

# GARDEN VARIETY

THE SOCIAL POTENTIAL & SPATIAL DESIGN OF AN URBAN LANDSCAPE

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# ABSTRACT

This project explores the site-specific design of an urban landscape as a focal point and social hub within a disparate community context. This research investigates the social, economic, and environmental context in the historic neighbourhoods of West Alexander and Centennial in Winnipeg, Manitoba, Canada. This area has witnessed a prolonged period of degradation and provides a challenging community interface. Many government and grassroots initiatives are active within the area, addressing cultural, educational, and economic issues. This project explores the potential of an urban landscape design in developing a more cohesive physical environment and facilitating interaction and collaboration between dissonant community factions. The intentions of this research are to provide a pragmatic design that is tailored to the current community.



An aerial photograph of a green lawn with a tree shadow cast across it. The text is overlaid on the right side of the image.

# GARDEN VARIETY

THE SOCIAL POTENTIAL & SPATIAL DESIGN OF AN URBAN GARDEN

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# SECTION ONE THE SEED

“To attempt to orient oneself to the everyday in the landscape, to the ways in which one experiences a landscape from day to day, in practical as well as conceptual terms, it is helpful to imagine people and the ordinary objects that people bring with them, in these landscapes. By peopling the landscape, one can begin to introduce various conflicting uses and meanings into one landscape, as well as to imagine a landscape as occurring not over the course of one photo shoot but over many years’ time.”

Margie Ruddick (1997)

# 1.1 INTRODUCTION

No work of landscape architecture has universal meaning. This project seeks to explore the possibilities embedded in the everyday interactions of a disparate population through the design of an urban landscape.

The vitality of a community often relies on the extent to which the participants live their lives in the public realm. This is not overt in Winnipeg's West Alexander and Centennial neighbourhoods, however, the area is home to several public programs and organizations that serve as a social and cultural backbone in the community. Contention between the interests of the institutional, residential, and commercial factions of the community, as well as the prominent cultural divisions within the community have created a challenging social interface and contributed to a disjointed physical environment.

This project explores formal design and the existing social context concurrently to inform an urban landscape design and conceptualize a network of social possibilities. The design celebrates the familiar through the preservation of landscape features and the introduction of pragmatic, landscape archetypes in the creation of a social and cultural focal point within the community.

## 1.2 INTENTION & APPROACH

This project will offer a vision for the West Alexander and Centennial neighbourhoods that is grounded in both quantitative data and qualitative observation. This vision is intended to provoke conversation; encouraging diversity in urban landscapes in Winnipeg and the provision for a community through insightful and site-specific design.

Community participation in the development of public architecture is often crucial to the success of such projects. Consideration was given to differing possibilities in both the evolution of the physical landscape, and the personal experiences and interpretations of the landscape. This consideration of outcomes influences design decisions, accounting for varying levels of community interest and engagement with the landscape. With its reliance on basic community engagement for a successful built environment, this project is intended to serve not as an absolute conception, but as a relevant and educated foundation in a community forum.

# SECTION TWO INFLUENTIAL GARDENS

“The reciprocity between ‘nature’ and humans happens within one system as the land that we steward — no matter how small — becomes part of a biological legacy and a social legacy, strengthening our collective identity and social cohesion.”

Erika Svendsen (2009)

This chapter focuses on gardens, the most recognized archetype in landscape architecture. Gardens have evolved throughout history to reflect the current cultural climate. Today’s most relevant gardens are rooted in the community garden movement. This chapter outlines the relevance of the movement and the multi-faceted rewards communities experience as an outcome of community gardening. The local context informs each garden’s role and form, providing for a great deal of variety within the movement. Several carefully selected case studies shed light on the success of a variety of garden projects and how they overcame both locally specific and common issues. The outcomes of these gardens and the strategies they employed will inform a design concept as they relate to the local context.

## 2.1 THE COMMUNITY GARDEN MOVEMENT



Figure 1. Liberty Community Garden, NY  
(Kreussling, 2010)

Gardens, as a genre of landscape architecture, have evolved over time and expanded with influences from different cultures. An important distinction exists between gardens that seek to provide a private retreat within an urban setting and those that are oriented toward the public, to provide a statement and structure to an urban space (Shroder, 2005). Public gardens offer a model of urban landscape that can support various levels of engagement and activities to bolster a social and cultural structure and create a quality environment within a community.

The community garden movement is rooted in the utilitarian needs of local communities. It is a multifaceted movement that embodies political, social, environmental, and economic activism that contribute to a sense of community, social well-being, and a quality environment. The

dynamic foundations of the community garden movement allow for it to establish a unique presence in every urban environment. In both Europe and North America the community garden movement was established in times of economic and social disparity, but it wasn't until the 1990's its more contemporary role was formalized (Lawson, 2005)

Early examples of community gardening in Canada date back as early as 1890 to the Railway Gardens that promoted civic beautification and advertised the fertility of Canadian soils (Quayle & Songhai, 1986). These early examples of civic engagement through gardening were accompanied by School Gardens that were thought to encourage agrarian values and educate students through hard work and nurturing the environment (Quayle & Songhai, 1986). In 1914, community gardening took on a different role in the Wartime Gardens that aided in food production and focused on efficiency and resources (Quayle & Songhai, 1986). Once both World Wars ended and economic security returned, community gardening turned to the more aesthetic and health-oriented purpose of bringing nature into the city (Quayle & Songhai, 1986). Gardens were used to create democratic spaces and encourage self-sufficiency, aligning with the political movement of the time. The history of Canadian community gardens depicts their contextual nature, as they facilitate the social, economic, and environmental agenda present in every era.

Many common themes exist in community gardens, including an appreciation for nature, social inclusion through resource-driven activity, the health and wellness benefits of outdoor activity, and the desire for self-sufficient food production (Hou, Johnson, & Lawson, 2009). All of these themes are found in garden projects throughout North American cities and seem to be more deeply appreciated and rooted in communities that are struggling or undergoing revitalization. There are several successful community garden projects in different neighbourhoods within Winnipeg, however the community gardening movement has yet to fully prosper in this city.



## 2.2 INTERNATIONAL GARDENS

Location: Göttingen, Germany

Patrons: Immigrants and German citizens from all socio-economic strata

Size: Unknown

Year: 1995 – now

Figure 2. Urban Garden in Berlin (2012). (Left)

Figure 3. Intercultural Community Garden at Mariannenplatz, Berlin (2010). (Right)



Intercultural Gardens not only offer access to healthy, high-quality produce but also achieve intercultural communication and social inclusion through a resource driven approach (“Intercultural gardens,” 2014). The first intercultural garden was developed in Göttingen, Germany. The idea evolved as a result of a number of female Bosnian refugees joining forces with a local Ethiopian agricultural engineer in order to improve upon the social and economic supports being offered (Müller, 2007). This initial project was extremely successful in bringing together German citizens and a variety of immigrants including many refugees and gained both national and international recognition. Within a few years of this intercultural garden being developed, the concept was replicated across Germany (“Intercultural gardens,” 2014).

Historically, allotment gardens were very popular in Germany and throughout Europe. These gardens provided a private garden plot and an escape from urban living. Intercultural gardens differ from allotment gardens as they seek social inclusion and are intended to function within the urban environment (Müller, 2007). The gardens generally contain a single, communal structure and lack distinct boundaries between plots (Müller, 2007). Boundaries often consist of the visual differentiation of species, fine rope, or discreet markers. The entire garden is often fenced or bounded to prevent damage from animals and uninformed community members. The garden plots typically range from 10-80 square meters. The greater garden generally consists of large common areas which often contain a fireplace, adobe oven, a play area, children’s gardens, and occasionally a greenhouse for seedlings. This gardening project has been most popular with women, which is likely due to widespread cultural notions about gardening as women’s work and many women missing both the familiarity of a garden and social connections (Müller, 2007). The association representing intercultural gardens in Göttingen consists of over 60 members not including their families, 40% of these members are German while the remaining members represent 18 different nationalities (Müller, 2007).



## 2.3 SOUTH CENTRAL FARM

Location: Los Angeles, California, U.S.A.

Patrons: Local low-income residents

Size: 14 Acres

Year: 1994 – 2006

Figure 4. South Central Farm Protest  
(Carranza, 2006). (Left)

Figure 5. South Central Farm  
(Carranza, 2006). (Right)



In 1994 many communities in Los Angeles were still affected by the aftermath of the 1992 riots. A central portion of undeveloped land that had been obtained by the city of Los Angeles through eminent domain, several years earlier, was provided to the public as a form of mediation and a solution to significant socio-economic and cultural disparity issues in the area (Kennedy, 2008). This land was transformed into the South Central Farm through efforts initiated by a local food bank. Garden allotments were made available to over 350 community members and families in low-income situations, based on welfare assessments (Kennedy, 2008). The massive urban farm was divided into a grid of large, fenced plots with narrow corridors and a wider central axis. The predominantly Mesoamerican community grew many culturally specific and uncommon crops as well as many medicinal plants (Kennedy, 2008). In 2004 legal issues regarding the contract through which the city obtained the property came to a head. The South Central Farmers campaigned, protested, fundraised, and took legal action in an attempt to keep their mature gardens (Kennedy, 2008). They demonstrated their deep cultural and emotional attachment to this property and its significant contribution to the livelihood of their community. The documentary *The Garden*, released in 2008, captured the quality of this massive garden as an urban sanctuary and followed the local residents as they worked tirelessly to preserve their gardens. As contention over this property grew, the court ruled in favor of the original owner, Ralph Horowitz, who promptly had the garden demolished despite a \$16 million offer to purchase the land (Kennedy, 2008). Many mature fruit trees, perennials, and structures were demolished without a new development plan in place. As of 2011 the land that was once a thriving farm remained an empty lot. A three acre site in a less central location has been made available to the community but this has not been as well received as the original project (Kennedy, 2008).



## 2.4 MEL JOHNSON SCHOOL GARDENING PROJECT

Location: Wabowden, Manitoba

Patrons: Eleanor Voitowicz, Bonnie Monias, and students

Size: 4' x 8' plots, school greenhouse

Year: 2005 – now

Figure 6. Bernell & Elanor Gardening  
(Stieffenhofer, 2009). (Left)

Figure 7. ... And This Is My Garden  
(Stieffenhofer, 2010). (Right)

Mel Johnson School is located in the northern Manitoba community of Wabowden. Wabowden is a small community whose population is primarily comprised of people of Métis and Aboriginal heritage (Growing Local Productions & Stieffenhofer, 2010). In an effort to further the science curriculum and spread her passion and knowledge of gardening, Eleanor Woitowicz spearheaded a gardening program at the school at which she taught. Each student in the gardening project helped to construct a 4ft x 8ft garden box at their home so they could care for the plants over the summer and easily harvest and use the produce (Growing Local Productions & Stieffenhofer, 2010). Due to the limited growing season in Wabowden's northern location, a school greenhouse was used to prolong the growing season and provide more overlap with the school curriculum. This program became popular within the broader community; reminding many seniors of the thriving gardens that existed to supplement the food supply that was brought in by rail, prior to the construction of regional roads (Growing Local Productions & Stieffenhofer, 2010). Partnerships developed with many community elders and tending the gardens became a family activity, making the project multi-generational (Growing Local Productions & Stieffenhofer, 2010). The Mel Johnson Garden Project began with meager intentions and soon addressed the larger issue of food availability in Northern communities, as well as healthy eating in Native American and Métis populations. In 2010 the Mel Johnson Garden Project was the focus of the documentary, "And this is my garden...", which followed the project's development, challenges, and success (2010). The documentary and its dedicated administrators eventually received international recognition for their focus on the gardening project. Once the program became popular with the students, local residents reported a noticeable increase in pride in the community environment (Growing Local Productions & Stieffenhofer, 2010). With Eleanor's weekly to biweekly garden visits, a produce display, and the preparation of food for a community feast, this school gardening project has had a holistic impact on the broader community, inspiring personal responsibility, ownership, and cultivating interest in the environment.



## 2.5 PRINZESSINNENGARTEN (PRINCESS GARDEN)


Location: Moritzplatz, Berlin, Germany

Patrons: Nomadisch Grün (Nomadic Green) and local residents

Size: 1.5 Acres

Year: 2009 – now

Figure 8. Prinzessinnengarten  
(Clausen, 2011).



Prinzessinnengarten represents new trends and innovation in community gardening, structuring the garden on temporality and mobility. This garden is located on an undeveloped, urban lot that is rented from the City of Berlin (Prinzessinnengarten, 2014). The garden was developed and is run by a non-profit organization, Nomadisch Grün, with the goal of encouraging sustainable living (Prinzessinnengarten, 2014). The entire garden is mobile with garden beds made from crates and rice sacks and structures made from recycled shipping containers. The plots are not assigned to individuals but volunteers contribute to running the garden in exchange for the pleasure and experience of gardening (Prinzessinnengarten, 2014). Being entirely independent from the ground, the garden is free from industrial contaminants that likely plague the once industrial area and are a common issue in urban garden projects. The garden beds are mobile and moved to a sheltered venue during the winter months. The garden is fully financed by the small on-site restaurant, produce sales, donations, and revenue generated by the project's entrepreneurial and experimental nature (Prinzessinnengarten, 2014). Prinzessinnengarten has become a social space in the neighborhood, offering a variety of activities and interests for the local residents including honey cultivation which is successful due to the garden's biodiversity (Prinzessinnengarten, 2014). Prinzessinnengarten is a multi-faceted business model that works with the shifting nature of a city, mitigating the issues associated with permanence and ownership found in many community gardens. The social support, education interest, gastronomic production, and civic acceptance have all contributed to this urban garden's viability.

## 2.6 CONCLUSION: GARDEN VARIETY

The case studies highlight the encompassing nature of community gardens in both the variety of form and function they represent. This is attributed to their rudimentary foundation in the social, economic, and environmental context of the local community in which they are initiated. Any community can benefit from the presence of a community garden. Determining the qualities of the garden and its role within the community require an in-depth understanding of the geographic context, the community demographics, and specific site conditions. The community context informs the size, organization, resources, and programming that are key factors in the design of a successful garden. A community garden can play many roles within a neighbourhood, serving as a retreat from the urban environment, providing food for a local family, or existing as a visual feature within a larger landscape design. As a landscape archetype and program, gardens offer compelling opportunities for design.

# SECTION THREE WELCOME TO THE NEIGHBOURHOOD

This section outlines the area selected for investigation and design intervention. This introduction to the neighbourhood context outlines the geographic area of investigation, the historical influences on the area, the demographic make up of the area, economic averages for the community, the current land use patterns in the area, and a description of current perceptions and initiatives impacting the area. This section provides a contextual survey which influences decisions about site selection, general design intentions, and the variety of landscape programming that is most appropriate and beneficial for the community.

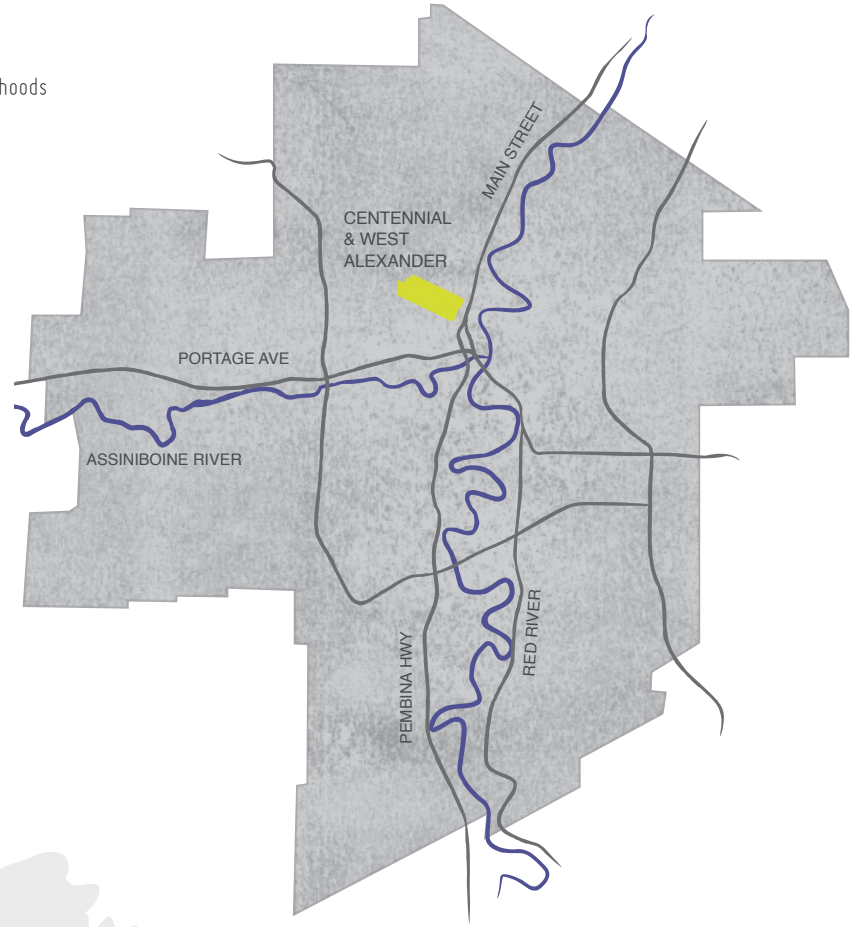


### 3.1 GEOGRAPHIC LOCATION

Winnipeg is located in the longitudinal centre of Canada and is the capital city of the Province of Manitoba. According to Statistics Canada, the population of Winnipeg at the time of the last census was 663,617 (2011). With an area of 464 sq km, the population density of Winnipeg is 1430 people per sq km (Statistics Canada, 2011). This map indicates the city's boundaries, not including census metropolitan area. The City of Winnipeg was founded where the Red and Assiniboine Rivers meet, therefore the most historic development is found in the central area of the city. The West Alexander and Centennial neighbourhoods, two historic areas in this city, are the focus of this project.

● WINNIPEG

Figure 9. City of Winnipeg showing Centennial and West Alexander Neighbourhoods



CITY OF WINNIPEG, MANITOBA, CANADA  
49.8994° N, 97.1392° W

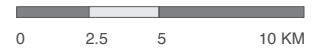


Figure 10. Neighbourhood Boundaries  
(2008). (NTS)

## NEIGHBORHOOD BOUNDARIES

Neighbourhood boundaries in the City of Winnipeg were defined in the 1970's based on the characteristic features and natural boundaries found in the area ("Description of geographies," 2014). These neighbourhood boundaries are used for city planning purposes and have only seen slight modifications since they were established ("Description of geographies," 2014). The primary traffic routes and the period of major development are two influential factors defining boundaries of the West Alexander and Centennial neighbourhoods. These two neighbourhoods are part of the thirteen neighbourhoods that create the Downtown East Neighbourhood Cluster, which is a designation commonly used in municipal departments ("Description of geographies," 2014). Recently, portions of both Centennial and West Alexander neighbourhoods that are adjacent to the Downtown neighbourhood boundary have been incorporated into the Downtown neighbourhood as an initiative of Character Area Zoning (PPDD, 2008).



Figure 11. View of Winnipeg, Northwest  
from City Hall to Arlington  
Bridge.  
(Archives of Manitoba, 1958).

## 3.2 HISTORY

In Winnipeg, many of the oldest, centrally located neighbourhoods have endured an extended period of degradation. The West Alexander and Centennial neighbourhoods form an area in Winnipeg that is currently divided by divergent social, economic, and environmental interests; and is in need of revitalization and a cohesive vision for the future. Both residential neighbourhoods developed as auxiliary outcomes of the presence of the Canadian Pacific Railway. Centennial and West Alexander have seen periods of prosperity as well as periods of significant change in both demographics and land-use (PPDD, 2008). The history of the area is evidenced in many of the re-purposed historic buildings and physical remnants of its industrial heritage. The residential faction of the combined area has seen a prolonged period of stagnation and degradation, with efforts for revitalization in Centennial being relatively consistent since 1974 (PPDD, 2008).



### 3.2.1 HISTORY OF CENTENNIAL



Figure 12. McDermot Avenue West from Main Street.  
(Archives of Manitoba, 1881).

The Centennial neighbourhood was established circa 1878 in anticipation of an increased demand for housing in the area as the Canadian Pacific Railway was being constructed (PPDD, 2008). The land was originally intended for industrial expansion but instead, a portion was subdivided into residential lots. Shortly after railway construction commenced in 1882 many of the early houses became isolated into fragmented residential sects by the fast-paced industrial and commercial development supported by the railway (PPDD, 2008). Conflicting land-use issues have plagued the Centennial neighbourhood since its establishment. As the area evolved these piecemeal residential tracts provided low rental housing, which in turn, encouraged new immigrants to settle in the area and form ethnic enclaves (PPDD, 2008).

In 1885 the Transcontinental Railway was completed and Winnipeg saw a time of prosperity as it situated itself to become the “Gateway to the West” (PPDD, 2008). The garment industry and wholesale goods were prominent in the Centennial area and employed many of the residents at this time (PPDD, 2008). As business grew so did the need to move goods locally between warehouses. The Midland Railway Company was established under the Great Northern Pacific Company to move goods from warehouses between Princess Street and McPhillips Avenue (PPDD, 2008). The Midland Freight Shed, now called the Freight House, opened in 1903 (PPDD, 2008). With the construction of the Midland Railway and the additional spur lines, the railway now bisected the remaining residential area between Ross and Pacific and degraded the environment with industrial contaminants (PPDD, 2008).

Despite some government intervention, the significant fragmentation of the neighbourhood led to a period of severe deterioration beginning in 1945. In 1974 the Neighbourhood Improvement Program set to work upgrading the public environment and introducing subsidized housing in areas that had been industrial and vacant (PPDD, 2008). Residents were also offered incentives to repair housing through low interest loans and grants. As the Neighbourhood Improvement Programs supported development, the Freight House, which held a central and iconic location in the neighbourhood, evolved into a recreation and leisure center serving the residential community (PPDD, 2008). The community united over the revitalization of the area and their common goals, challenging infrastructure changes and developing a community policing program (PPDD, 2008). Positive developments continued and in 1986 the Core Area Initiative implemented a facilities program in Centennial and West Alexander for capital improvements to health, social, and educational facilities in the area (PPDD, 2008).

### 3.2.2 HISTORY OF WEST ALEXANDER



Figure 13. Bannatyne Avenue East from Sherbrook Street (Archives of Manitoba, 1915).

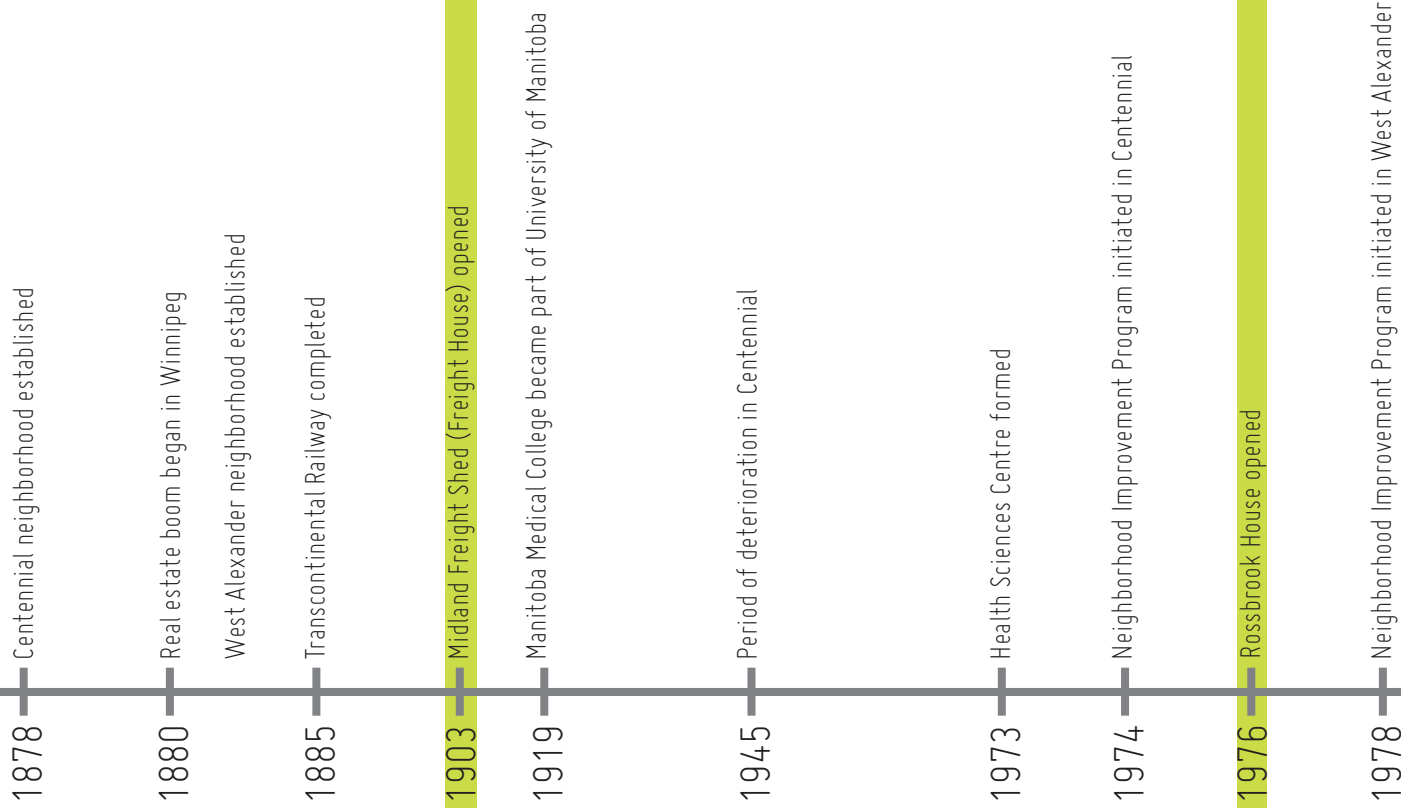
West Alexander developed shortly after Centennial and was early to establish itself as a predominantly residential neighbourhood during the real estate boom of the early 1880's (PPDD, 2008). The area along William Avenue was quick to develop due to its proximity to the commercial center along Main Street, the Canadian Pacific Railway and its associated businesses, and the prospering warehouse district (PPDD, 2008). This area of West Alexander was considered a vibrant residential area. In contrast to the surrounding area, the William Avenue tract maintained its property value and middle-class standing as the demographic shifted with an increase of new immigrants and labour sector employees (PPDD, 2008). Prior to 1914 and the beginning of World War I, the area continued to prosper and develop with newer residences replacing the oldest homes. Churches, businesses, and apartments were also constructed (PPDD, 2008). The western portion of the area was the latest to develop as West Alexander expanded. The West End Memorial Community Club was built in 1947 on land donated to the city and soon flourished as a community hub and a home to many successful sports teams (PPDD, 2008). The original building was replaced with the Burton Cummings Community Center in 1991 as

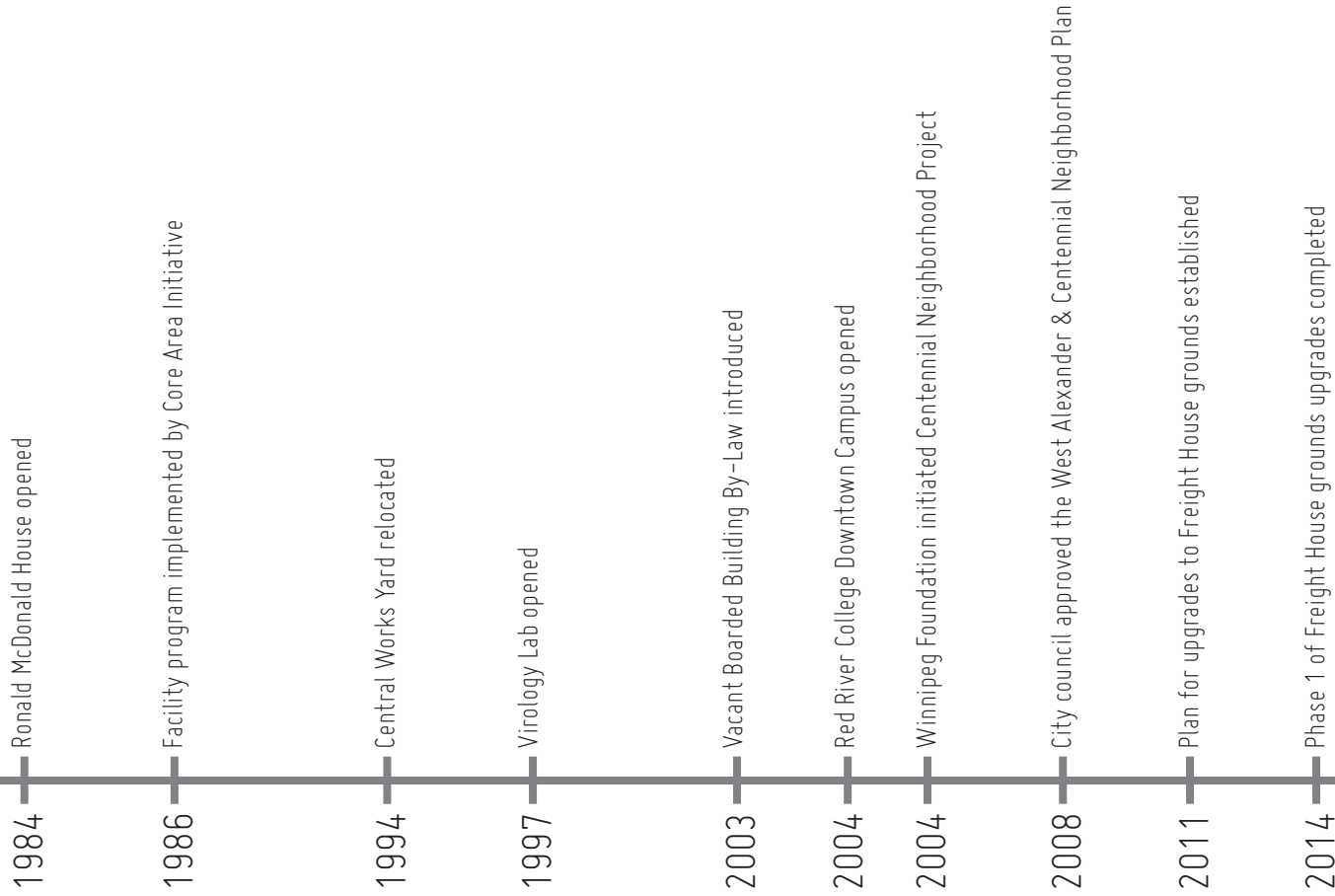
part of the Core Area Initiative (PPDD, 2008).

From its early day, West Alexander has been home to a variety of medical institutions. In 1919 the Manitoba Medical College, located next to the Winnipeg General Hospital, became a faculty within the University of Manitoba (PPDD, 2008). The Faculty was well developed and by the 1950's it had established itself as a major medical education center. West Alexander was home to several other medical institutions including the Winnipeg General Hospital, The Children's Hospital of Winnipeg, The Manitoba Rehabilitation Hospital, and the D.A. Stewart (Respiratory) Hospital (PPDD, 2008). In 1973 the provincial government amalgamated these independent institutes under a single administrative body, creating the Health Sciences Center (PPDD, 2008). Significant land assembly, construction, and redevelopment continued for the next 30 years.

The City of Winnipeg's Central Works Yards were a remnant of the industrial heritage of the greater area. The yards were a central location for asphalt production and gravel storage for roads, as well as a maintenance center for the City's heavy equipment (PPDD, 2008). The Yards were located on the east side of Arlington Street, on the north-west side of the neighbourhood. The pollution and traffic degraded the quality of environment, making the location of the Yards a contentious issue for residents (PPDD, 2008). In 1978 West Alexander, like Centennial, benefitted from the Neighbourhood Improvement Program and a Residential Rehabilitation Assistance Program. In West Alexander these programs included initiatives to demolish old railway bridges from the Midland Railway spur line, the realignment of streets, and the provision of a buffer zone along the Central Works Yards (PPDD, 2008). The public landscape was improved and social facilities were developed, including an addition to the Victoria Albert School which accommodated programs for the growing immigrant population (PPDD, 2008). As with Centennial, the improvements in the area spurred by government funding for revitalization, encouraged community engagement and the Sherbrook-McDermot Residents Association was developed (PPDD, 2008). In 1994 the Central Works Yards were relocated to an exclusively industrial area in order to accommodate the development of the Virology Lab which opened in 1997 (PPDD, 2008).

### 3.2.3 TIME LINE OF NEIGHBOURHOOD DEVELOPMENT





(PPDD, 2008)

### 3.3 DEMOGRAPHICS

The most recent statistical data published for the Centennial and West Alexander neighborhoods is derived from data gathered through the 2006 Census by Statistics Canada. Some of the data contained in the Census Data published by the City of Winnipeg dates back as far as 2001. While the exact figures may not directly represent the current neighbourhood profiles they do portray long-standing trends in the area. These trends also evidence many of the on-going circumstances affecting the population that both emergent and well-established organizations are addressing. It is important to note that the census data excludes institutional residents and temporary residents from the population. Both groups account for significant populations with distinct circumstances and requirements within this community. The Centennial and West Alexander areas generally follow similar statistical trends, which show great discrepancy when compared to the City averages.

Centennial and West Alexander constitute an area of the city with declining population. They have a much higher than average population of youth ranging from 0-15 years of age, making up just over 25% of population in each area (Statistics Canada, 2006). The populations of young adults and middle-aged people are slightly less than average in both communities and the population of elderly residents is drastically lower than the City average.

Both Centennial and West Alexander consist of extremely diverse multi-cultural populations. According to the Census data, 44.7% of the population in Centennial neighbourhood identified themselves as being Aboriginal and another 29% of the population identified themselves as being a visible minority (not including Aboriginal) (2006). The majority of these minorities are Filipino, African, and Chinese. In Centennial, 95.1% of the population holds Canadian citizenship but 27.2% were born elsewhere. It is not surprising that 50.1% of the population speaks a language other than English or French. The most common additional languages are Tagalog and Portuguese, followed by Ojibway. Census data for the West Alexander neighbourhood indicates that 18.1% of the population identifies themselves as Aboriginal and another 48.5% of the population identified themselves as being a visible minority (2006). The most common minorities found in West Alexander are Filipino, African, and South Asian. In West Alexander, 75% of the population holds Canadian citizenship and 43.5% are immigrants (Statistics Canada, 2006). Tagalog, Portuguese, and Vietnamese are the most common additional languages spoken, with 65.5% of the population being fluent in a language other than English and French (Statistics Canada, 2006).

Statistics Canada reports that education levels in both Centennial and West Alexander are lower than average for the City of Winnipeg. In Centennial, 52.9% of the population over 15 years of age have not received any form of certificate, diploma, or degree (2006). This is more than double the City average of 23.1% (2006). Out of the 47.7% of the population who have

achieved a certificate, diploma, or degree, 22.7% report high school or an equivalent as their highest level of education (2006). In West Alexander, 39% of the population over 15 years of age have not obtained a certificate, diploma, or degree and 22.3% of the population report having high school or equivalent as their highest level of education (Statistics Canada, 2006).

There is prominent contrast in marital status and household make-up between the Centennial and West Alexander area and the averages for the City of Winnipeg. Both Centennial and West Alexander have significantly more single residents (never been married) and significantly fewer legally married residents than the City average (Statistics Canada, 2006). With the large population of single residents and the large population of youth it isn't surprising that 56.1% of families in the Centennial neighborhood and 36.3% of families in the West Alexander neighbourhood consist of a single parent (Statistics Canada, 2006). Just over 5% of single parent families have a single, male parent in each neighbourhood, with the remaining families consisting of a single, female parent (Statistics Canada, 2006).

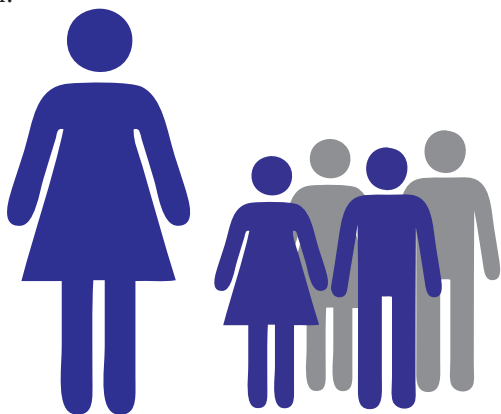
Both Centennial and West Alexander neighbourhoods consist of a predominately low-income population. According to the Census data, in 2005 the average income for an individual in Centennial was \$15,750, which was less than half of the city average of \$33,457 (2006). On average, 45.1% of income for economic families and 56.6% of income for non-economic families was provided through government transfer payments (2006). In 2005 the average income for a person residing in West Alexander was \$20,047 (2006). On average, economic families received 23.3% of their income from government transfer payments and non-economic families received 21.1% of their income from this source (Statistics Canada, 2006). Statistics Canada defines an economic family as, "...a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law, or adoption." (2006). Incidences of low income in 2005 for both neighborhoods, in all age categories, were double to quadruple the City

average. The unemployment rates for both areas were higher than the city average of 3.9%, with Centennial at 12.4% and West Alexander at 14% (Statistics Canada, 2006). More than half of employed residents, 15 years and older, in Centennial and West Alexander, are dependant upon public and active transportation (Statistics Canada, 2006).

The majority of residents in Centennial and West Alexander live in rented housing. This includes 79.1% of residents in Centennial and 62.4% of residents in West Alexander, compared to a city average of 34.9% (Statistics Canada, 2006). The lack of ownership in the area correlates with the lack of maintenance and care for private property.

## COMMUNITY PROFILE: TYPICAL FAMILY LIFESTYLE

A comparison of the most frequently occurring family structures and lifestyle factors, including transportation, income, and education, depicts the challenges facing many residents in Centennial. Similar but less extreme trends exist in West Alexander. The contrast between the family structure and lifestyle common in these neighbourhoods and lifestyle and family structure most commonly found throughout the larger city are significant. This data supports inferences about the specific needs and resources that should be considered to support this community through site specific design.



pay to the order of \_\_\_\_\_  
**\$24,000**



- SINGLE FEMALE PARENT
- TWO OR MORE CHILDREN
- VISIBLE MINORITY OR ABORIGINAL
- PUBLIC AND ACTIVE TRANSPORTATION
- RENTAL HOUSING
- MOTHER EARNS LESS THAN \$24,000 PER YEAR
- NO POST-SECONDARY EDUCATION



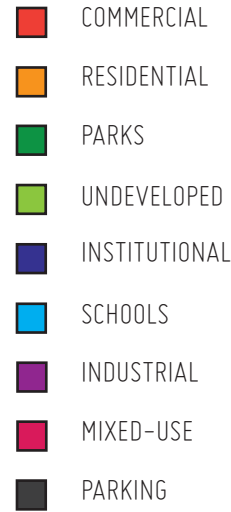
## CENTENNIAL

Figure 14. Typical Family Structure and Lifestyle Comparison.  
(Data gathered from: Statistics Canada, 2006)



- TWO PARENT FAMILY
- TWO OR MORE CHILDREN
- NOT A VISIBLE MINORITY OR ABORIGINAL
- DRIVE A VEHICLE
- OWN HOUSE
- PARENTS EARN OVER \$86,000 PER YEAR
- BOTH PARENTS HAVE POST-SECONDARY EDUCATION

CITY OF WINNIPEG AVERAGE



## 3.4 LAND USE ANALYSIS

As two of the oldest neighbourhoods in Winnipeg, West Alexander and Centennial boast a built environment rich in heritage, character, and diversity. The land use patterns in this area have shifted significantly over time, evolving constantly from the very early days when the railway propelled development. There have been countless efforts to overcome many of the challenges left from the early industrial sectors and the variety of competing and sometimes conflicting land uses present. Due to the constant evolution of the area, zoning regulations have been altered many times and have not been strictly followed or enforced (PPDD, 2008). Therefore, an examination of the current land uses in the area provides a better indication of the current environment and what issues and opportunities exist.



Figure 15. Land Use Map of Centennial and West Alexander (NTS). (2014).



# INSTITUTIONS

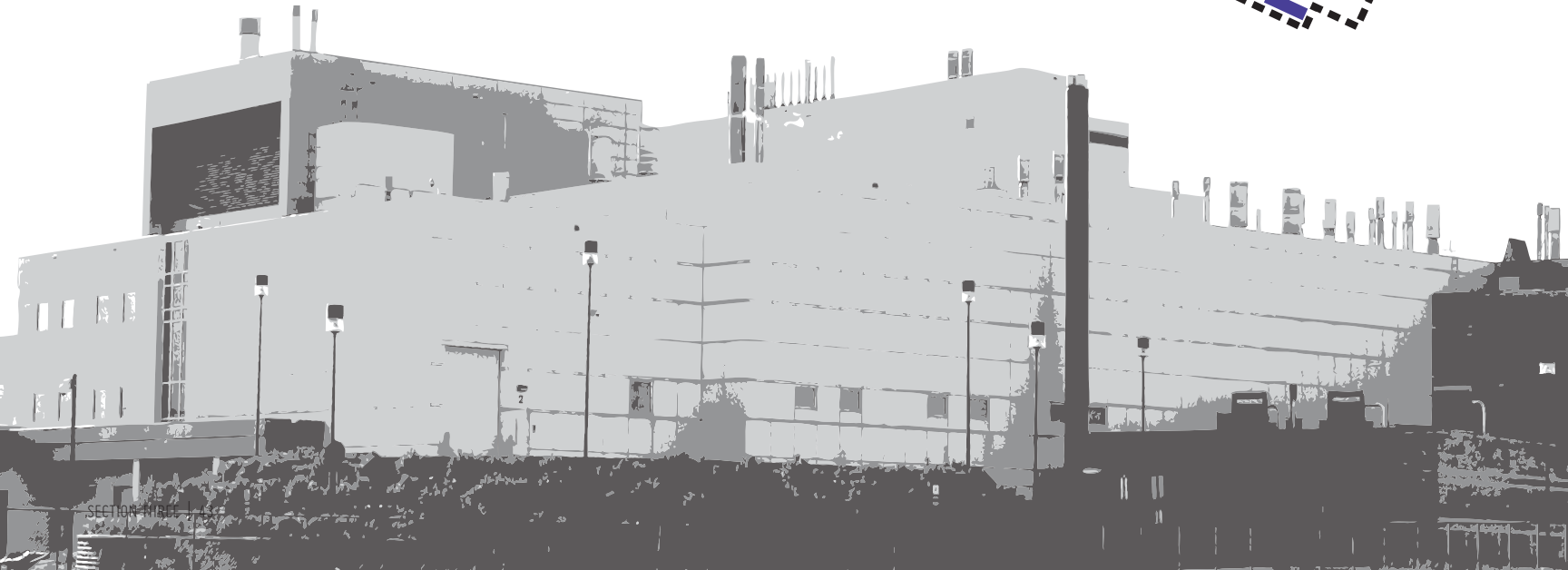
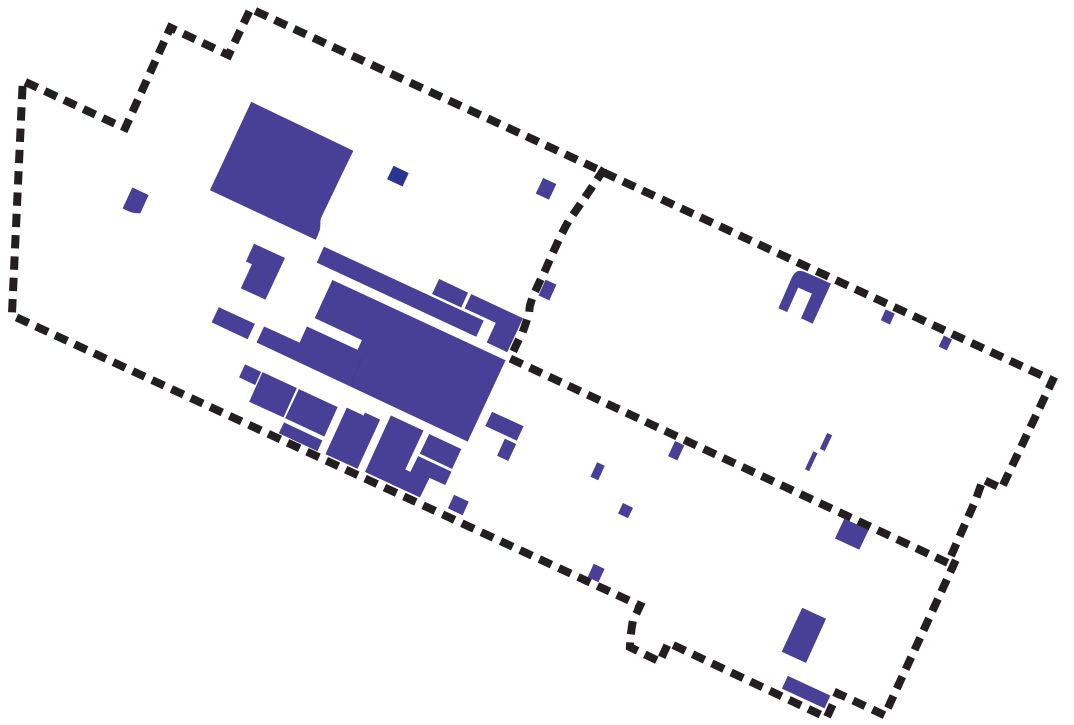



Figure 16. Institutional Land Use Map. (2014).

Figure 17. National Microbiology Laboratory. (2014).



One of the defining features in the combined area of West Alexander and Centennial is the significant presence of institutions, particularly those in the medical and medical research sectors. Institutional land use accounts for almost 25% of the area and expansion plans are continuous (PPDD, 2008). The Health Sciences Centre and the Federal Virology lab each house several secondary institutions and are the two most prominent institutional developments in the area. The majority of institutions in the area have some level of partnership or interaction with each other, including crossover between the educational and medical sectors. Many of the institutions that are located in Centennial and West Alexander are well-known establishments within their domain and are important destinations within the city and province for medical care, medical research, and educational programs. These institutions are easily accessible and connected through major transportation routes. These institutions also support connections with other related institutions and organizations serving as both physical and intellectual hubs in local, national, and international networks.

# SCHOOLS

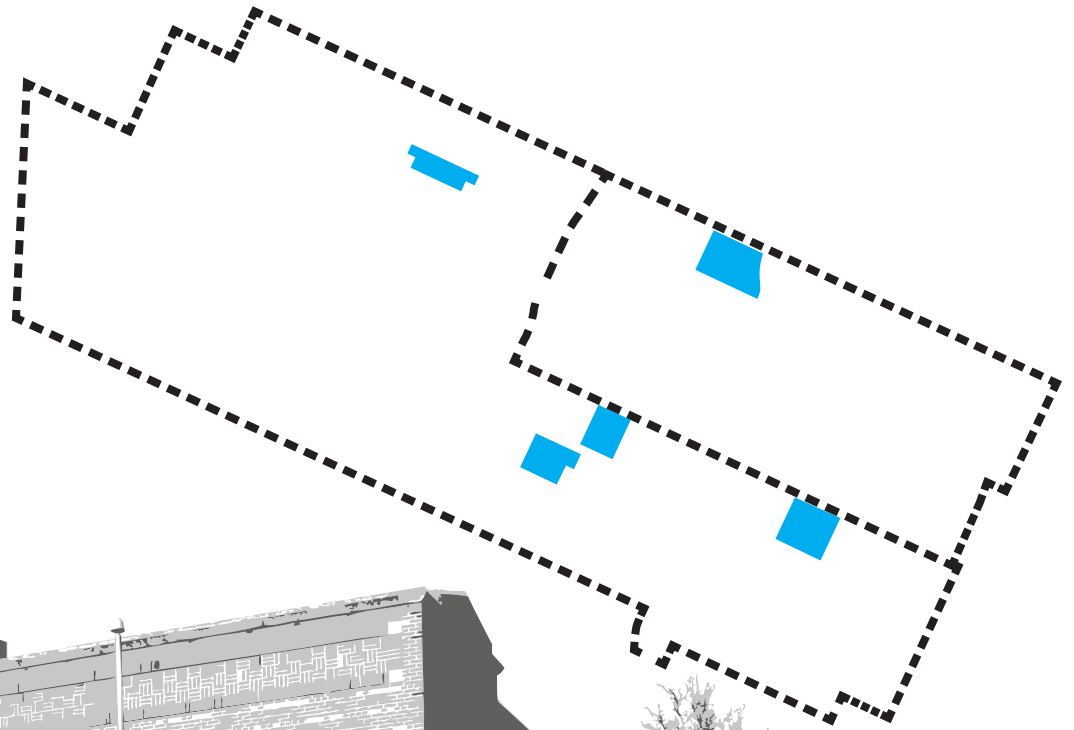


Figure 18. Map of Public Schools. (2014).

Figure 19. Victoria-Albert School. (2014).

There are five public schools in the Centennial and West Alexander area as well as three alternative school programs which run in conjunction with Rossbrook House (PPDD, 2008). There are three elementary schools, one elementary and middle school, and one junior high school. These schools provide outdoor facilities and sport fields, community programs, and many also provide daycare programs. The programs run through Rossbrook House include WiWabagooni for elementary programs, the Eagles Circle for junior high students, and Rising Sun for high school and job related training (“Rossbrook house programming,” 2014). All of these programs are affiliated with local public schools but focus on pride in indigenous culture and accommodate a variety of student needs. The elementary school grounds in the area are fenced and house play equipment. The majority of schools offer a paved surface and field area for sports. A couple of the schools in Centennial and West Alexander have a few small garden plots that appear minimally used and maintained during summer months.

# RESIDENTIAL

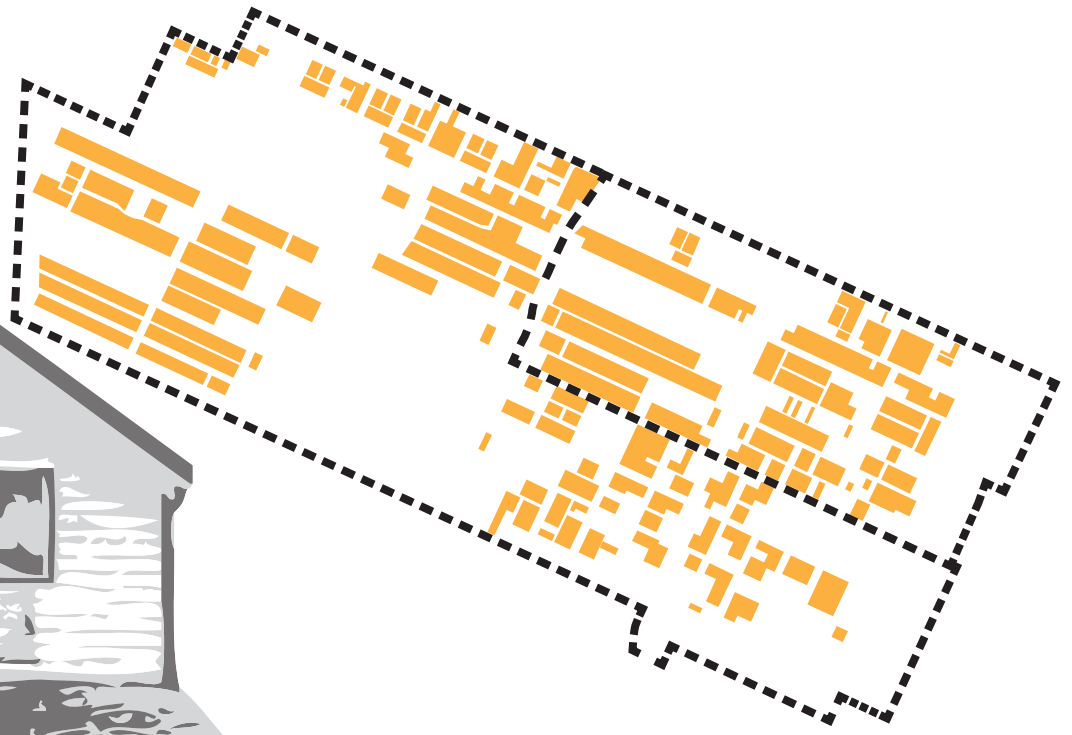


Figure 20. Residential Land Use Map. (2014).

Figure 21. Typical House in the Centennial Neighbourhood. (2014).

Approximately 38% of land use in the combined area is residential (PPDD, 2008). The residential development includes a variety of housing types and there are numerous programs and developments geared toward low-income housing options. These options include 64 licensed rooming houses which offer basic accommodations for individuals at a low cost (PPDD, 2008). When all residential types are considered, the percentage of residences that are rented is very high, at nearly 70% (Statistics Canada, 2006). This is a reflection of the socio-economic make-up of the area and is often considered an indication of the lack of stability in a neighbourhood (PPDD, 2008). The housing stock in West Alexander and Centennial is generally old, with roughly 50% constructed prior to 1946 (PPDD, 2008). Many homes are well constructed and have a great deal of character but are in need of significant repair and maintenance. Lot sizes vary slightly depending on the era in which they were developed but the majority of single family homes are on long and narrow lots ranging from 220 m<sup>2</sup> to 340 m<sup>2</sup>. While some properties have small gardens, the majority have very limited yard space which is often filled with toys or discarded household items. Since the early 1980s, a large number of residential units in the area have been demolished leaving several vacant lots. The buildings were initially deemed unsafe and therefore demolished, however, recent intentions have been to seek rehabilitation rather than demolition (PPDD, 2008). Many of these vacant lots have been obtained by the City of Winnipeg and redeveloped into parking areas and other land uses. Between 1970-1996, both Manitoba Housing and Renewal Corporation and Co-op Home Start Programs have successfully invested in developing rent-geared-to-income housing in the area (PPDD, 2008). A large number of these residences are in the Centennial neighborhood. In 2005 the Winnipeg Foundation became the most recent investor to target this type of housing in the area. Through the Foundation's Centennial Neighbourhood Project, twenty-six new rental units were developed (PPDD, 2008). The majority of residential development in the area has been designed to meet the needs of low-income members of the community, leaving few desirable options for middle to higher income home owners.

# COMMERCIAL & INDUSTRIAL



Figure 22. Commercial and Industrial Land Use Map. (2014).

Figure 23. Typical Commercial Development – Ding Ho Restaurant . (2014).

Commercial land use accounts for approximately 15% of the combined neighbourhoods (PPDD, 2008). Commercial development is concentrated along the periphery of the area, along major transportation routes, and close to major institutions (PPDD, 2008). The majority of commercial development consists of small businesses, and family-run restaurants and convenience stores, as well as businesses associated with the local medical institutions. The far west portion of West Alexander, along Arlington Street, has transitioned from industrial land uses to a commercial area with several auto service shops (PPDD, 2008). Commercial and institutional development are slowly replacing the few industrial establishments that remain in the area. Once a driving force for development in this area, local industry has migrated to designated industrial parks with larger properties and better access to transportation routes, leaving only a handful of light-industrial uses in West Alexander (PPDD, 2008). One of the main challenges in the area is the need for off-street parking for both commercial and institutional needs. The parking requirements and institutional and commercial expansion plans compete with the struggling residential sector for land. With the constant evolution of land use in the area, planning and revised zoning are critical to finding a balance of needs and complementary development.

# PARKS & GREEN SPACE

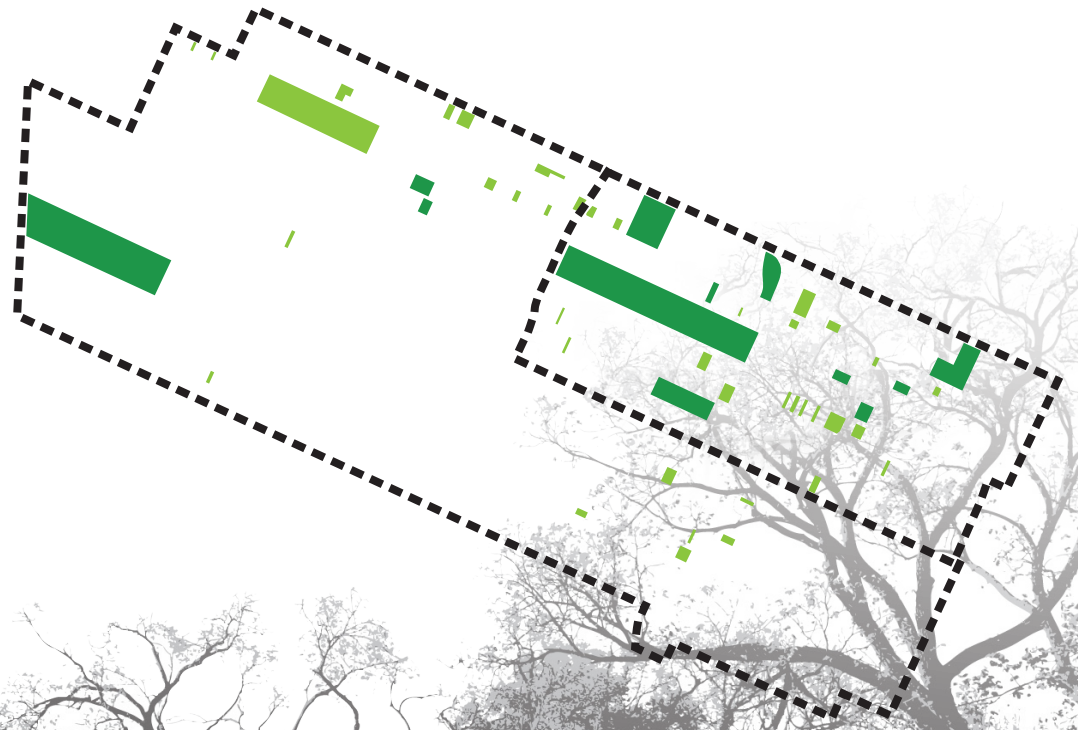


Figure 24. Park and Green Space Land Use Map. (2014).

Figure 25. Typical Park – Dufferin Park. (2014).

Centennial and West Alexander house a large area of parks and open space, and recreation facilities. These land uses account for 7.7% of the area and do not include the playgrounds and fields on school properties or informal green space (PPDD, 2008). This is higher than average for the City of Winnipeg and a rare condition to find in any historic and centrally located neighbourhood. While the parks, recreation facilities, and open spaces are numerous and fairly well dispersed throughout the neighborhoods, they lack formal connectivity and the majority are in poor condition with dated and damaged furniture and overgrown or patchy vegetation. The parks in the area consist of repetitive types. These typically consist of sports fields, small playgrounds, or small parks with peripheral trees or hedges and a seating cluster. Tree-lined avenues with sidewalks provide connections in some of the older residential portions of Centennial and the southern portion of West Alexander. Catwalks and paths across vacant properties also provide connections and shortcuts throughout the area. The two city-run recreation facilities in the area are the Burton Cummings Community Centre and the Freight House Recreation Centre, which also leases space to other community oriented programs. There are several buffer areas between different and sometimes conflicting land uses in the area. These undeveloped sites offer the opportunity for landscape development if competition for institutional expansion can be challenged.

There is an on-going initiative to redevelop playgrounds in the Centennial and West Alexander area through the replacement of old, unsafe play equipment. Throughout the duration of this project, several playgrounds have been updated and are clearly valued by the community children. The wading pools and swimming pool in the area are consistently busy throughout the summer months and the hill on the Freight House grounds is a popular winter feature. Despite the value placed on some of these outdoor spaces by the local youth, the focus on sports and play for young children limits the appeal of these environments to a broader population, creating an urban landscape that lacks variety and substance.

## 3.5 COMMUNITY CONNECTIONS

Figure 26. Map of Select Institutions, Organizations, and Agencies that Could Benefit from a Revitalized Landscape Design (NTS). (2014).

This map outlines organizations and agencies whose mandate and services would benefit from engagement with a revised landscape strategy in the area. A design intervention that supports a symbiotic relationship with the existing social, economic, environmental, and health care services would provide a physical presence for these organizations, and a new venue for programs. A centrally located public landscape could visibly display the evolution of this community. A common physical location may also encourage more collaboration with multi-generational and multicultural programs.

- |  |  |
|--|--|
| 1. PSYCHIATRIC HEALTH CENTRE, HSC              | 13. VICTORIA-ALBERT SCHOOL                     |
| 2. CANAD INNS DESTINATION CENTRE, HSC          | 14. IRCOM HOUSING                              |
| 3. PINKHAM SCHOOL                              | 15. KA NI KANICHIHK                            |
| 4. ROSSBROOK HOUSE                             | 16. VICTORIA ALBERT DAYCARE                    |
| 5. DUFFERIN SCHOOL                             | 17. LGC FAMILY PLACE                           |
| 6. CENTRAL COMMUNITY CENTRE                    | 18. RONALD MCDONALD HOUSE                      |
| 7. FREIGHT HOUSE BOYS & GIRLS CLUB             | 19. CHILDREN'S HOSPITAL, HSC                   |
| 8. FREIGHT HOUSE EARLY LEARNING & CARE         | 20. REHABILITATION & RESPIRATORY HOSPITAL, HSC |
| 9. IRCOM HOUSING                               | 21. GENERAL HOSPITAL, HSC                      |
| 10. THE SALVATION ARMY                         | 22. LENNOX BELL LODGE, HSC                     |
| 11. MANITOBA HOUSING WITH SERVICES FOR SENIORS | 23. BRODIE CENTRE, U. OF M., HSC               |
| 12. HEALTH ACTION CENTRE, HSC                  |  |





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## 3.6 LANDSCAPE NETWORK





-  SCHOOL YARD
-  UNDEVELOPED GREEN SPACE
-  PARKS
-  MATURE BOULEVARDS

Figure 27. Map of Existing Landscape Network (NTS). (2014).

The Centennial and West Alexander neighbourhoods have a significant number of parks and green spaces dispersed throughout the area. The majority of the outdoor areas are under utilized and in poor condition. The inventory of landscape features indicates the limited variety of outdoor space and activities offered in the area. The repetitive landscape types likely account for the under utilization of many areas.

1. BASEBALL DIAMONDS, TENNIS COURT, PLAYGROUND, WADING POOL, RINK
2. SOCCER FIELD, PLAYGROUND
3. PLAYGROUND, PARK
4. PLAYGROUND
5. WADING POOL, PLAYGROUND, PARK
6. BASKETBALL, GARDEN PLOTS
7. SOCCER FIELD, PLAYGROUND
8. POOL, PLAYGROUND, SOCCER FIELD, BASEBALL DIAMOND, TOBOGGANING HILL, RINK, PARK
9. PLAYGROUND
10. PLAYGROUND
11. BASKETBALL, PLAYGROUND
12. PLAYGROUND
13. SOCCER FIELD
14. PLAYGROUND, WADING POOL, SPRAY PARK
15. SOCCER FIELD
16. SOCCER FIELD, TRACK, PLAYGROUND





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## 3.6.1 EXISTING COMMUNITY GARDENS

The existing landscape network currently includes two small community gardens that are not part of school programs. While the gardens have very different qualities and character both appear to be utilized and appreciated by local residents.

The Centennial Neighbourhood Community Garden is located on Ross Ave between Ellen St. and Paulin St., near where Downtown meets Centennial. The garden is located on undeveloped land that is currently an open field with several built-up garden beds aligned along the southern portion. The garden is very informal and does not have a specific layout or any pathways. There is no access to water or resources, no tool storage, and no formal communal area to support the gardeners. The lack of frame or fence suggests that the garden plots are appreciated by the other residents and wildlife is a minimal issue. There is some graffiti on the main sign which is common in this area. There are mature street trees providing some shade over the garden plots. Annual vegetables were planted in each garden bed.

The Freight House Community Garden is located across from the Freight House building on Ross Ave. The garden was constructed on an undeveloped residential lot that borders on vacant commercial property. This land is currently being re-zoned for a multi-family residential development which will force the gardeners to re-locate. The garden is run by the Boys and Girls Club located in the Freight House and other tenants and residents are encouraged to harvest from the garden. The garden does not have a boundary or fence. This garden also lacks access to water and tool storage but likely uses the Freight House resources for these purposes. There are wood chip paths and small communal areas throughout the garden which has a playful layout with colorful wood-framed garden beds and several hand-painted signs. There are peripheral trees and some small trees that provide shade on site. The garden beds are overgrown but have a variety of annual and perennial flowers and vegetables.

Figure 28. Centennial Neighbourhood Community Garden.  
(2014, September).



Figure 29. Freight House Community Garden.  
(2014, September).



## 3.7 PERCEPTIONS & INITIATIVES

Centennial and West Alexander face many challenges that a great number of organizations and services continue to confront in an effort to establish a safe and prosperous community. The high concentration of such organizations and initiatives is not pronounced as many do not embody a significant physical presence and the majority are focused on economic and social issues. Both Centennial and West Alexander have received several designations under federal, provincial, and municipal programs that have provided funding and support to improve the built environment and implement additional social services in the community. These designations include the Neighbourhood Improvement Program, Residential Rehabilitation Assistance Program, Core Area Initiative, and Neighbourhoods Alive! (PPDD, 2008). Many non-government agencies have also recognized this area as a high priority for intervention. These non-government agencies often have more specific mandates and include organizations focused on aiding new immigrants, organizations offering programs for children and support to single parents, and organizations promoting pride and support for the indigenous community. In 2004 the Winnipeg Foundation initiated the Centennial Neighbourhood Project, committing a minimum investment of \$500,000 per year for five years in its goal to engage numerous community groups in supporting education (“Community vitality in action: Centennial,” 2014). The Centennial Neighbourhood Project relied on both government and private partnerships to create a collaboration of all possible resources to address the significant areas of need in the community.

Rossbrook House was founded in 1976 as a youth drop-in centre providing a place for youth to play, belong, and grow (“Rossbrook house about,” 2014). It has had a significant impact on the area and is widely respected within the community. Rossbrook House has grown to include three alternative education programs, support groups for young parents, and a wide variety of children’s activities (“Rossbrook house programming,” 2014). Rossbrook House is now open 24 hours a day, 365 days a year. Most recently Rossbrook House and the Winnipeg Foundation initiated

the Nourishing Potential program to encourage healthy eating and provide healthy food for local kids (“Nourishing potential,” 2014). The Freight House consists of five separate units that house community oriented services and programs. These include the Freight House Recreation Centre, Freight House Early Learning & Care, Freight House Gym , Freight House Boys & Girls Club, and Central Community Centre. These different units accommodate all age groups with sport activities and facilities, a multi-purpose hall, the Second Time Around senior’s club, children’s clubs, daycare, bingo, and many other programs.

Recently, the City of Winnipeg initiated the development of the West Alexander & Centennial Neighbourhood Plan to guide growth and redevelopment in the area. The comprehensive background research began in 2006 and shortly after the Stakeholder Committee, comprised of 13 organizations and groups invested in the community, was formed (PPDD, 2008). The goals of the neighbourhood plan are multifaceted, seeking to protect existing attributes and address existing challenges; all under the premise of establishing Winnipeg’s Health and Wellness District. The concentration of medical institutions and facilities in the area determined this designation which also encompasses the notion of a prosperous, sustainable neighbourhood (PPDD, 2008). The plan is intended to support institutional development while enhancing the quality of the residential environment, ensure a balance of complementary land uses, create a well designed and lively community, promote safety and accessibility, support the unique identity of the community, and promote affordable housing and varied housing options (PPDD, 2008). These goals address many of the challenges and perceptions expressed by the local residents.

Despite the number of on-going initiatives in the Centennial and West Alexander area, negative perceptions of this area are widely held throughout the City of Winnipeg. Many Winnipeg residents only visit this area for specific medical services or employment at one of the many institutions, while most simply pass though on a major transportation route. The area is often perceived as dangerous, partially due to the higher than average crime rates (Winnipeg Police Service, 2011) and partially due to unsavory perceptions of the core area of the city in general.

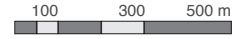
# SECTION FOUR THE LOCAL INVENTORY & GROUND ZERO

This section reviews the criteria considered in the selection of a specific site within the larger neighbourhood areas for a detailed design intervention. The location of this site and the environmental context directly surrounding the site are described in detail. A survey of the existing conditions and physical features on this site is important in determining a pragmatic design strategy. This investigation will help to identify the existing landscape features that can be incorporated or preserved in an intervention and the design opportunities that exist. Other factors included in the survey of existing conditions include general climate information and shadow studies for the site. Utilizing the existing features as a foundation to enhance the landscape design and understanding the existing conditions that will inform the suitability of landscape programs are vital to creating a pragmatic and successful design. Landscapes take decades to mature into the intended vision. The preservation of mature vegetation, land forms, and a wide variety of other features can aid in providing a design that has an immediate presence and impact.

Figure 30. Site Selection for Design Intervention. (2014).

## 4.1 SITE SELECTION

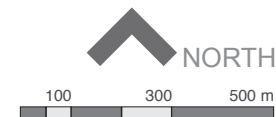
The Freight House grounds were selected as the most appropriate location for a design intervention within the West Alexander and Centennial neighbourhoods. Two locations were considered for this project; the undeveloped strip of land along the Virology Lab and the Freight House grounds. The strip of land or buffer zone along the Virology Lab was a consideration, as a landscape intervention could aid in the transition between the dominating institutional development and the small, rundown, single family homes across the street. However, the Freight House grounds were selected as they are more centrally located within the combined communities and the location is surrounded by greater residential density. With the community services based in the Freight House and Rossbrook House and their connection through this site, it is an ideal location to develop a hub within the existing landscape network that supports existing community services and organizations and contributes to a more cohesive environment.



## 4.2 ACCESSIBILITY : WALKING RADII

The West Alexander and Centennial communities have large populations that rely on both public and pedestrian means of transportation. These neighbourhoods are generally pedestrian friendly, with many sidewalks and tree-lined boulevards. The Freight House site is centrally located in the area and the programs and services based in the Freight House building attract many community members and children who primarily arrive on foot. While parking is available, it is seldom fully used. This graphic displays radii indicating zones of the approximate number of minutes it would take a person to walk to the Freight House site assuming an average speed of roughly 4.5 km/h (International Transportation Forum, 2012). Many factors can affect walking speed such as weather conditions, the type of terrain, and a person's physical ability. A large residential and institutional collective can easily access the Freight House location within a fifteen minute stroll.

Figure 31. Walking Travel Time: Based on Average Walking Speed of 4.5 km/h. (2014).



30 - 15 minutes



8 - 15 minutes

4 - 8 minutes

railway barrier

## 4.3 STREET CHARACTER

The Freight House site is framed by Ross Avenue to the south, Pacific Avenue to the north, Isabel Street to the east and Sherbrook Street to the west. Both Pacific Avenue and Ross Avenue are predominantly residential streets with single-family housing, as well as several small multi-family housing developments and houses that have been renovated to accommodate multiple tenants. Commercial and institutional developments are concentrated along Sherbrook Street and Isabel Street, as they are high traffic routes in the area. The commercial development consists of small to medium size businesses in buildings that are oriented to residential scale. The Health Sciences Centre can be seen from the west portion of the Freight House site as its scale dominates the neighbourhood. The houses, businesses, and institutions framing the Freight House grounds face the open park area. This makes the Freight House site a focal point within the community and keeps eyes on the urban landscape, increasing safety. The significant number of residential dwellings surrounding this site warrant design consideration for the definition between public and private property. The street elevations establish the importance of the boulevards as landscape features and key areas that mediate the public and private properties. Maintaining the street character while addressing the need for distinction and spatial definition are important considerations for a design intervention.

Figure 32. Street Character: Isabel Street. (2014).



ISABEL & PACIFIC

MULTI-FAMILY HOUSING

ISABEL & ROSS

Figure 33. Street Character: Sherbrook Street. (2014).



SHERBROOK & ROSS

COMMERCIAL DEVELOPMENT

SHERBROOK & PACIFIC

# STREET CHARACTER

Figure 34. Street Character: Pacific Avenue (West) (2014).



PACIFIC & SHERBROOK

COMMERCIAL DEVELOPMENT AND SINGLE FAMILY RESIDENTIAL

Figure 35. Street Character: Pacific Avenue (East) (2014).



SINGLE FAMILY AND MULTI-FAMILY RESIDENTIAL



SINGLE FAMILY AND MULTI-FAMILY RESIDENTIAL



SINGLE FAMILY RESIDENTIAL AND COMMERCIAL DEVELOPMENT

PACIFIC & ISABEL

# STREET CHARACTER

Figure 36. Street Character: Ross Avenue (East) (2014).



VACANT BUILDING AND LOT WITH TEMPORARY GARDEN

ROSS & ISABEL

Figure 37. Street Character: Ross Avenue (West) (2014).



SINGLE FAMILY AND MULTI-FAMILY RESIDENTIAL



SINGLE AND MULTI-FAMILY RESIDENTIAL



SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND ROSSBROOK HOUSE

ROSS & SHERBROOK

- MAXIMUM HOURLY WIND SPEED AND DIRECTION - km/h
- AVERAGE WIND SPEED (SOUTHERN WIND DOMINANT) - km/h
- AVERAGE PRECIPITATION - mm
- AVERAGE TEMPERATURE - °C

## 4.4 CLIMATE & ENVIRONMENT

Winnipeg, Manitoba experiences a continental climate with four distinct seasons and an extreme temperature range (“Natural history perspective of Winnipeg,” 2012). It lies in the north eastern portion of the Prairies Ecozone, receiving above average precipitation for this ecozone (“Natural history perspective,” 2012). The surrounding area consists of Boreal Plains and Boreal Forest Ecozones. Winnipeg is classified as plant hardiness zone 3, with zone 4 plants surviving well in urban microclimates. The average winter temperature is -10 °C and the average summer temperature is 15 °C (“Natural history perspective,” 2012). The average precipitation in Winnipeg is 514 mm, with slow surface drainage due to the flat terrain and high concentration of clay in the soil (“Natural history perspective,” 2012). The soil profile in the area is Fort Garry Clay, consisting of clay over light grey to yellow sandy clay calcareous subsoil (Canada Department of Agriculture, 1953). In urban settings, landscapes require access to water because the majority of precipitation is inaccessible to vegetation due to storm water management and snow removal during winter months.

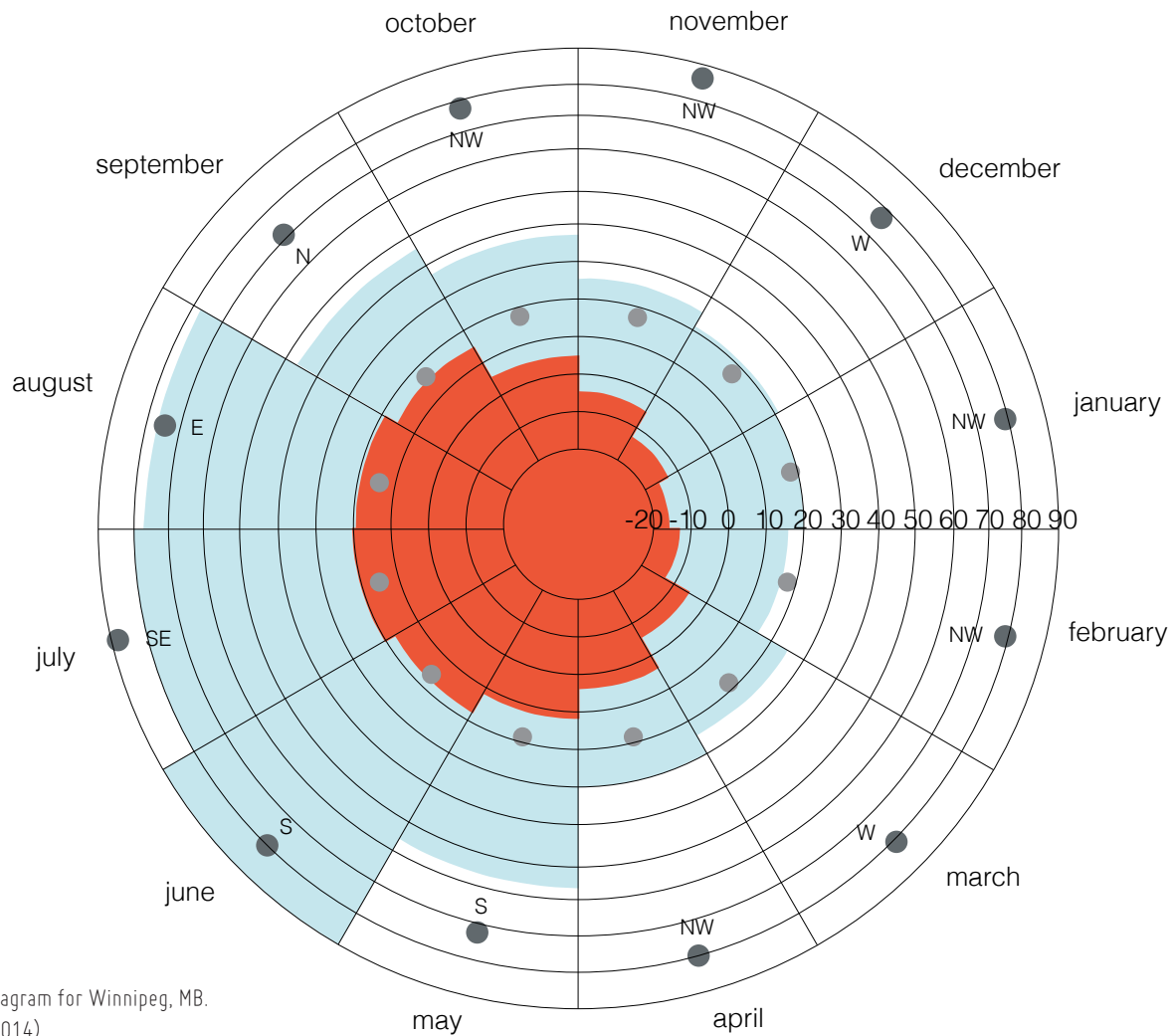
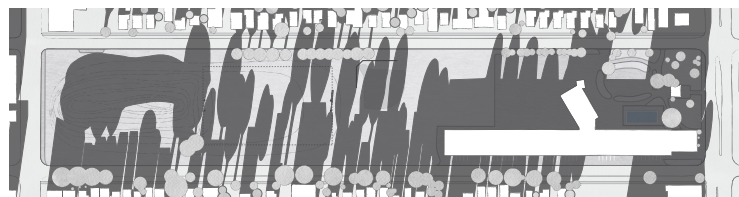


Figure 38. Climatic Data Summary Diagram for Winnipeg, MB.  
(Government of Canada, 2014)

# SHADOW STUDIES

Shadow studies provide information on the duration of direct sunlight reaching a specific locale throughout different seasons and times of day. The altitude of the sun is determined according to the geographic location being studied, a particular date, and specific time of day. The length of shadows cast by surrounding development and vegetation is determined by the height of each object and the angle at which the sun is casting light on it. The amount of sunlight reaching a locale effects what vegetation can thrive in the area and is a significant factor in the creation of microclimates. Microclimates provide mitigated conditions that can diminish or accentuate the larger climatic conditions. Winnipeg experiences extreme temperature variation so the creation and manipulation of microclimates is an important consideration in landscape architecture. These shadow studies focus on the primary growing season in Winnipeg. Gardens are generally planted at the end of May to early June and the latest crops are harvested in mid to late September. December is also included in the shadow studies to illustrate the winter conditions, when the days are the shortest.

Figure 39. Shadow Study (NTS): December 10:00 a.m.



December 4:00 p.m.

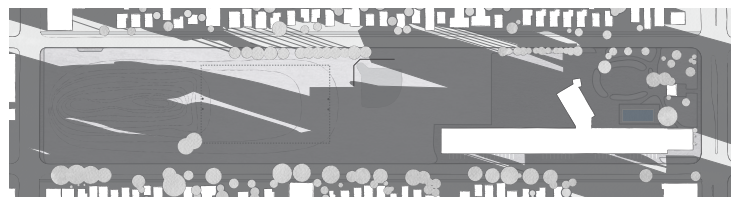
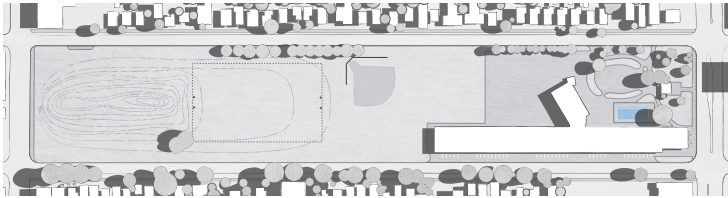


Figure 40. Shadow Study (NTS): June 21 10:00 a.m.



June 21 4:00 p.m.

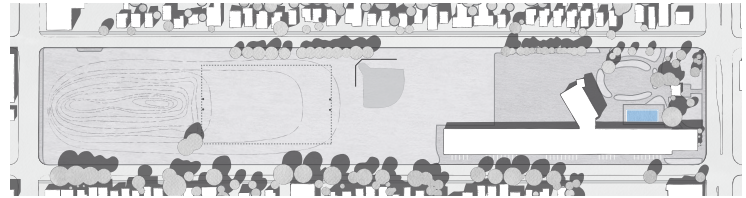
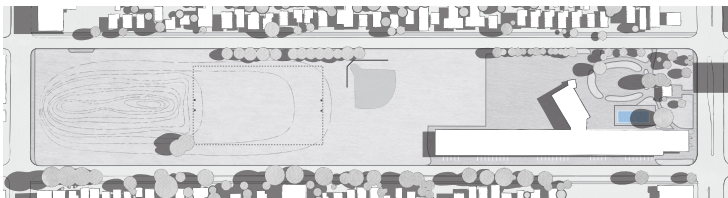


Figure 41. Shadow Study (NTS): July 21 10:00 a.m.



July 21 4:00 p.m.

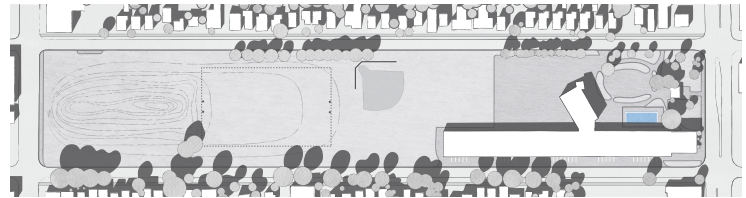
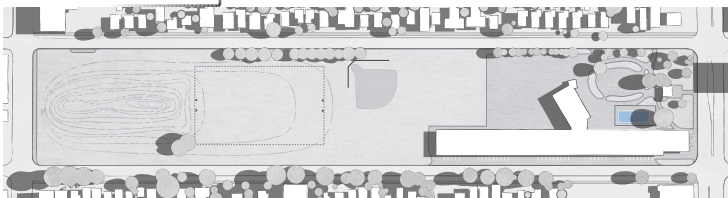
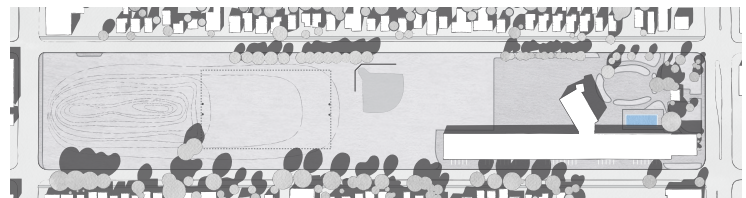


Figure 42. Shadow Study (NTS): August 21 10:00 a.m.



August 21 4:00 p.m.



## 4.5 SITE SURVEY: THE EXISTING FREIGHT HOUSE GROUNDS

The site survey consists of several maps identifying specific features and their relative locations on the Freight House grounds.

The Existing Landscape Development depicts the overall site structure, the specific features, zones, and access points on the Freight House grounds. The notable features include the soil cores tested from the hill. The presence of elevated lead levels in a single core pinpoints an area of concern on the site.

The inventory of the Existing Vegetation reviews the significant plants on the site, showing their location, height, diameter, and general condition. The majority of the vegetation consists of mature trees that are in reasonably good health. The trees that are in very poor condition and not likely to survive the winter are noted as they are not assets to be considered in a future design.

The terrain of the site is described through the Existing Topography, Drainage, and Ground Cover. The hill, providing a significant land form, was surveyed to determine its existing form. The drainage and ground cover determine the manner in which water is directed, stored, or discharged on and around the site. It is important to work with the existing topography in the creation of a pragmatic and economical landscape design.

The Existing Site Lighting on the Freight House grounds describes an important feature as the quality of light often influences the perception of safety in an urban landscape. Safety is a primary concern of local residents and a primary design consideration.

Distinguishing these existing landscape components aids in determining their contribution to the existing spatial quality and programmatic function. The site survey contributes to the value-based analysis of specific features and informs the design intentions.

# EXISTING LANDSCAPE DEVELOPMENT

Figure 43. Inventory of Existing Landscape Elements and Conditions



Soil Core Samples:

● - Permissible Levels Of Industrial Contamination

● - Elevated Lead Level

(Environmental Site Assessment, 2010)



PACIFIC AVE

BASEBALL DIAMOND

FIELD

TEMPORARY  
ICE RINK

PAVED AREA

PLAYGROUND

PARK

POOL

FREIGHT HOUSE

PARKING

ROSS AVE

ISABEL ST

# EXISTING VEGETATION

Figure 44. Inventory of Significant Vegetation

Height - (H) Healthy Tree, (H) Tree In Poor Condition  
 Diameter - (D) Healthy Tree, (D) Tree In Poor Condition



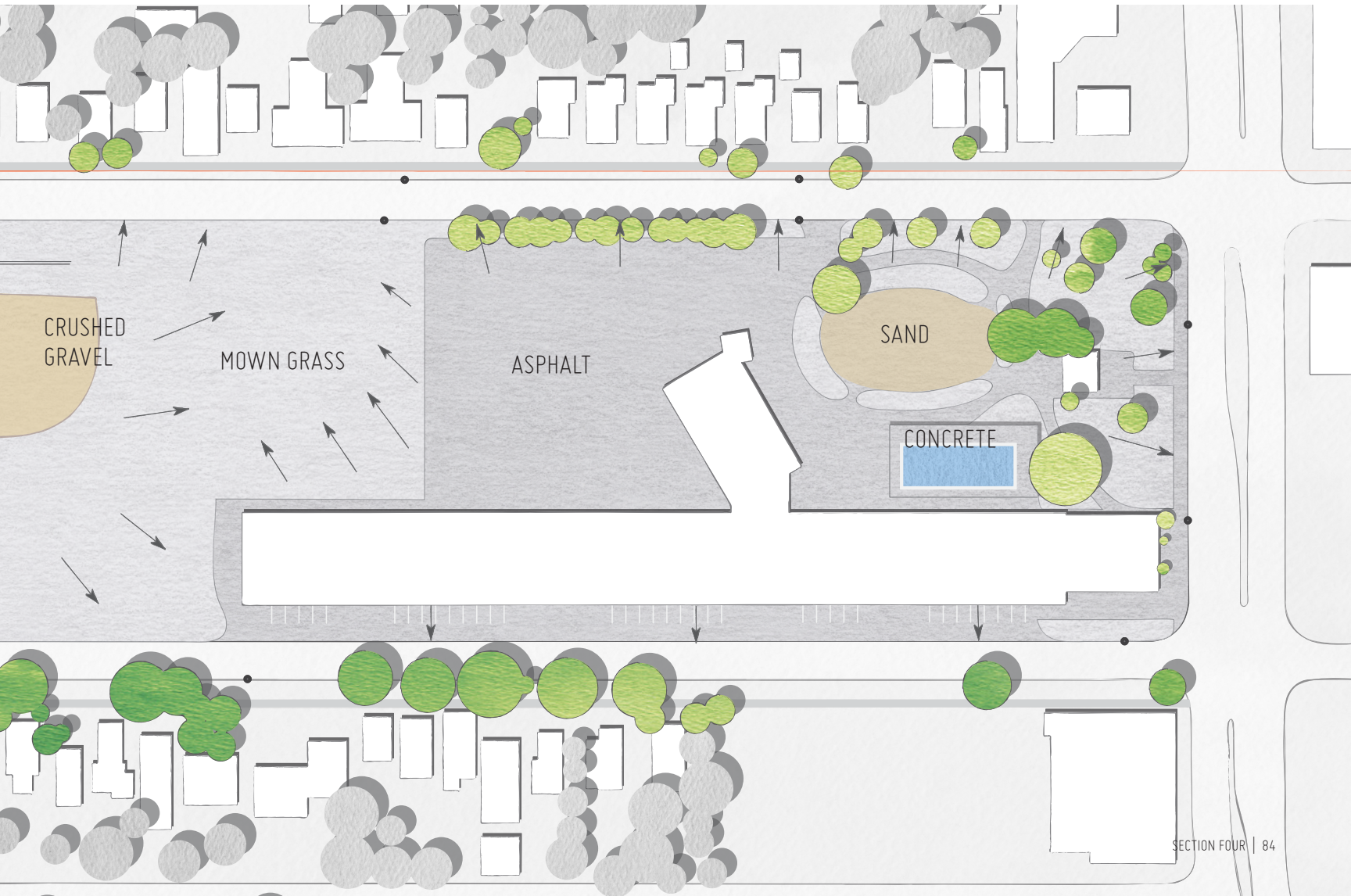


# EXISTING TOPOGRAPHY, DRAINAGE & GROUND COVER



Figure 45. Survey of Existing Topographic Features, Drainage Patterns, & Ground Cover Materials

● Existing Catch Basins



# EXISTING SITE LIGHTING

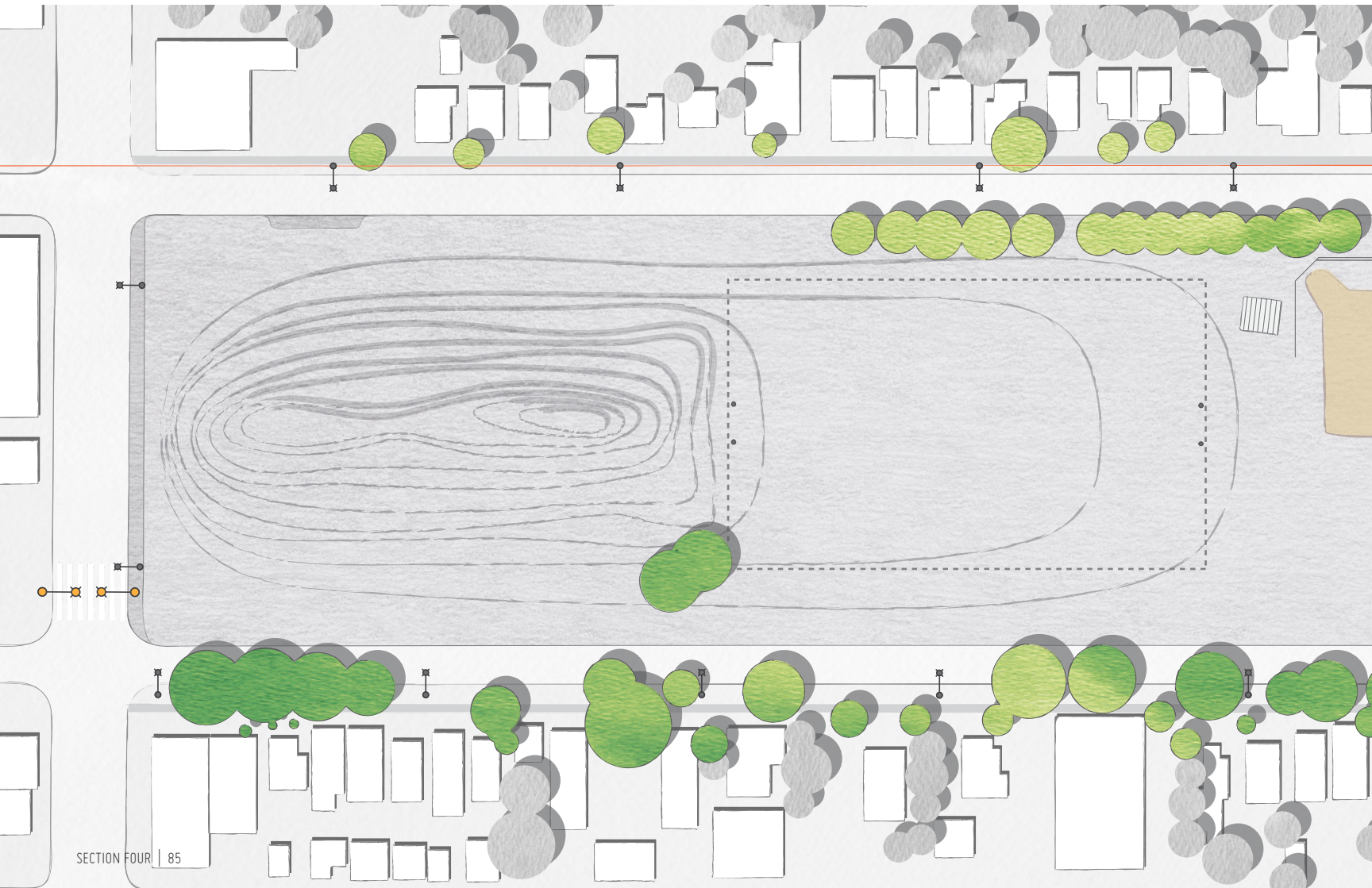


Figure 46. Inventory of Lighting Fixtures

Street Light

Crosswalk Signal

0 50 m

NORTH



## 4.6 THE FREIGHT HOUSE BUILDING

The Freight House originally opened in 1903 as The Midland Railway Freight Shed (PPDD, 2008). It was used to store and move goods as they were transported to and from the surrounding warehouse district. The Freight House is currently owned by The City of Winnipeg and houses several organizations and services with amenities that serve the local community and contribute significantly to the cultural and social structure of the area. The Freight House is the primary architectural consideration influencing the design for the surrounding property.



Figure 47. Freight House Elevation:  
Isabel Street

Figure 48. Freight House Main Floor Plan

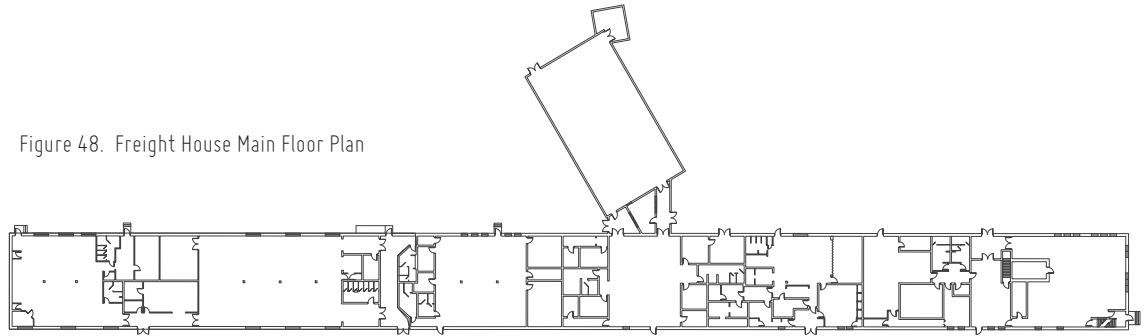


Figure 49. Freight House Occupants



Figure 50. Freight House Elevation: Ross Avenue – Main Entrances



# SECTION FIVE COMPILATION & COMPOSITION

This section begins with a site analysis that establishes both spatially pragmatic and value-based considerations for the design concept and spatial structure of the site. The site analysis compiles select factors from the neighbourhood context investigation, the site inventory, and personal observations in a spatial diagram. Design considerations and factors are elaborated and strategies and decisions are explored through spatial concepts. Clear intentions for the final design solution are outlined.

# 5.1 SITE ANALYSIS

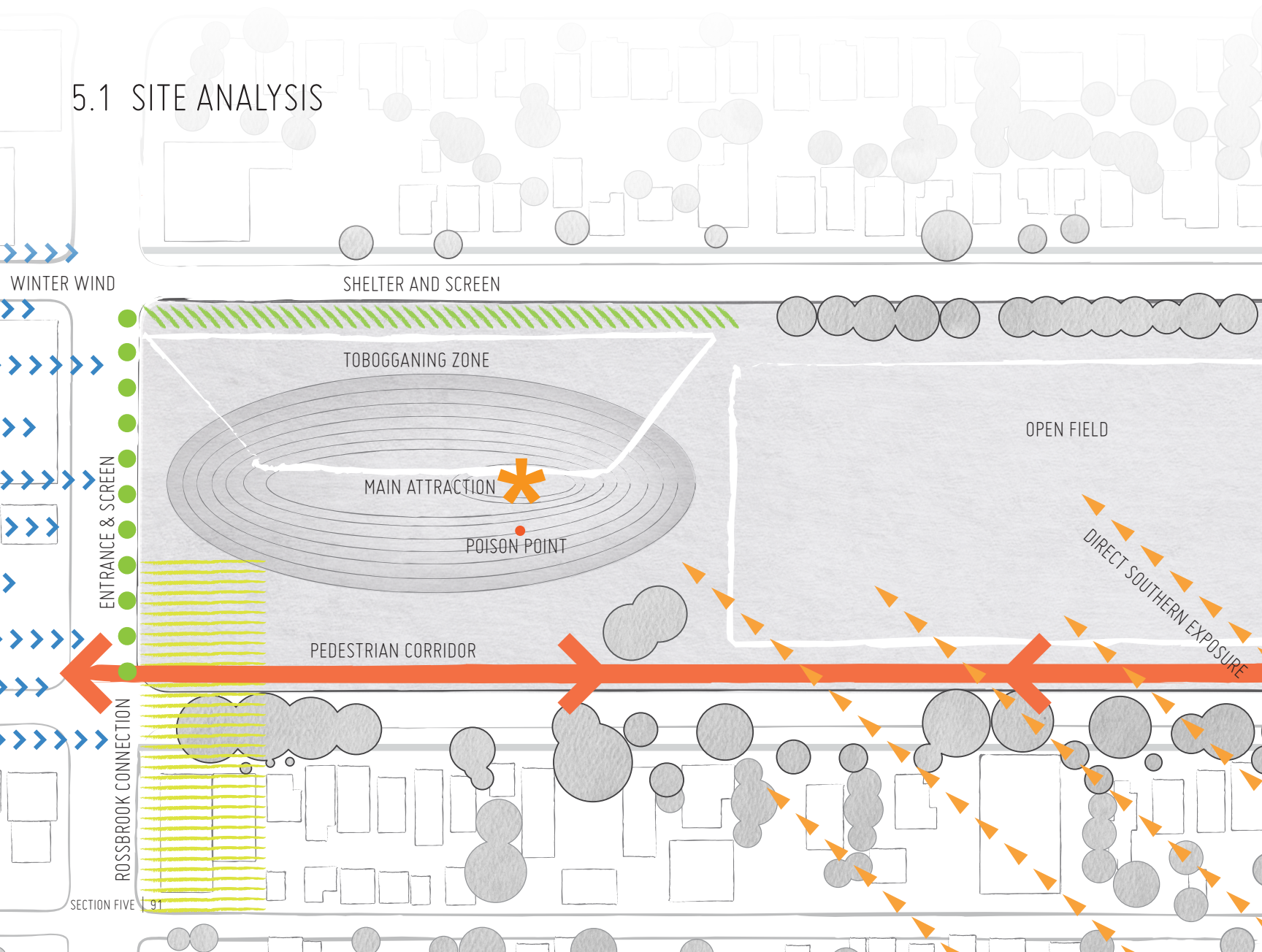
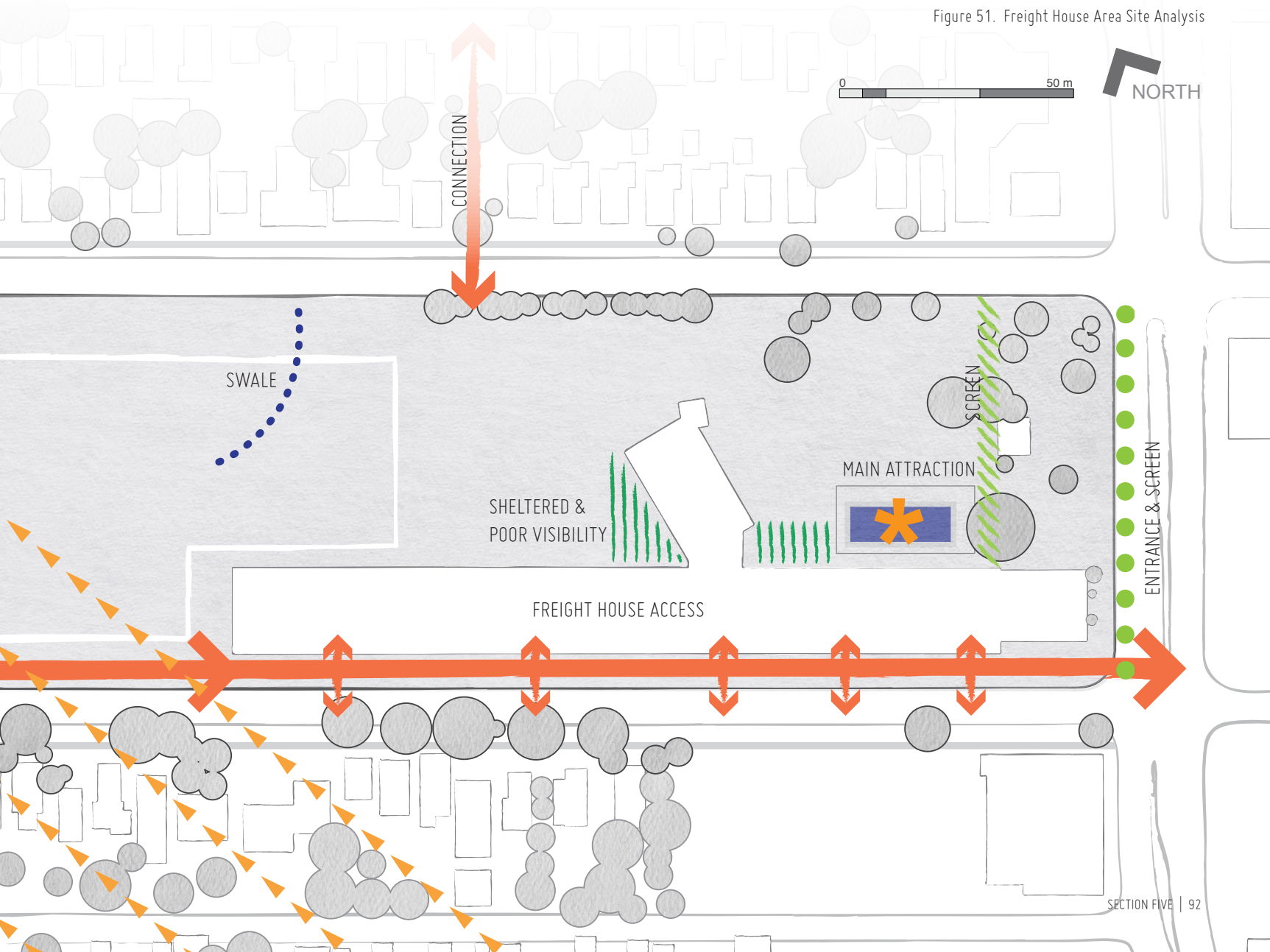


Figure 51. Freight House Area Site Analysis



# SITE ANALYSIS

The Site Analysis begins with a summary and interpretation of the physical data gathered in the site inventory, as well as an analysis of the programmatic function of the existing landscape features. This initial review leads to a more subjective design analysis that highlights opportunities to alter or enhance the function of the urban landscape through the alteration and addition of functional spatial components. The existing physical and environmental features aid in determining appropriate landscape programs for a site specific design. They are also primary factors in determining the pragmatic location for additional programmatic elements. This analysis informs initial spatial concepts for the design, as well as the overall function of the site within its surrounding context.

## ACCESS & TRAFFIC:

The Freight House grounds experience high volumes of pedestrian traffic, particularly along the periphery of the property. There are two main pedestrian connections that need to be addressed through landscape design. The first is the connection between Rossbrook House and the Freight House building and grounds, along Ross Avenue. There are a large number of children participating in programs at both locations and there is rarely supervision as they travel on foot or bikes throughout the area. There is a sidewalk along the residential side of Ross Avenue, however it is under-used and the street is treated as an extension of the park for both children and adults. The second prominent connection exists between the Freight House grounds and Dufferin School, with a passage through the residential lots along Pacific Avenue. This is a popular shortcut that keeps children away from the busy traffic routes to the east and west as they commute to and from school or to after school programs . These pedestrian connections should be acknowledged and enhanced through the design intervention. As significant destinations around the Centennial and West Alexander neighbourhoods, both Rossbrook House and the Freight House need to be better integrated into the urban context with more pronounced entrances, gathering spaces, and transitional spaces connecting the architectural elements and the landscape. The current use of space in many areas of the existing site indicate programmatic needs that are not currently met in the urban landscape. For example, the street area and southwest corner of the Freight House grounds in front of Rossbrook House are currently treated as an extension of the existing plaza area in front of the building. The parking area and street in front of the Freight House entrances along Ross Avenue are currently utilized as gathering space before and after community programs. This area is treated like a porch or an extension of the building. The site analysis identifies the need for pedestrian traffic routes and buildings to be integrated in the urban landscape design.

#### SCREENING & SHELTER:

The Freight House property is defined by a chain link fence that surrounds the majority of the property and several segmented rows of elms that line the north side of the site. The fence provides a physical barrier with little visual quality, offering little character and definition. The open and accessible nature of this site is important along the residential streets, however, screening the property along Sherbrook Street and Isabel Street would provide privacy and retreat from the busy traffic routes. The addition of screening would also provide a threshold, defining the urban landscape in the neighbourhood. An additional screen on the east side of the pool would ensure the pool area is more private, comfortable, and secure. Additional elms along the north side of the Freight House property would provide a cohesive frame, and preserve the established trees, as well as providing shelter from the northwestern winds in winter. The site analysis identifies the lack of privacy and shelter in the existing site conditions.

#### VISIBILITY & OPEN SPACE:

The open nature of the Freight House landscape allows for clear views of the majority of the property from any position in or around the site. The visual accessibility of this site is often associated with a perception of safety. The site currently lacks the complexity and intrigue provided by spatial definition and character. These qualities are required to maintain interest in an environment that residents experience frequently. Visibility, lighting, and frequent use are significant considerations in the design of a safe urban landscape and can contribute to the quality and character of the landscape. Achieving a balance of open space and sheltered space is a priority for an intervention on the Freight House grounds. Open space is required to maintain the popular tobogganing area in winter. The large open field holds potential for further intervention as it is located at the heart of the site and receives the most direct sunlight. Open space is also required for groups and gatherings near the Freight House as it is a busy venue for many

community events. This could be incorporated with a larger entrance area or could be a separate space for outdoor events. The site inventory and analysis highlight the need for spatial definition and variety on this site.

#### MAIN ATTRACTIONS:

The two primary attractions identified in the site analysis are the swimming pool and the hill. These two attractions are active environments that are particularly popular with the local children. Both the pool and the hill contribute to this site's identity within the neighbourhood context. The presence of both of these features are an asset to the community however, the quality and character of the environment surrounding these elements and their contribution to the larger landscape can be improved through a revised landscape design. The soccer field and baseball diamond that are currently located in the open field area are valuable landscape assets but are not consistently utilized, likely due to the proximity of other sports fields within the area. These sports fields have not been classified as main attractions, to be maintained in the landscape intervention on the Freight House property, as the greater landscape network has the capacity to accommodate the demand for the associated landscape programs.

## 5.2 DESIGN CONSIDERATIONS: CURRENT ATTRACTIONS

The Freight House site is centrally located in Centennial and West Alexander, an ideal location for an urban landscape. While the site is currently under-utilized and in poor condition it has several assets that are valued by the local residents and offer potential as a foundation for a revitalized landscape design. The presence of the Freight House, the organizations it houses, and the proximity of Rossbrook House, are very influential factors in the current use of this site. Other prominent physical features on the Freight House site include the hill, the pool, and boulevards along the north and south of the site.

The hill on the Freight House grounds is both a landmark in the area and a popular winter attraction. The elevation of 5.5 meters (18 feet), at the highest point, is rare to find in Winnipeg's prairie landscape. It provides an exciting view of the site and surrounding area, and is a popular tobogganing hill in winter. The value of this feature to the local children is clear and therefore its preservation is a consideration in the development of the site design.

The pool is the most popular outdoor attraction at the Freight House. Local children flock to the pool throughout the summer months. The pool is owned and operated by the City of Winnipeg and run through the Central Community Centre. It is a standard size for swimming laps, and offers a shallow end, deep end, and a water slide. The area around the pool is raised concrete and enclosed by chain link fence. Family participation may be inhibited by the small

Figure 52. Entrance to the Central Community Centre Pool. (2014).



area surrounding the pool and the lack of seating. This likely contributes to the relative absence of adult supervision. The popularity of the pool, and its current condition and lack of character warrant primary design consideration. While its location on the Freight House grounds is not ideal, this design is intended to offer a pragmatic design solution that supports the existing infrastructure.

A segmented row of elms line Pacific Avenue. This mirrors the boulevard trees found throughout the Centennial and West Alexander neighbourhoods. The mature elms along Ross Avenue provide a canopy over the sidewalk and street and support the neighbourhood character. The overhead power lines along the north side of Pacific Avenue prevent the planting of large boulevard trees. Preserving the trees along Pacific Avenue, on the north side of the Freight House grounds is important in maintaining the neighbourhood character and the pedestrian-oriented connections throughout the existing landscape network.

## 5.3 DESIGN CONSIDERATIONS: SOIL CONTAMINATION



The hill is a major feature on the existing Freight House grounds, however, this area also embodies a design challenge. In 2010, elevated levels of lead were found in one of the six soil cores sampled from the hill. A single soil core showed unacceptable levels of lead at 386 ppm (Environmental site assessment, 2010). The Canadian Council of Ministers of the Environment permit 140 ppm for parkland designations (Environmental site assessment, 2010). However, in the United States, lead levels under 400 ppm warrant caution but do not require remediation efforts (Darwish, 2013). Soil samples were limited to the hill on the Freight House grounds but due to the industrial heritage of the site some contamination is likely present in additional areas. Lead contamination is an issue common to many post-industrial landscapes. There are three easily administered methods of remediation that have proven successful in dealing with this potential health issue.

The first remediation method is to immobilize the lead in the soil so it cannot be taken up by plants. This can be accomplished by raising the alkalinity of the soil with additives (Darwish,

2013). Additives can include phosphorous rich matter such as chicken manure or bone meal, or if arsenic is also a concern, iron rich material can be added to bind both contaminants (Darwish, 2013). In this method, the added phosphorous binds to the lead, forming pyromorphite crystals, which are a form of lead that is non-toxic and not biologically available to plants (Darwish, 2013).

The second remediation option is to extract the lead from the soil using phytoremediation. This method facilitates the uptake of lead in plants. The acidity of the soil can be increased through the addition of acidic compost, allowing the lead to be more easily absorbed (Darwish, 2013). Plant species that absorb and store large amounts of lead can then be planted, harvested and carefully disposed of for several growing seasons until the contamination is reduced to acceptable levels (Darwish, 2013). Sunflowers, geraniums, and brown mustard are common lead accumulating plants that would be well suited to the local climate (Darwish, 2013).

The third method in dealing with lead contaminated soil, is to ensure the soil is not physically disturbed, is inaccessible, or is removed from the public site. If contamination levels are extremely high, bioremediation methods may not be possible within an appropriate time frame and a more invasive tactic may be required (Darwish, 2013). Soil may be capped with a non-porous material or removed all together. As long as high levels of lead are not present within the upper layers of soil where vegetation is most active and is not in direct contact with organisms in the local food chain, the health risks associated with lead contamination remain minimal (Darwish, 2013).

Due to the relatively low contamination level and its isolated location on the hill, it has been determined that dealing with the lead contaminated soil in place, and preserving the hill as a landscape feature is a priority for the design intervention.

## 5.4 DESIGN CONSIDERATIONS: LANDSCAPE PROGRAMS

Although there are a significant number of parks and green spaces that are well distributed within West Alexander and Centennial, there is little variety within the existent landscape programs. The numerous sports fields - primarily soccer fields, run-down playgrounds, and small parks offer little to entice adults and elderly residents into the existing urban landscape. The vast majority of outdoor spaces are oriented toward young children. The repetitive landscape types also likely contribute to the poor maintenance and under-utilization of the existing parks and green spaces as they have become mundane and commonplace. A large central landscape would provide hierarchy to the existing landscape network and include environments and programs that are more inclusive for different ages and outdoor interests.

On the west side of the site, a formal connection to Rossbrook House should be developed. This area of the Freight House grounds is currently used as an extension of the small plaza area in front of Rossbrook House, where youth meet and congregate. It is also an active area with a lot of pedestrian traffic. This corner is a point of confluence with pedestrian traffic along Sherbrook, the crosswalk situated at the corner of Sherbrook and Ross, and pedestrian traffic along Ross Ave.

Preserving the hill is a priority for a design intervention as it is a landmark in the area and a feature appreciated by the community. Maintaining a clear area for tobogganing on at least one side of the hill is important. A buffer or barrier along the street is also important, providing clear definition between the park and toboggan area, and the street.

There are several options for addressing the point of contamination on the hill. Acknowledging this point and creating a built feature will contain the contaminated soil and reference the source of contamination; the industrial history of this neighbourhood and the Freight House site.

The addition of a community garden in the landscape design for the Freight House grounds would bring variety to this urban environment. A community garden would be an ideal addition to this site in the open field where the soccer field is presently located. There are currently five other soccer fields in the area and several open fields for casual games. This area receives optimal amounts of direct sunlight during the prime growing season and has flat, well-drained terrain.

A sheltered area and gathering space would provide a venue for community events and for activities associated with the community garden. A sheltered area would offer diversity, as it contrasts the exposed environment of the hill. A forest or bosque with a high canopy would provide shelter and a plaza-like atmosphere. An urban forest would provide a bold and unique environment in this area. A simple clearing at the heart of the forest provides a destination for groups and events.

A retreat area surrounding the pool would provide space around this popular destination for families and groups. This area could become the local destination for an afternoon rather than an hour. The development of the surrounding area would increase the privacy and seclusion of the retreat area around the pool. An expanded pool deck would provide an area for lounging and gathering when not using the pool and would provide a retreat from the urban setting. A mixture of sun and shade would be ideal for this area and the local climate. This area should also be made accessible for members of the community with mobility issues or disabilities.

A more formal entrance plaza along Isabel would provide a bold statement or environment that increases the visibility and importance of the Freight House grounds. Isabel Street is a high traffic route cutting through this residential and pedestrian-oriented neighborhood. Extending the landscape design across the street would slow traffic, contribute to the landscape network, and provide a more cohesive community environment.

## 5.5 WHY A GARDEN?

Community gardens have the potential to enhance any community. The social, environmental, and economic context in the West Alexander and Centennial area contribute to a community situation with many challenges. A community garden project has the potential to empower the local residents while alleviating some of the social and economic stressors.

The demographic investigation identified key features that contribute to the challenges faced by West Alexander and Centennial residents. These features culminate in a predominantly low-income community with a challenging social interface. Some of these factors include, lower than average educational achievement, a predominance of female-led, single-parent households, and high populations of ethnic minorities and recent immigrants. The case studies reviewed in the first section of research, outline the development of community gardens in similar community contexts. These case studies demonstrate the success of such initiatives and the far-reaching benefits of both past and present community garden projects. Each of these projects was

tailored to the existing community context and provides valuable knowledge about the physical, social, and economic features that warrant consideration. A community garden offers a venue and a resource-driven activity for all age groups, ethnic groups, and people of varying social and economic backgrounds. The benefits of social interaction, the sharing of knowledge and resources, and the self-sufficiency of growing healthy food are well documented in each case study.

The intercultural gardens in Germany provide an exceptional case study, demonstrating the potential of a simple garden in social programming. Differences in ethnicity, age, and socioeconomic class are not relevant in a community garden. The garden provides a democratic place for social interaction, outdoor recreation, and food production. The initial intercultural garden programs in Germany were so successful in breaking social boundaries and encouraging healthy communities that government now supports the development and running of these programs as a social and cultural initiative.

The South Central farm in Los Angeles became a focal point within a low-income, industrial area. It was a lush retreat within the steel and concrete environment dominating this industrial area. The community embraced this site, investing their time, energy, and emotions into their individual gardens. The South Central Farm case study depicts the commitment, pride, and ownership that a community can develop when given the opportunity to champion their own well-being. This example also provides a warning about the permanence of community gardens. Many community gardens are built on temporary sites or undeveloped land and consideration should be granted to the time, energy, resources, and emotion that gardeners put into developing their personal space and agricultural resource.

The Mel Johnson School Garden focuses not only on the educational and nutritional importance of gardening with children, but the holistic and far-reaching effects a garden project can have in a community. This project is facilitated and administered through the school but the gardens act as satellite classrooms at each student's home. The documentary "*...And This Is My Garden*", highlighted the multi-generational interest and the many community events surrounding the garden project and how this brought the community together, despite the geographical distance between the student's gardens. The Freight House and Rossbrook House provide many community services and clubs, such as Nourishing Potential and the Boys and Girls Club garden, that could further incorporate gardening and nutritional education into their programs with additional resources and increased community interest.

The Prinzessinnengarten offers a new structure for community gardens, both physically and logistically. Physically, the Prinzessinnengarten offers a solution to the temporal nature of gardens built on post-industrial land that is not legally owned or permanently at the gardeners' disposal. This also offers a solution for constructing gardens on brown field locations that are convenient or available to a community. Logistically, the lack of ownership over gardens or plots creates a very communal gardening environment but reduces the resource-driven self-sufficiency that is a key component of many garden projects in struggling neighbourhoods, such as West Alexander and Centennial. In contrast to the philosophy behind the Prinzessinnengarten, personal garden plots directly reflect the level of effort and energy invested in the quality and amount of produce available to the gardener. This sense of ownership encourages self-sufficiency, learning, and a sense of pride.

These case studies all highlight the benefits of incorporating a central community garden in West Alexander and Centennial, as well as the physical and environmental considerations that should be addressed on this site.

Figure 53. Prinzessinnengarten: Gemeinsam Ernten (Harvest Together) (2012)

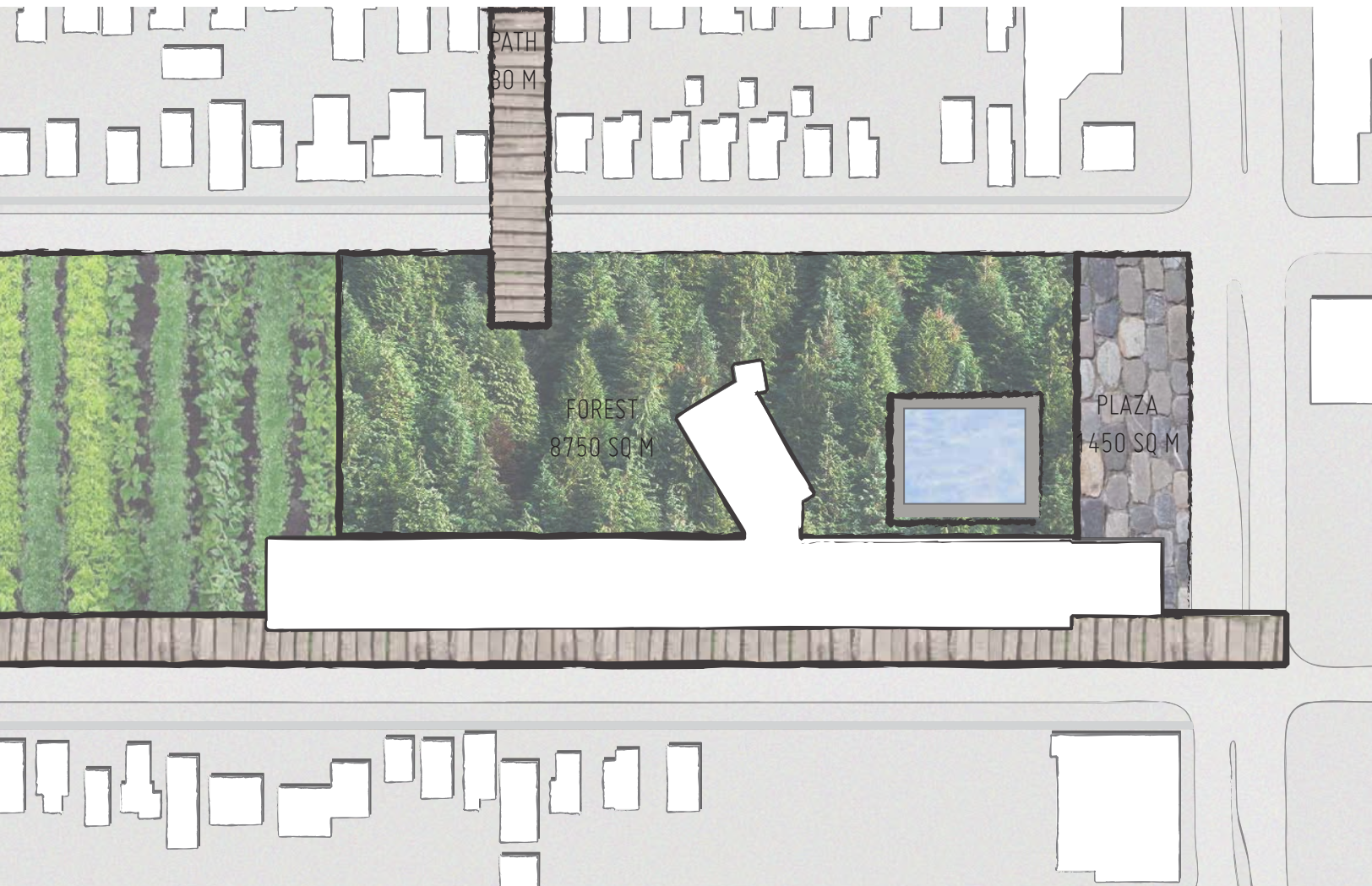


## 5.6 PROGRAMMATIC FRAMEWORK



Figure 54. Framework of Landscape Types and General Programs

0 50 m



## 5.7 DESIGN INTENTIONS

The study of the social, economic, and environmental context surrounding and including the Freight House grounds has informed a selection of design intentions and concepts that are the most beneficial and pragmatic for the West Alexander and Centennial communities. The intention of the project is to create a plausible design that increases the appeal of the existing landscape features and generates a focal point within the existing network of public spaces. As a community focal point, the design should broaden the landscape programs currently available and appeal to all ages. The study of the social, economic, and environmental influences on the community and this site will continue to inform all scales of this design as it evolves from a concept to detailed components.

## 5.8 SPATIAL CONCEPTS

Spatial diagrams explore how design programs can be arranged to create the fundamental structure of the landscape and reflect the overall design intentions. Both of these spatial concepts preserve the existing hill, as significant elevations are rare in Winnipeg, and include the addition of a community garden. In Concept 1, the hill, the garden and the forest exist independently and are connected by a promenade. In Concept 2, the frame of trees defines a garden landscape with a hill and several groves.

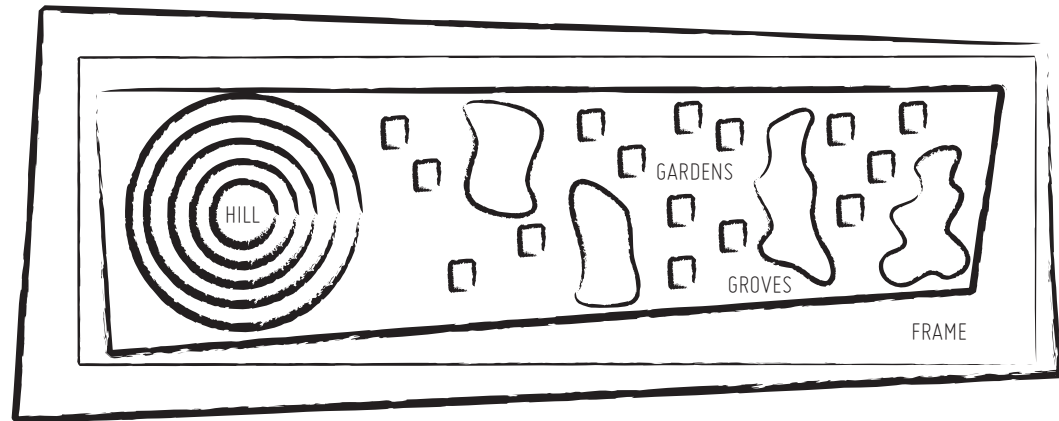
Concept 1 encourages integration with the surrounding context and provides a smaller, more intimate garden that allows for more concentration of shared resources required for gardening. The forest and the hill offer contrasting experiences while the promenade connects each component. The frame of trees in Concept 2 separates the landscape from the community. The interior consists of a more homogenous landscape of small gardens and groves spread across the large site. The hill provides a unique feature and landmark.

Further design exploration led to the selection of Concept 1 as the spatial concept to inform the final design. The integration of the site within the community and the more intimate community garden better supported the intentions of this project.

Figure 54. Concept 1:  
A Hill, a Garden, and a Forest  
Connected by a Promenade



Figure 55. Concept 2:  
A Hill, a Garden, and Groves  
within a Frame of Trees



# SECTION SIX DESIGN SOLUTION

This section refines the landscape programs and intentions and reviews how they inform the landscape design. The overall design is discussed in the context of the neighbourhood and then broken into individual zones to discuss specific programmatic elements and design decisions. The conclusion of this project reflects on the use of the neighbourhood and community context to inform a research path and design process that establish a vision for an area. This vision is more than a collection of programmatic zones that represent the specific needs of the area. It is an integrated design derived from the context of the area, with extensive consideration given to the manner in which the components relate to each other and the existing physical and social context.

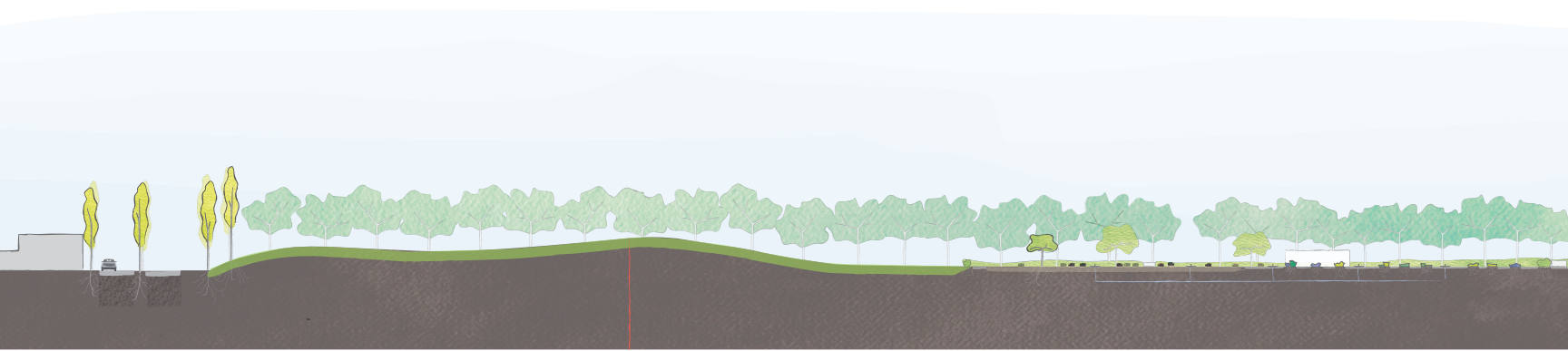
# 6.1 SITE DESIGN



Figure 56. Site Design (Original Scale: 1:1000)



## 6.2 SECTION ELEVATION



SHERBROOK STREET

ASPEN ARCADE

POISON POINT

THE GARDEN

Figure 57. Site Design Section Elevation: View Toward the Northeast (Original Scale: 1:1000)



THE ORCHARD

THE SAND CLEARING

FREIGHT HOUSE FOREST

THE POOL DECK

THE RED GROVE

ISABEL STREET

## 6.3 DESIGN ELEMENTS

The site design consists of several distinct areas, each with unique spatial organization and character that foster specific landscape programs. A variety of landscape archetypes - forms and patterns that embody an inherent cultural conception and hold significance in the collective unconscious (“Archetype”, 2014) - increase the diversity in the urban environment and provide clear spatial definition and cues as part of the larger landscape design. The bold archetypes compliment the existing landscape features and context to create a cohesive and pragmatic design. Each area of the design consists of features and details that enhance the greater composition.

## 6.3.1 THE ASPEN ARCADE

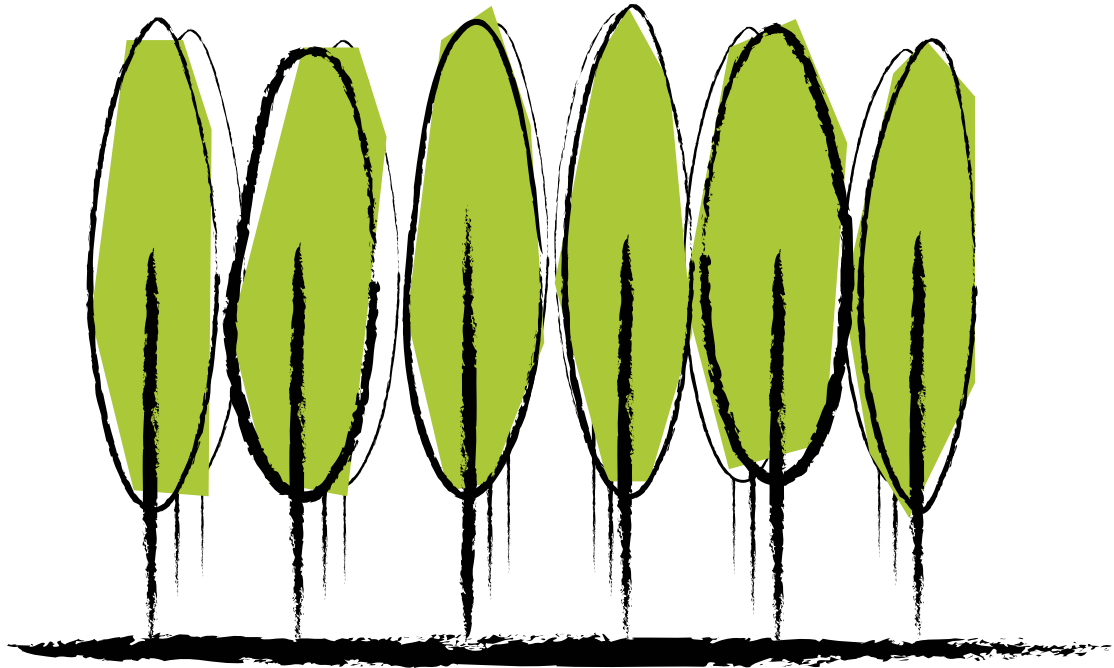
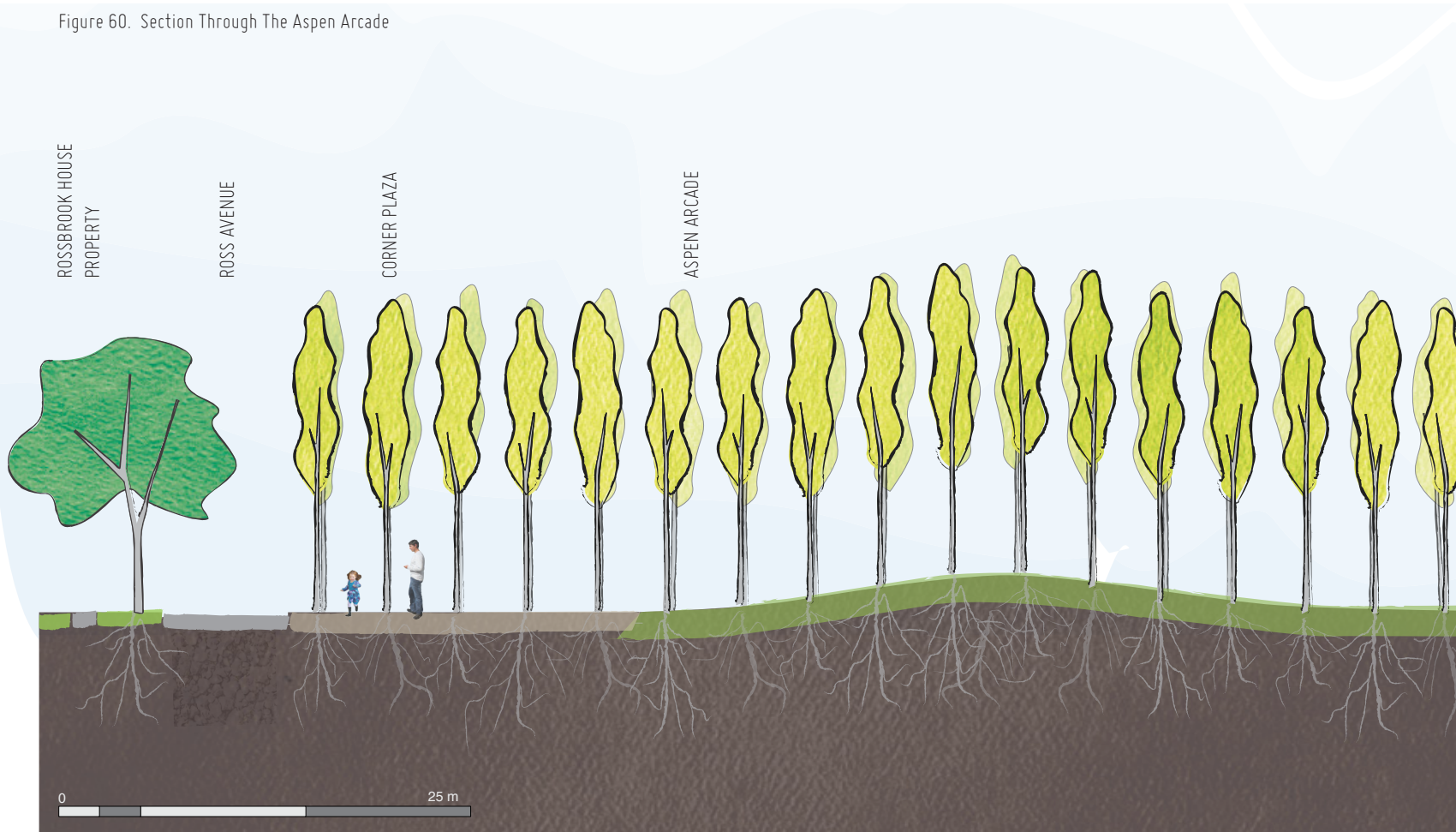


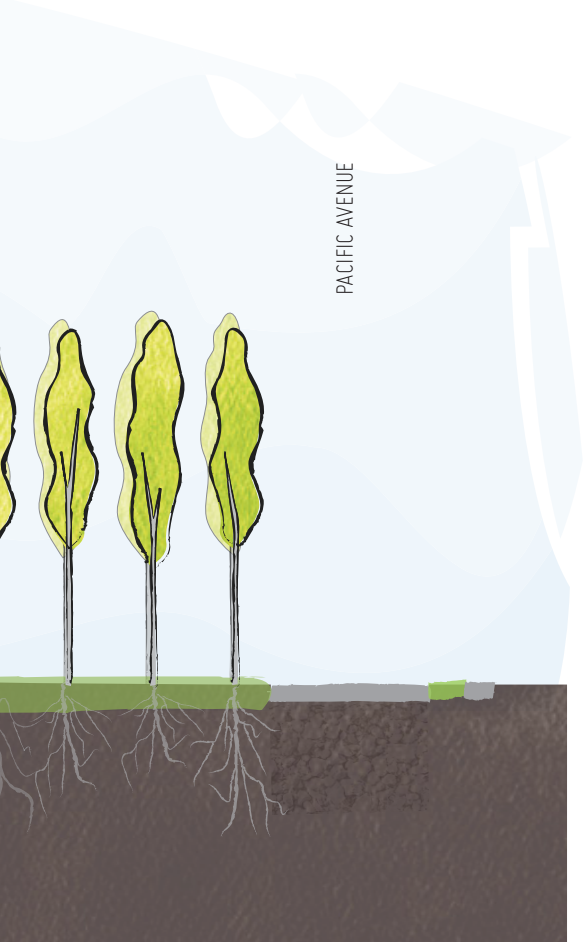
Figure 59. Concept Sketch: The Aspen Arcade

The Aspen Arcade consists of trembling aspen planted on a 4.3 m (14 ft) grid. These trees have architectural qualities with a strong vertical structure and consistent form. The columnar form contrasts with the other tree species in the area and their height signals a formal area and entrance to the park. The Aspen Arcade is an entrance to the Freight House grounds from the west. The plaza space and rows of trees bridge Sherbrook Street, providing a continuous landscape environment that exerts its presence and importance into the surrounding area. The continuation of the aspens also provides a contextual change that will encourage slower traffic and create a more pedestrian oriented atmosphere. The open plaza area in front of Rossbrook House is bordered by four mature elms on the boulevard. The plaza will continue into the Aspen Arcade that aligns with the property on the opposite side of Ross Avenue. The promenade to the east and terrace steps to the north, both lead into the Aspen Arcade. As a formal entrance and meeting area, this zone will house bike racks, garbage and recycling receptacles, and seating near the street front. It will also include subtle up-lighting of the columnar trees to provide a pleasant and safe nighttime environment which is important because Rossbrook House operates 24 hours a day. The lighting will accentuate the architectural nature of the trees and the formal grid organization. Mature aspens often form tightly-knit groves in natural settings. These trees exhibit predictable growth habits, with a spread of roughly 3 m (10 ft) and a height varying from 10-15 m (33-50 ft) (Farrar, 1995). The canopy of a trembling aspen is approximately 2 -3 m (6 - 10 ft) from the ground which, in this design, will create a dense ceiling of leaves throughout the canopy elevation (Farrar, 1995).

# THE ASPEN ARCADE

Figure 60. Section Through The Aspen Arcade






 NORTH  
 Figure 61. Plan of The Aspen Arcade

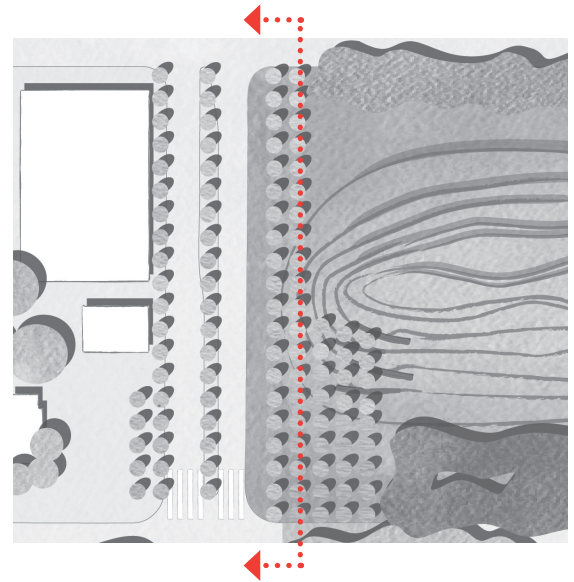


Figure 62. West Entrance to Freight House Grounds

# ROSSBROOK HOUSE & THE ASPEN ARCADE

Figure 63. Perspective of The Aspen Arcade and Rossbrook House

This perspective depicts the relationship between Rossbrook House and the Aspen Arcade, with plaza space on each side of Ross Avenue. The view is from the west corner of Ross Avenue and Sherbrook Street, where a crosswalk leads into the landscape. The Health Sciences Centre is located three short blocks to the south of this location.





## 6.3.2 ROSSBROOK TERRACE & POISON POINT



Figure 64. Concept Sketch: The Hill, Rossbrook Terrace & Poison Point

Rossbrook Terrace consists of subtle, ramping steps built into the existing slope of the hill. The aspens break their rigid grid and begin to follow the curving stairs as they climb the south side of the hill. The stairs provide an unexpected element amongst the formal aspens and extend the connection between the plaza area and Rossbrook House and the greater landscape. The ramping stairs of Rossbrook Terrace are a suggestive path to the top of the hill but also provide a destination, as stairs and terraces are common gathering spots in many urban settings. The built edges are wide enough for seating, which is oriented toward Rossbrook House, conceding the title of this area.

A promontory is built into the southeast elevation of the hill. The apex of the promontory marks the single point of lead contamination identified on the hill, earning this location the title, Poison Point. The built form secures the contaminated soil in place, covering it with a gravel substrate and encasing it in a concrete retaining wall, making it inaccessible. This design acknowledges the presence of lead contamination and offers a relatively immediate and unintrusive solution to dealing with the soil condition at this location. Poison Point emerges from the existing slope of the hill near the highest elevation. The two elongated edges allow for views to the east and west of the point. This built promontory embodies archetypal qualities of a lookout or citadel, allowing surveillance and navigation with clear views of a larger landscape. This archetype also supports a sense of achievement due to its elevated position in the landscape. Unlike a natural lookout, Poison Point does not provide a drastic or dangerous elevation and the edges of the promontory provide a sense of security and enclosure rather than curiosity and risk. Poison point is a landmark within the landscape and the three lighting posts signify the location of the contamination, acting as a beacon looking into the industrial past of the location and looking forward with the revitalization of the park and neighbourhood.

# ROSSBROOK TERRACE & POISON POINT

Figure 65. Section Through The Hill, Poison Point & The Promenade

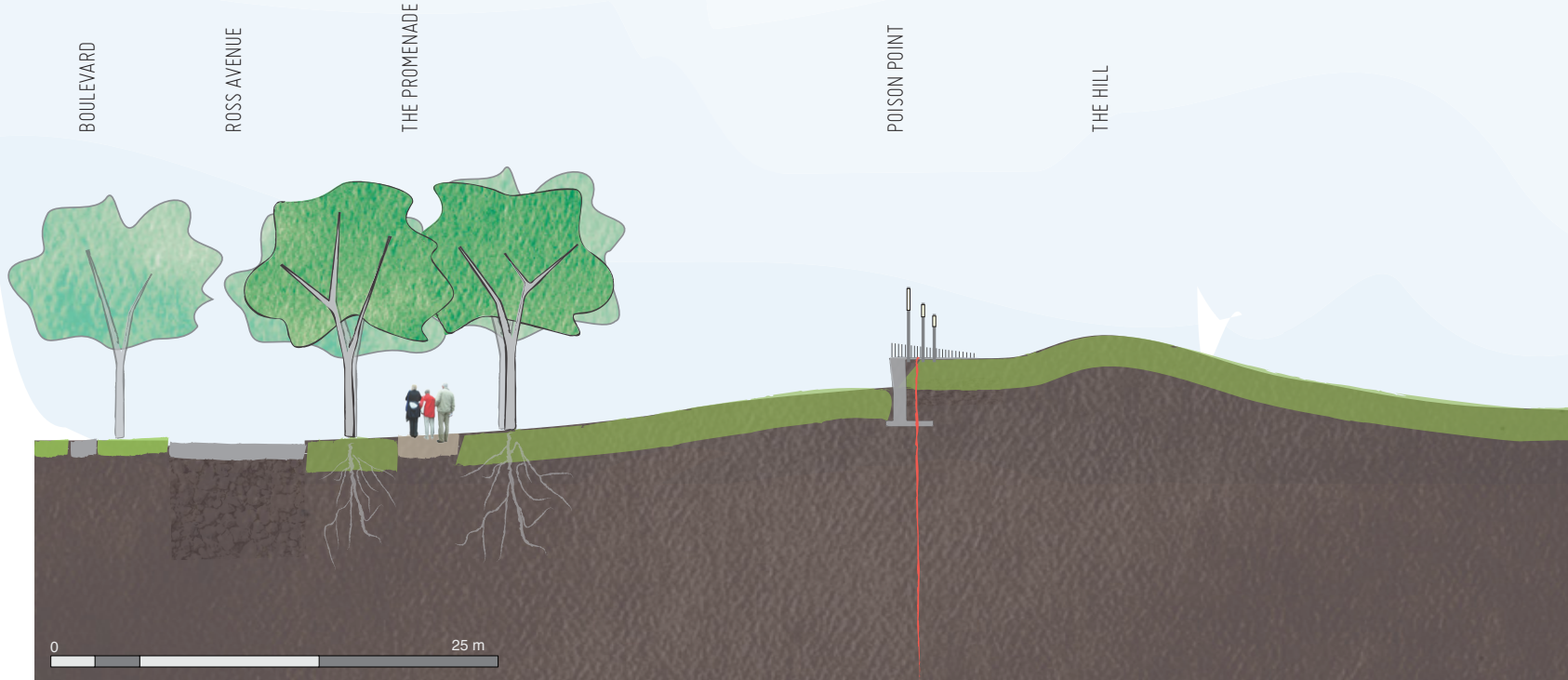




Figure 66. Plan of The Hill, Poison Point & The Promenade

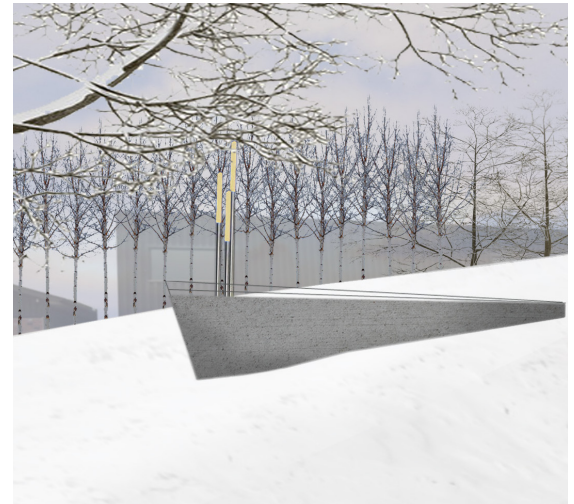
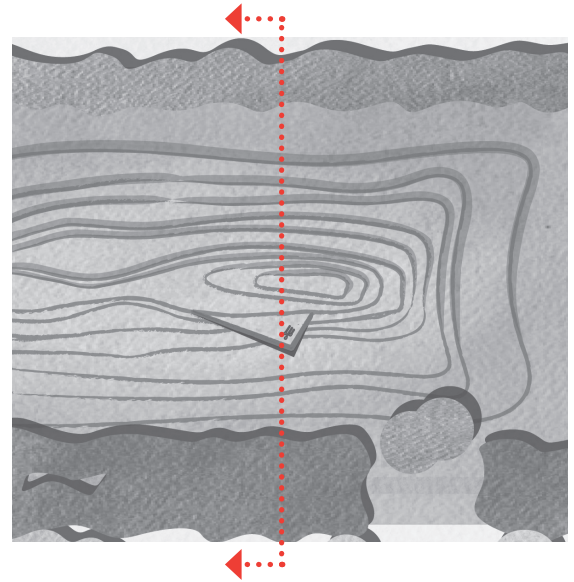


Figure 67. Poison Point

## THE HILL & POISON POINT

Figure 68. Perspective of Poison Point and The Hill

This perspective depicts the hill and Poison Point in winter when the built landmark and the ideal slopes provide an exciting attraction within a snow covered landscape. The addition of a meeting place and outlook does not interfere with the clear slopes on the north side of the hill that currently attract flocks of local children for tobogganing.





### 6.3.3 THE GARDEN



Figure 69. Concept Sketch: The Garden

The Garden is the most prominent addition to the existing landscape programs on the Freight House site. The Garden is open to the community and offers a place for residents, community groups, and people who work in the area to grow fresh produce or establish an ornamental garden. The Garden embodies many archetypal qualities. It is a room within the greater landscape, providing an escape from the urban context. Unlike the formal archetype of a garden, the community garden has a flexible framework that is based on the utilitarian needs of gardeners. However on a smaller scale, the traditional beauty found in the layering of textures and colors and variety of species is still prevalent. The enclosed garden is intended to encourage the development of a gardening community through a common activity and the sharing of resources and knowledge. The ideal environmental conditions including, adequate drainage, even ground,

and direct sunlight influenced the location of the community garden in the center of this urban landscape. The industrial heritage of the site influenced the form and function of this community garden. The Garden consists of modular and mobile garden plots, creating a flexible garden structure that can reflect the interest level and needs of the community. The modular garden plots are not dependant on the soil found on the existing site, which may contain contaminants that can be absorbed by edible plants. The flexibility of this garden structure accommodates all scales of gardens and provides accessibility to residents with mobility issues.

The overall framework of the garden is determined by the location and layout of the communal resources needed by the gardeners. The greenhouse and storage area are located on the north side of the garden, near to the communal fruit shrubs and herbs. The water taps are placed on a grid so gardens are never more than 7.6 m (25 ft) away from a water source. Gardeners can access water by either attaching a hose or filling a container at the water taps. The garden plots consist of recycled pallets, generally 1 m x 1.2 m (40 in x 48 in). Re-used plastic pails are filled with soil and placed on a pallet creating a raised, self-contained garden. Different pail sizes can be used to accommodate different plant species. The pallets perfectly fit twelve standard size 4 to 5 gallon pails. Each gardener can determine the number of pallets or plots they would like and their arrangement in the garden. Twice a year the garden can be re-organized according to the spatial needs of the gardeners and community groups. Additional plots can be added and new arrangements can be developed, providing new neighbours within the garden. The mobile garden plots possess the potential of moving beyond the garden frame at the Freight House if similar projects were to develop in the neighbourhood. The larger garden framework contains all of the resources required, including a compost area, tool storage, a greenhouse for starting seedlings, and storage area for extra pallets and pails. The orchard, located to the east of the garden, compliments the form and function of the Garden, with communal crops and rows of trees that continue their trajectory into the frame of the garden.

# THE GARDEN

Figure 70. Section Through The Garden & The Promenade

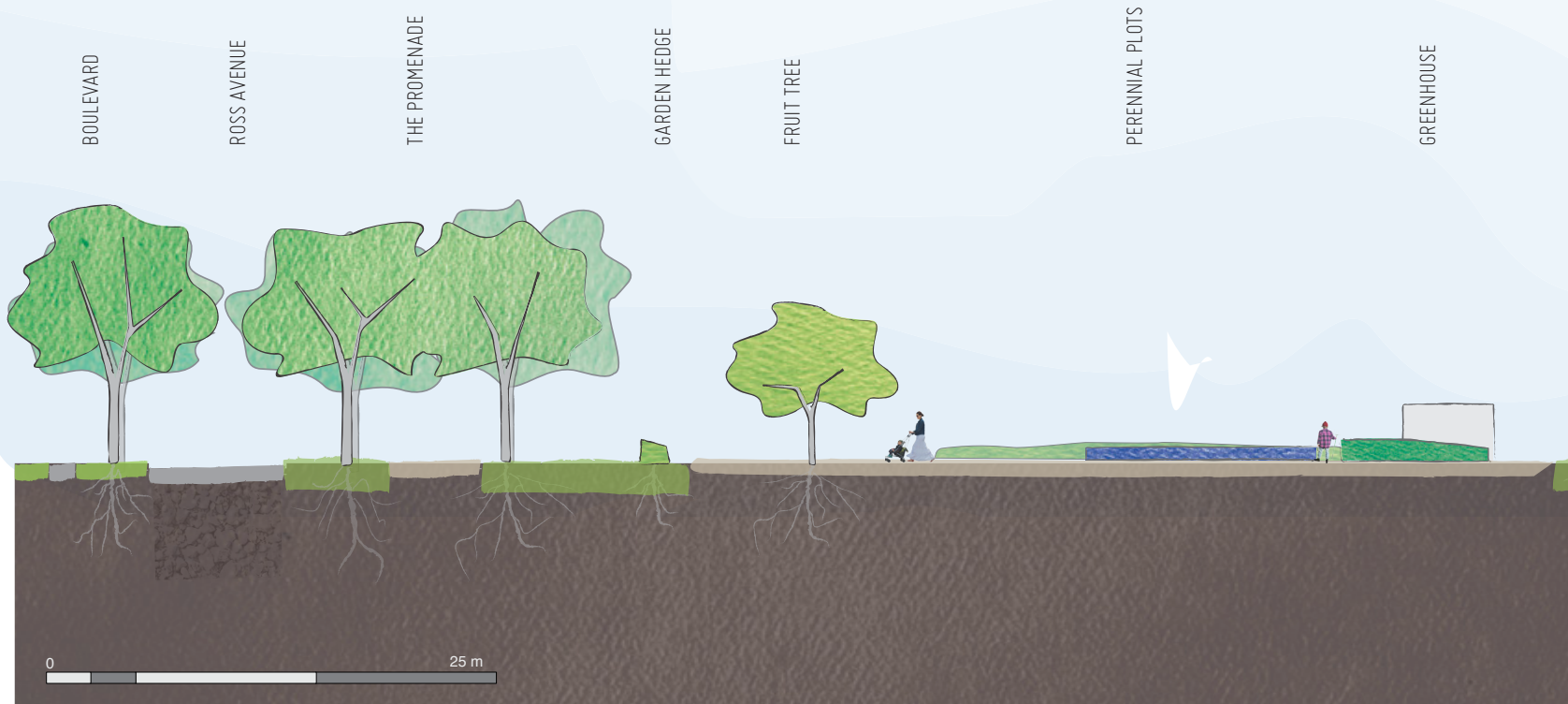




Figure 71. Plan of The Garden & The Promenade

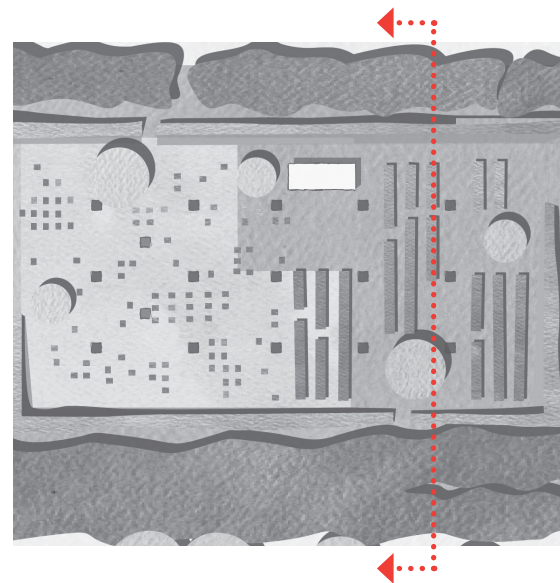
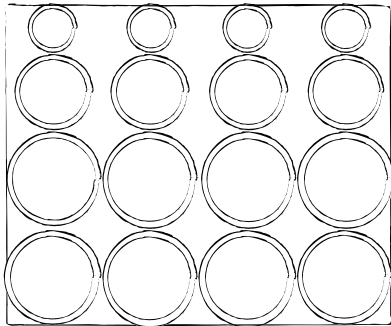


Figure 72. The Greenhouse in The Garden

# THE GARDEN PLOTS

48 in | 122 cm



40 in | 102 cm

Figure 73. Pallet Dimensions & Configuration of Pails



Figure 74. Pallet Garden Plots with Plants



## Pail Sizes for Common Vegetables Grown in Manitoba Gardens (Lettuce Link Program, n.d.)

4–5 gallon pail:

Beans, Zucchini, Tomatoes, Cucumber, Broccoli, Leeks, Squash, Turnip, Cabbage, Eggplant

2–3 gallon pail:

Beets, Carrots, Kale, Lettuce, Swiss Chard, Bok Choy, Green Onion, Radishes, Peppers

1/2 – 1 gallon pail:

Most herbs, garlic



Plastic pails are a readily available item due to their use for transporting liquids and fine materials, making them an ideal recycled container for a mobile community garden. A variety of sizes of plastic pails can be used for different species of plants depending on their size and the depth of their root system. A few 1/8” holes will be drilled in the bottom of each pail with a power drill to allow excess water to drain from the pails if there is heavy rain or they are over watered. The largest pails are 4 to 5 gallons and will be fairly heavy once planted, however all pail sizes should be relatively manageable for a healthy individual. The mobility of the pails allows for the individual gardens to be reorganized and for the pails to be transported to and from the greenhouse area in spring and fall. The pails can be stacked on a single pallet, double pallet, or triple pallet, depending upon their height and the ergonomic needs of the gardener. Each pallet is typically 6” in height. The specific dimensions of pallets and pails can vary, however the logistical efficiency required in the transportation of materials predisposes these garden plots to be spatially efficient and relatively uniform in size.

# THE GARDEN & THE ORCHARD

Figure 75. Perspective in The Garden

This perspective captures both the pallet garden plots and the perennial garden beds that form The Garden at the heart of this landscape design. The grid of water taps, the greenhouse, and the communal perennial beds are important fixtures that provide a framework for the flexible garden layout. Several fruit trees are incorporated within the garden, relating to the adjacent orchard.





## 6.3.4 THE ORCHARD

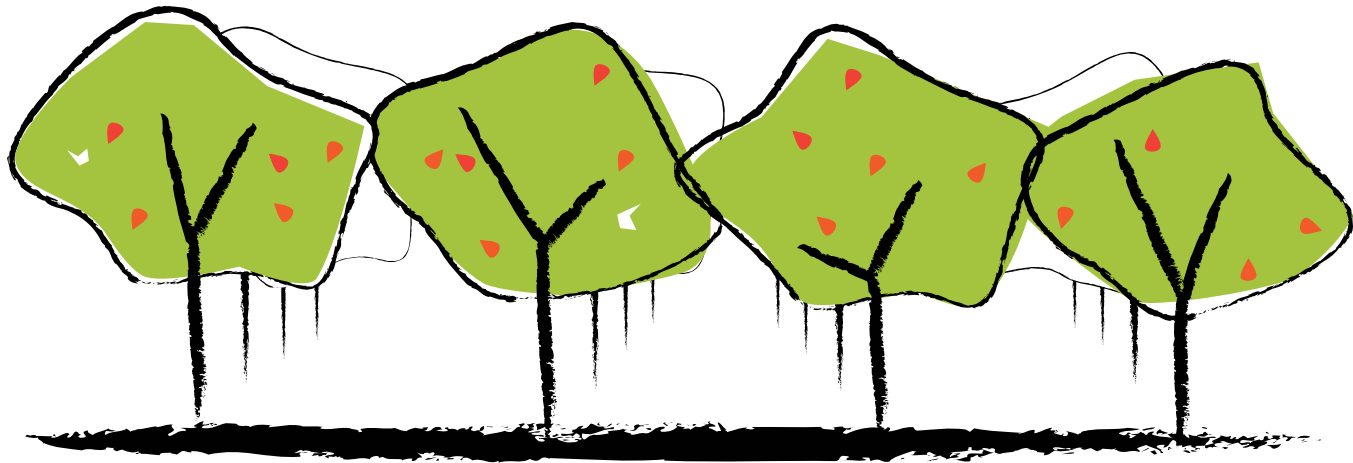


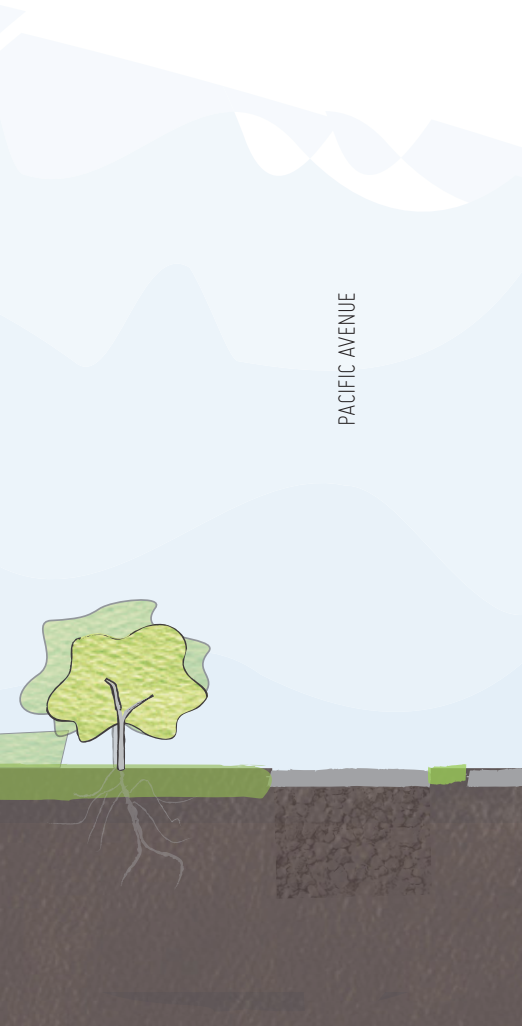
Figure 76. Concept Sketch: The Orchard

The Orchard compliments the garden with its formal organization, beauty, and provision of edible fruit. The relatively small fruit trees are planted in rows and allow for fruit to be easily harvested. This area will be full of fragrant flowers in early spring, creating a visual and aromatic event in the greater landscape. The twenty one fruit trees making up The Orchard consist of hardy and relatively low-maintenance species that are accessible to all members of the community. These species include a pear variety and apple variety although cherry and plum trees could also be incorporated. The Orchard is an intermediary space that extends into the community garden to the west and evolves into The Freight House Forest to the east. The rows of small fruit trees transition into larger shade trees in a gradient that establishes the Freight House Forest. In its intermediary role, The Orchard mediates both the formality and scale of The Garden as it transitions into canopy covered expanse that encompasses a nearby clearing.

# THE ORCHARD

Figure 77. Section Through The Orchard & The Promenade





PACIFIC AVENUE



NORTH

Figure 78. Plan of The Orchard & The East Garden Entrance

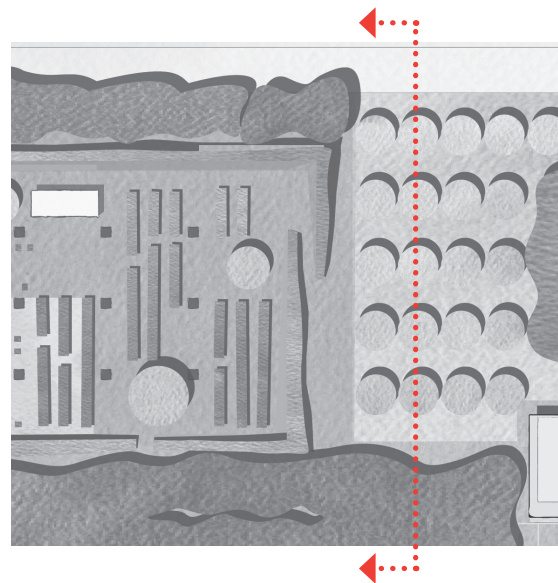


Figure 79. Perspective in The Orchard

## 6.3.5 FREIGHT HOUSE FOREST

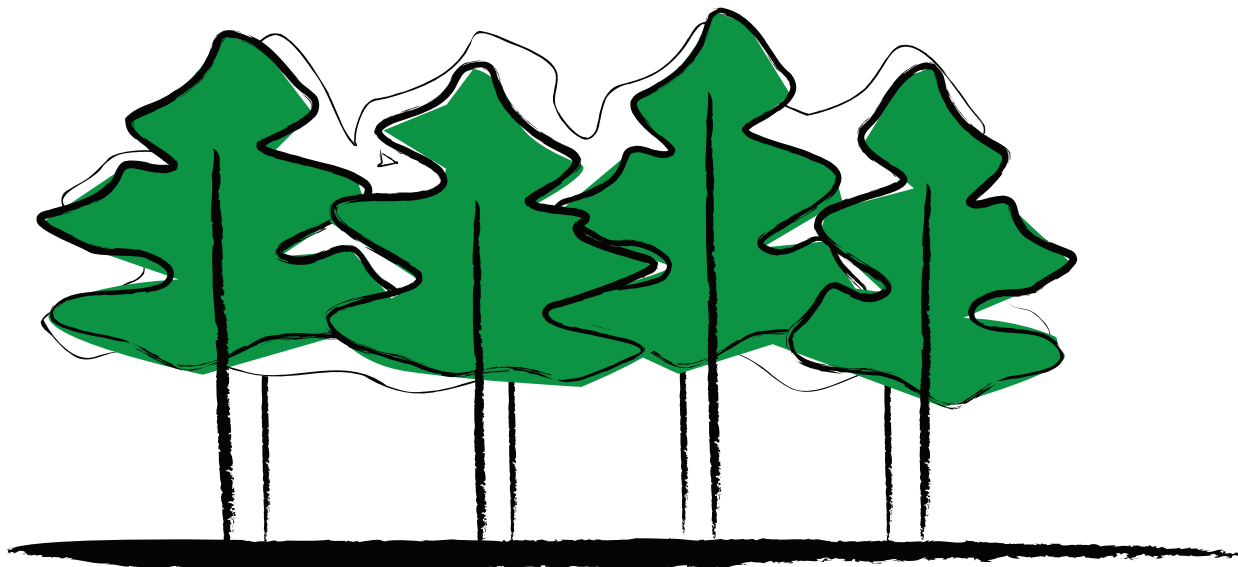


Figure 80. Concept Sketch: The Freight House Forest

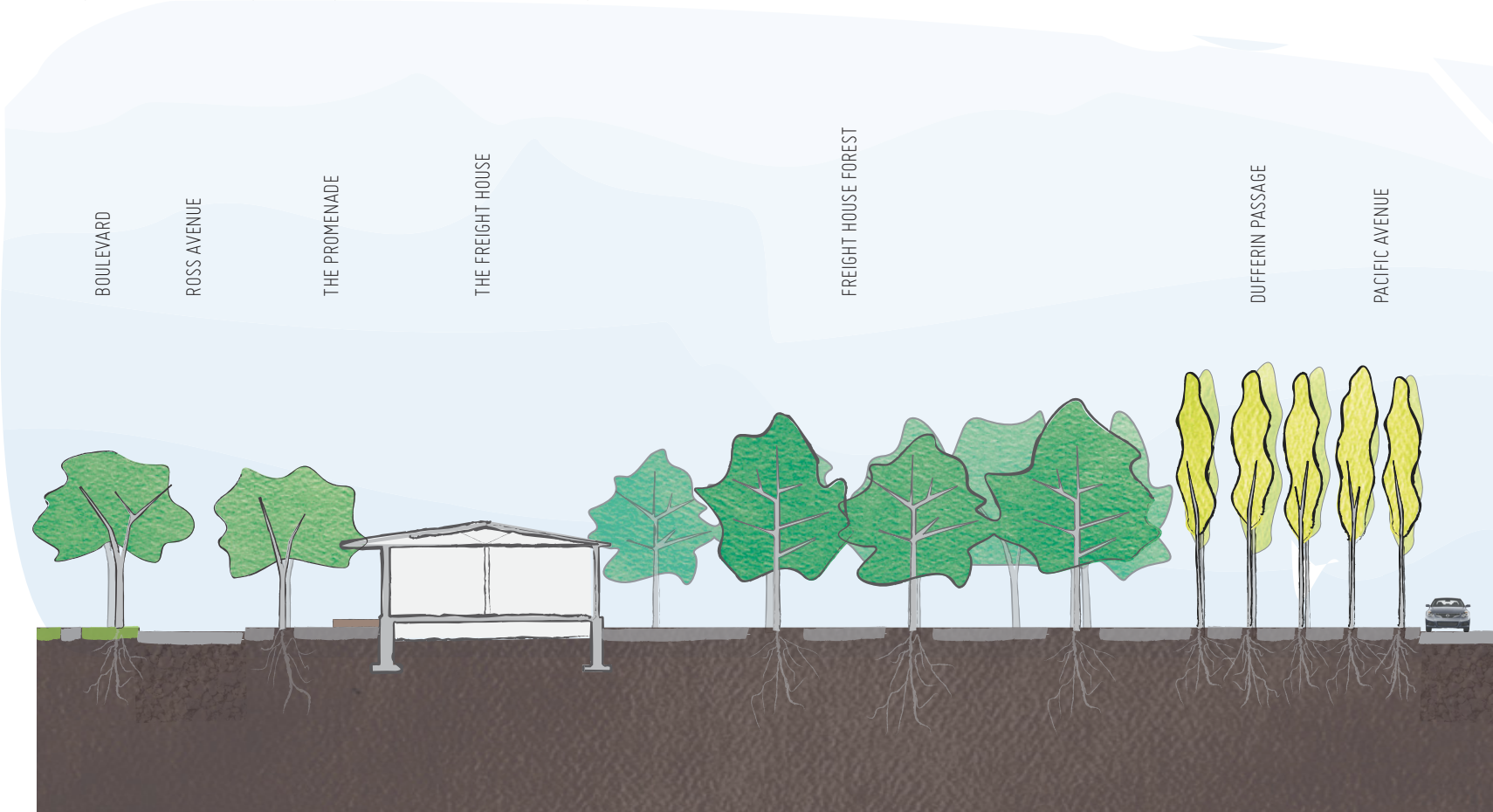
The Freight House Forest consists of large pine trees that puncture the existing asphalt, disrupting the monotony of this area. The forest extends from the rows of orchard trees with increased density due to the larger species and broader canopies, which fill the area behind the Freight House. The height of the pine trees combined with the height of the manicured canopy generates an open plaza punctuated by columnar trunks throughout the understory. The open plaza encourages an active understory in this urban forest. The canopy is relatively consistent throughout the forest allowing light to filter in and providing a ceiling, creating a sheltered area that contrasts the exposed, skyward nature of the hill. The Freight House Forest follows the rows

set by the orchard trees, eventually breaking the formality with offset maple trees that relate to the Red Grove to the east. The concept of this urban forest is attributed to the archetypal forest that embodies a sense of spontaneity and mystery. Although more formal than a natural forest, the Freight House Forest contrasts its surroundings and is characterized by the density of trees and the canopy ceiling, creating a unique and defined space throughout all four seasons. The forest encompasses a clearing between The Orchard and the asphalt area, providing a room for gatherings that is more isolated than the other landmarks and gathering spaces incorporated in throughout this design. The clearing has an organic boundary as materials transition from the mown grass to the crushed shale island that houses a fire pit and clusters of large boulders for seating. Unlike many of the bold gestures in the greater site design, the more intimate clearing allows for a sense of discovery for people visiting this landscape.

The connection between the Freight House grounds and Dufferin School grounds is established as an interruption in the Freight House Forest. The design for the Dufferin Passage accentuates the existing trail that runs between residential properties, connecting the Freight House grounds and Dufferin School. The large maple tree that currently marks the passage is preserved in the design, while aspens are planted through the passage, extending into the Freight House Forest. The Dufferin Passage bridges Pacific Avenue, extending the landscape design and formalizing this passage as an important component of the larger landscape network within these neighbourhoods. Similar to the Aspen Arcade, the architectural nature of the columnar trees and their formal planting arrangement signal a plaza-like entrance and connection to the urban landscape.

# FREIGHT HOUSE FOREST

Figure 81. Section Through The Freight House Forest & Dufferin Passage



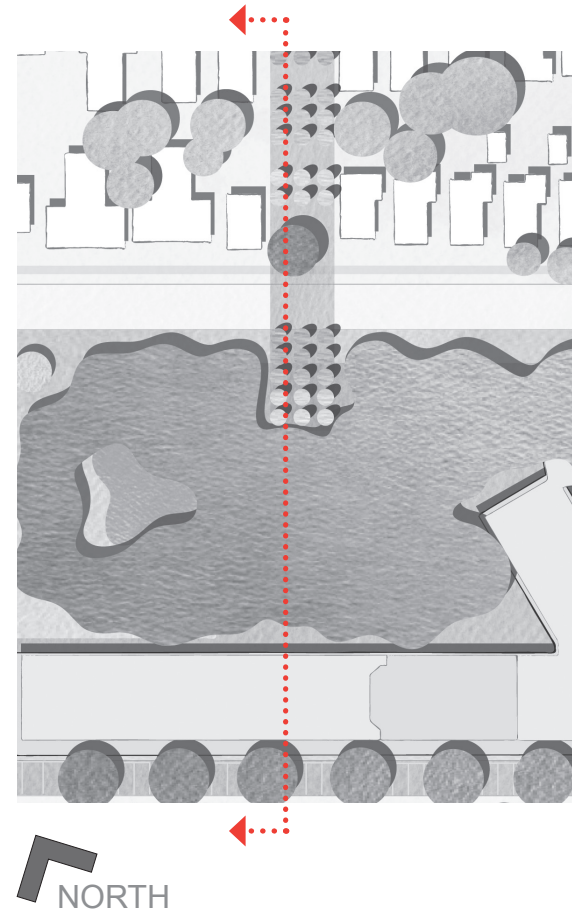
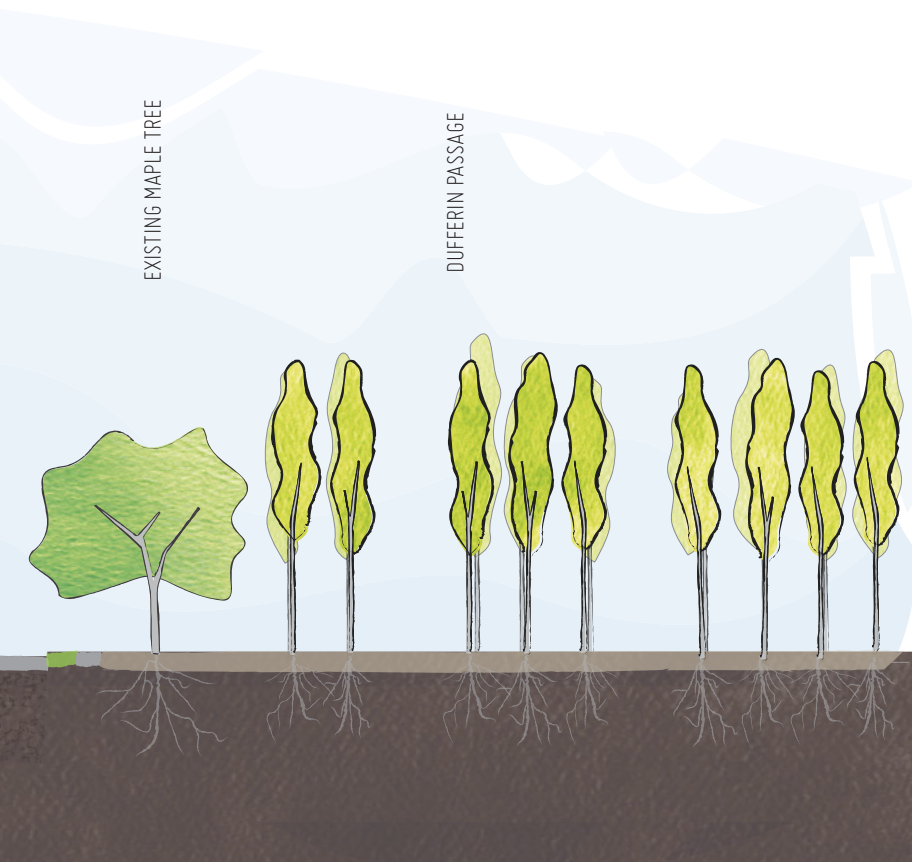


Figure 82. Plan of The Freight House Forest, The Clearing & Dufferin Passage

# FREIGHT HOUSE FOREST

Figure 83. Perspective in the Freight House Forest

This perspective of the Freight House Forest captures both the paved area, where trees puncture through the existing asphalt, and the lawn area with the open clearing. This view looks through the pine trees, toward the rows of fruit trees in The Orchard.





## 6.3.6 THE POOL DECK

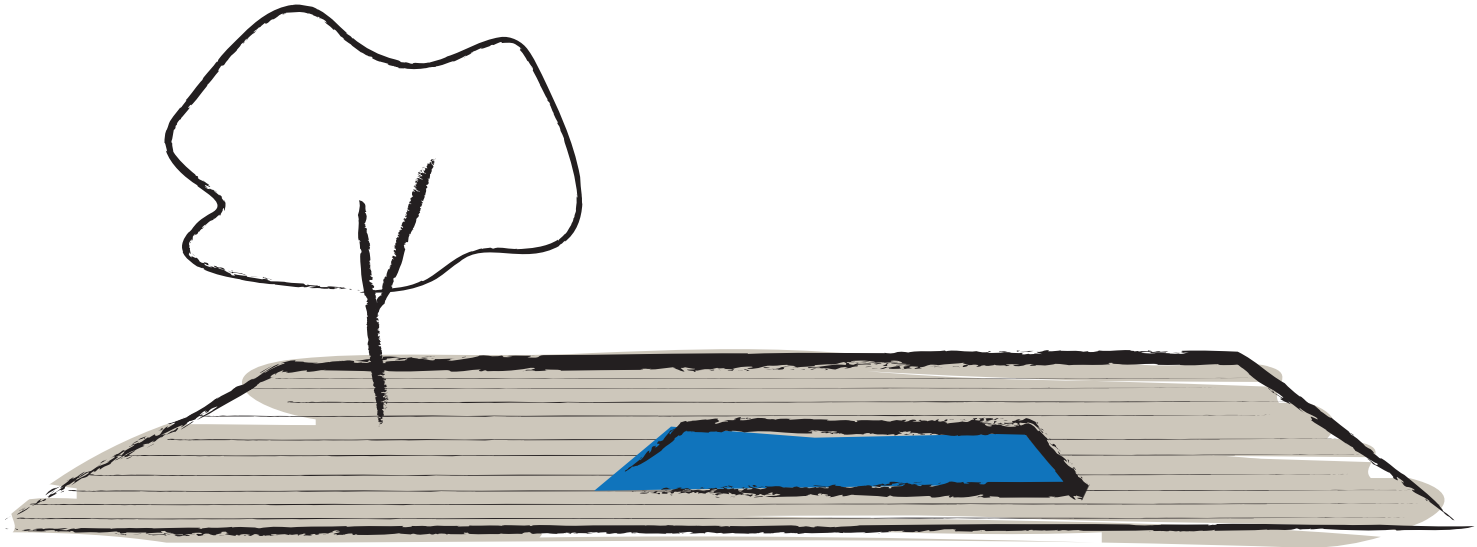
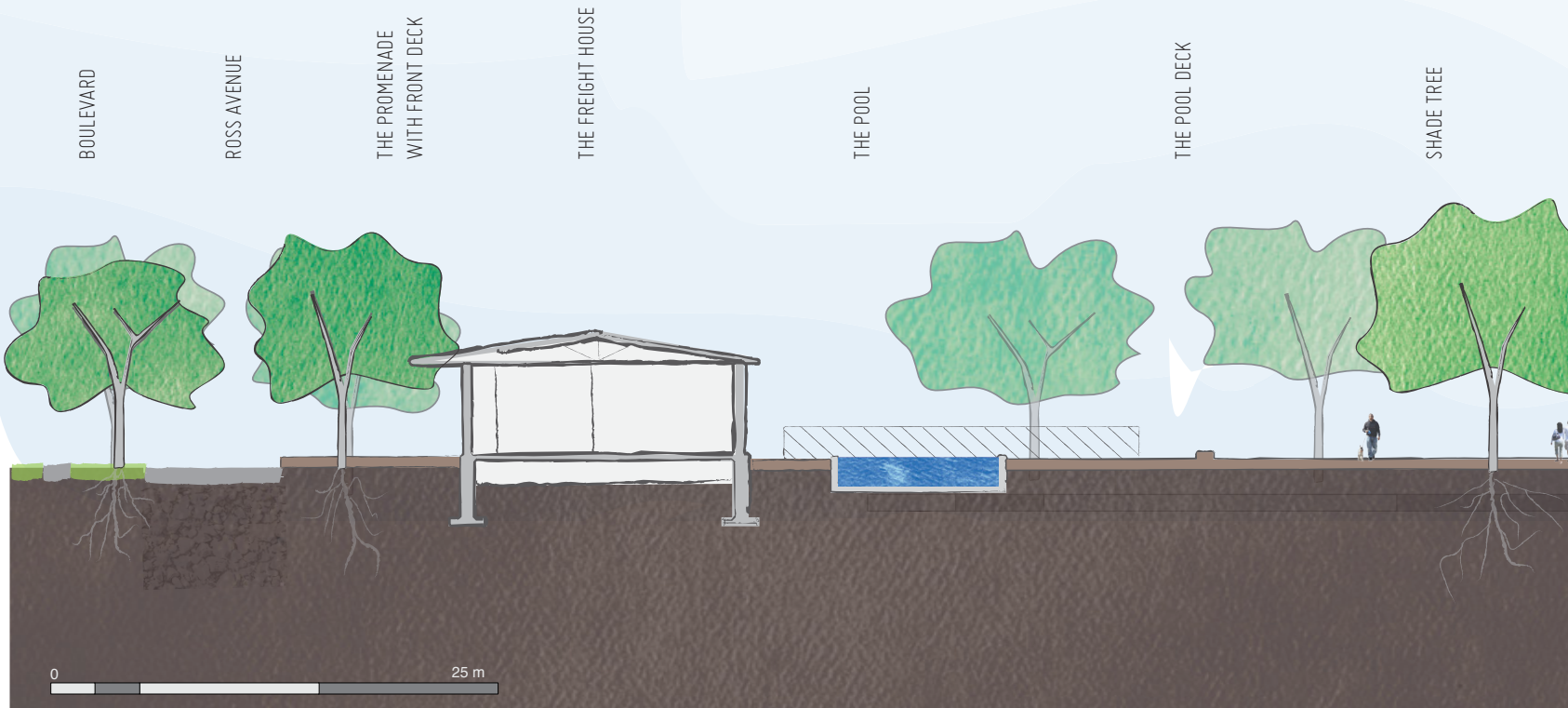


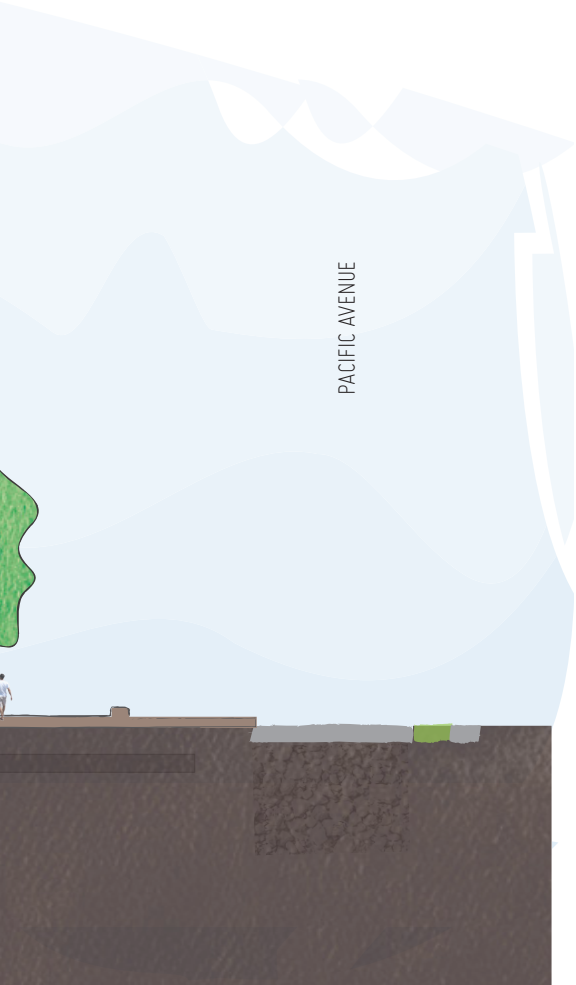
Figure 84. Concept Sketch: The Pool Deck

The Pool Deck encompasses the existing pool, which is a significant feature in the neighbourhood. Currently, the pool is a very popular destination for local children but does not easily accommodate families or parental supervision. The Pool Deck expands the area surrounding the pool, offering a deck area to gather and lounge and transforming the pool area into a larger retreat and a destination. The concept driving the design of the Pool Deck is an urban beach. This area is screened by vegetation along both the east and west sides and offers seating and shaded areas for families and groups. The deck extends from the Freight House building to Pacific Avenue and is continued along the south side of the Freight House where the main entrances are located. The continuous deck creates a bold and cohesive environment that unites the architectural elements, including the Freight House building, and the surrounding landscape. The pool area is far more welcoming with the wooden deck covering the existing concrete pool deck and the custom fence is far less authoritarian than the existing chain link enclosure. The deck encompasses the Freight House building surrounding it with a social space. The deck along the entrances on Ross Avenue welcomes visitors to the Freight House and allows residents to socialize before and after activities and events. The deck provides a clear definition of gathering space and maintains parking along the building. Separation between pedestrians and cars is important in this area and the deck offers a walkway along the building that connects to The Promenade, running the length of the site. The Pool Deck transforms the existing pool into a prominent destination and provides a cohesive social space that integrates the Freight House in the urban landscape.

# THE POOL DECK

Figure 85. Section Through The Pool Deck & The Promenade





 NORTH

Figure 86. Plan of The Pool Deck & The Deck Along Ross Avenue

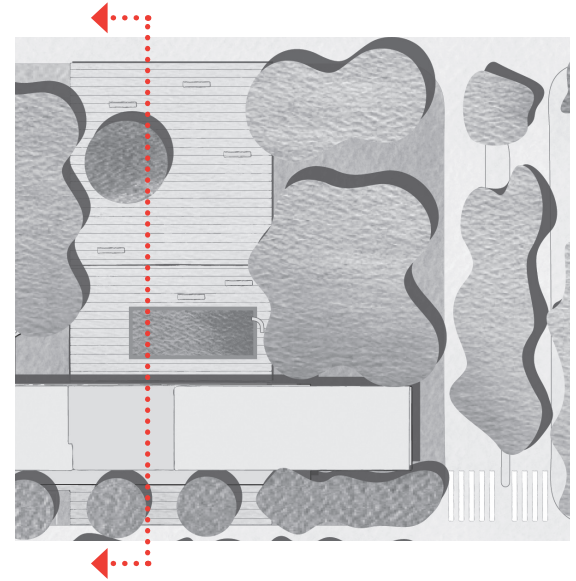


Figure 87. The Pool & The Deck

## THE POOL DECK

Figure 88. Perspective on The Pool Deck

This perspective captures the existing swimming pool which is incorporated into the design of a large deck area to the north of the Freight House. The pool deck is an open area with continuous surface that is only interrupted by the subtle cable fence that secures the pool area and a single elm tree that provides shade to visitors.





## 6.3.7 THE RED GROVE & THE PROMENADE

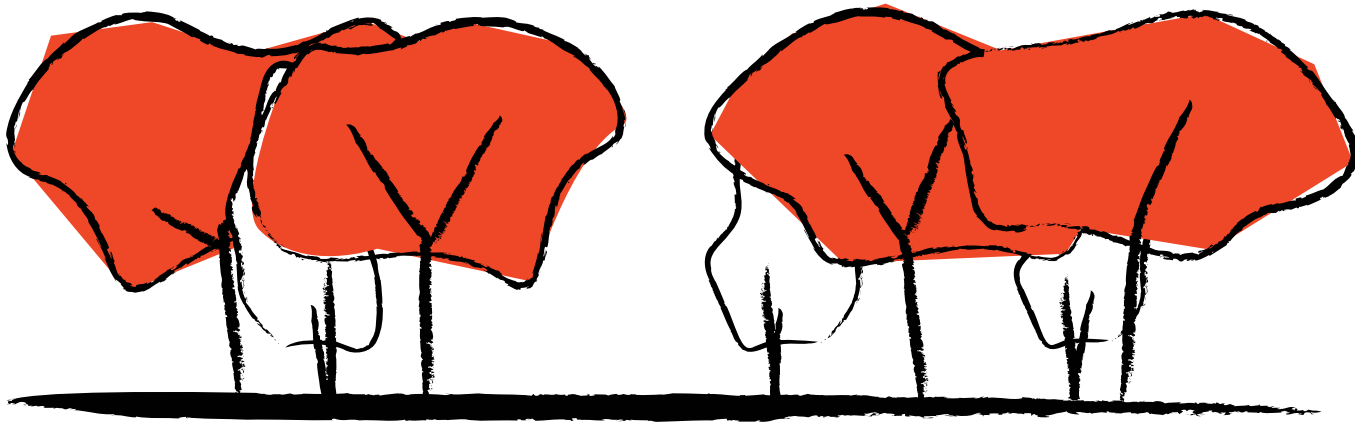


Figure 89. Concept Sketch: The Red Grove

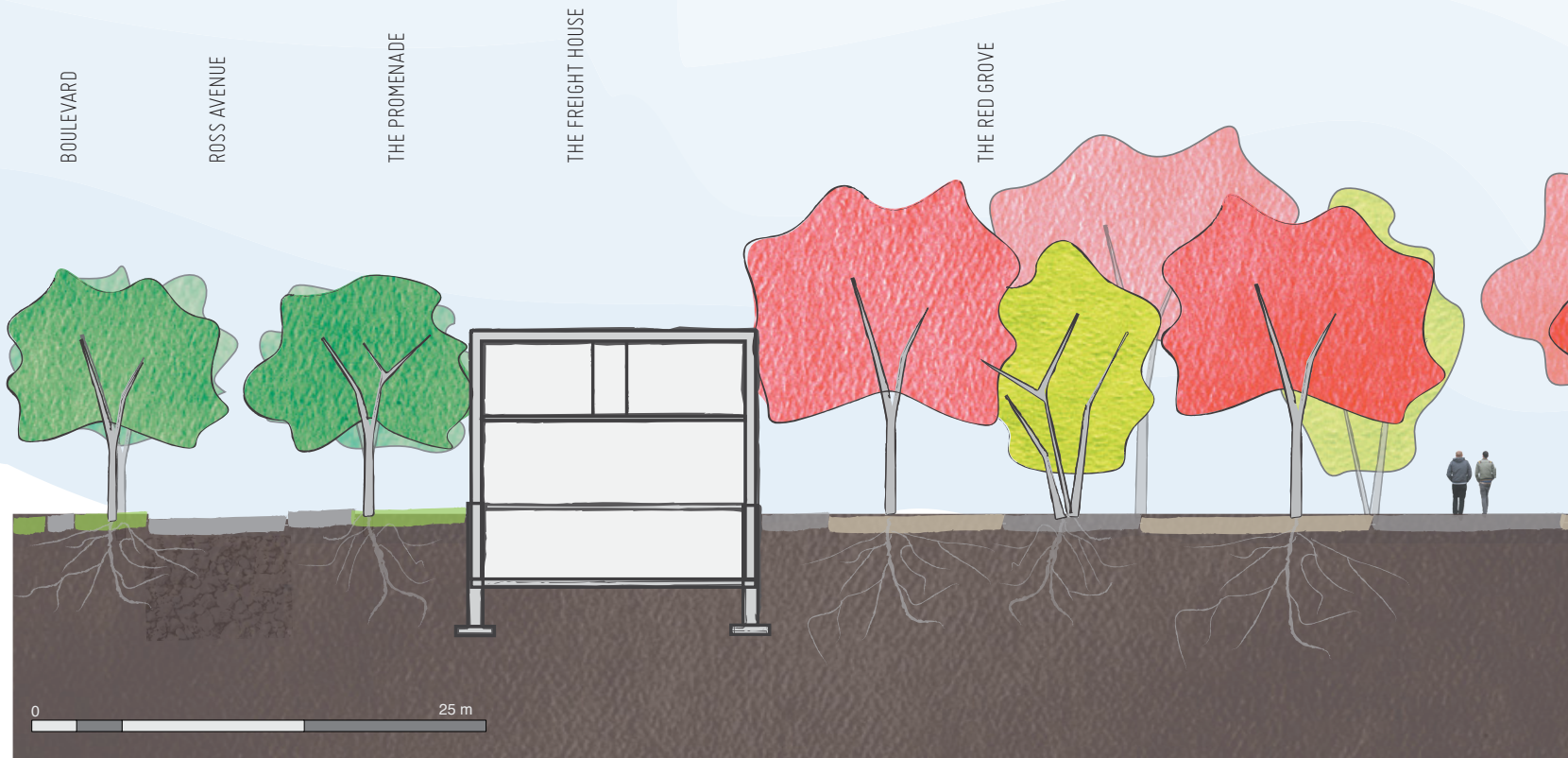
The Red Grove is the entrance to the urban landscape from Isabel Street, which is a high traffic route through the Centennial and West Alexander neighbourhoods. The Red Grove is an extension of the Freight House Forest, with large trees planted in clusters that break through the existing asphalt surface. The species vary from those found in the Freight House Forest, creating distinction in this highly visible area. The Red Grove consists of multi-stem Paper Birch, that have lower growth habits, providing a screen for the pool area, as well as large Fall Fiesta Sugar Maples that act as shade trees, with high canopies. The Sugar Maples are very large trees and provide a bold identity for the front of the Freight House property as they turn vibrant red and

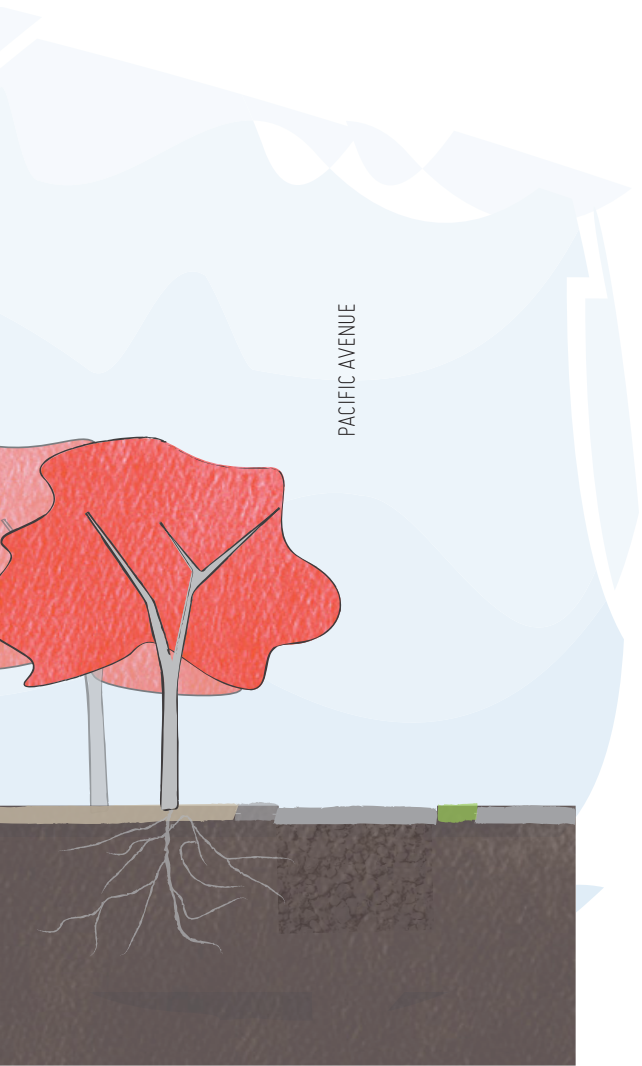
orange in fall. The vibrant red is complemented by the bright yellow of the Paper Birch. Like the Aspen Arcade, the Red Grove spans Isabel street, providing a continuous environment bordering each side of the street with the inclusion of a planted median. The presence of trees and a cohesive design signify a change in context and help to slow traffic by alerting drivers to a pedestrian zone.

The Promenade runs along Ross Avenue, enhancing the presence of the mature elm trees lining the boulevard on the opposite side of the street. The Promenade accommodates the existing, informal pedestrian route, moving people off the street and into the public landscape as it connects the Freight House at Isabel Street and Rossbrook House at Sherbrook Street. Hybrid elm species have been selected to maintain the existing street character. There are several hybrid species that embody a similar stately form to the existing American Elms along Ross Avenue, and are resistant to Dutch Elm Disease which eliminates many mature elms every year. The elms provide consistent repetition along the 3 m (10 ft) wide path and provide an attractive canopy creating an alley that runs from the Aspen Arcade to the Red Grove. The Promenade continues along the front of the Freight House with several trees between parking spaces, along the front deck, as well as a couple of trees incorporated into the wide portion of the deck. The Promenade has a high canopy, maintaining clear sight lines into the park, accommodating the community's safety concerns. The Promenade provides a permeable frame for the landscape, setting it apart from the urban context and allowing the surrounding residents access from any point along the periphery.

# THE RED GROVE & THE PROMENADE

Figure 90. Section Through The Red Grove & The Promenade





NORTH

Figure 91. Plan of The Red Grove

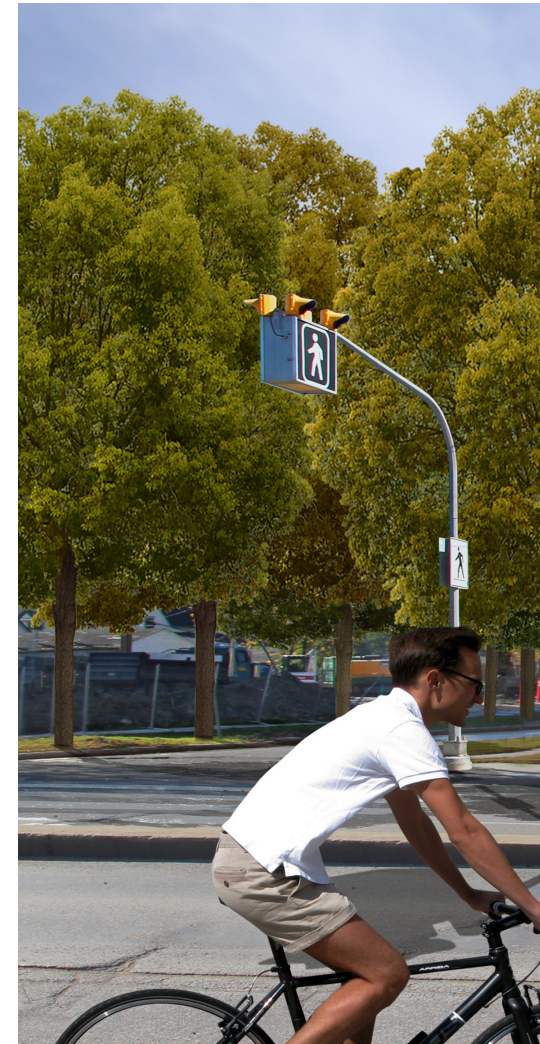


Figure 92. Perspective of The Red Grove

# THE RED GROVE & PROMENADE

Figure 93. Perspective of The Red Grove and The Freight House

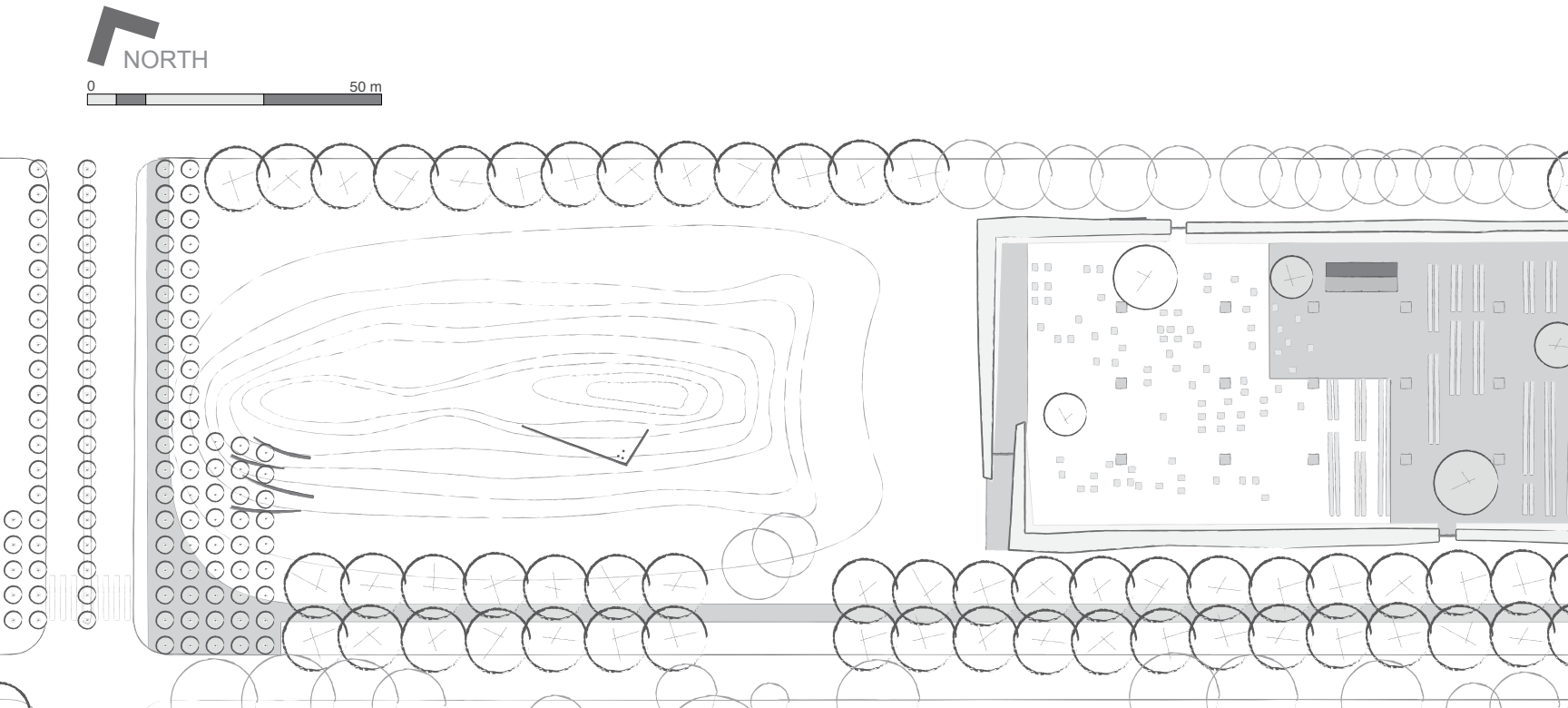
This perspective depicts the Red Grove in early fall when the changing leaves provide an event in the landscape. The view is from the front of the new Immigrant and Refugee Community Organization of Manitoba development, which is included in the design of the Red Grove, and looks across Isabel Street. The large elm trees to the south of the Freight House building establish The Promenade, which runs the length of the site.



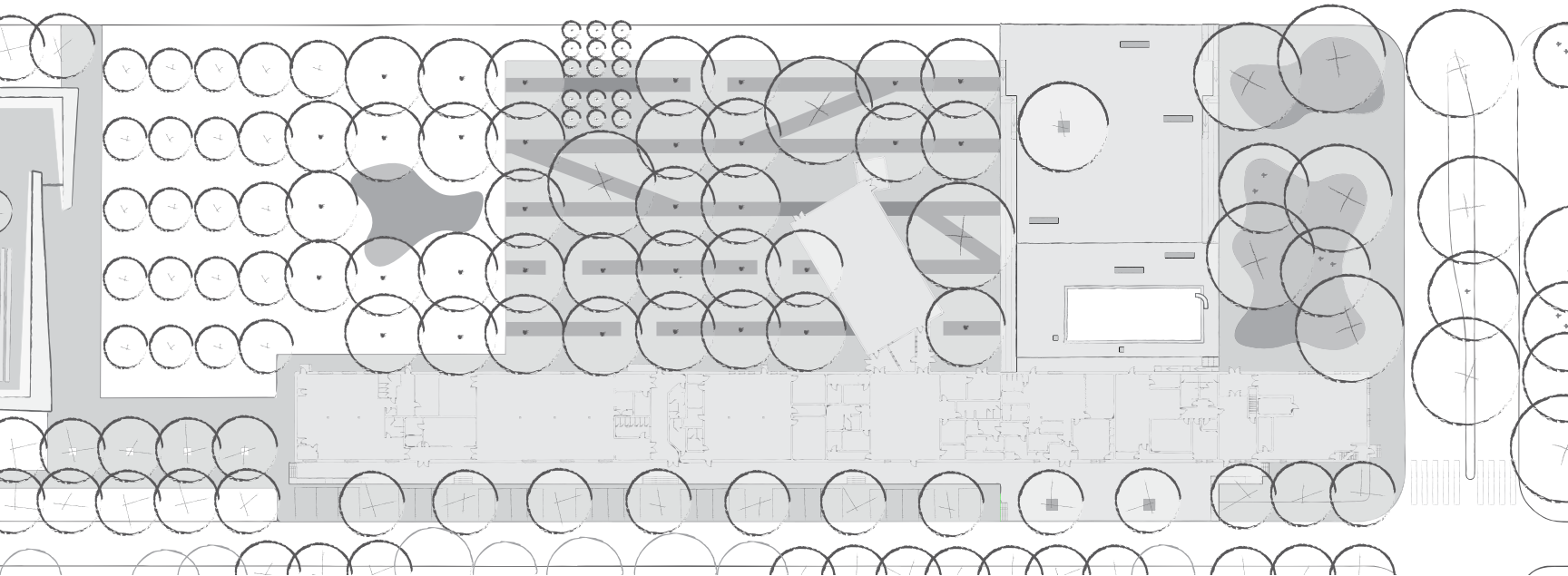


## 6.4 PLANTS & MATERIALS

Figure 94. Site Plan with Vegetation and Material Distinction (Original Scale: 1:500)



The intention of this design is to develop a pragmatic and diverse landscape on the existing Freight House property. The selection of modest, economical, and complimentary materials contribute to the quality of the landscape and its ability to endure over time. Plant materials were selected throughout the development of this design as they provide the architectural structure to the body of the landscape design, as well as providing dynamic character. The plant species were selected according to their inherent physical qualities, hardiness, and level of maintenance. Together, the plants and materials are the fundamental design components breathing life into this comprehensive vision.

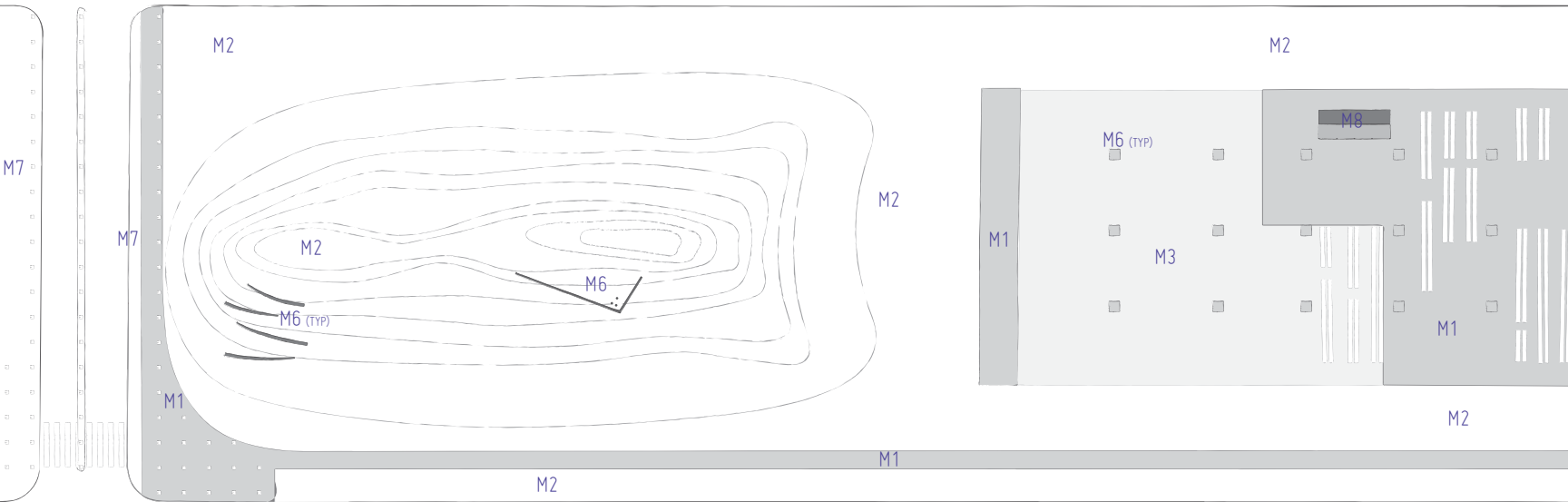


# 6.4.1 MATERIALS PLAN

Figure 95. Materials Plan (Original Scale: 1:500)



0 50 m

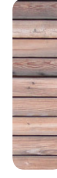




M1. RECYCLED BRICK



M3. CRUSHED SHALE (BASEBALL MIX)



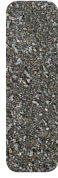
M5. CEDAR DECK



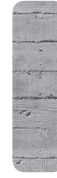
M7. EXISTING CONCRETE



M2. EXISTING TURF



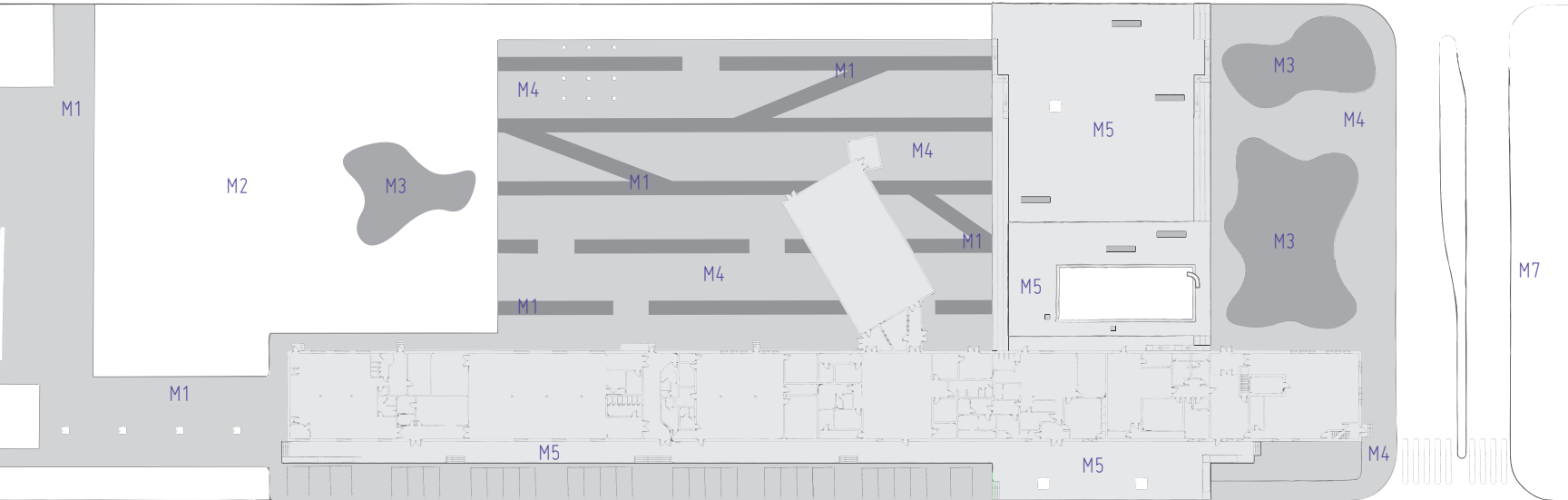
M4. EXISTING & REFORMED ASPHALT



M6. CAST-IN-PLACE CONCRETE



M8. RECYCLED SHIPPING CONTAINERS



## 6.4.2 PLANTING PLAN

Figure 96. Planting Plan  
(Original Scale: 1:500)



**P1. TREMBLING ASPEN**  
*Populus tremuloides*  
height: 15.25 m (50')  
spread: 7.6 m (25')



**P3. FIREDANCE DOGWOOD**  
*Cornus sericea 'bailadeline'*  
height: 1.2 m (48")  
spread: 1.5 m (60")



**P5. OREGANO**  
*Origanum hirtum*  
height: 0.3 m (12")  
spread: 0.36 m (14")



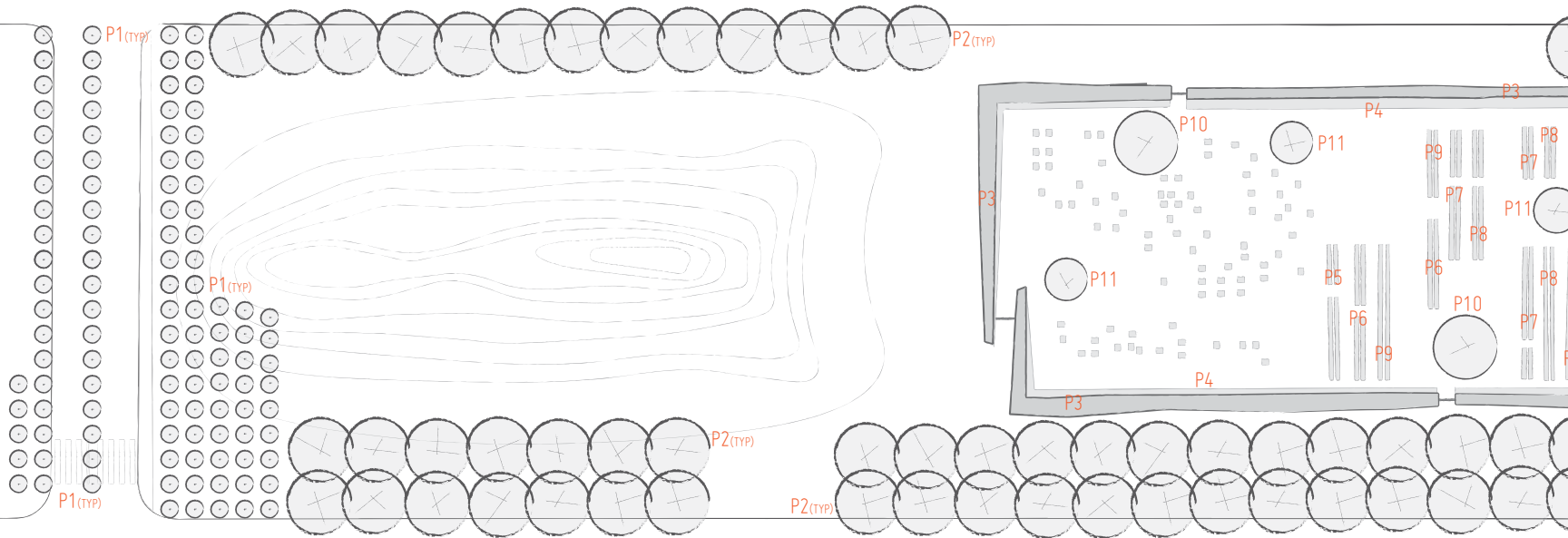
**P2. DISCOVERY JAPANESE ELM**  
*Ulmus davidiana japonica*  
'discovery'  
height: 15.25 m (50')  
spread: 12.2 m (40')



**P4. CREEPING JENNY**  
*Lysimachia nummularia 'Aurea'*  
height: 0.1 m (4")  
spread: 0.6 m (24")



**P6. THYME WEDGEWOOD**  
*Thymus vulgaris*  
'wedgewood'  
height: 0.15 m (6")  
spread: 0.2 m (8")





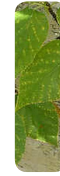
**P7. SOURIS RASPBERRY**  
*Rubus idaeus* 'Souris'  
 height: 1.5 m (5')  
 spread: 1.22 m (4')



**P9. SPEARMINT**  
*Mentha x villosa*  
 height: 0.3 m (12")  
 spread: 0.46 m (18")



**P11. HONEY CRISP APPLE**  
*Malus* 'Honey crisp'  
 height: 6.1 m (20')  
 spread: 6.1 m (20')



**P13. PRAIRIE DREAM PAPER BIRCH**  
*Betula papyrifera* 'Varen'  
 height: 12.2 m (40')  
 spread: 9.1 m (30')



**P8. NORTHSKY BLUEBERRY**  
*Vaccinium corybosum*  
 'Dwarf'  
 height: 0.6 m (24")  
 spread: 0.6 m (24")



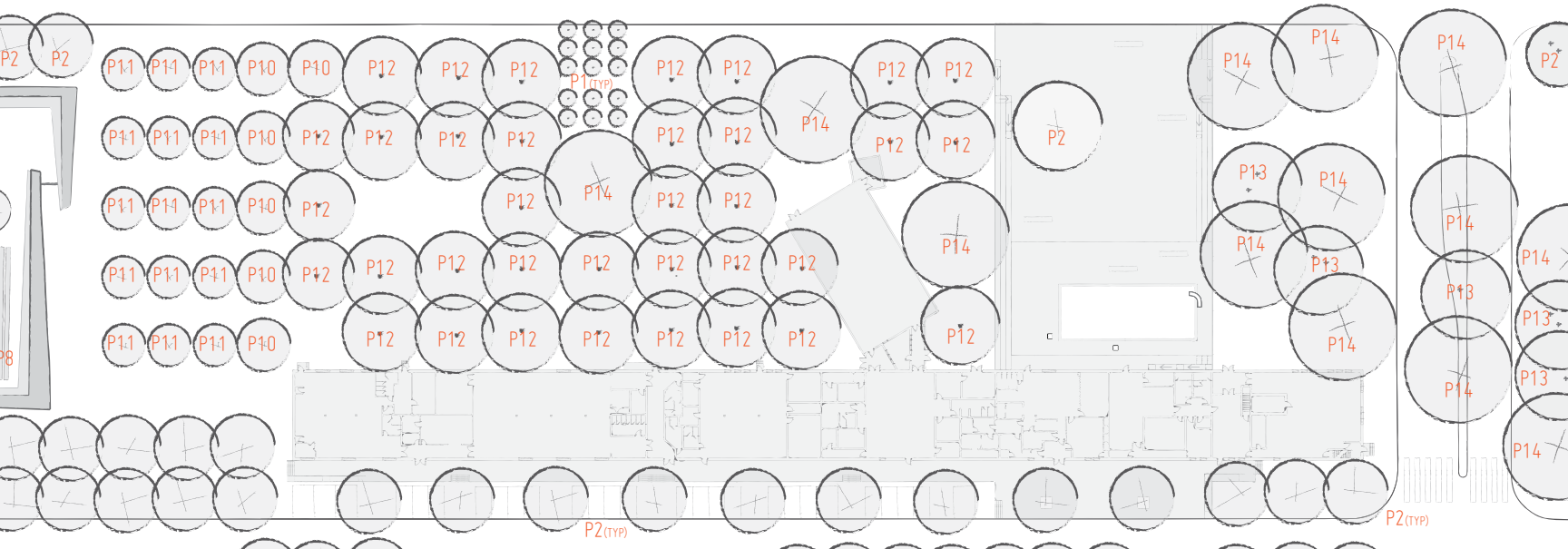
**P10. EARLY GOLD PEAR**  
*Pyrus ussuriensis*  
 'Early gold'  
 height: 7.6 m (25')  
 spread: 6.1 m (20')



**P12. RED PINE**  
*Pinus resinosa*  
 height: 15.25 m (50')  
 spread: 7.6m (25')



**P14. FALL FIESTA SUGAR MAPLE**  
*Acer saccharum* 'balista'  
 height: 18.3 m (60')  
 spread: 18.3 m (60')



Plant information: (Farrar, 1995), (Jefferies nurseries limited catalogue, 2014), Net PS Plant Finder Tool- Online Database for local nurseries.

# SECTION SEVEN PROJECT DEVELOPMENT & CONCLUSION

“The commons represent both the natural systems (water, air, soil, forests, oceans, etc.) and the cultural patterns and traditions (intergenerational knowledge ranging from growing and preparing food, medicinal practices, arts, crafts, ceremonies, etc.) that are shared without cost by all members of the community.”

EcoJustice Dictionary (2008)

## 7.1 LEADERSHIP & DEVELOPMENT

The contextual research driving the proposed design for the Freight House grounds led to a site-specific design addressing the social, economic, and environmental circumstances in the West Alexander and Centennial neighbourhoods. The proposed design is both pragmatic and pertinent with substantial potential to contribute to the revitalization of the area. The success of an urban landscape development and the greater goal of neighbourhood revitalization both require the commitment and investment of community stakeholders. Neighbourhoods such as Centennial and West Alexander engage a diverse assembly of stakeholders, including agencies in the provincial and municipal governments, community institutions and organizations, as well as individual residents. Every stakeholder and beneficiary has the ability to contribute to the

initiation and success of a project such as this urban landscape at the Freight House, however leadership and key areas of collaboration are required to usher a concept into reality. The primary stakeholder in the initiative to redevelop the Freight House property is the municipal government. The City of Winnipeg is the current owner of the property and is also responsible for the maintenance and day to day running of services on the site. The City of Winnipeg has invested considerable time and money in the development of the design guidelines for the Health and Wellness District, which have been passed into by-law. These design and development guidelines drive thematic projects in the Centennial and West Alexander areas as the City and community organizations seek to develop a distinct environment and a more vibrant, cohesive community. The proposed design for the Freight House grounds contributes to the overarching intention of community revitalization and would require approval and financial backing from the City to establish a long-term development commitment for the local community. The Freight House design proposal would require the City of Winnipeg to champion the financial requirements for the development of the property as a contribution to this collaborative initiative.

The Central Neighbourhoods Development Corporation (CNDC) is committed to improving all aspects of the Centennial, West Alexander, and Central communities through the coordination of associations, organizations, stakeholders, and government. The CNDC develops proposals for projects that are tailored to community needs and draws on their diverse connections and collaborations to coordinate projects contributing to a holistic vision of community health (“Central neighbourhoods development corporation”, 2014). The jurisdiction of the CNDC and their capacity to bring government agencies and funding together with non-profit groups and private investment, places them in the ideal position to undertake the coordination of this proposal for the Freight House property. The CNDC could provide strong leadership to support the collaboration needed to strengthen and unite the disparate community sects in these neighbourhoods.

There is a high concentration of community organizations and agencies at work within the Centennial and West Alexander area. These organizations adhere to diverse mandates that primarily focus on a variety of social services catered to specific demographics. While the majority of organizations are potential beneficiaries of the proposed landscape redevelopment, several hold the potential to be major stakeholders in the development and operations of the proposal for the Freight House and the associated programming. The design proposal identifies Rossbrook House and multiple occupants in the Freight House, such as the Central Community Centre, the Boys and Girls Club, and Freight House Early Learning and Care as influential agents given significant consideration in the formal and programmatic design proposal. Rossbrook House and the Immigrant and Refugee Community Organization of Manitoba (IRCOM), which is located across Isabel Street from the Freight House, are the most physically connected and programmatically relevant organizations in the area. Both organizations support multiple programs throughout Centennial and West Alexander and have garnered support and respect throughout the city for their long-running and successful work. Rossbrook House and IRCOM have the ability to rally the community behind the proposal for the Freight House and develop inclusive programming to maximize the use and impact of the landscape. One of the primary principles driving the design proposal is the development of a more cohesive community interface; leadership from these potential stakeholders has the ability to garner interest and collaboration from the multitude of organizations throughout the area.

## 7.2 STRATEGIC LESSONS

The case studies examined in section two of this document highlight strategies and concepts that have created successful community-driven landscape projects while also outlining challenges and unique circumstances facing these projects. A correlation of the contextual analysis of the West Alexander and Centennial neighbourhoods and the relevant strategies and lessons from the case studies illustrates several factors and management strategies that could contribute to the overall success of the proposed re-development plan for the Freight House grounds.

Many urban re-development and community garden projects struggle to secure property and the appropriate zoning of urban land, as owners often have their sights set on future development and greater profits. Unlike the South Central Farm in Los Angeles, the Freight House property is owned by the City of Winnipeg and is designated for parks and recreation. Support and long-term commitment from the City is a necessity in the development of the community garden. The Garden offers residents the ability to empower themselves through food production, promoting healthy lifestyles and defraying the cost of healthy food. The Garden also offers a venue and activity to support social connections, which is particularly important for the large population of recent immigrants in the area and the disparate cultural sects within the community. The sweat equity, commitment, and emotion residents invest through their participation in the community garden needs to be recognized and secured at the highest level. This requirement is highlighted in the betrayal felt by the South Central gardeners who took ownership of their garden plots to empower their community only to have it demolished several years later (Kennedy, 2008).

The largest programmatic components of the proposed design are The Garden and The Orchard, which are focused on communal food production. These areas demand functionality as well as community access along with individual ownership. The design for The Garden is derived from functionality combined with flexibility. Several site factors and lessons from case studies influenced this focus and the proposed framework. The Prinzessinnengarten is a prime example of a flexible garden displaying mobility and modularity through the use of easily acquired, recycled components (Prinzessinnengarten, 2014). The Prinzessinnengarten model offers a solution to the environmental factors, such as lead contamination, that demand independence from the existing ground. The flexibility found in both the Prinzessinnengarten and this proposal accommodates varying levels of participation through flexible spatial arrangements. The permanent grid of water, the primary resource, will influence the spatial arrangement of the garden plots based on functionality. The International Gardens throughout Germany highlight the importance of functionality and individual ownership as primary influences for garden organization and design. The International Gardens are intended to bring diverse cultures together to strengthen intercultural relations within larger communities (Müller, 2007). These gardens consist of simple plots that gardeners define with their individual designs and decorations. Unlike the Prinzessinnengarten model, the International Gardens embody a sense of ownership that encourages commitment and sweat equity in order to gain greater yields. The sense of ownership over individual plots and the focus on simple, functional gardens have enhanced the success of this project. The functionality of the garden is the primary design consideration, creating an impartial environment that does not cater to any particular culture but allows individuals to incorporate their traditions and preferences within their own plot (Müller, 2007). The nonpartisan diversity found in the International Garden strikes a balance that encourages diversity and shared knowledge in a functional and equitable environment.

Landscapes offer a venue for interaction with the environment as well as a venue for events that celebrate seasonality or cultural events. All of the case studies investigated throughout this project depict the importance of community events and celebrations that incorporate a community landscape. The South Central Farm was a venue for cultural celebrations for the predominantly Latin American population. It served as a marketplace for the gardeners and local residents (Kennedy, 2008). The Prinzessinnengarten houses a small restaurant that is supplied by the garden's produce, as well as hosting educational events on both gardening and the distinctive business model behind the garden development (Prinzessinnengarten, 2014). The International Gardens support community gatherings for diverse cultural events as well as providing a venue for community meals and harvest celebrations (Müller, 2007). The Mel Johnson School Gardening Project portrays the importance of community events as fundamental factors in the success of the gardening program. Unlike the majority of community-driven landscape projects, the Mel Johnson School Gardening Project does not have a single, communal property (Growing Local Productions & Stieffenhofer, 2010). This project has managed to unite a community and initiate education and a common interest in gardening despite its reliance on satellite garden plots located at student's homes throughout the town. The school-initiated program incorporates harvest celebrations, community meals, and hands-on educational events that have engaged the greater community (Growing Local Productions & Stieffenhofer, 2010). The Mel Johnson Gardening Project depicts how the participation of an individual can strengthen the social and physical connections of an entire family or household to the community. The consolidation of urban design and social programming provides a reciprocal relationship that has the potential to support community revitalization through a holistic and tailored strategy. The success of the proposed landscape at the Freight House hinges on a holistic and site-specific approach to creating a cohesive, vibrant community.

## 7.3 CONCLUSION

The Centennial and West Alexander neighbourhoods have been the focus of revitalization efforts by grassroots organizations and government agencies for decades. The area has seen significant change in both its physical environment and social structure, however, the area has not managed to fully develop into a safe and thriving community.

A detailed investigation of Centennial and West Alexander's social, economic, and environmental context contributed to a comprehensive analysis of the area. The extensive analysis facilitated the identification of programmatic elements that could provide holistic community support by enhancing the existing environment and supporting the efforts of select community organizations active within the area. The primary intention of this design practicum was to develop a pragmatic design that is tailored to the needs of the area. The decision to utilize the existing landscape as a foundation for the design intervention established a framework for a pragmatic design. This also allowed existing landscape features to be maintained and enhanced.

The Freight House property was an ideal site to develop into a focal point within the community through a bold design and the introduction of more encompassing landscape programs. Features such as the hill and the pool, as well as many of the healthy and mature trees were preserved and enhanced through the design. Landscape archetypes contributed to the design of a well-defined environment with great variation in spatial qualities. This focal point in the landscape network integrates the surrounding context but is a departure from the typical parks and green spaces which lack experiential qualities and character.

The disjointed neighbourhood context in the Centennial and West Alexander area benefits from the introduction of a cohesive landscape that engages the existing landscape network. The overall design consists of a series of distinct spatial environments. The Red Grove, The Pool Deck, Dufferin Passage, Freight House Forest, The Orchard, The Garden, Poison Point, Rossbrook Terrace, and The Aspen Arcade all embody a clear character and spatial quality that come together to create an intriguing and varied experience. The spatial qualities provide cues for way finding and traffic through and around the site. Important connections are emphasized and transitions between programs and zones are constructed.

The development of a large community garden on the Freight House property is the most significant programmatic addition proposed in the site design. The large, central garden is a room within the landscape and provides the resources required by local gardeners. Research was conducted to understand the community garden movement and the benefits of successful projects. Several case studies informed the direct application and design of the garden as it pertains to the West Alexander and Centennial community. The garden is intended to provide a venue for social interaction, education, and the promotion of self-sufficiency through food production. The presence of a substantial community garden addresses and supports the social and economic challenges faced in the area and provides an activity for all age groups and ethnicities.

The success of this design for the Freight House property is its mitigation of existing challenges, both social and environmental, as it defines a focal point within the community through a site-specific and pragmatic intervention. This design practicum accounts for the on-going initiatives in the area and provides a concept and vision for the holistic revitalization of the West Alexander and Centennial communities.

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