Living Laneways in The City of Toronto’s Residential Neighbourhoods

by

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ABSTRACT

Toronto’s inner city laneways provide miles of public space. A deeply rooted structure embodies generations of inhabitants which form the pattern and rhythm of harmonious settlement. Proposals to densify the laneways threaten the balance and fundamental character of Toronto’s inner city residential neighbourhoods. How can we interpret the deep structure of these neighbourhoods to understand the limits, give them new meaning and find appropriate means of inhabitation?
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CHAPTER 1: INTRODUCTION

Identity means living in a world that comprehends both place and the community one lives in.¹

As the need for denser urban living increases in North America we are becoming more aware of the impact it has on our daily lives. While our social networks extend globally our local identity is decreasing. Modern high-rise dwellings limit this identity and neighborhood even further. Is it possible to increase density while maintaining a sense of identity within our cities? "50 % of the world’s population lives in urban areas. By 2050 this will increase to 80%. Life in a mega city is both enchanting and problematic. Today we face peak oil, climate change, loneliness and severe health issues due to our way of life. But why?"² In the 2012 documentary Human Scale, Jan Gehl studies and documents human behavior in cities over forty years and illustrates how modern cities discourage human interaction. He argues that we can build cities in a way which takes human needs for inclusion and intimacy into account.³ According to Helen Woolley, the intrinsic value of city life is being ignored in 20th century city planning and sustainable cities needs to include much more than just dense built form, it has to include open space.⁴ “Currently it is estimated that 80 per cent of public open space within urban areas is in the form of streets."⁵ Reclaiming the street as a pedestrian resource can improve social interaction, environmental awareness, and pollution, noise and safety concerns.⁶ As discussed by Jane Jacobs, buildings must be oriented toward the street to ensure the safety of residence and strangers, providing "eyes on the street".⁷

The City of Toronto has over 2400 publicly owned laneways. Currently laneways provide vehicle access and parking to residential communities as well as loading, servicing and parking to commercial properties. "Historically, the commercial and residential use of the

². The Human Scale (Brooklyn, NY: KimStim, 2012), Film.
³. Ibid.
⁵. Ibid., 79.
⁶. Ibid.
laneways in Toronto was important to servicing the city.” Laneways were instrumental in integrating goods, services and housing, achieving density and maximising land use. “The laneway has helped to give Toronto a density and humane scale, which contributed to the liveability of the city.” Twentieth century modern planning, zoning and transportation systems changed the way we use the laneways. Neighbourhoods became segregated by land-use bylaws, resulting in the separation of commercial and residential laneway activity. Residential laneways became lined with garages and parking spaces. Toronto did not entirely lose its historical structure, some laneway houses, factories, bakeries, auto-repair shops remain. While laneways continue to be social, active spaces within the city they are underutilized. Having once served a city network, today, the laneway serves the individual home owner. The most sustainable and viable function the laneway can provide today, is to serve the block.

Often described as a ‘City of Neighbourhoods’, polarization between existing neighbourhoods and new dwellings in Toronto is increasing. This is caused by a demand for walk-up, single family homes driving up the cost of housing and forcing people to choose between high-rise condo dwellings or a suburban lifestyle outside of the core. While the city protects the existing character of its residential neighbourhoods, it does not take into account the lack of character on the laneway and opportunity to strengthen the quality of these neighbourhoods. It is possible to utilize the existing laneway infrastructure to create diverse opportunities for local economic benefits, strengthening social infrastructure and to create opportunity for an appropriate, modest form of density in the city.

Current city policy states “that no changes will be made through zoning or other public actions which are out of keeping with the physical character of the area.” Currently, laneway development is decided on a case by case basis. This affectively prevents major infrastructure and planning concerns for the city but overlooks current issues of privacy, safety, environmental concerns and quality on the laneways. As well as lacking a long-

10. Ibid., 7.
term planning solution or opportunity to provide low-rise density, open public space and affordable housing. Many other cities in North America have adopted city wide strategies to improve laneways, both mechanical and social infrastructures and in some cases developed policy for laneway housing in order to create density.

The thesis intent is to explore the history, culture and existing discourse of laneways in the City of Toronto, define the character of the laneways and prove that there is opportunity to improve the quality of laneways while creating a new form of community within the existing character of inner city residential neighbourhoods. Current laneway development and the existing approval process is fractured and disjointed from existing neighbourhoods. Laneway intervention should include civic and collective programming, derived, not on a case by case basis, but rather a block by block basis.

As the population increases we need to consider the future of our cities and the impact they may have on our social, mental and physical well-being. High-rise developments increase the demand for vehicles and traffic in the downtown, favour commercial development over community development and drive up the cost of living. Creative and innovative thinking can lead to sustainable, human scaled, low-rise density. By fostering unique opportunities to create diverse, walkable communities we can create a new modest layer of appropriate density within the existing fabric of the city.

**Inspiration**

Gary Dault writes in The Canadian Architect: “There’s a high energy in laneways, both dis-taff and invigorating. A city’s laneways and alleyways provide the best and worst a city can offer--urban intimacies *sans facade*, in both heart-warming and bone-chilling modalities.”

Laneways are a source of cultural identity for neighbourhoods in Toronto. For example, Queen West is home to *Graffiti Lane*. Typically, laneways are lined with parked cars, sheds, garages, fences and gates. Upon visiting a typical laneway one day I saw a woman with two children playing soccer from the inside of their open garage. I was inspired by the ‘backyard’ use of the space in spite of the formal architectural language suggesting only cars live here. Many laneways have a history and existing life of housing, gardens,

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children playing and incredible street art. “They’re familiar places, quiet and often hidden in plain sight. I think when you know a city, you know its back alleys. It’s like a house; the dining room is in the front to show guests, while the real living goes on in the kitchen in the back.” I was interested in finding the symmetry between the existing culture of human activity and the formal architectural language of the laneway.


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**Fig. 01** View from laneway in Little Portugal, Toronto, 2014; photograph of Flipping Projects Exhibition by Rear View (Projects)

**Fig. 02** Back Alleys and Urban Landscapes by Michael Cho

**Fig. 03** Graffiti Lane, Queen West, Toronto, 2011; BlogTo; Alley Way Love Affair: Toronto Laneway Tours

**Fig. 04** Laneway Tour, Toronto, 2011; BlogTo; Alley Way Love Affair: Toronto Laneway Tours
Fig. 05  Timeline of existing laneway discourse
Research Methodology

In November of 2014, The Laneway Project of Toronto hosted its first ever ‘Laneway Summit’ at The Great Hall. Listening to architects, landscape architects, developers, civilians and scholars discuss the future of the Toronto laneways I was able to reflect upon my role in this existing discourse. Figure 02 is a timeline of existing and related literature, websites and books on the topic of laneways with a focus on Toronto. If professionals, students, community members and city officials know that laneways can provide a unique opportunity for density and growth in the city but development is still limited, where do we go from here? This thesis is intended to explore the intervention of a new layer of density not for density’s sake. Rather, introducing social and interactive program to the lane through the exploration of an architectural language that can assist with future improvements to the quality and use of the laneways and possible intensification.

This thesis is informed by existing explorations into laneway housing in Toronto. For example, A Study of Laneway Housing in Toronto by Jeffrey Terence Stinson and Van Elslander in 2003. They provided a detailed study of the existing vernacular laneway housing typology, laneway houses built recently, mainly by architects and the laneway housing application approval process. Stinson and Van Elslander give a detailed approach to materiality, servicing and construction methods for laneway housing. Another example is Site Unseen; Laneway Architecture and Urbanism in Toronto (2004). Edited by Bridgette Shim and Donald Chong, they worked with an architectural studio at Ryerson University to produce a thorough study of the possibility of laneway housing in the city of Toronto. This work inspires the idea of a new layer of program on the laneways. While the studio explored the possibility of laneway housing the results were a new social infrastructure on the lane. This new infrastructure included, but is not limited to, a Laundromat, literary centre, student housing, and cafe.

To further the work of these studies, Maya Janikowski discovered a method to prove, imagine and further explore laneway housing in Toronto in her thesis This is (NOT) a Laneway, Envisioning Toronto’s Future Mid-Block Communities in 2011. In addition to the existing discourse on residential laneways in the City of Toronto, the proposed rehabilita-

tion of Toronto’s commercial laneways by an urban planning studio at Ryerson University; *The Prospect of Animated Laneways* informed an even greater understanding of city wide policy needed to evoke improvement of existing laneway conditions.

Supported by the existing literature, precedents and architectural influences this thesis will first, explore the history, precedents and existing infrastructure and servicing on the laneways in the city of Toronto. Second, provide a set of guiding principles to define the existing character the laneways. And finally, provide an exploration of an architectural language of the laneways.

**Walkability and New Demographics**

Jeff Speck emphasizes walkable space as a part of favorable living conditions in today’s cities. In his book, *Walkable City*, he refers to a trend he calls a “demographic perfect storm”. People favoring an urban lifestyle are of two major demographics. The first are “empty nesters”, baby boomers, of whose suburban home is too large without the children. And the second, are ‘Millennials’, exposed to changing ideology from suburb living to city living, they idealise the city. 64% are choosing where they want to live first and finding a job second. And 77% of this demographic want to live in the urban core.\(^ {15} \)

According to Speck, “chief among them [are] “creative’s,” urban living is simply more appealing: many wouldn’t be caught dead anywhere else. Second, massive demographic shifts occurring right now mean that pro-urban segments of the population are becoming dominant, creating a spike in demand that is expected to last for decades. Third, the choice to live the walkable life generates considerable savings for these households, and much of these savings are spent locally.”\(^ {16} \)

An article in *Global News* states: “In 2001, one-third of Toronto residents lived in lower-density neighbourhoods 25 km or more away from the city centre, a trend supported by the glut of baby boomers moving to the suburbs. But since 2006, Toronto has seen a “revival of population growth” in the downtown core, largely due to young professionals seeking

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16. Ibid., 18.
affordable, transit-supported housing in mixed-use communities.” A growing trend toward mixed-use neighbourhoods could allow for “pocket neighbourhoods” within the inner suburbs—a kind of “neighborhood within a neighborhood”. “A pocket neighborhood is not the wider neighborhood of several hundred households and network of streets, but a realm of a dozen or so neighbors who interact on a daily basis around a shared garden, quiet street or alley. The realization of new demographics populating the inner city and new diverse programming can strengthen and improve existing social infrastructures in inner city residential neighbourhoods.

Toronto has been at the forefront of introducing mixed-use, walkable, live-work neighbourhoods. Jane Jacobs and Ken Greenberg were among a group of planners who advocated and put Jacob’s “seminal concepts into practice” in Toronto in the 1990’s. They led the way in creating pro-urban, mixed-use, walkable neighbourhoods in the inner city of Toronto. Re-vitalizing the historically industrial King-Spadina and King-Parliament Districts, Jacobs and Greenberg reduced parking requirements, lifted density restrictions and created more flexible land-use regulations. “Among the many collateral benefit is the fact that the ‘Kings’, with their proximity to the downtown, have the highest ratios of walking and cycling to work of any neighborhood in the city, as is evident in the heavy morning and evening pedestrian traffic on local sidewalks.” Only six months after this project, amendments were made to create better planning strategies for livable, walkable neighborhoods in downtown Toronto. One of Toronto’s current leading examples of a diverse, mixed use rehabilitation of an existing neighborhood is Regent Park. Among the many diverse strategies to improve this neighborhood is the Daniels Spectrum Arts and Culture Centre, this building was built in 2012 to inspire creativity, culture and innovation. Tapping into an

19. Ibid.
21. Ibid.
existing creative culture in the neighborhood and creating a stronger more diverse social infrastructure. The same mixed-use programming and diverse forms of social infrastructure can be used to create a new form of density and community in existing low-rise residential neighbourhoods in Toronto.

**Scale and the Automobile**

The Toronto laneways are a network of public streets, with an average height-to-distance ratio of one to one. Meaning, the distance between buildings on either side of the street is the same as the height of those buildings. "A height-to-distance ratio of one to one presents an object which is part of its larger whole". Conforming to traditional architectural street principles, laneways have a unique balance and opportunity for pedestrian streets. (fig.06) “We live in a mechanical and technical era to speak of harmony, balance, and a sense of scale in keeping with human proportions-- concepts which have been vital components of architecture and civic design since ancient times--is to ridicule and laughter in the fast-paced, cut throat world of dead-lines, profit, and achievement." Recognizing the role of the vehicle as the primary use of the laneways is a disservice to our cities and dismissing age old traditions and principles of architecture. "A hundred years ago there was one car for every ten thousand people; in 1940 there was on car per five people; and now there is one car for every second person." Furthermore, "the car is an undeniable reality, and to argue against its existence would be pointless. Its effect on all of our lives has been immeasurable...In the not-too-distant past, streets were built to a human scale. Back lanes provided access to the rear of homes. Setbacks were not mandated by zoning bylaws, so buildings came right up to and defined the edge of the pavements compromising sidewalk and street." The use of the vehicle is undeniable for residence, even in the urban core of Toronto. However, with opportunities for more walkable neighbourhoods, better cycling routes, and use of transit and live work situations it is possible to decrease the use of the vehicle in core residential neighbourhoods. And in doing so, provide new opportunities for walkable neighbourhoods, density and more affordable living. Creating a

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24. Ibid., 145.

25. Ibid., 151.

26. Ibid., 152.
pedestrian oriented street not only encourages human scaled interaction but also allows a modest, small scale form of density in the growing city.

Fig. 06 Human scaled architectural principles diagram of writing by Avi Friedman
CHAPTER 2: LANEWAYS AND LANEWAY HISTORY

Grady Clay wrote in 1978:

"Out of sight, out of mind, the American residential alley has been the academic, geographic and social outcast of the built environment for at least a half-century. As one observer has noted, The written history of architecture and town planning has a visual fix on frontality, a permanent obsession 'en face.' The literature on alleys is rudimentary, to say the least, and it is now time to consider what the alley is, and what it might become ---a hidden resource waiting to be recognized."

The term ‘alley’ is just one of many terms to describe the urban typology known in Toronto, Ontario as a lane.

Referred to as mews, carriageway, a close in Scotland, a ruelle in Quebec, grand in Sweden, this urban typology can be found all over the world. While the ‘alley’ dates back to the Roman Empire I will be focusing on the history of alleys in North America to better understand laneways in Toronto.

The City of Toronto’s Draft Zoning Bylaw defines a lane as a public right-of-way that is not for general traffic circulation (2012). The laneway refers to paved or unpaved right-of-ways located to the rear or side of a property. Laneways provide pedestrian and vehicular access to properties and permit the storage and collection of waste. Unlike streets, laneways are often unnamed.

History in North America and Toronto

The history of laneways date back to the Greek city of Olynthus in 430 BC, a grid pattern was designed forming main streets with alleyways used for drainage and refuse. They are also found in Medieval cities in Europe, Asia and other parts of the world. Housing in alleyways was his-

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torically a means of shelter during times of need. For example when the industrial revolution brought rapid growth and poverty to England the alleys became densely packed slums. This occurs again in North America, to a lesser degree after the Great Depression. Nineteenth century British settlers brought the European grid across to North America along with the alleyway.

Tucked away from view behind respectable facades, alleys were indispensable elements in American city building during the last half of the nineteenth century where the impolite realities of the industrial era were hidden from polite Victorian society. Alleys not only allowed physical services such as refuse removal, underground and above ground utilities to be separated from the main street, but also provided a place that supported housing for the poor. In cities such as Philadelphia and Washington D.C., and Galveston, the generously sized original blocks were subdivided with alleys and housing.29

In Toronto the Georgian gridiron (a mile square grid) was used early on to develop the city’s core. (fig. 10) However, it was abandoned after the American Revolution and War of 1812. British loyalists moved to Toronto to settle the rapidly growing city. A few elite, were given much longer, narrow plots of land at this time, each with differing ideals about settlement and city growth. These were divided into individual properties with a right-of-way (laneway). (fig. 11)

Toronto felt the affects by the Great Depression in the 1930s and slum housing developed in laneways off Yonge street and throughout the city. (fig. 12) “After the Great World War there was a increase in affordable housing demands and new mass housing developments were being built to meet the demand and there was no longer a need to seek out

Another blow to alleys came in the 1940s when U.S. auto makers began exuberantly to lengthen and fatten their new models. Every foot of length, every inch of girth helped squeeze these new monsters out of old garages. Million by million, year by year, garages in backyards, in houses along alleys became obsolete and thus available for demolition or reuse. This is turn shifted cars out onto front yards and streets and on display. (There they remained into the late 1970s, when they began to shrink in size again.)

By 1950 the problematic nature of the alleys was becoming clear. “Alleys in present-day single-family or two-family residential neighbourhoods are no longer desirable nor considered neccessary. A rear property line easement is preferred to an alley...The disappearance of the alley is one of the advances which has been made in land planning during the motor age.”

Many laneway frontage is overgrown and unused, the laneway does not serve every household. They are no longer used for waste management and are generally take the form of parking lots. “Public in nature but hidden from public view” the laneways are the informal street, that which is unique to the homeowners that live on it. It embodies an opportunity for a new architectural language in the city, which cannot be found on the formal street.

**Precedent**

Residential laneways can be found all across North America. They are uniquely embedded in the culture and history

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31. Ibid., 15.
32. Ibid., 14.
33. Ibid., 5.
of a place. Cities have responded to the changing laneways in many different ways. In Baltimore, alleyways have been converted into pedestrian or cycling paths. In Montreal the “Ruelle Verte” is a movement to convert public laneways into green spaces. Other cities such as Boston and Seattle have turned over some laneways from public ownership to private. This approach allows home owners to make improvements to the lane when it is beyond the scope of the city. However, in some cases this has also left frustrated lane owners when the city steps in to maintain public lanes and personal finances are need to care for private lanes. And in these cities and others, home owners are building small secondary houses on the laneway.

Widely known as an “accessory unit”, the laneway home is referred to by many different colloquialisms, such as: a cottage, granny flat, in-law suite, tiny house and common to Toronto, a carriage house.34 In July 2009 in Vancouver, BC, city council adopted laneway housing regulations and guidelines for properties in single family districts (which make up 94% of the city’s single family lots). After 100 laneway housing permits were issued, staff reported to City Council with a Monitoring Report on Laneway Housing Development in November 2010. Council directed staff to report back with amendments to address key issues of neighbourliness, livability, and length of the permitting process. Amendments to the Laneway Housing regulations and guidelines and an expansion of the Laneway Housing program was made in 2013.35 There are over 500 laneway houses in Vancouver.

with applications increasing by 100 each year since 2011.\footnote{36}

Laneways differ by site and not all laneways have the potential for laneway housing. The following cities have allowed accessory units; 13 cities in Washington, USA (including Seattle), Vancouver, BC and Portland, Oregon. I think it is significant that the City of Toronto has not allowed accessory units yet, putting them in a greater position for planning the future of this untapped resource.

**Commercial versus Residential Laneways**

Residential laneways in the City of Toronto are found in inner suburban neighborhoods. This thesis focuses on these neighborhoods, rather than laneways found in the commercial core of the city (fig. 16). Studies have been done of Toronto’s commercial laneways. Partnering with the Toronto Public Space Initiative, a graduate studio of the Masters of Planning in Urban Development program at Ryerson University proposed the City of Toronto rehabilitate the underutilized commercial laneways into “Animated Laneways”. They have suggested that the laneways be repurposed into a network of pedestrian pathways:

> Animated laneways are laneways that have been transformed to enhance the urban fabric through basic capital improvements, public art, active frontages, special events and other programming. These human-scaled spaces help foster new opportunities for social interaction, urban exploration and even self-revelation.\footnote{37}

It acknowledges a current global shift toward a desire to improve usership and reclaim these public spaces in our cities. The document outlines numerous precedents for this

\footnote{36. Ibid.}

\footnote{37. Master of Planning in Urban Development Studio, “Prospects for Animated Laneways: Background Report” (Ryerson University, Toronto, October 23, 2012) 10.}
type of rehabilitation; the leading example is in Melbourne, Australia. (fig. 18) The city has created a network of pedestrian pathways throughout the urban core. Melbourne has opened up commercial frontage along the laneways, including retail, cafes and seating. Activating the once service spaces into a lively network of city goers.

Fig. 18 Laneway in downtown Melbourne, Australia; Flickr, "Melbourne Laneway Activity" by Kathie Thomas
Fig. 20 Orthographic study of existing laneway conditions
CHAPTER 3: RESEARCH ANALYSIS

Existing Planning Policy and Guidelines

Historically, laneways were used to service the home, also providing workers housing, ice houses and stables. “This made sense for developing the city in the 19th century, since they made the urban fabric more porous”.38 Once providing a back alley network within the city, residential zoning and planning in the 20th century segregated individual neighbourhoods and laneways became more private. Use of parking on the laneway established the dominance of the vehicle. Leading to the fortress-like privacy walls/approach to the laneway found today. While the garage now acts as the new service quarters to the home, it overcomes a potentially livable, sustainable space for pedestrians. New planning policy and guidelines are required to establish change on the laneways. While the culture and social demographics have changed in the last century the physical form of Toronto’s neighbourhoods remained the same. The Toronto Official Plan recognizes that residential neighbourhoods in the city are stable and viable communities. Current policy protects the integrity of existing neighbourhoods in Toronto:

The stability of our Neighbourhoods’ physical character is one of the keys to Toronto’s success. While communities experience constant social and demographic change, the general physical character of Toronto’s residential Neighbourhoods endures. Physical changes to our established Neighbourhoods must be sensitive, gradual and generally “fit” the existing physical character. A key objective of this Plan is that new development respect and reinforce the general physical patterns in a Neighbourhood.39

This should be the number one priority for these neighbourhoods, but it does not need to


limit the possibilities for growth and potential intensification. This thesis attempts to prove that a study of the existing neighbourhood characteristics along with carefully crafted restrictions provide guidelines that allow positive change while protecting the integrity of Toronto’s neighbourhoods.

**Toronto’s Neighbourhoods: Existing Character Defining Elements**

1. Green Space: A mature tree canopy, front yard setbacks, privately maintained green backyards and public landscaping.

![Fig. 24 Typical residential neighbourhood block: green space](image)

2. Block Pattern and Rhythm: Existing block typology, property setbacks and dimensions, public right-of-way widths and setbacks.

![Fig. 25 Typical residential neighbourhood block: pattern and rhythm](image)
3. Massing: Density (based on lot) and prevailing housing type.

Fig. 26 Typical residential neighbourhood block: massing

**Existing Municipal and Zoning ByLaws**

No changes will be made through rezoning, minor variance, consent or other public action that are out of keeping with the physical character of the neighbourhood. The prevailing building type will be the predominant form of development in the neighbourhood.⁴⁰

The existing laneway width in the city of Toronto is a minimum of 3.5 metres and new laneways require a 6 metre width. According to the *Toronto Official Plan; Chapter 2.5.3:* “The City’s transportation network will be maintained and developed to support the growth and management objectives of this Plan by: c) Acquiring over time lands to ensure that public lanes serving residential lands or parks and open space will be at least 5 metres wide and public lanes serving commercial, mixed-commercial-residential, institutional or industrial lands on at least one side will be at least 6 metres wide. The conveyance of land to widen the lane to the standard width may be required for a nominal consideration from abutting property owners as a condition of subdivision, severance, minor variance, condominium or site plan approvals”.⁴¹ The design guidelines presented in this thesis will assume the extension of public residential laneways to 5 metres wide.

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⁴¹ Ibid., 2.5.3 c.
Existing Residential Zoning ByLaws

1. Residential; detached, semi-detached = 17m min. building depth and townhouse, duplex, triplex, fourplex or apartments = 14m min. building depth

   City of Toronto Zoning By-law 569-2013; 10.10.40.30

2. Ancillary Buildings and Structures
   5% lot coverage (not including parking space)

   City of Toronto Zoning By-law 569-2013; 10.10.60.70

A. Street frontage = 6m width min.
   City of Toronto Zoning By-law 569-2013; 10.10.30.20

B. Front yard setback = 6m min.
   City of Toronto Zoning By-law 569-2013; 10.10.40.70

C. Rear yard setback = 7.5m
   City of Toronto Zoning By-law 569-2013; 10.10.40.70

D. Side yard setback with no windows or doors on exterior wall= .45m
   City of Toronto Zoning By-law 569-2013; 10.10.70 (4)

E. Side yard setback = .3m or required side yard setback as residential building
   City of Toronto Zoning By-law 569-2013; 10.5.60.20 (2) + (3)

F. Side yard setback = .9m for detached, semi-detached and townhouses
   side yard setback = 1.2m for duplex, triplex, fourplex or apartments
   City of Toronto Zoning By-law 569-2013; 10.10.40.70 (3)

G. Side yard setback = required side yard setback as residential building
   City of Toronto Zoning By-law 569-2013; 10.5.60.20 (2) + (3)

H. Rear yard setback to ancillary building = 1m from rear lot line or side lot line and no closer than 2.5m from the original laneway centre-line
   City of Toronto Zoning By-law 569-2013; 10.10.60.20 subject to 10.5.60.20 (4)

The City of Toronto Transportation Division plans to acquire this land over time.
typical residential lot

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\text{lot area} = \text{lot frontage} \times 30\text{m}
\]

City of Toronto Zoning By-law 569-2013; 10.10.30.10

Fig. 27 Typical residential lot illustrating existing zoning bylaws in Toronto

**Setbacks**

Existing residential public laneways vary in width but many have a typical width of 3-1/2 metres. New laneways must be 6 metres wide. Currently an existing 1 metre setback from the laneway is required for ancillary buildings/structures on private property abutting the laneway. Stated in Zoning Bylaw 10.5.60.5; Ancillary Buildings and Structures: Rear Yard Setback:

In the Residential Zone category, the required minimum rear yard setback for an ancillary building or structure containing a parking space must comply with regulation 10.5.60.20(2), except: (A) if the rear lot line abuts a lane and vehicle access to the parking space in the ancillary building is from the lane, the required minimum rear yard setback is 1.0 metres, subject to regulation 10.5.60.20(4); and (B) if it is on a through lot, and vehicle access is from the street abutting the rear lot line, the required minimum rear yard setback is the greater of: (i) the required minimum front yard setback for a residential building on the adjacent lot that fronts on the same street that the rear lot line abuts; or (ii) 6.0 metres.\(^42\)

\(^{42}\) City of Toronto, bylaw No. 569-2013, Zoning Bylaw (May 9, 2014), c 10.5.60.5.
As previously stated, the City’s Transportation Department plans to extend public laneways to a width of 5 metres in residential areas. Acquiring the existing 1 metre setback on private property over time for the city. The laneway can have rear property lines abutting the lane but can also have side yard property lines abutting the lane. The proposed city setback applies only to rear yard property lines.

**Servicing, Infrastructure and Access**

Toronto’s laneways currently have limited infrastructure and receive minimal servicing based on a need-be basis. There are no provincial standards pertaining to laneway maintenance and the City of Toronto’s Transportation Department inspects the laneways annually for basic maintenance. In order to provide this service the vehicles require thruway access or a 9.5 metre turning radius and minimum 4.4 metre overhead clearance.

In order to provide servicing for future development on the laneway, a new approach is required. Laneways require a new strategy for servicing and infrastructure, achievable by implementing smaller scale vehicles and working with Public Works, the Transportation Department and the Building Department to implement new policies which are unique to the laneways. The two main concerns for laneway development are fire fighting access and water/sewage infrastructure. Figure 30 illustrates proposed fire access strategies for laneway development as well as existing building code and regulations. Figures 32 and 33 illustrate two options for providing water/sewage to laneways, while outlining the existing zoning bylaws and regulations.

![Diagram of existing and proposed laneway extension](image)

**Fig. 28** Typical residential block: existing and proposed City public laneway
Fire Access

Majority of laneways are within 90 metres and serviceable from existing fire hydrants. However, a survey is required to ensure proper access from each laneway development. As stated in the Ontario Building Code: Location of Access Routes: “Access routes shall be provided to a building so that, (b) for a building not provided with a fire department connection, a fire department pumper vehicle can be located so that the length of the access route from a hydrant to the vehicle plus the unobstructed path of travel for the fire fighter from the vehicle to the building is not more than 90m, and (c) the unobstructed path of travel for the fire fighter from the vehicle to the building is not more than 45m.”43

Fire Hydrants are currently provided for buildings required to face a street. The Ontario Building Code states: “(1) An Adequate water supply for firefighting shall be provided for every building. (2) Hydrants shall be located within 90m horizontally of any portion of a building perimeter that is required to face a street in Subsection 3.2.2.”44 New policy is required to ensure fire hydrant access is available to eligible laneway properties.

43. The Ontario Building Code, 2012. s 3.2.5.5, 2.
44. Ibid., s 3.2.5.7.
A Minimum width of .9 metres is required between existing residences for fire fighter to access the laneway. Vancouver can be used as precedent, requiring a .9 metre side yard setback for an existing residence to be eligible for a laneway property and the laneway dwelling must maintain the same setback as the existing street facing property. The issue in Toronto is the Zoning By-law 569-2013; 10.10.40.70, which states: (4) Side yard setback with no windows or doors on exterior wall = .45m.\textsuperscript{45} Therefore, only properties with existing width greater than .9 metres between should be eligible for laneway development.

![Typical residential block: potential fire access route and typical hydrant locations](image1)

**Fig. 30** Typical residential block: potential fire access route and typical hydrant locations

![Typical residential lot: illustrating required side yard setback of .9m minimum for fire access](image2)

**Fig. 31** Typical residential lot: illustrating required side yard setback of .9m minimum for fire access

**Water and Sewage Lines**

The Municipal Water Main is operated by Toronto Works & Emergency Services. Regulations can be found in the *Toronto Municipal Code; Chapter 681: Sewers. Chapter 681-11; Sewer Connections* outlines the rights and responsibilities of the city and the home

\textsuperscript{45} City of Toronto, bylaw No. 569-2013, Zoning Bylaw (May 9, 2014), c 10.10.40.70 (4).
owner. Existing street facing properties are responsible for a Service Pipe connecting individual properties to the Main line.

Some laneways have existing water/sewage infrastructure but are not all recorded in the city’s records. Where it is not on record the city requires new lines. No new water mains and sanitary drainage pipes are laid under laneways after 2005. Currently, feasibility and implementation is measured on lot by lot basis. Construction and servicing vehicles required access is 3m to 4m right-of-way width and the entire laneway requires closure during construction. There are two options to service the laneway:

Option 1: City provides services for the entire laneway by creating a secondary line from the Main line underground, along the laneway. Feasibility requires community organization and City support (fig. 32).

Option 2: Service laneway from adjacent street required permission from neighbouring property is obtained to create an easement and run a service pipe to the individual laneway property from the main line (fig. 33).

Other Services:

Solid Waste Collection

Existing Laneway Policy: Street side pick up only.

Existing Requirements: The minimum loading space required is 6.1m H x 4m W x 13m L with a minimum turning radii of 9.5m inside and 14m outside.

Department & Regulations: City of Toronto Municipal Code, Chapters 841 and 844.

Proposed Laneway Strategy: Consolidated service, a pickup point on nearby street or throughway point, if applicable, and storage within buildings if possible or smaller contain-

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Fig. 32 Option 1; proposed water and sewer line on laneway

Fig. 33 Option 2; service pipe running through easement
ers is required. And storage and pick up can be designed not to impede laneway traffic (adequate clearance for emergency vehicles) and use smaller vehicles.

Precedent: Laneway Waste laws have been adopted in Calgary, Seattle and Melbourne.49

**Snow Removal**

Existing Laneway Policy: No operations on laneways.

Existing Requirements: Minimum width for vehicles at entrance of right of way is a 6 metre width and 4.4 metres unobstructed throughout. With minimum vertical clearance of 4.4 metres. Existing trucks are 3 metres wide.

Department & Regulations: Toronto Works & Emergency Services.

Proposed Laneway Strategy: Main issue is that there is no room for snow storage along sides of lane, especially not without blocking in vehicle access. Creating a permeable surface and natural storm trench would assist with minimizing snow gathered on the laneways. A strategy to mark setbacks during winter months would allow vehicle traffic on packed snow and the protection of landscaping and structural elements.

Precedent: The Chicago Green Alley Handbook.50

**Hydro**

Existing Laneway Policy: Distributed above ground along streets and some laneways.

Existing Requirements: If there is no existing hydro line, permission from a street facing property can be acquired to carry a new line above ground onto a laneway property.

Proposed Laneway Strategy: Distribute underground hydro line along any laneways without existing hydro.

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**Storm Water Management**

Existing Laneway Policy: Drainage provided along laneways underground.

Department & Regulations: Toronto Works & Emergency Services.

Proposed Laneway Strategy: Convert paved laneways and design new laneways using permeable surfaces using pavers and landscaping. Additional foliage, green roofs and ponds would limit storm water runoff, reducing the Heat Island Affect and creating a more environmentally sustainable condition.

Precedent: The Chicago Green Alley Handbook outlines the process of converting paved laneways to permeable surfaces with greater foliage, green roofs and natural storm water trenches and ponds.51

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51. Ibid.
CHAPTER 4: DESIGN GUIDELINES

Block Patterns / Urban Typology

Shim and Chong outline the urban typology of existing laneways in the city of Toronto in *Site Unseen* (fig 34).\(^{52}\) In addition to Shim and Chong’s laneway typologies, figure 35 illustrates four significant laneway conditions that present different challenges to laneway design.

![Laneway typologies](image1)

Fig. 34 Laneway typologies, Shim & Chong, Site Unseen

![Laneway conditions](image2)

Fig. 35 Laneway conditions

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For example, it is unadvised to develop on impasse laneways as they are highly restricting. The thesis intent is to provide an in-depth study of the most common, generally speaking, and the most challenging laneway condition in order to provide a set of principles that can be applied to most laneways. The typical thruway lane provided an opportunity to explore many of the challenges that apply to laneway design.

**Technical**

Proposed is a set of guidelines applicable to residential blocks in the existing neighbourhoods of Toronto. The following diagrams propose a strategy for density, circulation and lot severance to improve the laneways. Also provided are applicable existing bylaws and regulations.

**Density**

The Greater Toronto Area is forecasted to grow by 2.7 million residents and 1.8 million jobs by the year 2031. The forecast allocates to Toronto 20 per cent of the increase in population (537,000 additional residences) and 30 per cent of the employment growth (544,000 additional jobs).\(^5\)

Individual lots may only be eligible for a laneway dwelling if they meet the following criteria: 1) They have a minimum property width of 6 metres. This is based on Vancouver as a precedent, while taking into account existing property widths in Toronto. Vancouver has a minimum property width of 9.8 metres required to be eligible for a laneway dwelling. In Toronto, 6 metres provides a livable space while reaching an appropriate number of properties to create an impact.

2) Residential properties must have existing lot coverage no greater than 35 per cent. This is based on Maya Janikowski’s study, challenging Jeffery Stinson’s recommendation that 30 per cent lot coverage is acceptable for intensification. Janikowski suggests extending that percentage will be more affective for Toronto.\(^5\)

3) They must have a minimum side yard setback of .9 metres, providing an easement for laneways properties. Easements may be utilized for infrastructure, fire access and/

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54. Maya Janikowski, “This is (NOT) a Laneway: Envisioning Toronto’s Future Mid-Block Communities” (Ryerson University, 2008) 46.
Alternative programming such as a home office, local business, studio, workshop or gallery can be allowed at 1 storey on properties with lot coverage no greater than 45 per cent. The 6 metre property width and minimum side yard setback of .9 metres are still required. According to the Toronto Official Plan: “more recently, as the economy has changed, thousands of Torontonians have begun working from their homes, creating valuable economic activity, enhancing safety providing “eyes on the street”, and reducing trips to work.”  

one story garage). Improving the quality of the space while engaging the laneway in a new form of community and human scaled interaction.

Fig. 38 Typical residential block illustrating eligible laneway properties for alternative programming

Open space is also required on the laneway in order to create modest, appropriate density. Existing opportunities for open space on the lane require revitalization. Areas such as parks, parking lots and additional thruways meet laneways without consideration for pedestrian access or quality of space. In addition to the one metre setback acquired by the City over time from individual property owners, a proposed 3-7 metre setback could provide open green space on the laneway, when possible. This would require cooperation from community, the city and individual property owners. And could provide programming such as; bike share, community gardens, outdoor seating and recreational areas. Open space is also achievable by the proposed one metre setback from the laneway, outlined in the design principles.

Fig. 39 Typical residential block illustrating potential open space on the laneway
Circulation and Parking

Laneways currently accommodate the vehicle, providing multiple thruways and access points. This is a proposal to provide open green space and ease of access for pedestrians by reducing the number of vehicle thruways. Where there is one sufficient vehicle thruway all other laneways will provide pedestrian-only access. These spaces will provide safe pedestrian access, community gardens, outdoor seating, more pedestrian friendly lighting, bike share, and public art, potential for exhibitions and installations and even public transit stops.

Alternative means to parking take into account two conditions. First, that new dwellings or even new home owners are of a new demographic. The use of car share, bike share, a walkable commute, local amenities, services and business,’ as well as TTC access or a live/work situation allows them to live in the core of the city without the need or added cost.

Fig. 40 Typical lot plan illustrating potential alternative parking spaces

Fig. 41 Typical residential block illustrating vehicle circulation
of a vehicle. Therefore, a parking space is not required. The second is that it may be necessary to accommodate the existing parking space. Therefore the following alternatives would need to be considered on a case-by-case basis: 1) The option to provide a laneway development while maintaining the parking facilities, 2) Front yard parking, if possible, 3) A city provided street parking pass to residents, or 4) Shared block parking lots located on the block. These would be acquired from existing city parking lots or commercial parking lots and provide spaces for residents parking only.

**Lot Severance**

Existing lot sizes and coverage vary and would create varying allowable depths for a laneway lot severance line. In order to provide a consistent lot line for new development on the laneway, proposed, is a lot severance line setback 7 metres from the existing laneway. Easements through the street facing property to the street are required for fire access and may be used for infrastructure or pedestrian access if possible. Multiple lots can be consolidated.

In the case of a dwelling, lots will be severed with an easement. Any commercial or retail developments also require severance with an easement. If fire access is provided alternatively, an easement is not required and a lot may be severed without street access.

![Fig. 42 Typical residential block and proposed lot severance line](image1)

![Fig. 43 Typical residential block and proposed property lines for eligible laneway lots](image2)
**Principles**

Proposed are three guiding principles to laneway design. They are derived from the existing character of the lane, a study of existing policy and bylaws and with respect to the character of the neighbourhoods. The following illustrations provide a set of rules to guide appropriate, modest density and improve the quality of space on the laneways.

The three guiding principles are:

1) Rhythm and Pattern: rules defining setbacks and dimensions unique to the laneway. (fig. 45)

2) Green Space: establishes setbacks and requirements for landscaping and foliage along the laneway as well as a strategy to protect the existing tree cover. (fig. 46)

3) Pedestrian Use: prioritizing the pedestrian over the vehicle establishing a safe and pedestrian friendly environment on the laneway. (fig. 47)
Fig. 45 Guiding principles diagram; rhythm and pattern
Green roofs, landscaping, permeable surfaces and foliage creates an environmentally sustainable environment as well as a lively, pedestrian friendly space.

Proposed 1m setback requires permeable groundcover with 50% landscaping.

Green roof

Landscaped patio

Structure set back to protect existing tree canopy.

Fig. 46 Guiding principles diagram; green space
CHAPTER 5: DESIGN

Design Intentions

Existing Character

The first, is to maintain the existing character of each of Toronto’s neighbourhoods. Lane-
ways provide an opportunity to extend the life and quality of existing neighborhoods even
further. Improving the overall quality of the laneway as well as providing a stronger sense
of local identity.

Connectivity

Improving connectivity to the laneways will improve the quality of the space and restore
their authentic value of once providing a network throughout the city. This can be made
possible by; connecting laneways to existing infrastructure and services; improving ped-
estrian access; and, improving negative threshold conditions by better connecting lane-
ways to existing surrounding public space.

Walkability

Decreasing use of the vehicle on laneways by finding alternatives to parking and circu-
lation (when possible) will improve the overall quality of the lane. While creating more
walkable, sustainable and environmentally responsible communities, it can both improve
quality of life for existing residence and provide diversity and density.

Safety

Encouraging more human activity on the lane creates “eyes on the lane”. Decreasing
‘fortress’-like privacy walls and creating active frontages will improve safety and use. Cre-
ating a strategy for fire safety and emergency services is required for prospective new use
of the laneways.

Community Initiative

Change should be fostered and organized by the existing neighbourhood. A city-wide
planning strategy should enable neighbourhoods to find a best fit for their community while
providing regulations and planning strategies suitable to all laneways.

**Diversity**

Laneways provide an opportunity to create mixed-use neighborhoods within an existing infrastructure. Offering local services, business and closer amenities will create a more sustainable economy and social infrastructure within growing neighbourhoods. With programming, such as: bike share, home offices, local business, studio space, community services and rental housing.

**Test Block**

**Site**

The neighbourhood of Trinity-Spadina is located in the City of Toronto. A residential neighbourhood in the urban core, it has commercial zoning along the main arteries and residential streets with laneways.

![Map of Toronto, highlighting existing laneways and Trinity-Spadina neighbourhood](image)
Fig. 49 Map of Trinity-Spadina neighbourhood and test block

Fig. 50 Existing test block
**Block Analysis**

Fig. 51 Existing test block; existing and proposed setbacks

Fig. 52 Existing test block; eligible properties for laneway dwellings and laneway programme

Fig. 53 Existing test block; proposed block circulation and pedestrian laneways

Fig. 54 Existing test block; proposed design interventions
Design Interventions

*The Mid Lot Studio*

A Studio space for entrepreneurs, this provides a live home, work in the backyard opportunity for young professionals.

Fig. 55 Mid lot studio render from laneway
Fig. 57 Mid lot studio, perspective axonometric

Fig. 58 Mid lot studio, existing, guidelines and architectural language diagram
The Corner Lot Bakery

The scale of the laneway provides the perfect fit for small, local business. Providing an opportunity for greater diversity for local residents as well as new opportunities for home grown business and a local economy.

Fig. 59 Corner lot bakery render from laneway, looking west

Fig. 60 Corner lot bakery render from laneway, looking south
Fig. 62 Corner lot bakery section 01 and 02
Fig. 63 Corner lot bakery perspective axonometric

Fig. 64 Corner lot bakery existing, guidelines and architectural language diagram
**Laneway Path**

By simply reorganizing vehicle traffic on the lane a pedestrian-only laneway is created. This provides a pathway through the block that is safe and inviting for pedestrians. It can accommodate bike share, community gardens, seating and safe, open green space in the community.

![Laneway path perspective axonometric](image1)

**Fig. 65** Laneway path perspective axonometric

![Laneway path cross section](image2)

**Fig. 66** Laneway path cross section
Fig. 68 Laneway path render looking down laneway, from Markham Street

Fig. 69 Laneway path render looking down laneway, from Palmerston Avenue
CHAPTER 6: CONCLUSION

The city of Toronto’s laneways have a unique character and existing built form, embedded in the history and culture of Toronto. Other North American cities and Vancouver, Canada allow the development of laneway housing on a city scale. The City of Toronto has no existing planning policy and a unique opportunity to grasp a new approach to residential laneways. If we continue to ignore city scale planning issues and consider each laneway dwelling on a case by case basis the laneway will become overcrowded and continue to have privacy, safety and infrastructural concerns. Existing laneway literature in Toronto has proved the value and potential for low rise intensification on the laneways. This thesis is not a proposal for laneway housing, it is a strategy to improve and revitalize existing laneways in residential neighbourhoods. It is a stepping stone, to ensure future intensification is not fractured from the rich, existing fabric of the city.

The laneways are only as good as the sum of their parts. Disjointed development stands in the way of a unique laneway architectural language. A language that is true to their historical role in the city. In order for laneway rehabilitation to be possible, cooperation from the city, community and servicing bodies is required. The City of Toronto requires a laneway planning policy, an improved application process that includes block strategies and sustainable practices, and a set of guidelines for laneway design. Communities need a strategy and city scale organization to represent them. Individual organizations require design and planning strategies to enable servicing and infrastructure on the lane. And finally, cultural organizations can influence change and partake with active laneway strategies.

Figure 70 illustrates a prospective block with a ‘living laneway’. A cohesive, open approach to the laneway which represents the outcome of a planning strategy utilized at the scale of the block. Using a set of technical guidelines and design principles it creates a space that benefits the common good.
Fig. 70 Prospective block; living laneway

- Commercial on main arteries
- Pedestrian laneway open, community space
- Potential laneway dwellings 6% density increase
- Pedestrian laneway with vehicle access for servicing
- Small scale, local commercial on laneway
- One vehicle thruway laneway traffic reduced
- Parking

Locations:
- College St
- Markham St
- Palmerston Ave
The thesis intent was to provide a method of modest, appropriate intensification on the laneway. In the end the architecture itself was very modest. I think this was proof of the intent. The built form proving to be of a ‘right fit’ on the lane is that which is foremost, respectful of the laneway’s unique character. The tree canopy and overgrown foliage taking on the miles of pavement are enough to intrigue one to take the laneway on a beautiful summer day. The graffiti we call “street art” is given its name because this is one of few places in the city it will not be washed away and rather, is celebrated. And the built form has remained over generations of social and cultural change. I find the existing character of Toronto’s laneways a place where modesty becomes exceptional. In the city, space is defined by rules and formalities, the informal quality of the laneway is what makes them unique. Twentieth century planning and zoning regulations have left city goers with few places that have age old architectural principles we desire. Spaces that make us feel a part of the streetscape, are human scaled and give us a sense of place. With any hope, this thesis explores the endless possibilities of embodying this human scaled space in a city that is rapidly growing taller. It provides a practical study of the potential to improve the quality of the laneways. And it presents new opportunities for rich, inviting spaces which give way to a new generation of laneway habitation.
BIBLIOGRAPHY


