

A Living Room for Milton

by
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Author's 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

Milton, Ontario is one of many smaller Canadian cities that has absorbed the sudden growth brought on by a combination of the lack of affordable housing prices and access to major employment lands in larger urban centres. In the process of this growth, the city has begun to run out of space for sprawl due to its unique geography, and is now looking to densify its downtown core. However, what is left in the middle of the city has long been neglected, empty of character or identity. The few built projects in the newly delineated city centre demonstrate a future indistinguishable from the present, where more profit driven and introspective developments will stake their claim.

Within this context, this thesis looks to community building as a way to restitch the fractured landscapes of Milton, and to reclaim

the identity of a new city centre for its citizens. The thesis begins with a photoessay that I have captured and curated over the span of 2019. It is a study of the state of communities in Milton, and a critique of their degradation. This critique is then addressed by four principles derived from a series of successful projects and contextual conditions. Finally, the thesis proposes two major interventions for Milton's urban centre. First is the creation of a public park and rail-side mobility lane that link the public spaces of Milton. And second, a reimaged high school for the arts and public theatre as a community hub. In its entirety, the designs aspire to create a dignified public space of community, learning, and culture through accessibility, transparency, and collaboration.

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Thank you to Maya Przybylski, my first term thesis research and design instructor, for kickstarting this whole process, and substantiating my initial interests to one worthy of thesis research.

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Table of Contents

Author's Declaration	iii
Abstract	v
Acknowledgements	vii
List of Figures	xi
Introduction	1
<i>Exhibit A: An Impression of Milton</i>	3
<i>Exhibit B: Design Principles for Community Spaces</i>	53
1. Reconnecting the Public Realm	55
2. Intensity Through Specific Activities	57
3. Community School	59
4. Community Through the Arts	61
<i>Exhibit C: A Living Room for Milton</i>	63
1. Artery	65
2. Pathway	67
3. Site	69
4. Design	75
Conclusion	103
Bibliography	105

List of Figures

*All images original by author unless otherwise noted

- fig. 1 Map excerpt from Growth Plan for the Greater Golden Horseshoe, 2017 (https://files.ontario.ca/appendix_-_growth_plan_2017_-_oc-10242017.pdf) **pg.4**
- fig. 2 Photo essay, drone aerial view **pg.5**
- fig. 3 Photo essay, drone aerial view **pg.6**
- fig. 4 Photo essay, drone aerial view **pg.7**
- fig. 5 Map of Milton's land use proposals **pg.8**
- fig. 6 Map of current Milton land usage **pg.9**
- fig. 7 Map of projected 2033 Milton land usage **pg.9**
- fig. 8 Photo essay, Habitat for Humanity thrift store beside vacant lot in Urban Growth Centre **pg.11**
- fig. 9 Photo essay, Milton road expansion **pg.12**
- fig. 10 Photo essay **pg.13**
- fig. 11 Photo essay **pg.14**
- fig. 12 Photo essay, residues of road construction **pg.15**
- fig. 13 Photo essay, Niagara Escarpment **pg.16**
- fig. 14 Photo essay **pg.16**
- fig. 15 Photo essay **pg.17**
- fig. 16 Photo essay **pg.18**
- fig. 17 Photo essay **pg.19**
- fig. 18 Photo essay, shifting boundaries at the outskirts of the city **pg.20**
- fig. 19 Photo essay **pg.21**
- fig. 20 Photo essay, school sport fields in winter **pg.22**
- fig. 21 Photo essay **pg.23**
- fig. 22 Photo essay, new condo development beside Milton GO station parking **pg.24**
- fig. 23 Photo essay, contrasting edges between new and old **pg.25**
- fig. 24 Photo essay **pg.26**
- fig. 25 Photo essay, worn warehouse in the Urban Growth Centre beside vacant lot **pg.27**
- fig. 26 Photo essay, details of worn warehouse **pg.28**
- fig. 27 Photo essay, details of worn warehouse **pg.28**
- fig. 28 Photo essay, details of worn warehouse **pg.29**
- fig. 29 Photo essay, organic growth at back of warehouse lot **pg.31**
- fig. 30 Photo essay, organic growth at vacant lot **pg.31**
- fig. 31 Photo essay, looking east on Main St. underpass **pg.32**
- fig. 32 Photo essay **pg.33**
- fig. 33 Photo essay **pg.34**
- fig. 34 Photo essay, some of many leftover cars by auto dealerships around the Urban Growth Centre **pg.35**
- fig. 35 Photo essay **pg.36**
- fig. 36 Photo essay, looking towards the GO station to the north **pg.37**
- fig. 37 Photo essay **pg.38**
- fig. 38 Photo essay, lots planned for high density development **pg.39**
- fig. 39 Photo essay, paved concrete floor of demolished warehouse **pg.40**
- fig. 40 Photo essay **pg.41**
- fig. 41 Photo essay **pg.42**
- fig. 42 Photo essay **pg.42**

- fig. 43 Photo essay **pg.43**
- fig. 44 Photo essay **pg.44**
- fig. 45 Photo essay **pg.45**
- fig. 46 Photo essay **pg.47**
- fig. 47 Photo essay **pg.48**
- fig. 48 Photo essay **pg.48**
- fig. 49 Chart of % U.S. adults who use the internet, by community type. (<https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>) **pg.50**
- fig. 50 Chart of % U.S. adults who use the internet, by age. (<https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>) **pg.50**
- fig. 51 Photo essay **pg.52**
- fig. 52 Public Realm Diagram from Milton Mobility Hub Study (<https://www.milton.ca/en/business-and-development/resources/Major-Transit-Station-Boards-2019-06-25.pdf>) **pg.54**
- fig. 53 Aerial Photo of Olympic Sculpture Park by Weiss Manfredi (<http://www.weissmanfredi.com/project/seattle-art-museum-olympic-sculpture-park>) **pg.54**
- fig. 54 Diagram model of Olympic Sculpture Park by Weiss Manfredi (<http://www.weissmanfredi.com/project/seattle-art-museum-olympic-sculpture-park>) **pg.54**
- fig. 55 Photo of art exhibition by Creativehub1352 (https://www.instagram.com/creativehub_1352/) **pg.56**
- fig. 56 Photo of dance performance by Creativehub1352 (https://www.instagram.com/creativehub_1352/) **pg.56**
- fig. 57 Photo of board of directors meeting by Creativehub1352 (https://www.instagram.com/creativehub_1352/) **pg.56**
- fig. 58 Diagram of school as community hub by Canadian Centre for Policy Alternatives (https://www.policyalternatives.ca/sites/default/files/uploads/publications/ourselves/docs/OSOS_Summer10_Preview.pdf) **pg.58**
- fig. 59 Photos of intergenerational learning by Canadian Centre for Policy Alternatives (https://www.policyalternatives.ca/sites/default/files/uploads/publications/ourselves/docs/OSOS_Summer10_Preview.pdf) **pg.58**
- fig. 60 Photo essay, exterior of school **pg.58**
- fig. 61 Photo of School of Narrative Dance Project by ASSEMBLE (<https://assemblestudio.co.uk/projects/the-school-of-narrative-dance/>) **pg.60**
- fig. 62 Photo of Folly for a Flyover by ASSEMBLE (<https://assemblestudio.co.uk/projects/folly-for-a-flyover/>) **pg.60**
- fig. 63 Rail map diagram, base map from Google Maps **pg.64**
- fig. 64 Change in elevation diagram, base map from Growth Plan for the Greater Golden Horseshoe 2017 (https://files.ontario.ca/appendix_-_growth_plan_2017_-_oc-10242017.pdf) **pg.65**
- fig. 65 Pathway design diagram, base map from Google Maps **pg.66**
- fig. 66 Pathway design section diagram, base map from Google Maps **pg.67**
- fig. 67 Site map, base map from Google Maps **pg.68**
- fig. 68 Current context diagram, base map from Google Maps **pg.69**
- fig. 69 Future context diagram, base image from Milton Mobility Hub Study (<https://www.milton.ca/en/business-and-development/resources/Major-Transit-Station-Boards-2019-06-25.pdf>) **pg.69**

- fig. 70 Photo essay, drone aerial view **pg.70**
- fig. 71 Photo essay, drone aerial view **pg.71**
- fig. 72 Photo essay, drone aerial view **pg.72**
- fig. 73 Photo essay, drone aerial view **pg.73**
- fig. 74 Underpass proposal map, base map from Google Maps **pg.74**
- fig. 75 Morphology diagram 1 **pg.76**
- fig. 76 Morphology diagram 2 **pg.76**
- fig. 77 Morphology diagram 3 **pg.76**
- fig. 78 Morphology diagram 4 **pg.77**
- fig. 79 Morphology diagram 5 **pg.78**
- fig. 80 Morphology diagram 6 **pg.78**
- fig. 81 Morphology diagram 7 **pg.78**
- fig. 82 Hand drawn ground level axonometric **pg.81**
- fig. 83 Enlarged sub grade axonometric **pg.82**
- fig. 84 Enlarged sub grade axonometric **pg.82**
- fig. 85 Hand drawn sub grade axonometric **pg.83**
- fig. 86 Enlarged third level axonometric **pg.84**
- fig. 87 Enlarged third level axonometric **pg.84**
- fig. 88 Hand drawn third level axonometric **pg.85**
- fig. 89 Enlarged perspective school section **pg.86**
- fig. 90 Enlarged perspective school section **pg.86**
- fig. 91 Hand drawn perspective school section **pg.87**
- fig. 92 Enlarged perspective gymnasium section **pg.88**
- fig. 93 Enlarged perspective gymnasium section **pg.88**
- fig. 94 Hand drawn perspective gymnasium section **pg.89**
- fig. 95 Rendering of north school entrance **pg.90**
- fig. 96 Rendering of gymnasium during festival **pg.91**
- fig. 97 Rendering of performing arts centre from underpass **pg.92**
- fig. 98 Enlarged perspective theatre section **pg.94**
- fig. 99 Enlarged perspective theatre section **pg.94**
- fig. 100 Hand drawn perspective theatre section **pg.95**
- fig. 101 Rendering of cafe bookstore **pg.96**
- fig. 102 Rendering of west lecture hall **pg.98**
- fig. 103 Enlarged site aerial of future developments **pg.100**
- fig. 104 Enlarged site aerial of future developments **pg.100**
- fig. 105 Hand drawn site aerial of future developments **pg.101**
- fig. 106 Photo essay, looking towards Niagara Escarpment from Derry Rd. in Milton **pg.102**

Introduction

The phenomenon of various attempts to densify and renew in existing edge, suburban or post-suburban cities is not a new one. Bureaucracies, developers, designers, and buyers are all realizing, or starting to realize the benefits of creating environments that embraces density, interconnectivity, and diversity¹. Regardless of whether this realization have come proactively or retroactively, the fact remains, the sprawling suburbanscapes which have become so ubiquitous in the boundaries of North American metropolises have contributed to much of the sufferings of our physical and mental health, of the environment, and the economy². Yet much potential often already exists within these communities. So the question is not whether the suburban landscape is in need of improvement, but rather through understanding the methods which are attainable and effective.

^{1,2} Ellen Dunham-Jones, and June Williamson, Foreword and 2011 Update. In *Retrofitting Suburbia*, Updated Edition. Wiley, 2011.

Exhibit A:
Milton: An Impression

fig. 2 (right) Aerial view of Milton's south corner.

“Will we ever be proud of this place?... Will it ever be the place we want to call home?”

Joel Garreau, Edge City: Life on the New Frontier³

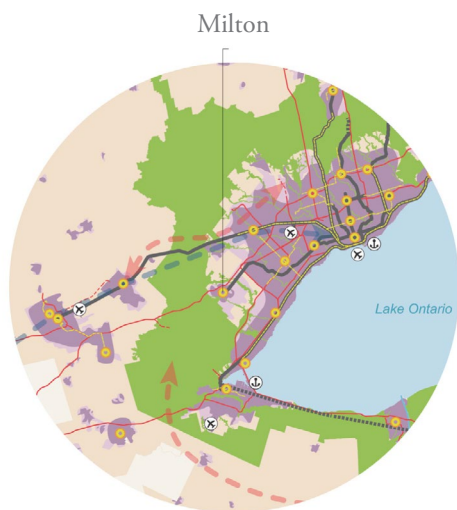


fig. 1
Map excerpt from Growth Plan for
the Greater Golden Horseshoe

Milton is a city in Ontario's Greater Golden Horseshoe that is “...forecast to experience significant population and employment growth. Between 2016 and 2036, Milton's population base is forecast to increase by approximately 166,000 persons which represents an annual population growth rate of 4.6% annually. Over the next 20 years, the Town of Milton's population is forecast to grow at a rate which is close to double that of Halton Region and almost five times the provincial average.”⁴

³ Joel Garreau. *Edge City: Life on the New Frontier*. Anchor Books, 1992.

⁴ *Land Base Analysis, Land Base Assumptions, Key Findings & Secondary Planning Framework*. Markham: Malone Given Parsons Ltd. 2017. Accessed Sept 2019.



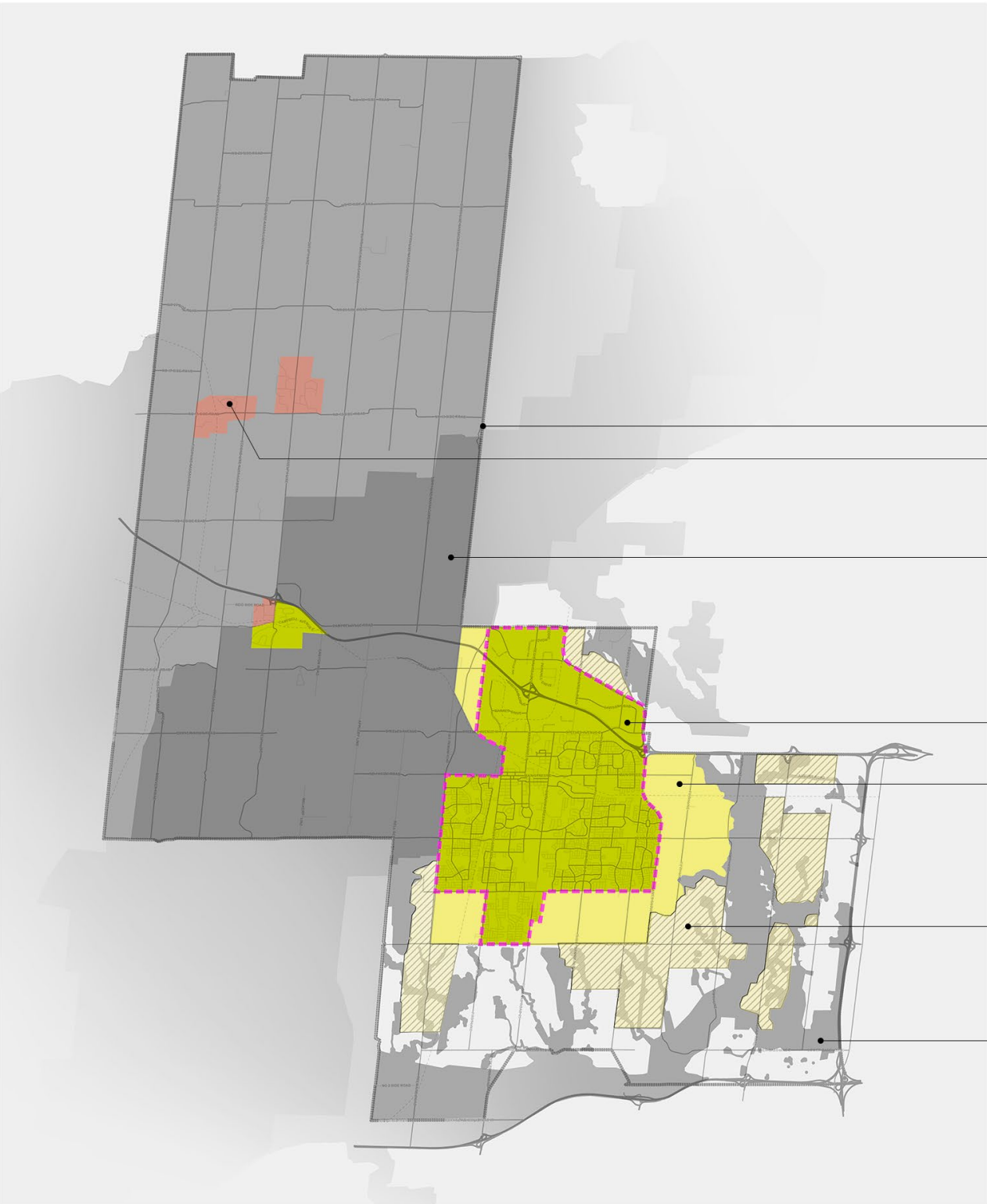


fig. 3 Aerial Photo of the Mattamy National Cycling Centre, Milton



fig. 4

fig. 5 Map of Milton's land use proposals with information from Land Base Analysis



- municipal boundary of Milton**
- hamlets**
 limited growth permitted, subject to policies of the Growth Plan
- niagara escarpment plan area**
 the majority are escarpment natural and protection areas, which does not permit any developments above single dwellings. accessory developments that promote or protect the escarpment are permitted.
- existing urban area**
- urban expansion area / sustainable halton lands**
 currently as part of the Second Plan Area and is undergoing land base analysis alongside other studies. proposals of land use are being considered. area not to be developed until post 2033
- urban area approved / in development**
 contains both residential and business/ industrial developments. current density is low - undeveloped.
- protected countryside**
 delineated under the Green Belt Plan. includes three geographic specific policies: agricultural, settlement, and natural areas. large residential developments are forbidden.

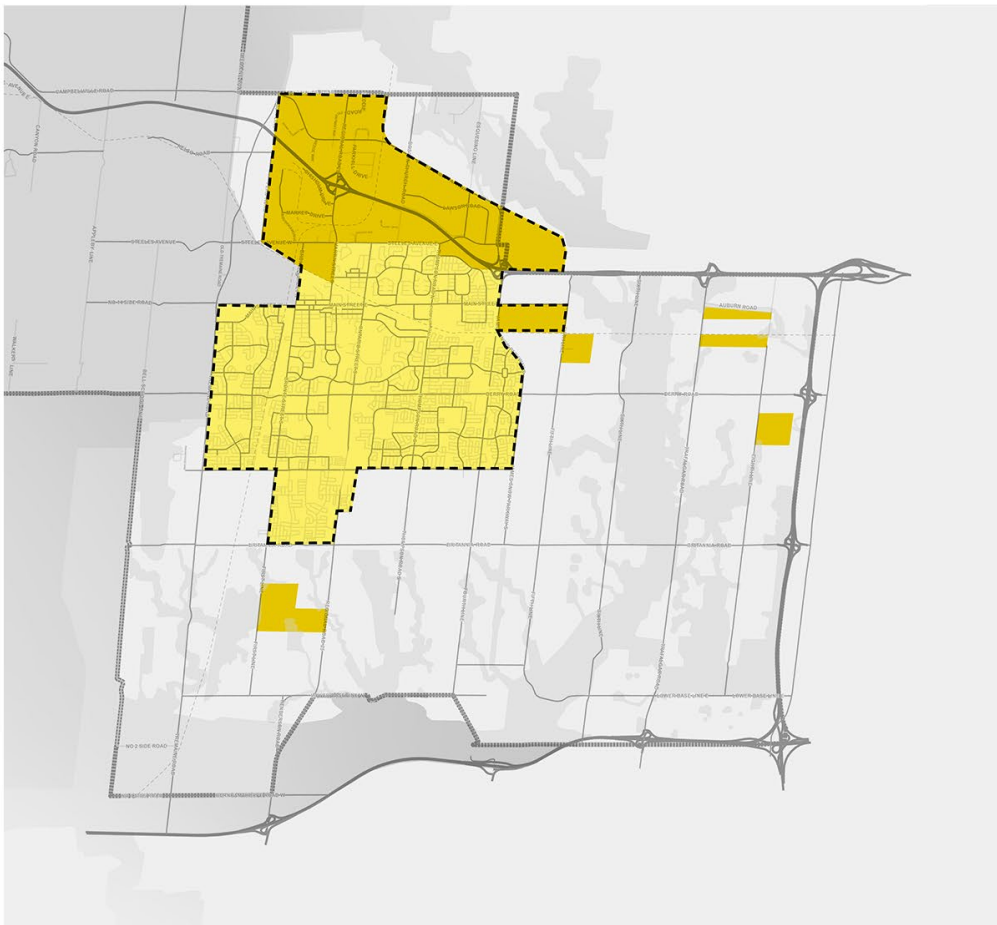


fig. 6 Map of current Milton land

2019

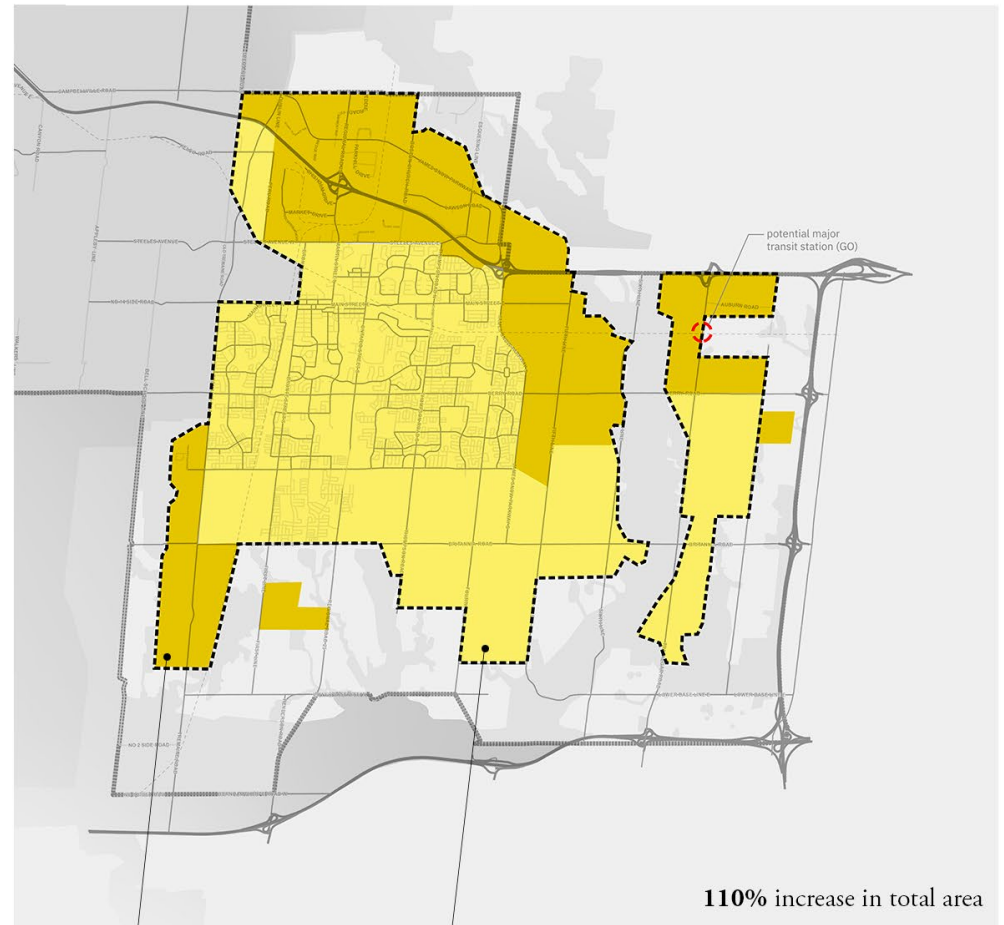


fig. 7

employment areas

community areas

110% increase in total area

(Projected) 2033

With this growth came challenges and limitations in Milton's available lands for development. Due to Milton's adjacency to the Niagara escarpment, Green Belt Plan's protected countryside delineations, and neighboring city's borders, its capacity to sprawl will soon run out. If the speed of expansion follows the trend of the last decade⁶, spaces for sprawl could expire in two to three decades.

The provincial Growth Plan has long acknowledged a need to intensify both existing developed lands as well as new developments through density targets and other guidelines. Milton, as an Urban Growth Centre, has pursued both land use studies of the city's remaining develop-able lands, as well as an intensification zone titled the "Urban Growth Area" at an existing and central area of the city.

⁶ Statistics Canada. *2016 Census of Canada Population and Dwelling Count Highlight Tables*. Ottawa, On. 2016. Accessed Feb, 2019.

It is within this delineated “Growth Area” that I have captured most of this photo essay. I was first drawn to its pace of change, its temporal density due to transit, and a promise of its future. I hope to have captured an identity of Milton’s of this moment in time.

The photos presented here are a selection from more than four hundred captured. Their sequence within this thesis are arranged to best examine the “Growth Area” and Milton’s urbanscapes, as well as to invoke thoughts beyond immediate appearances through their pairing. The process of photographing almost always start with a walk from one of the many public parking lots by the GO Station, and my camera slung around my shoulder.



fig. 8



fig. 9



Lots in anticipation of employment land expansions fig. 10

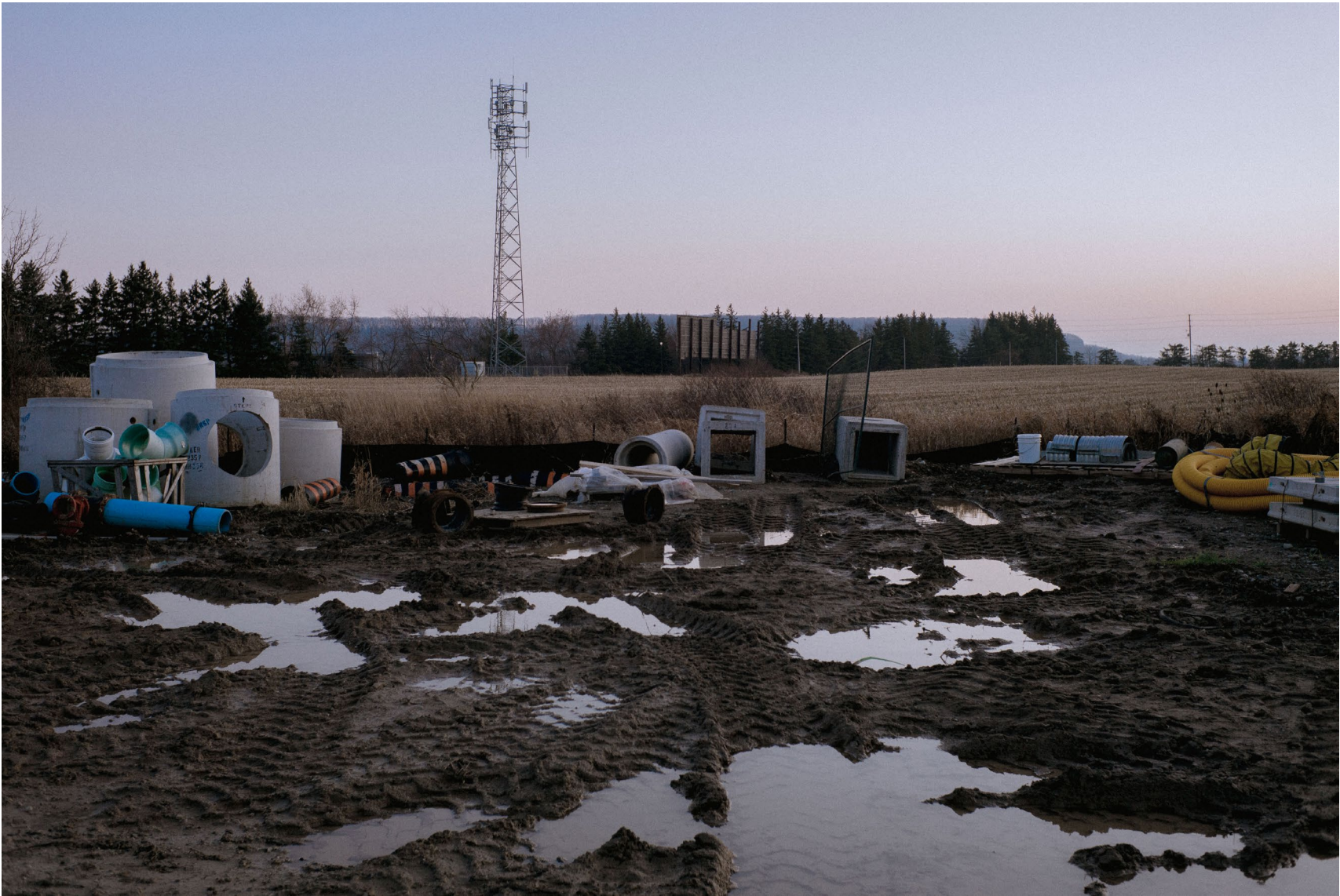


fig. 11 Residues of road building towards the west



fig. 12



fig. 13

“Much of it occupies what was until recently rural land--destroying, incidentally, such age-old social arrangements as the distinction between city life and country life. To me, it is a landscape of scary places, the geography of nowhere, that has simply ceased to be a credible human habitat.”

James Howard Kunstler, The Geography of Nowhere⁷

⁷ James Howard Kunstler. *The Geography of Nowhere: The Rise and Decline of America's Man-made Landscape*. Touchstone, 1993. Page 15.



fig. 14



fig. 15



fig. 16 Rural home at the boundary of the city



New suburban developments near Growth Centre fig. 17



fig. 18



A common sight in Milton fig. 19



(left) fig. 20



Numerous portable classrooms erected around schools fig. 21

His school already has more students than space. Sixteen portables serve as classrooms; there's room for two more on the field. Mr. Marshall knows he will fill them. Just outside the school building, yellow machinery rumbles over old farmland, clearing the path for rows of tightly packed new homes for even more young families.

"They're coming towards us," Mr. Marshall says, glancing out the window. "The rapid growth here is something that I've never seen."

*Caroline Alphonso, The Globe and Mail*⁸

⁸ Caroline Alphonso, "In Milton, Ont., Crowded Classrooms Put Canada's Fastest-Growing Town to the Test," The Globe and Mail, December 19, 2016, <https://www.theglobeandmail.com/news/national/education/in-milton-ont-crowded-classrooms-put-canadas-fastest-growing-town-to-thetest/article33333444/>



fig. 22



fig. 23



fig. 24 A parcel of empty land in the middle of the Growth Centre



fig. 25



fig. 26



fig. 27



fig. 28

⁹ Joel Garreau. *Edge City: Life on the New Frontier*. Anchor Books, 1992.

Edge City's problem is history. It has none. If Edge City were a forest, then at maturity it might turn out to be quite splendid, in triple canopy. But who is to know if we are seeing only the first, scraggly growth?

*Joel Garreau, Edge City*⁹



fig. 29



fig. 30



fig. 31



Junction between the rail and Main St. underpass fig. 32



fig. 33 Back of lots planned for future high density developments



fig. 34



fig. 35 Warehouse facility in the employment lands to the north



fig. 36



fig. 37 Lots planned for future high density developments



fig. 38

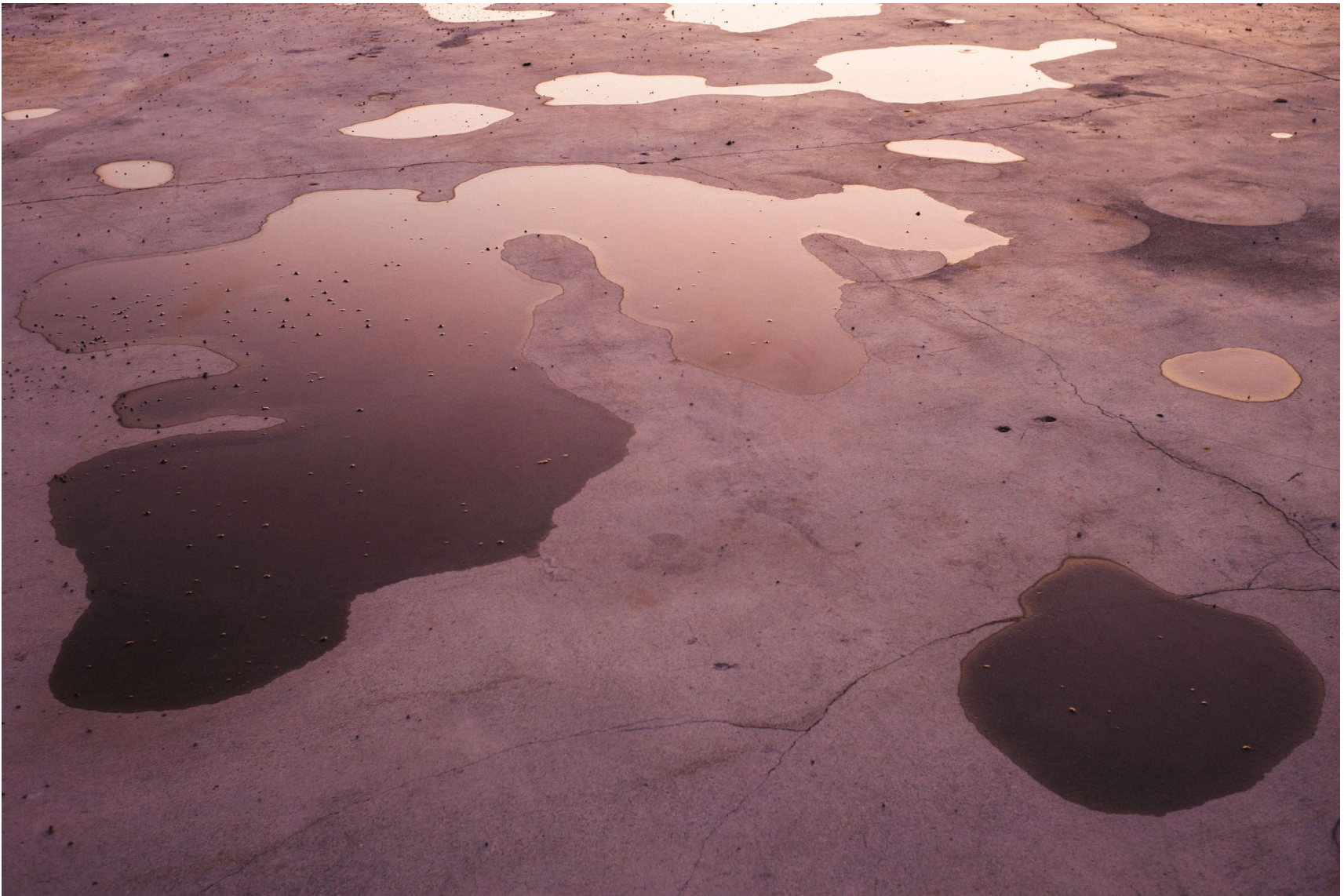


fig. 39 Remaining interior surface of warehouse that was recently demolished



Also planned for high density development fig. 40



fig. 41 Local cadet bands



fig. 42 Local Chinese dragon dance group

Staging Area at GO Station
Santa Claus Parade,
Milton 2019

While these photos undeniably describes Milton, I don't know if I found the identity that is Milton's beyond a few recognizable landmarks. The association one might have with these places would more likely be formed through personal experiences that were routine than through one's conscious desires to interact and appreciate. Beside the criticisms of the ambiguity of identity itself, the argument for the growing absence of identity in a changing city like Milton is a common one. Its causes and effects typical. If the identity of a place can be simplified and summarized into its

appearance and geography¹⁰, and its connection to an individual or community's experiences through time as a form of social imprint¹¹, Milton have been loosening its grip on both interpretations of its sense of place. Its physical character eroding through generic for-profit developments and formulaic planning studies, and more importantly, its people's experiences with place uninspired and unwoven as the city continues to expand without intentional directions towards building community.

¹⁰ Lynch, Kevin. *The Image of the City*. Cambridge, MA: MIT Pr., 1979.

¹¹ Tuan, Yi-Fu. *Space and Place: the Perspective of Experience*. Minneapolis: University of Minnesota Press, 2001.



Milton GO Station fig. 43



fig. 44 Looking across the rail towards the vacant lot in the middle of Growth Centre



The other side of the rail and Main St. junction fig. 45

“The world of the immigrants and pioneers is not dead in America; it has just moved out to Edge City... It adds another level of history to places already filled with ghosts. That is why one day Edge City, too, may be seen as historic. It is the creation of a new world, being shaped by the free in a constantly reinvented land.”

Joel Garreau, *Edge City: Life on the New Frontier* ¹²

Perhaps it is also overtly optimistic and unrealistic to expect uniqueness for instant cities. If a sustainable, efficient, and habitable environment is the result of the developed edge city, is the search for identity a pursuit of vanity? In Dogan Kuban's essay of “What Identity, Whose Identity?” ¹³, he asks: “*Do we look for identity because we lost our identity? Maybe the latter question is nearer to our search. Modern culture is a culture of a lost man: lost in technology, lost in capitalism, lost in wars, lost in the struggle for power and money, lost in cultural chauvinism, lost in advertisements, lost in authority, lost in the landscape of sick urban areas, lost in debased philosophies and literature... Should we identify ourselves with this world which does not offer security?*” While Kuban admits his idiosyncrasies, his argument seems fitted against the search for symbolic and intentional designs for the unique. Evidently, cities like Milton

hardly ever attract the investments for design originality, but the question of whether it should be a criteria for most of the city's developments and retrofits remains relevant.

Maybe the right approach to take as cities like Milton develop is to stimulate spaces of community. After all, shared experiences reinforces an authentic and embodied identity for its participants. The approach to creating community also does not focus on the elusive and subjective target of an identity, but instead the democratic undertake for the creation of one. What's more, building community solves some of the key issues of the edge city. It authors history in a place where there is often little of, and has the potential to dissolve boundaries between changing demographics.

¹² Joel Garreau. *Edge City: Life on the New Frontier*. Anchor Books, 1992.

¹³ Herrle, Peter, and Dogan Kuban. “What Identity, Whose Identity?” Essay. In *Architecture and Identity*, 403–10. Berlin: Lit, 2008.

Underpass Onlookers, Santa Claus Parade, Milton 2019



fig. 46



fig. 47 Ravine between old suburban developments and new midrise condos



fig. 48 Chain link fencing around new neighborhoods

Fractures Seen

Where are existing community spaces in cities such as Milton? It certainly does not seem to find itself embodied through the physical spaces of the suburb if the term was defined by an urbanist. Nor does it reside in commercial and retail amalgamations if the definitions point towards the public. The kind of community spaces prevalent in these cities seems to end at archetypal building typologies such as the school, the church, or the cultural / community centre. The issue perhaps has not to do with their type, but rather they have not evolved to accommodate the changing demographics and landscapes of the growing city. New schools are built to specification of the previous with little forethought of future demands or alternate uses beyond the portable classrooms, and new cultural centres are built on block sized parking lots with little considerations for their context.

It may be too rash to criticize them as many were built to fulfill the essentials new developments demand, but this also point towards a major threat community spaces face in edge cities. The decentralization of community amenities as an effort to create

accessibility both contributes to a thinning of resources that were allocated to the building and operation of these spaces, as well as their intensity of use. In Alex Marshall's book *How Cities Work*¹⁴, he saw sprawl and its adjacent forces as the biggest cause for the fractures of the idea of physical community, and "*Because of all this, community has become an option rather than a fact of life.*" Furthermore, "*The delinking of commerce and most actions to physical place has drained and damaged us, even as it has increased our wealth as individuals. We finally need a physical place that also links us in ways that are not optional to a community.*" While the idea of mending the physical realm of suburbs has long been touted by the New Urbanists, its critics have also pointed towards the empty cosmetic changes it brings and calls for a state backed solution to transit and transportation.¹⁵

Nonetheless, fractures are yet a common sight in cities like Milton. From pristine condo developments surrounded by metres high chain link fencing next to the cracked and faded pavement of a automobile repair shop, to big box chain store plazas covering the entrance to

a road flanked with run down storage buildings. Are these merely the phenomenons of a developing city or do they represent our profit driven priorities? These contrasting sites have in ways broken the structure that communities are funded upon. A structure that is built with design excellence, permanence, and perhaps most importantly: sensitivities to its context. In James Kunstler's *Geography of Nowhere*¹⁶, he saw this sensitivity as a respect that we no longer have for our neighbors. "*Such awareness and respect were not viewed as a threat to individual identity but as necessary for the production of amenity, charm, and beauty. These concepts are now absent from our civilization. We have become accustomed to living in places where nothing relates to anything else, where disorder, unconsciousness, and the absence of respect reign unchecked.*" Still, can such respect co-exist with our changing modes of commerce and economy? And if so, how will communities continue to prosper?

¹⁴ Marshall, Alex. *How Cities Work: Suburbs, Sprawl, and the Roads Not Taken*. Austin: University of Texas Press, 2000.

¹⁵ Dewolf, Chris. "Why New Urbanism Fails." Planetizen, February 18, 2002. <https://www.planetizen.com/node/42>.

¹⁶ James Howard Kunstler. *The Geography of Nowhere: The Rise and Decline of America's Man-made Landscape*. Touchstone, 1993. Page 185

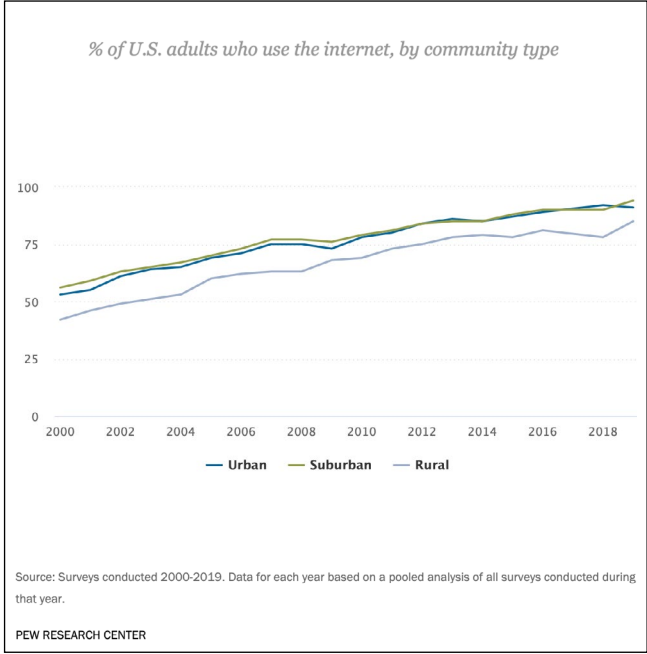


fig. 49

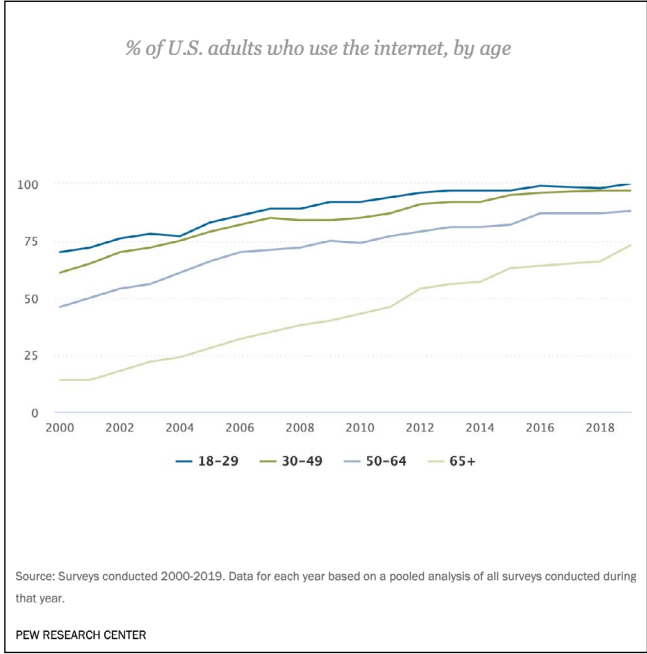


fig. 50

Fractures Unseen

In addition to being fractured physically, communities in cities such as Milton are also being redefined through our evolving technological habits and resultant behavioural shifts. The participation of online communities are almost, if not ubiquitous today. This prevalence speaks volumes of the importance of community and belonging as one of our ingrained social needs as a specie, and in many ways strengthen the argument for placing a priority on meeting this need physically as well. In the case of Milton, could our digital habits inform the design of physical community spaces?

Statistics from Pew Research Centre who tracks online usage data of Americans have seen higher percentage of internet users from suburban areas in comparison to urban and rural areas (fig. 49). This trend was visible through the last two decade. While the data does not describe the specific usage or demographics by region, it does show young adults to be the most active users across the entire dataset (fig. 50). One can imagine that being a teenager living in the suburbs without access to a car or license, while instinctively seeking social belongings will inevitably turn to digital methods' conveniences. However, the pliable minds of teenagers also exposes them to certain hazards online communities bring. In this situation, can

there exist an intermediate location where this demographic is both encouraged to explore the benefits of virtual communities, while being a part of a physical community that will provide help alongside this journey?

It is also undeniable that our culture of convenience have blossomed alongside, if not caused our increase in internet usage. In cities like Milton, issues such as inaccessibility and the lack of identity is cast aside and forgotten from the instant solutions of new technologies. Why worry about the distance and experience of shops and restaurants when we can order for instant delivery? Why bother going to the theatre when we can stream from our phones? These are just some of many cliches convenience culture have brought. While the critique of our desire for the convenient cannot exist without also acknowledging the positive changes it has brought. In the context of the edge city, has our search for convenience taken away focus and development from what would otherwise be tangible and local places of community?

For example, the discourse of the relationships between mass media and performing arts is extensive. In many ways, it is no longer a debate to win, but the realization that both sides are converging¹⁷. In the performing arts, new experiments (ex. interactive theatre)

have allowed theatres to reference digital mediums while embracing the benefits of live participation. This has made theatre relevant and fresh to new and seasoned audiences. However, these changes are often reflected fastest in culturally dynamic urban centres and slowest in suburban theatres—places where live participatory events have arguably more impact in creating social cohesion and identity. Whether this stagnation comes from the convenience seeking reclusive demographic or economic factors, engaging in performing arts is one of the ways of creating change. With this in mind, are there contextually feasible and faster ways of introducing new live performance ideas to the edge city?

In any case, most would agree that experimentation in design of spaces that serves communities is a necessary step in addressing the various forms of fractures and neglect the edge city has experienced. The proposed design of this thesis is one of such experiments that will attempt to create a dignified community space by leverage existing community programs and their relationships to transit and other contextual opportunities.

¹⁷ Auslander, Philip. "Ontology vs. History: Making Distinctions Between the Live and the Mediatized." Conference Archives: Auslander, October 6, 1997. <https://web.archive.org/web/20060906055120/http://webcast.gatech.edu/papers/arch/Auslander.html>.



fig. 51 Onlookers of the parade making use of the Main St underpass

Exhibit B:
Design Principles for
Community Spaces

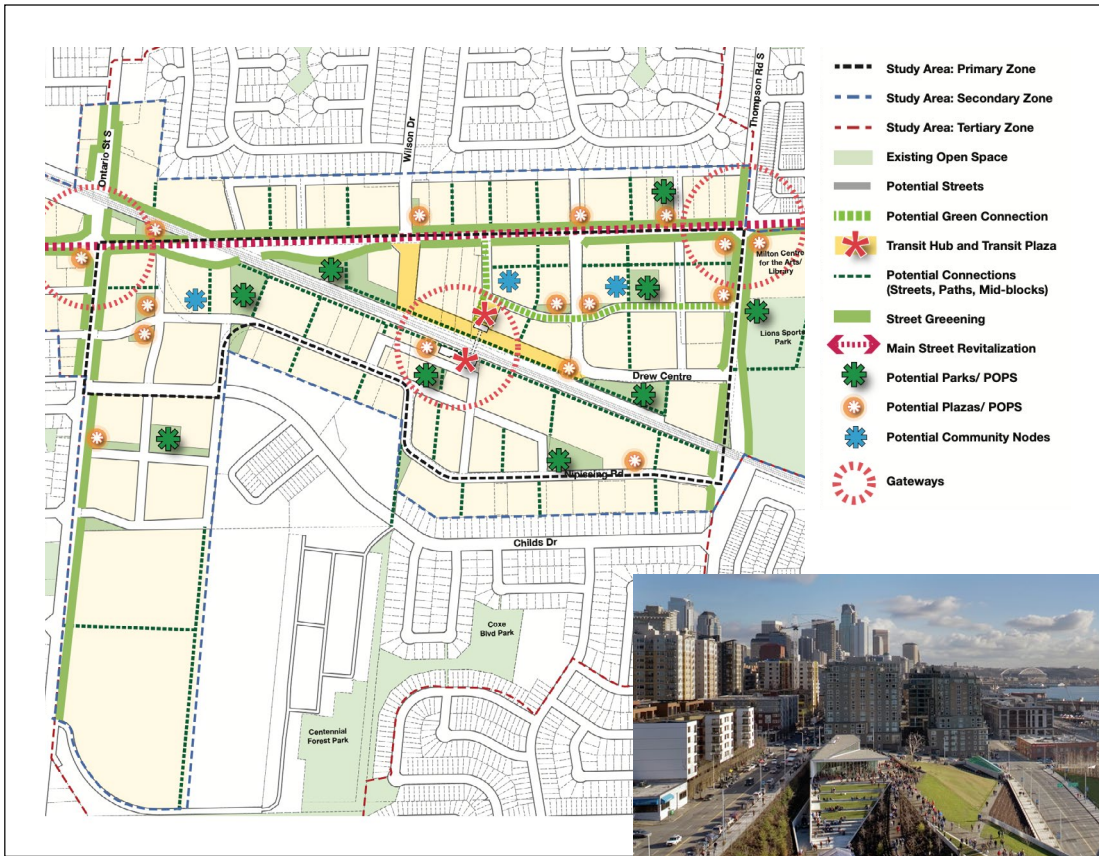


fig. 52 Public Realm Diagram (Mobility Hub Study)



Olympic Sculpture Park, Seattle fig. 53



fig. 54

Fractures Seen

1. Reconnecting the Public Realm

Within attempts to mend the fractures of the edge city landscape, reestablishing an accessible and connected public space is perhaps one of the most effective strategies. Ideas such as increased social encounters, fostering identity through sense of place, and resultant benefits to local economies are all net positives to the community, and are well understood¹⁸. Even though a successful public space has variables beyond an accessible space, an accessible space provides the foundation for building one.

To build an accessible public space in the edge city, issues of the urban scale must be addressed. Cul-de-sacs and fenced up employment land properties prevent any forms of efficient nor creative path findings, and often times cut off access between socially productive lands and its demographic. In the urban redevelopment of these cities, a municipal/public lead initiative is often needed to create some form of over-spanning logic to reintroduce a walkable, cycle-able infrastructure that can break up or circumvent the delineated landscape. This infrastructure can service a range of essential to social and recreative uses for the people, and act as an alternate artery for adjacent developments.

In Milton's recent Mobility Hub Study for the development of its urban centre, there are a series of more piecemeal ideas of this

connective infrastructure (Fig. 52). They are conveyed through smaller property parcels, redeveloped streetscapes, and new pedestrian connections. While these strategies are necessary in supporting a high density region, it is arguable that their efforts in creating a sense of community and place very much depend on the success of individual developments. With this in mind, is it possible for there to be a simpler and more identifiable means of creating an accessible and public connection?

Although not an edge city, Seattle's Sculpture Park project by Weiss Manfredi offers an outlook at how an architecturally focused project might be able to reconnect public realms and offer a productive social space (Fig. 53, 54). Built on an existing brownfield and rail infrastructure, the park cascades over a forty feet drop across rail lines and roads into the waterfront. In its gesture, it has reconnected waterfront to the urban fabric, and created an engaging public place through sculptural displays backdropped by fresh views of the city. While a project of this scope and gesture seems unlikely to be funded in Milton, could its strategies still be relevant for a gentler response?

¹⁸ *The Social Value of Public Spaces*. York: Joseph Rowntree Foundation, n.d.



fig. 55



fig. 56



fig. 57

Fractures Seen

2. Intensity Through Specific Activities

To curb edge city's physical fractures, the strategy of intensification at different scales seems to be another rule of the playbook. From urban renewal zones to mixed use developments, the smash up of people and activities create benefits from infrastructural and environmental savings to economic gains¹⁹. The closer physical distance between its population also tends to lead conclusions to the improvement of social cohesion and community. However, this is a vague projection in the sense that while being closer together do provide a place and chance for community, it is the activities and adversities people share that foster it. Without a hardline definition on what these activities are, community by adjacency is likely to be left to pure chance. To phrase it differently, while intensification sets the scene, are there specific activities that can utilize this intensity and have guaranteed outcomes at affecting community?

A project recently opened nearby lakeshore Mississauga may provide some examples in defining activities with mixed-use possibilities. The Creative Hub 1352 (also known as Small Arms Society) is an adaptive reuse project

with goals of becoming a catalyst in attracting developments to the Lakeview community (fig. 55, 56, 57). This facility has branded itself as a “*multidisciplinary creative hub... promoting culture, arts, heritage, scientific research, idea exchange and small business opportunities.*”²⁰. The most relevant aspect is the fact that directions each discipline take are largely driven by the participants and collaborating communities. Programs can be run by commercial organizations, in-house residents, community initiatives or interested individuals. And often times it is by a mixture between interested parties. The result is an agile, collaborative and inclusive facility that is also a community living room of sorts, building on the strength of creative and cultural pursuits.

¹⁹ Salakoh, Brendan. “*Achieving Urban Intensification in Winnipeg.*” The Canadian Centre for Policy Alternatives. CCPA REVIEW, March 2012.

²⁰ Griesbach, Ethan. “*Small Arms Inspection Building - Redevelopment Project.*” Toronto and Region Conservation Authority (TRCA). Accessed August 2019. <https://trca.ca/conservation/green-infrastructure/small-arms-inspection-building-redevelopment-project/>.

THE SCHOOL AT WORK
AS COMMUNITY HUB

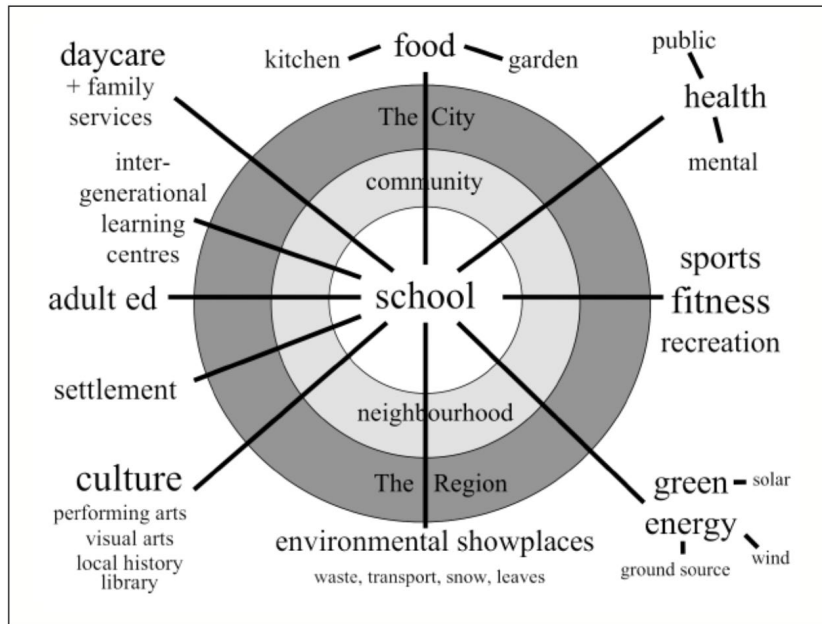


fig. 58



fig. 59

Learning together: Intergenerational IT classes in London and Singapore



fig. 60

Fractures Unseen

3. Community School

The public school is one of the most important spaces of community in any city. While the relationships and effects between the school and the community warrant a discussion of its own, an attempt here is made to summarize two of its key strengths in the edge city. First of all it is a public institution, a democratic place accepting of all demography. It is also a place where a significant amount of experiences and identities are formed for the populations of the city, as it is the starting place for the way in which almost every person learns about and forms an opinion of themselves and everything else. In the context of the reclusive nature of edge city, the public school is the facilitator of cultural diversity and inclusive community.

Public schools are also possibly the most used and relatable places of community for the suburban student demography. Excluding the time spent during mandatory school hours, the exterior of the school remains a popular hangout for students due to walk-ability, un-supervised and un-gated public outdoor facilities, and a sense of familiarity²¹. In addition, survey targeting Milton youths also reports public schools as the place where they

feel most welcome alongside other municipal services²². While it is clear potentials exist in the school typology, it is also clear much can be done to improve what is currently built (fig. 60). In a landscape where youths are absorbed in mass media, are public schools becoming their only foothold of a physical place of community?

At the present in Milton, schools are under extraordinary service demands due to the huge influx of new family and immigrant populations. Elementary schools have experienced as much as 160% of enrolment increase and high schools 50%²³. The response has been a rush to put in portable classrooms, as many as 16 for one school outside existing facilities and redrawing each school's service boundaries. While considerations for new additions are being planned, there is also a persistent and valid hesitation to build more schools. Elsewhere in Ontario, hundreds of schools are under consideration for closure due to declines in enrolment²⁴. The issue of building just enough school to meet peak and null demands is both an ongoing discussion and experimentation.

One of the tried solutions is utilizing schools for more than compulsory classroom uses. In "The School as Community Hub" published by The Canadian Center for Policy Alternatives (fig. 58, 59), suggestions were argued for the school to "...be thought of as a two-way hub when children's learning activities within the school contribute to community development, and when community activities contribute to and enrich children's learning within the school". To elaborate further "...what the community has by way of knowledge and skill flows into and across a curriculum based on really useful knowledge – engaging its students in understanding and changing the world. It does mean that pupils can develop their own expertise and put it to work in the service of the community." In practice, activities benefiting culture, new immigrants, seniors, and health were to be part of the curriculum.

In response, could a similar school be introduced to Milton's current dynamic, and not only provide a solution for the demand change, but also in providing a place to reinforce its community?

^{21, 22} Crowder, Don, and Michelle Dittmer. Rep. *Milton Youth Final Report*. Milton, Ontario: Town of Milton, 2018.

²³ Alphonso, Caroline. "In Milton, Ont., Crowded Classrooms Put Canada's Fastest-Growing Town to the Test." *The Globe and Mail*, December 19, 2016. <https://www.theglobeandmail.com/news/national/education/in-milton-ont-crowded-classrooms-put-canadas-fastest-growing-town-to-thetest/article33333444/>.

²⁴ Hugo Aboites et al., "The School as Community Hub: Beyond Education's Iron Cage," ed. David Clandfield and George Martell (Our Schools/Our Selves, 2010).



fig. 61



fig. 62

Fractures Unseen

4. Community through the Arts

Building on the earlier idea of utilizing a specific set of activities to create community, the inherent roles that the performing arts have can be significant. There are already countless studies and examples of the arts' capacity to positively influence social behaviours, personal or community identities, and neighbourhood vitalities²⁵. All of which are needed changes for a city like Milton. Instead of delving on the latent qualities however, this section is more intent on exploring ways performing arts can be integrated to a community focused facility.

The first plan is a straightforward merge between the arts and the school. The arts school has long had relations with communities outside its educational boundary. From involvements with professional industries to civic events, the idea of using the arts as a tool of communication to fulfill the school's potential as a community hub is a realized one. In Milton, a school for the arts is one way to build inclusivity of the diverse cultural backgrounds—through student, parent, and

public collaborations to create and consume art. Even more pressingly perhaps, is the fact that the entire Halton region encompassing Milton, Burlington, and Oakville does not have such a school, and the demands for one to be built are becoming increasingly vocal.

The second plan is an attempt to address the seasonal nature of performances spaces. In Milton's current theatre, a typical month has around 4 events. In holiday season a bit more at 8, but in the spring as low as 2 to none²⁶. Granted, time must be factored in for setup, practice, and private events. Yet, there are still numerous gaps in the usage of these spaces. Similarly in the auditorium spaces of a school, its usages are limited to school assemblies and events, both of which are infrequent and most often during school hours. In this plan, is it reasonable to have one performance space operated by both a school and a cultural arts organization?

Lastly, could an informal and adaptable performance space engage the public in the arts? Both as a method to embrace the pop-up nature of grassroots and impromptu communities, and as a way of involving the communities in the construction of a public exhibition. In projects such as the Folly for a Flyover (fig. 62) or School of Narrative Dance (fig. 61) by ASSEMBLE studio, they both manage to use live arts to transform neglected or overlooked public spaces into places of interest, while simple designs allowed for community involvement in these projects. In cities like Milton where spaces are abundant but its usage for public hindered by property delineations and physical barriers, could an informal space for performance promote discussion and change in the way we view and use these spaces?

²⁵ Moran, Jenna, Jason Schupbach, Courtney Spearman, and Jennifer Reut. Rep. *Beyond the Building: Performing Arts & Transforming Place*. Washington, DC: National Endowment for the Arts, 2015.

²⁶ Front & Centre. "FirstOntario Arts Centre Milton Season Program (2019-2020)." August 2019.

Exhibit C:

A Living Room for Milton

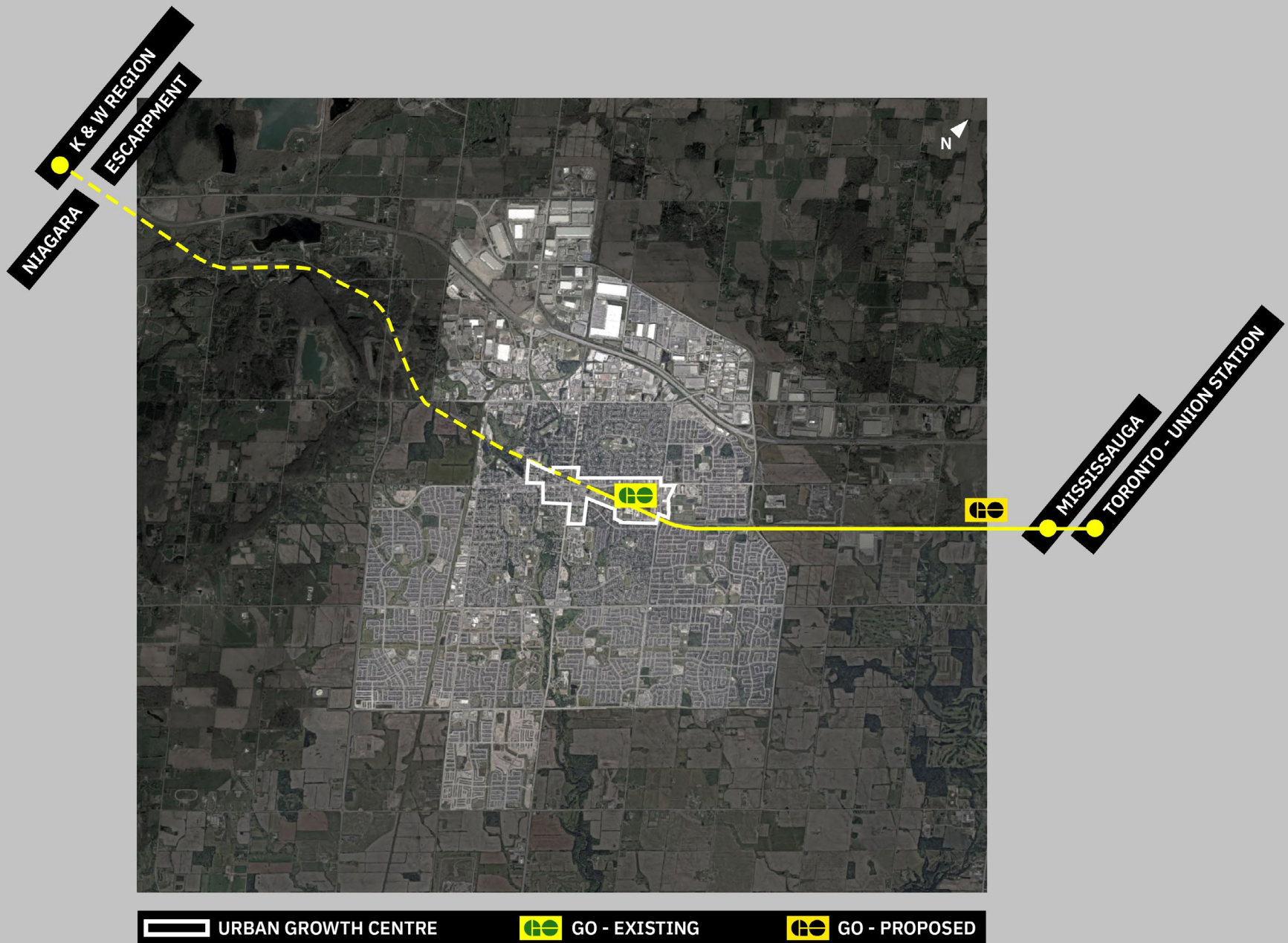


fig. 63 Map diagram of CN rail's path across Milton

Elevation Change

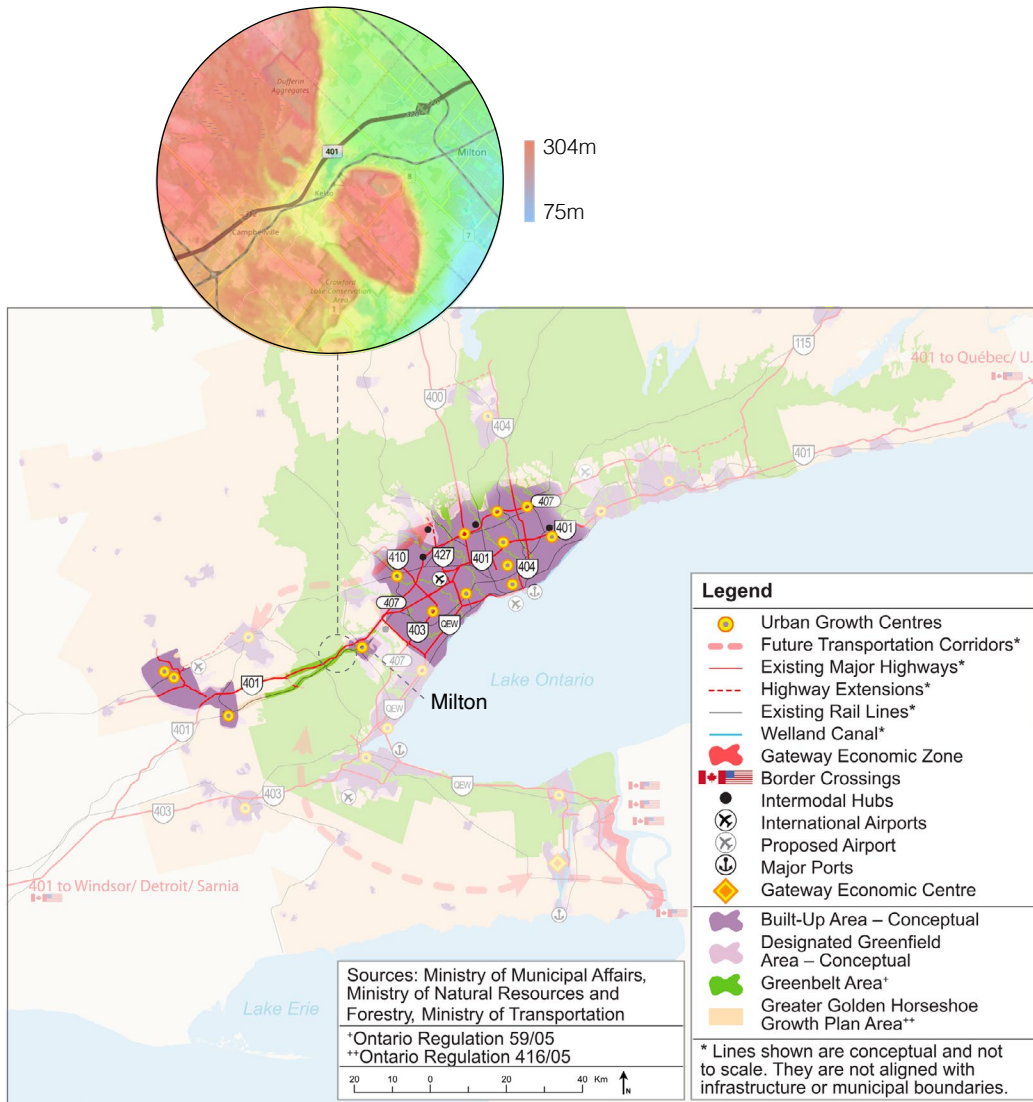


fig. 64

1. Artery

One of the most important reason for any edge cities to prosper is its connections to a major transportation artery²⁷. For Milton, this significance is made unique by the fact that the city sits at a gateway between major urban centres of the GTA and the Kitchener Waterloo region. This is due to a more gradual elevation change in the Niagara Escarpment alongside the city that allows both the 401 highway and the Canadian Pacific rail lines to pass through (fig. 64).

Within the city, the commuter population uses both modes of transportation to the limit of their capacity. Congestions leading up to and on the 401 in Milton are daily occurrences, and commuters who cannot find parking at the Milton GO station are asked to drive to the next station in Mississauga. As a result, the rails became the main stimulant for the Growth Centre. In the next decade, a new GO station expansion across the existing one, as well as a new intermittent station to the east are being considered²⁸. Both of which can make way for more efficient electric trains, and more frequent schedules.

²⁷ Lang, Robert E. *Edgeless Cities: Exploring the Elusive Metropolis*. Washington, D.C.: Brookings Institution, 2003.

²⁸ Twigg, David, R.E. Millward and Associates, Sajecki Planning, DTAH, WSP, and LURA. "Milton Mobility Hub Study Phase 6: Implementation Plan and Recommended Planning Framework." Milton : Town of Milton, June 25, 2019.

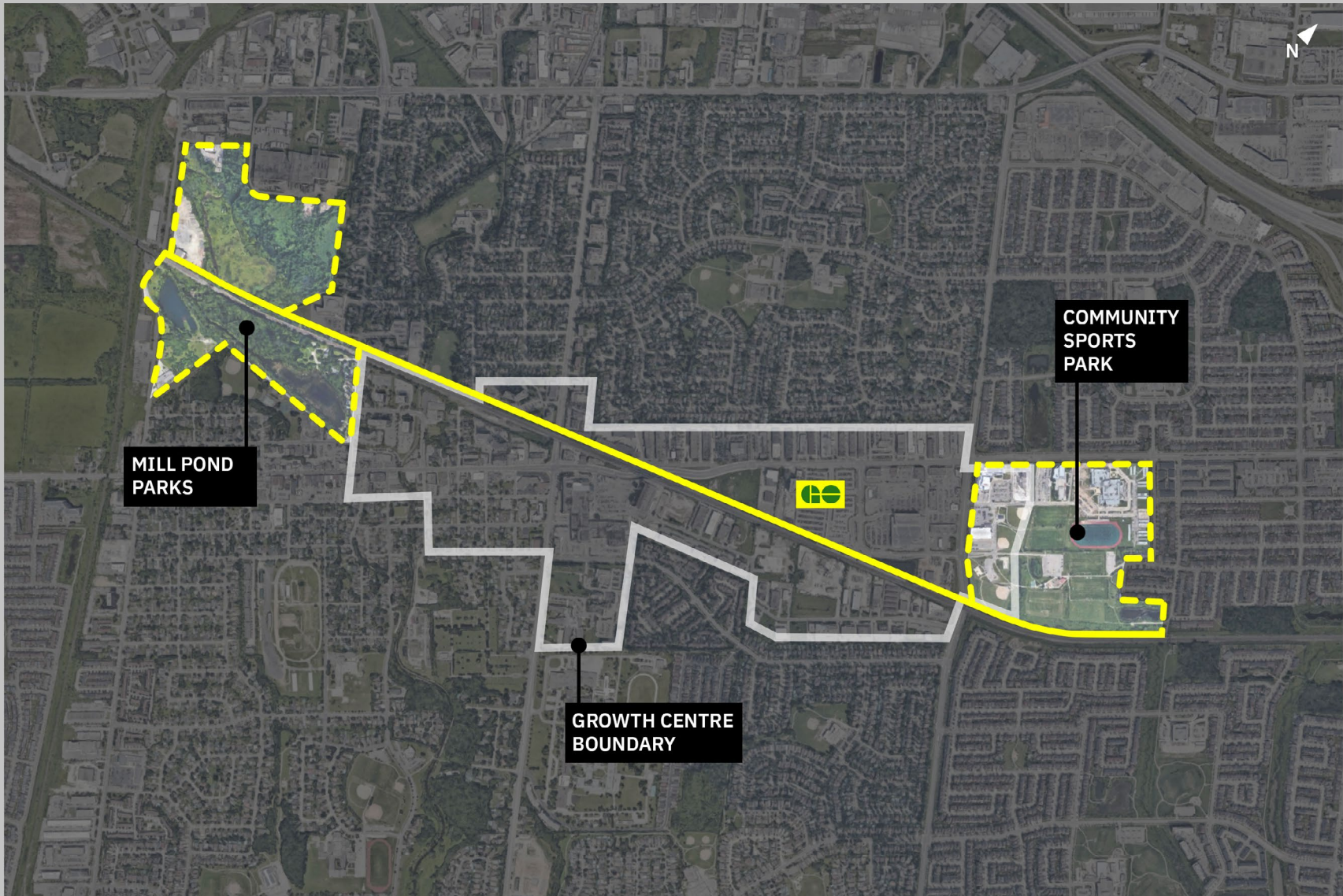


fig. 65 Proposed pathway highlighted in yellow



fig. 66

2. Pathway

The first design is of the urban scale. The proposal is a simple paved and maintained pedestrian and cycling path stretching alongside the existing railway. It connects the Lions sports park and the historic Mill Pond to the Growth Centre. This pathway can also serve as east-west connections for the existing suburban trails that runs largely north-south. The pathway is seen as both a recreational and social infrastructure that strings commercial, residential, and public spaces along the railway.

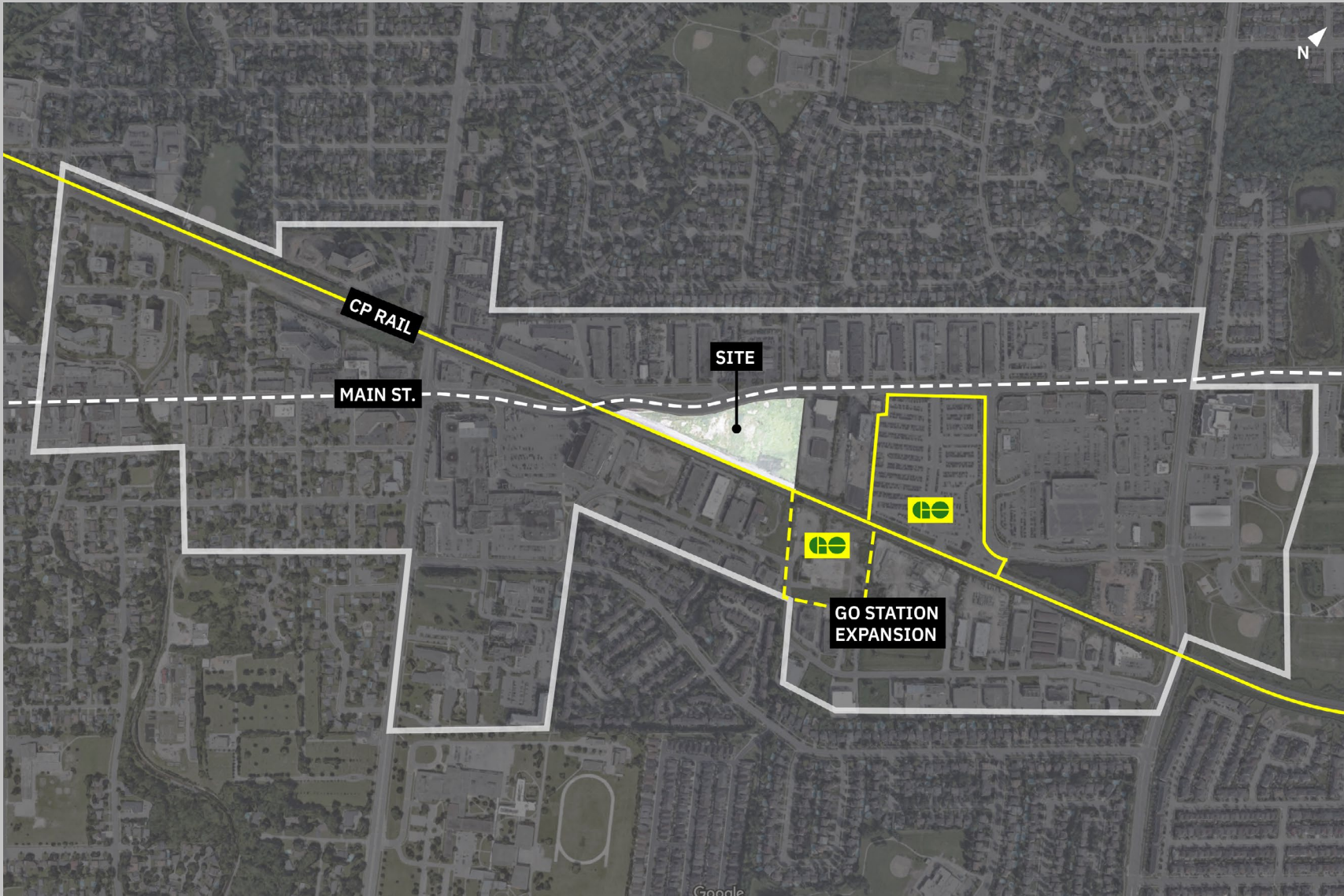


fig. 67

Current Context

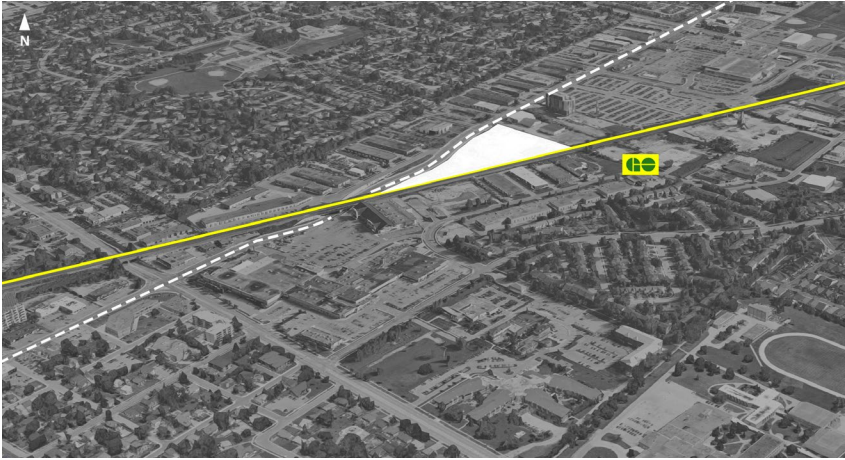


fig. 68

Future Context

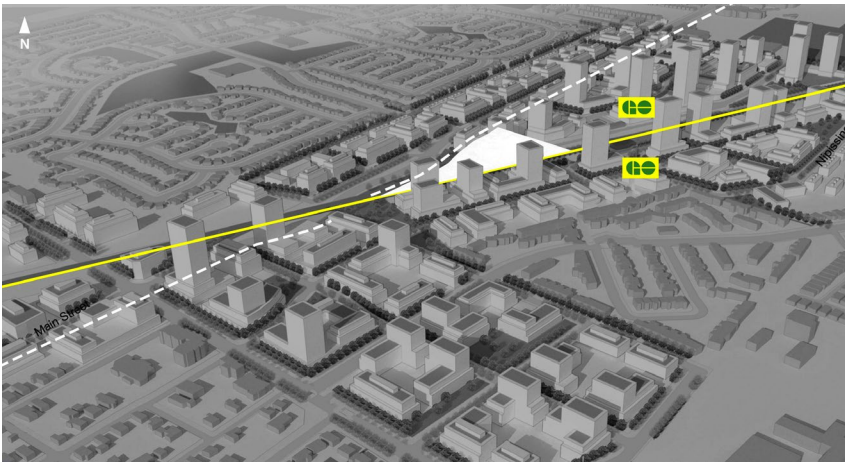


fig. 69

3. Site

Zooming in further into the Urban Growth Centre, there is currently a parcel of undeveloped land at the intersection of Main St. and the railway. This location is significant as the site will become a relief from the density and height of the surrounding future developments, as well as becoming a community park according to planning studies²⁹.

This site is also symbolic as the junction between road and rail, more specifically between the historic Main Street where the city was founded and the GO station where the future developments will surround. The outcomes of this site has the potential to be a very visible model of the kind of city Milton decides to become.

²⁹ Twigg, David, R.E. Millward and Associates, Sajecki Planning, DTAH, WSP, and LURA. "Milton Mobility Hub Study Phase 6: Implementation Plan and Recommended Planning Framework." Milton : Town of Milton, June 25, 2019.

Towards **North**



fig. 70

Towards East



fig. 71

Towards **South**



fig. 72



fig. 73



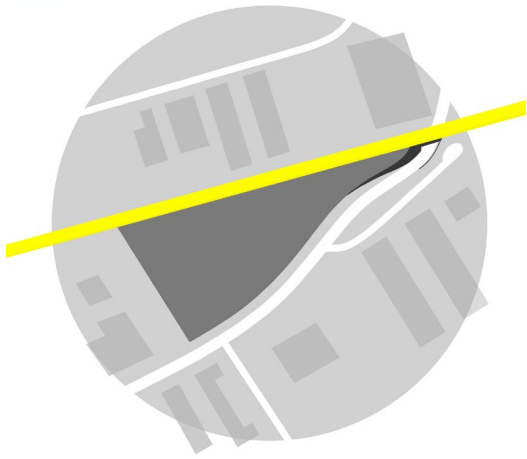
fig. 74

4. Design

The first gesture on the site is to create an underpass that connects Main St to Nipissing Rd. This will cut down the otherwise 20 minute walk it would take from Ontario St's rail crossing to Thompson Rd's. And also create better access to future developments on Nipissing Rd. In terms of the site, the underpass will both serve as an anchor to the design layout, and as a service roadway that relieves traffic from Main Street.

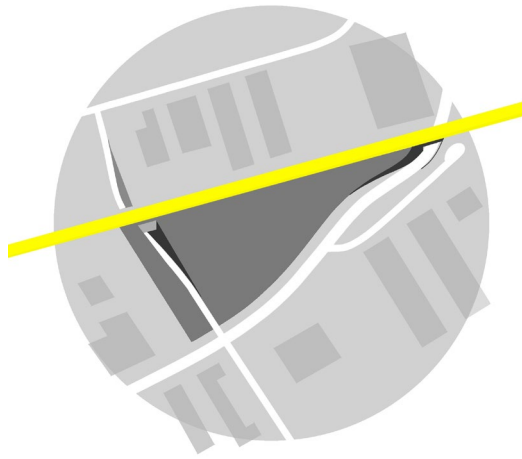


fig. 75



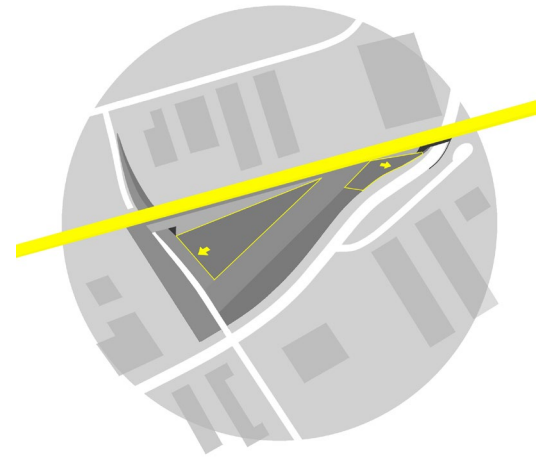
1. Current Condition

fig. 76



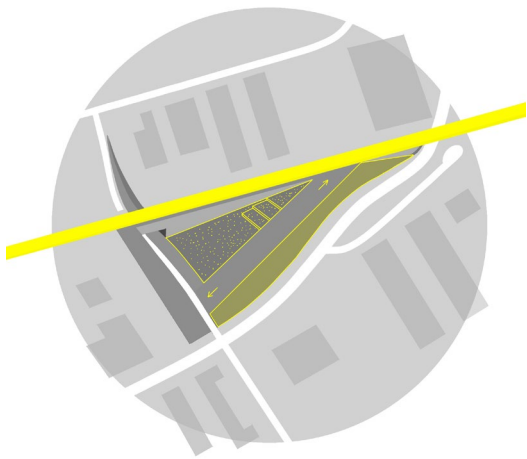
2. Create Underpass

fig. 77



3. Downward Folds

fig. 78



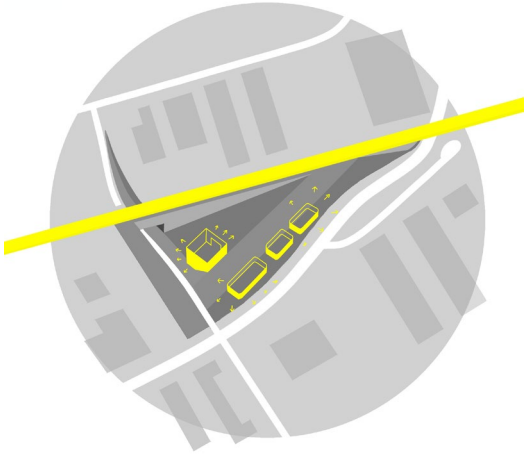
4. Three Gradients

Next, parts of the remaining site are excavated and folded downwards to meet both existing and new underpasses, bringing along light and access (fig. 77).

Lastly, these folds are thought of as a gradient of community activity zones. The strip closest to Main St. is for concentrated indoor community events, and serving as the signage and street front for the site. The spine of the fold is a paved connection to the pathway park alongside the rail, and also the outdoor activity area. The last fold beside the rail is a tiered and sloping community park, running under and to the south (fig. 78).



fig. 79



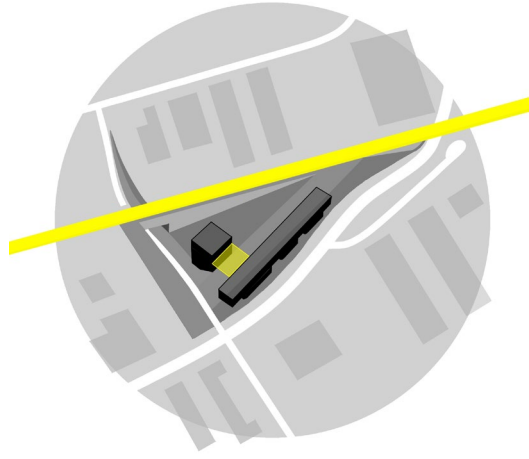
5. At Grade Spaces

fig. 80



6. Programs Above

fig. 81



7. Terrace and Gym Connection

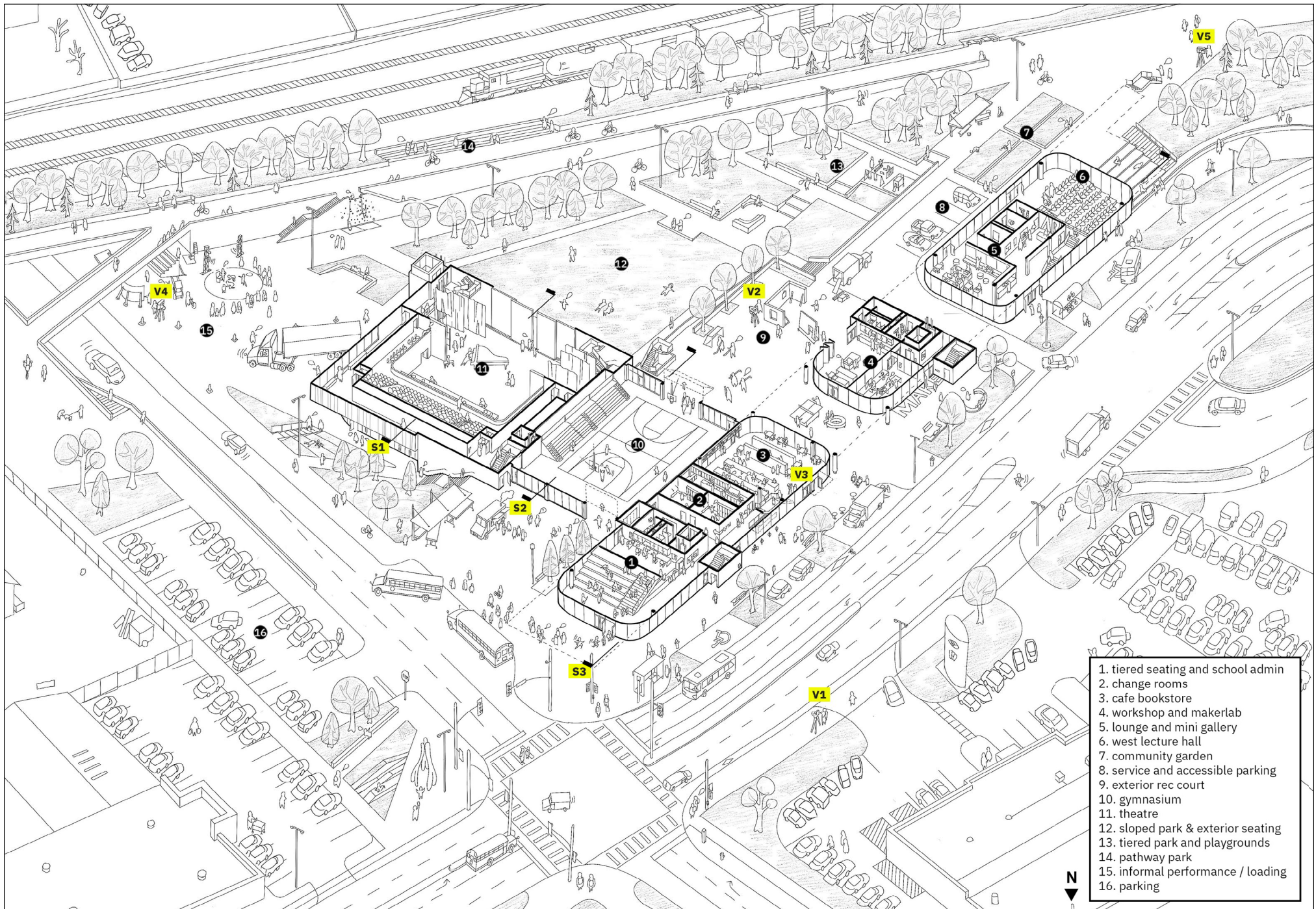
Building on previous diagrams, the following shows the general organization of the building. On the ground plane, transparent rooms contain the collaborative spaces shared between the school and the public. Across from them, a multi-use performance art centre (fig. 79). On-top lies the school, and the back of house functions (fig. 80). The space between the two are joined and enclosed with a rooftop terrace on top, and gymnasium below (fig. 81).

Consistent to the four guidelines earlier. The aspirations for this design attempts to address both the visible fractures of the city through accessibility, public commons, transparency. And unseen fractures through programming and activity.

The first goal was to provide an accessible public common for the Growth Centre, and the city of Milton. At the urban scale, the pathway park acts as an alternative artery to provide a more informal and by-chance encounter with the site. With its connections to a system of Milton parks and public spaces, this facility stops being just a destination and becomes a part of the journey. A space where meandering, exploration, and rest is encouraged. The pathway also connects with the critical GO station, and gives this public

park system meaning at a regional scale. Within the Growth Centre, the site provides pockets and perforations of spaces for activity. Some of which are permanent features of the landscape, and others change, depending on the activities required. For example within the gymnasium between the theatre and school, the bifold doors can open up for an extended open space that allows local festivals, regional conventions, or just students playing ball, to spill out and mingle with the public.

This transparency is also used for the three community rooms parallel to the street. Workshops, classes, or hanging out in the lounge room, the activities within are on display to the city, all while providing the users inside with a sense of context.



1. tiered seating and school admin
2. change rooms
3. cafe bookstore
4. workshop and makelab
5. lounge and mini gallery
6. west lecture hall
7. community garden
8. service and accessible parking
9. exterior rec court
10. gymnasium
11. theatre
12. sloped park & exterior seating
13. tiered park and playgrounds
14. pathway park
15. informal performance / loading
16. parking



fig. 82

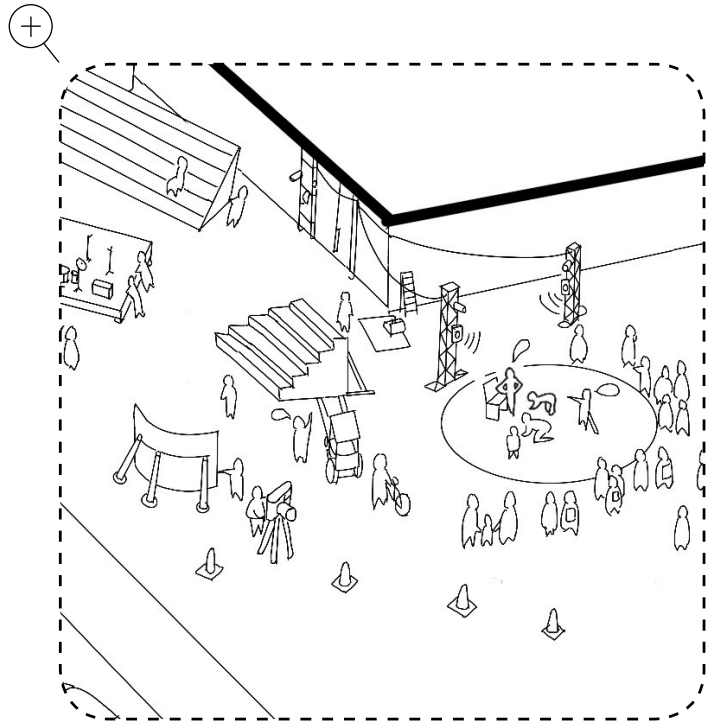


fig. 83

Large open plaza that extends beyond the underpass allows informal and experimental performances, projects, markets, and congregations to form naturally. The space also serves as loading for the performing arts centre.

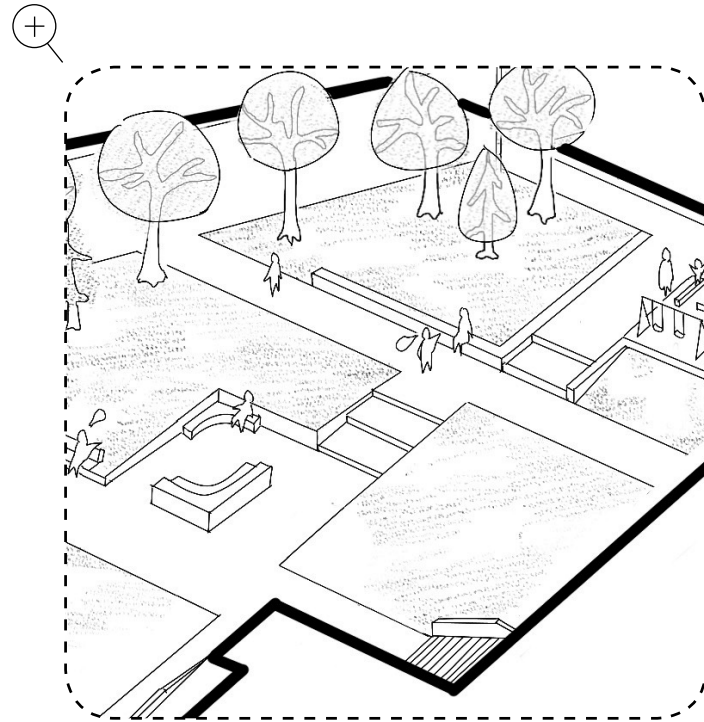
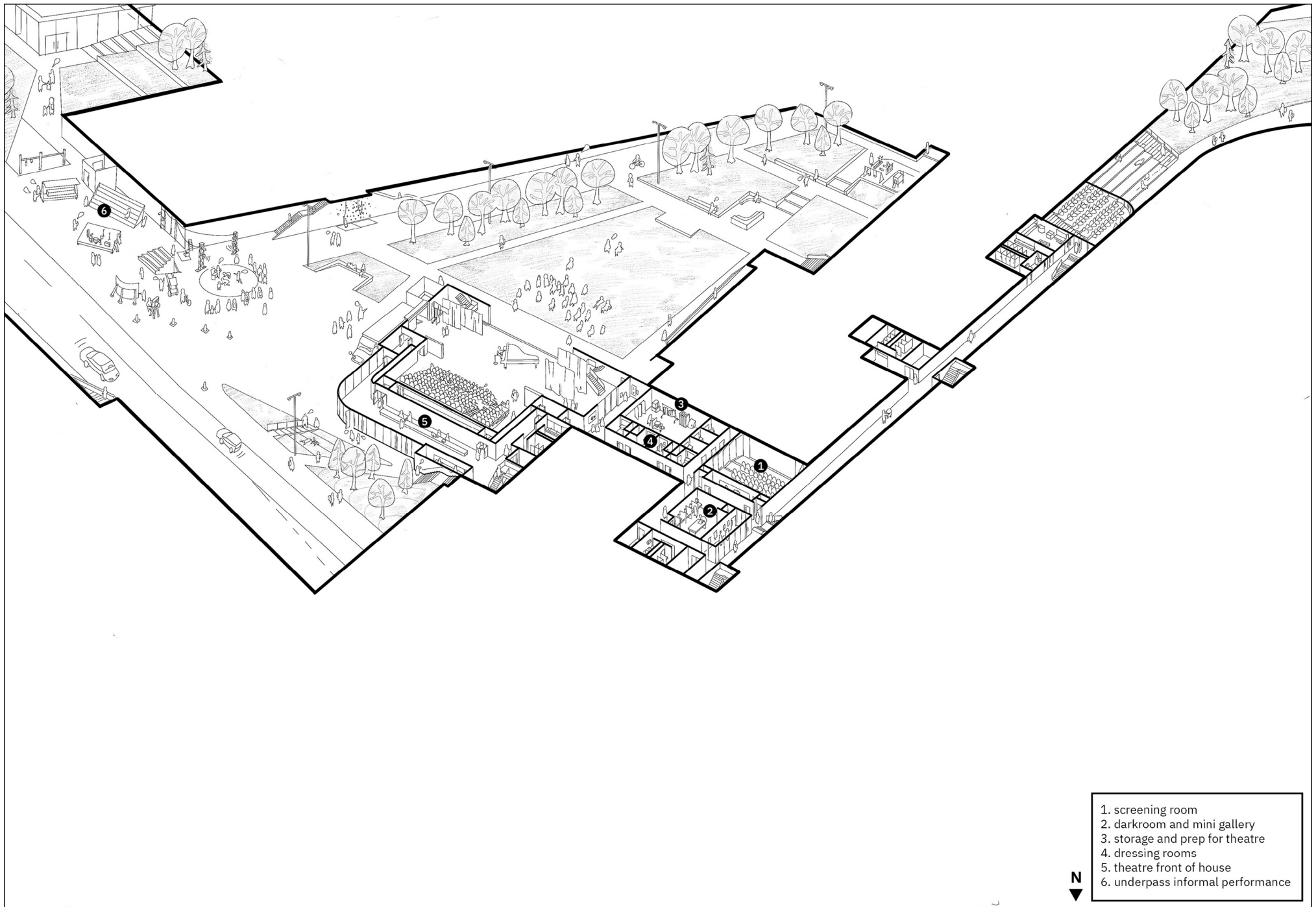


fig. 84

Tiering platforms with plantings, exercise and other play equipments create a denser and calmer environment for people wanting to rest and socialize at a comfortable scale.



- 1. screening room
- 2. darkroom and mini gallery
- 3. storage and prep for theatre
- 4. dressing rooms
- 5. theatre front of house
- 6. underpass informal performance

fig. 85

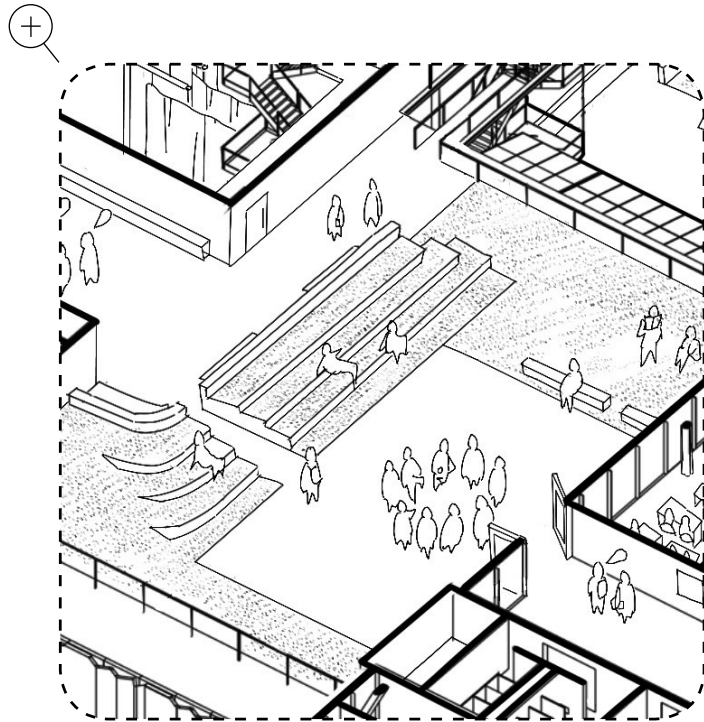


fig. 86

Rooftop courtyard over the gymnasium connects the performing arts' back of house spaces with the school. This outdoor space can both be a space of collaboration between the two facilities, and a place of rest.

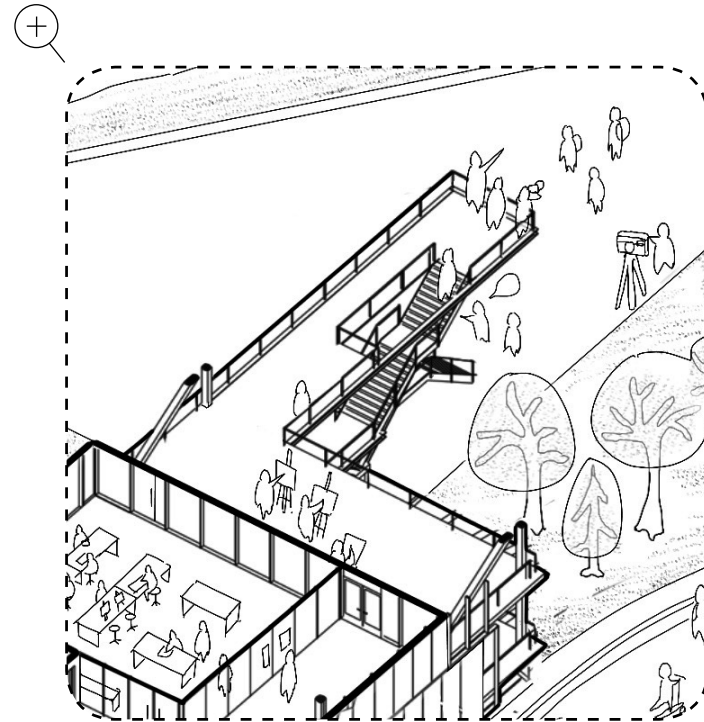


fig. 87

Raised platforms facing the Niagara Escarpment over the horizon creates a photogenic spot to attract public interest, and potentially foster interactions between the students and the public.

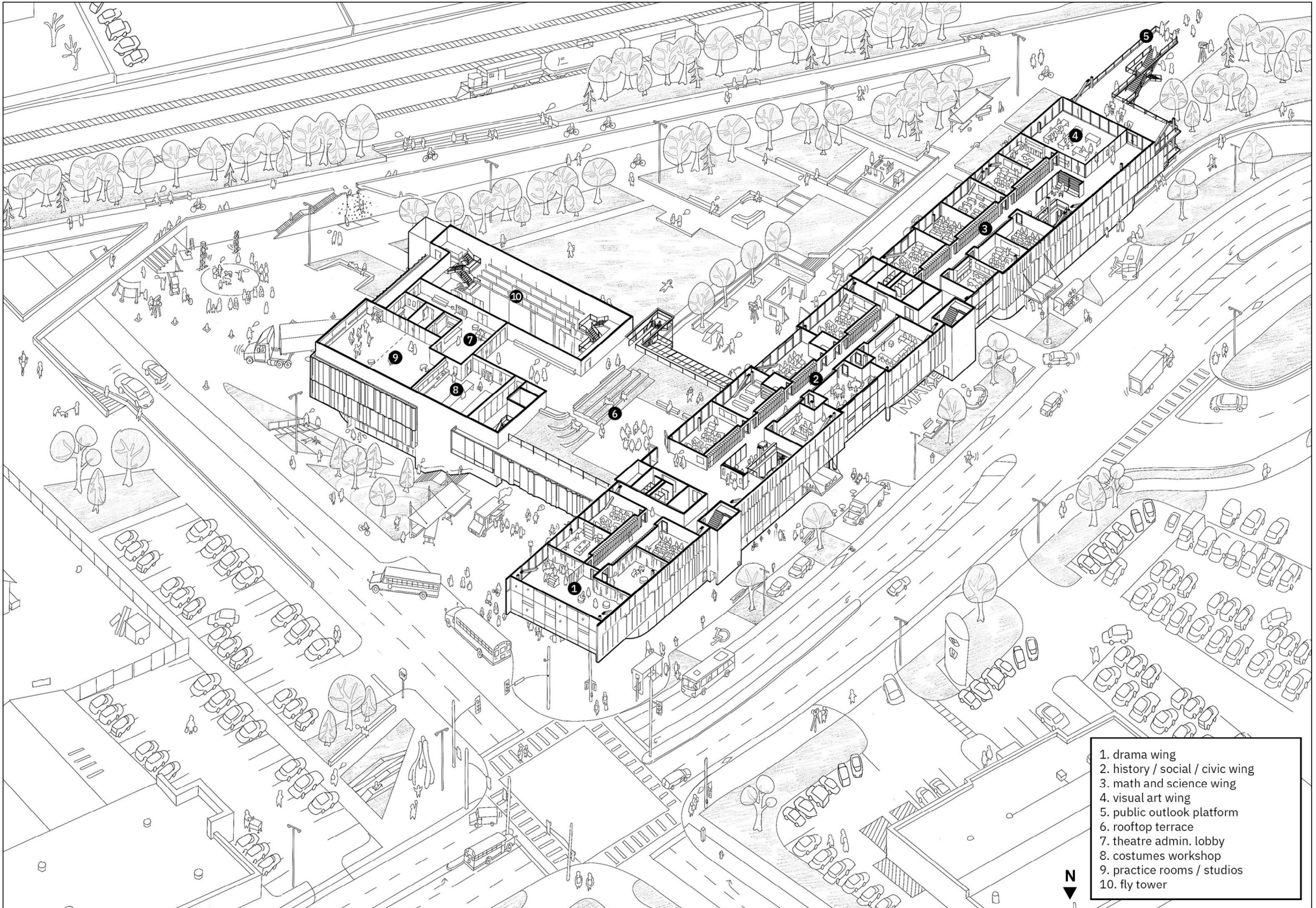


fig. 88

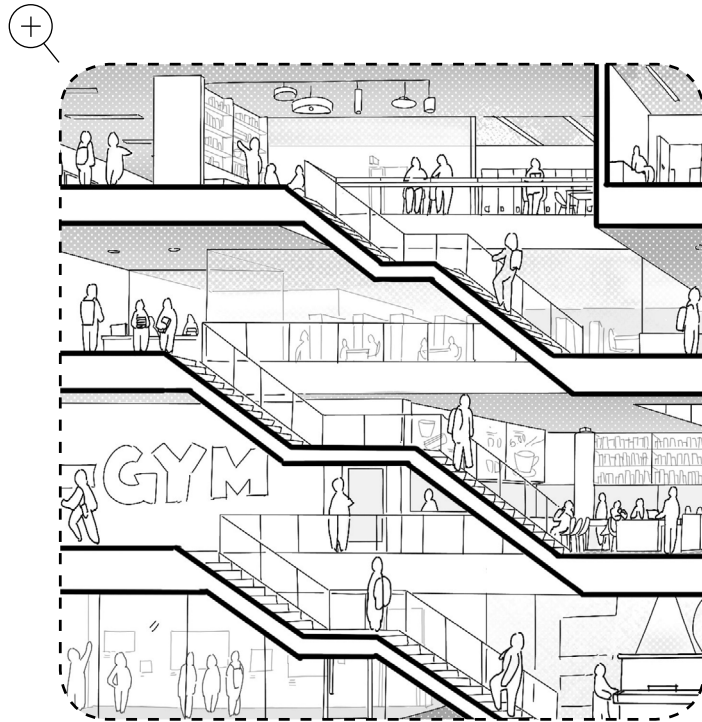


fig. 89

Open interior vertical circulation allows sound to permeate across different active programs, facilitating a sense of involvement. The alignment also helps to anchor major programs on each floor.

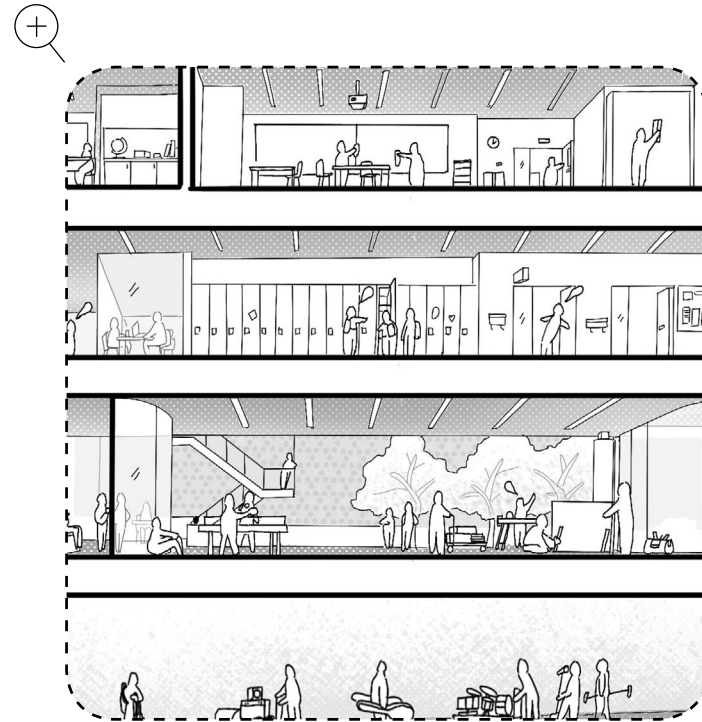
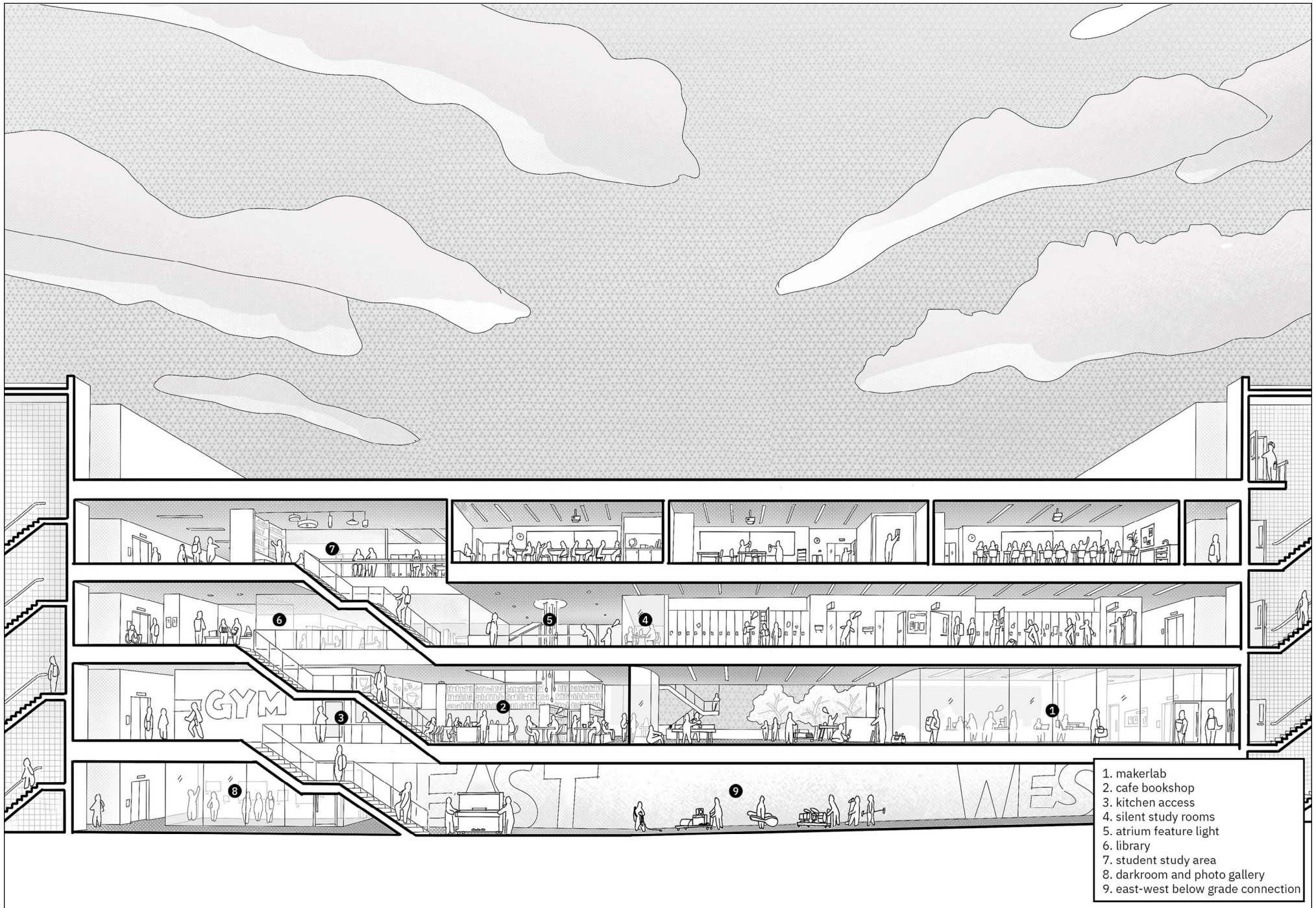


fig. 90

Openings at grade across the building helps break down its scale at the pedestrian level. These pockets are also used as shaded spaces for outdoor activities.



- 1. makerlab
- 2. cafe bookshop
- 3. kitchen access
- 4. silent study rooms
- 5. atrium feature light
- 6. library
- 7. student study area
- 8. darkroom and photo gallery
- 9. east-west below grade connection

fig. 91

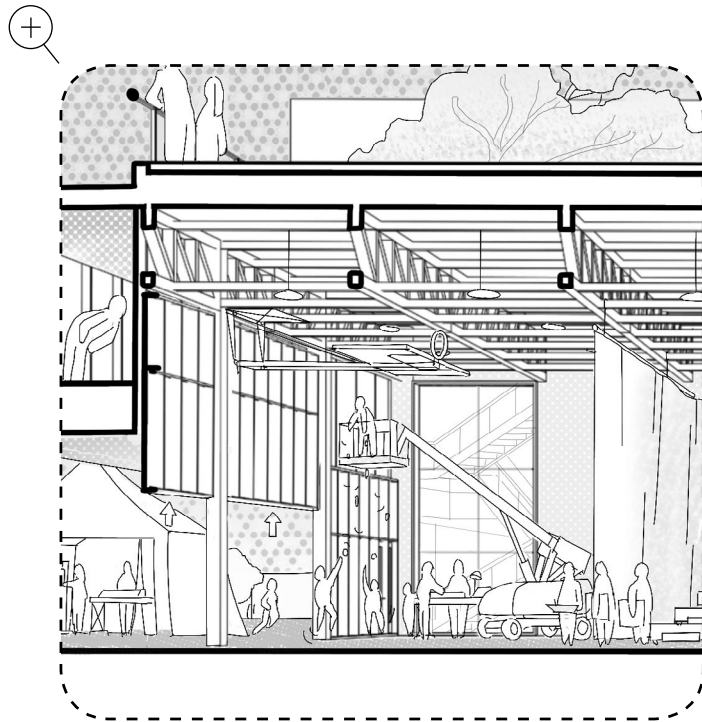


fig. 92

Large operable walls on either side of the gymnasium allows the space to connect with exterior plazas and create one continuous public strip. In good weather, the walls can also be opened to cross ventilate.

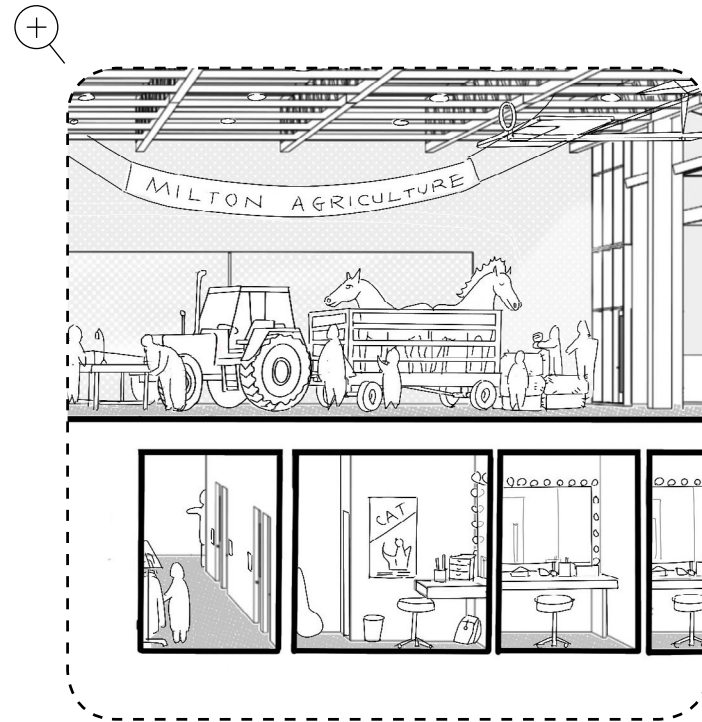


fig. 93

The large spans and height of the gymnasium structure makes it suitable to house various events. Below sits the sub grade connection between the school and performing arts spaces.



fig. 94



fig. 95



fig. 96



fig. 97

Meanwhile within the theatre, spaces are reconfigurable and pedagogical, where students and interested members of the community and industry professionals can participate in productions and knowledge transfer. The theatre's stage can level from interior to exterior, and open up to extend the performances into the public park (fig. 99), and encourage interactions between performers, regular patrons, and the person that have come across the show by chance. At a macro scale, the sloping park fronted by the fly tower has the potential to be a screen for the city, where movies, events, and news are projected and broadcasted for the public.

Drawing from previous research on programmes that provide community engagement, this thesis proposes to extend the current boundaries of theatre and school into the site of investigation. In creating a new intertwined relationship between students, professionals, and the community, the public living room aims to foster the identity of Milton naturally by way of letting its people colour the space.

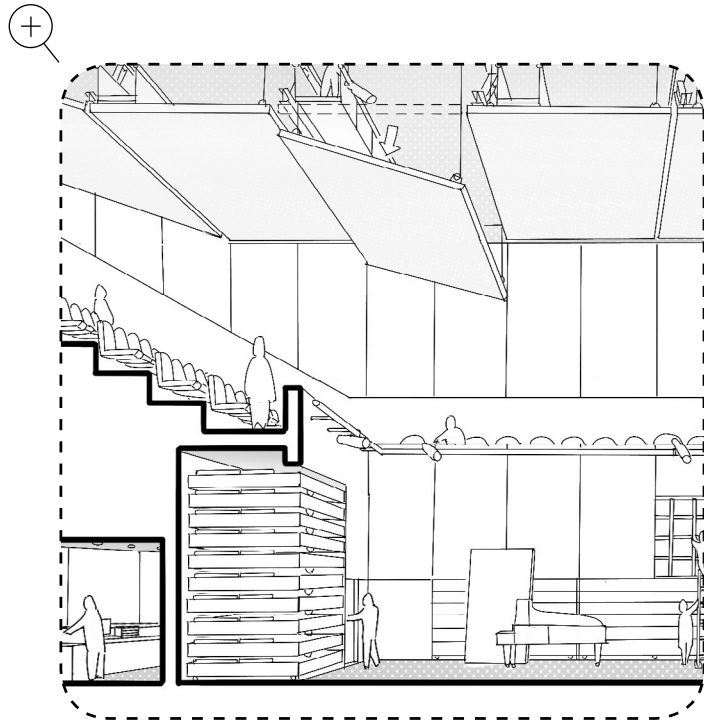


fig. 98

The interior finishes within the performing arts space are affordable to allow for modification. Operable ceiling panels and retractable seating also makes for a multi-functional performance space.

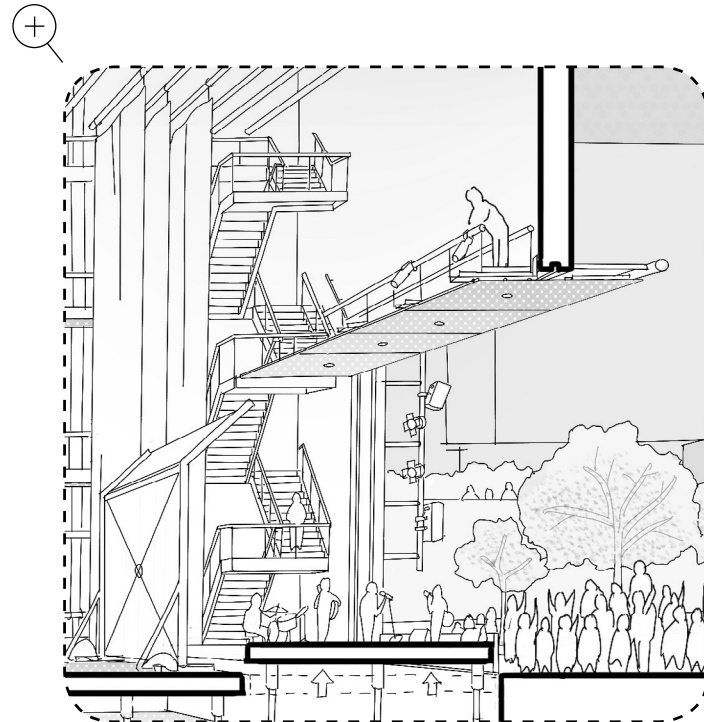
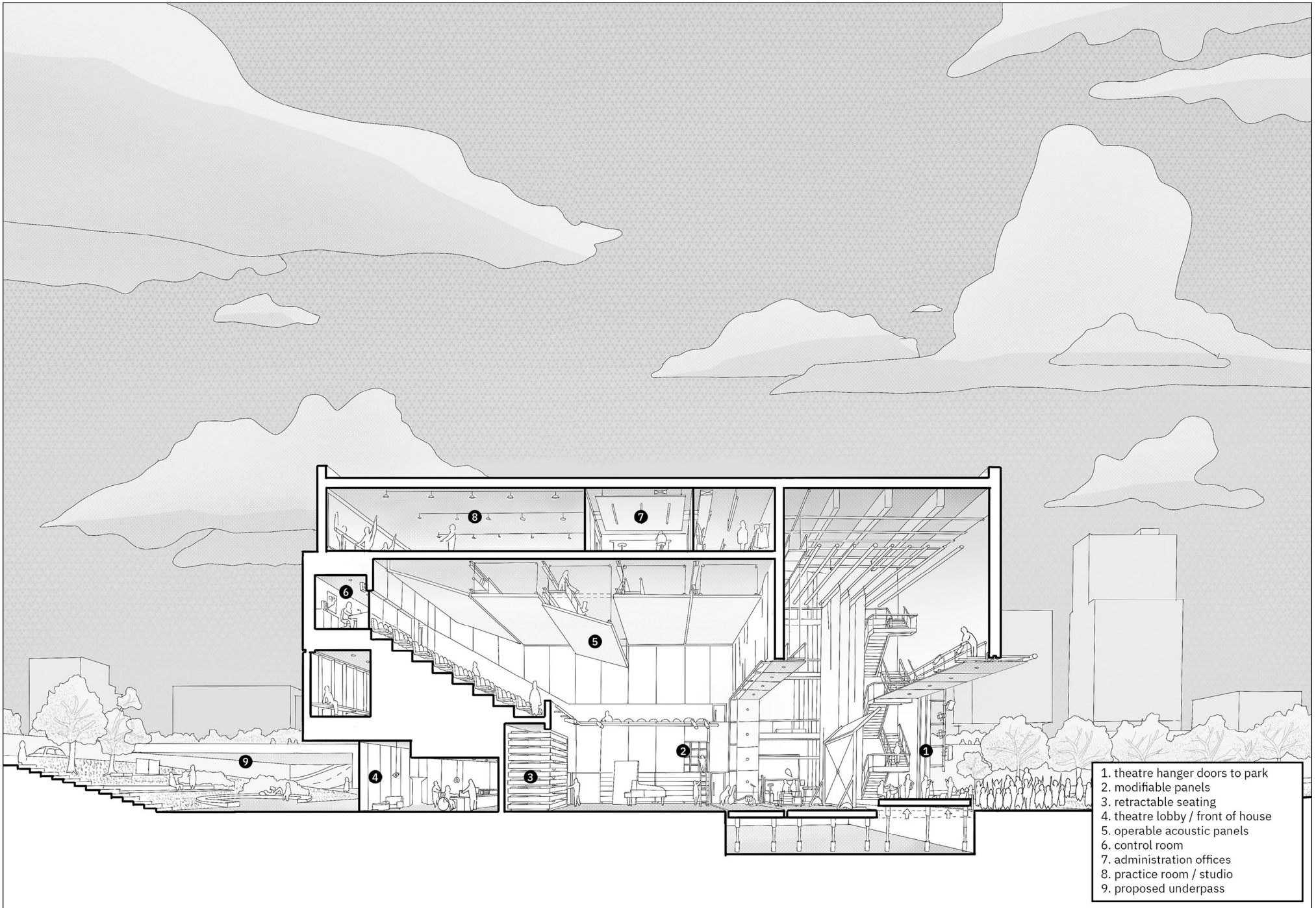


fig. 99

The stage can be reconfigured to service both the interior and exterior. Level-able platforms can also create a seamless surface between them, and encourage new experimentation in performances.



1. theatre hanger doors to park
2. modifiable panels
3. retractable seating
4. theatre lobby / front of house
5. operable acoustic panels
6. control room
7. administration offices
8. practice room / studio
9. proposed underpass

fig. 100



fig. 101

Within the school, classes on the culinary arts, fitness, technology and construction, and the cultural arts all have a space for community collaboration. Imagine activities where a local writer can host a book signing within the cafe bookstore, and then walk towards the tiered amphitheatre for a guest lecture to an English class alongside interested members of the public. Or a local photographer who gives a talk on his works in the sunken lecture hall where the art classes upstairs are invited, and later, head towards the gallery and lounge for an opening party. Maybe it's the Nuit Blanche and student films are shown to the parents and public on the sloped park, while the theatre hanger doors open between each film for music performances. Where student and public art installations are set up across the site, and the gym becomes host to an interactive theatre production, as the cafe caters to its audience.



fig. 102

The building also hopes to act as a beacon and signage to the peripheries of the site with transparent rooms of activity. These rooms house the four art programs within the school, as well as other spaces of collective learning and discussion. In openly displaying the functions of this facility, perhaps the public can recognize the fun and excitement the arts generate, and the rapport it can build with neighbors in the community.

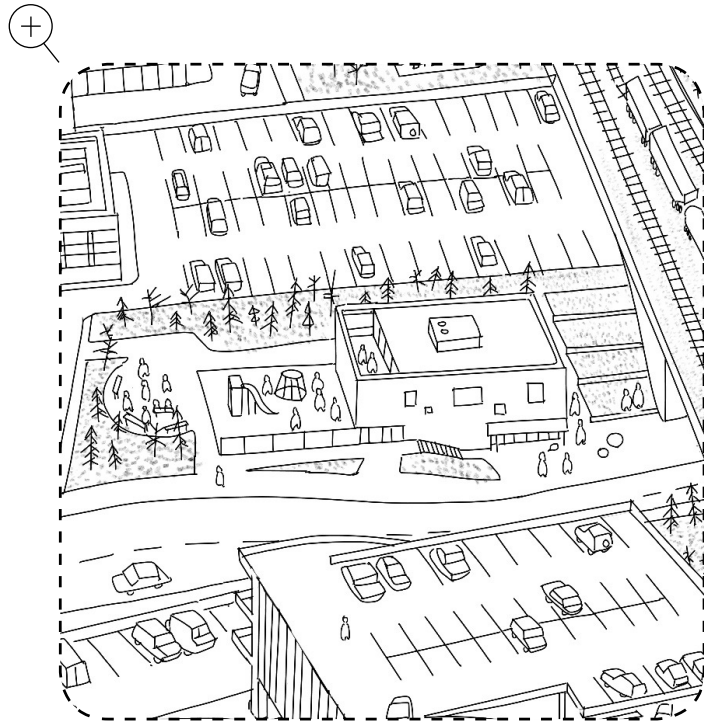


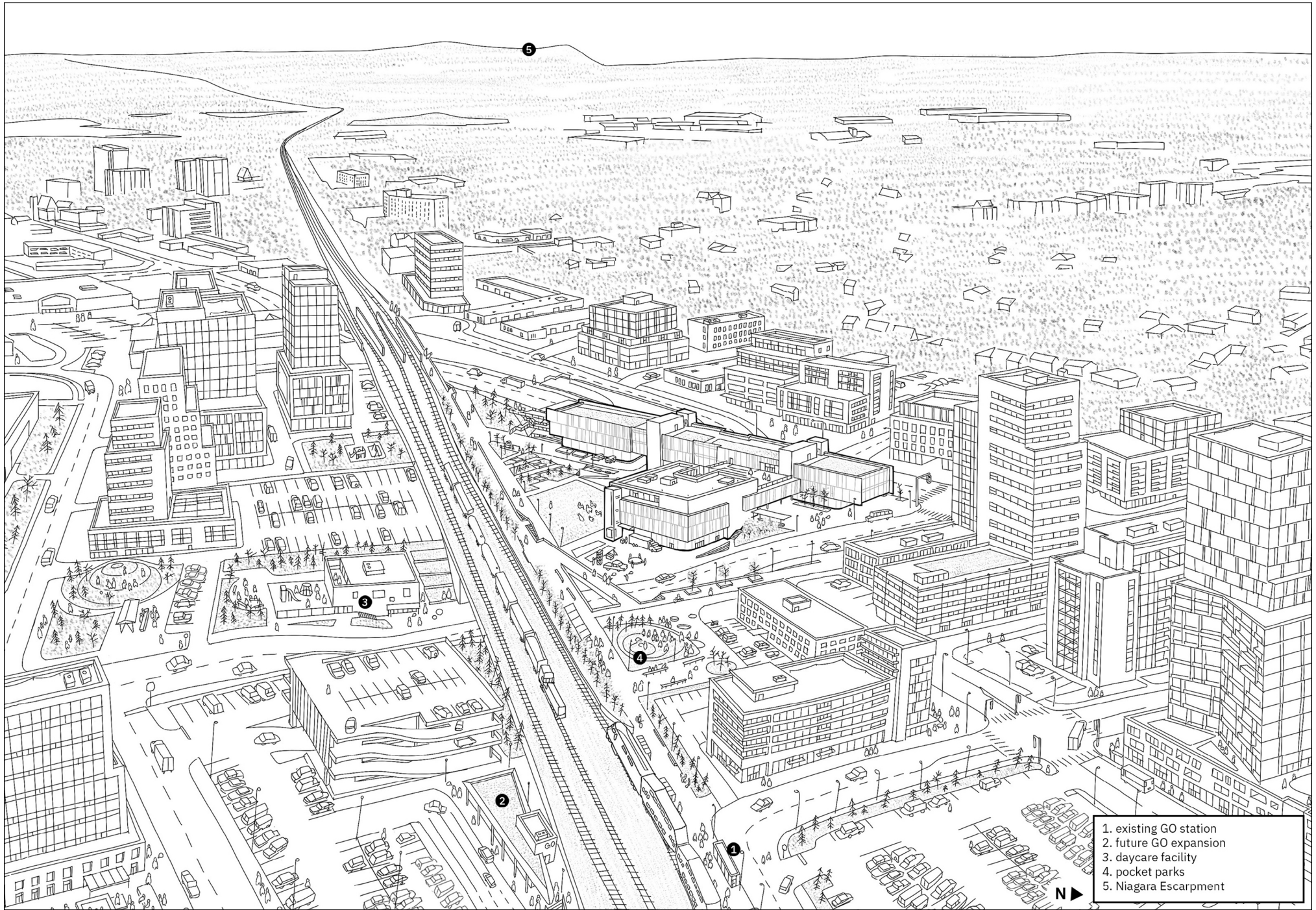
fig. 103

Spaces adjacent to the underpass on the south side of the rail are also planned as part of the larger community hub in this design proposal. A daycare facility at this location would be highly accessible to commuters looking to use the GO.



fig. 104

Adjacent developments are drawn according to density targets and master plans part of the Milton Mobility Hub Study. Massing and facade of new developments in this drawing are speculative.



- 1. existing GO station
- 2. future GO expansion
- 3. daycare facility
- 4. pocket parks
- 5. Niagara Escarpment

fig. 105



fig. 106

Conclusion

In the end, this thesis is an observation, speculation and experiment on the capacities community has over the urban environment.

The photo essay lays bare the state of an urban environment created without care of the social needs of its occupants, where profitability and convenience has triumphed. In this environment of introversion and anxiety, exposures to a more social, safe and connected space can rebuild meaningful connections, and eventually initiate discourses of building better cities for its people. The design of this thesis is an experiment in building such a space, leveraging on existing conditions of the city, and forces already contributing to social celebration within communities.

With an aesthetic that is topical, familiar, and possibly economical, the design also hopes to lead by example through its functional devices and spaces rather than virtues of its appearance. It aspires to be a place where experiences are

created by choice rather than routine. And a place where these experiences are shared between the diverse demographics that Milton has. More importantly perhaps, is the potential these experiences has, that through them, art and culture is created rather than consumed in a new city centre. This proposal asks if its possible that public engagement, development interest, and municipal directions can be directed by this place of cultural production, and in return a beautiful, empathetic and prosperous city centre of the future.

Ultimately, the design hopes to push for, or at the very least reiterate the capacities architects have over building spaces capable of influencing our social tendencies, and fostering a true sense of community.

Bibliography

- Aboites, Hugo, Chris Bigum, Rita Bouvier, David Clandfield, Larry Kuehn, Richard Hatcher, Elise Houghton, et al. Rep. Edited by David Clandfield and George Martell. *The School as Community Hub: Beyond Education's Iron Cage*. Our Schools/Our Selves, 2010.
- Alphonso, Caroline. "In Milton, Ont., Crowded Classrooms Put Canada's Fastest-Growing Town to the Test." *The Globe and Mail*, December 19, 2016. <https://www.theglobeandmail.com/news/national/education/in-milton-ont-crowded-classrooms-put-canadas-fastest-growing-town-to-thetest/article33333444/>.
- Auslander, Philip. "Ontology vs. History: Making Distinctions Between the Live and the Mediatized." Conference Archives: Auslander, October 6, 1997. <https://web.archive.org/web/20060906055120/http://webcast.gatech.edu/papers/arch/Auslander.html>.
- Crowder, Don, and Michelle Dittmer. Rep. *Milton Youth Final Report*. Milton, Ontario: Town of Milton, 2018.
- "Demographics of Internet and Home Broadband Usage in the United States." Pew Research Center: Internet, Science & Tech. Pew Research Center, June 5, 2020. <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>.
- Dewolf, Chris. "Why New Urbanism Fails." Planetizen, February 18, 2002. <https://www.planetizen.com/node/42>.
- Dunham-Jones, Ellen, and June Williamson. Foreword. In *Retrofitting Suburbia*. Hoboken, NJ: Wiley, 2008.
- FirstOntario Milton. "FirstOntario Arts Centre Milton Season Program (2019-2020)," August 2019.
- "Folly For a Flyover." Assemble. Accessed July 2020. <https://assemblestudio.co.uk/projects/folly-for-a-flyover/>.
- Ontario. 2017. *Greenbelt Plan*. [Toronto]: Ministry of Municipal Affairs and Housing.
- Griesbach, Ethan. "Small Arms Inspection Building - Redevelopment Project." Toronto and Region Conservation Authority (TRCA). Accessed August 2019. <https://trca.ca/conservation/green-infrastructure/small-arms-inspection-building-redevelopment-project/>.
- Herrle, Peter, and Dogan Kuban. "What Identity, Whose Identity?" Essay. In *Architecture and Identity*, 403–10. Berlin: Lit, 2008.
- Lang, Robert E. *Edgeless Cities: Exploring the Elusive Metropolis*. Washington, D.C.: Brookings Institution, 2003.
- Lynch, Kenneth. *The Image of the City*. Cambridge, MA: MIT Pr., 1979.
- Marshall, Alex. *How Cities Work: Suburbs, Sprawl, and the Roads Not Taken*. Austin: University of Texas Press, 2000.
- Moran, Jenna, Jason Schupbach, Courtney Spearman, and Jennifer Reut. Rep. *Beyond the Building: Performing Arts & Transforming Place*. Washington, DC: National Endowment for the Arts, 2015.
- Salakoh, Brendan. "Achieving Urban Intensification in Winnipeg." *The Canadian Centre for Policy Alternatives CCPA REVIEW*, March 2012.
- "School of Narrative Dance." Assemble. Accessed July 2020. <https://assemblestudio.co.uk/projects/the-school-of-narrative-dance/>.
- "Seattle Art Museum: Olympic Sculpture Park." Weiss/Manfredi: Seattle Art Museum: Olympic Sculpture Park. Accessed March 2020. <http://www.weissmanfredi.com/project/seattle-art-museum-olympic-sculpture-park>.
- The Social Value of Public Spaces*. York: Joseph Rowntree Foundation, n.d.
- Tuan, Yi-Fu. *Space and Place: the Perspective of Experience*. Minneapolis: University of Minnesota Press, 2001.
- Twigg, David, R.E. Millward and Associates, Sajecki Planning, DTAH, WSP, and LURA. "Milton Mobility Hub Study Phase 6: Implementation Plan and Recommended Planning Framework." Milton : Town of Milton, June 25, 2019.
- "Why Public Places Are the Key to Transforming Our Communities." RSS, May 12, 2014. <https://www.pps.org/article/why-public-places-are-the-key-to-transforming-our-communities>.

