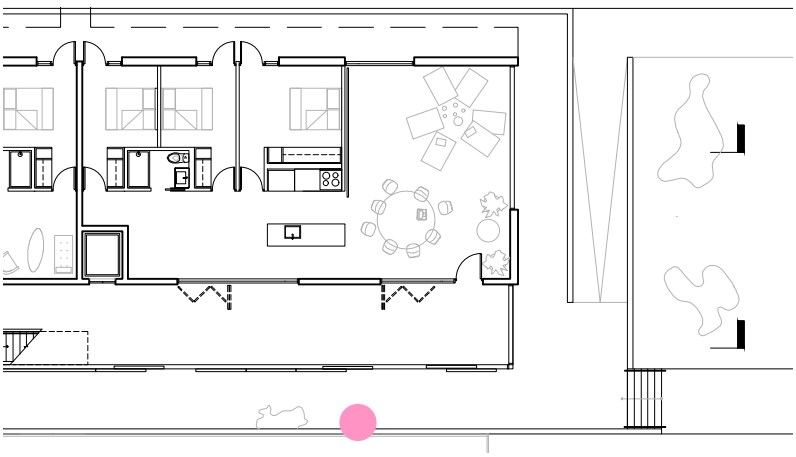
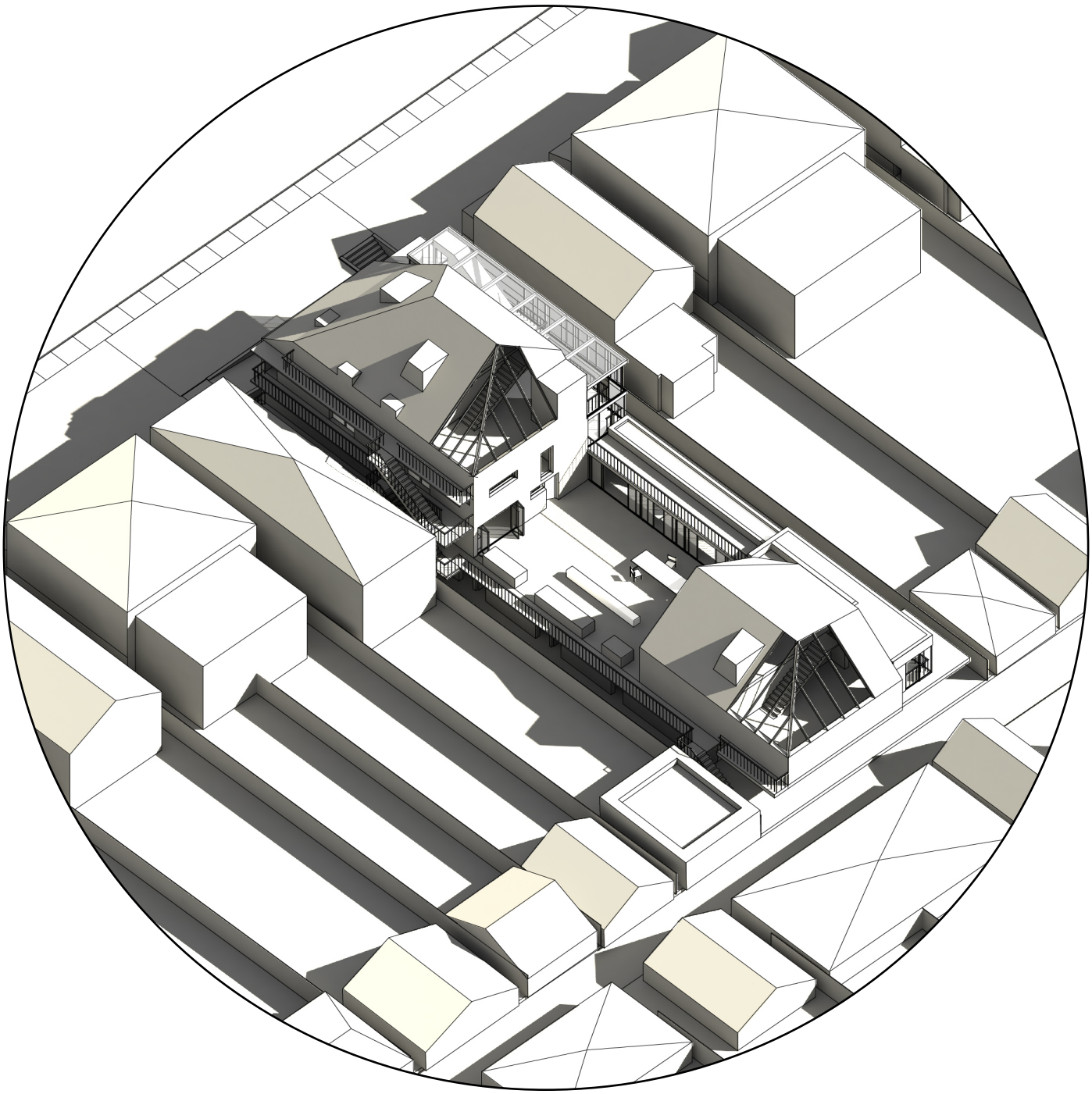
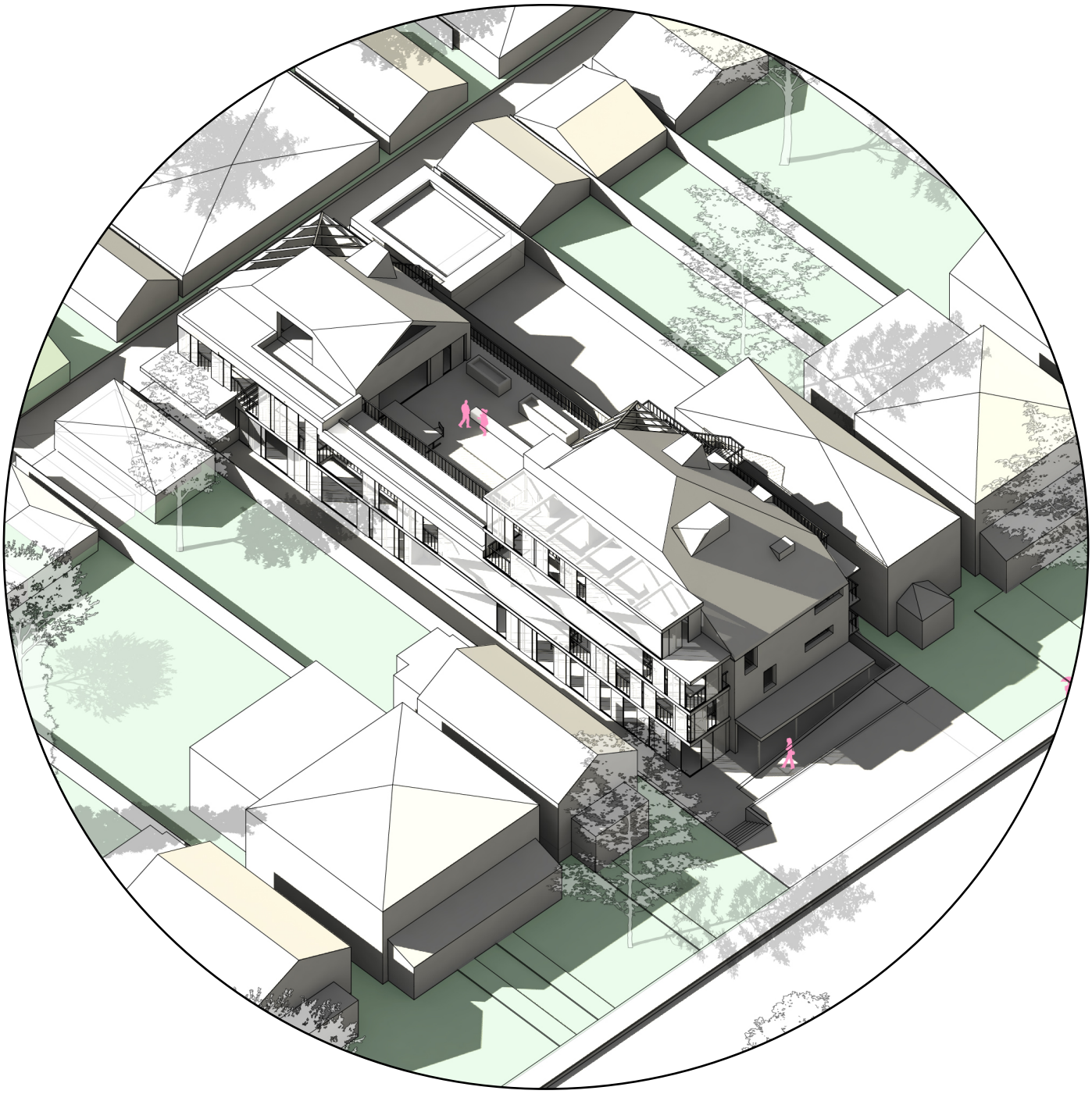


Figure 3.85 **Perspective from corridor into unit** Gradations of common and private space displayed through dwelling space

Figure 3.86 **Axonometric detail of Downtown neighbourhood proposal from North**
Illustrated axonometric showing occupation and use of central courtyard space.

The plantings along the south face of the property, outdoors at the ground level and on top of the outdoor terrace serve as a buffer to the adjacent properties, screening views and sound . The orientation of these plantings, as well as the selective location of windows in the project serve to minimize the impact on the privacy of the neighbouring properties.





The concept of permeability is important at the level of social interaction within the project, at the scale of the units and corridors, but also at the scale of the building and its relationship to the surrounding fabric. While vegetation serves to provide one layer of permeable screening from the surroundings, the operable polycarbonate panels comprising the south facade add a dynamic translucent element to the building face.

Figure 3.87 **Axonometric detail of Downtown neighbourhood proposal from South**
Illustrated axonometric showing permeability and orientation of common spaces of the project in its context.

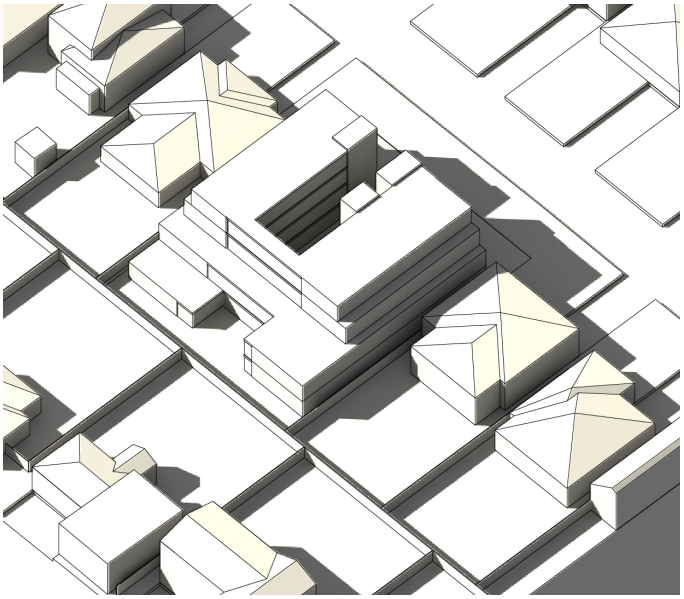
Figure 3.88
Axonometric of Suburban neighbourhood
Illustrated axonometric showing the replication of the proposed typology across the urban context

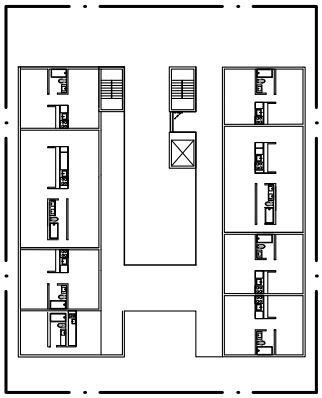
Iteration 1

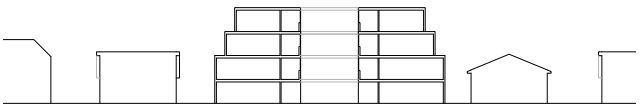
Suburban Prototype

Lot Size	**1150**
GFA	**1268**
FAR	**1.86**
Storeys	**4**
Units per HA	**121**
Persons per HA	**402**

Two main building volumes perpendicular to the street, four storeys tall with setbacks at the second, third and fourth floors at the side and rear building faces. The building has significantly more density than the existing, as well as significantly more height and building mass.





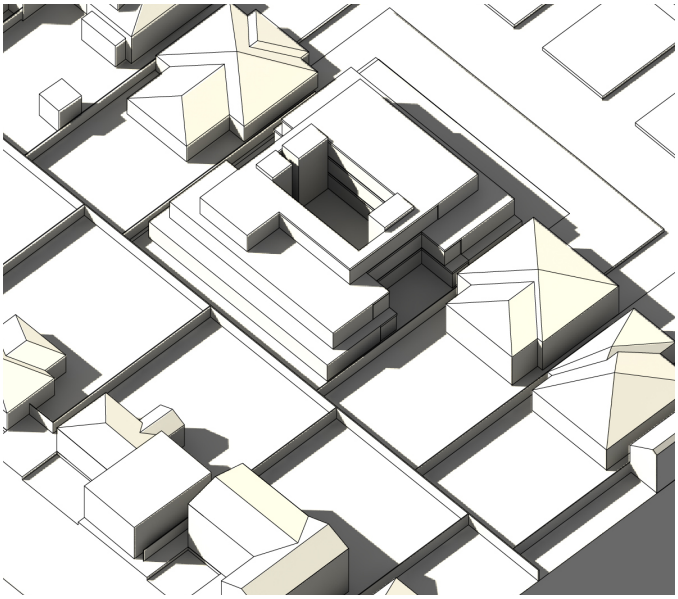


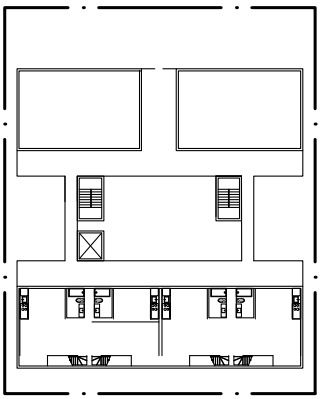
Iteration 2

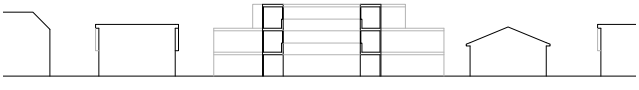
Suburban Prototype

Lot Size	**1150**
GFA	**1268**
FAR	**1.1**
Storeys	**3**
Units per HA	**78**
Persons per HA	**300**

A three storey building facing the street with a two storey segment at the rear, it presents a long elevation as a public face. Step-backs decrease the mass of the building, but the form has little relation to the surrounding context.





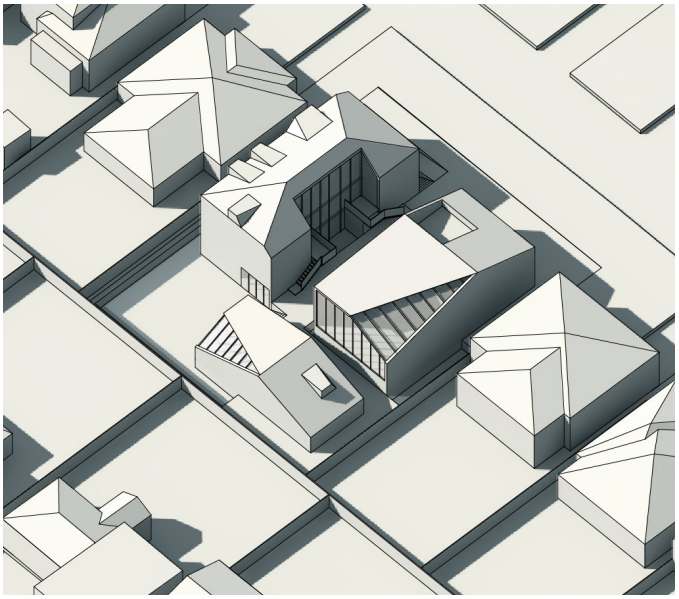


Proposal

Suburban Prototype

Lot Size	**1150**
GFA	**1157**
FAR	**1.0**
Storeys	**3, incl. one basement level**
Units per HA	**61**
Persons per HA	**287**

Two building forms address the street, maintaining a consistent rhythm to the elevation. The central space between them creates common circulation, with a single storey building with common program at the rear.



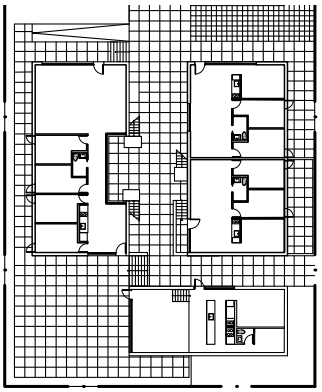


Figure 3.89
Diagrammatic plans and xonometric illustration of scheme 1
Showing gradation of spaces from public to private

Figure 3.90
Diagrammatic plans and axonometric illustration of scheme 2
Showing relation to context and access to light

Figure 3.91 **Diagrammatic plans and axonometric illustration of scheme Proposal**
Showing relation to context and access to light

Form

***Suburban** Prototype*

As in the downtown site, two properties are to be assembled and the existing houses demolished. The urban form in this context is that of a collection of object-like buildings rather than a continuously defined street presence; the design articulates two separate buildings that enclose a shared courtyard space between them providing access to individual units. Each of these buildings A separate, single storey volume containing shared programs is located at the rear of the site; creating a larger sunken courtyard condition in the interstitial space. The third floors of the two residential buildings, and the shared building at the rear are formally derived from the application of a series of subtractive planes, defining the form through parameters of access to light and sight lines from adjacent neighbours and the street.

The desired density results in a FAR of 1.2 on the suburban site.

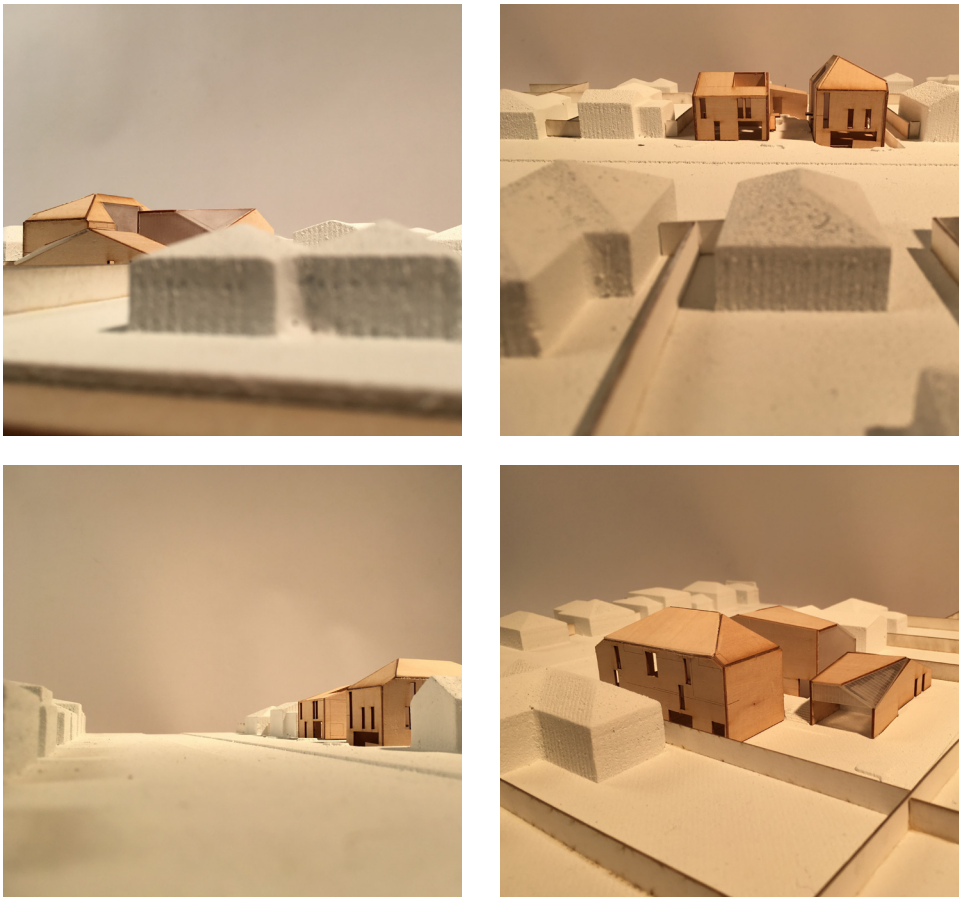
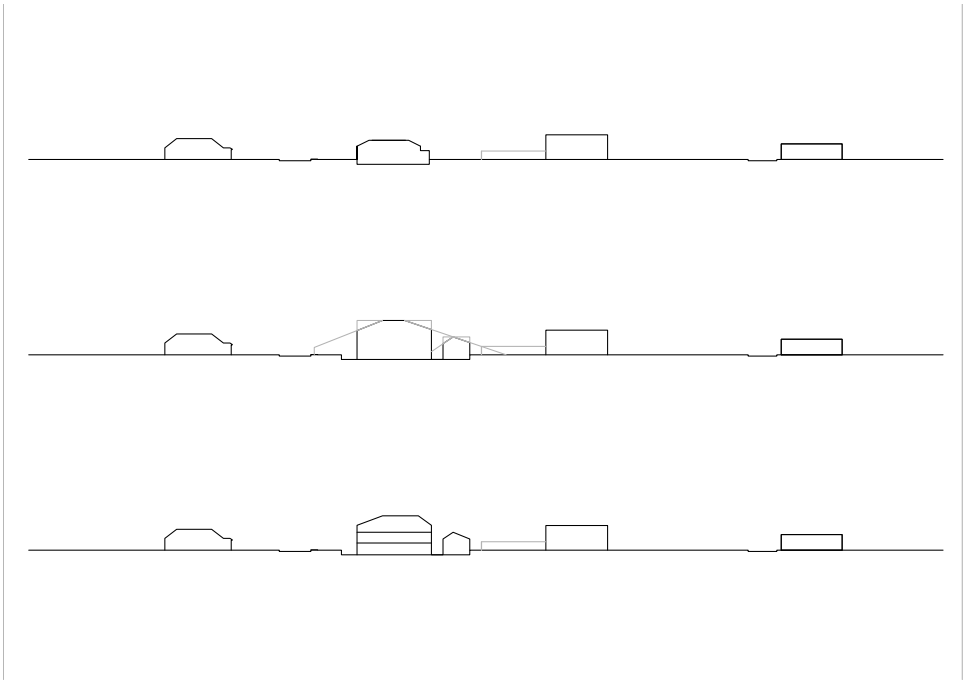


Figure 3.92 **Physical model experiments**
Iterative formal strategies for shaping the building mass



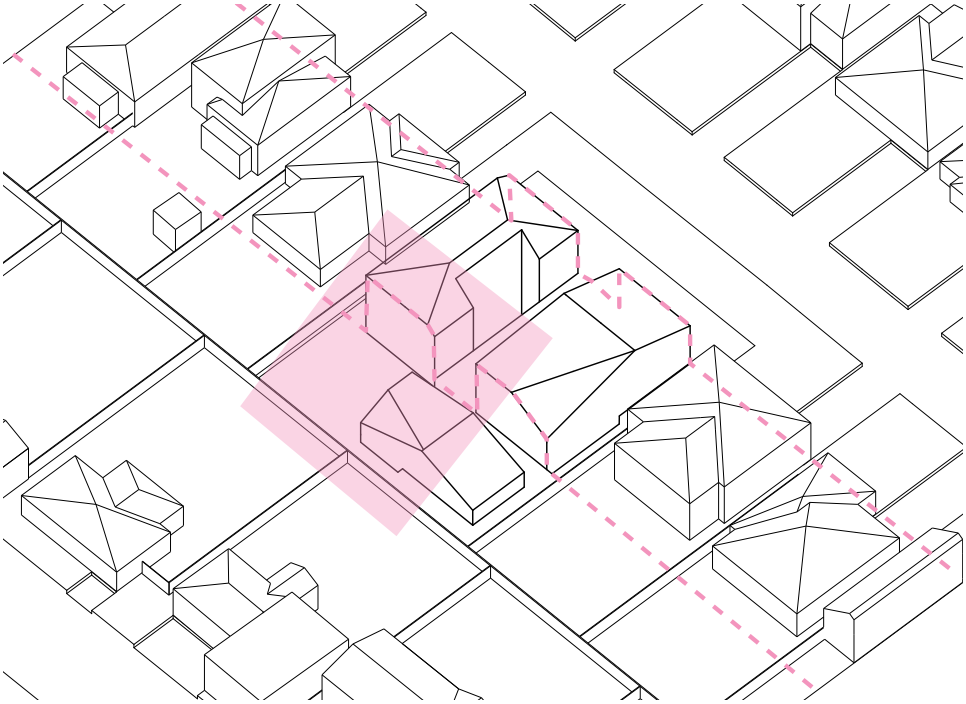
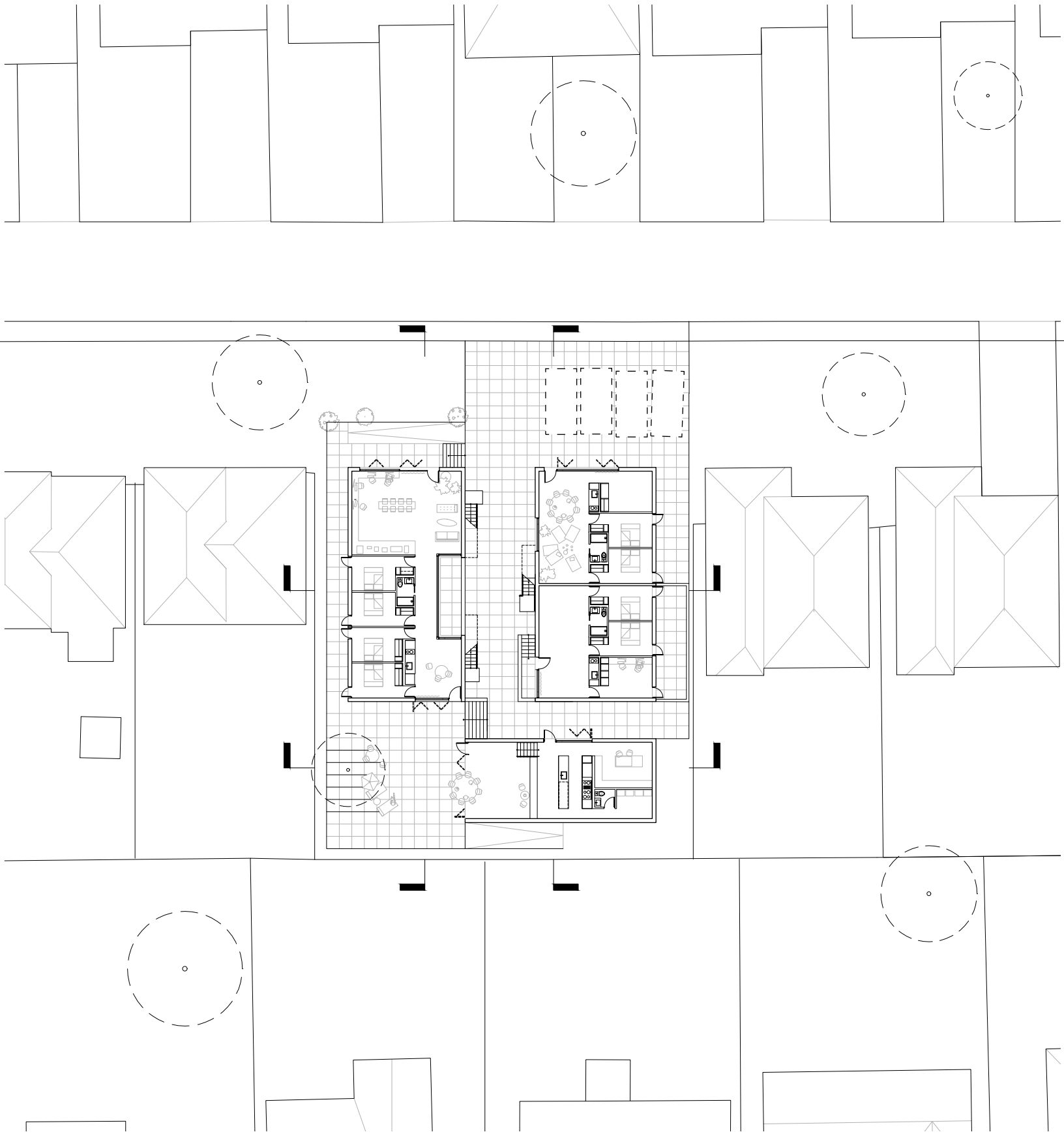


Figure 3.93 **Axonometric illustration of setbacks and Zoning Envelope Existing**

Figure 3.94 **Axonometric illustration of setbacks and Zoning Envelope Proposed**
Building footprint and formal manipulations based on context



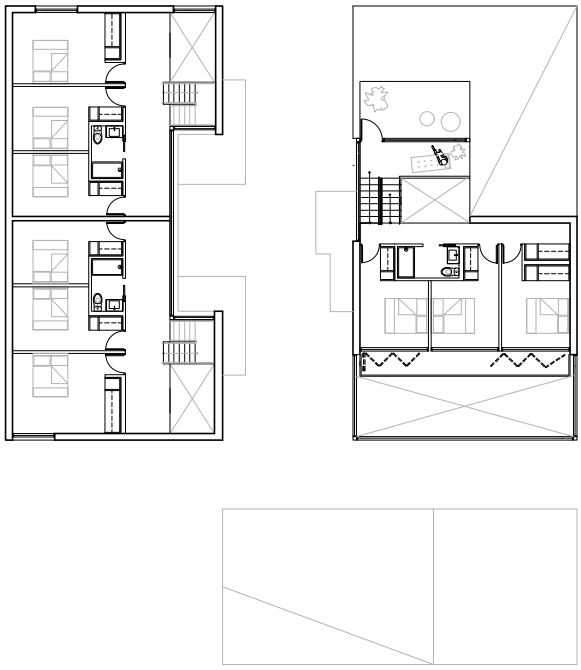
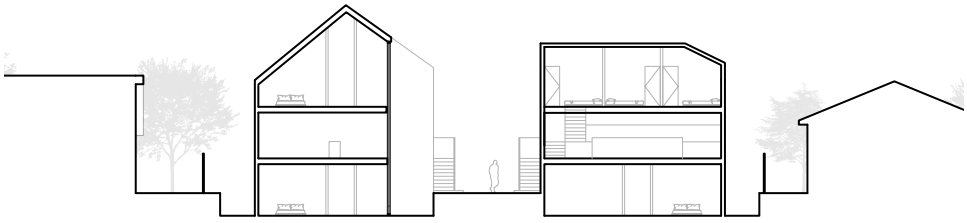
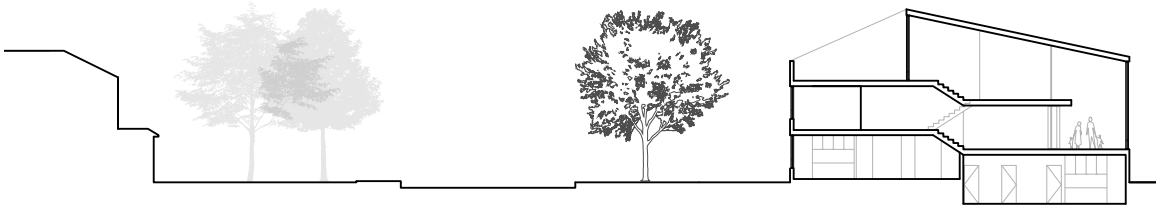
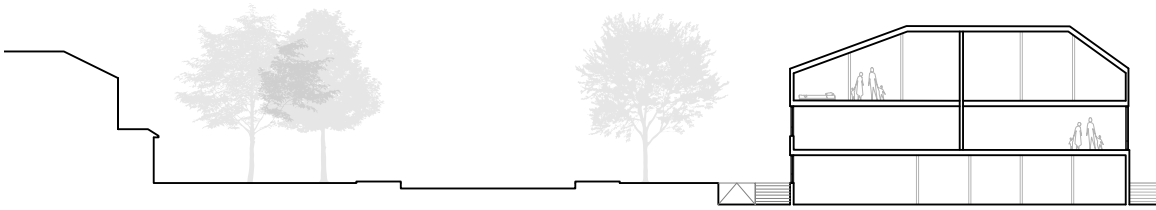


Figure 3.95 **Floor plans**
From left; Ground floor plan, second floor plan, third floor plan







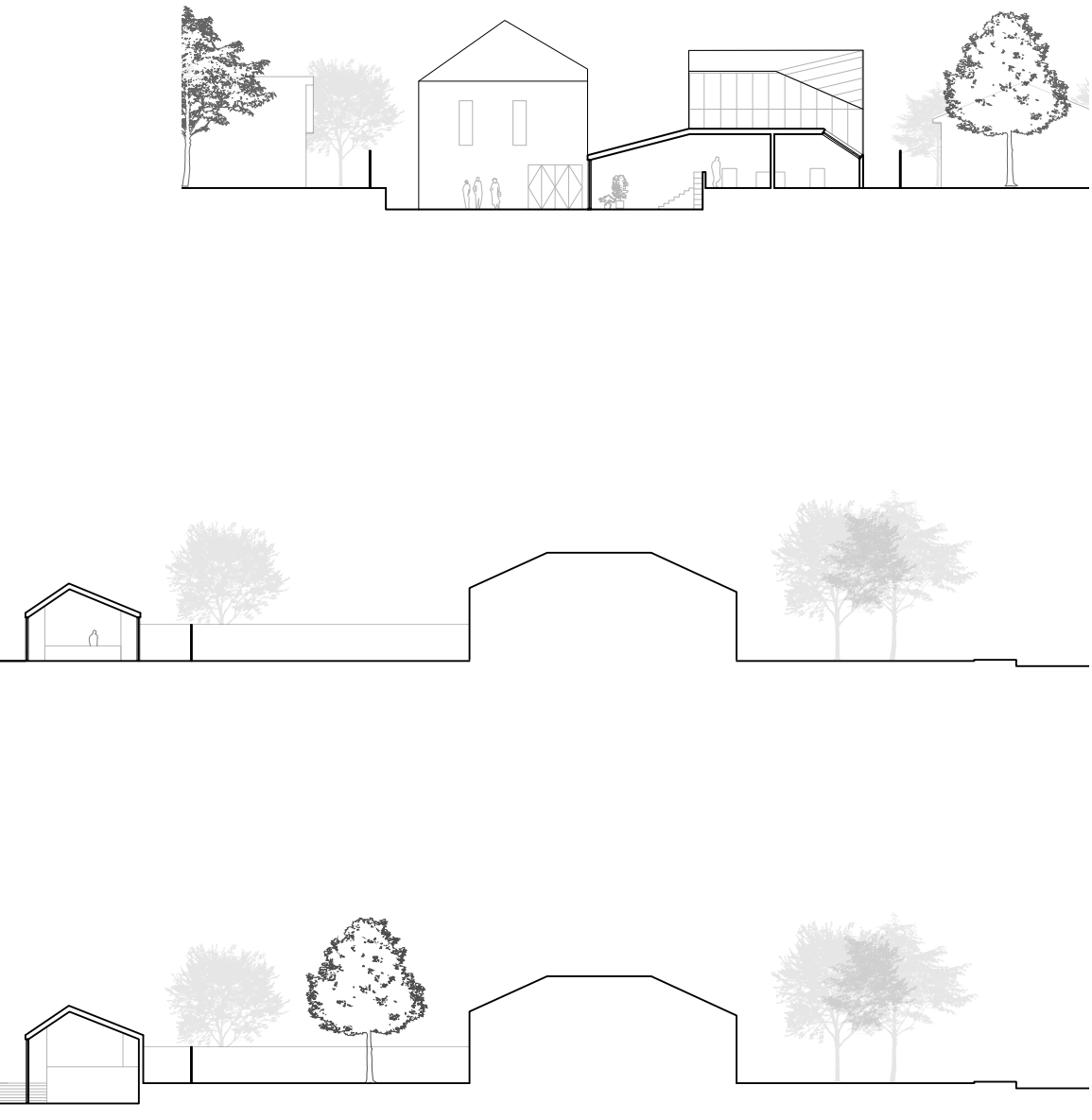
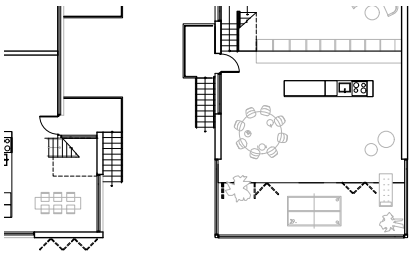


Figure 3.96 **Sections**



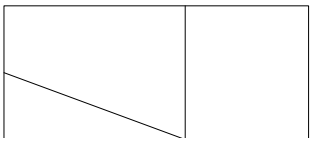


Figure 3.97 **New Domestic Spaces**
Image of double height interior common space

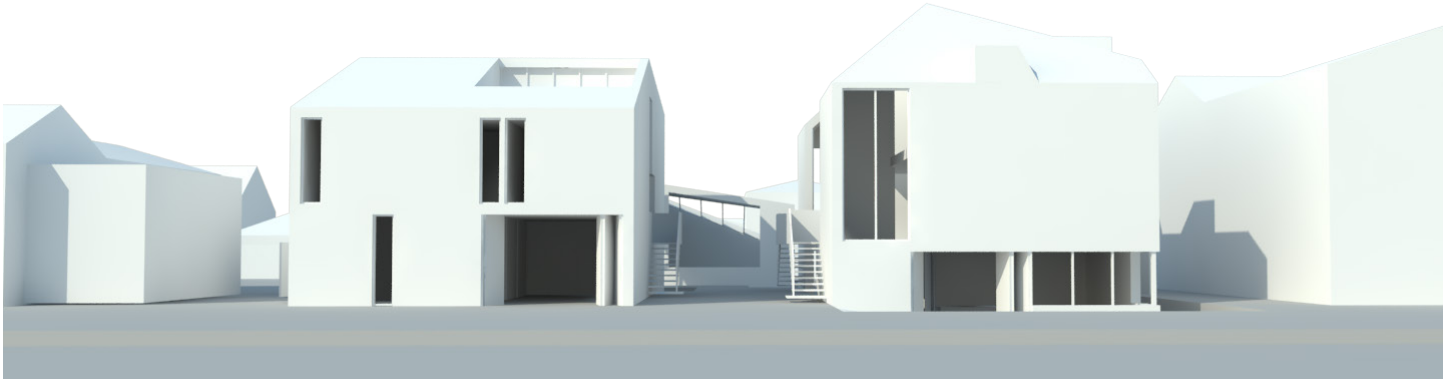


Figure 3.98 **View of courtyard space from the street**
Perspective view of suburban project from the street

Common Space

Suburban Prototype

The suburban model manipulates ideas of layered and developed in the downtown model in relationship to the central exterior space between the two residential buildings. The exterior stairs provide individual access to units on the upper floors, and serve to animate this space through stoop like conditions that can be occupied by residents. The gradations of public and private, and the structuring of rooms, occurs perpendicular to this central space, instead referencing the stairs that provide both access to the unit and circulation within it as defining more common, shared space. Shared spaces form extended landings between these floors, with clear views between and double height spaces.

The rear of the site has a sunken courtyard facing the kitchen and dining space of the common building, further integrating collective uses of space throughout the project.

Figure 3.99 **Common program**
Axonometric diagram of distribution of common space throughout project

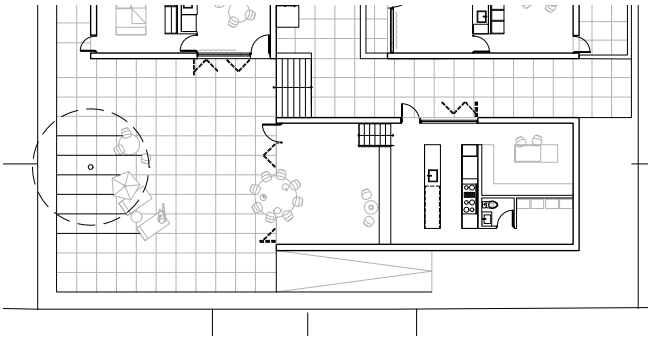


Figure 3.100 **Common Courtyard**
Perspective view of sunken outdoor courtyard and common kitchen and recreation program

Privacy

Suburban Prototype

Hierarchies of privacy, similar to those developed in the downtown model, are also employed in the suburban model. The exterior stairs and stoop, while acting as common space, also serve to provide a basic separation between the space within the unit and the space of the courtyard.

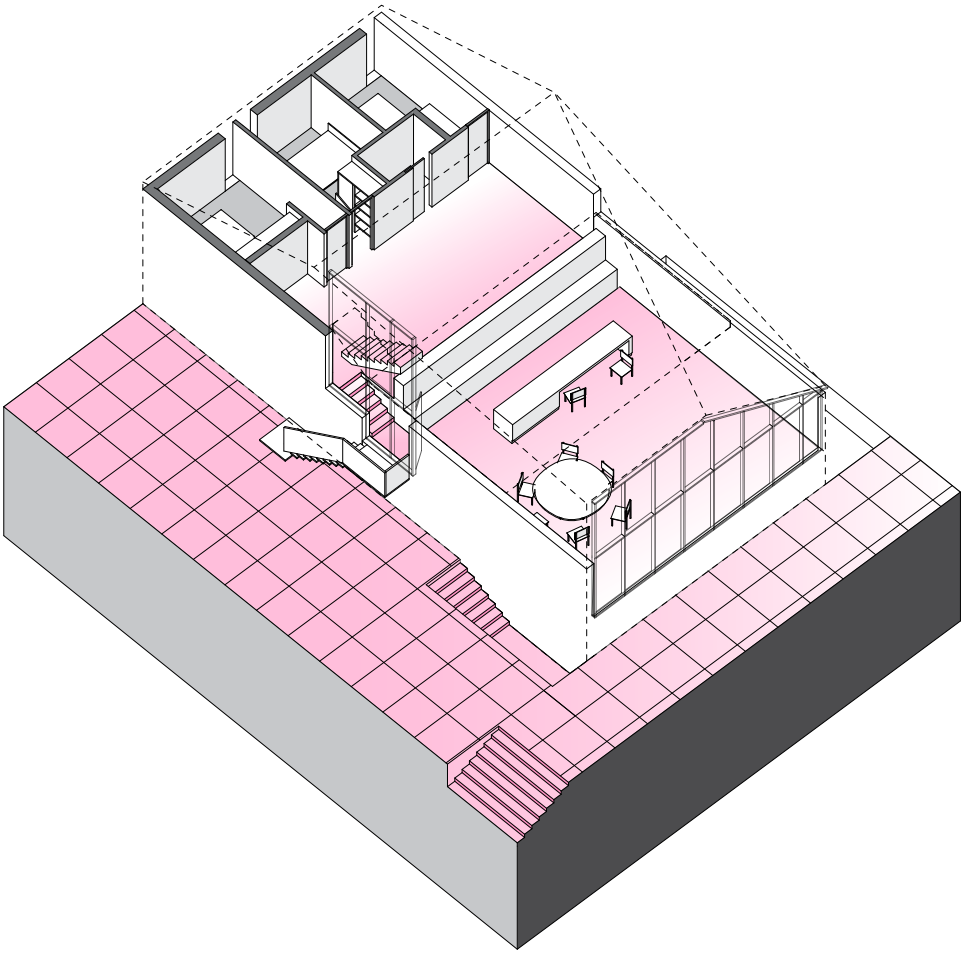


Figure 3.101 **Privacy**
Diagram explaining the gradient of private to common space in the project at the scale of units

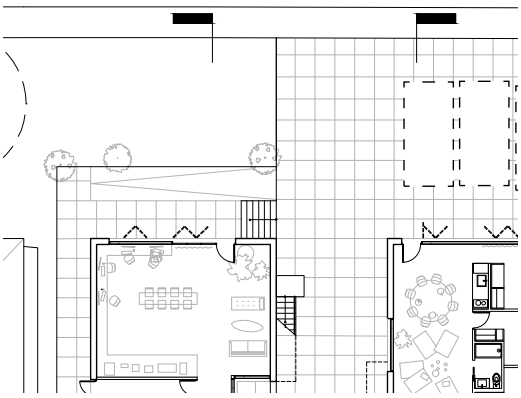
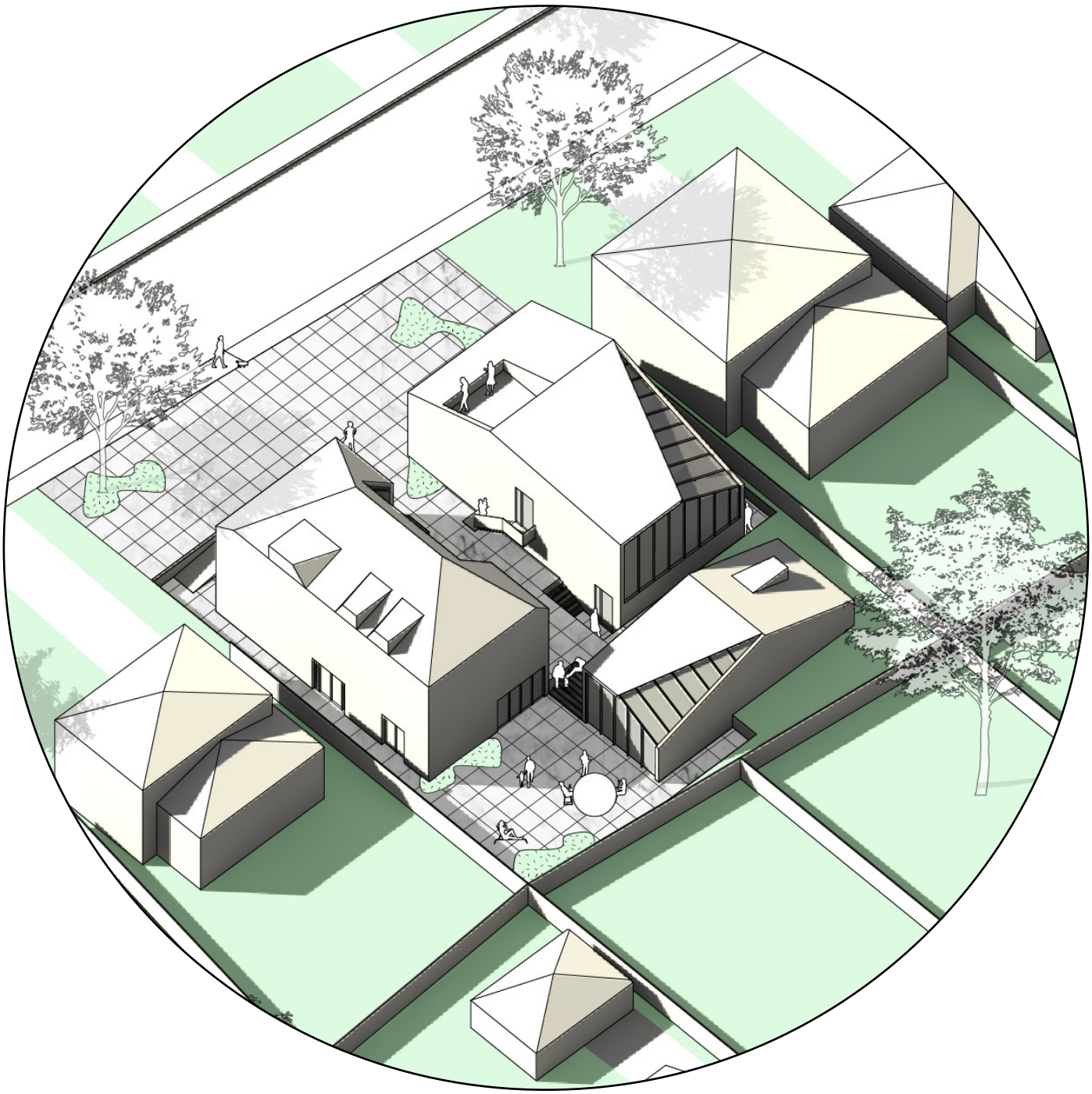
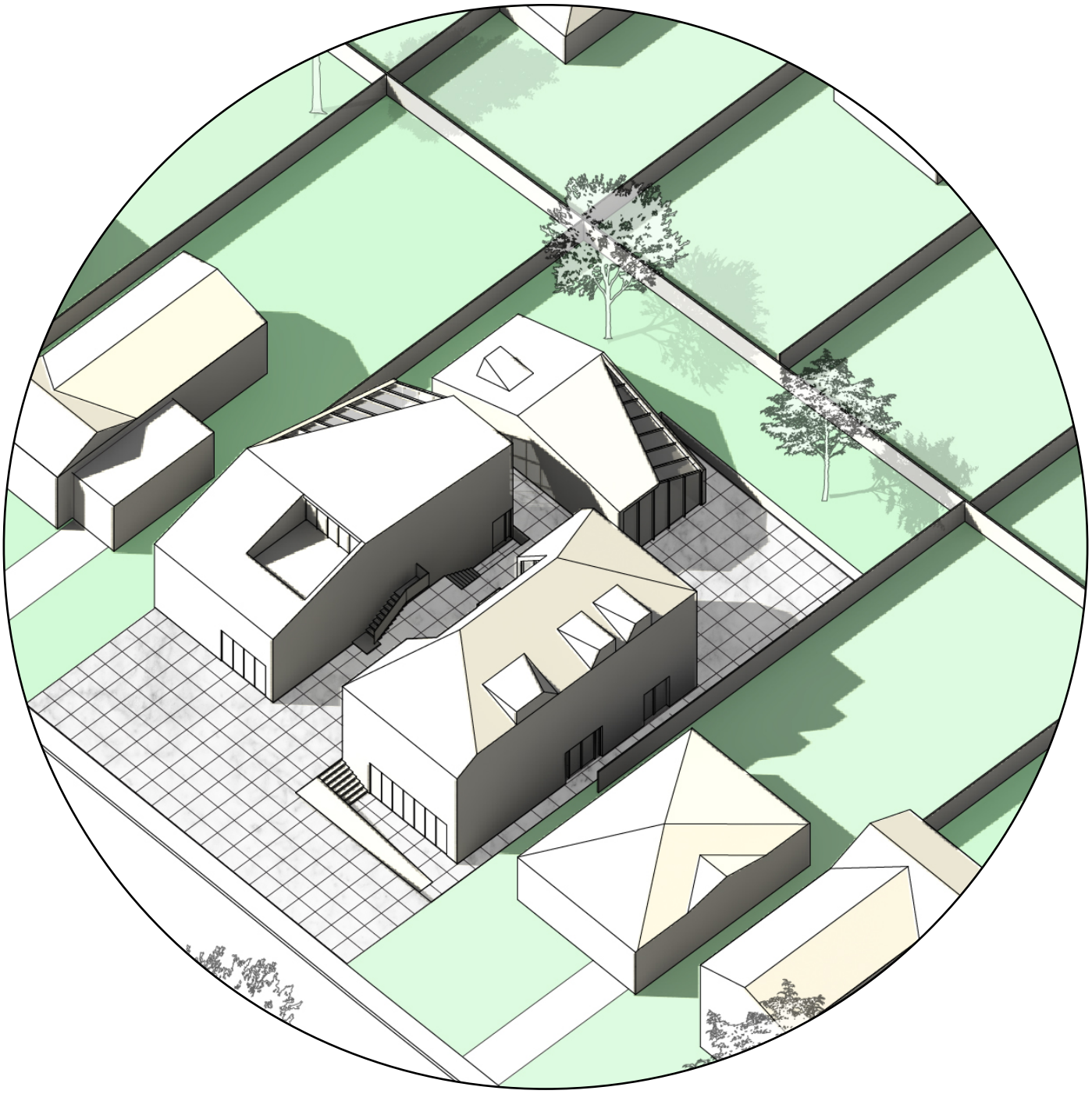


Figure 3.102 **Shared and common spaces of production**
Perspective view of shared kitchen space overlooking common program building

Figure 3.103 **Axonometric detail from south**
Illustrated axonometric showing occupation and everyday life of the project in its context

The site treatment, including sectionally lowering outdoor spaces at the rear courtyard creates a more internalized space for residents, as well as allowing for interior areas at the same level to open directly to these spaces. The single storey building at the rear of the site is similar to rear yard garages evident in other properties across the sample area.





The treatment of landscape and paving in the street face of the project is intended to allow for both greater usability by residents as well as inviting to passers-by. Selected areas of planting act as screens, providing a gradation of space as one passes through them to the central circulation space. The form and scale of the individually articulated buildings is informed by the neighbouring buildings, maintaining a consistent rhythm to the street.

Figure 3.104 **Axonometric detail from North**
Illustrated axonometric showing occupation and everyday life of the project in its context

Conclusion

Within the contemporary crisis in Toronto, new modes of intensification and housing are urgently needed to address the issue of provision and social inclusion of diverse groups of people within the city, particularly in the context of the rapid growth of the population of the city of Toronto and the GTA. While the Official Plan and other provincial and municipal planning and zoning regulations recognize this, they consistently work against creating new affordable housing and creating resident agency in the process; most significantly, through the designation of large areas of the city as low density, 'stable' residential neighbourhoods are insulated from change. These residential neighbourhoods are in fact, not currently 'stable' as described by the official plan. Rather, due to demographic changes described previously, they are often areas of decreasing population and thus density while greenfield development of single family homes on the urban periphery and the construction of high rise condominium apartment buildings continues.

The widespread and ubiquitous nature of these existing residential neighbourhoods across large portions of Toronto, allows for replicability of these proposals across the city. While the broad division into two typologies was useful as an analytical, as well as generative tool in the design process, these neighbourhoods, both in suburban areas and the downtown core, have more variable elements; adjacency to transit, more specific variations in setback requirements, allowable density, and articulations of existing built form. Within the thesis proposal, these additional parameters provide a potential insight into the eventual suitability or capacity for areas to accommodate these developments. It is anticipated that development will initially be centred on transit corridors and existing designated transit oriented development centres,[67] as well as more peripheral areas of the downtown core. With a total of 347,415 single family homes in Toronto,[68] there is a huge available scope for this development if the necessary zoning were to be universalized with the potential to house up to 4,000,000 additional residents. With this development structure in place, these prototypes will proliferate in an organic way; as they do, many areas will remain untouched by these changes. Despite this, it is imagined that this could still serve as a way of creating significant numbers of new homes in the city; with the population of Toronto expected to increase by more than 500,000 residents by 2031,[69] this alternative infill model has the potential to accomodate a significant percentage of this growth presenting a viable alternative to high rise development. Over the next 15 years, 200 projects per year increasing to 400 per year would correspond to a total of more than 4500 projects built; that is, a total of 4700 projects and housing for an additional 124,000 people or 25% of the projected growth over this time period. In total, it would replace 2.5% of the existing stock of single family homes in the city. This represents 10% increasing to 20% per year of

67. Refer to Page 20; North York Centre, Scarborough Centre, Yonge-Eglington Centre Etobicoke Centre.

68. http://www1.toronto.ca/City%20Of%20Toronto/City%20Planning/Wards/Files/pdf/W/Ward%2017%20Profile%202011.pdf

69. http://www1.toronto.ca/City%20Of%20Toronto/City%20Planning/SIPA/Files/pdf/H/Housing%20Occupancy%20Trends.pdf

the more than 17,000 high rise condominium units entering construction in 2016; however, significantly more people are housed per unit in the proposed projects and with greater flexibility in the housing to accommodate alternative household arrangements. As this new typology begins to proliferate, the proposed increase in density, five times over the existing in both downtown and suburban contexts in persons per hectare, represents a transformative effect on these areas. Even over a limited number of sites, the increased population both enables and demands the additional common amenities and alternative program in the form of productive and work spaces, while increasing affordability and access to housing. At the same time, it reduces individual transportation needs and reliance on automobiles, and addresses contemporary ecological concerns by reducing greenfield developments that still form a large component of the contemporary production of housing in the GTA. [70]

70. Burchfield, Marcy, and Anna Kramer. Growing Pains: understanding the new reality of population and dwelling patterns in the Toronto and Vancouver regions. Toronto: The Neptis Foundation, 2015. PDF. 46.

It is essential to emphasize the dialectical nature of the thesis; that in addressing this urgent need for intensification and access to housing in the residential neighbourhoods, it is also essential to create new social structures that enable collective agency in both the production of housing and domestic life. Ultimately, these two elements must be tied together; emerging models of regulation, such as inclusionary zoning, and additional density metrics such as the requirement to accommodate a minimum number of persons per hectare, would begin to address the regulatory framework necessary to enable these types of housing. These must be introduced alongside basic organizational structures and financial incentives from the provincial or municipal government in the form of start up funding or low interest loans for not for profit housing could make alternative models more feasible; as is the case currently in certain European countries, and as has been the case historically in Toronto.

The designs presented previously are not presented as complete proposals; however, they suggest typologies that could change urban fabric, communities, and new forms of domestic life that could emerge in opposition to the contemporary production of housing. They envision the potential of collective living as a means to enhance, rather than compromise the quality of domestic life. This is as a more radical proposal in the tradition of historical housing movements in Toronto, from workers housing advocacy and cooperatives in the rapidly industrializing city at the turn of the 20th century, to the middle class driven infill movement and its references to existing urban fabrics and contextual forms. They are prototypes that provoke a necessary discussion about the kind of city that we want to live in, and our role as residents in realizing that vision.

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