

Community to table

envisioning food production in North End Winnipeg

by
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A practicum
submitted to the Faculty of Graduate Studies
of The University of Manitoba
in partial fulfillment of the requirements
of the degree of

MASTER OF
LANDSCAPE ARCHITECTURE

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Winnipeg

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Community to Table

Envisioning Food Production in North End Winnipeg

Heather Lins

The Selkirk Avenue district is located on the traditional lands of Anishinaabeg, Cree, Oji-Cree, Dakota, and Dene Peoples, and on the homeland of the Métis Nation.

In respect for the Treaties that were made on these territories, and acknowledgment of the harms and mistakes of the past, this work is an offering of the knowledge I have learned.

Abstract

The goal of this practicum is to uncover and exemplify how to feed the community with nutritious food in order to sustain and bring the community together. The practicum illustrates how the transformation of underutilized urban land into a community-based food production network can help to create a nourished and connected community. The practicum asks the question of what can be imagined.

Through a foundational approach of land ethic and the creative application of a community food system, individuals may increase empowerment, improve physical conditions, and achieve better health and wellness of community members. This practicum focuses on the Selkirk Avenue District in the North End of Winnipeg, Manitoba, to identify locations for the integration of food and proposes a series of community-based design strategies to achieve the goal.

In order to feed the community with nutritious food, an investigation into the relationships between the community's needs, urban infrastructure, and food sovereignty is undertaken so as to understand the ethical, social and physical inclusion of food production into the urban fabric. The integration of food being grown within existing urban infrastructure frames such as boulevards, schoolyards, vacant lots, and home yards, enhance the experience, health, and well being of the community members.

Community, Gardening, Growing food, Health, Wellbeing, Neighbourhood food network, and North End Winnipeg

All images by the author unless otherwise noted

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Firstly, Anna Thurmayr, my advisor, thank you. Your guidance throughout my education has been ever so kind and irreplaceable. You believed in me and my work when I did not. Your care, kindness, creativity, and logic are what I aspire to as I enter this next phase in my life. Thank you.

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Also, I must express my very profound gratitude to my loved ones. Mom, I can not thank you enough for the countless hours of editing and encouragement, D.S., for your reassurance and kindness, especially in these past months, and finally, Garrett, thank you for your unconditional love, constant support, and sacrifice.

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Fig. 1: Community garden, Silver Avenue (Lins, 2019)



Fig. 2: Selkirk Avenue
(Lins, 2018)



Fig. 3: SA district plaza
(Lins, 2018)



Fig. 4: SA district boulevard
(Lins, 2018)

INTRODUCTION

Human health and well being are in an ever-increasing state of distress, particularly in older urban neighbourhoods. How this can be amended is at the core of this practicum. The goal of this practicum is to uncover and exemplify how to feed a community with nutritious food in order to sustain and bring the community together. To achieve this goal this practicum illustrates how the transformation of under-utilized urban land into a community-based food production network can help to create a nourished and connected community. The practicum asks the question of what can be imagined.

In order to feed the community with nutritious food, an investigation into the relationships between the community's needs, urban infrastructure, and food sovereignty is undertaken so as to understand the ethical, social and physical inclusion of food production into the urban fabric. The integration of food being grown within existing urban infrastructure frames such as boulevards, schoolyards, vacant lots, and home yards, enhance the experience, health, and well being of the community members.

Through the foundational approach of land ethic and the creative application of a community food system, individuals may increase empowerment, improve physical conditions, and achieve better health and wellness of community members. As indicated in the North End Five Year Neighbourhood Renewal Plan 2016-2021, the North End of Winnipeg, Manitoba, needs the above three improvements and therefore has been selected as the ideal site for an urban land ethic design intervention. Focusing on a portion of the North End; north of the rail yard, east of the old exhibition grounds, south of Redwood Avenue, and west of Main Street, to identify locations for integration of food and proposes a series of community-based design strategies to achieve the goal in the Selkirk Avenue District.

CHAPTER ONE

A NEIGHBOURHOOD IN CRISIS

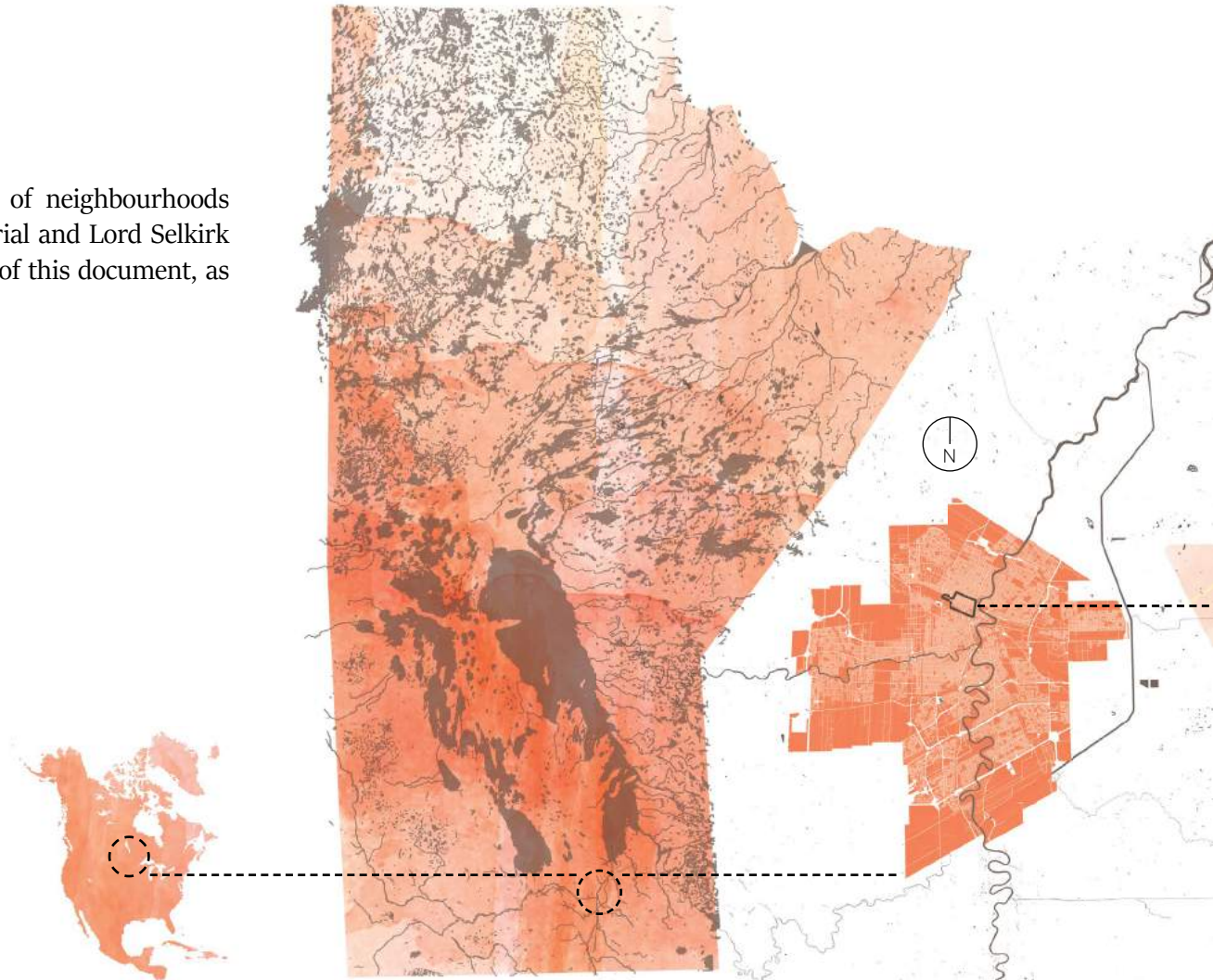
INTRODUCTION

A diverse, beautiful, historic, and distressed neighbourhood cluster is nestled in the North End of Winnipeg, Manitoba. The area's history of diversity, community, and disenfranchisement carries on to the present day. Census data depicts a district with elevated health issues and crime rates. A number of neglected buildings and public spaces perpetuate the stigma that the greater Winnipeg community has of the North End's violence and insecurity. This neighbourhood cluster is lacking food sources and is in need of renewal.

Selkirk Avenue District

a neighbourhood cluster

The North End is home to a collection of neighbourhoods William Whyte, Dufferin, Dufferin Industrial and Lord Selkirk Park, to be referred to, for the remainder of this document, as Selkirk Avenue District.



Includes the neighborhoods of;

1. William Whyte
2. Dufferin
3. Dufferin Industrial
4. Lord Selkirk Park

49.8951° N, 97.1384° W

Size | 2.8 km²

Population | 10,225

Dwellings | 3,825

humid continental climate zone (Köppen Dfb)

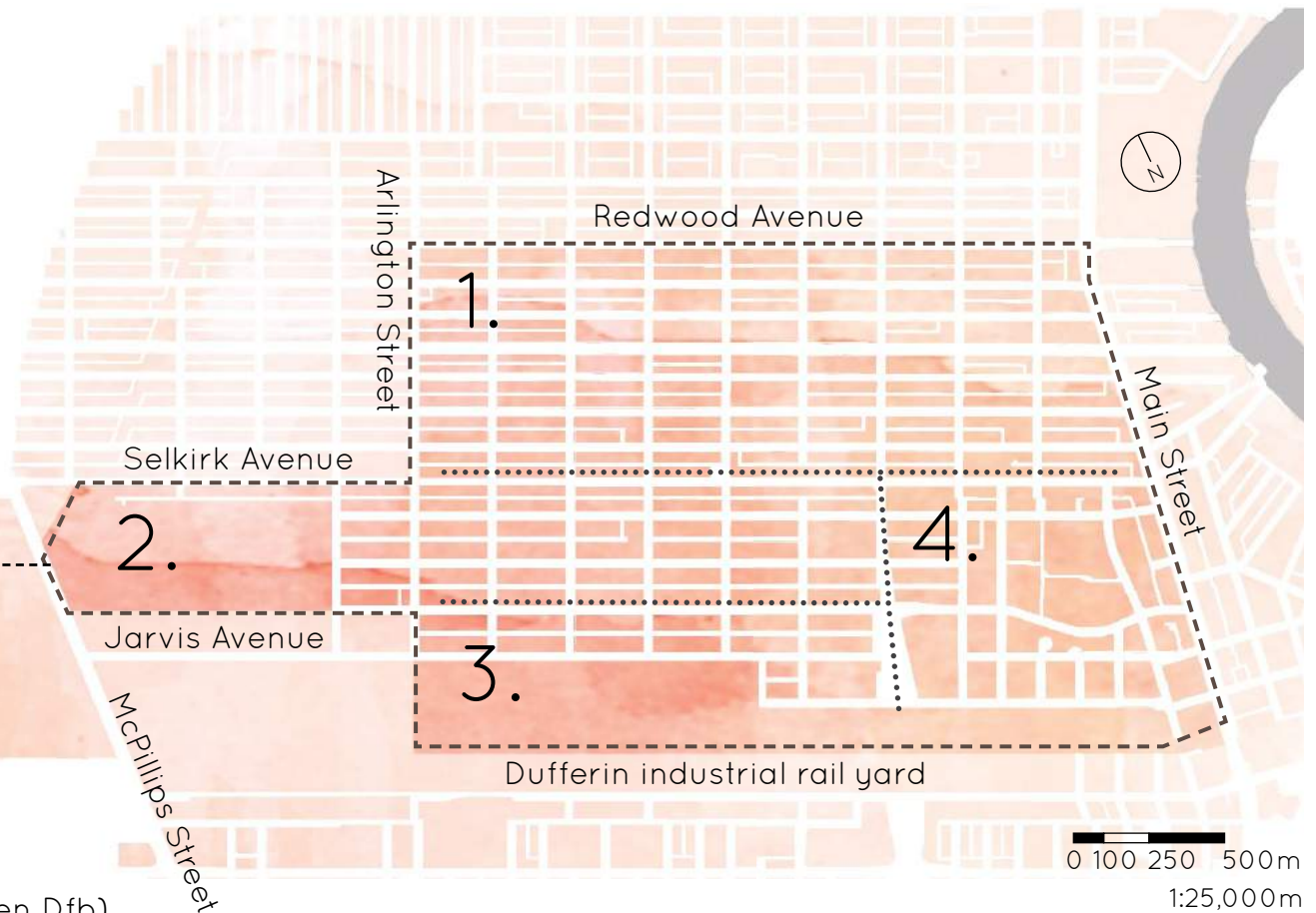


Fig. 5: Context and scale (Lins, 2018)

The character within the district is an enticing mix of beautiful, loved, profane, and neglected. Within a single block, one may see a house with a well-tended yard, another home with a lovingly cared for flower garden, another home which has been boarded up and vandalized, and yet another with shifting shingles and an overgrown yard. There is history and beauty in the buildings and open spaces, including the neglected ones. There is little public green space and the significant physical barrier of the rail yard, which disconnects the North End from the prominent South End of the city. The degraded physical character of this neighbourhood district mirrors the degraded social factors; poverty, crime, violence, and health and well-being issues.



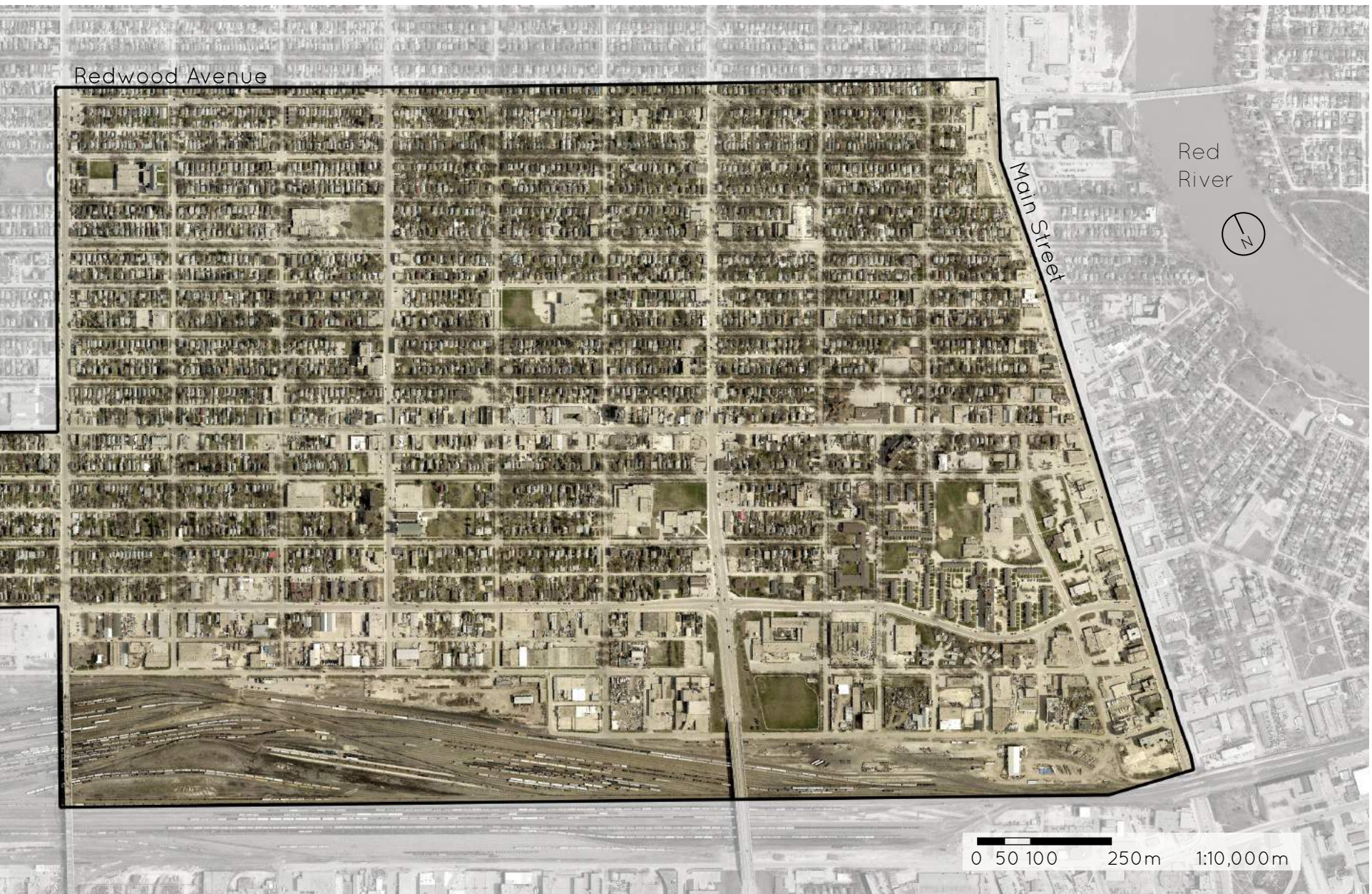


Fig. 6: Areal (Lins, 2019)

History

Reviewing the North End's rich history, illuminates the area's narrative of disconnection, diversity, fresh local food, and the importance of food to the community.

Since the development of the city, as new waves of settlers have come, the district has maintained a more transient population than the broader Winnipeg region, as people who move into the area do not tend to remain (Gourluck, 2010). With this amount of transiency, it can be challenging to develop neighbourhood pride, leading to a sense of social disconnection for those transient populations. The district has a history of the people bringing with them diverse sets of opinions, beliefs, culture, and food (Gourluck, 2010). It was one of the first neighbourhoods developed in the city (Graham, 1984, cite), and over time, it has become a degraded neighbourhood.



DISCONNECTION FOOD



Fig. 7:
Snow covered boulevards
(Lins, 2018)

History continued

During the Pleistocene Epoch, the most recent Ice Age, glaciers covered this region. When this era ended, roughly 11,700 years ago, these glaciers receded and left fine clay deposits, resulting in a relatively impervious soil base (Graham, 1984, p.26).

Small nomadic and semi-nomadic groups of Indigenous People migrated into the region and hunted, gathered and cultivated the landscape until the colonization of Canada (The Living Prairie Museum, 2005).

1612

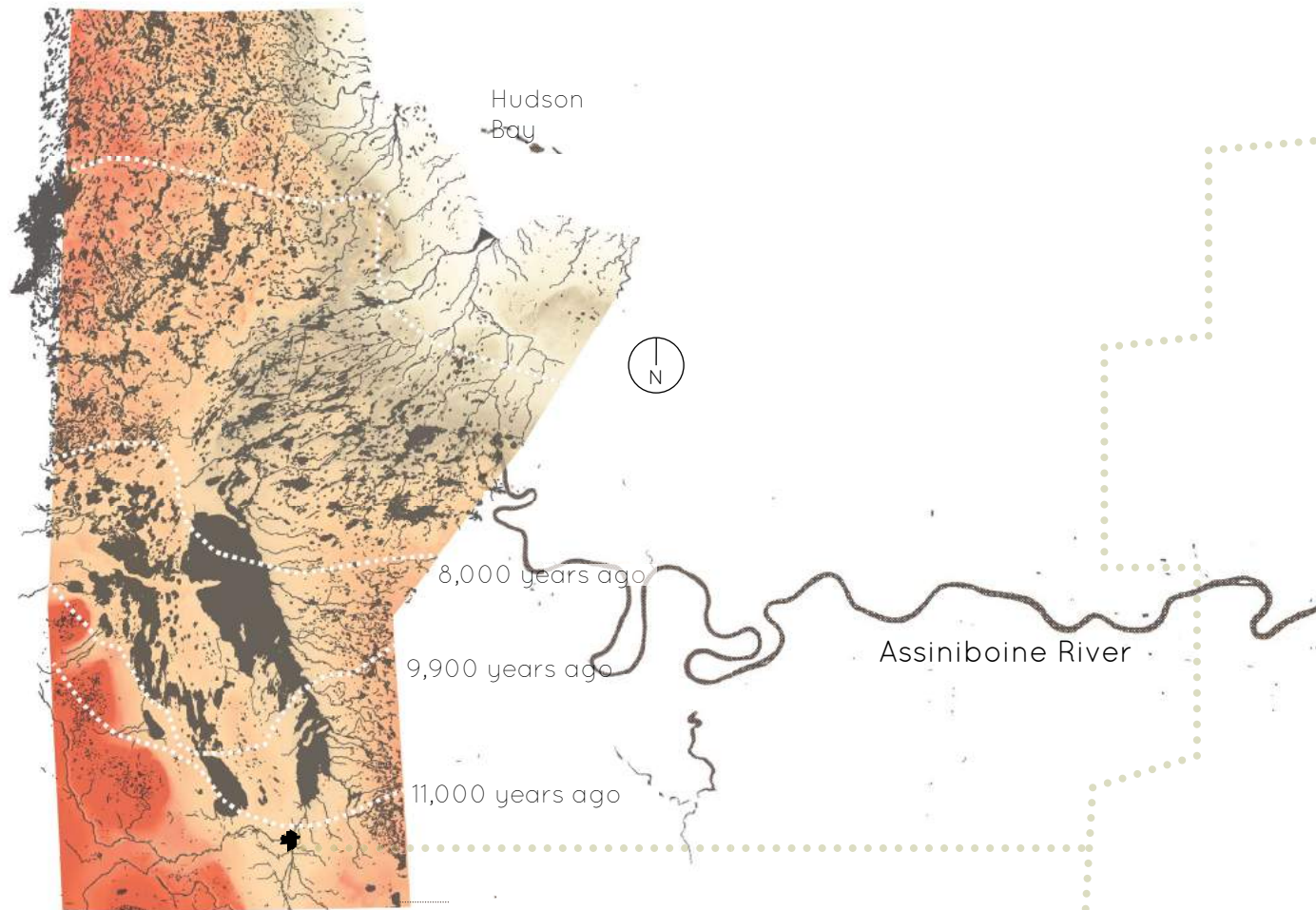
The first explorers reached the present day Manitoba Hudson Bay coast (The Canadian Encyclopedia, 2014).

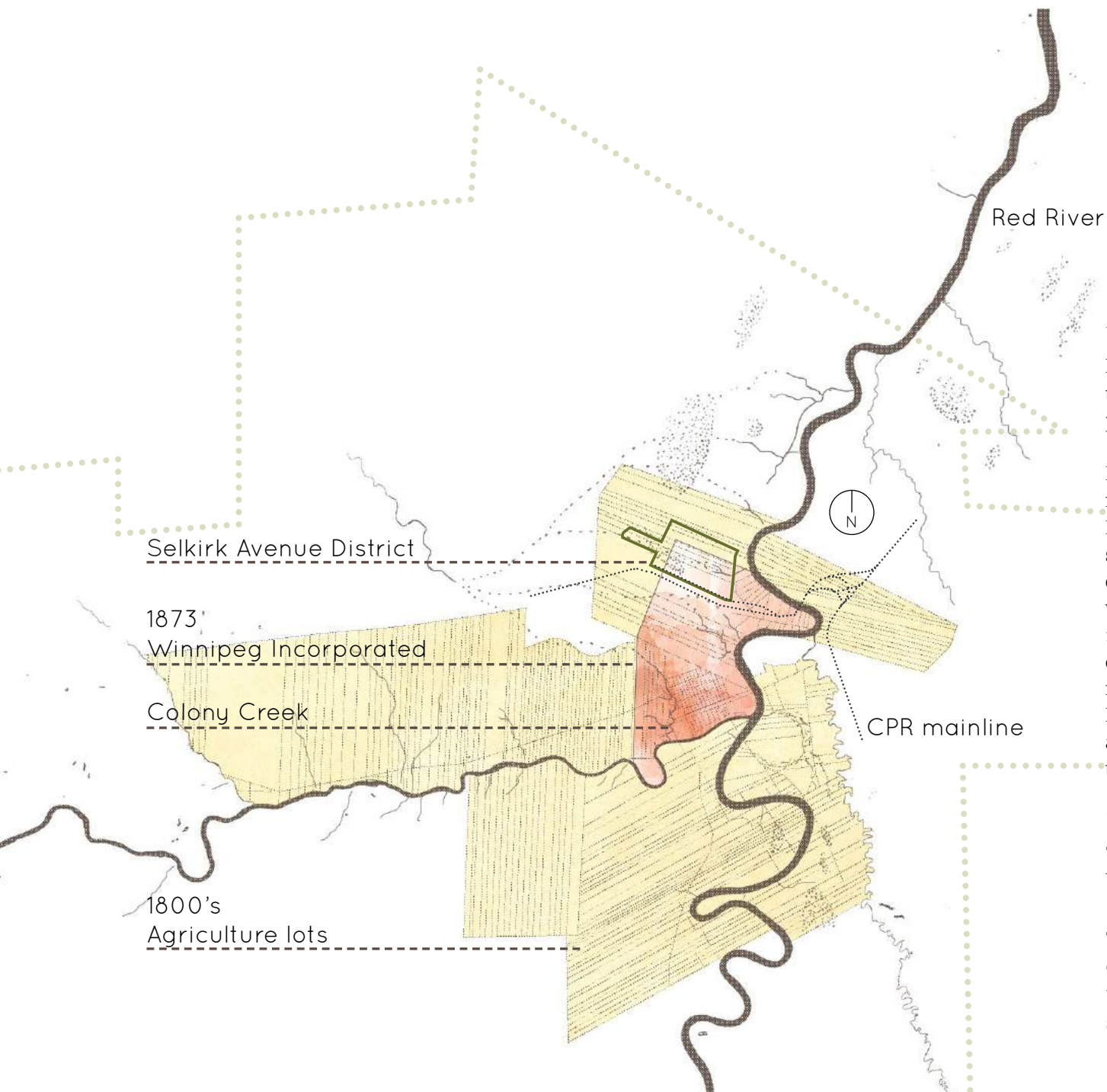
1690-1692

Henry Kelsey was the first foreigner to journey into the prairies (The Canadian Encyclopedia, 2019).

1730-1850

During the fur trade era (Graham, 1984, p.58), five forts were built near the district.





1880-1882

It was confirmed that the railway was to pass through Winnipeg, not Selkirk (Graham, 1984, p.60).

Railway beds were established leading to severe flooding of colony creek (Graham, 1984, p.79). Because of this, and as the area was an agricultural settlement, there needed to be diversions and ditches built (Graham, 1984, p.61). A 30' wide ditch with embankments was established (Graham, 1984, p.80). After further extreme flooding, and embankments being re-enforced, the source water for six major streams (Colony, Browns, Logans, Pritchards, St. Johns, and Inksters) were blocked and within 20 years only traces would remain of their original courses (Graham, 1984, p.82).

1885

The Canadian Pacific Railway arrived and Winnipeg became the gateway to the west (Graham, 1984, p.4).

The CPR mainline “symbolized the aspirations of Winnipegers, but it also became a barrier that divided the city into two distinctly different sections” (Gourluck, 2010, p.15)

Fig. 8: History (Lins, 2019)

History continued

1900's

The North End became “a mosaic of diverse cultures, religions, and languages”(Gourluck, 2010, p.15). Small homes on narrow lots, 25-33” wide (Gourluck, 2010, p.17), were built intending to house roughly 7 people. However, multiple families, 25-30 people, often resided in a single home (Gourluck, 2010, p.18).

A regular farmers market is run at Dufferin + Derby

(Gourluck, 2010, p.19).

1907

Thirteen different languages were taught in schools, though many children did not attend (Gourluck, 2010, p.21).

1913

The north end was home to 87% of the Jews, 83% of the Slavs, 67% of the Scandinavians, 22% of the Germans in Winnipeg (Gourluck, 2010, p.20). Few services were available to assist immigrant transition to a new life and there was prevalent prejudice towards immigrants (Gourluck, 2010, p.20).

1919

Unemployed returning soldiers resented immigrants for occupying jobs. A group of veterans rampaged the North End, smashing store windows breaking into homes, and demanding ‘foreigners’ kiss the union jack. This great turmoil contributed to the outbreak of the Winnipeg General strike (Gourluck, 2010, p.21).

1920's

Ukrainians were involved in politics, built churches, developed newspapers and cultural programs. Poles developed religious institutions. Jewish people created small business ventures, synagogues, free Hebrew schools, and social activities and agencies (Gourluck, 2010, p.7-8).

Many backyard gardens and chicken coops were kept for fresh produce, preserving, and eggs (Gourluck, 2010, p.19).

1930's

The neighbourhood's population moved frequently, within but also out of the neighbourhood, due to family financial changes (Gourluck, 2010, p.27).

Main Street Farmers Market, between Flora and Stella, was the longest running and most well known market (Gourluck, 2010, p.160).

1937

Gunn's Bakery was founded (Gourluck, 2010, p.38).

1950's

The people in the area received below sufficient pay, yet were blamed for inadequate and slum living conditions (Gourluck, 2010, p.30). The community conducted almost all their shopping in the north end, especially along Selkirk Ave, the 'heart of the north end' (Gourluck, 2010, p.31).

Many **corner stores** with longer hours were scattered throughout the North End, typically with floor to ceiling wooden shelves stocked with cans and boxes (Gourluck, 2010, p.35).

Selkirk Avenue was the commercial center and was regularly packed with a mosaic of people, which 'illustrated the ethnic diversity of the area' (Gourluck, 2010, p.38). Selkirk Avenue had everything you could need, butchers, bakers, a shoemaker, tinsmiths, barber shops, a bowling alley, (Gourluck, 2010, p.38), many clothing stores, and public comfort stations (public washrooms) (Gourluck, 2010, p.39).

1960's

After the right to vote was granted to First Nations people, there was an influx of indigenous people into the city, and the north end in particular (Gourluck, 2010, p.217).

"The spirit of the north end can be found in businesses that have been part of the neighbourhood for ages and are proud to remain" (Gourluck, 2010, p.219), many of which are food based.

1970's

Advocates of the north end debated over the creation of a Sherbrook to McGregor overpass (Gourluck, 2010, p.111).

2007+

A safety strategy has helped reduce criminal activity in the North End (Gourluck, 2010, p.230).

2009

Several surveillance cameras were installed at intersections (Gourluck, 2010, p.208).

Food Businesses are historically important to the character of the area (Gourluck, 2010, ch.4), and some of the earliest and most enduring businesses.

European bakeries

KUB, Gunn's, City Bread, and The Donut House (Gourluck, 2010, pp.132-135)

Delicatessens

Oscans, Simons, The Oasis, Elman's Kosher Deli Foods, Naleway Catering (Gourluck, 2010, pp.138-141)

Kubasa etc

Manitoba Sausage and Winnipeg Old Country Sausage (Gourluck, 2010, p.144)

Restaurants

C. Kelekis, The White House, The Windmill, Sals, and Alycia's Restaurant (Gourluck, 2010, pp.148-154)

Those living within the North End have great community pride, as seen through all the engagement. However, over time, for those living outside the community, the neighbourhood now

“represents crime and violence” as
“aging neighbourhoods, poverty, and
hopelessness have taken their toll”.

A “Changing Mosaic” (Gourluck, 2010, p.207)

However,

“(n)orth end pride and spirit continue to
thrive in the people and organizations
that believe in the North End and work
together to create a better future.”

A “Changing Mosaic” (Gourluck, 2010, p.229)



Fig. 9: Lovely walk (Lins, 2018)

Demographics

Social conditions dictate the emotional feel of an area and percolate into the physical conditions. The demographics, which follow, show the state of the Selkirk Avenue District compared with the broader Winnipeg region. Unless otherwise stated, these statistics are drawn from Statistics Canada (2011), as cited by the City of Winnipeg (2020). The district inhabitants live with great diversity and variety but not in the best conditions.

There are striking concerns for this area. Health and social crises abound. These issues point to more significant concerns regarding well-being and human rights. The following demographics illustrate these concerns. Comparing the district to the broader Winnipeg area, there are significant discrepancies, which indicate the crisis and a need for an impactful social response.

Citizenship + Generations

The tree canopy (fig. 11) represents the number of non-Canadian citizens living in the district, in comparison to the large number of Canadian citizens. The tree roots (fig. 11) indicate the high percentage of second and third generation Canadians. These statistics illustrate potential deep ties to the neighbourhood. Also, the significant number of new citizens and first generation Canadians indicate an opportunity to engage new community members.

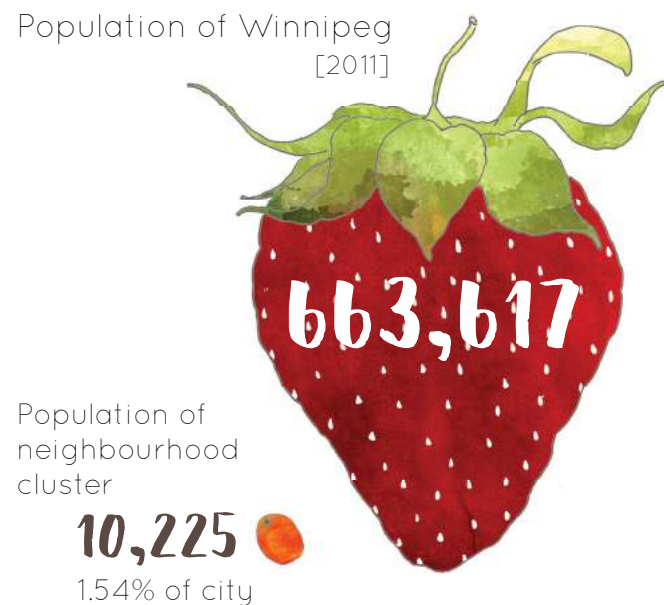
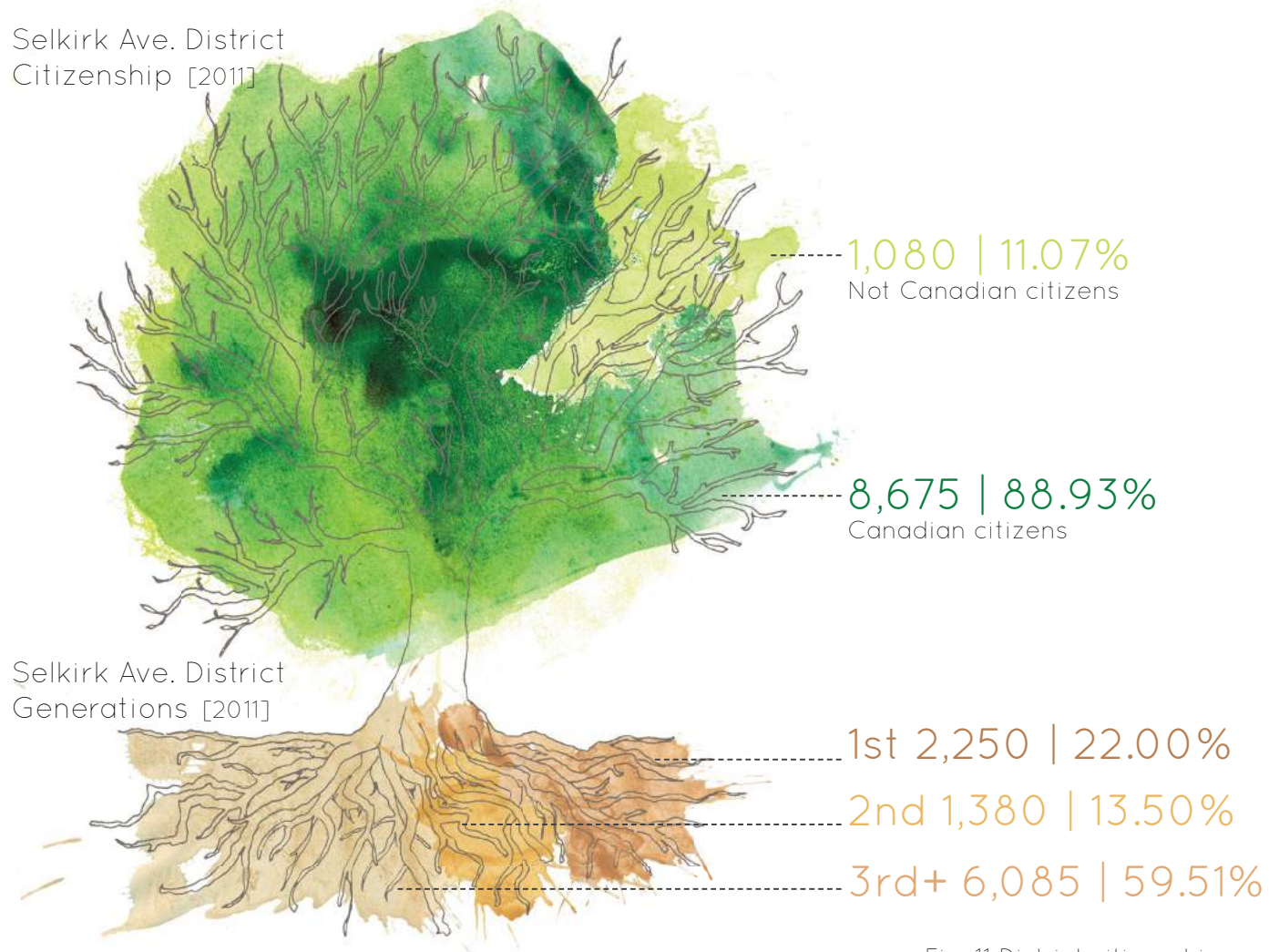


Fig. 10 District and Winnipeg populations (Lins, 2018)

Selkirk Ave. District
Citizenship [2011]



Selkirk Ave. District
Generations [2011]

Fig. 11 District citizenship and generations (Lins, 2018)

Demographics _ Diversity

Age of Community

The bean sprouts (fig. 12) indicate the population breakdown within the neighborhood cluster, by age groups. In many instances, the women outnumber the men. The highest population being the youngest and the smallest being the elderly. The high proportion of young people in the area could indicate older people do not stay or are not living as long. An opportunity is apparent, given the large population of young people, to engage youth in community efforts.

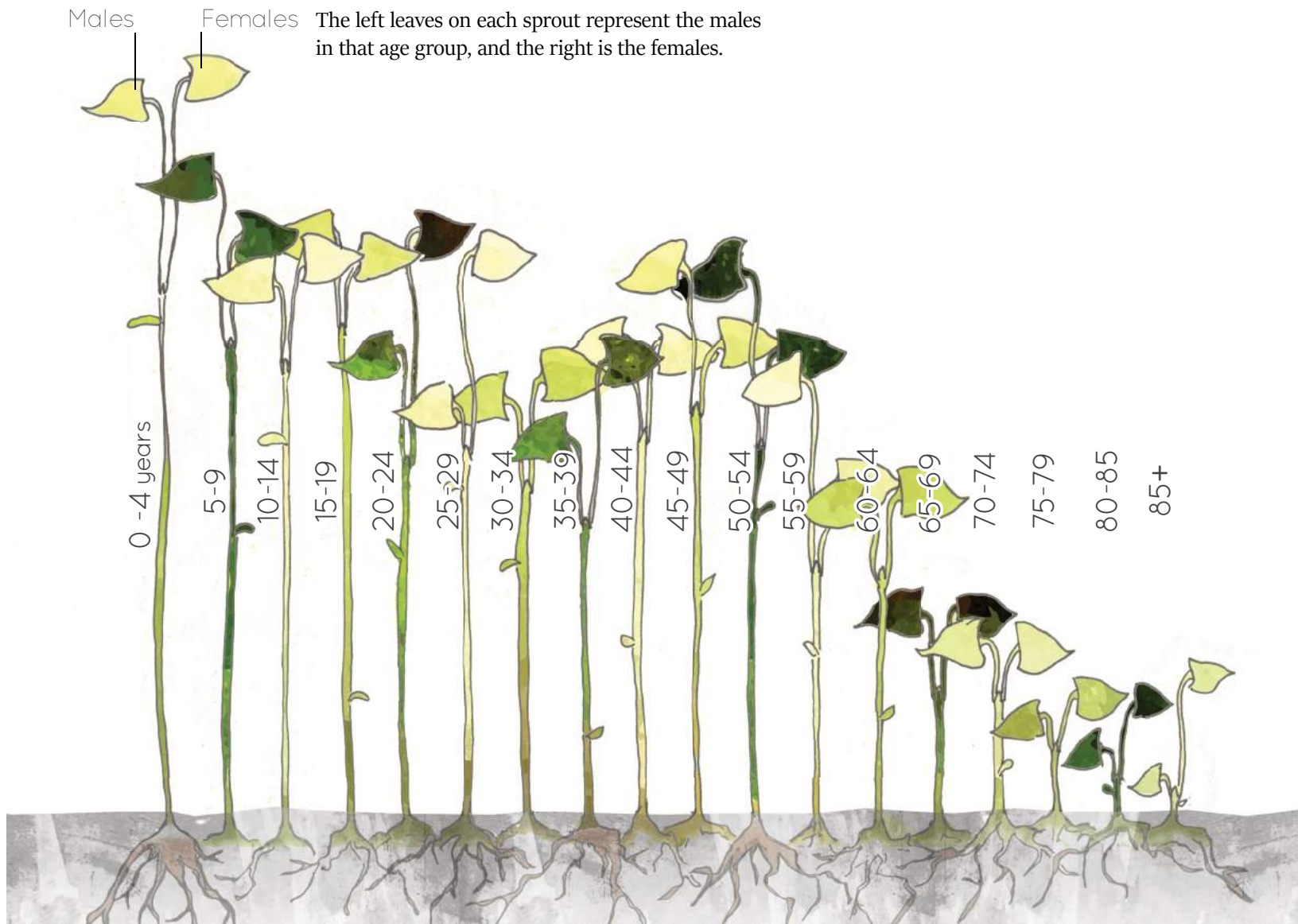


Fig. 12 Age of community (Lins, 2018)

Demographics _ Diversity

Indigenous Identity

The Sunchokes (fig. 13) demonstrate the high percentage of individuals who self identify as indigenous in this neighborhood cluster, especially compared to the rest of the city of Winnipeg. All community members should be considered, but based on these numbers, indigenous values, needs, and concerns must be considered.

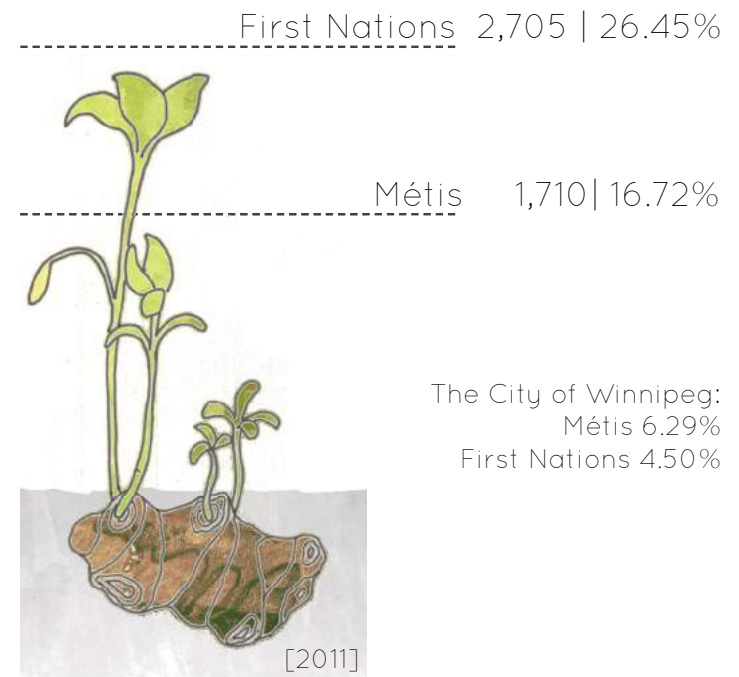


Fig. 13 Indigenous identity (Lins, 2018)

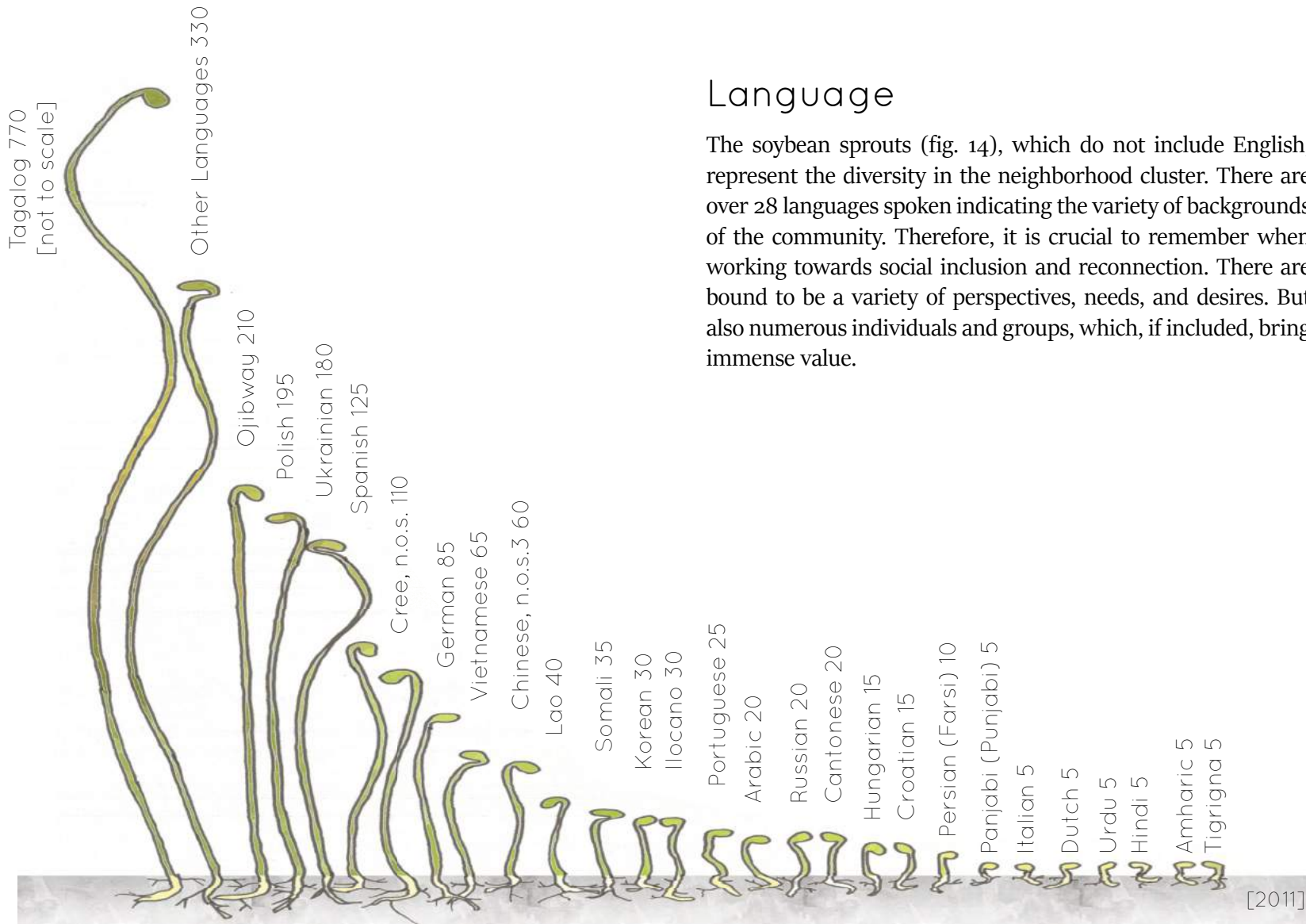


Fig. 14 Language (Lins, 2018)

Language

The soybean sprouts (fig. 14), which do not include English, represent the diversity in the neighborhood cluster. There are over 28 languages spoken indicating the variety of backgrounds of the community. Therefore, it is crucial to remember when working towards social inclusion and reconnection. There are bound to be a variety of perspectives, needs, and desires. But also numerous individuals and groups, which, if included, bring immense value.

Demographics _ Economic

Income

The average income (fig. 15) in the district is roughly \$20,000 a year versus the average income in the city which is slightly below \$40,000 a year. This shows many households in the district are in need of financial assistance to provide for themselves.

Education

A large proportion of the community has no certificate, diploma, or degree in education (fig. 16). Roughly half the people in the district have no high school certificate or secondary diplomas. However, in the broader Winnipeg region, more than half the population has received a certificate or degree at or above the post secondary level.

This lower level of education makes it difficult for people to provide and care for themselves, as education is directly related to the type of job and income one will earn.

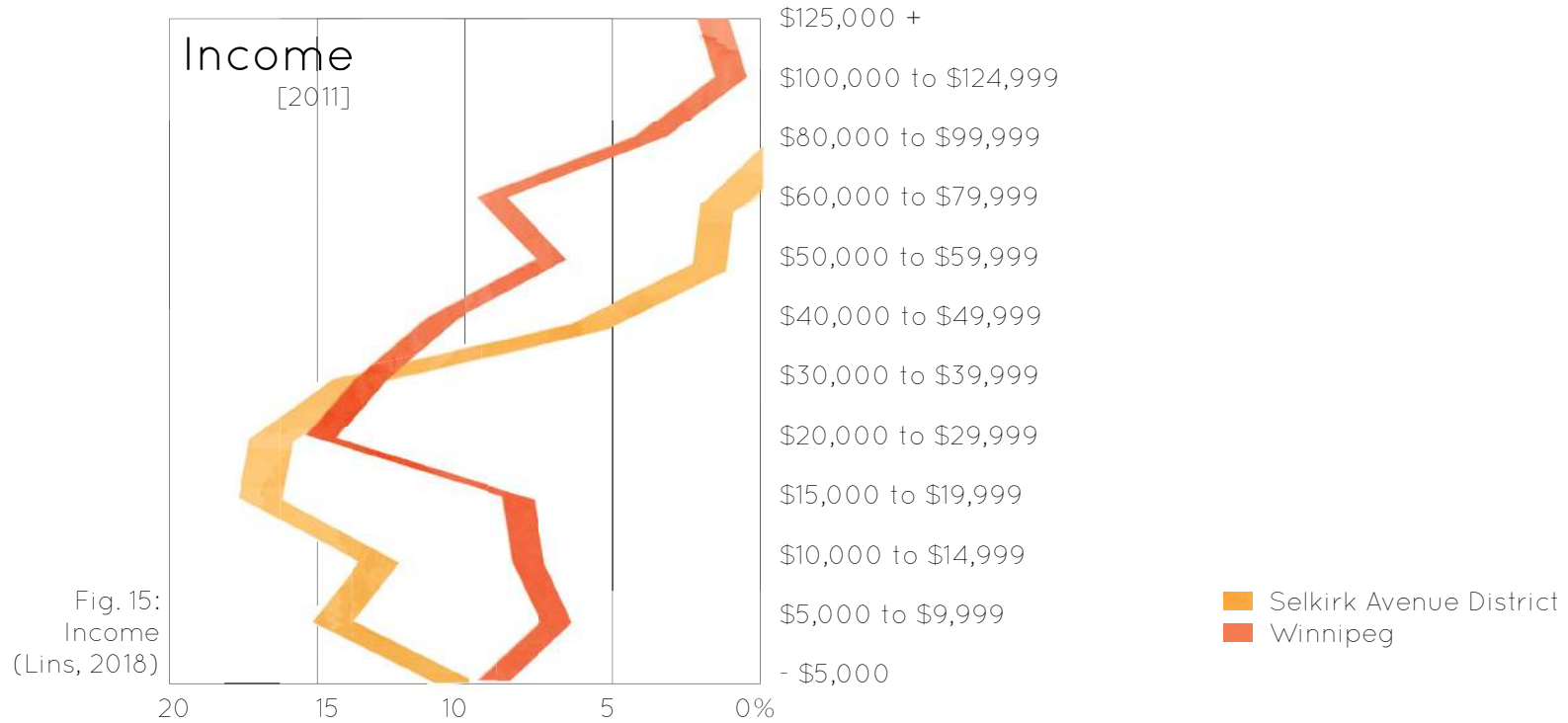


Fig. 15: Income (Lins, 2018)

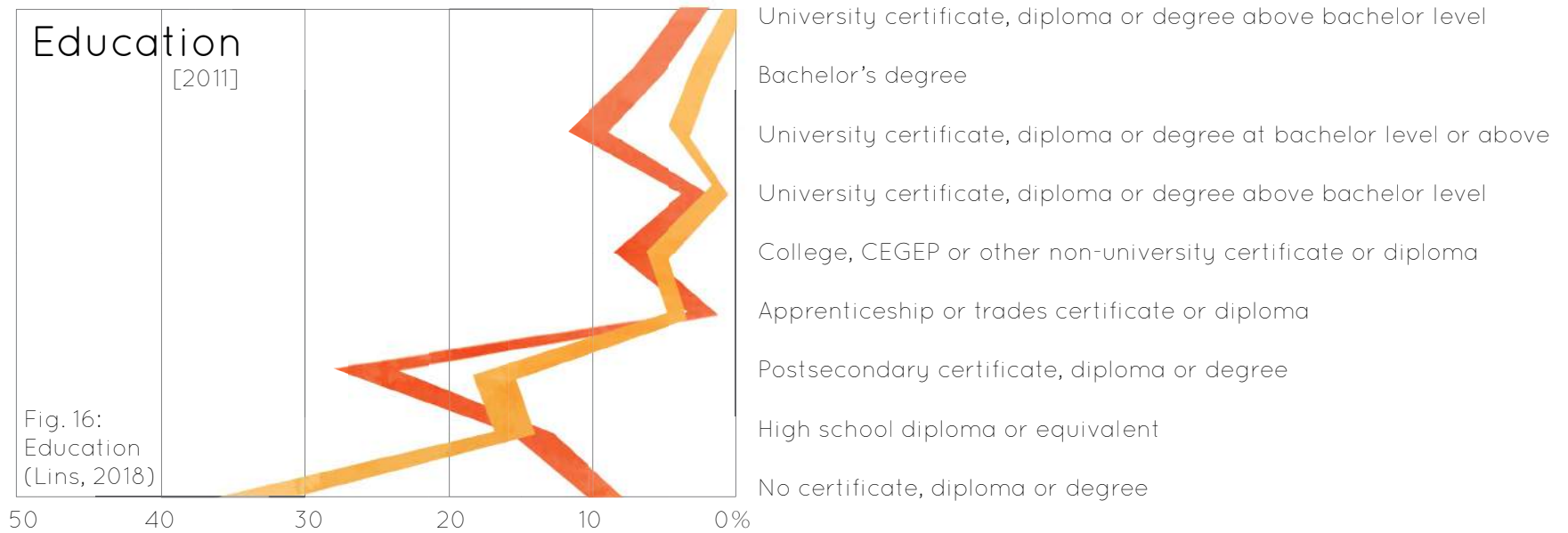


Fig. 16: Education (Lins, 2018)

Demographics _ Economic

Employment

This district is underemployed. The graphic to the right (fig. 17) demonstrates, out of the population of the neighbourhood cluster, how many individuals are employed, indicating an opportunity to increase employment in the area.

Economic inequality is of great concern. People are not able to provide the necessities because of a lack of adequate income opportunities. Some cannot find work, but many are underemployed, meaning they need multiple jobs because one is not enough to meet their basic needs. There is an ever-expanding wage gap and inability for average people to acquire the means to provide for themselves or their families. Those with less have access to fewer options, which includes the basics of food and water.

Employment rate
[2011]

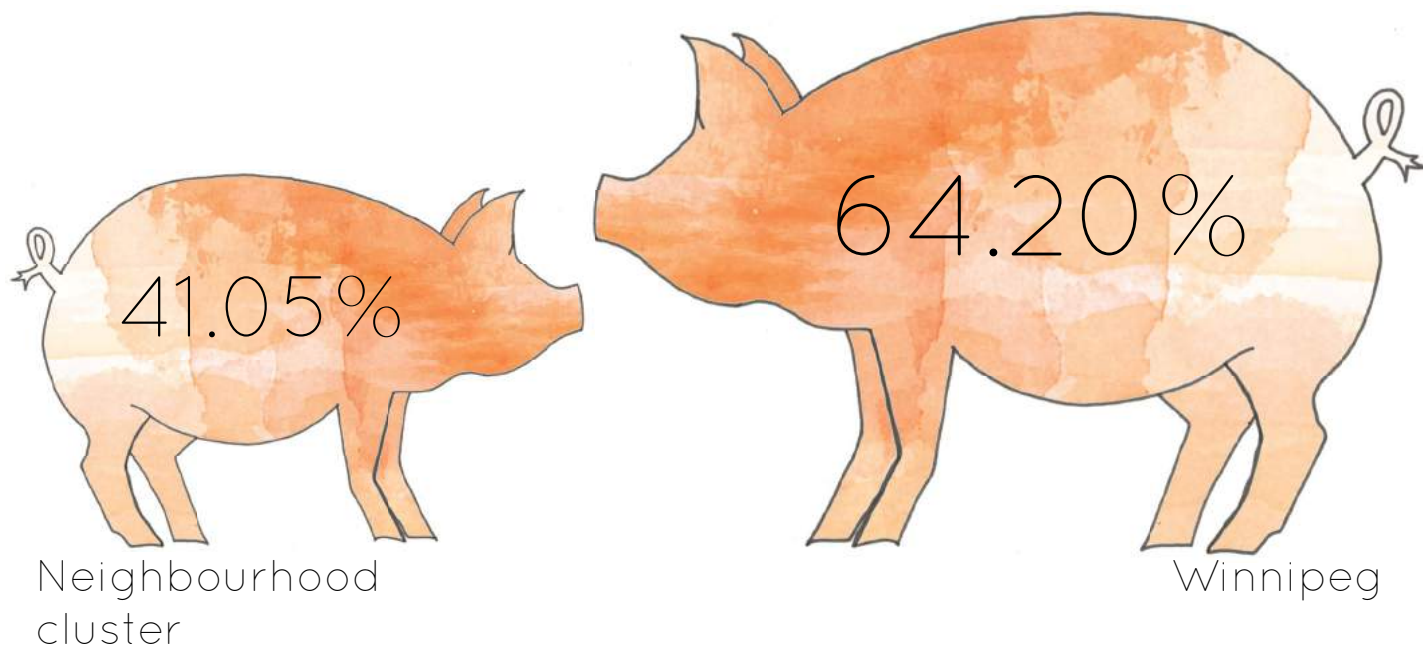


Fig. 17: Employment rate (Lins, 2018)

Demographics _ Health + Safety

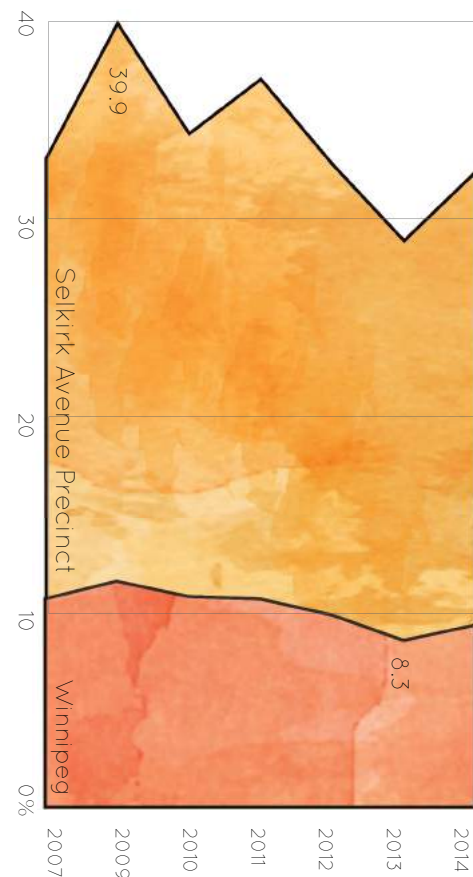
Safety + Security

The rate of reported assaults and attacks (fig. 18) is dramatically higher in the Selkirk Avenue district compared to Winnipeg (Peg, 2020. Personal safety). These safety statistics are of great concern for an individual's well-being, as the Winnipeg rates are considerably lower. Unfortunately, these rates may climb as lack of food threatens individual safety, security, and well-being, as conflicts are likely to arise from people trying to secure adequate food and water.

Well-being

There is a substantial prevalence of health-related issues (fig. 19-22) that occur in the district, including diabetes (Peg, 2020. Diabetes), substance abuse (Peg, 2020. Substance abuse), stroke (Peg, 2020. Stroke), and heart attack (Peg, 2020. Heart Attack). The rates of all these illnesses are much higher in the area. These health-related issues paint the picture of poor overall health but also diet and lifestyle-related health concerns. Strategies are needed to lessen these conditions.

Safety [2011]



Personal Safety

Assaults, homicides, sexual assaults, + robberies per 1,000 pple

- Selkirk Avenue District
- Winnipeg

Fig. 18: Safety (Lins, 2018)

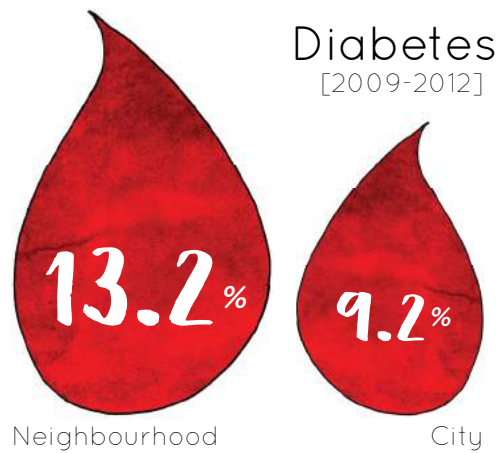


Fig. 19: Diabetes (Lins, 2018)



Fig. 20:
Substance
abuse
(Lins, 2018)

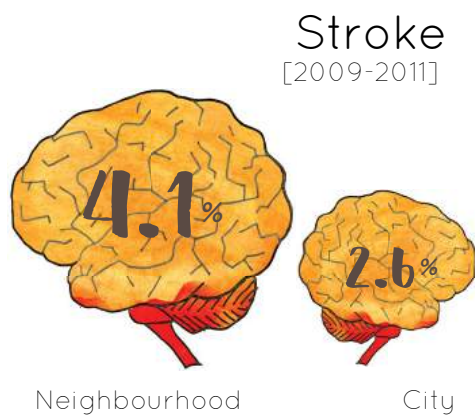


Fig. 21: Stroke (Lins, 2018)

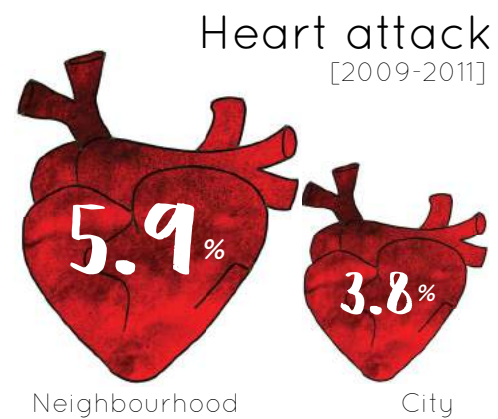


Fig. 22: Heart attack (Lins, 2018)

Demographics _ Life

Life expectancy (fig. 23) is shorter in the Selkirk Avenue District compared to the Winnipeg area (Peg, 2020. Life expectancy female and Peg, 2020. Life expectancy male). It is possibly due to the increased prevalence of the health related issues the district faces. However, life is too valuable to be wasted in this way. Therefore the health and safety discrepancies must be addressed. This gap should be of utmost importance to close.

Life Expectancy at Birth



Fig. 23: Life expectancy (Lins, 2018)

Physical Characteristics

Physical Characteristics _

Commercial Food

The adjacent map demonstrates how few food sources are available in the Selkirk Avenue District. There is barely a handful of stores within the area, and many of these do not provide fresh food options. Selkirk Avenue District is a relatively densely populated area, and yet a fundamental right is not locally provided.

- Supermarkets + grocery stores 
- Convenience stores + restaurants 
- Houses 
- Buildings 

0 250m
1:10,000m





Fig. 24: Commercial food (Lins, 2019)

Neighbourhood needs_

Land Types

Open land within the Selkirk Avenue District (fig. 26) can be classified into three categories; public land, private property, and industrial lands. Public lands include public parks and boulevards. Private property includes the yards around homes, apartments, and businesses. Industrial lands are the lands surrounding industrial buildings or used for industrial purposes.

The majority of the land is private property. However, the most publicly visible land is public, which contributes significantly to the character of the district. The majority of this land is planted with trees and grasses. There is a beautiful tree canopy, but the ground beneath appears bare. This bare land is often degraded, leading to an environment that seems to be neglected.

-  Public land
-  Private property
-  Industrial land



Fig. 25: SA district boulevard (Lins, 2018)

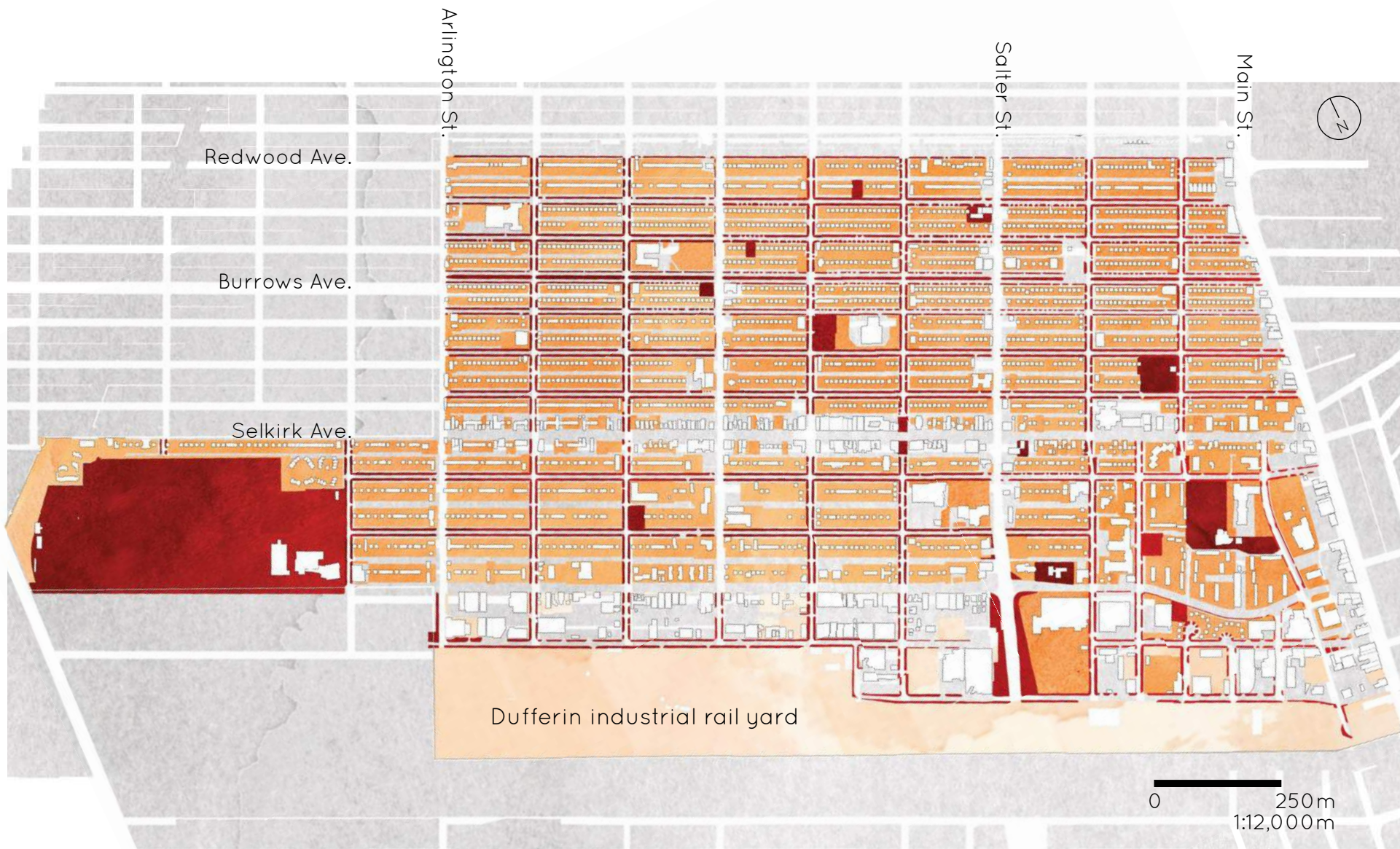


Fig. 26: Land types (Lins, 2019)

Physical Characteristics _

Boulevard Trees

Risk of Street tree loss

A significant contributor to the feel of the Selkirk Avenue District is the street tree canopy (fig. 28). However, in the plan adjacent, the vast amount of red indicates how at risk the urban forest truly is. Due to Dutch elm disease and the Emerald Ash Borer, the elm and ash trees are at considerable risk of catastrophic die-back. This die-back is of great concern, especially in Winnipeg, as part of the city's civic identity is the abundant tree canopy. Additionally, there has already been great die-back in the district due to the age of the trees and disease.

When a tree is removed, there is a two-year period before a new tree may be planted, and this depends on funding and availability (City of Winnipeg, 2020). This loss is of great concern as the Winnipeg urban forestry programs have been underfunded and can not keep up with the loss (Santin, A., 2019). In 2017 Winnipeg removed 8,668 public trees. However, only 2,448 public trees were planted (Santin, A., 2019). Therefore, there is an opportunity to make use of those areas currently with few or no trees, as well as areas anticipated to lose the trees.

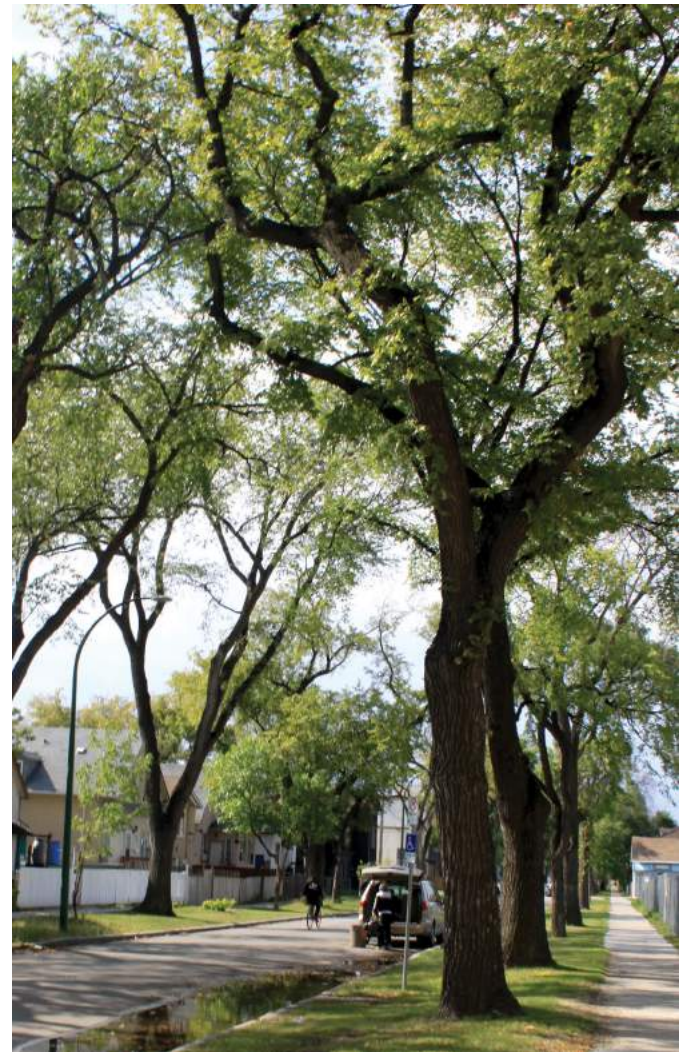


Fig. 27: SA district boulevard tree canopy (Lins, 2018)







Fig. 28: Boulevard trees (Lins, 2019)

Physical Characteristics _ Traffic Flow

Traffic flow (fig. 29) contributes to the feel of the neighbourhood. The average weekly daily traffic flowing through the district contributes to a number of types of pollution; noise, air, road wash, and litter. The number of busy streets, with more than 5,000 cars passing through in a day, indicates the pollution may be greater near these streets.

Traffic Flow

	20,000+
	10,000-20,000
	5,000-10,000
	-5,000

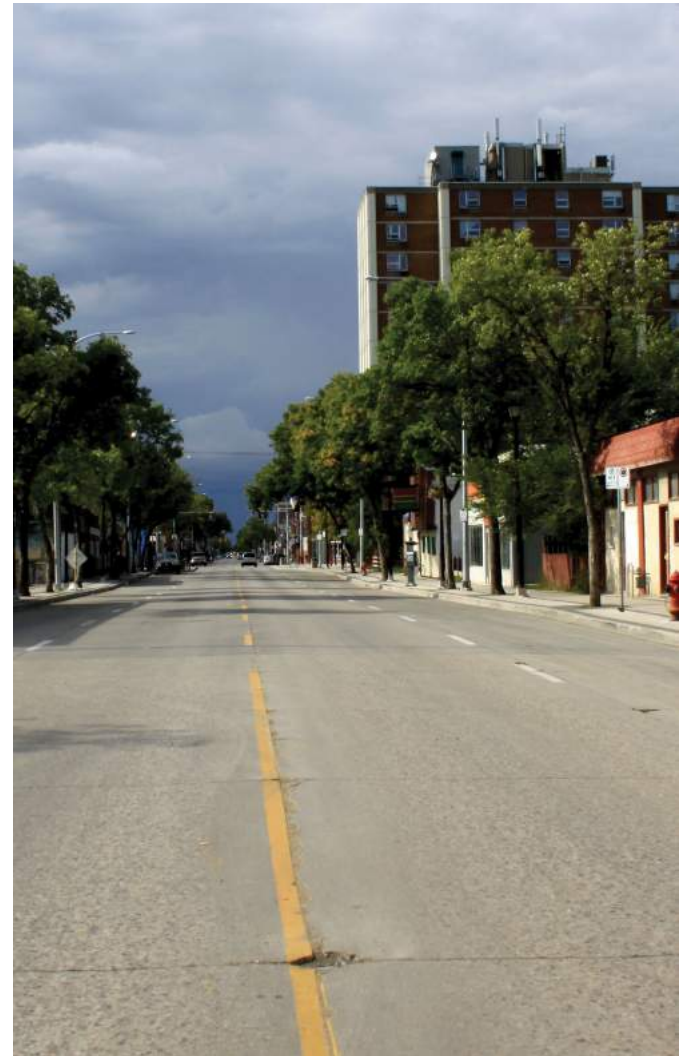


Fig. 29: Selkirk Street (Lins, 2018)

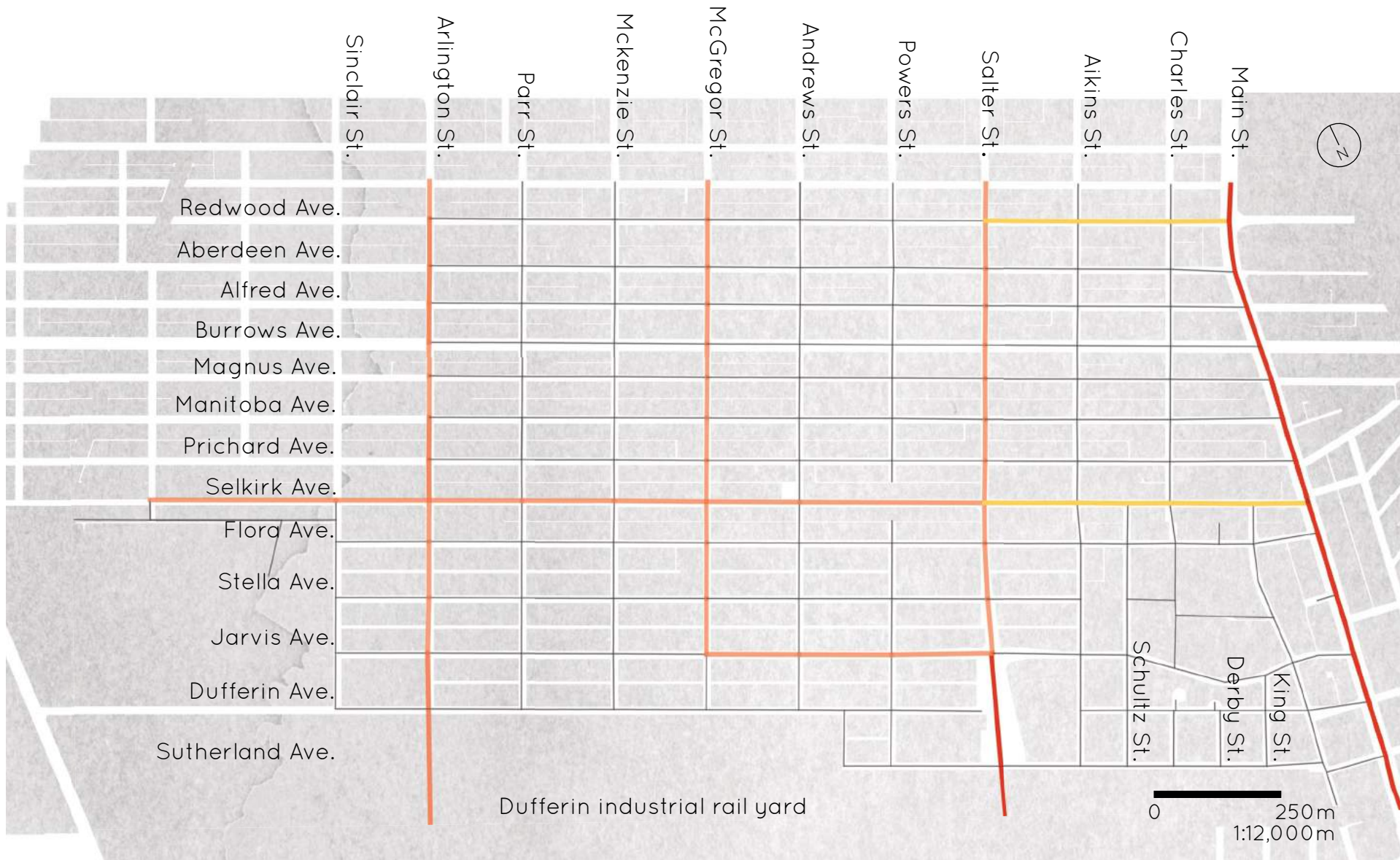


Fig. 30 : Traffic flow (Lins, 2019)

NEIGHBOURHOOD NEEDS

INTRODUCTION

The North End is home to countless passionate community members who continuously strive for the fruitful development of the North End. The community has indicated through documentation (North End Community Renewal Corp, 5 Year North End Community Renewal Plan 2016-to-2021) that access to resources and social connections are needed on various scales. There is a theme throughout the neighbourhood renewal plan that there is a need for healthy, culturally relevant food availability. Food security may be the outward concern, but food itself could act as the connector. Growing food and establishing a community food network to feed and enhance well-being in the neighbourhood is an avenue to meet the community goals. Nourishing and connecting community members is needed in the Selkirk Avenue District.

Neighbourhood Needs _ North End - Five Year Community Renewal Plan 2016-2021

Within this vibrant community, filled with over 70 divergent groups dedicated to bettering the North End of Winnipeg (NECRC, Partnerships, n.d.), there is the North End Community Renewal Corporation (NECRC). This organization includes funders, businesses, government (municipal, provincial, federal), residents and partner organizations (NECRC, About Us, n.d.). Their mission states they are “committed to the social, economic and cultural renewal of the North End of Winnipeg” by working “with community committees to plan and implement development strategies . . . to revitalize the North End” (NECRC, About Us, n.d.). NECRC works towards their goals with a focus on collaborative engagement as they promote bringing people together to share the work, as they are all stronger together (5 Year North End Community Renewal Plan 2016-to-2021, 2011). They organize their goals into seven categories or “development themes”; “housing, employment, culture and diversity, community, safety, economic and recreation, and wellness” (5 Year North End Community Renewal Plan 2016-to-2021, 2011, p.25). “NECRC reviews and defines its development goals through annual consultations and ongoing networking with North End residents and businesses” (NECRC, n.d.) in

which the North End – Five Year Community Renewal Plans are developed. This plan is where the community comes together to define the community needs.

The North End – Five Year Community Renewal Plan 2016-2021 (North End Community Renewal Corporation, n.d.) is a document produced by the community. The report indicates a focus on goals such as the “needs and concerns of youth” as well as creating a community that is “inclusive, holistic and respectful” (p.4) with particular thought towards the “Truth and Reconciliation Commission of Canada: Calls to Action” (p.4). Thirteen focus groups of over 150 people, eight neighbourhood based groups (North Point Douglas, Lord Selkirk Park, William Whyte, Dufferin, St. John’s, Burrows, Inkster/Faraday/Robertson, Luxton/St. John’s Park) and five sector groups (Youth, Business, Community Service, Aboriginal, Education) contributed (p.1). A lovely community feast was held (p.1) to inform the community of the results of a this community research, identifying a wish for a vibrant, engaged, healthy, and safe community.



Fig. 31: Powers - Selkirk Park Mural (Lins, 2019)

The North End – Five Year Community Renewal Plan 2016-2021

Priorities + Strategies Sample

Objective	1. Improve neighbourhood capacity/ empowerment (as measured by increased participation of local stakeholders in renewal efforts, complementary funding leveraged and greater residential stability) (NECRC, n.d., p.5).	2. Improve housing conditions (as measured by physical improvements to substandard housing, development of affordable housing units, increased housing values/ investment and promotion of homeownership including cooperative housing models) (NECRC, n.d., p.8).
Priorities	<ul style="list-style-type: none"> - Inclusive education opportunities - Increased programing for disenfranchised community members - Community building activities, revitalizing the north end - Information sharing - Improving the perception of the North End - Enhancing cultural competency in the North End (NECRC, n.d., p.5-7) 	<ul style="list-style-type: none"> -Complete Merchants Corner -Promote and support local businesses and new business development -Improve the image of North End Business districts -Ensure a better selection of grocers and other retailers -Support local hiring and provide assistance to secure employment (NECRC, n.d., p.10-11)
Example result	<ul style="list-style-type: none"> -Programming, especially for youth, seniors and other disenfranchised community members -Collaborate efforts of newcomers and indigenous people -Increased knowledge of access to healthy/traditional foods -Continue to facilitate, support and promote cultural food workshops in the North End -Increased cultural awareness surrounding food -Support opportunities for neighbours to work together to revitalize their community. eg: regular community clean up events, exterior improvements, removal of derelict buildings, graffiti removal, needle pickup and disposal (NECRC, n.d., p.5-7) 	<ul style="list-style-type: none"> -Increase homeowner capacity with workshops on repairs and maintenance (NECRC, n.d., p.10-11)

*Red text indicates food related needs as identified by the community.

3. Increase economic development activity
(as measured by labour market participation rates, job creation, training/ employment preparation, adult education opportunities, sustaining or development of small business and/or social enterprise) (NECRC, n.d., p.12).

- Support social enterprise and co-op development
- Promote and support local businesses and new business development
- Ensure a better selection of grocers and other retailers (NECRC, n.d., p.13-14)

- Support the formation of an advisory committee with responsibility to determine missing business profiles, particularly related to grocers and other retailers and to disseminate information around defined missing business opportunities
- Continue to facilitate North End retailers to incorporate 'healthy food' projects
- Support development and implementation of Shop Local- Buy Local campaign
- increased healthier selection of foods at convenience stores
- continue to partner with local grocer to access affordable produce for the community
- continued development of ideas on how to get affordable and healthy food into the NE (NECRC, n.d., p.13-14)

4. Improve safety conditions
(as measured by reductions in crime including fires/ arson; improved security measures such as street lighting and home security; and greater perception of safety) (NECRC, n.d., p.15).

- Incorporate CEPTED principles into North End community planning
- Provide more programming for youth, especially in the evening (NECRC, n.d., p.16)

- Continued support for youth led initiatives (NECRC, n.d., p.16)

5. Increase access to recreation and wellness opportunities
(as measured by improvements to parks and green space, play structures and other community recreation facilities; increased recreational programming and affordability including equipment and transportation) (NECRC, n.d., p.17).

- More affordable and accessible programming options and opportunities for youth
- More programming for seniors
- Development of a North End wellness strategy
- Creation of a North End cultural center (NECRC, n.d., p.17-18)

- Increase in the number of accessible activities for youth
- Increased youth engagement in the planning and implementation
- Increase in number of youth participating in recreation and art & music programs
- Support and coordinate the development/ maintenance of additional public green spaces in the North End
- Seniors have better access to healthy and affordable food (NECRC, n.d., p.17-18)

Fig. 32: The North End, Five Year Community Renewal Plan 2016-2021 priorities and strategies sample (NECRC, n.d.)

Community Renewal Plan continued



Fig. 33: Open boulevard (Lins, 2019)

It is made clear that the specific goals must be transparent, realistic, and follow the SMART criteria.

“S Specific about what you will achieve

M Include enough detail to be Measurable

A Achievable and realistic

R Relevant to the overall purpose of the project

T Time-bound: indicate when the objective is to be met”

(North End Community Renewal Corporation, n.d., p.3)

The North End Five Year Community Renewal Plan’s goal for a revitalized, stable and healthy community includes five objectives of improving the capacity and empowerment of the neighbourhood, housing conditions, economic development activity, safety conditions, and access to recreation and wellness opportunities (North End Community Renewal Corporation, n.d., p.2). Fig. 32 (see pages 43-44), The North End, Five Year Community Renewal Plan 2016-2021 priorities and strategies sample, includes a selection of the community priorities and strategies which exemplifies the call for connection, social opportunities available, and the potential and beneficial role food could play within this neighbourhood.

Disconnection is a prevalent and pervasive issue from the community's perspective, as is seen in the renewal plan (NECRC, n.d.). This plan calls for connection at all levels, from connecting with and providing for youth to connecting with land and business owners in order to elevate the visual condition of the neighbourhood.

Disconnection is a break between two things. For people to be disconnected implies they do not know, understand, or are apart from something. Humans have become disconnected and distant on a multitude of levels; nature, community, personal health, and food (Kesebir and Kesebir, 2017; Latson, 2018). This disconnection is especially clear in specific communities, often in inner cities, such as in the Selkirk Avenue District.

The district is disconnected from nature as the green space available is lacking a diverse variety of plantings (see pages 33-35), which would allow for a variety of insects and animals. The district's disconnection of people from one another is evident in particular areas due to elevated crime rates such as vandalism, theft, assault, and murder. A feeling of disconnection or, more accurately, alienation from one's society, is perpetuated by a lack of access to services. The community's disconnection from personal health is apparent in growing rates of health issues such as diabetes, heart disease, and stroke.

The Selkirk Avenue District community is disconnected from food in that there is very little food grown and very few whole food retailers within the area. Further disconnection is perpetuated in the current global food network's lack of clear, honest information regarding healthy food options (McNeilly, 2017). Additionally, there are no opportunities for Indigenous community members to participate in traditional food hunting, foraging, and growing practices, and new immigrants may be disconnected from their culturally appropriate and recognizable food. With a disconnection from food comes a disconnection from oneself, as seen in the communities health issues. These are diet and lifestyle-related conditions and can indicate a lack of care for ones self.

The Community Renewal Plan's priorities clearly call for access to services, opportunities, and to one another. They specifically focus on youth prospects, as well as senior connections, and opportunities for education, activities, programs, and support (North End Community Renewal Corporation, n.d.). Access to food is mentioned multiple times. It is clear that health and well-being is of utmost importance. Seeing food as a contributor is accurate, but growing food within the neighbourhood may also be a means to achieve many of the community goals.

Neighbourhood needs_

Urban Land Ethic

Urban centres are where individuals are the most separated from, and in the most need for reconnection to a land ethic. The city is often seen as separate from nature, but also, our day to day is detached from the land, parks, rivers compared to homes. One needs to understand that nature is not only in our yards, boulevards and back lanes, but we are nature, and our homes are part of the urban land community.

Land ethic, as proposed by Aldo Leopold, in his book *A Sand County Almanac* (1949), is an ethical perspective that views everything within the land, from the trees and water and animals and humans right down to the microorganisms within the soil, as members of one community (pp.203-205). This ethic is beautifully in line with traditional indigenous beliefs that

see humans intertwined and existing in balance with nature (Preston, 2012, and The Ojibwe Native Americans, n.d.).

Developing a land ethic connects individuals and societies to the land they exist within. Incorporating the urban condition into this ethic is necessary for those living in urban centres. Through the foundational approach of an urban land ethic and the creative application of urban gardening and local food systems, individuals may reconnect to their land, local community, broader regional community, food, and themselves. Food could be the tool to reach people and draw them into a new ethic and a new healthier world.



Fig. 34: Food and urban land ethic (Lins, 2020)

Neighbourhood needs _ Community Food Systems

Food is a fundamental, inalienable right as it is a necessity for human survival, and adequate nutrition is a necessity for health and well-being (United Nations, 2020). Additionally, there are endless social factors surrounding food, involving family and community (Locher, Yoels, Maurer, and van Ells, 2005). Individuals gathering to share a meal is a historic practice (Bardone, 2015). Food is not only crucial to our physical bodies but to our mental and social health (Selhub, 2015).

Food security is an important contemporary issue. As the food system expands and becomes more extensive and more complex, it also becomes more vulnerable (Puma, Bose, Chon, and Cook, 2015). It puts communities at risk of not having sufficient amounts and quality of food for good health and well-being. “Food security is the ability to access healthy, culturally appropriate and nutritious food” (Manitoba, 2017). A lack of food security can lead to many individual health and well-being issues, such as the increased risk of disease, crime, and violence. The Selkirk Avenue District has significantly more of these risks compared to the broader Winnipeg area. Low education, employment, and income rates, higher incidents of violence, more significant health risks, and lower life expectancy all indicate the need to raise the quality of life within this district. Addressing food security in this neighbourhood is a strategy

which could positively effect the above concerns. To achieve food security, one needs to consider food networks, which consist of the systems that bring food to the individual.

The current food system is highly commercialized, and more of a production and distribution network than a nourishing system. It is widespread, incredibly complex, and fragile (Puma, Bose, Chon, and Cook, 2015). Food often comes from very far away, is harvested before it is ripe, is packaged in plastics, and ripens on its’ journey to the customer, reducing its nutrient value (ISAAA, 2018). This food is not grown for flavor or nutrient density but for the ability to produce abundant, predictable, and profitable crops (Davis, Epp, Riordan, 2004). Within this system, manufacturing plants include chemical additives along with additional sugar, fat, and salt, and combines them into food products to be consumed rather than nutrient-rich food to be eaten, which the body cannot process (Harvard T.H. Chan Public School of Public Health, 2019). A diet high in these ultra-processed foods has been linked to an array of health issues such as obesity, heart disease, cancers, and diabetes (Harvard T.H. Chan Public School of Public Health, 2019) as seen in the district. A shorter, more natural food system housed within a community is a solution with many positive effects.

Through appropriate strategies and implementation, along with thoughtful situational design, people can be provided with the opportunity to recognize their land community through food, understand the growing process, our dependence on these processes, and, therefore their fallibility, fragility, and value. In encouraging collaboration to build a thriving food neighborhood, reconnection with one another may be achieved. Community food systems also offer a valuable necessity to the broader community in providing whole foods, knowledge, and pride.

A local community food system that is tightly knit, interdependent, steady, and resilient is how the Selkirk Avenue District community members can work together to nourish their neighbourhood. The primary goal is to feed a community with nutritious food. The new Canadian food guide 2019 (Government of Canada, 2020) indicates plant products, which can be grown virtually anywhere, as the primary food for a healthy diet.

There is a simple list of requirements for plant growth; sufficient space to grow enough to harvest, nutrient rich soil, water, sunlight, and knowledge of growing, harvesting, processing, and cooking. Additionally, there is a need for a local resilient food system to share food and products throughout the community. Growing food and a local food system are possible in this urban environment, especially if the vernacular is utilized. Food in back yards, front yards, boulevards, schools, playgrounds,

community gathering spaces, and parks, could potentially allow citizens to reconnect with their land and each other. This goal of growing local food and developing a resilient neighbourhood food network is much more likely to be achieved when a complete energy cycle (production, process, distribution, use, and compost and recycle) (Bohn,K. and Viljoen, A. 2014, p. 7) is achieved.



Fig. 35: Ideal food system energy cycle (Lins, 2020)

Neighbourhood needs _

Food Systems Components

There are many components to growing and sharing food within the district. The way these components function together is the neighbourhood food system and they play an essential role in completing the energy cycle of production. Using these parts to complete the cycle with particular attention to the details and layout could lead to a dynamic and diverse urban food landscape, which could feed the evolution of the urban land ethic.

Two categories of food system components

Production: enables the growing of food

Distribution: enables the sharing of food and knowledge

production



In ground planting beds
Garden beds relatively at grade. Somewhat susceptible to road-wash and washout but the least complicated and least expensive to establish and water.



Raised planting beds
These are beds that are not on grade. They have raised sides that can protect the encased plants from road wash, but require more materials and soil. These beds edges can act as seating and can be placed virtually anywhere, including rooftops. Additionally, they can be temporary or permanent and enable universally accessible growing.



Water retention
There are many ways to retain water; however, cisterns are one of the most simple and effective ways. They can be above or below ground, becoming an integrated and standard part of our infrastructure.



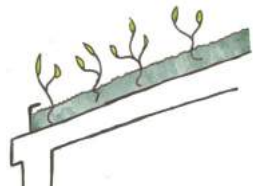
Composting + Recycling
Composting is an essential component of the full systems cycle. Waste becomes valuable. Composting is great for education on the circle of life and our role in the land community.

distribution



Green houses

These structures are a necessity in our climate for extending the growing season.



Green roofs

Green roofs are home to intentional vegetation. On flat roofs raised beds could house fruits, vegetables, grains, and legumes. On sloped roofs plantings would be chosen for water retention and to help mitigate the urban heat island.



Green walls

Green walls also mitigate the urban heat island as they use underutilized growing space. These walls can be quite the investment and, in Manitoba's climate, likely more of a showpiece than a standard part of the urban fabric.



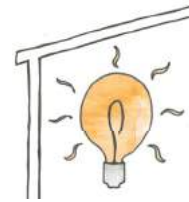
Kitchens

Kitchens can act as sites for education and processing, which are beneficial for preserving food and providing what is grown to the broader community.



Restaurants

They can mutually support the growing food in the neighbourhood by purchasing fresh produce and, with this, feed the community fresh neighbourhood food.



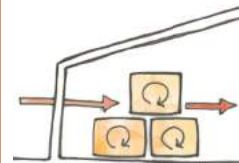
Education centres

These centres are places for people to gather and learn, either through traditional education or communal gathering and sharing of knowledge such as in a community garden.



Markets + shops

Local retail venues with a focus on providing local food and goods act as another mutually beneficial venture.



Processing + distribution facilities

These small scale facilities are beneficial for more processing, distribution, and job creation.

Fig. 36: Food system production + distribution (Lins, 2020)

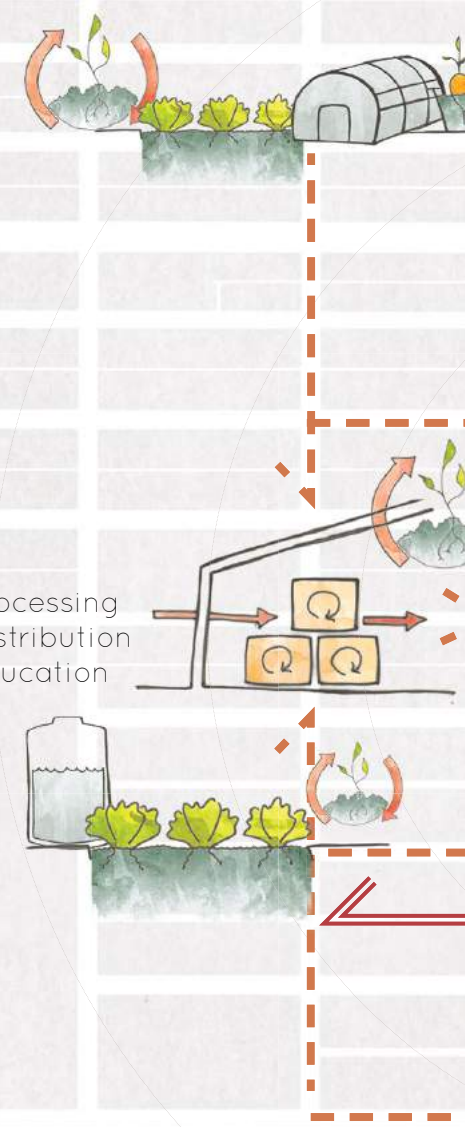
Urban Food Systems _

Schematic Food Network

This schematic (fig. 37) demonstrates a speculative flow of food through the neighbourhood. The dashed and double lines indicate the movement of food into, and out of, food growing, processing, distribution, and education locations. Overall this illustrates how the components support one another to form a neighbourhood food system.



Processing
Distribution
Education



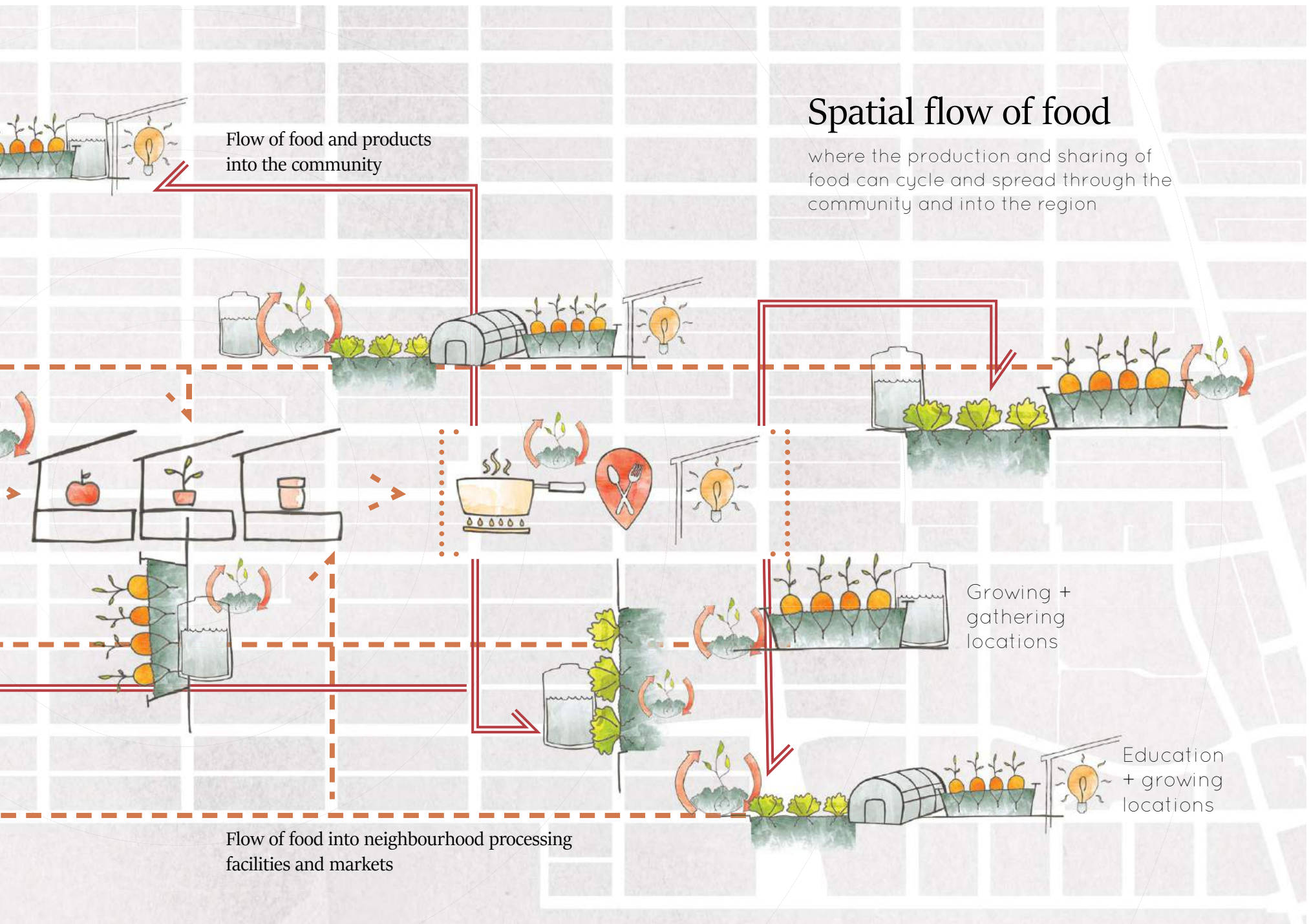


Fig. 37: Food system flow schematic (Lins, 2019)

COMMUNITY OPPORTUNITIES

INTRODUCTION

The physical conditions and dedicated community members of the Selkirk Avenue District provide great opportunities for enhancing well-being through growing food in the neighbourhood. Not only is healthy food a necessity but growing food appears as an excellent tool to achieve a system which will better individual well-being. Adjusting the current food system from a vulnerable global system to a resilient community network can lead to food security. There is the potential to spread food through the community enabling connections by engaging community members as champions of food.

Neighbourhood Opportunities _

Access to Land and Connecting to the Community

Grow-able Land

There is a lack of public land (parks and open spaces) currently accessible to groups to take responsibility over and potentially grow food (fig. 26, page. 34). However, boulevards offer potential space where food and individuals can interact daily. Industrial land may be a potential for the future for grow-able land. As this land is primarily adjacent to industrial buildings, the possibility of economic investment to develop hydroponic or aquaponic food farms, may be possible. This endeavour could offer year-round fresh food to the community and, if expanded, possibly the broader Winnipeg region. Currently, the potential for access to grow-able space is in the private lands such as front and back yards, and lots connected to private owners, ideally uncontested lands.

Broader Winnipeg Community

The amount of average weekly daily traffic through the district (fig. 30, page. 38) is an opportunity to engage with the broader Winnipeg community through their daily travels, using primary roads. As individuals pass through the district they will encounter a new urban landscape focused on growing and supporting fresh local food.

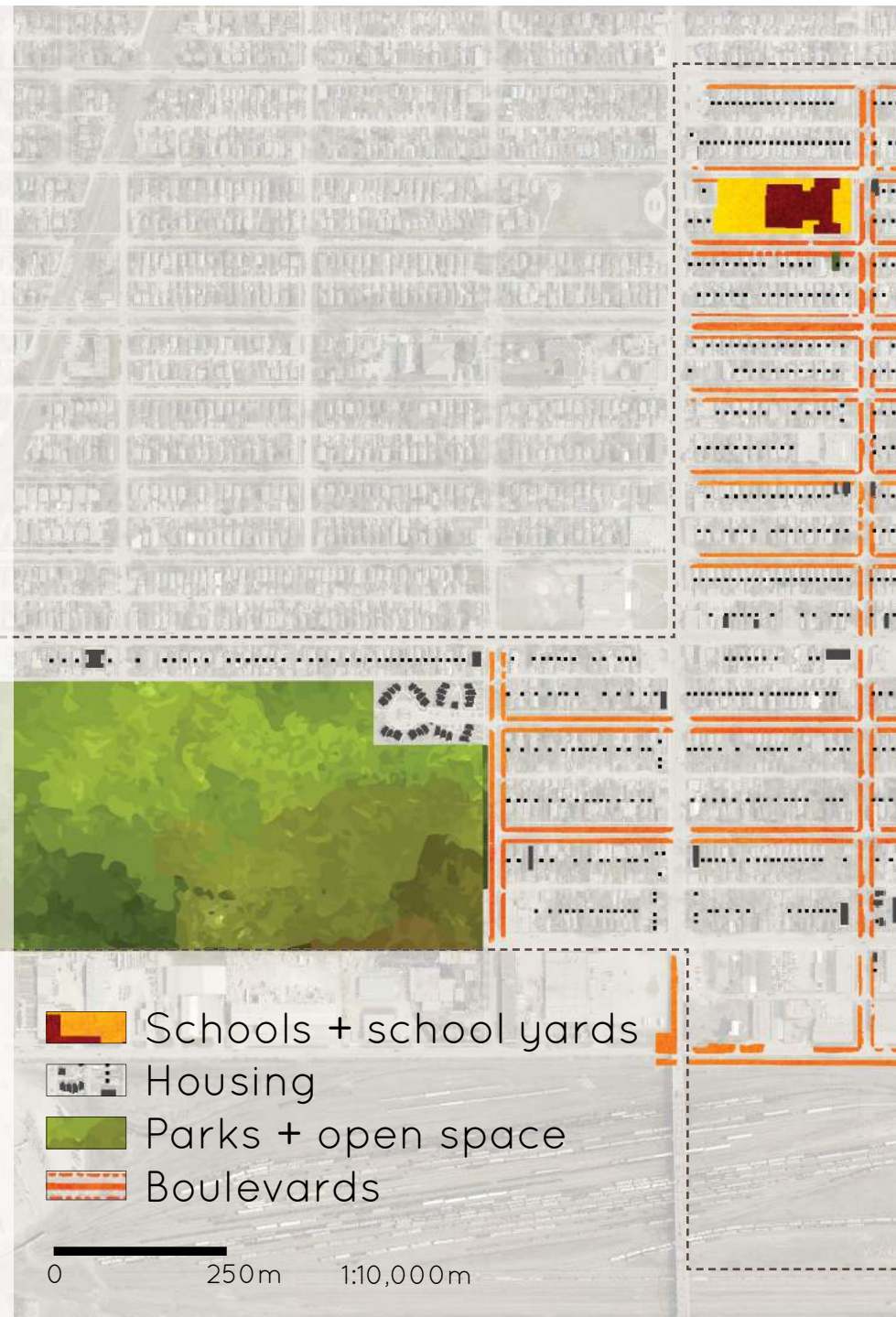


Fig. 38: Grow-able district boulevard (Lins, 2018), Fig. 39: District school (Lins, 2018), Fig. 40: District vacant lot (Lins, 2018), Fig. 41: District homes (Lins, 2018)

Neighbourhood Opportunities _

Food Production Opportunities

Addressing the lack of social connection can be achieved through enlivening the area's character and pride, investments into public space, and provisions of human necessities such as healthy, culturally appropriate food options. There is potential for schoolyards, public lands (boulevards and parks), and personal property, to be accessible land claimed for growing food and community engagement.



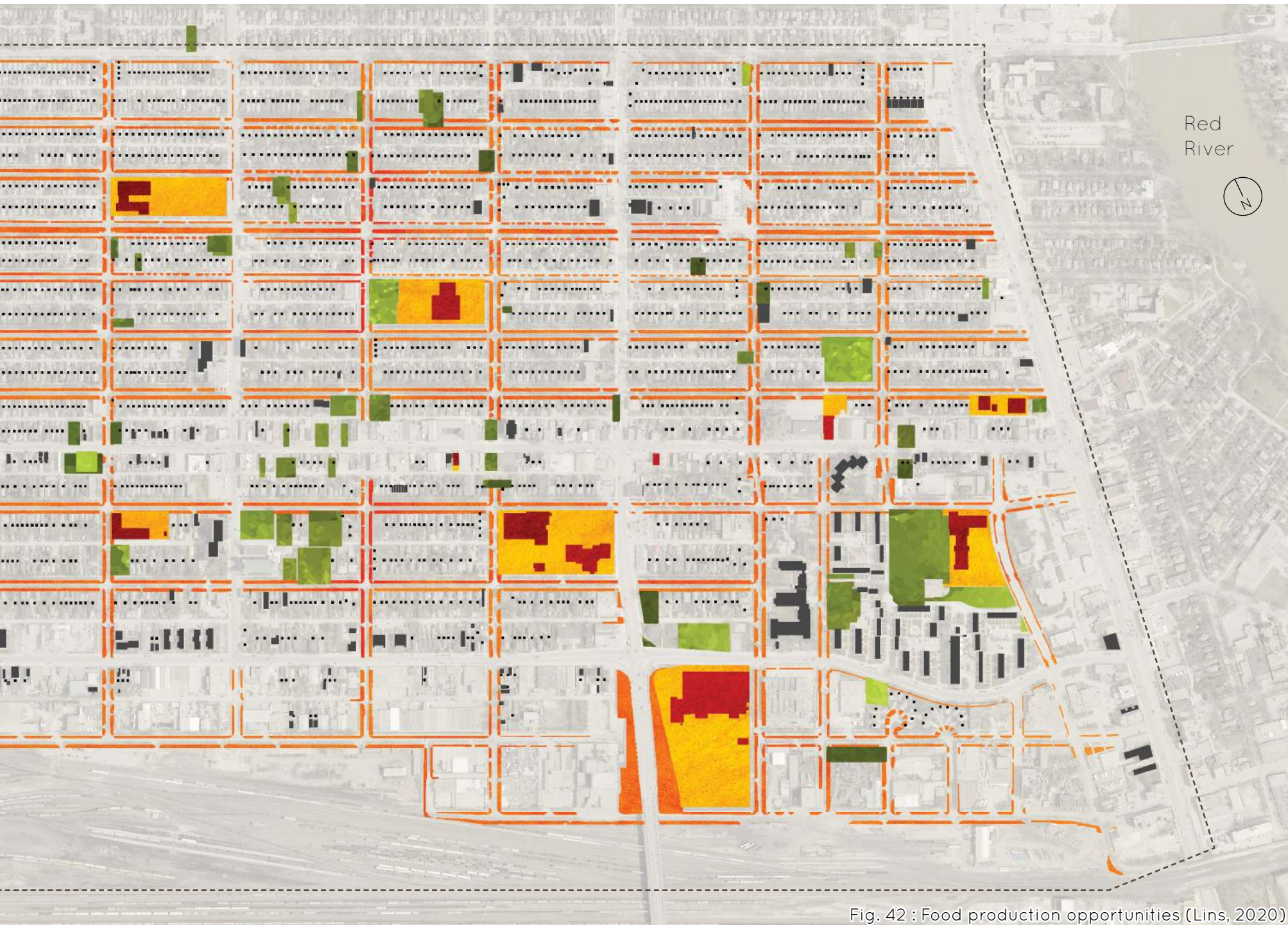


Fig. 42 : Food production opportunities (Lins, 2020)

Neighbourhood Opportunities _

Community Food Champions

Community food champions are individuals and groups who advocate for food in the district. They are leaders who grow the food, and catalysts, who support the growing of food in the neighbourhood.

These champions can work together or individually to produce food. Community members are some of the most important participants. However, for the neighbourhood food system to evolve it is important to include both top-down (government initiatives and schools) and bottom-up (community groups and individuals) champions. They are all interdependent gardeners, processors, and educators, working on a variety of scales and sites to reach the diverse community. These champions share and spread their understanding and love of growing food.

Government

Province of Manitoba, City of Winnipeg, and its departments such as By-laws, Office of Sustainability, and Planning, Property and Development.

Schools

Strathcona school, William Whyte, Isaac Newton, Immaculate Heart of Mary, David Livingstone, Niji Mahkwa, R.B. Russel Vocational, and Children of the Earth High.

Community groups

Aboriginal Vision for the North End, Aboriginal Youth Opportunities, AKI Foods, Community Education Development Association, Eddy's Restaurant and Billiards, Food Matters Manitoba, Indigenous Family Centre, Ma Mawi Wi Chi Itata Centre, Merchants Corner Inc., Mother Earth Recycling, North End BIZ, North End Community Helpers Network, North End Food Security Network, North End Residents Association, SEED Winnipeg, Selkirk Avenue BIZ, and William Whyte Neighbourhood Association (NECRC, Partnerships, n.d.).

Individuals

Community members including residents, home owners, and business owners.

Neighbourhood Opportunities _

Gardens + Champions

When rethinking the use of open urban spaces, new opportunities for food production systems emerge. These spaces support growing food within the community, leading to a new landscape with a beautiful condition.

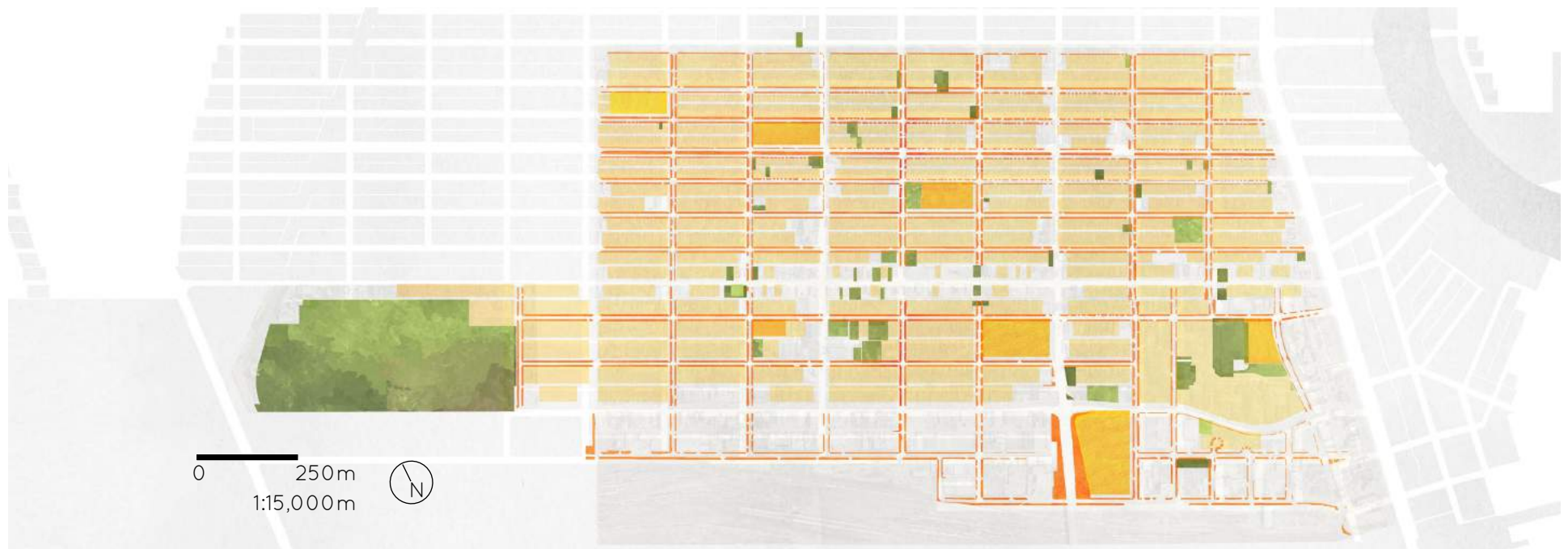


Fig. 43 : Garden opportunities (Lins, 2020)

Gardens	Champions	Where	Role in the Scheme
1. Home recipe gardens	Individuals	Individual yards	Individuals grow food to feed themselves, and possible as a source of income.
2. Neighbourhood gardens	Community groups	Parks + uncontested land (vacant yards)	Communal sites are for growing food and learning, and to subsidise the supply of fresh food for the community.
3. Learning gardens	Schools	Schools + school yards	Education sites help to connect youth with food. Also, school ground can act as living labs and community farms.
4. Public gardens	Government + Individuals	Boulevards + street edges	City Gardens act as a neighborhood showpiece and indicator of food growth in the area. Also, the plants selected not only supply food but also aid in pollination.

EXEMPLARY GARDENS

INTRODUCTION

Exemplary gardens are examples of ideal gardens which could exist within the Selkirk Avenue District. The gardens the champions tend are of different scales, functions, approaches, and food. Yet all exemplify the reclaiming of land throughout the neighbourhood, spreading food and social connection. These gardens take into consideration the existing infrastructure and hard permanent surfaces in order to imagine an affordable, realistic, and achievable future. The community champions utilize a variety of spaces to exemplify the beauty of food gardens in the neighbourhood that can bring food to community tables.

PUBLIC GARDENS

City as Champion

The first community champion is the city in partnership with community members. It is a schematic which encourages a new planting scheme on public boulevards. A combination of fruit trees, personal gardens, and supportive plantings make up this new public patchwork, which acts as a food provider and beautiful indicator to the broader Winnipeg community of this new food district. As aged and threatened trees, such as the ash and elm are likely to die, there is a huge opportunity to create a new neighbourhood condition. Boulevard spaces would become gardens, food forests, and supportive plantings. The city of Winnipeg acts as the champion over public spaces as it protects this land for the community and encourages and supports the community members in taking ownership of the extensive plantings of trees and the cultivation of boulevards adjacent to homes.

The current street tree planting strategy of the City of Winnipeg contains guidelines regarding soil, setbacks, road adjacent suitability, accessibility, utility requirements, existing streetscape context, and pedestrian movement (City of Winnipeg, 2009, p.4). Additionally, the city provides a list of acceptable tree species for boulevard planting (City of Winnipeg, 2017). This list consists primarily of common street trees but also includes some ornamental crabapple trees. With the city as champion, this list is amended to include an assortment of fruit-bearing trees such as apple, crabapple, and plum. Planting on the boulevard is possible as long as the planting does not interfere with visibility, emergency access, or road clearing, (City of Winnipeg, By-law 125/2007) and the gardener needs to be aware that they are planting at their own risk.

The public garden schematic suggests the city's planting guidelines shift from, requiring planting design to "respect existing or planned streetscape context" (City of Winnipeg, 2009, p.16), to enhancing existing or planned streetscape context. This shift would allow for the growth of a unique character in the Selkirk Avenue District, where the streetscape is at considerable risk of changing and being degraded from tree loss. Further, the schematic would require adding more food-bearing trees to the city's list of acceptable street trees.

Public Gardens _

District Schematic

Vacant boulevards will be filled with a new planting schematic.

As there is a heavy traffic flow on busy streets, there is the concern of the road wash, the spray, and mist that flows to the road edge and boulevards. Many plants are unable to survive these conditions, therefore, choosing hardy salt-tolerant plants for their optimal survival is essential. Boulevards adjacent to north-south oriented streets, heavy traffic-flow, or with limited planting space are reserved for hardy, road-wash tolerant tree species such as Maple, American Elm, Bur Oak and Hackberry, in descending order of salt tolerance. These hardy trees would support the other food plantings as a companion planting, to aid in pollination and habitat provision for helpful insects, to increase food production.

The edges of light traffic-flow roads, such as side streets, would be an ideal place to plant food. However, it is still necessary to carefully select plants as some road wash may transfer to plants, and these are plants for consumption. Fruit-bearing trees such as apple, crabapple, cherry, and pear are interspersed with food gardens on these secondary roads with less traffic and larger boulevard planting spaces.

Successive planting, cultivation, and maintenance over the next fifty years would lead to a unique, food dominant, and acclaimed district landscape.



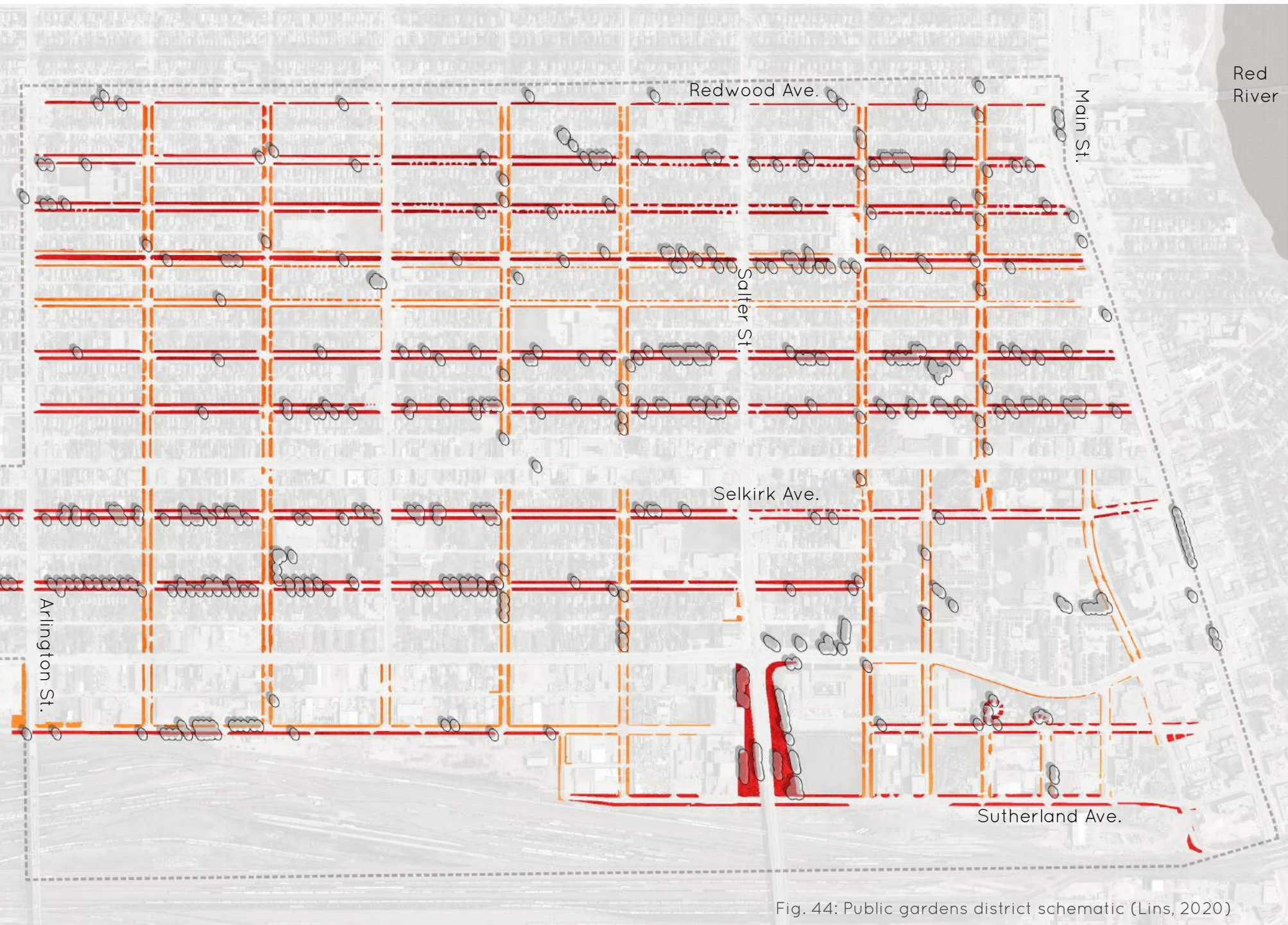




Fig. 45: Public gardens district schematic zoomed in (Lins, 2020)

Public Gardens _ District Schematic Continued

The Selkirk Avenue District will grow into a patchwork of food production. Traditional city trees grow alongside food-bearing trees, and garden food takes over vacant boulevards.

This patchwork would be cared for by the community members, but the city would have an active role as a champion. The city would initiate programs to support the growers. One potential program provides participating households and businesses with a rain barrel, compost bin, and insect hotel,

if desired. A second program manages the care, maintenance, and harvesting of the fruit trees. A specific green team of youth living within the Selkirk Avenue District is employed to maintain the fruit trees and help community members with their gardens. A third program aids the community in gaining access to provincial, municipal, and private funding through grants for neighbourhood development. One such private funding opportunity is the community tree grants from Tree Canada (Community Tree Grants, n.d.).



Public Gardens _

New Street Condition

The Selkirk Avenue District currently consists primarily of well established and beautiful elms and ash trees, as well as many bare boulevards from trees that have already been removed for various reasons. As the City of Winnipeg is not planting trees as quickly as they are removing them, soon, this will be primarily bare boulevards with only sporadic new tree plantings. Establishing a planting plan which focuses on food-bearing trees and food gardens within boulevards, leads to the condition changing once again, and a unique character emerging.

Before



Fig. 46: Existing street condition (Lins, 2020)

After



Fig. 47: Future street condition (Lins, 2020)

LEARNING GARDENS

Schools as Champions

These learning garden champions will engage youth with food, and integrate an urban land ethic into their lessons. Young people can then bring knowledge and passion home and into the community as they grow.

The school board's mandate will incorporate urban land ethic and the growing of food into the curriculum, as it relates to sustainable development, as they have done with indigenous perspectives. School divisions would support this through fundraising, grant writing, and connecting with organizations such as Evergreen (School Board Collaborations & Services, n.d.). Once the food plants are established and providing enough food to garner a decent harvest, additional yields would be sold to the community as a fund-raiser. Schools with greenhouses would provide seedings to the other school for planting.

Most importantly, the individual school administration and teachers would need to be the primary champions. They are the direct contact and have a connection with the youth. If these educators are engaged the students will be as well.

William Whyte

Primary School as Champion

Children are so precious and bring energy and enthusiasm to whatever they do, if they are allowed. The students of William Whyte will be engaged as growing, preserving, and preparing food is incorporated into most, if not all, subjects including; Math, science, social studies, history, health, and physical education.

The plan (fig. 48) would allow for more outdoor curricula, putting learning into real-life context. The children could be asked to learn about how their families grew food historically, apply that in the annual garden beds, and prepare this food in science class. Additionally, these gardens would also be an experiment to see what can grow under what conditions. There are so many possibilities of incorporating urban land ethic into a curriculum. With a little guidance children could likely be the generators of integrating food into their education.

Using the maximum school grounds possible while maintaining the yards' sports field, allows for abundant in-ground planting. Mini-greenhouses would be wonderful to allow for the extension of growing and outdoor learning. Wild perennial plantings would include perennial berries, traditional indigenous plants, and flowers, which act as supportive plantings and a good site for providing insect habitat.

Before



Fig. 48: Existing school condition (Lins, 2020)

1. Bicycle keep
2. Cisterns
3. Compost
4. Seating areas

 Berms





Fig. 49: Future school condition (Lins, 2020)

William Whyte Time Line

Goal time

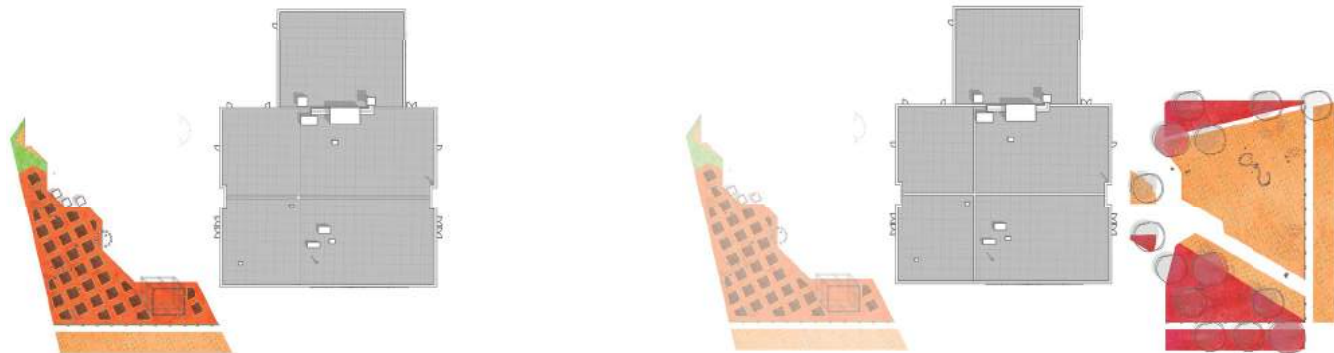
5 years

10 years

Objectives

Garden plots established
First perennial boulevard plantings
Compost + Cistern + Insect hotels

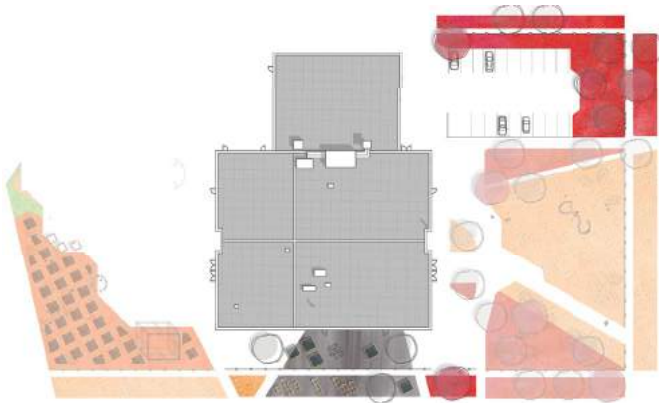
School entrance;
berms formed
perennials planted
fruit trees planted
Cistern + Insect hotels



Integrating a new curriculum and developing the landscape is challenging, therefore this would not be an overnight change. It could begin with a few garden plots and plantings but has the potential to spread, and change the dynamic of the schoolyard into a charming landscape focused on food and health. As surrounding trees die off, there would be more sun exposure which would allow for more food crops.

15 years

More fruit trees planted
South side education spot
developed
Insect hotels



20 years

Sports field;
berms formed
perennials planted
fruit trees planted
Insect hotels



Fig. 50: Future school time-line (Lins, 2020)

Berms _ Fruit trees _ Wild perennial plantings

This unique front yard acts as a welcoming entrance for students and all community members. The engaging landscape allows for creative free play amidst growing food.





Fig. 51: Future school east yard perspective (Lins, 2020)

Engaged students bring their knowledge and spirit home, and significantly impact their community.





Fig. 52: Future school west yard perspective (Lins, 2020)

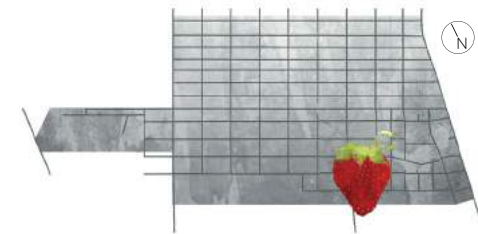
R. B. Russell Vocational

High School as Champion

Claiming all the uncontested schoolyard and surrounding land for gardens would provide ample space for a wide variety of food to be produced.

There is the opportunity for an orchard, with low growing edible plants, and farm rows for more traditional crops that are on high demand. A few rows would be reserved for experimenting on breeding and alternative plants. The adjacent berms are ideal for perennial plantings of berries and shrubs. The surrounding wild plantings would be kept for indigenous wild plants and insect hotels. This would provide a buffer for invasive weeds, and help with pollination.

There is also a conservation area, which would be an experimental space for wild plantings. Initially, indigenous forest bottom plants would be planted and then watched to see how they naturally grow and change. The entire grounds would be a living lab, but this space especially so. The front of the school would, with fruit trees and wild plantings, be a welcoming indicator of food being grown.



Before

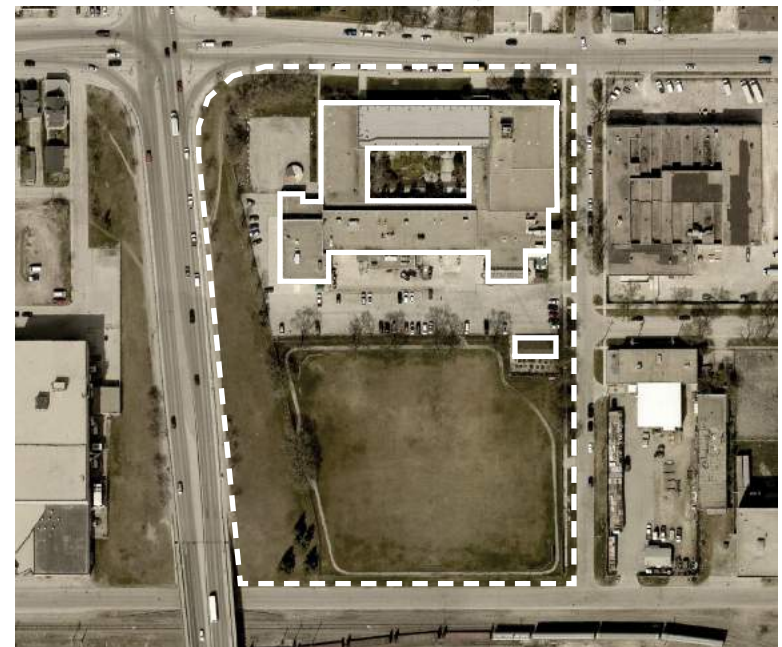
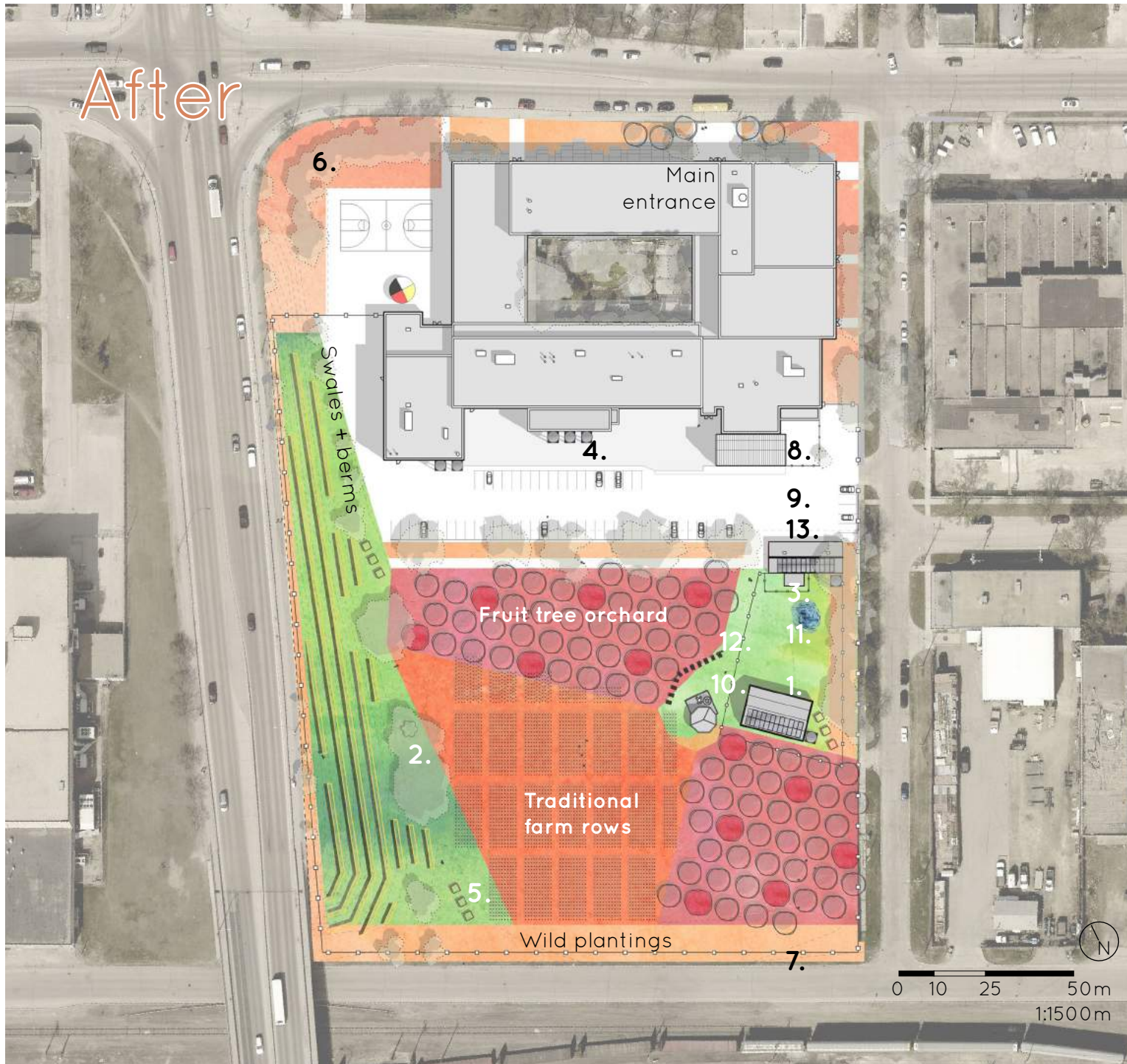


Fig. 53: Existing secondary school condition (Lins, 2020)



1. Barn with solar panels
2. Beehives
3. Chicken coup
4. Cisterns
5. Compost
6. Conservation area
7. Fence
8. Greenhouse
9. Parking + festival area
10. Pavilion with deck
11. Pond
12. Raised planting beds
13. Work + storage bldg

Fig. 54: Future secondary school condition (Lins, 2020)

R.B. Russell Time Line

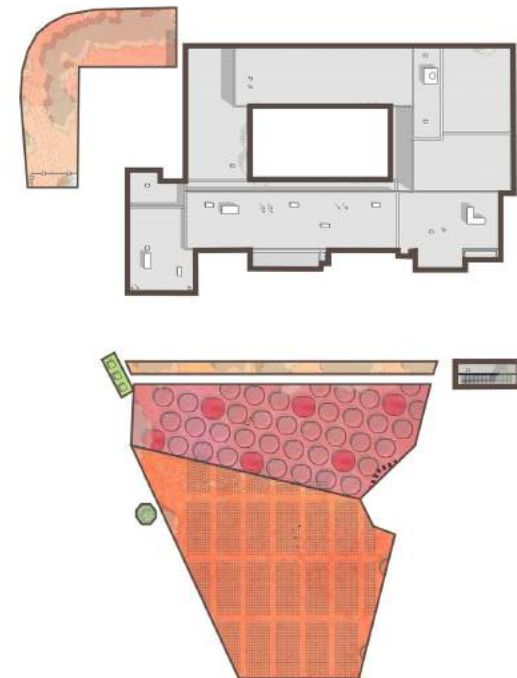
The full establishment of this schematic would develop over several years and involve many cohorts. More than one area can be in a state of development at a time. This time line is an example of how R.B. Russell's yard could be developed and the areas could be completed within these time frames.

Goal time

10 years

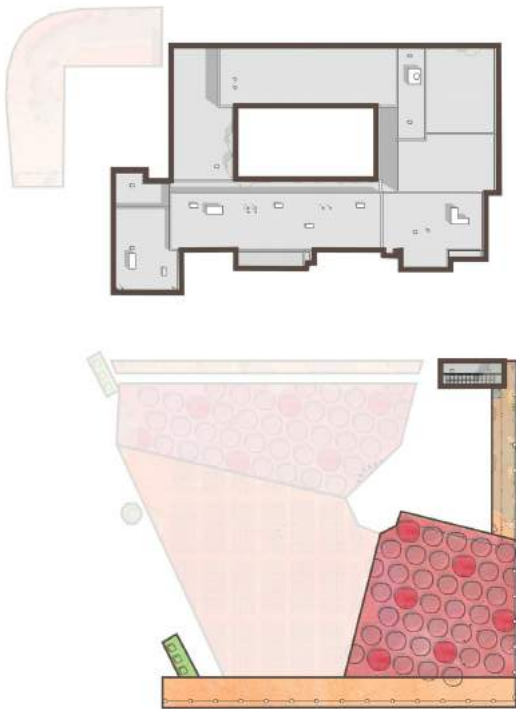
Objectives

Farm rows established
First half of orchard established
Bees + Compost + Cistern
Wild plantings planted
Conservation area planted



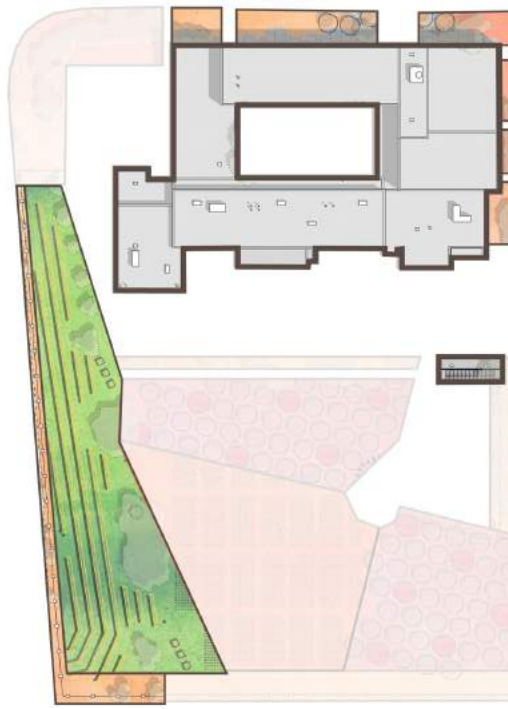
15 years

Second half of orchard established
Compost
Cistern
wild plantings extended



20 years

Swales + berms established
Wildflower swatch extended
Further wild plantings
School entrance developed



30 years

Pavilion + deck + barn built
Fences + pond + animal yard set up
Cistern and compost
Animals brought in

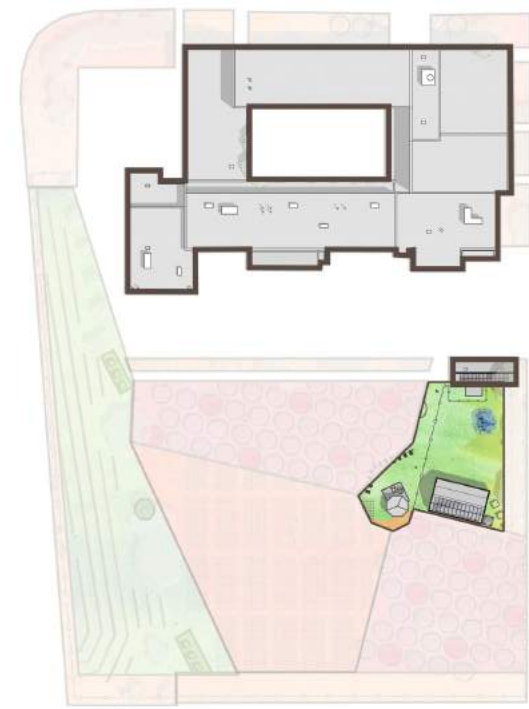
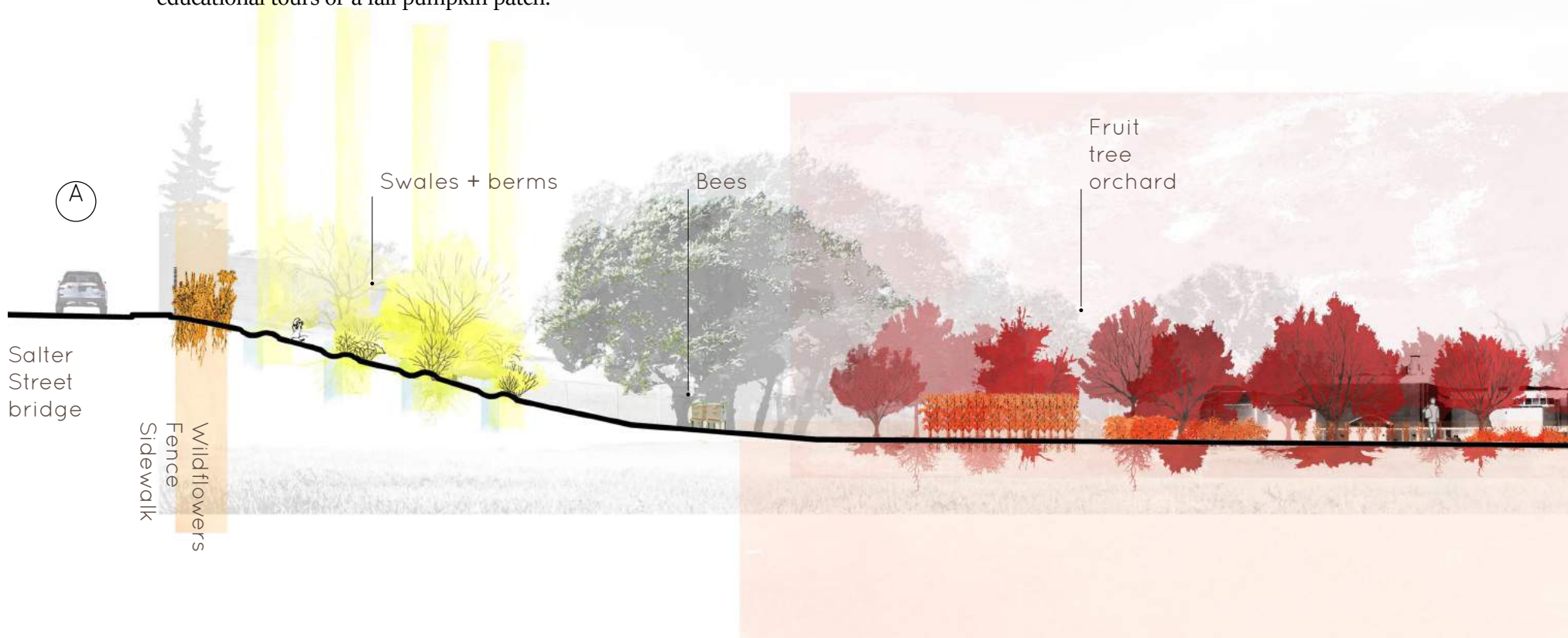
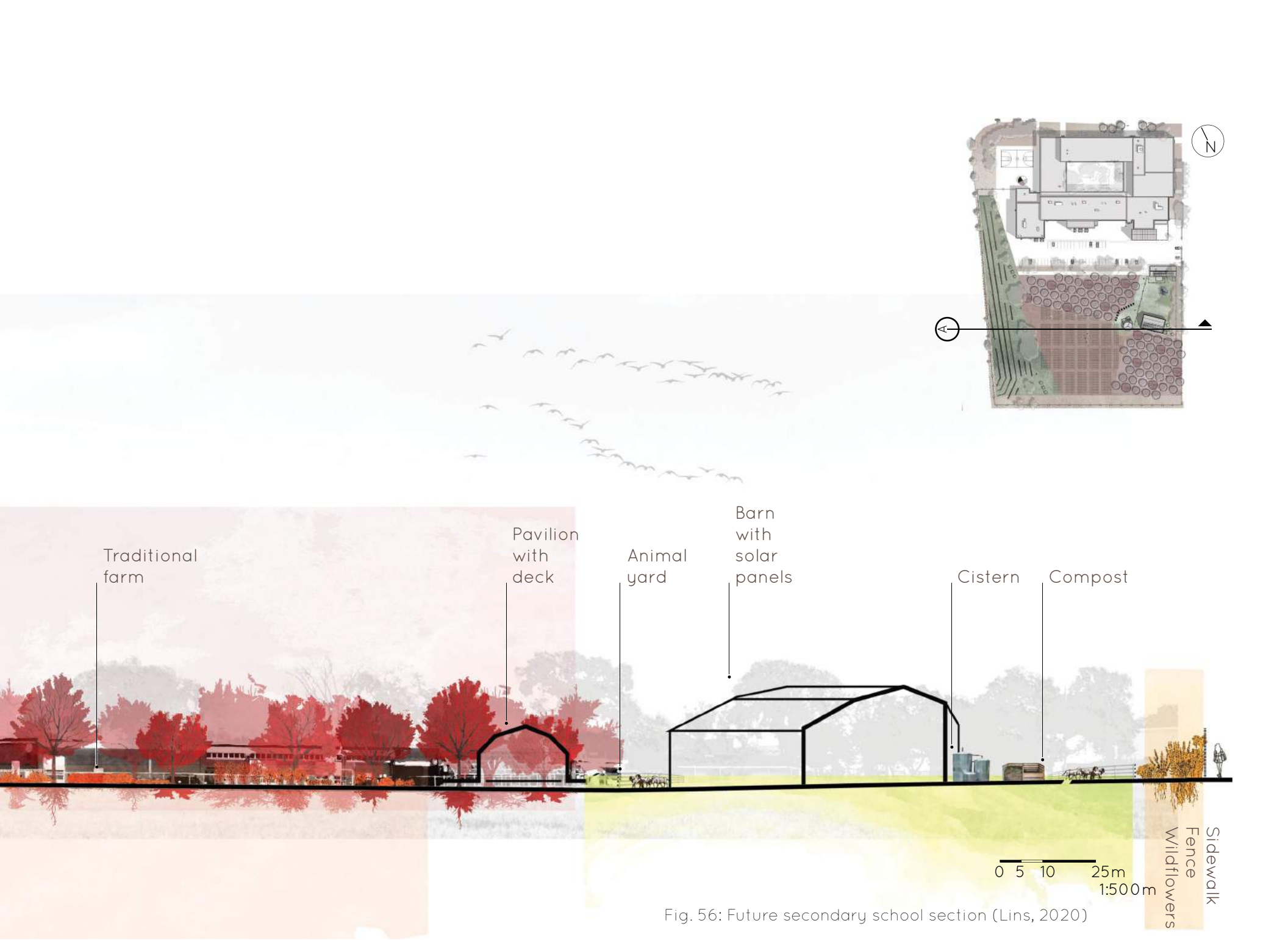


Fig. 55: Future secondary school time-line (Lins, 2020)

This garden could allow for many youth summer jobs such as the urban green team, funded through the province of Manitoba. The income that would be produced from the vast amount of food grown could also fund youth summer jobs.

The parking lot is ideal for events like a spring blossom festival, community harvest, or a fall harvest banquet hosted by the school. Other community engagement could include educational tours or a fall pumpkin patch.





This vocational secondary school already houses a horticulture and landscaping program (Winnipeg School Division, 2020). This plan would be a dramatic extension of that. The realization of this project is not simply about the growing of food. Other skills and knowledge are necessary for this dynamic food system to function. The skills that are developed in the current school programs would support this project. Graphic design and print media would create public awareness of the food available to the community. Carpentry and welding technology would aid in the building of some of the facilities. The Culinary Arts program could process and prepare the abundance of food for the community.

As the study of food integrates into the standard curriculum, students studying in programs such as geography and social sciences courses can focus on food and food production. A focus on food could include the history of food production in Canada and the current political and economic structures which support the different local and global food networks. The real-life example in the school's yard inspires students to learn how these global structures work and how they can be improved.





Once again, the school division would need to make this a priority. The administration and teaching staff would be the go-to champions, passing on this role during the students tenure, so they may go out into the neighbourhood, with their knowledge and unique set of skills, to help create a healthy food community.

Fig. 57: Future secondary school perspective (Lins, 2020)

NEIGHBOURHOOD GARDENS

Community Groups as Champions

Neighbourhood gardens are developed on either park spaces or uncontested land, whose care is taken over by members of the community. By-laws would be written so that vacant lands would be turned over to the community for intermediate use, so food may be grown, until the property is developed.

Those taking over the land, such as groups that already exist or groups that form around the growing of food, are the community champions. As there are possible locations for neighbourhood gardens on Flora Street and Magnus Street, a Flora Food Friends or a Magnus Growers Co-op could form.

There are countless arrangements possible, but what really matters is that there is a determined, like-minded group with adequate support. Any variety of food can be grown in any variety of layout; a garden could be an orchard space with benches, or colonnades of climbers, or in-ground rectilinear beds. The choice is that of the champions.

Neighbourhood Gardens _

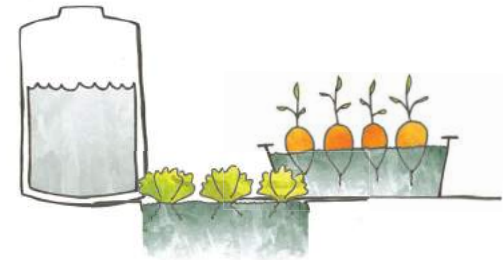
Components

A well functioning neighbourhood garden utilizes components which fall under four categories; essential, important, ideal, and alternative. Each component should be considered when developing a neighbourhood garden. As many components as a site allows and the group finds appropriate, should be utilized.

Essential

Land + Sun +
Planting beds + Water

Without space that is not at risk of being disturbed, adequate sunlight and water for plants to grow, and quality planting space, a garden can not come to be.



Important

Composting + Green houses

It is of great benefit if there is sufficient area to compost. Greenhouses, which extend the growing season and expand what can be grown in the region, are important.



Ideal

Market space +
Preparation + Processing

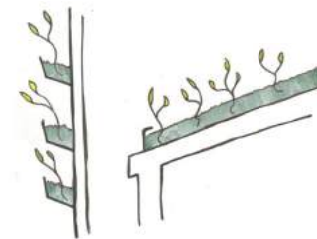
A market space for the community to gather and sell goods is ideal, as these neighbourhood gardens should strive to be a hub for food and education in the community. Also, champions should strive for space for preparation and processing of food.



Alternative

Green roofs + walls

Communities need to keep open minds for different possibilities. Champions should not limit themselves to only park and vacant land, but should look to integrate their ideas into the optimal environment. If a group wanted to grow in conjunction with a Selkirk Avenue restaurant, a green roof or wall may be ideal.

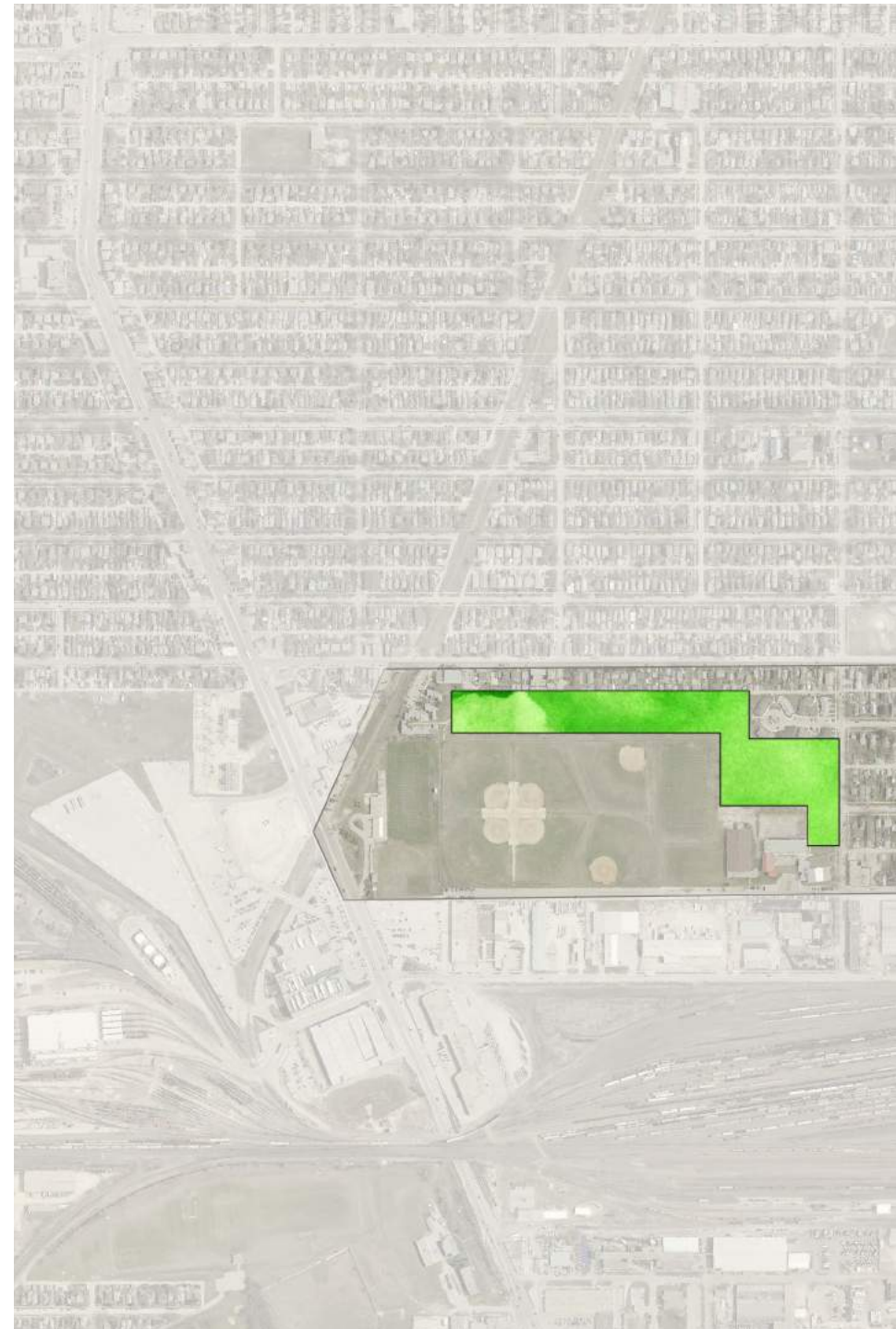


Neighbourhood Gardens _

Possible Locations

The size of the garden does not matter; it could be a tiny vacant lot between two houses, or a large plot set in the old exhibition grounds. The type of land taken over by neighbourhood gardeners could be a variety of available land within the district. The garden location should be chosen based on proximity to the champions residence or workplaces, and ideal components the gardeners would like to utilize. What food is grown and how it is organized would be decided upon by the groups and individuals taking responsibility of the land.

- Existing community gardens ■
- Community group land ▲
- Uncontested + vacant land ■
- Parks + open space ■



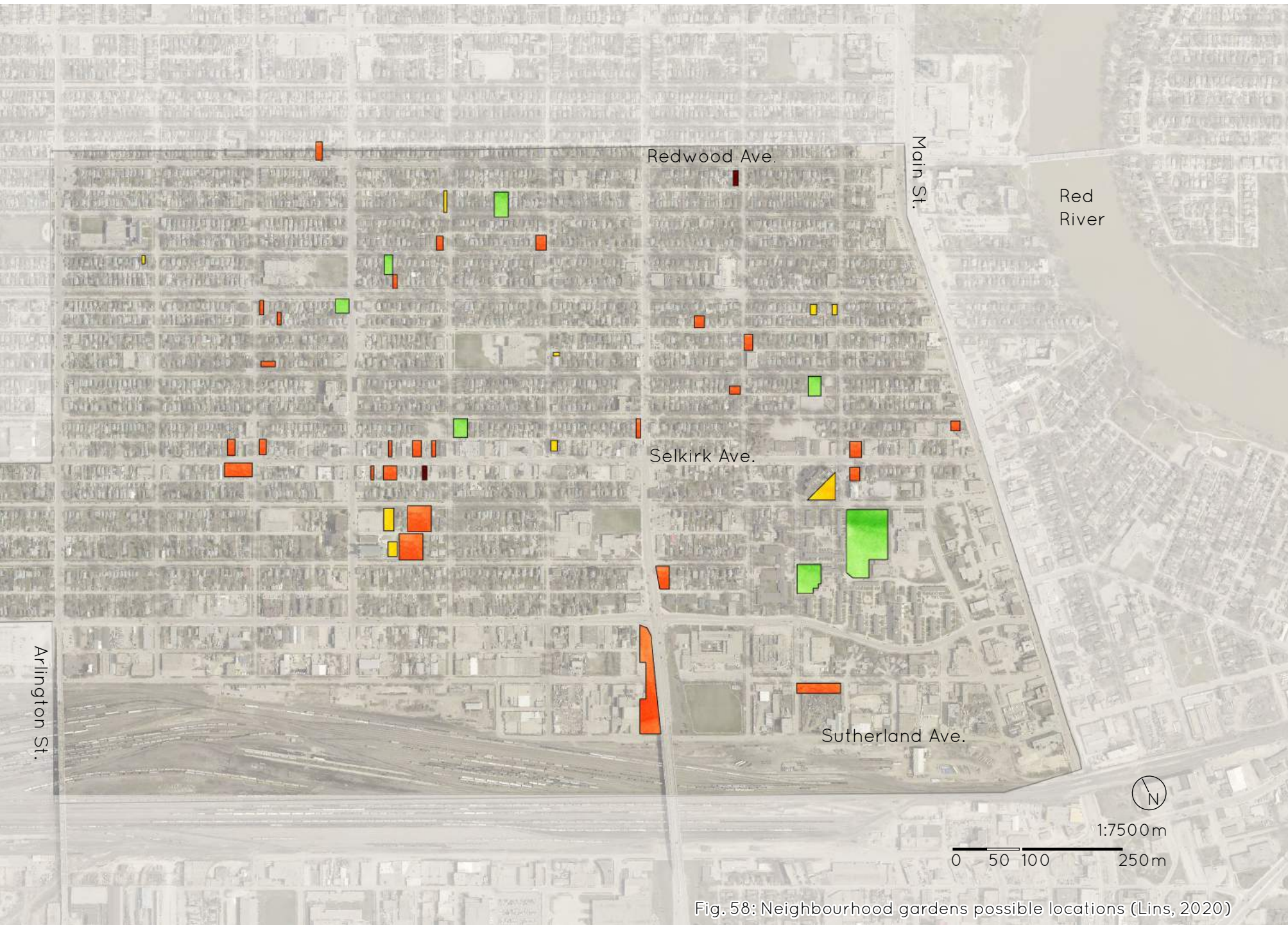


Fig. 58: Neighbourhood gardens possible locations (Lins, 2020)

Neighbourhood Gardens _

Speculative Future

Neighbourhood gardens act as gathering sites within the community. They can be places for those lacking space and/or sunlight to garden at home, but also as an educational space for the community. Gardens can offer an additional resource within the community when they include preparation and processing facilities. These engaging sites are a welcoming place, inviting the community in as they pass by. The benefit of the gardens will be the connections between people in the Selkirk Avenue district and the broader Winnipeg community.





Prichard Avenue

Salter Street

Fig. 59: Neighbourhood gardens speculative future (Lins, 2020)

HOME RECIPE GARDENS

Individuals as Champions

These gardens are to be set up by the individual with community support. The city will provide cisterns and compost units, through a grant program, for individuals wishing to partake. The community can offer social support in the way of education, possible starter plants, and a community of gardeners to help one another. The neighbourhood gardens act as the community space for these individual champions to gather, share recipes and knowledge, and sell their fresh and processed food.

There can be a variety of scales of home recipe gardens, from a balcony, or front step small container garden, to large properties filled with food. The exemplary recipe gardens focus on the larger scale with the belief that one can pull back to the size the individual finds achievable and useful.

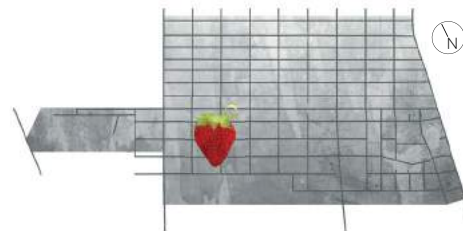
Exemplary recipe gardeners will grow food in a structured manner to meet the requirements of the ingredients of their chosen cuisine. These recipe gardens include culturally appropriate food. Public exposure to a great variety of food would help educate the community about food, and food varieties, as well as tie people together and give a clear message of care and love, for oneself and others.

Home Recipe Gardens _

Borscht Garden

“This traditional Ukrainian borscht combines the earthiness of beets with the freshness of dill and other vegetables. A hearty, healthy and frugal way to use up your garden vegetables and stretch your food budget while filling your family’s bellies this fall!” (Sakawsky, 2017).

Inspired by traditional European gardens, food is grown in rows interspersed with fruit trees. These champions are challenging the by-law stipulating no farm animals to be kept within city limits (By-law No. 200-2006, p.61), as they have a chicken coop for fresh eggs. The patio stones are moved further back into the yard to allow for the safest placement of the chickens. This very sunny yard, is an ideal space to grow an abundance of food, and with the addition of the garden beds and fruit trees, the yard becomes a much more comfortable, engaging, and welcoming space.



Before



Fig. 60: Borscht garden existing condition (Lins, 2020)

After



Fig. 61: Future Borscht garden (Lins, 2020)

Borscht (Sakawsky, 2017)

Ingredients

1 cup of diced celery
1 cup diced onions
1 cup of chopped cabbage
2 cloves of garlic, grated or pressed
1 tbsp of butter (for sautéing onions and celery)
8 cups water, beef broth or chicken broth
1 can diced tomatoes (home or commercially canned)
2 or 3 medium to large sized peeled beets
(half grated and half diced)
1 or 2 medium carrots, grated
1 medium potato, diced
1/2 cup of fresh dill weed
Salt and pepper to taste
Optional ingredients: Bay leaf, green beans, peas,
beet greens and shredded pork or pork sausage

Instructions

Sauté the onions, celery and cabbage with the butter until soft and translucent. Add the can of diced tomatoes and the garlic, as well as all of the water or broth. Bring to a boil over medium high heat, then reduce to medium heat and let simmer. Peel the beets, carrots and potato. Dice half the beets and grate the other half. Grate all the carrots. Dice the potato. Add the beets, carrots and potato to the broth. If you would like to add any other optional vegetables (ie. beans, peas, beet greens, etc.) do so now. Allow soup to simmer on medium until diced beets and potatoes are soft (test them with a fork or by biting into them!), about 15 minutes. Remove soup from heat. Stir in chopped fresh dill weed and salt and black pepper.

Serve hot with a dollop of sour cream and a slice of bread and butter (rye bread is best!)

Serves 6 Preparation Time 15 min Cooking Time 20 min





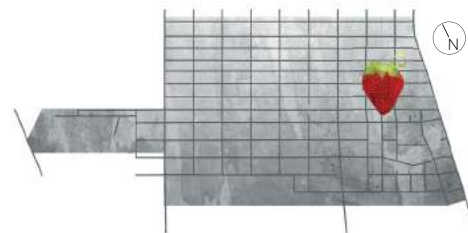
Fig. 62: Future Borscht garden perspective (Lins, 2020)

Home Recipe Gardens _

Empanadas + Chimol Garden

“These roasted poblano cilantro empanadas are full of flavorful goodness! The poblano adds the yummiest roasted pepper flavor and the combination of poblano, cilantro, and melty vegan cheese cannot be beat. The slaw becomes a beautiful bright pink and adds the much needed fresh crunchy quality to the mix.” (McKinnie, 2018).

An infill home, not built until after this aerial photograph was taken, exemplifies a flowing garden. These champions choose to plant in a way which creates an engaging space. The cabbage acts as a physical barrier and the variety of planters, filled with food plants, provide visual privacy.



Before

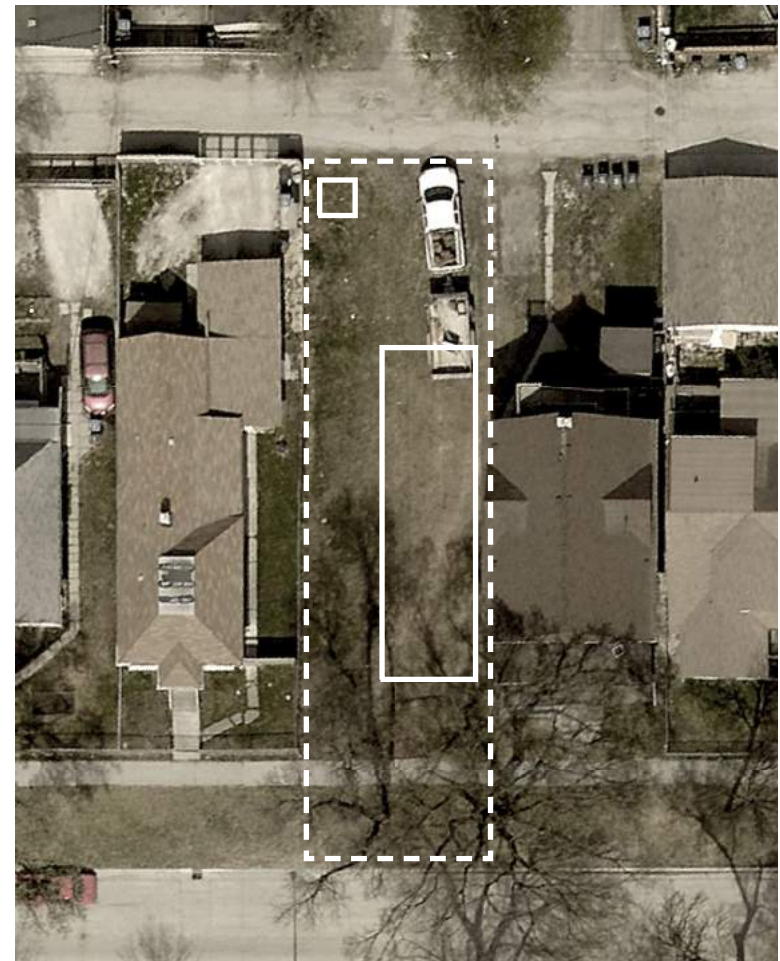


Fig. 63: Empanadas + Chimol garden existing condition (Lins, 2020)

After

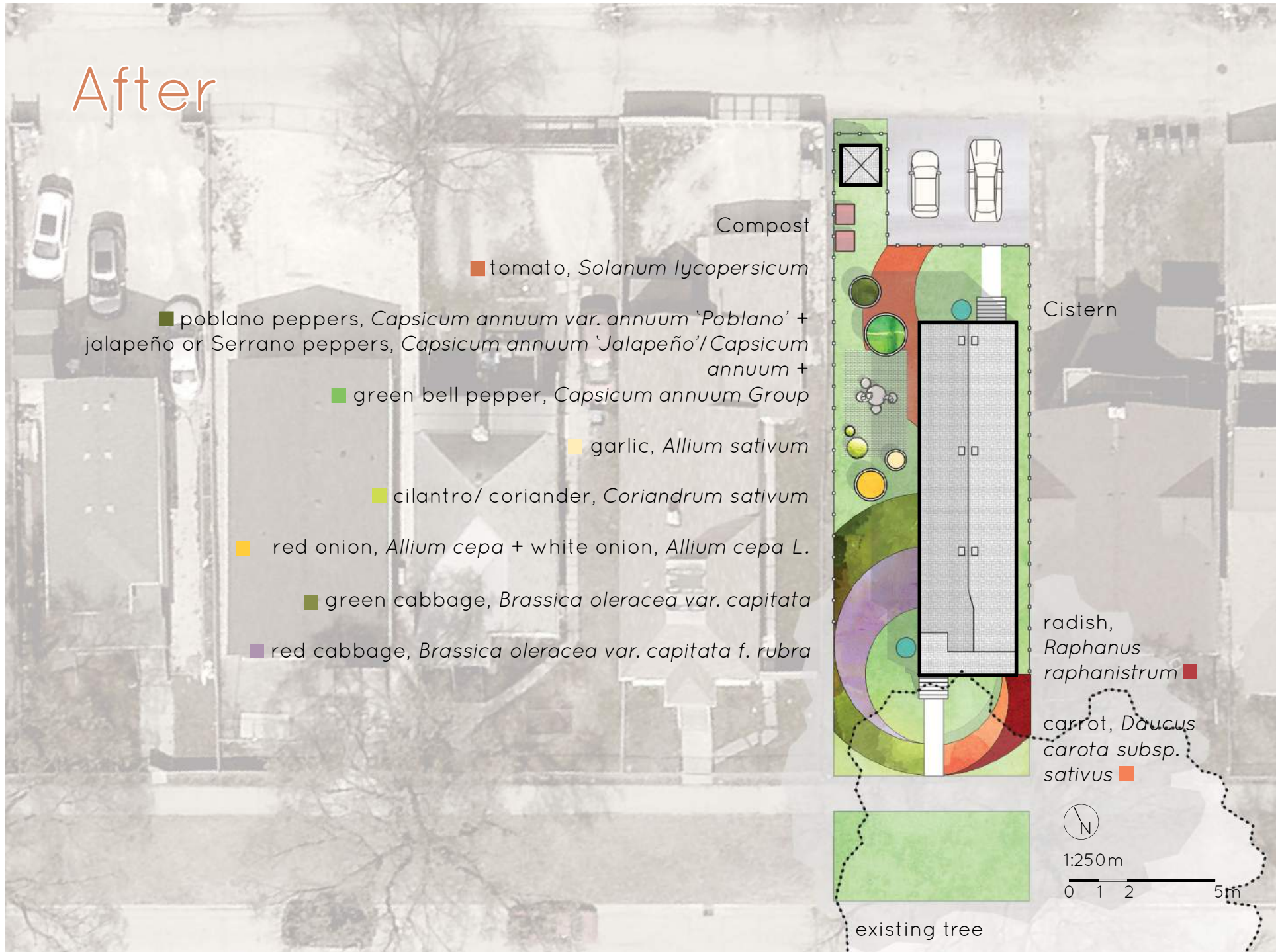


Fig. 64: Future Empanadas + Chimol garden (Lins, 2020)

Empanadas -Roasted Poblano Cilantro

(McKinnie, 2018)

Dough ingredients:

- 1 1/4 cups oat flour, plus 1 tablespoon for rolling dough
- 1 1/4 cups chickpea flour
- 1 tablespoons chia seeds, ground into a powder
- 1/2 teaspoon sea salt
- 1/2 teaspoon black pepper
- 1/2 cup, plus 1 tablespoon warm filtered water, plus extra for sealing empanadas
- 1/2 cup vegan butter, melted

Dough instructions:

1. Add flours, pepper, and salt into and mix together.
2. Melt the vegan butter and mix with water, add a little to chia seeds, whisk, then mix in the rest of the liquid. Stir in the flour.
3. Mix until the dough forms a slightly sticky ball. It will firm up as it sits.
4. Place the dough on a piece of parchment paper, form into a disk, and wrap tightly then place in the refrigerator for 30 minutes.

While the dough is chilling, prepare the filling.

Filling ingredients:

- 2 large poblano peppers, roasted and diced
- 1 garlic cloves, minced
- 1 1/2 cups vegan cheese shreds
- 1 1/4 cups cilantro, roughly chopped
- 1/4 teaspoon sea salt, or to taste
- 1/8 teaspoon black pepper

Filling instructions:

Dice the poblano peppers for filling. When cool, mix in the cheese, cilantro, garlic, salt, and pepper.

Curtido-Style Slaw ingredients:

- 1 1/2 cups red cabbage, thinly sliced
- 1 1/2 cups green or savoy cabbage, thinly sliced
- 1/2 red onion, thinly sliced
- 3 cups filtered water, boiling
- 1 carrot, grated
- 1/2 cup radish, thinly sliced and cut into matchsticks
- 1/4 cup apple cider vinegar
- 1-2 jalapeño or Serrano peppers, minced
- 1 garlic clove, minced
- 3/4 teaspoon sea salt, or to taste
- 1/8 teaspoon black pepper

Curtido-Style Slaw instructions:

It's best if you make this slaw the day before.

1. Place the cabbage, carrots, and onion into a large bowl. Pour the boiling water over, cover, then set aside for about 5 minutes. Drain in a colander, pressing out as much liquid as you can.
2. Add the cabbage and carrots back to the bowl and toss with the remaining ingredients. Let set at room temperature for a couple hours. Then chill.

To Assemble:

1. Preheat the oven to 375°F.
 2. Sprinkle a little flour onto a piece of parchment paper and roll out the dough fairly thin. Use a 5-inch round cookie cutter to make 8 circles. Or use a plate and cut with a knife around the plate.
 3. Once you have each circle of empanada dough cut out, fill them with 3 tablespoons of filling.
 4. Spread some water around the edges and fold over to seal. Use a fork to crimp the edges. Gently poke a fork on top to let steam escape.
 5. Place on a baking sheet and into the oven for 20-25 minutes, or until golden. Some of the cheese may come out during baking.
- Garnish with crtido-style slaw + Salsa and enjoy!

Chimol_ a freshly made salsa (Darlene, International Cuisine, 2015)

Ingredients

- 1/2 white onion
- 1 green bell pepper
- 1 tomato
- 1/4 cup fresh coriander
- 2 limes
- Salt to taste

Instructions

1. Finely dice equal parts of onion, pepper, and tomato
2. Finely chop coriander
3. Mix everything in a bowl
4. Add salt and lime juice to taste

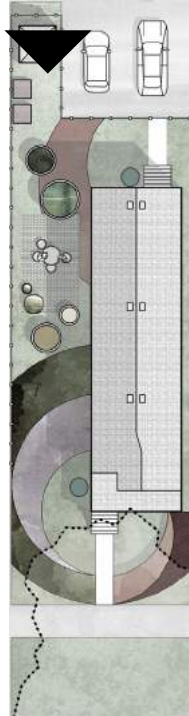


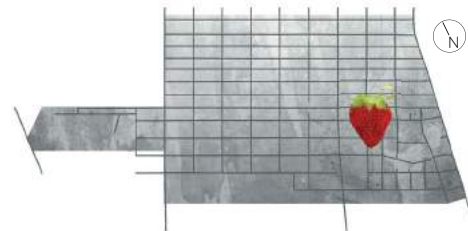
Fig. 65: Future Empanadas + Chimol garden perspective (Lins, 2020)

Home Recipe Gardens _

Pinakbet Garden

“The tender and earthy sweet taste of the squash, the crunchiness of the green beans, the bitter taste of the bittermelon and the slimy texture of the okra. The taste and texture of each of these vegetables contribute to make this dish a popular staple at my house” (Agbanlog, 2017).

A simple layout of the plants, layered for sunlight access, creates a beautiful texture of food. The okra is not typically grown in Canada; however, is worth the risk as agricultural trials are showing promising results (Daynard, 2016). This garden would benefit from the plants being seeded inside in late winter and hardening and planting once the frost is gone, to extend the growing season.



Before



Fig. 66: Pinakbet garden existing condition (Lins, 2020)

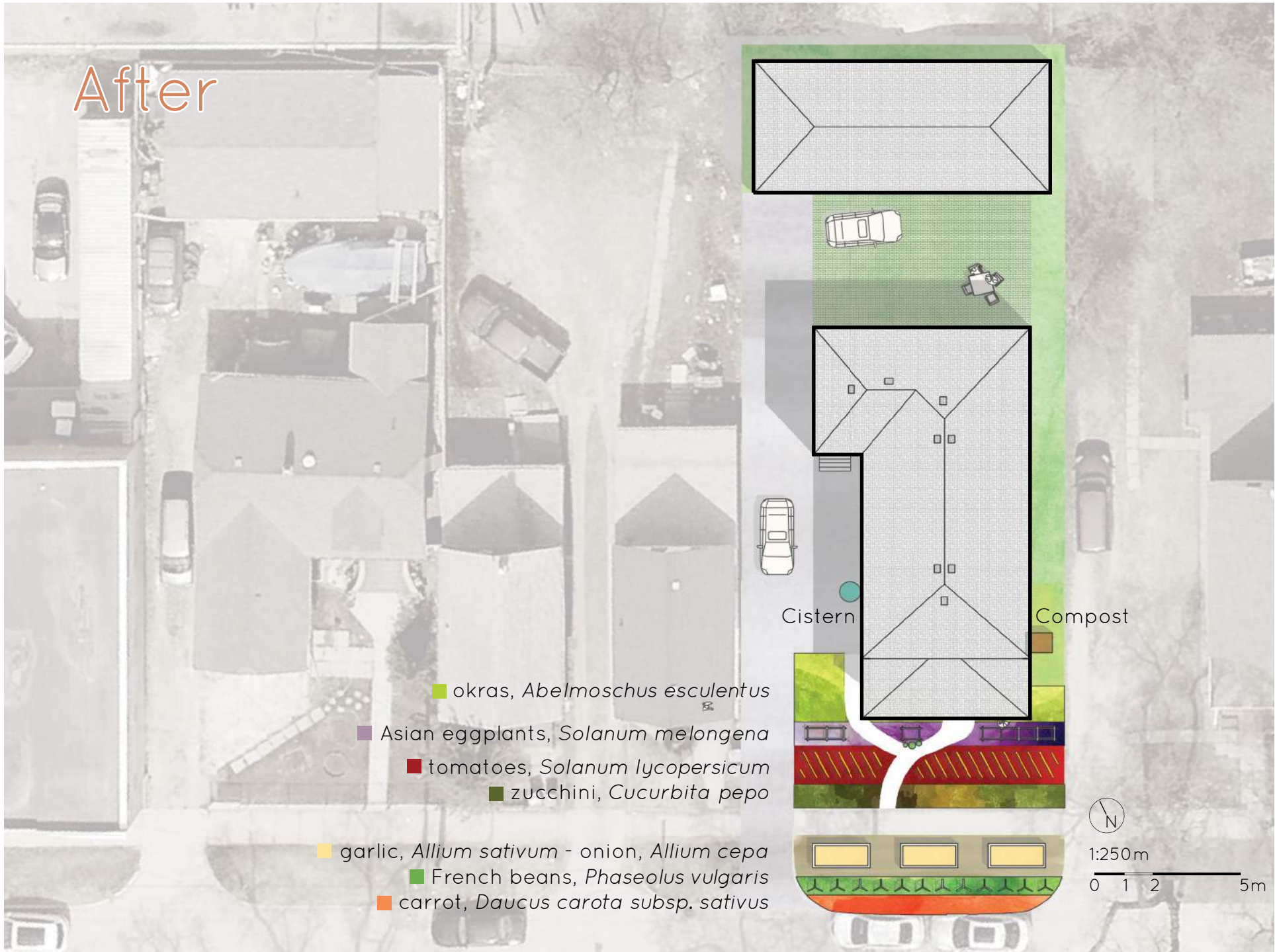


Fig. 67: Future Pinakbet garden (Lins, 2020)





Fig. 68: Future Pinakbet garden perspective (Lins, 2020)

Pinakbet -Vegetable medley with pork and bagoong (Alejandro, 2005, p.57)

Ingredients

2 tablespoons oil
2 cloves garlic, minced
1/2 medium onion, diced
12 oz (350g) pork, cubed
2 1/2 in ginger (6 cm) ginger, cubed
4 ripe tomatoes, diced
1 tablespoon fermented baby shrimp (bagoong alamang)
1/2 cup (125 ml) water
14 oz (400 g) Asian eggplants (2-3 eggplants), cut into strips
3 small bitter melons (bitter gourd) about 9 oz/275 g total
or 1 small zucchini, soft center and seeds discarded,
cut into strips
6 okras (about 3 1/2 oz/100 g), caps discarded, stems halved
10 French beans, cut into lengths
Salt and black pepper, to taste

Instructions

1. Heat the oil in a saucepan and stir-fry the garlic until golden brown, then stir-fry the onion until translucent. Add the pork and stir-fry over medium heat for 5-7 minutes, until brown.
2. Add ginger and tomatoes, and stir-fry for another 5 minutes. Then add fermented shrimp and stir-fry for 3 min.
3. Add water and bring to boil. Reduce the heat and simmer for 15 min until the pork is tender. Add eggplants, bitter melons, okras, and beans, reduce heat and allow to simmer for another 15 minutes. Season with salt and pepper.

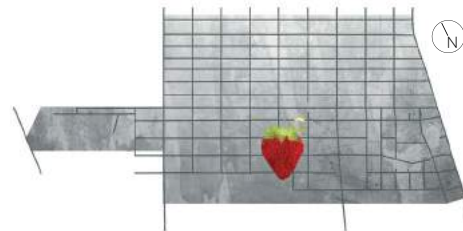
Serve immediately.

Serves 4 Preparation time 25 min Cooking time 45 min

Home Recipe Gardens _

Three Sisters Soup + Wild Greens Salad Garden

This hearty and soul warming soup is made from corn, bean, and squash. “The three plants were planted close together and like close sisters, aided one another in their respective growing processes” (The Table communiyt food centre, n.d.). “The three plants are also a nutrition powerhouse when combined. Corn contains carbohydrate, providing a rich source of energy while beans provide protein and fibre to help balance the release of sugar into the bloodstream, keeping us fuller for longer. The squash is full of nutrients, such as vitamin A that helps to maintain good eye health. Fibre helps keep us regular, lower bad cholesterol and prevent overeating due to its role in helping us to feel full” (The Table communiyt food centre, n.d.).



Before

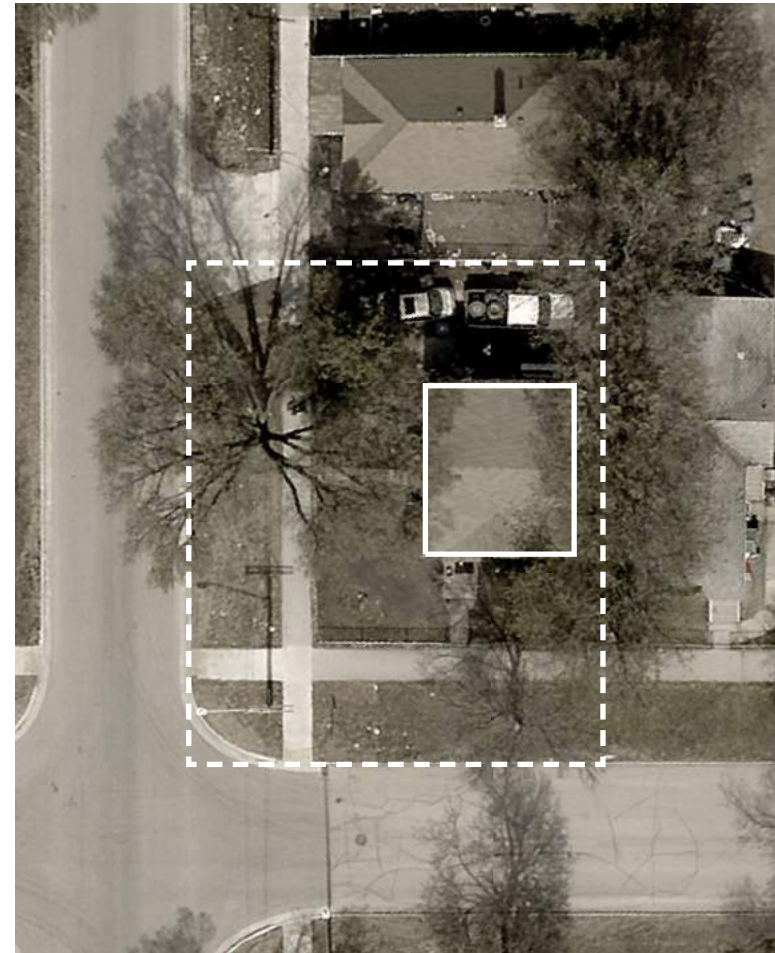


Fig. 69: Three sisters garden existing condition (Lins, 2020)

After

This garden is planted with an intent to let the plants expand and shift through seasons, growing symbiotically with one another. The entire yard is a garden, and the plant's nature is respected. As a primarily no-digging garden, these champions use their hands and work with compost to feed the garden, without digging. The Three Sisters plantings are the exception to the no-dig garden. They would require cultivation and yearly planting. These perennial and annual plants create a nourishing home landscape.

■ lamb's Quarter, *Chenopodium album*
chickweed, *Stellaria media*
dandelion, *Taraxacum*
milkweed, *Asclepias*
Chokecherry, *Prunus virginiana*

■ corn, *Zea mays*
beans, *Phaseolus vulgaris*
butternut squash, *Cucurbita moschata* 'Butternut'
sunchokes, *Helianthus tuberosus*
sage, *Salvia officinalis*

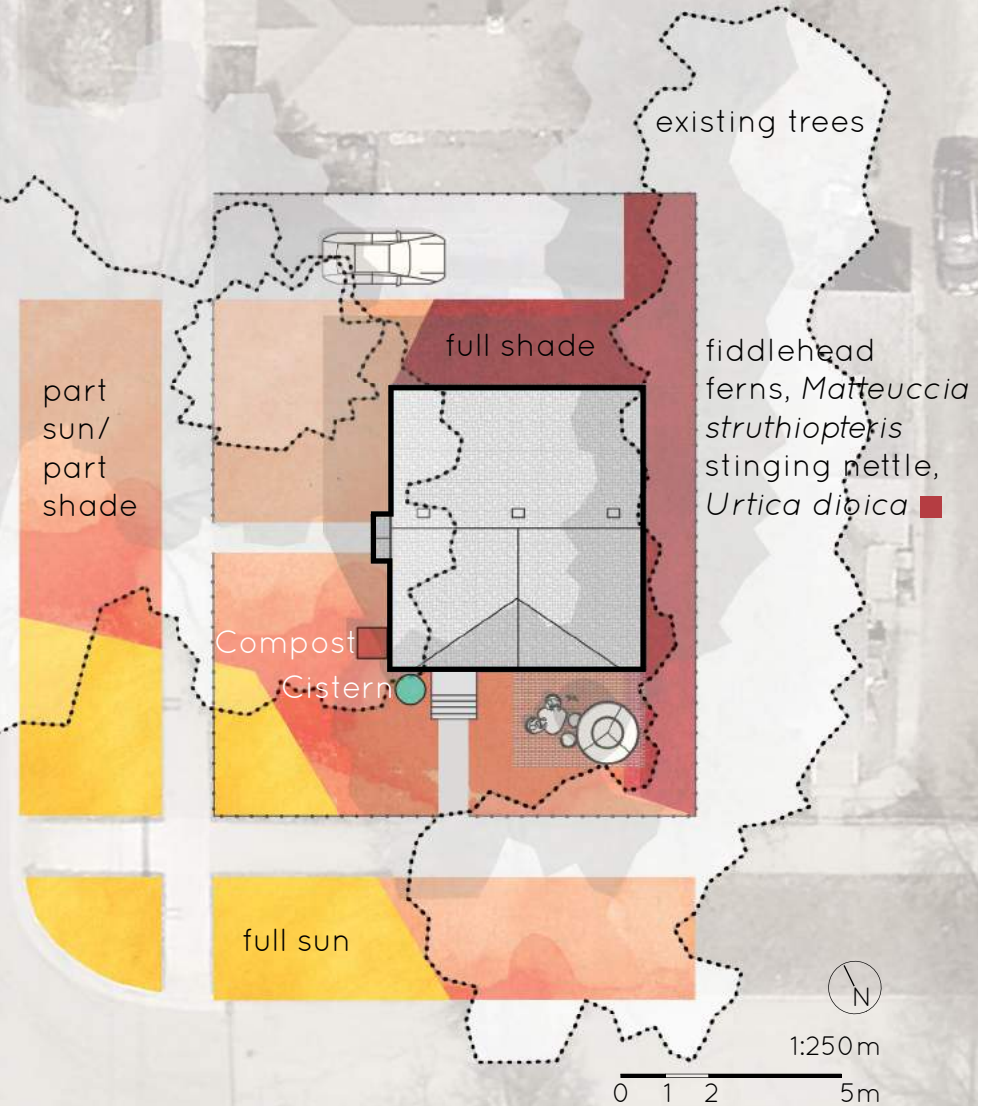


Fig. 70: Future Three sisters garden (Lins, 2020)

Three Sister Soup

(The Table communiyt food centre, n.d.)

Ingredients

- 2 cups white or yellow hominy corn
- 2 cups fresh green beans, trimmed & snapped
- 2 cups peeled and cubed butternut squash
- 1 1/2 cups diced peeled potatoes (sunchokes)
- 5 cups water 1 1/2 tablespoons chicken bouillon granules
- 2 Tbsp all-purpose flour 2 tablespoons butter, melted
- 1/4 tsp pepper

Instruction

1. Place the hominy, green beans, squash, and potatoes into a pot, and pour in water and chicken bouillon. Bring to a boil
2. Then reduce heat to low, and simmer until vegetables are soft, about 10 minutes.
3. Blend flour into the butter, and then stir into the soup. Increase heat to medium, and cook for 5 more minutes, or until soup thickens.
4. Season with pepper, and serve.

Wild Greens Salad (Forager Chef, 2020)

Ingredients

- 12 ounces mixed wild greens washed and dried (lamb's Quarter, chickweed, dandelion greens, and fiddlehead ferns)
- Flowers to garnish (dandelion and milkweed flowers)
- Salad oil or vinaigrette
- Salt and black pepper to taste

Instructions

- Put the greens, flowers and herbs in a salad bowl, then drizzle with the vinaigrette, salt and pepper to taste. Serve immediately.

Chokecherry Vinaigrette

(amended from: Candace, All Recipes, n.d.)

Ingredients

- 1/4 cup chokecherry juice
- 2 tablespoons balsamic vinegar
- 2 teaspoons honey
- 1 tsp olive oil

Instructions

1. In a small jar with a tight-fitting cover, combine the orange juice, vinegar, honey and oil.
2. Cover and shake well until combined.
3. To store, refrigerate for up to 1 week.
4. Shake well before serving.

Chokecherry Juice

(Josh, Home & Family, 2011)

Ingredients

- 10 cups ripe chokecherries washed, with stems removed
- 5 cups water

Instructions

1. Add 5 cups (1250 mL) water to 10 cups (2.5 L) berries and simmer 15 minutes.
2. Crush fruit with potato masher as it softens.
3. Drain through a moistened jelly bag.





Fig. 71: Future Three sisters garden perspective (Lins, 2020)

CONCLUSION

CHALLENGES + OUTLOOK

Increasing health and well-being remains a concern for the North End community. Transforming underutilized urban land into gardens, which grow food, and forming a community food network, would nourish and connect community members in the Selkirk Avenue District.

In order to begin such a large initiative, community members need to be engaged as champions, with a focus on inclusivity, and with special attention paid to engaging youth and seniors. The larger the variety of groups, and people engaged, the more quickly the initiative will grow. Luckily the district has an abundance of diversity. Although, this can present challenges as it is difficult to address everyone's needs. However, there is a common need for food and community, which gardening in the community would address. The variety of culturally appropriate foods people may want to grow will only add to this beautiful, diverse, and loved neighbourhood.

Currently it may be a challenge to get access to growing land. Yet, once champions are engaged, they will mitigate this issue as they will help to provide access to this currently inaccessible land.

A further challenge for the community would be accessing funding to support the gardens and food system. The exemplary Gardens work within the existing infrastructure and hard surfaces (concrete paths and patios), therefore the costs would be primarily for soil, garden bed establishment, and yearly seeds and seedlings to plant.

Funds for development, and maintaining the gardens and food system can be acquired for each project from a variety of sources: grants such as; The Little Green Thumbs Garden-based Education Grants for Schools & Non-Profits (Little Green Thumbs, 2020), the Province of Manitoba Building Sustainable Communities grant (Government of Manitoba, Grants by Department, n.d.), the Winnipeg foundation Resilient Community Program Grant (The Winnipeg Foundation, 2019),

Manitoba education's Education for Sustainable Development (ESD) Grant (Province of Manitoba, Education, n.d.), The Federation of Canadian Municipalities Green Municipal Fund-Pilot Project Waste Diversion (The Federation of Canadian Municipalities, 2020), and TD Friends of the Environment Foundation Grant (Clean River recycling solutions, 2020); sponsors, fundraisers, and eventually investors. Additionally, there is a hopeful outlook with the proposed One Million Tree Challenge set to begin in 2021, which aims to plant one million public trees in Winnipeg by 2040 (Domke, D.A., and Penner, R., 2020).

As the food system evolves, it can become self-sustaining as the sale of the produce grown would cover the costs for planting and maintenance.

This Selkirk Avenue District food system is a large undertaking, but it is not envisioned as a quick development. It is speculated that over the next few years ground would be broken and the food system would be functioning within the next 50 years.

Conclusion _

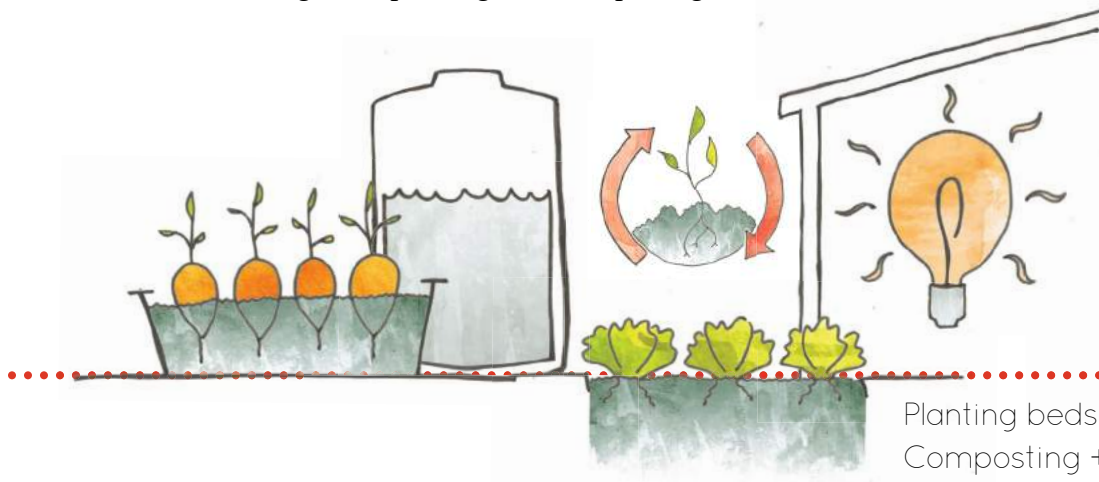
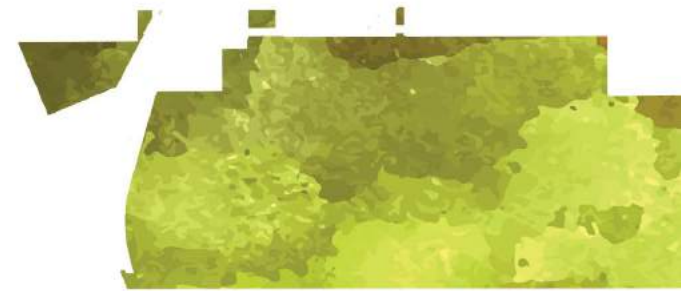
Community Time Line

over the next 12 years

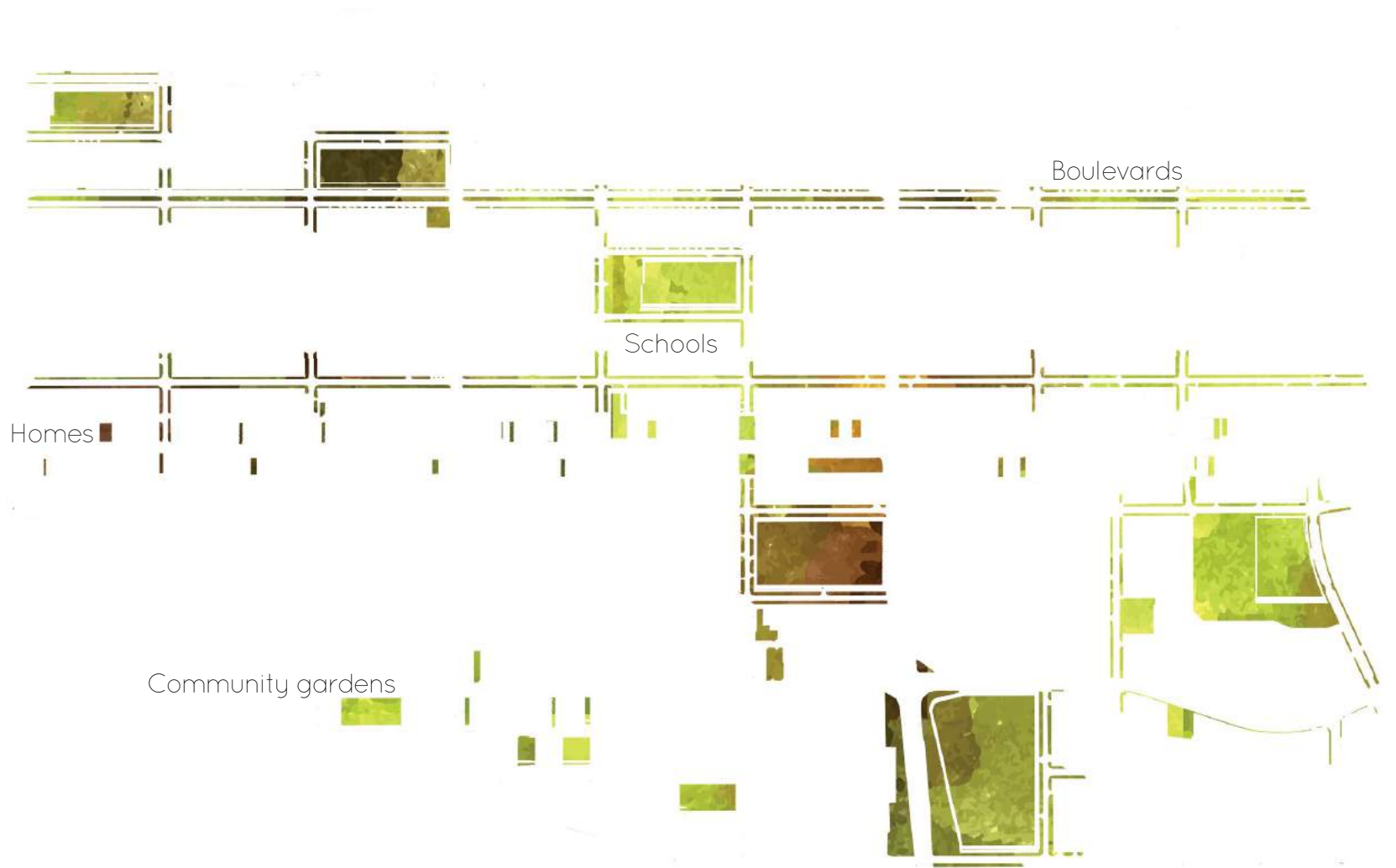
This speculative time line for the Selkirk Avenue District utilizes the food systems components, which, over time, take over the urban landscape, slowly creating a dynamic, beautiful, and nourished community.

Beginning with the neighborhood youth allows the system to organically grow as the children connect with land and growing food. The first cohort would be between 4 and 18 years old when the first initiative begins.

It would begin with these youth and other community champions in a selection of boulevards, schools, community gardens, and homes. It would also start with the basic growing necessities of raised and in-ground planting beds, composting units, cisterns, and education centres.



Planting beds + Cisterns +
Composting + Education Centres



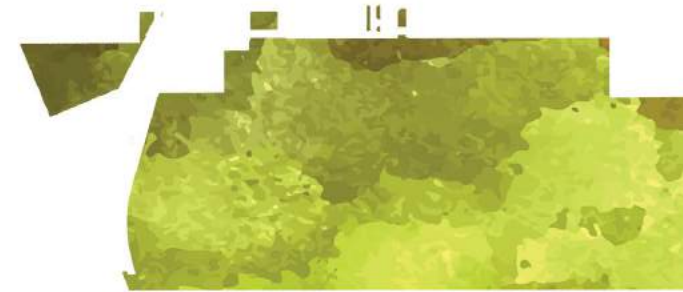
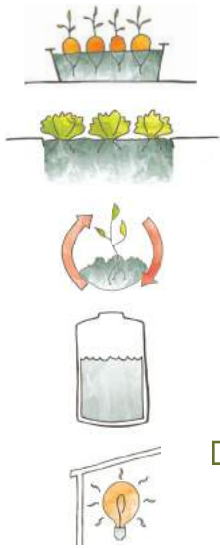
2032

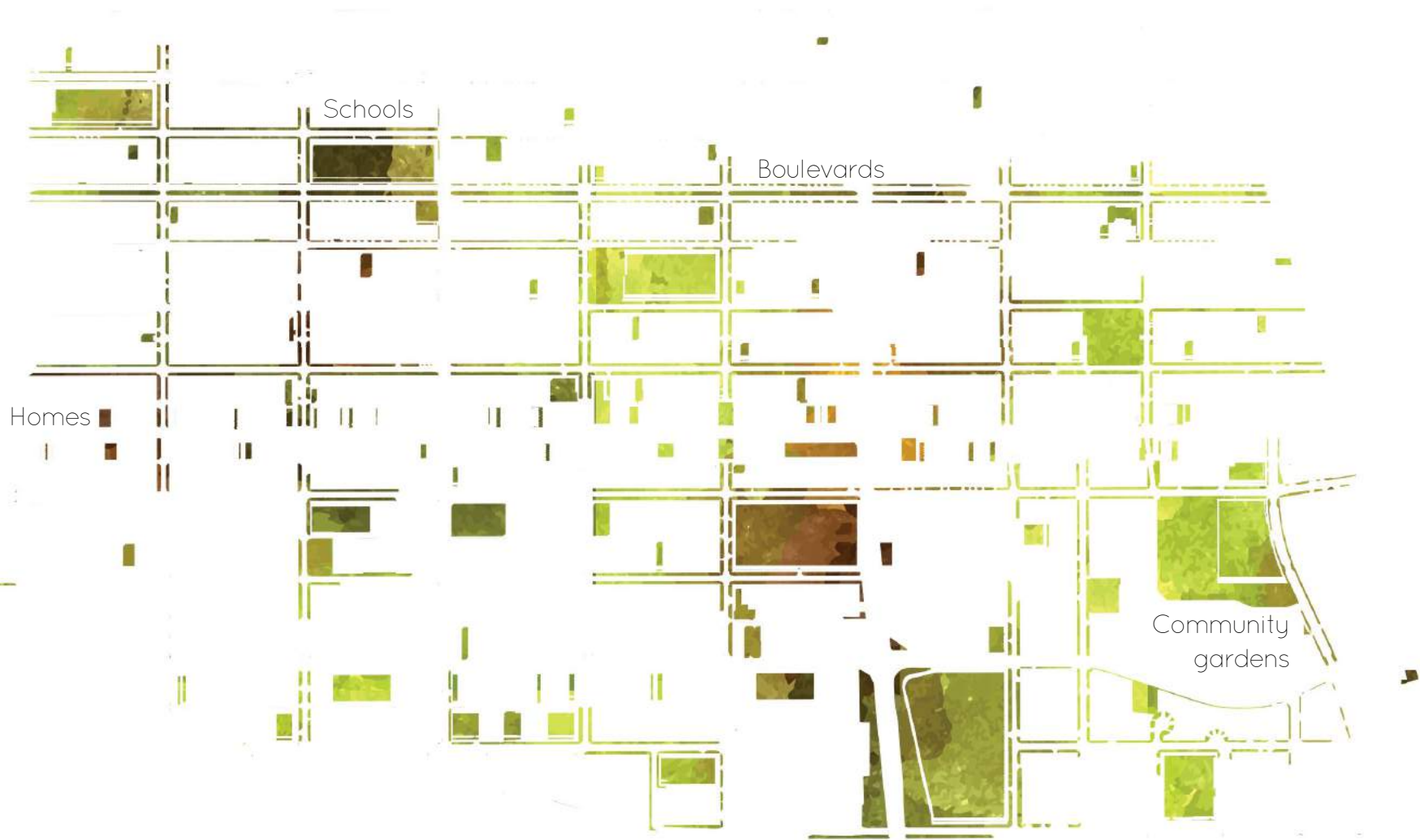
Fig. 72: Speculative time-line - 0-12 years (Lins, 2020)

Conclusion _ Community Time Line

10-20 years

The first cohort would now be 14 to 28 years old and could carry their knowledge of growing into the neighbourhood and into more; boulevards, schools, community gardens, and homes. They would also expand the number of raised and in-ground planting beds, composting units, cisterns, and education centres. In this time line, the first greenhouses and green roofs would be developed.





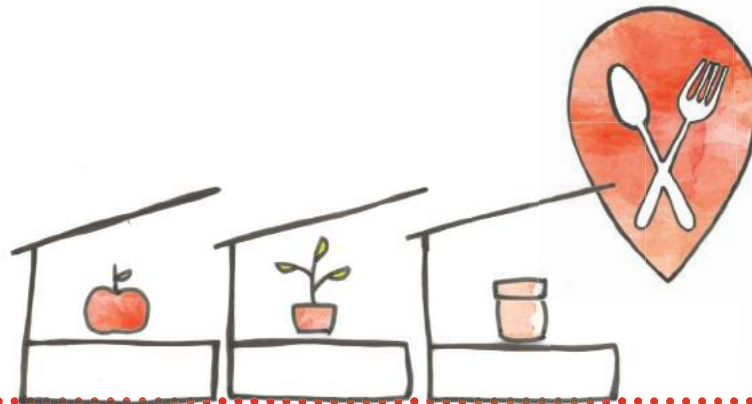
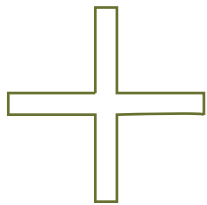
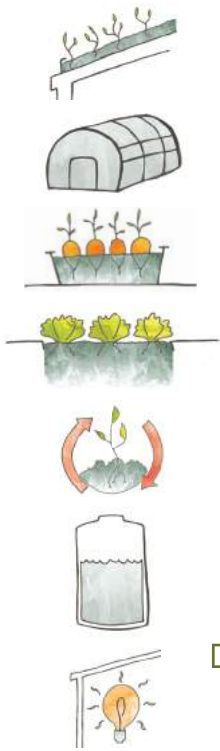
2042

Fig. 73: Speculative time-line - 10-20 years (Lins, 2020)

Conclusion _ Community Time Line

20-30 years

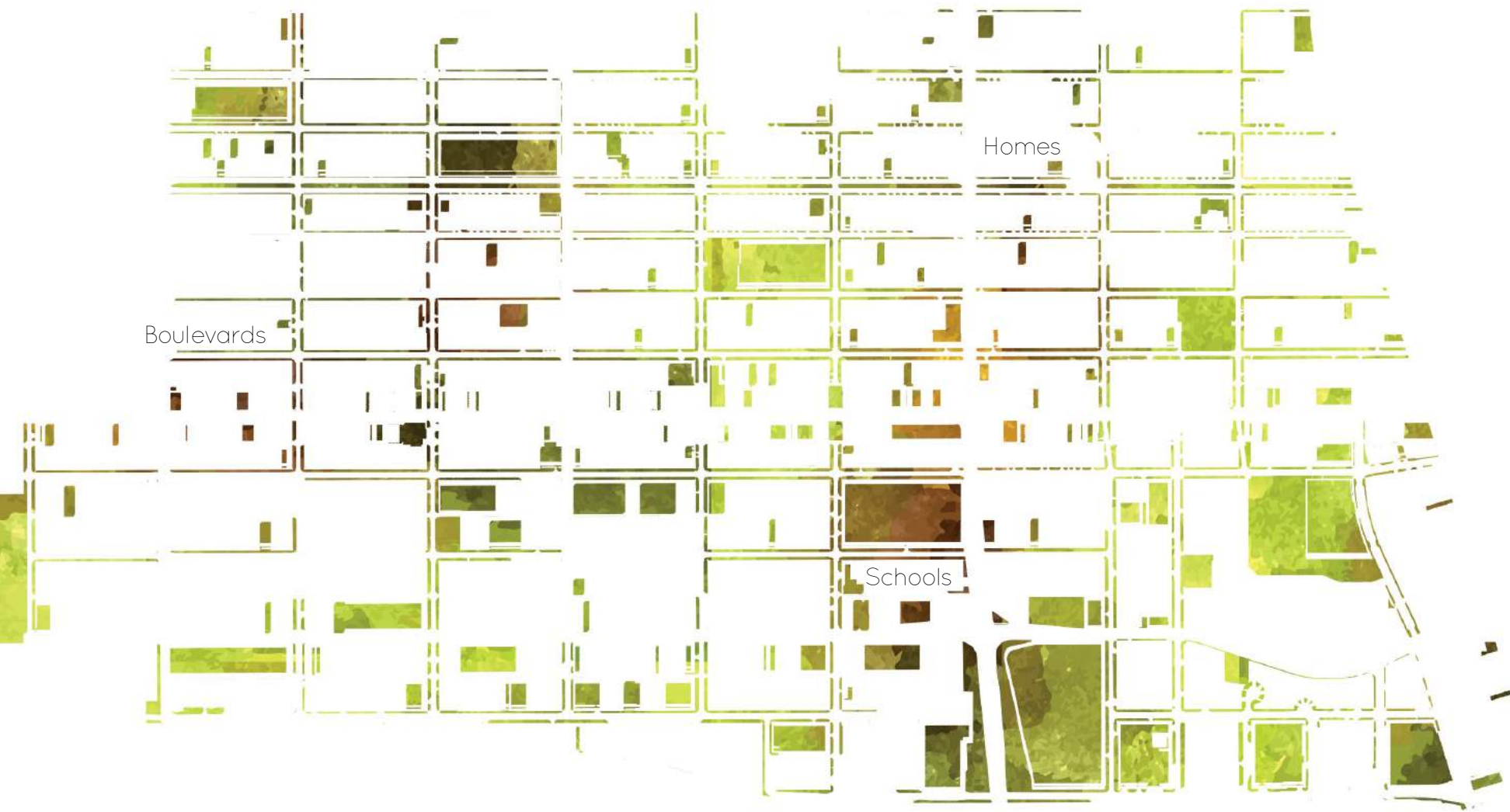
The first cohort is now 24 to 38 years old. These adults, establishing themselves in their careers, can carry the urban food ethic into their workplaces, as well as into their young families. There is additional potential for this cohort to invest in their neighbourhood through new business ventures, and with the expansion of the existing components. More expensive and more experimental markets and shops, restaurants, and green walls can be developed and incorporated into the community food system.



Market space +
Restaurants + Green walls

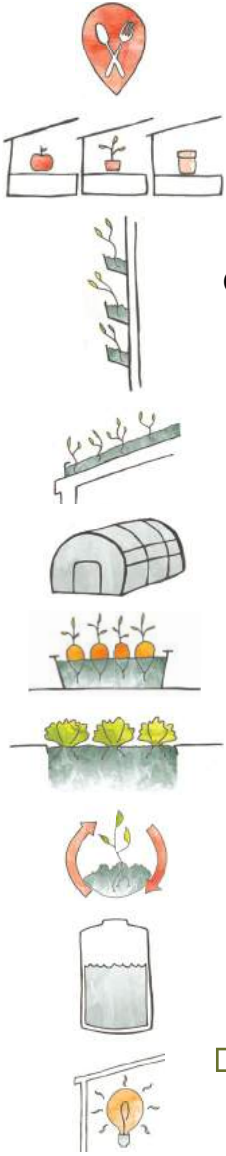


Community
gardens



2052

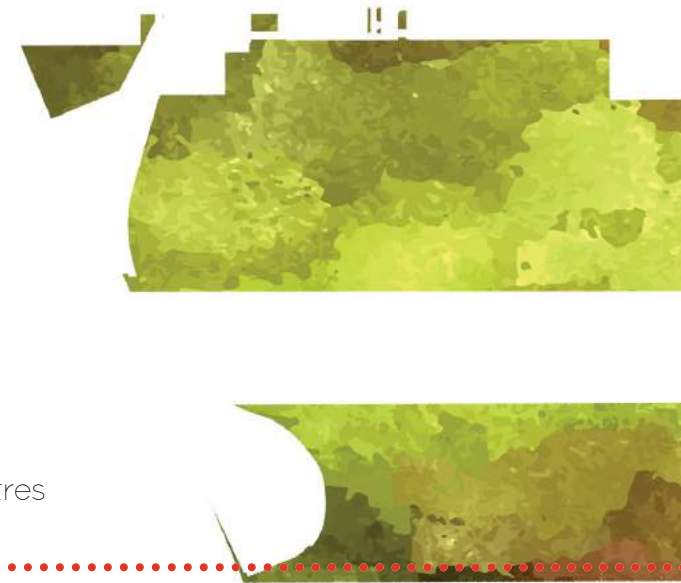
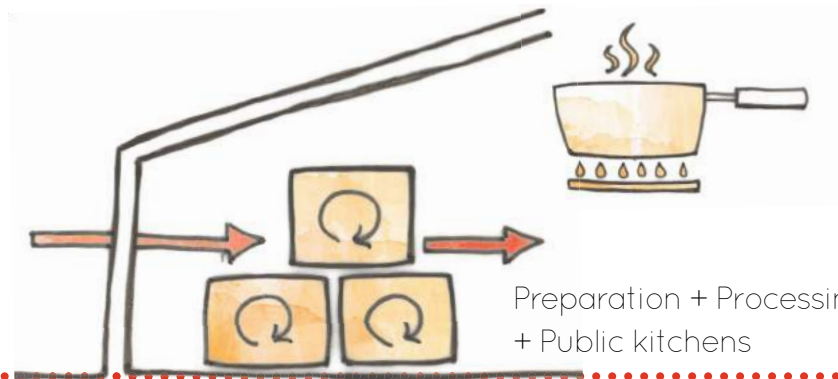
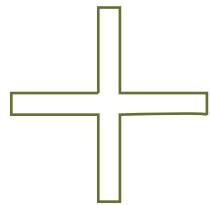
Fig. 74: Speculative time-line - 20-30 years (Lins, 2020)



Conclusion _ Community Time Line

30-40 years

The first cohort is now 34 to 48 years old. These adults, fully established in their careers, continue to carry the urban food ethic through their lives. Processing and distribution centres and community kitchens are established, while more of the land is taken over for growing food. The system grows.





Schools

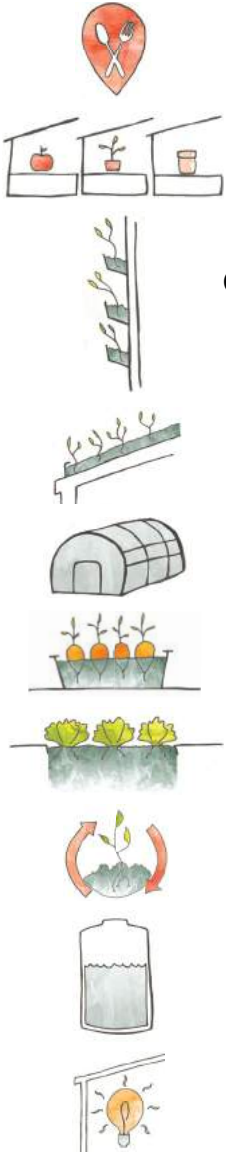
Homes

Community gardens

Boulevards

2062

Fig. 75: Speculative time-line - 30-40 years (Lins, 2020)

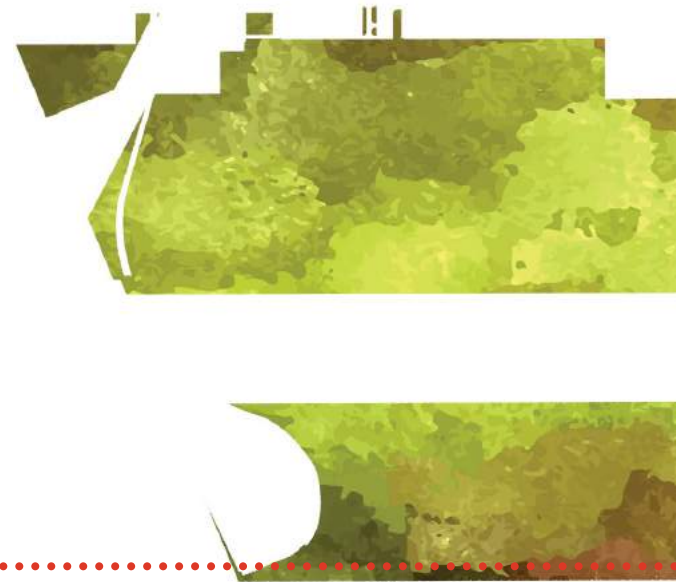
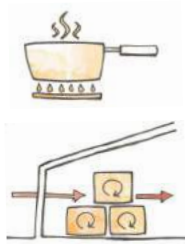


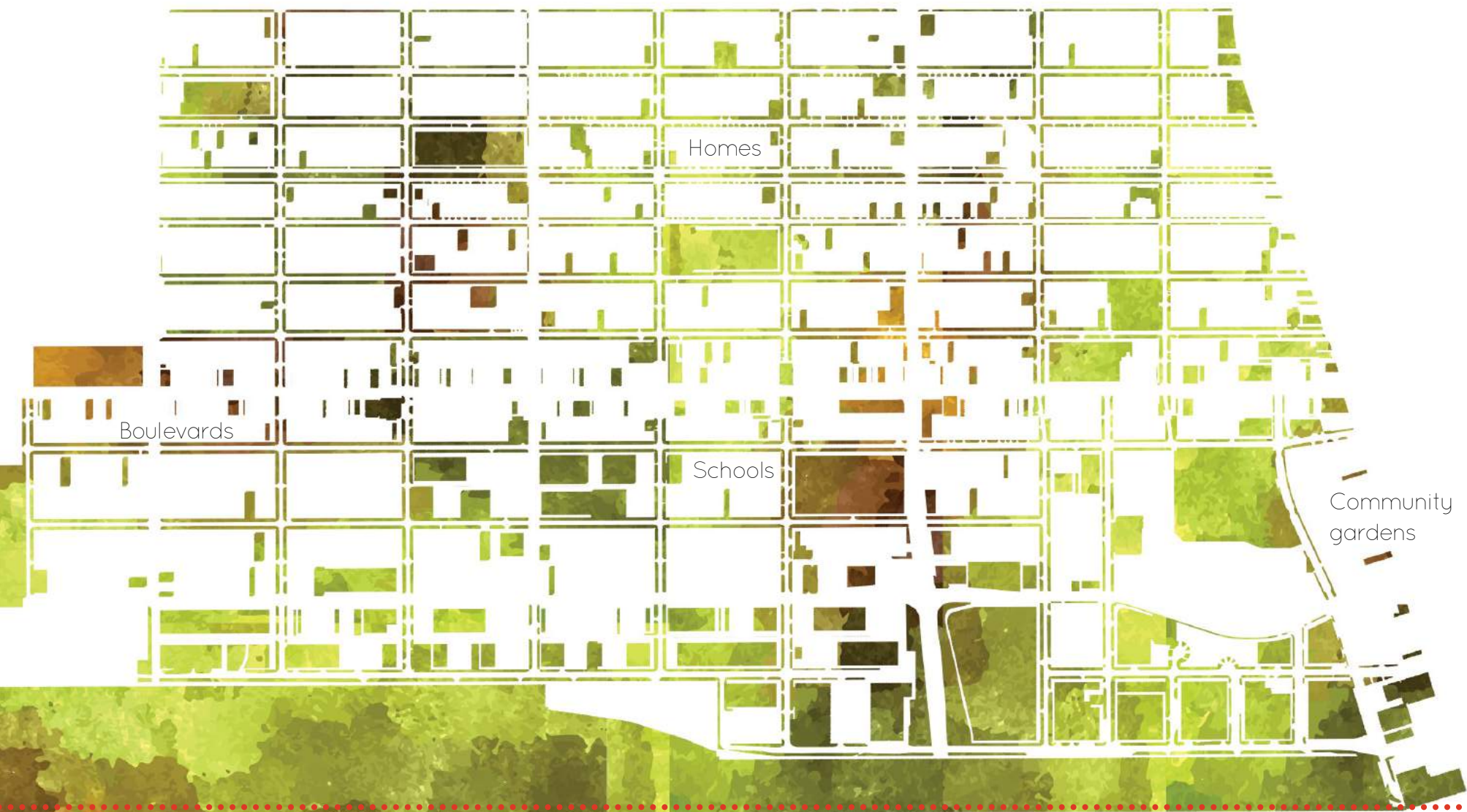
Conclusion _ Community Time Line

40-50 years

Now that all the components are incorporated into the community, and the first cohort is now 44 to 58 years old. The community can now focus on elaborating the neighbourhood food landscape through developing more components into each garden. These champions can take all they have learned to focus on fully taking over the community space.

This 50 year plan culminates with a developed, diverse, and beautiful Selkirk Avenue District with dense food production and a nourished community. The system will continue to evolve as the community's needs are always growing. There are always opportunities to find new places and people to engage, new techniques, and new plants to introduce.





2072

Fig. 76: Speculative time-line - 40-50 years (Lins, 2020)

Conclusion _ Challenges + Outlook _ continued

Growing food is necessary in light of the current health and well-being concerns within the Selkirk Avenue District. Food gardens bring people together and provide healthy fresh food to the community. A variety of gardens are necessary to produce the quantity and variety of food that would enable a healthy and connected community. Creating a community food system would meet many of the needs as identified by the community and is realistic and achievable when champions are engaged.

Possibly the two most significant challenges faced in realizing this vision is a shift in mindset and active participation, especially in gardening. The change of mindset is needed to gain the second obstacle of participation. Community members would need to see growing food as an essential need and a beautiful possibility to be integrated into their community and lives. This mindset is necessary, so individuals will be willing and eager to devote their time, energy, and resources to the community food system. Not only do individuals matter, but also businesses, support groups, and governments need to shift their mindset. The required shift for these champions is a belief in a need for a change from the global food production market as the primary source of food, to a regional healthy sustainable food system, which will only happen when the community mindset shifts and advocates for change. There will then be the political and economic will to adjust and realign policies and practices. All need to be committed, for if the community is not engaged, a program may start but not continue or grow; vandalism and poor upkeep could occur. If the political will is not present, the rules for land occupation and resource support will also not be present, making it much more challenging for the program to thrive or for some elements such as the street fruit trees to be incorporated.

The greatest success for this initiative will come from beginning with small gatherings intending to spur a grassroots movement, initiating the change of mindset, and participation challenges by engaging a few community champions. Establishing and supporting these champions will strengthen and build the community food system's overall success. This document brings to light the benefits of a shift in mindset and participation in a neighbourhood food system and can act as a starting point for discussion during the initial gatherings. This practicum can fulfill this vital role as it exemplifies the possibilities of food within an urban neighbourhood in that food in the city is possible, beneficial, and beautiful, leading to a new urban condition that is wonderful, with happier, healthier people.

Each type of exemplary garden should be explored further and refined to create detailed plans for the future. Community consultation would be essential for determining which foods should be grown where, and by whom. This practicum asked the question of what can be imagined. Additional work should ask; what can be done with a given set of champions and specific land?

For as the world is in a state of disconnection, what is better than to sit around a table with those one cares about sharing knowledge, stories, laughter, and love over a warm plate of fresh food?

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Bibliography Metadata

1:20 000 Buildings - points

Originator: Manitoba Department of Conservation
Publication_Date: March, 2002
Publication_Time: Unknown
Title: 1:20 000 Buildings - points
Edition: 1.0
Geospatial_Data_Presentation_Form: vector digital data
Online_Linkage: http://mli2.gov.mb.ca/t2ok/shp_zip_files/str_bas_2ok_buildings_pt_shp.zip

Purpose: To provide the public with high detail and high accuracy topographic base map coverage of Manitoba.

Abstract: The 1:20 000 scale Topographic Base Map series are digital map layers that show lakes, rivers, streams, marshes, contours, and elevations of surrounding land. Additional features such as classified roads, railway lines, towns, villages and buildings are also shown. This data was collected photogrammetrically from 1:60 000 aerial photography.

1:20 000 Hypsography - lines

Originator: Manitoba Department of Conservation
Publication_Date: March, 2002
Publication_Time: Unknown
Title: 1:20 000 Hypsography - lines
Edition: 1.0
Geospatial_Data_Presentation_Form: vector digital data
Online_Linkage: http://mli2.gov.mb.ca/t2ok/shp_zip_files/hyp_bas_2ok_ln_shp.zip

Purpose: To provide the public with high detail and high accuracy topographic base map coverage of Manitoba.

Abstract: The 1:20 000 scale Topographic Base Map series are digital map layers that show lakes, rivers, streams, marshes, contours, and elevations of surrounding land. Additional features such as classified roads, railway lines, towns, villages and buildings are also shown. This data was collected photogrammetrically from 1:60 000 aerial photography.

Bibliography Metadata cont.

1:20 000 Water Bodies - polygons

Originator: Manitoba Department of Conservation

Publication_Date: March, 2002

Publication_Time: Unknown

Title: 1:20 000 Water Bodies - polygons

Edition: 1.0

Geospatial_Data_Presentation_Form: vector digital data

Online_Linkage: http://mli2.gov.mb.ca/t2ok/shp_zip_files/hyd_bas_20k_py_shp.zip

Purpose: To provide the public with high detail and high accuracy topographic base map coverage of Manitoba.

Abstract: The 1:20 000 scale Topographic Base Map series are digital map layers that show lakes, rivers, streams, marshes, contours, and elevations of surrounding land. Additional features such as classified roads, railway lines, towns, villages and buildings are also shown. This data was collected photogrammetrically from 1:60 000 aerial photography.

2016 Orthographic Photography Tiles

Originator: Open Data Admin

Publication date: Oct 19, 2016

Updated: Apr 20, 2017

Geospatial data presentation form: vector digital data

Licence: Open Government Licence - Winnipeg

Department: Corporate Support Services

Group: Information

Publisher: City of Winnipeg

Online linkage: <https://data.winnipeg.ca/Organizational-Support->

Services/2016-Orthographic-Photography-Tiles/5kgu-m3ec

Description: Map of orthographic photography tiles for the City of Winnipeg for 2016. The tiles link to the specific .ecw file for that area, with each file being on average 58.75MB in size.

Census 2006 - Neighbourhood Boundary

Originator: Open Data Admin

Publication date: Jul 11, 2014

Updated: Apr 20, 2017

Geospatial data presentation form: vector digital data

Licence: Open Government Licence - Winnipeg

Department: Community Services

Group: Census

Publisher: City of Winnipeg

Online linkage: <https://data.winnipeg.ca/Census/Census-2006-Neighbourhood-Boundary/k78r-tn6e>

Description: Neighbourhood boundaries used for the 2006 Census.

Map of Assessment Parcels

Originator: Open Data Admin

Publication date: Aug 24, 2017

Updated: Feb 24, 2020

Geospatial data presentation form: vector digital data

Licence: Open Government Licence - Winnipeg

Department: Assessment and Taxation

Publisher: City of Winnipeg

Online linkage: <https://data.winnipeg.ca/Assessment-Taxation-Corporate/Map-of-Assessment-Parcels/rt7t-3m4m>

Description: Map of all Assessment Parcels from the Assessment and Taxation Department. Additional property information available on

the tabular dataset: <https://data.winnipeg.ca/Assessment-Taxation-Corporate/Assessment-Parcels/d4mq-wa44/data>

Map of Parks And Open Space

Originator: Open Data Admin
Publication date: Sep 19, 2016
Updated: Feb 24, 2020
Geospatial data presentation form: vector digital data
Licence: Open Government Licence - Winnipeg
Department: Public Works
Group: City Services
Publisher: City of Winnipeg
Online linkage: <https://data.winnipeg.ca/Parks/Map-of-Parks-And-Open-Space/tug6-p73s>

Description: Data representing parks and open space in Winnipeg, including the spatial boundaries, names, area, and addresses.

Road Network

Originator: Open Data Admin
Publication date: Feb 13, 2018
Updated: Feb 24, 2020
Geospatial data presentation form: vector digital data
Licence: Open Government Licence - Winnipeg
Department: Planning, Property & Development
Group: Planning
Publisher: City of Winnipeg
Online linkage: <https://data.winnipeg.ca/City-Planning/Road-Network/2eba-wm4h>

Description: Single lane road network of the City of Winnipeg. Data includes bridges and address ranges.

Tree Inventory Map

Originator: Open Data Admin
Publication date: Mar 23, 2018
Updated: Feb 24, 2020
Geospatial data presentation form: vector digital data
Licence: Open Government Licence - Winnipeg
Department: Public Works
Group: City Services
Publisher: City of Winnipeg
Online linkage: <https://data.winnipeg.ca/Parks/Tree-Inventory-Map/xyma-gm38>

Description: Detailed list and map of all public trees located in the City of Winnipeg, including botanical name, common name and precise location. Also available in tabular format here: <https://data.winnipeg.ca/Parks/Tree-Inventory/hfwk-jp4h/data>

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Heather Lins © 2020