THE MUSEUM EVOLVED:

AN INTERPRETIVE CENTER FOR WINNIPEG'S EXCHANGE DISTRICT

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The Museum Evolved: An Interpretive Center for Winnipeg's Exchange District

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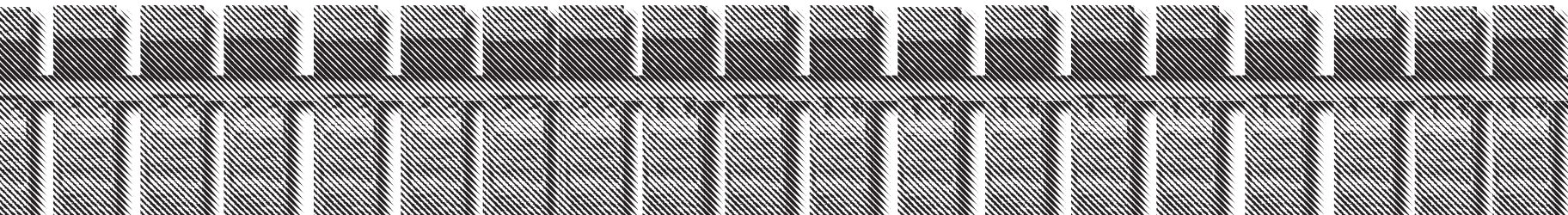
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Abstract

This project involved the adaptive reuse of Maw Garage at 112 King Street. The building was transformed into an interpretive centre for Winnipeg's Exchange District. As museums are faced with challenges of being relevant in today's context, museum planners have started to shift their attention toward new approaches for the design of these environments. The purpose of this project was to investigate the evolving nature of the museum, and to determine how its role in society could be modified to better accommodate its audience's needs.

Society's understanding of heritage in regard to the way we interpret, relate to, and connect with objects, each other, and environments has changed. A thorough review of literature resulted in a broad understanding of post-museum, constructivist learning, and public space theories. Combined with knowledge gained from the analysis of three precedents and programming, these theories enabled the development of a contemporary museum that challenges stereotypical ideas of the museum.

This design proposal illustrates one possible way in which post-museum, constructivist learning, and public space theories could be used to design a new museum. Although the solution presented here is specific to Winnipeg's Exchange District and the Heritage Winnipeg client, conceivably, the same theories could be used to design interpretive centres elsewhere in North America.

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CHAPTER 1
INTRODUCTION
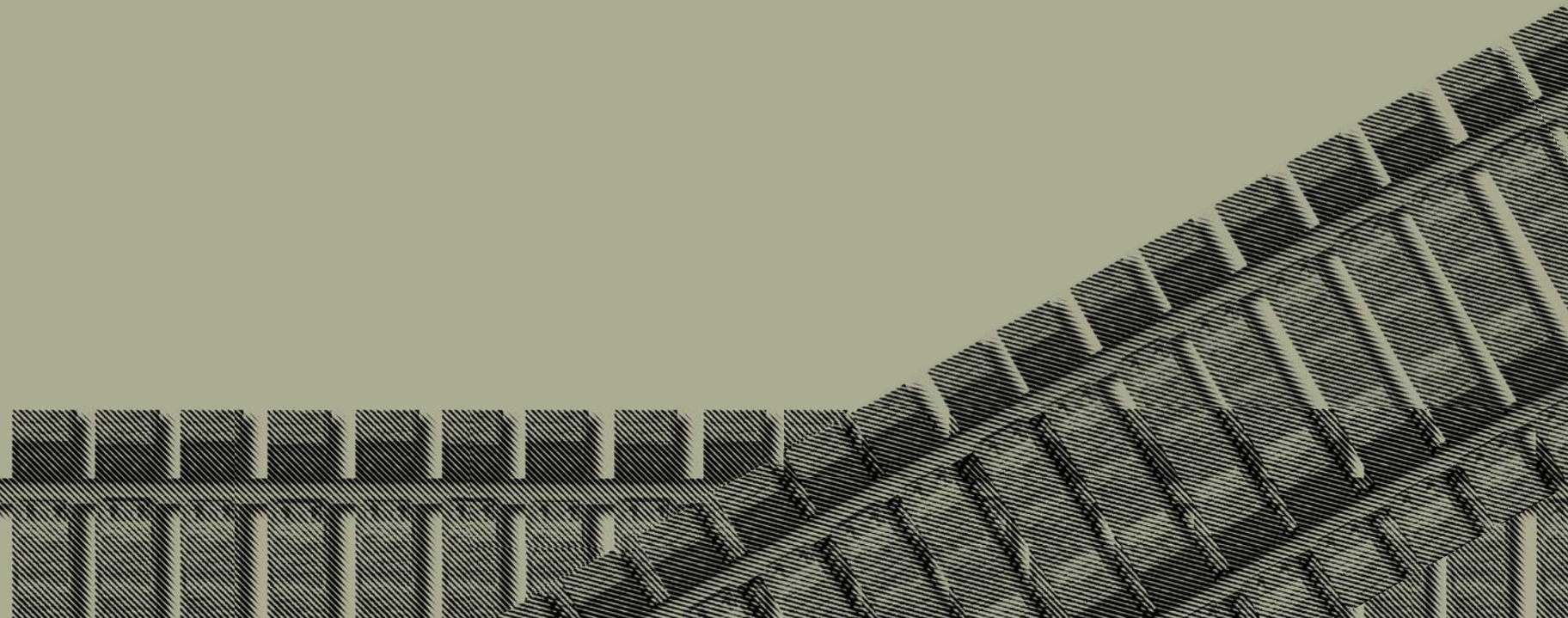
1.1 Project Scope

This project involves the adaptive reuse of 112 King Street (Maw Garage) in Winnipeg's Exchange District to form an interpretive center. The selected site, 1 storey high and measuring approximately 18,000 square feet is located in the heart of the District, directly across from Old Market Square.

Interpretive center is a term that symbolizes a new kind of museum whose aim is not "to collect, conserve and study objects; [but] rather ... enable visitors to gain a better appreciation of the site's natural and cultural values" (Izquierdo Tugas, Juan-Tresserras, Matamala Mellín, & Baeyens, 2005, p. 31). The museum is in a state of transition, its role in society is being re-evaluated to better accommodate its audience. Throughout this document the terms museum and interpretive center will be used interchangeably as museums can cover a wide range of environments, such as galleries, heritage sites, and interpretive centers.

Our understanding of heritage in regard to the way we interpret, relate to, and connect with objects, each other, and environments has changed. The museum has had to re-examine its role in society as a result of this shift. The analysis will begin with this idea, looking at different ways museums can be reworked to better suit the audience's needs. The three main issues arising are as follows: (a) moving away from the modernist museum to the post-museum, (b) developing an environment that implements constructivist learning theory so as to get participants actively involved, and (c) examining how the museum can be simultaneously developed into a public gathering space so as to broaden the audience base. In this way, the space will provide people with the opportunity to learn about the history of the Exchange District but will also serve as a social center where fundraising events could take place, lectures could be held, or simply where individuals could gather together in an open and accessible environment. This interpretive center is not meant to replace other facilities but complement what is already offered. According to a study done by University of Manitoba architecture graduate student Shelly Bruce, "78% were in favour of developing an interpretive center [in the Exchange District] and (44%) stated it would be very likely that they would use the facility" (1999, p. 141).

1.2 Project Objectives

The goals of this project include:

• foster core area redevelopment by renovating a historic building

• examine how recent museums have been designed to better accommodate today's audiences

• demonstrate through design how constructivist learning theory can be applied to the interior environment in order to help facilitate active participation and encourage social interaction

• investigate how museums can support a broader social use of its space

1.3 Questions of Inquiry

The following questions were the catalyst for this project:

1) With the evolving view of the museum, in what ways are its interior environments adapting?

2) How can interior design further provoke awareness about heritage conservation issues?

3) How can the design of an interpretive center support the development of an active public gathering space?

1.4 Client

The client for this project is Heritage Winnipeg, in partnership with Artspace. Heritage Winnipeg is a not for profit organization that advocates for the "restoration, rehabilitation and preservation of Winnipeg's built environment."(Heritage Winnipeg, 2012). A large focus of the organization's efforts has been in the Exchange District because much of Winnipeg's history is based on the former activity in this area. Heritage Winnipeg has previously expressed interest in the creation of an interpretive center in the Exchange District to further educate the public and promote the preservation of Winnipeg's historic buildings (S. Bruce, 1999, p. 103).

Artspace Inc. is located in the Gault Building, at 100 Arthur Street, within view from Maw Garage. Artspace is a not for profit organization that supports the development of arts and culture in Manitoba. It is an "arts service organization that supports... the Manitoba arts and cultural community at large with administrative services and the provision of affordable creation, production, exhibition and administration space" (Artspace Inc., 2013). While

Artspace will be in partnership with Heritage Winnipeg, providing financial and managerial support, they will not be permanently based at the interpretive center. However, a hotelling spot will be made available in the office space.

1.5 Contextual Issues/Trends

> Our national historic sites are vital to our history, our identity as Canadians, and our tourism industry. By investing in them ... we ensure that they will continue to help support local economies and encourage more Canadians to explore and discover our national heritage (Government of Canada, 2011b, para. 5).

In spite of the national recognition, the Exchange District is being overlooked as a vital element that made Winnipeg what it is today. This stresses the importance of supporting the development of places where individuals can learn about the history of their city's heritage. Currently, the Exchange District is being disregarded by individuals and little by little, more sites are being demolished without objection by the general public. Heritage Winnipeg declared this as the primary problem at their Annual General Meeting in July 2012, stating that it is due to lack of public education and awareness on these issues. Consequently, the organization is interested in finding new ways of attracting public interest on heritage conservation issues. This further supports the need for the development of a museum-like environment that would not only increase an individual's knowledge on the Exchange District, but would also have a social aspect to its programming, promoting participants to actively participate in public discourse and advocacy. The center would support this through the implementation of a multi-purpose space that could hold fundraising events, presentations, lectures, and conferences to raise awareness. Holding these events on common ground, visible and accessible to the everyday public could result in a stronger connection between people and Winnipeg's heritage elements, benefiting ongoing efforts to preserve the area.

In 2011 the Government of Canada announced an investment in the Association of Manitoba Museums, as it is dedicated to "ensur[ing] that Canada's rich heritage is preserved for future generations" (Government of Canada, 2011a, para. 3). This funding is important in supporting

the Manitoba museum community so as to ensure that Manitoba heritage is appropriately preserved and presented (Government of Canada, 2011a, para. 5). The importance of heritage sites is highlighted by the Federal Environment Minister Peter Kent's comment, stating that our government is dedicated to "inspir[ing] Canadians to develop strong and meaningful connections with Canada's national treasures" (Government of Canada, 2011b, para. 5). The government has also declared that it is in support of investing and building lasting relationships with companies that operate such venues. This suggests heritage conservation has a significant role in forming a strong sense of place between museums and its community.

These ideals are also supported in Winnipeg Plan 2020 Vision, which stresses that the City of Winnipeg is dedicated to promoting downtown revitalization and heritage conservation (City of Winnipeg, 2011, p. 12). This is accomplished through the use of incentives, protective designation, and enforcement of regulations.

Some of the other key trends outlined in Winnipeg Plan 2020 Vision are:
• "promote adaptive reuse of heritage buildings,
• integrating heritage conservation into the broader context of community,
• supporting the implementation of heritage resource education programming" (City of Winnipeg, 2011, p. 51)
• "enhancing the value of the Exchange District as a National Historic Site by encouraging the development of a mixed-use cultural district" (City of Winnipeg, 2011, p. 13)

CHAPTER2

SITE

2.1 Exchange District History

The heritage movement within Winnipeg was set off by the demolition of a number of old warehouses and Winnipeg's 'gingerbread' city hall to make way for the current Civic Centre Complex. This led to a wave of public interest in where Winnipeg was heading, as it became clear that getting rid of the old and starting fresh did not lead to "the much-anticipated stimulative effect" (McDowell, 1988, p. 3). With a great deal of public interest shown for the conservation of historic buildings, city council passed By-law 1474/77, "The Historical Buildings By-law" in February of 1977. This resulted in the protection of heritage structures deemed historically significant. In 1978, By-law 2032/78 was established listing the criteria for evaluating the significance of a building. The organization Heritage Winnipeg was formed the same year after the province set aside half a million dollars to do so. It has been proven that "historic preservation adds immeasurably to the quality of our urban environment and that it makes good business sense" (McDowell, 1988, p. 7). Heritage Winnipeg was tasked with overseeing heritage issues in the Exchange District and the rest of Winnipeg while reinforcing their importance to the public.

Winnipeg's Exchange District is the "only designated historic district in Manitoba" (Lunn, 2001, p. 3) and was classified as a national historic site by the Minister of Canadian Heritage on September 27, 1997 (Heritage Winnipeg, 2010a). According to guidelines set out by the Historic Sites and Monuments Board of Canada (HSMBC), a historic district is defined by having a "special sense of time and place through buildings, structures, and open spaces" (Lunn, 2001, p. 2). The Exchange District was classified as a national historic site because

> it illustrates the city's key role as a centre of grain and wholesale trade, finance and manufacturing in the historically important period in western development - between 1880 and 1913, the period during which Winnipeg grew to become the gateway to Canada's West and the region's metropolis. Further the district ... contains a range of architecturally significant built resources which speak to the city's key economic role in the West and the collective character of these built resources is distinctive and relatively intact (Lunn, 2001, p. 8).

In the Commemorative Integrity Statement on the Exchange District, the Government of Canada's three goals for national historic sites are listed as:

•"foster knowledge and appreciation of Canada's past
•ensure the commemorative integrity of national historic sites ... by protecting and presenting them for the benefit, education and enjoyment of this and future generations
•encourage and support the protection and presentation by others of places"(Lunn, 2001, p. 2).

The Exchange District consists of a twenty-city block area containing approximately 150 heritage buildings (Heritage Winnipeg, 2010a). The boundaries of the Exchange District are illustrated in Figure 2.3.1 (p. 14). Protection and presentation of these areas are of top priority as without "protection there can be no historic site to be enjoyed and without presentation there can be no understanding of why the site is important to our history and hence, to all, Canadians" (Lunn, 2001, p. 4). To support this, I plan on developing an interpretive center in the Exchange District to further enhance knowledge on the history of the Exchange through a museum-like environment coupled with a public

gathering space in an attempt to get a broader audience involved. The center will encourage public discourse, attempting to get citizens more actively involved in advocating for the conservation of buildings which they feel are meaningful.

The history of the Exchange District is key in understanding how it has developed into the unique historic district we see today. Railways were the pivotal factor in Winnipeg becoming a hub of commercial activity because without them "agricultural exploitation of the west was impossible" (Artibise & National Museum of Man (Canada), 1977, p. 24). Initially, the main railway line was supposed to cross through Selkirk but due to many petitions by the people of Winnipeg, a negotiation was made and in 1881 it was settled that the main route was to go through Winnipeg. As a result of this activity, Winnipeg attracted large amounts of settlers to the area. The railway was completed in 1885 and "for almost three decades following ... the city of Winnipeg enjoyed a level of growth and prosperity that is unequalled in the history of Canadian urban development" (Artibise & National Museum of Man (Canada), 1977, p.

30). Winnipeg was in a favorable position as it did not just become a thoroughfare for the movement of goods. Rather, it was established as a "point of transshipment" meaning that "it was cheaper to ship goods to Winnipeg, store them, and ship them onwards to retail outlets than to ship them directly to western retailers" (Lunn, 2001, p. 24). By 1890, Winnipeg became the center of Canadian grain trade and as a result, required financial institutions to support growth; as began the development of numerous bank buildings on Main Street, which became known as Bankers Row. Winnipeg became known as 'Chicago of the North', as it was one of the fastest growing cities at the turn of the century (Heritage Winnipeg, 2010b). In 1904, a CPR spur line was constructed into the heart of the Exchange District, furthering development of wholesale trade. Midland Railway followed and also entered the district between 1910 and 1912 (Artibise & National Museum of Man (Canada), 1977, p. 62). The key themes that lead to the rapid development of the Exchange District were: grain trade, finance, wholesale/manufacturing, architecture, civic development, and labour(S. Bruce, 1999, p. 55). These will be the main themes showcased in the interpretive center.

A number of factors led to the decline of activity in the Exchange District. The opening of the Panama Canal in 1914 caused a decrease in the distribution of goods as it became cheaper to ship on water as opposed to land. At the same time, the wheat economy lost its momentum, followed by the General Strike on June 21, 1919 which further disrupted economic prosperity, causing the economy to enter a period of recession. Furthermore, Winnipeg lost its key freight-rate advantage as other cities in the West began to grow. Slowly, Winnipeg's days as the hub of distribution began to fade. The stock market crash in October 1929 developed into the Great Depression which further impacted the economy, detrimentally affecting Winnipeg businesses. After time, Winnipeg focused its efforts on developing west of the Exchange around Portage Avenue; resulting in the Exchange District being kept relatively intact. Other reasons include the decline of the economy, the availability of cheap land and Winnipeg's slow growth (Lunn, 2001, p. 25). Consequently, the Exchange District represents "one of the most historically intact turn-of-the-century commercial

districts on the continent" (Heritage Winnipeg, 2010b).

Today, the Exchange District "flourishes as Winnipeg's commercial and cultural nucleus" (Heritage Winnipeg, 2010a). The Exchange District is a colorful part of the city, containing the history and meaning of how Winnipeg came to be and yet, little focus seems to be put on its importance. Through my design I aim to change this by creating a space where individuals can learn about the history of their city and participate in the development of what should happen with the buildings in the Exchange District. "Preserving old buildings contributes to our sense of who we are, where we have come from, and what we are in the process of becoming" (Lorenc, 1988, p. 30).

2.2 Site Selection

The characteristics used when selecting a site were as follows:
• a building that is municipally designated - on the building conservation list
• adaptive reuse site
• easily accessible by walking, cycling, using transit or vehicles
• located along already established routes of pedestrian traffic
• in close proximity to Old Market Square
• highly visible
• access to or in close proximity to a loading zone
• open plan (minimal columns)
• self-contained profile or identity (not a small part of a large building)

The selected site is located in the heart of the Exchange District at 112 King Street. This location is ideal as it is directly across from Old Market Square. This was a principal criteria in site selection as in previous studies, it was found to be the preferred location by 64% of people interviewed (S. Bruce, 1999, p. 115). It stands to feed off the activity that already takes place in Old Market Square, a natural social hub. It is also located near the Exchange District Biz office, at 502 Main Street, which organizes walking tours starting at Old Market Square. Directly adjacent to the site are King's Head Pub and the Peasant Cookery, both of which have a large audience base that fills their patios on a nice evening, adding to the social atmosphere of the area. The site is still in proximity to Winnipeg's cultural district

(Manitoba Museum, Manitoba Theatre, Concert Hall, Pantages Playhouse Theatre, etc) which could result in the piggy-back-effect, where visitors to one facility make their rounds to other attractions. Another key advantage to this site is that the main portion is 66' wide by 198' deep with no columns due the building being constructed with large steel trusses. There is an opportunity to highlight and take advantage of this design feature but they could also be a constraint to the design. The building also has a very human scale as the main floor is level to the ground outside and is 1 storey high, as opposed to some of the large warehouses in the area. The building also has access to a loading zone and is located near bus routes, and a parkade.

2.3 Site Analysis

Context
The Exchange District is bordered by a number of distinct areas which include: the civic center (City hall/administration building/public safety building/civic parkade), educational center (Red River College/ University of Winnipeg (Massey Building on the corner of Princess Street and William Avenue), Chinatown, Cultural Center

(Centennial Concert Hall/Planetarium/Manitoba Museum/ Pantages Theatre/Manitoba Theatre Centre (MTC) Mainstage/ MTC Warehouse Theatre), and waterfront drive. (Figure 2.3.1)

The Exchange District encompasses a 20-city block area which is bordered by Waterfront Drive on the east, Notre Dame and Lombard Avenue on the south, Princess Street on the west and Ross Avenue on the north (Figure 2.3.1).

Land Use
Referring to Figure 2.3.2 (p.16), one can notice that the Exchange District encompasses a broad range of building typologies, including commercial, office, recreational, residential, and industrial.   It is also evident that there is a substantial amount of parking available in the area. Winnipeg has "the most parking spaces per resident... [and] per downtown employee" in comparison to other cities in Canada (Downtown Winnipeg BIZ, 2010, p. 38). Strong residential clusters are developing in the Exchange District, with Waterfront Drive and Princess Street emerging as the top two (The Forks, n.d., p. 3). Due to this residential expansion, the growth is projected at between 13.5%-22.5%

EXCHANGE DISTRICT NATIONAL HISTORIC SITE BOUNDARY
EDUCATIONAL CENTRE
CIVIC CENTRE
CULTURAL CENTRE
WATER FRONT DRIVE
SELECTED SITE
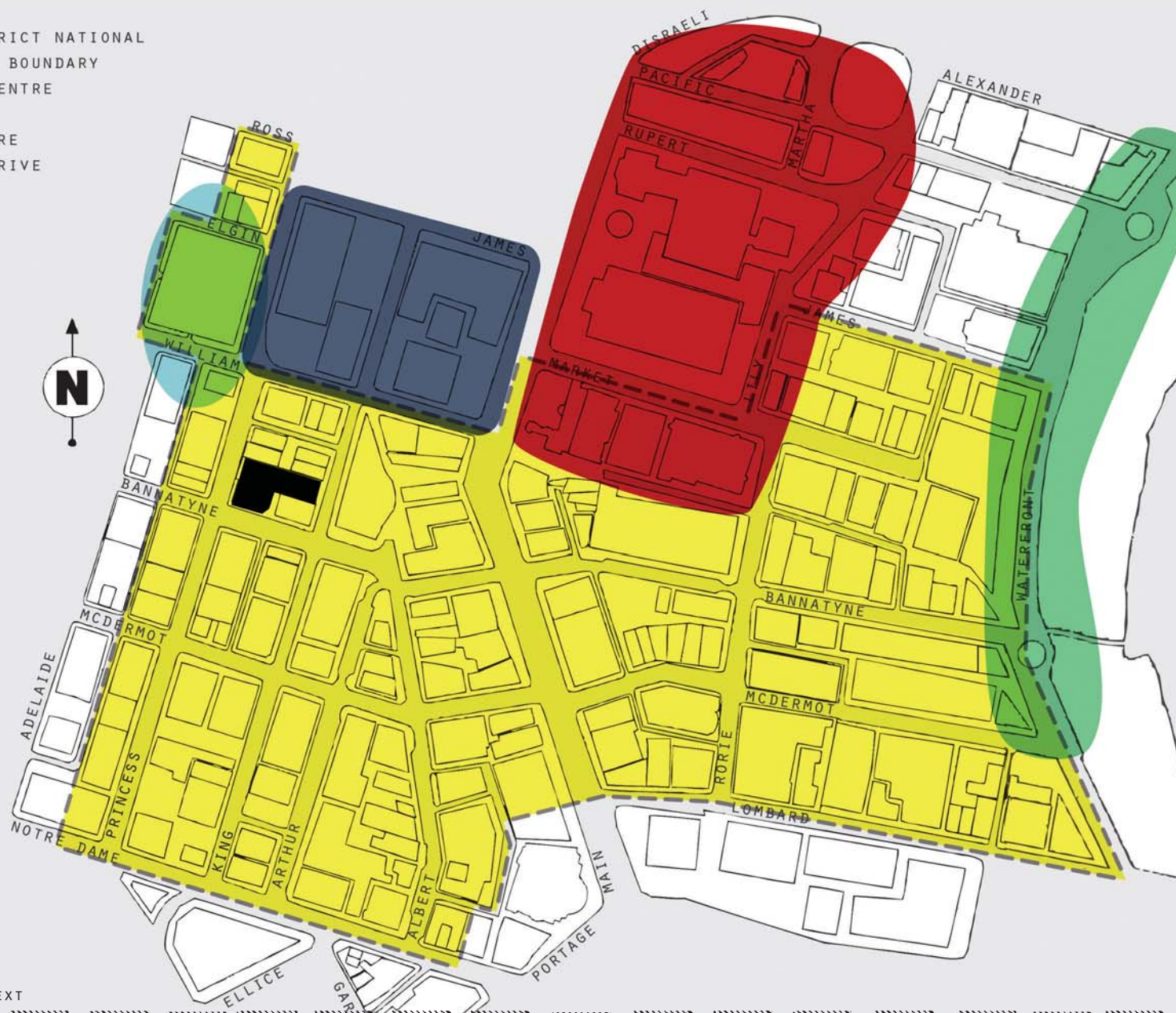
FIGURE 2.3.1 - CONTEXT

from 2006 to 2021 (Downtown Winnipeg BIZ, 2010, p. 10). Even though there is a lack of activity in some areas, the number of vacant properties is less than one may expect. The primary green space in the West Exchange is Old Market Square, while in the East Exchange it is Stephen Juba Park.

The Exchange District is "well-situated for the sorts of quick-service food concepts" as it is in close proximity to a large number of people (MJB Consulting, 2009, p. 25). Immediately north is the Civic Center which employs around three to four thousand people, while to the south is Portage and Main, housing approximately eight thousand workers. Further down Princess Street lies Red River College, having around 2,200 students and staff with an additional 400 expected at the new culinary arts school that opened in 2013 (MJB Consulting, 2009, p. 25). The need for quick-service food is also illustrated in the fact that there are not many options for people in the area. It may also be found that people working just outside the Exchange District around Portage and Main could be drawn into the area if it offered compelling alternatives not available in their area.

Recently, the Exchange District has been undergoing a fair amount of development, particularly in the areas of Old Market Square and Waterfront Drive. There has also been talk of closing down Albert Street to create a pedestrian mall (Martin, 2010), which would provide the much needed connectivity to Old Market Square. The redevelopment of the Union Bank Tower on the corner of Old Market Square will provide the area with much more activity as it is now home to Red River College's Paterson Globalfoods Institute, a culinary arts school/student residence. A number of newly developed residential units have also been constructed at 123, 110, and 230 Princess Avenue and 283 Bannatyne, all of which are located in close proximity to the selected site, adding to the social activity of the area. These developments will act as potential catalysts in activating the Exchange District into further becoming a lively social hub.

LEGEND

- COMMERCIAL
- EDUCATIONAL
- GREEN SPACE
- HOTEL
- INDUSTRIAL
- OFFICE
- PUBLIC BUILDING
- RESIDENTIAL
- VACANT PROPERTY
- SURFACE PARKING
- PARKADE
- SELECTED SITE
- QUICK-SERVICE FOOD

N
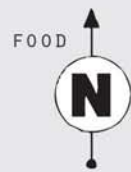
FIGURE 2.3.2 - LAND USE

Circulation

The major transportation routes illustrated on Figure 2.3.3 are: Main Street, Portage Avenue, Disraeli Freeway, Princess Street, King Street, William Avenue, Notre Dame Avenue, and James Street. The daily traffic volumes of the following streets are:

• Main Street: 63,600 -68,500 vehicles per day
• Princess Street: 13,900-17,300 vehicles per day
• King Street: 8,900-18,700 vehicles per day
• William Avenue: 9,200 vehicles per day
• Notre Dame Avenue: 8,700 vehicles per day
• James Street: 8,500 (Urban Edge Consulting, 2008, p. 19)

Main Street is also the primary hub of transit activity, with more than 72,000 workers travelling downtown everyday (Downtown Winnipeg BIZ, 2010, p. 2). Main Street is also what visually and physically divides the West Exchange from the East Exchange. The Downtown Spirit Bus is a free shuttle that travels around downtown during office hours and shortened weekend hours to provide individuals with another means of transportation. An alternative is the River Spirit water taxi, which operates during the summer months, regularly making stops at its eight docks along the Red and Assiniboine Rivers, with one of the stops located at Stephen Juba Park.

The West Exchange has shown to have a larger proportion of pedestrian activity, Albert, Arthur, King, Princess, McDermot, and Bannatyne being highlighted in Figure 2.3.3. Princess and King Streets were found to be the most significant, being classified as a "major arterial pair of roadways" (Urban Edge Consulting, 2008, p. 22). Whereas, in the East Exchange, Rorie and Waterfront Drive were the only ones found to have significant pedestrian counts (Urban Edge Consulting, 2008, p. 20). As for cycling activity, the expert and novice bike routes are illustrated on Figure 2.3.3.

Walking is the primary mode of transportation used by people living in the Exchange District, followed by driving, with cycling and public transit having equal percentage (City of Winnipeg & Statistics Canada, 2006) (Figure 2.3.3). With walking being the main activity, it would be beneficial to take this into consideration, locating the interpretive center on an already established route of pedestrian activity.

Legend

- ▶▶▶ WINNIPEG TRANSIT
- ● MAJOR TRANSIT NODE
- ≈≈≈ MAIN TRAFFIC
- ••••• PEDESTRIAN ROUTES
- ～～～ WATER BUS ROUTE
- ■ WATER BUS DOCK
- ••••• BIKE LANE
- ◀◀◀ DOWNTOWN SPIRT
- —— UNDERGROUND WALKWAY
- ■ SELECTED SITE

N
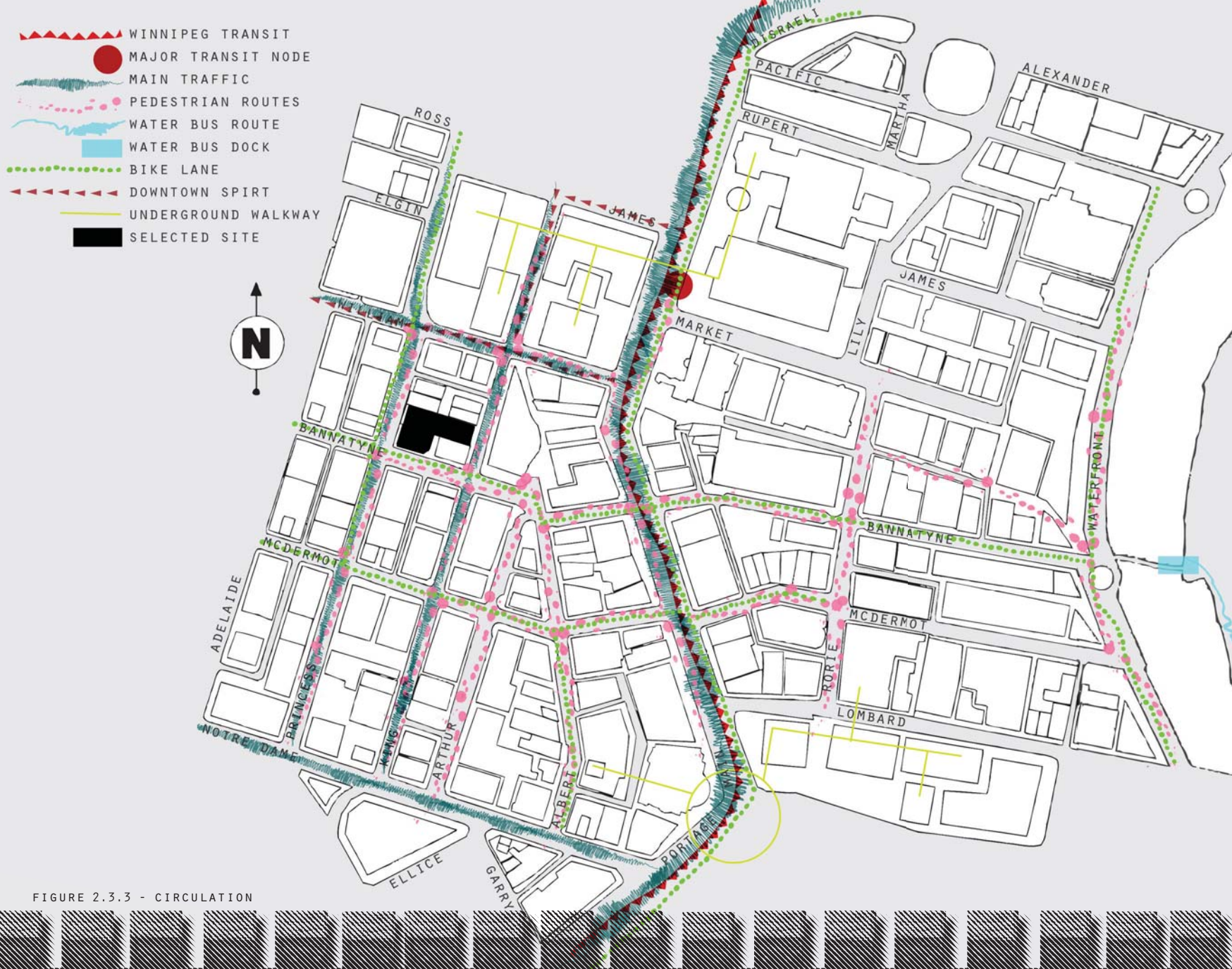
FIGURE 2.3.3 - CIRCULATION

MODE OF TRANSPORTATION	Exchange District			CITY OF WINNIPEG
15 and over, employed labour force[1]	Male	Female	% of Total	% of Total
Car, truck, van, as driver	55	25	39.0%	68.0%
Public transit	0	10	4.9%	14.2%
Car, truck, van, as passenger	0	0	0.0%	9.0%
Walk	80	25	51.2%	6.2%
Bicycle	10	0	4.9%	1.8%
Taxicab	0	0	0.0%	0.2%
Motorcycle	0	0	0.0%	0.1%
Other method	0	0	0.0%	0.6%
TOTAL	145	60	100.0%	100.0%

Figure 2.3.4 - Mode of Transportation. Excerpted from the City of Winnipeg, & Statistics Canada. (2006). 2006 Census Data - Exchange District. City of Winnipeg.

POPULATION BY AGE	Exchange District			CITY OF WINNIPEG
Age Group	Male	Female	%	%
0-4	10	15	6.0%	5.4%
5-9	0	0	0.0%	5.8%
10-14	0	0	0.0%	6.5%
15-19	0	0	0.0%	6.8%
20-24	0	0	0.0%	7.4%
25-29	15	25	9.6%	6.9%
30-34	50	0	12.0%	6.6%
35-39	50	20	16.9%	6.7%
40-44	10	25	8.4%	7.9%
45-49	25	10	8.4%	8.0%
50-54	35	15	12.0%	7.3%
55-59	40	0	9.6%	6.4%
60-64	40	0	9.6%	4.6%
65-69[1]	10	10	4.8%	3.5%
70-74[1]	0	0	0.0%	3.2%
75-79[1]	10	0	2.4%	2.8%
80-84[1]	0	0	0.0%	2.3%
85+[1]	0	0	0.0%	1.7%
TOTAL	295	120	100.0%	100.0%

Figure 2.3.5 - Population by Age. Excerpted from the City of Winnipeg, & Statistics Canada. (2006). 2006 Census Data - Exchange District. City of Winnipeg.

Population & Demographics

A substantial portion of the Exchange District's population is contained within the 25-64 age bracket (City of Winnipeg & Statistics Canada, 2006). The largest percentage is made up of middle aged individuals, with a higher proportion of males.

The top four educational backgrounds for people living in the Exchange District are as follows: 1) Business, management and public administration 2) Social and behavioural sciences and law 3) Health, parks, recreation and fitness 4) Architecture, engineering and related technologies and mathematics, computer and information sciences(City of Winnipeg & Statistics Canada, 2006). The two fields that would most likely relate best with the proposed interpretive center are business, management and public administration as well as architecture, engineering and related technologies.

EDUCATION[1]	Exchange District			CITY OF WINNIPEG
Population With Post-Secondary Education (25-64 years)	Male	Female	% of Total	% of Total
Business, management and public administration	50	15	33.3%	21.6%
Architecture, engineering, and related technologies	10	10	10.3%	19.0%
Health, parks, recreation and fitness	25	10	17.9%	16.4%
Social and behavioural sciences and law	20	25	23.1%	10.2%
Education	0	0	0.0%	8.7%
Humanities	10	0	5.1%	5.5%
Mathematics, computer and information sciences	10	10	10.3%	5.0%
Personal, protective and transportation services	0	0	0.0%	4.9%
Physical and life sciences and technologies	0	0	0.0%	3.4%
Visual & performing arts, & communications technologies	0	0	0.0%	3.3%
Agriculture, natural resources and conservation	0	0	0.0%	1.9%
Other fields of study	0	0	0.0%	0.0%
TOTAL	125	70	100.0%	100.0%

Figure 2.3.6 - Education. Excerpted from the City of Winnipeg, & Statistics Canada. (2006). 2006 Census Data - Exchange District. City of Winnipeg.

Nodes and Landmarks

The main nodes in the area include Old Market Square, City Hall courtyard, Red River College, and Stephen Juba Park. These are places where people congregate, areas that have a buzz of activity.

Major landmarks of the area include Old Market Square, Red River College, Portage and Main intersection, Union Bank Tower, City Hall, Centennial Centre, and MTC. Figure 2.3.7 also illustrates the main points of entry into the area, being defined as "gateways...they represent the transition from one area to another" (Urban Edge Consulting, 2008, p. 22). The five illustrated are from Notre Dame Avenue to King Street, Waterfront Drive as one passes underneath the railway, the gateway from the Exchange District to Chinatown as one passes underneath the pedestrian bridge of the Dynasty Building, from Disraeli Freeway onto Main, and from Disraeli Freeway turning onto Lily into the East Exchange.

FIGURE 2.3.7 - NODES & LANDMARKS
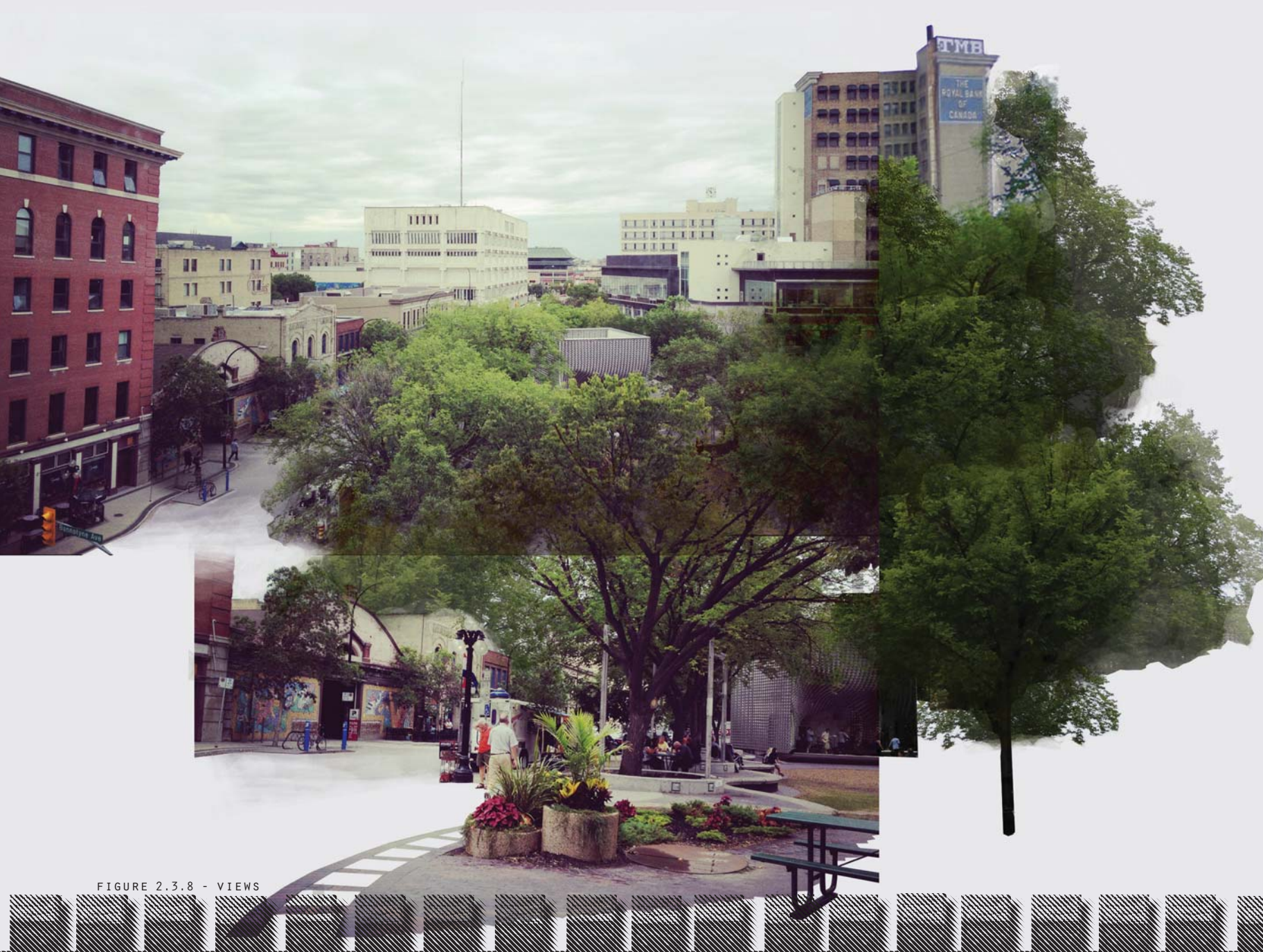
FIGURE 2.3.8 - VIEWS

FIGURE 2.3.9 -- IMAGE OF PLACE

2.5 Building History

Originally this site was made up of two separate buildings; the Sanford building designed by Charles H. Wheeler in 1890 and Maw Garage designed by W.H. Stone in 1906-7. The Sanford building was originally three storeys, with a fourth being added in 1903. However, the entire building became part of Maw Garage in 1906. In 1942, a fire destroyed the top three storeys of the Sanford Building, resulting in the one-storey building seen today.

Joseph Maw is an important figure in Winnipeg's history, as he is known "as the man who brought gasoline power to the prairies" (Rostecki & McFarland, 2000) . The majority of people at this time would walk, ride a horse, wagon, or streetcar as their main method of transportation. Automobiles were just becoming prevalent, so for people to take notice Maw constructed a race-track five kilometers west of his building (currently where Polo Park is). This gave people the opportunity to try out the vehicles, enticing them to make a purchase.

Traditionally at this time building construction consisted of post-and-beam. However, since this building was to be used as an automobile show room, Maw did not want any columns in the way. For that reason, the building used the most advanced building technologies available, employing steel girders and trusses resting on the exterior walls which are made up of concrete with a facing of brick. Maw Garage was the "first Ford dealership in Western Canada and, for a short time, the largest dealership in the world, displaying up to 140 cars" (Komus & Historical Buildings Committee, 2006, p. 2). The King Street entrance originally consisted of a large quantity of plate glass so as to provide views of the automobiles on display (Fig. 2.5.1). Maw Garage was said to be "the best of its kind in Canada" consisting of stunning "offices and waiting rooms [which] were finished in oak" (Historical Buildings Committee, 1979, p. 3). Interestingly enough, this was one of the first sites in the Exchange District to have an adaptive reuse take place, when it was converted into the Old Spaghetti Factory. Currently, it is being used as Republic Nightclub, with the east portion deteriorating, being used as a parking garage.

Figure 2.5.1 - Joseph Maw and Company Garage, 114 King Street, 1909. (Courtesy of the Manitoba Legislative Library, Winnipeg Telegram, December 18, 1909, p.18).

Figure 2.5.2 - Truck of A. Carruthers and Co. Ltd. parked in front of J. Maw and Company Garage, n.d. (Courtesy of the Western Canada Pictorial Index1515-50380)

Light Studies

These initial light studies helped me gain a better understanding of the amount of light entering the space from the front and back facades and skylights. The studies reinforced the fact that lighting within the space was going to be an important consideration as there was not much daylight at the center of the space.
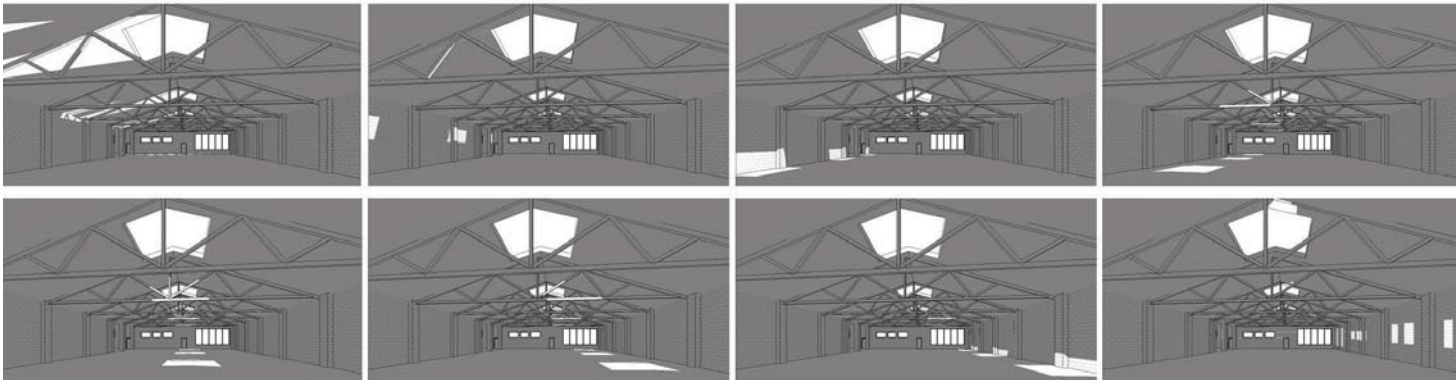
Figure 2.5.3 - Light Studies. Image by author.
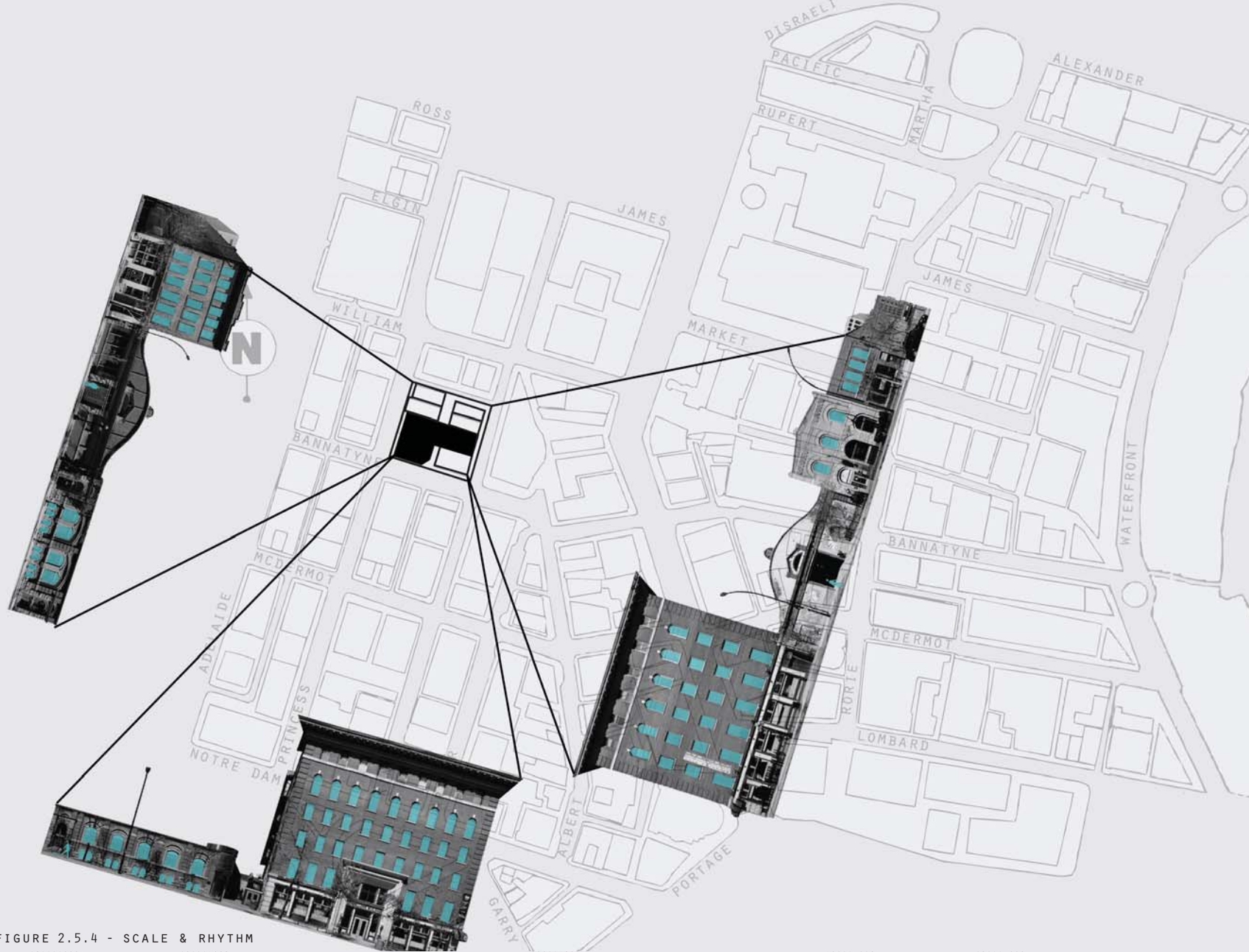
FIGURE 2.5.4 - SCALE & RHYTHM

2.6 Building Analysis

Year constructed: Sanford Building - 1890

Maw Garage - 1906/07

Zoning: C (Character Sector)

Building facing: 3 streets

Total building area: 18,012 sq. ft

Architect: Charles H. Wheeler and W.H. Stone

Heritage status: Sanford Building - Grade II

Maw Garage - Grade III

Storeys: 1

Building owner: Sabino Tummillo

Building construction: brick, stone, and concrete

Flooring: Maw Garage: unfinished

Republic Nightclub: carpet and VCT

Ceiling height: 15' - 18'

Ceiling: Maw Garage: steel trusses and girders

Republic Nightclub: exposed mechanical system, acoustical ceiling tile in other areas

Mechanical air systems: Maw Garage: None

Republic Nightclub: Forced air system

Building is sprinklered: No

Occupants: Republic Nightclub and Impark Parking

Under the City of Winnipeg's Building Conservation List, structures are designated as either Grade I, II, or III depending on the significance of the structure, with Grade I being the most historically significant. Both buildings are municipally designated heritage sites with Maw Garage designated as Grade III, while the Sanford Building is Grade II on the Building Conservation List. I plan on keeping the historical structures intact, with little to no alterations made to them. The trusses in Maw Garage will be highlighted in the design as they are the key element that relates to the history of what the building was originally built for - an automobile showroom. In addition, the King Street facade will be restored to its original condition. As for demolition, the interior partitions that were added by Republic Nightclub will be removed to open back up the space.

FIGURE 2.5.5 - BUILDING IDENTITY
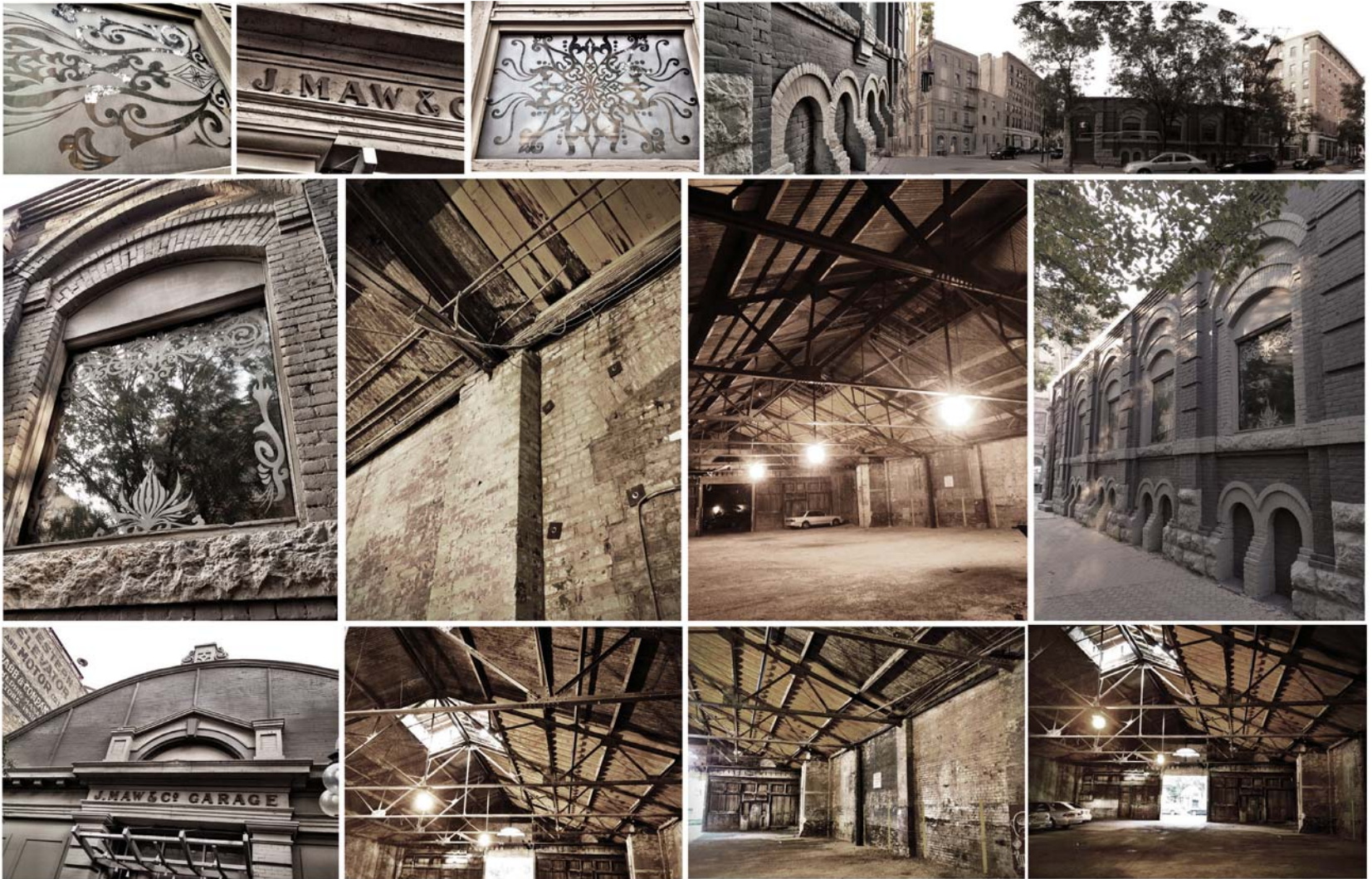
Figure 2.5.6 - Images of 112 King Street.
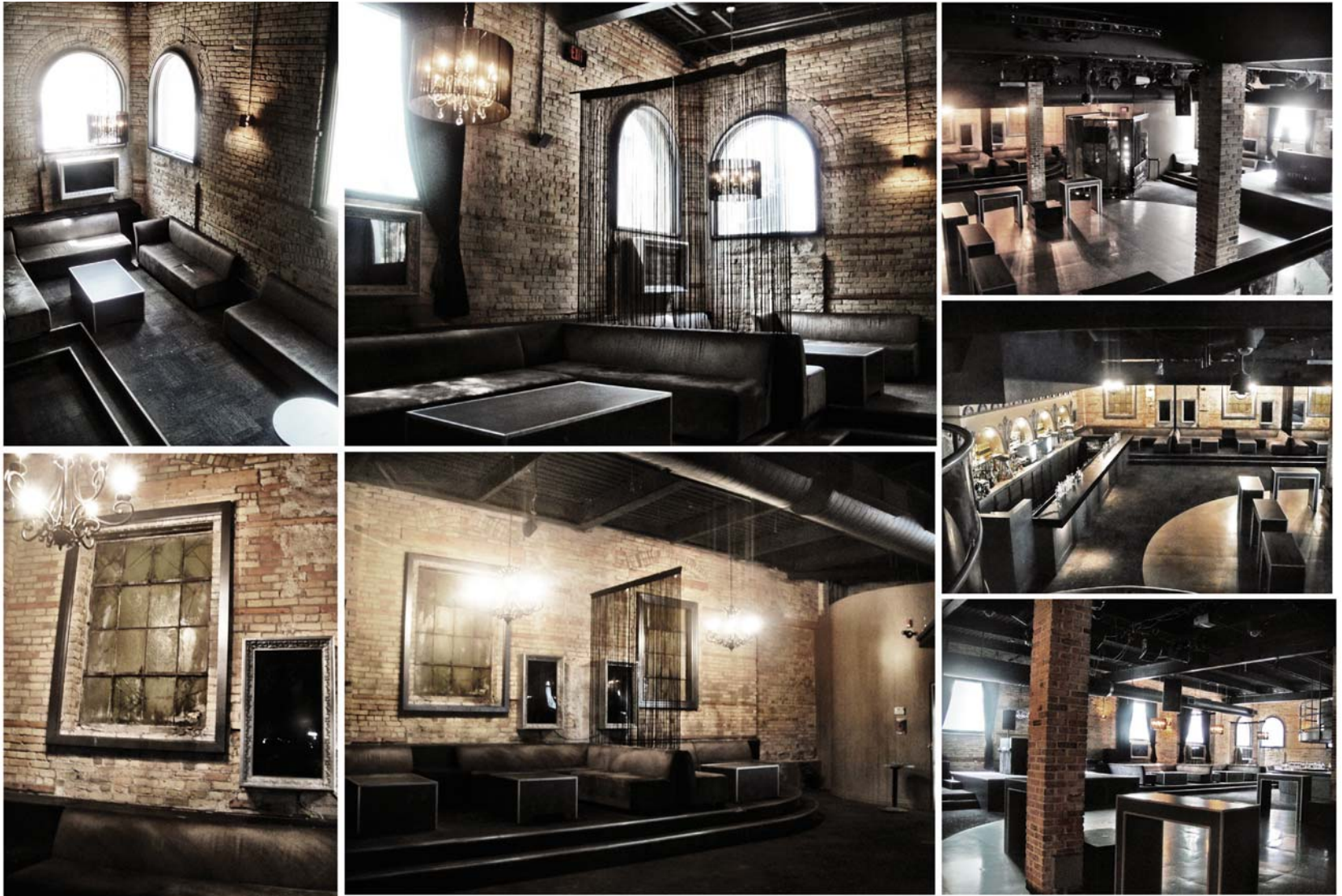
Figure 2.5.7 - Images of 112 King Street.

CHAPTER3
LITERATURE REVIEW

3.1 Introduction

This section begins with an outline of how museum space has evolved over time so as to continue being relevant to its audience. Post-museum[1] theory will be discussed first as it is a key theory that looks at the future of museums. Comparisons will be made between the modernist and post-museum, looking at the differing pedagogical styles they support. The following section will develop, in greater detail, the constructivist pedagogical style which builds on the idea of how museum environments are changing. Investigating how a learning environment can best fit a diverse set of user needs, actively involving them in the construction of knowledge. This is a significant focus as "understanding visitors' learning has become a matter of survival for museums" (Hein, 1998, p. 12). The final section discusses the importance of viewing the museum as a public space from three viewpoints: (a) the museum as a democratic space, a place where individuals can gather together on common ground to discuss matters; (b) public space as third place which examines how the museum can be developed to become a setting for informal public activity; and (c) public space as social space which uses the work of William Whyte,

an American urbanist, to develop a stronger understanding of human behaviour in public settings. These theories will provide a solid foundation in developing a design that pushes the boundaries on what a museum should offer.

3.2 Development of the post-museum

Museums have undergone significant change in time, developing from a cabinet of curiosities deriving from wealthy individuals' private collections in the late eighteenth century to the public museum in the nineteenth century. This shift of the museum to a democratic space occurred at the same time as the reorganization of social space, leading to the formation of the bourgeois public sphere (Bennett, 1995, p. 25). The private collections became opened to the public, yet little was altered in the way of spatial arrangement (Barrett, 2012, p. 104). As a result, museums still conveyed a sense of power and authority over the visitors. The museum in this instance is seen more so as a shrine/temple (Marstine, 2006, p. 10). The collections were organized by the collectors themselves or a member of the academic or curatorial elite; this caused the collections to be structured in such a way to be most relevant to those with an education

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[1] Eilean Hooper-Greenhill coined the term in her book "Museums and the Interpretation of Visual Culture" published in 2000.

(Cameron, 2004, p. 66). This model developed into the modernist museum, which can still be seen in a lot of areas today. However, the success of this model is questioned as it is found ineffective in meeting society's current needs and wants (Hooper-Greenhill, 2007, p. 189). A new view of the museum is warranted. Eilean Hooper-Greenhill, a key figure in the development of new museum theory, coined the term "post-museum" to describe the direction that museum design is taking. Moving away "from the modernist museum as a site of authority to the post-museum as a site of mutuality" will result with museums becoming open to diverse point of views, growing to be more engaged with users (Hooper-Greenhill, 2000, p. xi).

The word 'museum' is defined by the International Council of Museums (ICOM) as a space "which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment."(ICOM, 2012). However, there is a trend for some museums to stop using the term museum, instead using the word center to further illustrate the movement from traditional methods

(Cameron, 2004, p. 63). To envision this new museum typology, the defining characteristics of the modernist and post-museum will first be examined.

By looking at the two different pedagogical styles, a greater level of understanding will be gained as to how the communication methods are evolving. First off, pedagogical style

> refers to the way in which something is said, or teaching method; in museums this refers to the style of communication in displays, which includes the way objects are used or placed, the way the text is written, the provision within the exhibition for various forms of sensory engagement, the use of light and colour, the use of space, and so on

(Hooper-Greenhill, 2000, p. 5).

The modernist museum positioned its visitors as passive recipients. They were understood as deficient in that they lacked knowledge and were therefore treated as "empty vessels to be filled" (Hooper-Greenhill, 2000, p. 125). The movements of the visitor were controlled from the moment

they entered. This results in a didactic approach, learning being conceived as a one-way linear communication in which information is being "transferred from those who are knowledgeable to those who are not" (Hooper-Greenhill, 2000, p. 133). Learning in this model is focused on "learning at a glance... the eye was expected to quickly take in visual information so that disciplinary structures.. were immediately understood" (Hooper-Greenhill, 2007, p. 191). Therefore, a great deal of hierarchy was placed on the presentation of objects, the original thought being that by placing "objects on view was sufficient to ensure learning" (Hooper-Greenhill, 2000, p. 2). However, this model does not consider the fact that objects can have multiple interpretations, supporting the idea that museums should encourage several ways of viewing objects. In addition, not all individuals respond well to a restricted pedagogical style. In this model the audience is not viewed as individuals with different learning approaches but as a homogeneous mass, all of whom were expected to learn the same way. This is where the model begins to fail because differences between users are not considered. The curator is seen as

the authoritative voice behind the museum, making the decisions on how exhibits are to be displayed, organized and arranged; their role in museums today is being questioned. Traditionally, once the exhibits are installed, the only individuals in sight are guards and the occasional museum attendant (Tchen, 1992, p. 290). This leaves very few points of contact between the visitor and the museum professionals, resulting in a troubling situation as the authoritative voice takes over (Tchen, 1992, p. 290), described as "talking at people" rather than with people (Tchen, 1992, p. 291).   This is the key difference between the modernist and post-museum, where the focus shifts from a collection-driven model to a participatory model.

Modernist Museum	Post-Museum
Values: elitist static serious educational work	Values: populist experiential fun entertaining play
Visitor experience: contemplative mental passive observation edification solitary	Visitor experience: interactive sensory immersive participation celebration social
Visitors are viewed as: passive recipients homogeneous mass were understood as deficient in that they lacked knowledge treated as "empty vessels to be filled" set up to receive information in a one-way linear communication	Visitors are viewed as: active recipients individuals who learn and interpret differently co-authors engaged in a two-way linear communication
Institutional presentation traditional artifacts authoritative/institutional viewpoint quiet	Institutional presentation: innovative high-tech, media discovery/ multiple viewpoints boisterous

Figure 3.2.1 - Differences between the modernist and post-museum. Excerpted from Bruce, C. (2006). Experience Music Project as a Post-Museum. In J. Marstine (Ed.), New Museum Theory and Practice : An Introduction (pp. 134-35). Malden, MA: Blackwell.

As museums search for relevancy, the need for the museum as a public forum starts to arise, allowing for "confrontation, experimentation, and debate" (Cameron, 2004, p. 68). Duncan Cameron, a museologist, argues that if museums force the two discrete ideas of the museum as a forum and museum as a temple together it will result in error. "The error, as said, is in part that they rob the forum of its vitality and autonomy" (Cameron, 2004, p. 70). As a result, the designer must make a decision as to what they envision for the space and public. Societies will no longer accept the museum as a temple or shrine as it "is an elitist paradigm that does not meet the needs of contemporary culture" (Marstine, 2006, p. 10). Museums "must meet society's need for that unique institution which fulfills a timeless and universal function" (Cameron, 2004, p. 72). Theorists suggest the museum move away from "a site of worship and awe to one of discourse and critical reflection" (Marstine, 2006, p. 5). This approach will open the museum up to people who are traditionally non-museumgoer's, transforming the space to a meeting ground for diverse people to engage in dialogue. Considering this, we can see how the creation of a space where stronger connections can be formed with the communities it serves is vital. Consequently, focus should be placed on how community members can be drawn to the environment and feel like their needs, interests and preferences are being considered.

The notion of the post-museum re-envisions what the museum is and what it should support. As it repositions itself, the search for "spaces with more colour, more noise, and which are more physically complex" is called for in what Bennett terms 'the ratio of the senses' (Hooper-Greenhill, 2000, p. 148). Hooper-Greenhill described the post-museum as a space which "is no longer a 'museum' but something new, yet related to the 'museum'" (Marstine, 2006, p. 19). This has resulted in the development of different techniques in order for it to appeal to a wider audience. Whereas the modernist museum's focus was on display, the post-museum's focus is on diversifying the uses to what would be classified as non-traditional forms of communication. In an attempt to construct the museum as part of 'a nucleus of events', different community groups and uses will be encouraged (Hooper-Greenhill, 2000, p. 152).

The biggest difference between the two models is the change in the museum/visitor relationship. By re-conceptualizing the role of the curator and visitor, new opportunities arise. The post-museum looks towards methods that support a greater degree of social interaction as it has been found that "learning is enhanced through social interaction" (Falk, Koran, Dierking, & Dreblow, 1985). This idea shifts the visitor from a passive receiver of knowledge to an active member in the construction of knowledge. An important aspect for this to occur is by considering the visitors as individuals who learn and interpret differently instead of a mass audience. The post-museum no longer gives sole power to the curator as the authoritative voice behind the museum, but rather acts as a facilitator engaging in two-way communication with the public.

The other main difference with the post-museum is that it shifts its focus away from the objects in space to its social role. As Huyseen described it, "the museum must ...refine its strategies of representation, and offer its spaces as sites of cultural contestation and negotiation" so that it can become "a space for the cultures of this world to collide and to display their heterogeneity, even irreconcilability, to network, to hybridize and to live together" (Huyssen, 1995, p. 35). This is how I see the post-museum advancing in today's context in order to stay relevant. In this way, it becomes a space for conversations and ideas to be put forward and discussed which I see aligning well with Heritage Winnipeg's mission to become a public forum advocating for the restoration and preservation of Winnipeg's built environment. To ensure this, other programs would need to be put in place to supplement the exhibition, such as a public gathering space, that would support events, activities, and potential for food/drink. This idea is connected with the thought of a museum as a public space, which will be discussed in the last section of the literature review.

3.3 Constructivist Learning Theory

This section addresses the issue of how museums can provide "spaces that involve visitors not only in the material and their meaning, but also in the process of making meaning"(Styles, 2011, p. 12).   It will include explanations of how the museum can implement strategies set by the post-museum. The key characteristics of the constructivist museum[2] are the active participation of visitors to facilitate the construction of knowledge and the creation of dialogue between the museum and the community.

The museum's function has always been to educate. However, how museums approach this has been highly contested. The differing pedagogical styles were discussed earlier, this section will examine more closely constructivism which is a

> theory about knowledge and learning; it describes both what 'knowing' is and how one 'comes to know.' ...the theory describes knowledge not as truths to be transmitted..but as emergent, developmental, nonobjective, viable constructed explanations by humans engaged in meaning-making in cultural and social communities of discourse (Fosnot, 2005, p. ix).

Constructivism developed from the field of cognitive science, predominantly from the work of Jean Piaget, Lev Vygotsky, and Jerome Bruner. The constructivist view of learning involves an active learner in a complex and nonlinear learning process. "Most contemporary neurobiologists and cognitive scientists agree: knowledge is actively constructed" (Fosnot, 2005, p. x). No longer are learners viewed as "empty vessels waiting to be filled but rather active organisms seeking meaning" (Driscoll, 2000, p. 376).

MODERNIST MUSEUM

CONSTRUCTIVIST MUSEUM
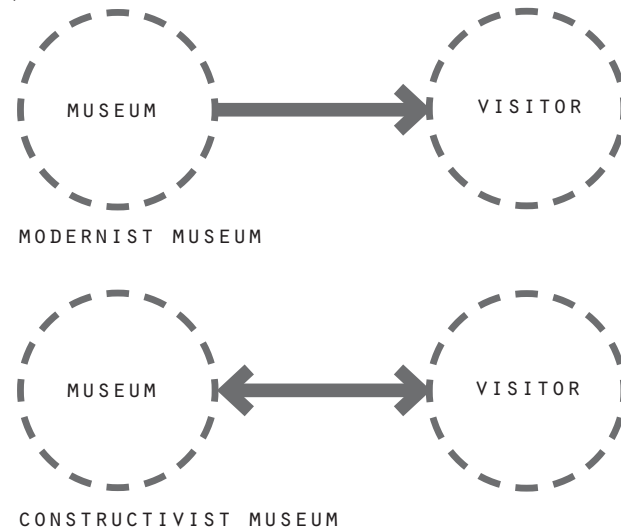
Figure 3.3.1 - Highlighting the difference between the modernist museum's one-way communication in comparison to the constructivist museum's two-way communication.

[2] George Hein coined the term in his book "Learning in the museum" published in 1998.

The fundamental change from the modernist museum to the constructivist museum is the focus shifting from transmitting 'universal' knowledge linearly, to now providing opportunities for visitors to construct their own meaning in a two-way communication with the museum. Meaning is no longer viewed as singular but rather plural and open to difference of opinion. Communication in this view is "understood as a process of sharing, participation and association" (Hooper-Greenhill, 1999, p. 69). The hierarchy that was once present has now dissipated, allowing for individuals to form their own meaning from the environment through "engag[ing] in activity, discourse, interpretation, justification, and reflection" (Fosnot, 2005, p. ix). In order to form a stronger relationship with its audiences, the museum's designers must consider how visitors interpret their surroundings, so as to best meet their needs.

For one to be able to develop a museum that supports these ideals, an understanding on how people learn must be considered. Hein breaks down educational theory into two main components: a theory of knowledge and a theory of learning. On the two sides of theory of knowledge there is the idea that knowledge is independent of the learner in contrast to knowledge being constructed by the learner. The second theory deals with how people learn which is set by two extremes, one being that learning is incremental, in contrast to the idea that learning is constructing (Hein, 1999, p. 74). Hein focuses his research on constructivism as he argues this theory fits best with where he and other theorists see the museum going (Marstine 2006, Hein 1998/1999, Hooper-Greenhill 1999/2000). The premise of constructivism is "that we construct our own understanding and that learning occurs through the association of previous experiences with newly acquired knowledge" (Chao & Stovel, 2002, p. 116). This results in individuals having their own interpretation of environments, depending on their unique past experiences. Learning occurs when the individual can fit their newly acquired information into a pattern they have constructed in order to make meaning of it (Brooks & Brooks, 1993, p. 4).

Hein breaks down the constructivist museum into a number of components which include: connection to the familiar,

association with place, learning modalities, accessibility, other resources, collaborations, social interaction, developmentally appropriate, intellectual challenge, and acknowledging constructivism.

Connection to the familiar
For the learning experience to be successful the learner needs to connect new information with their prior familiar knowledge. This allows the learner to form the appropriate connection, fitting it into a constructed pattern. A possible way the curator can assist in this process is by providing familiar objects alongside unfamiliar objects to "give a sense of comparative scale... to bridge the gap" between the two (Hein, 1998, p. 161). The key being to "link the old with the new" (Hein, 1998, p. 163).

Association with place
The connection that the visitor makes with the building is important, as its appearance, location or atmosphere can deter some visitors. The building sets up how the visitor feels in space and how they view the organization. Traditionally, museums consisted of "imposing structures, often in neo-classic style... the intention of the architecture is usually to make a grand statement. Unfortunately, this is not necessarily the most accessible image for many visitors"(Hein, 1998, p. 157). Even still today we see museum buildings remaining "heavily dependent upon traditionally-held views of the physical environment and its relationship to people" (Parr, 1959, p. 313). Even though the architectural style has been altered, "most of the changes reflect technological and aesthetic progress, rather than a more informed and sophisticated approach to meeting the needs of the visitor"(Thompson, 1990, p. 74). Another interesting theory was if the museum is located in a building that is imposing "it may suggest a bank, a courthouse, or another public building entered only when necessary, rather than a place that is desirable for learning and enjoyment" (Hein, 1998, p. 157). In order to encourage equal access to all it is important to determine what the cover of your building says to potential users. This became one of the reasons behind choosing a non-traditional structure as the site (Maw Garage), when I was previously looking at buildings that would have fallen into the traditional category, such as 436 Main St (originally Bank of British North America).

Some factors to consider in the interior environment include: freedom of movement, comfort, competence, and control. The constructivist museum should allow for multiple paths through space, with no fixed entry and/or exit points to best support individuals arriving at their own conclusions. This provides the learner with a range of choices in how to gain information, supporting diverse ways of learning. Comfort is also a major factor that determines how long people will ultimately end up staying in the space, seating being key. Robert Coles interviewed children who had spent the day at the Boston Museum of Fine Arts and found that the children's first impression of the interior environment was its "enormous rooms, the marble floors, the hushed silence that threatened to envelop the children" (Coles, 1992, p. 7). One can imagine this description fitting the majority of traditional museum styles, leaving people feeling isolated and that they are constantly being watched by guards. One of the children said they just "wanted to scream so everything would be more 'real'" (Coles, 1992, p. 7). I believe setting up the museum to be more socially interactive could result in more collaboration, life and

activity throughout the space. By combining different functions and elements that are not necessarily traditional allows for new opportunities to re-conceptualize what should be provided to museum users. The atmosphere in the constructivist museum would be non-formal, boisterous, and animated.

Wayfinding is another important aspect in museum development because in order for people to learn they have to feel comfortable in the space, knowing where they are and where they are going.

Learning modalities
People learn and understand through a number of different methods. Therefore, museum environments should provide a number of different opportunities for the visitor to connect with the space. An example of this can be seen at the Boston Museum of Science, where at first, traditional dioramas were implemented that only considered the sense of sight. After an update, the exhibit involved all the senses, finding that the duration of visitation time doubled, in addition to individuals gaining a stronger qualitative understanding of the exhibits (Hein, 1998, p. 164). By breaking down

the "one-way flow of knowledge,"(Witcomb, 2003, p. 143) the user can then enter into a mutual relationship with the exhibit. This leads to the "visitors themselves hav[ing] an active role in the process, becoming co-authors in the production of meanings"(Witcomb, 2003, p. 143).   As a result, the user's level of participation with their surroundings increases, forming a more intimate spatial relationship. Yi-Fu Tuan, a human geographer, describes this type of active experience as "requir[ing] that one venture forth into the unfamiliar and experiment with the elusive and uncertain."(Tuan, 1977, p. 177). This shift in thinking opens up the museum to become a place of dialogue, now prioritizing the audience interactions and experience.

Accessibility
Accessibility arises as another key factor in the importance of meeting a diverse set of needs. Some goals include varying display heights for children and people in wheelchairs, as well as providing opportunities for those with visual impairments by installing tactile signs, tactile display models, or audio labels. By creating environments that work well for everyone the museum's audience base is not limited.

Other Resources
The majority of the time, exhibits display set items but museum holdings include a wider range of other resources, such as books, manuscripts, letters, postcards, photographs, journals, etc., which are usually out of sight and segregated from the public space. By integrating these components into the space, in what Hein terms "open storage areas... where a museum's extensive collections are available to be viewed... provides an opportunity to involve the new or ongoing interest" (1998, p. 170). He comments how this strategy has rarely been integrated, suggesting it as a possible way to enhance interaction with visitors.

Collaborations
Museum planners continually investigate ways of expanding their audience, an already established path is to link with other cultural and educational organizations (ex BIZ, Centre Venture, Manitoba Historical Society, University of Manitoba - Faculty of Architecture) to combine resources

and support each other to enhance awareness on heritage and arts.   Organizations will also be encouraged to cosponsor events in support of heritage conservation issues, or rent out the space for their own events.

Social Interaction
Vygotsky (1978) discusses how learning is a social process, explaining that learners build knowledge through interacting with others.   A potential way to attempt this would be collaboration between the community and the museum in the production of exhibits, so as to move "beyond exchanges of empirical information to deeper discussions of meaning" (Tchen, 1992, p. 298).   Educational theorists now recognize "learners need to interact in meaningful ways with new information before it can become part of their repertoire of knowledge" (Hooper-Greenhill, 2000, p. 7).   This model is thought to "improve the quality of educational exchange" (Tchen, 1992, p. 291).   As was previously stated, evidence supports hat social interaction enhances learning (Falk et al., 1985).   It sets up learners to cooperate, so as to more efficiently learn the material. The goal is to advance awareness on heritage conservation issues by creating a

public space where individuals can gather together, share their thoughts, and bounce ideas off one another in an attempt to foster learning and knowledge on the history of the Exchange District.

Developmentally appropriate
Developmentally appropriate has to do with whether museums provide opportunities for people with varying learning capabilities, from children to adults, to be able to participate and interact with the environment. This will increase user satisfaction in the environment. One possible approach is to provide specific areas for children and others for adults. The other option is to provide different labels for adults and children, called "layered text" (Hein, 1998, p. 166). The key is to focus on developing spaces that would be accessible and appealing to all. Nevertheless, there will always be compromises.

Intellectual challenge
Hein describes the constructivist museum as setting up the user for an intellectual challenge, not so much that it deters the individual, but enough so that they are enticed to take up the challenge and construct their own understanding from

the problem (Hein, 1998, p. 176).

Acknowledging constructivism
By acknowledging constructivism, curators understand that they are "not displaying truth, but interpretation" (Hein, 1999, p. 177). The constructivist museum needs to "publicly acknowledge its own role in constructing meaning when it displays objects and develops programs"(Hein, 1998, p. 177) so that it can further enhance the visitor's drive to construct their own meaning and knowledge from the exhibit.
As one can see, constructivism is a learner-centered approach which first takes into consideration how people learn and create knowledge to then use this understanding to develop an environment that supports this process.

3.3.1 Kolb's Theory of Learning

As previously stated, the key to effective learning in the museum is to provide individuals with a diverse array of options in the exhibition environment. The more museums aim to expand their audience base the more that these environments must outline and respond to a greater range of learning styles. As discussed in the previous section,

museums are moving away from a purely didactic exhibition environment towards providing a number of alternative approaches in which the individual has control over how they want to construct their own knowledge. Didacticism will not be eliminated from the environment but will no longer be the only method used; it will now become a part of a palette of approaches. This is where Kolb's theory of learning comes into play, developing a framework comprised of four modes: Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation. Kolb "does not see these as stark choices. Rather they are mutually compatible, enabling the visitor to develop an individual mix that adds up to a unique personal encounter or experience" (Black, 2005, p. 137). Kolb saw learning as a process involving all four learning modes, individuals moving between them as seen fit during different stages of the visit. Hein stated that the constructivist museum should provide a range of choices and multiple paths for individuals to choose from. Kolb outlines these choices that should be offered in a learning environment to support individuals arriving at their own conclusions. He stressed the

importance of providing a balance between the four learning modes in order to advance learning. Individuals will have preferences on which mode they are more comfortable with and will be drawn toward that area.

Figure 3.3.1.1 shows the traditional way Kolb's model is illustrated. However, Kolb discusses how a user can move between any one of the four modes at any time in their visit. Therefore, the implementation of these four modes within space can be less cyclical than the traditional model suggests. Considering this idea, I looked at how the arrangement of

the four modes should be laid out in the space while trying to provide each of the four modes in close proximity to one another so that the user would be drawn to whichever area they feel most comfortable with. Figure 3.3.1.2 illustrates how I overlaid Kolb's theory onto the floor plan, indicating each mode's location using a designated color code.

'HAVE THE EXPERIENCE'

CONCRETE EXPERIENCE [CE]

'APPLY THE EXPERIENCE'

ACTIVE EXPERIMENTATION [AE]

REFLECTIVE OBSERVATION [RO]

'REVIEW THE EXPERIENCE'

ABSTRACT CONCEPTUALISATION [AC]

'LEARN THE EXPERIENCE'
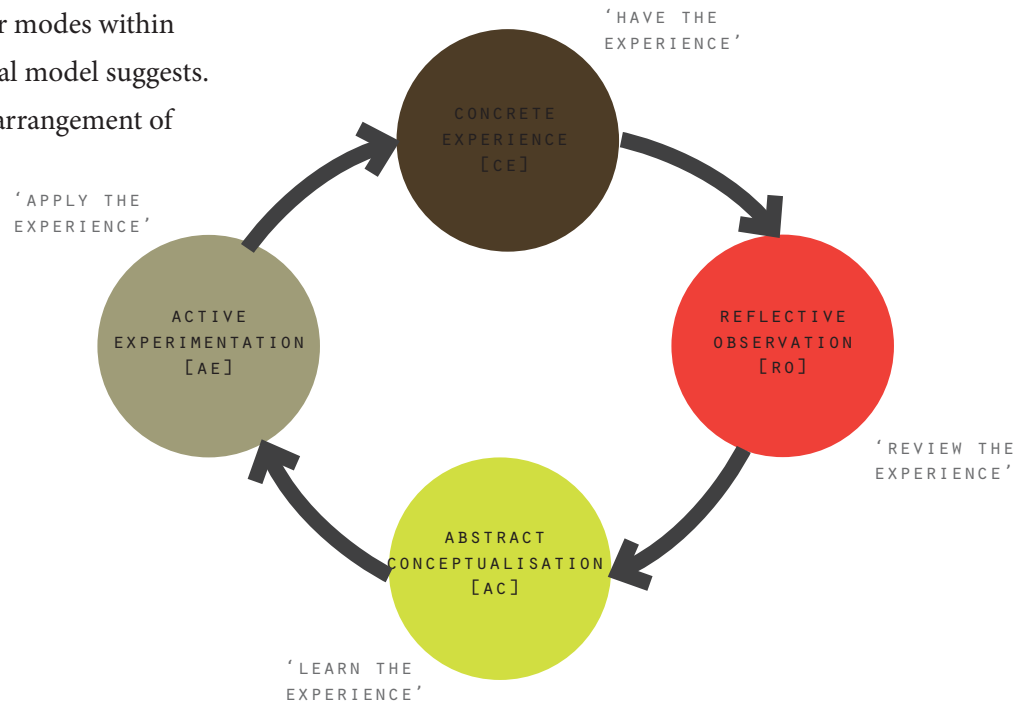
Figure 3.3.1.1 - Kolb Learning Cycle. Image by Author.

ARTISTIC CONCRETE EXPERIENCE

SCIENTIFIC REFLECTIVE OBSERVATION

ARTISTIC ABSTRACT CONCEPTUALIZATION

SCIENTIFIC ACTIVE EXPERIMENTATION

Figure 3.3.1.2 - Kolb four modes overlaid on floor plan.
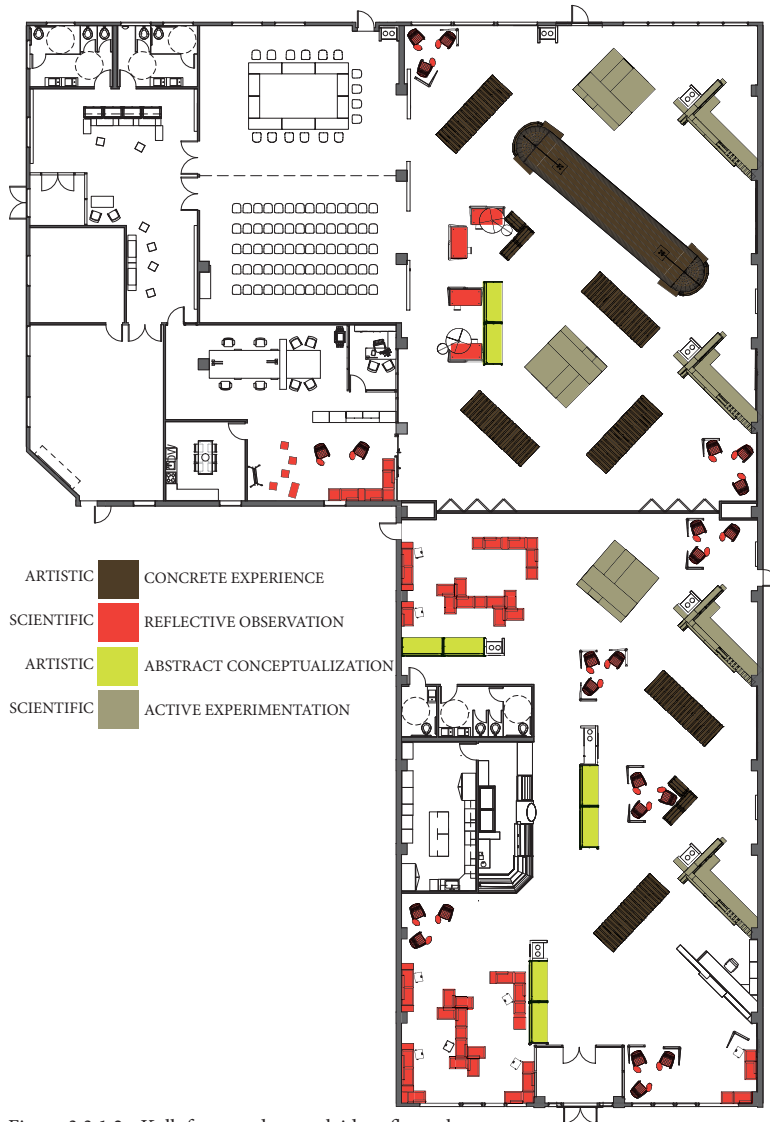
Below outlines the differences between each of the four modes:

Concrete Experience (CE) focuses on "being involved in experiences... It emphasizes feeling more than thinking... an intuitive, 'artistic' approach as opposed to the systematic, scientific approach to problems" (Kolb, 1984, p. 68). This is the area that introduces the public to a new way of viewing and thinking about a subject, where they start acquiring information.

Reflective Observation (RO) focuses on "understanding the meaning of ideas and situations by carefully observing and describing them. It emphasizes reflection and understanding..." (Kolb, 1984, p. 68). These learners like listening and sharing ideas, sitting back to ponder and observe from different perspectives. "They perceive new information through reading/thinking and then reflect further on this" (Black, 2005, p. 135).

Reflecting on our experiences is a very important part in the process of learning, as this is where individuals construct their own understanding. Therefore, providing ample opportunity for this is essential. Museums can best support

and encourage reflection through a number of methods, first by forming a non-intimidating, inviting, supportive atmosphere where there are many opportunities provided for individuals to sit back, observe and converse throughout the space. It is also important not to overfill the space with exhibits so that people do not feel overwhelmed. Way finding and landmarks that help guide individuals through the space are also important to develop carefully. "Creating a supportive environment for reflection is little thought of in the design of museums and museum exhibitions, yet it is an essential backdrop" (Black, 2005, p. 142). As such, I see this becoming a vital area of further development in my design.

Abstract Conceptualization (AC) focuses on "using logic, ideas, and concepts... [to form] general theories rather than intuitively understanding" (Kolb, 1984, p. 69). This is where learners will make sense of the information, putting it in concise logical forms and developing their own abstract concepts. In this section, knowledge becomes part of the learner.

Active Experimentation (AE) "emphasizes practical applications... an emphasis on doing as opposed to observing" (Kolb, 1984, p. 69). These learners prefer hands-on experiences, where they are able to put into action their own ideas and theories. It will be important to get the public more actively involved in these areas.

In describing the four different learning modes, Kolb outlined each as either an artistic or scientific approach (Kolb, 1984, pp. 68–69). He saw CE and AE as artistic, with RO and AE being scientific. These areas will be represented in the design by being off grid (artistic) and on grid (scientific).

3.4 Public Space

Literature on public spaces generally focuses on outdoor plazas, town centers, streets or parks. However, little covers how museums can become a space of public address. I argue that a museum seems like a natural fit, with its primary goal being a space that represents the history of people, places and things. Many museum programmes imply they are a public space without actually modifying anything within their programme to support and develop such a space. I plan on looking at the limitations and potential of the museum as a public space. By analyzing the relationship between museums and public spaces, I will determine how the development of an interior space can address the growing need of a communal gathering place of discourse within communities. In the first section of the literature review, the view and understanding of museums was discussed. As the role of the museum was re-examined, its importance as a public institution arose.

Museums are evolving to attract a more diverse audience base by welcoming people not regularly visiting their institutions. The status of the museum as a public institution has been stated in museology writing; however there is ongoing skepticism regarding its validity. By recognizing that museums "have neither acted as, nor been perceived as, being 'for the public,' despite a history of being a public institution" (Barrett, 2012, p. 5) will provide an imperative outlook on how to proceed. It will be important to first develop an understanding of the key terms, how they are defined, used and what they mean in today's context. Through the examination of theory on public space a more comprehensive understanding on how museum professionals can better respond to the public will be developed.

Despite the fact that we are surrounded by public spaces in our everyday, the meaning and history behind them is rather complex. To begin with, one must ask what public space is. Public space can be defined in a variety of ways, the traditional concept emerging from the Greek agora. Agora, which literally means gathering space, functioned as a place where citizens could gather and participate in public discourse. When defining what it means for a space to be public, a number of themes arose, public space as democratic space, public space as third place, and public

space as social space.

3.4.1 Public space as democratic space

Jurgen Habermas, member of the Frankfurt School, was a key theorist on public space, defining it as "the space in which citizens deliberate about their common affairs, and hence an institutionalized arena of discursive interaction" (Calhoun, 1992, p. 110). For Habermas, the public sphere is a "universal abstract realm in which democracy occurs... public space, meanwhile, is material. It constitutes an actual site, a place, a ground on which political activity flows" (Mitchell, 1995, p. 117). Habermas cites cafes and piazzas as examples of material public spaces as they become communal meeting grounds. The focus of his writings, particularly The Structural Transformation of the Public Sphere, center on the concept of the bourgeois public sphere in France during the late eighteenth century. He discusses how at that time, there was a shift in the social structure as a new civic society arose. This led to the development of the bourgeois public sphere, which became the site "where the interests of the state, the commercial class and the bourgeois

intersect[ed]" (Barrett, 2012, p. 19). This was a pivotal moment in history as it began to change how the public sphere was perceived; it became a new platform in which the public could disseminate their view. Oddly enough, it was at this time that the concept of the public museum arose. This was similarly due to the shifting social values and practices of the time, moving away from the private collections of the wealthy to public collections accessible to all. Accessibility was one of the key elements of a public space because it allowed everyone to be able to participate in a democratic process. "The existence of public space is thus said to support democracy because it facilitates public discourse" (Barrett, 2012, p. 9). If this is the case then how can a museum facilitate public discourse? Programming comes to mind first, considering what the prime uses of the space are, in addition to looking at the types of activities the space should support. By viewing the museum as a site of public address, it is important to reflect on what the space needs to respond to and encourage so as to intersect with a wider audience. This type of space would support a more intimate environment, developing into a public living space where

individuals connect with one another. For this to occur the traditional spatial organizations must be reconsidered, which may involve a broader outlook on the concept of what a museum should provide and support. Conference/ meeting rooms, and a multipurpose space that can hold lectures and fundraising events, begin this transformation. As Barrett argues, museums "tread a fine line between breaking new ground and appropriating spaces and practices already situated elsewhere"(2012, p. 114). Hooper-Greenhill describes the new form as "the exhibition ... form[ing] part of a nucleus of events which will take place both before and after the display is mounted" (Hooper-Greenhill, 2000, p. 152). I took hold of this notion, contemplating how the design could support this concept. This became the main reasoning behind the location of the site being in close proximity to Old Market Square, because this has naturally become the nucleus of the Exchange District, so I wanted to feed off its dynamic. Directly across from Old Market Square is Maw Garage which is currently undervalued and deteriorating. It stands out when one imagines the facade being restored to its original condition, being open and

light-filled developing this visual and physical connection to Old Market Square.

Habermas' work can help foster a new outlook on how museums can go about developing democratic sites for the people. For this to occur, Habermas' 'three institutional criteria' which are: (a) a 'disregard of status' (b) a 'domain of common concern,' and (c) all 'inclusive,' should be met (Habermas, 1989, pp. 36–37). The key to making a museum that meets these characteristics is by "challeng[ing] the unidirectional transmission of knowledge" (Barrett, 2012, p. 57). In breaking down the elitism front and diminishing the authoritative voice of the museum, control is given to the people to construct their own meanings and understanding through active participation within the environment. It becomes central to bring individuals together regardless of their social status or education in order to form a neutral ground of public debate. This way, the space reflects inclusivity and diversity, Habermas' key criteria. This becomes a significant development in the museum by offering new relationships between individuals, community members, and Heritage Winnipeg, all of this changing the

participant's role into one that is active. It is important to consider who the public is that the environment is trying to appeal to. In this instance Heritage Winnipeg would be trying to attract individuals that are interested in the conservation of Winnipeg's built environment. However, the interior environment will support a broader range of elements, such as a cafe, or hosting events that are outside Heritage Winnipeg's realm in an attempt to create a 'social space', or 'third place' which will be discussed in the following sections.

Habermas states that "the bourgeois public sphere may be conceived above all as the sphere of private people com[ing] together as a public" (Habermas, 1989, pp. 27, 52). The way Habermas describes the public sphere seems quite simple and eloquent, private people coming together to form a public. However, the complexity arises in how the design of the interior environment contributes to the development of a public space. From looking at examples of other projects, such as The Smithsonian Museum of American History, one can notice how they used different design elements such as "a light filled atrium, open vistas, and a grand staircase... to contribute to the feeling of the Museum as a public square" (Barrett, 2012, p. 89). The space develops into an 'arena for discussion' where the public can share their opinions freely and contest one another.

I see Habermas' notion of public space as a site of democratic discourse coinciding with Heritage Winnipeg's objective of getting community members interested and activated in heritage conservation issues of the Exchange District. At Heritage Winnipeg's Annual General Meeting in July 2012 it was noted that they saw the lack of public education and awareness on heritage conservation issues as the underlying problem. As Heritage Winnipeg's prime purpose is to advocate for the restoration of buildings, a key way to reinforce and build awareness on these issues is by developing a public space that becomes a stage for public debate, fostering discourse to continue and grow.

3.4.2 Public space as third place

Ray Oldenburg, an urban sociologist, proposed that we require three types of spaces in order for our lives to have a "sense of wholeness and distinctiveness" (Oldenburg &

Brissett, 1982, p. 265).   These include, home, work, and what Oldenburg termed third places, described as

> the core settings of informal public life. The third place is a generic designation for a great variety of public places that host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms of home and work (Oldenburg, 1997, p. 16).

The key defining characteristics Oldenburg lists of a third place are that it is: on neutral ground, a leveler, conversation is the main activity, accessibility and accommodation, importance of regulars, low profile, mood is playful, and home away from home. One of the most important aspects of a third place is that they provide a neutral ground so as no one is troubled by playing host or guest (Oldenburg, 2010, p. 41). They are casual places where people come and go as they please while acting as a leveler by eliminating the presence of different social classes or rank by being accessible to all public. This brings a diverse group of people together, putting everyone on common ground. The main activity in a third place is conversation; it is about intermingling with others that you would not normally have the chance to. It is important to consider different activities that would complement conversation, such as games (cribbage, dominoes), pool, as well as food and drink. This leads to third places having low profiles as their main focus is on social interaction between people. If third places are to become common meeting grounds for individuals, careful consideration must be made to accessibility within the premises in addition to getting to the building. It must be convenient for people to get to, otherwise the appeal fades (Oldenburg, 2010, p. 48). As times vary where people can escape from home/work, it is important for third places to keep long hours of operation in order for them to be accessible and accommodating. A way to go about this is by having a partition that can subdivide the space, keeping the front end with the cafe open for longer hours. The mood in a third place is playful due to the spontaneity of the environment but what draws people most to third places is the other regular visitors, it is these people "who give the place its character" (Oldenburg, 1997, p. 34). Third places are also considered to be a home away from home as people

feel comfortable in their environment.

Oldenburg researched the evolution of American culture, describing how the development of the modern urban environment has led to the decline of third places. He stated that it is due to the changing form of community that we have lost our connection to third places. Oldenburg and Brissett insisted that it is not a loss of community that arose from suburbanization but rather a "loss of certain conditions of social life which community allowed... provid[ing] opportunities for social relationships and experiences with a diversity of human beings" (1982, p. 267). Oldenburg emphasized the importance of developing such places by using the metaphor of a tripod. If people only have home and work then they will be relying on the instability of a bipod (Oldenburg, 1997, p. 15). Many people think of third places as representing the past, such as the general store, the saloon, post-office, or tavern, however, as their primary purpose is to connect individuals to one another in an informal public space. I would argue that there will always be a need for this in society, "we are, after all, social animals" (Oldenburg, 1997, p. 203).

Another trend that has surfaced in response to our way of life is an increase in stress-related illnesses, leading to American industry losing 50-75 billion dollars annually due to absenteeism (Oldenburg, 1997, p. 10). Oldenburg asserts that a possible way to counter this stress is by having informal public gathering places. A study was done on the impact of third places on community quality of life and a positive correlation was found; the more third places, the higher perceived quality of life (Jeffres, Bracken, Jian, & Casey, 2009, p. 343). Other benefits to participating in third places include diversity and novelty (Oldenburg & Brissett, 1982, p. 274), which home and work rarely allow for these as they have consistent inhabitants. On the contrary, third places are marked by diversity as there is always a potential for people with diverse backgrounds and experiences to gather together (Oldenburg & Brissett, 1982, p. 275).

The rapid development of suburban communities after World War II led to a new form of community which removed the services and amenities from neighborhoods, resulting in a greater dependence on automobiles. As these elements grew more fragmented, nothing was within

walking distance. Urban development became hostile to both walking and talking. In walking, people become part of their terrain; they meet others; they become custodians of their neighborhoods. In talking, people get to know one another, they find and create common interest and realize the collective abilities essential to community and democracy (Oldenburg, 1997, p. xiv).

Environments are being designed to discourage loitering and lounging, the layout of space preventing individuals from sitting or standing around in conversational groups (Oldenburg, 1997, p. 204).

Post-war housing was increasingly privatized and segregated from others. As the houses got bigger, they began to integrate a lot of aspects the outside world was to provide, such as, "swimming pools, pool tables, picnic grills, liquor bars, the movie screen and quality music sound, and even tennis courts" (Oldenburg, 1997, p. 214). As places for informal public gathering were not provided in neighborhoods, individuals tried to compensate in other areas of their life. This however did not work out well, "in

the absence of an informal public life, people's expectations toward work and family life have escalated beyond the capacity of those institutions to meet them." As a result, people are finding themselves increasingly alienated from others in their community (Oldenburg, 1997, p. 9). As we continue to realize the importance of third places, ways in which we can reintegrate them into communities must be found.

The Exchange District provides an alternative to traditional suburban communities as it has a diverse mix of commercial, residential, educational, and recreational uses. As Winnipeg's downtown continues to be redeveloped and revitalized, it continues to attract larger amounts of people every year. City council's long range plan is to promote downtown development and encourage downtown living (Downtown Winnipeg BIZ, 2010, p. 7). With more than 72,000 people already going downtown to work every day, and the projected residential unit growth between 13.5% - 22.5% by 2021, downtown Winnipeg is in position to develop a strong community (Downtown Winnipeg BIZ, 2010, p. 10). To support this growth, third places should

be developed in conjunction with the development of the community. The Exchange District is already home to a natural social hub, being Old Market Square; however, in the winter there does not seem to be a place that provides similar activities and atmosphere. Developing a space to meet these needs will further strengthen the Exchange District's standing as a social hub.

In Oldenburg's book Great Good Place he discusses a number of examples of third places. The example of a store in the small American town of River Park, Minnesota stands out as he discusses how the architecture became a significant element in the way people interacted with the place. The facade featured large windows which played a key role in unifying the interior with the exterior. These elements encouraged the development of public space as a third place. By taking these elements into consideration, I will be able to more thoughtfully develop how people use and interact with space.

For a museum to develop into a third place, a number of changes must be made. These include longer hours, more seating, acceptance and encouragement of noise, food and beverage facilities that are integrated into the environment, development of spaces that support conversational groupings along with areas for loitering and lounging. "Third places create opportunities for social interaction and community building and benefit organizations once they position themselves to achieve the status of third places" (Crick, 2011, p. 63). This is one of several reasons behind the choice to complement the design of Heritage Winnipeg's interpretive center in the Exchange District with an informal public gathering place. I saw it as an opportunity to broaden the range of people coming in contact with the organization and what it does in an informal setting. "Oldenburg... has great value to the museum profession if our institutions are to be effective public forums and catalysts in the creation of a truly civil society" (Gurian, 2001, p. 112). From Oldenburg's work one can see how third places have the potential to develop into an informal social hub where citizens can gather and develop connections.

3.4.3 Public space as social space

William Whyte was an American urbanist who studied human behavior through people watching and time-lapse photography/filming. From his observations, he would chart people's movement to discover patterns. In 1971, Whyte began the Street Life Project for the New York City Planning Commission, investigating why certain public spaces worked and some did not. Using this research, he published the book The Social Life of Small Urban Spaces, which outlines his key findings being broken up into eleven sections: the life of plazas; sitting space; sun, wind, trees, water; food; the street; the 'undesirables'; effective capacity; indoor spaces; concourses and megastructures; smaller cities and places; and triangulation. The following highlights the most relevant.

At this time, urban plazas were being studied in New York because the City was giving incentives to add additional floor space to buildings that included a public plaza. After construction, it became apparent that certain plazas were not attracting anyone while others were very popular. Whyte figured if he could discover the reasoning behind this, better guidelines could be set out in the building code. In total, Whyte studied "16 plazas, 3 small parks and a number of odds and ends." (1980, p. 15). Whyte commented that the human behavior patterns he observed would not be unique to New York, but could rather be applied to any city with high pedestrian traffic (1980, p. 23). In the end, the City Planning Commission incorporated Whyte's recommendations into a new open-space zoning code.

Whyte studied the Seagram Building plaza as it appeared to be one of the most popular, as well as the success that inspired the city to form the building incentive. Constructed in 1958, this plaza was not intentionally planned to be a people plaza, but naturally took shape into one, with up to one-hundred and fifty people found there on a good day (Whyte, 1980, p. 14). He began his study by looking at "how people use plazas" (Whyte, 1980, p. 16) and some of the patterns that arose were:
• mainly young office workers from the surrounding buildings used the plaza, the best-used ones being sociable places.
• people tend to distribute themselves fairly consistently over space.

• women "tend to favor places slightly secluded" whereas men tend to be near the front of the action (Whyte, 1980, p.18).

• most-used plazas had a higher proportion of women compared to men; further to this, if "there are double-sided benches parallel to a street, the inner side will usually have a high proportion of women; the outer of men.

Whyte's key finding was "what attracts people most, it would appear, is other people" (Whyte, 1980, p. 19). Another notable finding was that when people stopped to have a conversation, they did not move out of the main path of travel but rather towards it, entrance and exit points being the most popular. It is understandable why conversations start near or around the main paths of travel but why they stay in this location blocking traffic was unclear. One hypothesis Whyte made is that it is a result of individuals having choice. By being in the center, one has the most choice, they can easily break off or continue their conversation (Whyte, 1980, p. 21). You can see this reason arise again in the way individuals choose their seat in a space, with the middle of large open spaces often being empty. It was also found that people gravitated towards objects in space, "such as a flagpole or statue" (Whyte, 1980, p. 21).

Elaine Heumann Gurian is a museum consultant/advisor that does a fair amount of writing on museology. Similar to Whyte, she discusses human behavior in a public space and how it is essential to set up areas in the museum where people can stroll at their own pace, pause, sit, and converse with others. She underscores how social interaction within museums is now understood to be a critical consideration in the design. This idea is reinforced by research on museum visitor behavior which claims that "on average, visitors spend... one third of their time interacting with other people" (Falk et al., 1985). The authors also infer that social interaction enhances learning. If this is the case then perhaps museum designers should be considering how the space can encourage and support "gathering as an activity"(Gurian, 2001, p. 110). Instead of being like the traditional museum where visitors may go only once a year, the museum as a public space encourages repeat visitors through new consideration in the programming of space.

This would help "change the museum into a functioning neighborhood by providing the casual social interchange that civil streets engender" (Gurian, 2001, p. 108). Gurian concludes by stating "that museums should stay attuned to and then encourage such broader social uses of their spaces as important opportunities to enhance community building within our museums"(Gurian, 2001, p. 108).

When trying to determine the reasoning behind why certain plazas were more popular than others, a correlation was found with the amount of 'sittable' space; finding that the plaza with the largest amount was most popular. Whyte believed "one linear foot of sitting space for every thirty square feet of plaza" was sufficient (1980, p. 39). One would think that the physical comfort of sittable space would be most important but revealed as most significant was being socially comfortable; this means having choice over the different types of areas you can sit (Whyte, 1980, p. 28). What arose from this was what characteristics determine an ideal sittable surface. Seventeen inches was found as the prime height, but it could range anywhere from twelve inches to thirty-six inches (Whyte, 1980, p. 31). The other

key criteria is the depth, indicating that for two people to sit comfortably back to back it should be at least thirty inches, with thirty-six inches being ideal. This relates to the idea of what is socially comfortable, people were found sitting backs to one another on a twenty-four inch deep surface, however "not in comfort: they have to sit on the forward edge, erectly, and their stiff demeanor suggests a tacit truce" (Whyte, 1980, p. 31).

Whyte found an interesting pattern in the use of corners; people seemed to cluster in these areas as the abutting ledge to the stair provides a right-angle that is perfect for face-to-face conversations. Similar to how people have conversations in the prime traffic routes, it was found that "circulation and sitting, are not antithetical but complementary" (Whyte, 1980, p. 33). Whyte described benches as artifacts whose purpose "is to punctuate architectural photographs" (Whyte, 1980, p. 33). The issue with this outlook is that they are often in isolation from one another and the action of the plaza; therefore, they do not end up being very popular. Alternatively, the main criteria with chairs is movability because this provides individuals with choice, allowing them

to form their own groupings. This concept of movability relates back to the idea of being socially comfortable, "if you know you can move if you want to, you feel more comfortable staying put" (Whyte, 1980, p. 34). During the time-lapse filming it was seen repeatedly that when an individual goes to sit down in a chair they move it a few inches either way before sitting. What is intriguing about this is that the chair always ends up being about where it was originally, but Whyte states "the moves are functional... they are a declaration of autonomy, to oneself, and rather satisfying" (1980, p. 35). Whyte warns against the use of entirely fixed seats as there is less chance to meet the appropriate social distances between different elements for a wide range public space. The key is to map pedestrian flows and placement of elements within the space in attempt to provide a socially comfortable space.

Whyte listed food as one of the main factors in forming a socially active space, asserting that "food attracts people who attract more people" (1980, p. 52). In his studies he researched vendors in public plazas and how they flourish social activity. He found that when cafe tables were placed in closer proximity to one another there was a greater chance of impromptu social interaction between people (Whyte, 1980, p. 53). However, Whyte lists the critical factor to social activity as the relationship of the plaza to the street. For it to be successful, a passerby should not be able to gauge where one begins and the other ends. There should be a seamless transition by making the sidewalk part of the space to extend the interior public space onto the exterior.

Whyte uses Paley Park in New York as an example of where you can see what he terms as secondary use, which is when people do a double-take of the park as they are passing by. About half will smile while others will pause then move towards the park (Whyte, 1980, p. 57). This secondary use stimulates impulse use therefore location choice is a very important aspect in attracting visitors. This idea led me to research the surrounding neighborhood to find the proper site placement that has a connection to an active street. King Street was found to be an already established pedestrian route, becoming even more active when events are taking place in Old Market Square or in the surrounding businesses (Kings Head/Peasant Cookery). Since sightlines of the space

are vital, locating it in clear view from Old Market Square was essential. As Whyte states, "a good internal space should not be blocked off by bland walls. It should be visible from the street" (1980, p. 79). This will be done by restoring the King Street facade back to its original condition, consisting largely of windows that will connect the interior to the exterior.

Looking at Whyte's concepts made me recall Elaine Heumann Gurian's article "Form Follows Function: How Mixed Use Spaces in Museums Build Community" where she describes the changing context of the museum interior to one of community-building. She suggests to view museums' "internal spaces as neighborhoods within themselves" as it would open up new and different ways of organizing the space (Gurian, 2001, p. 104). Gurian states how museum professionals have already began supporting aspects of this but must further push this concept in order for it to be successful. This is where I think Whyte's research on human behavior can come into play by adding another layer to the development of a thriving social public space. Suggested aspects to consider are "strolling opportunities,

frequent corners to turn, demarcations between public and private space, comfortable opportunities for hanging out, and a mix of services provided" (Gurian, 2001, p. 104). Gurian reinforces the significance of the last factor explaining that "the more varied the internal spaces, the more diverse the audience" (Gurian, 2001, p. 106). Flexibility becomes an important concept as the spatial requirements continually evolve, leading to a broader view of programming, adding food services, gift shop, media bays, meeting space, and a multi-purpose space. A fundamental change in view is made when one "consider[s] the uses of traditionally non-programmed museum spaces" and how they can now become locations for public activity. An example of this is when the entryways/atriums in a museum are used for events such as concerts, or fairs. Breaking away from the traditional and exploring new opportunities is what will make the museum relevant to current society.

The final concept Whyte discusses is triangulation which is defined as "the process by which some external stimulus provides a linkage between people and prompts strangers to talk to each other as though they were not" (1980, p.

94). An example of this would be 'street characters' doing impromptu performances for people passing-by. Sculptures have also been found to produce the same effect, drawing in viewers to "stand under it, beside it; they touch it; they talk about it" (Whyte, 1980, p. 96). The horse sculpture outside of Mayberry Gallery in the Exchange District can be seen as an example of this, drawing people's attention. Whyte's examples made me consider how this concept could be further prompted by the environment, whether it is a design element (such as Heritage Winnipeg's Streetcar 356) or the activities that are taking place within the interior.

Although Whyte's concepts are directed towards urban spaces they can easily be extrapolated to interior environments. In regards to indoor spaces, Whyte even states himself "there is enough of a record to indicate that the denominators are much the same as with outdoor spaces" (1980, p. 76). Whyte views his surroundings through a very human perspective which is why his work can so easily translate to interior design, as the focus is on how people will move through space. His outlook ended up being termed bottom-up place design as the focus of the "design should

start with a thorough understanding of the way people use spaces, and the way they would like to use spaces" (Project for Public Spaces, 2012). A lot can be learnt from Whyte's text, particularly focusing on the types of spaces that will support and foster social interaction. By using his research on human behavior and patterns of movement I will be able to make more informed decisions on how to organize the space.

3.5 Conclusion

Faced with challenges of being relevant in today's context, museums planners have started to shift their attention toward new approaches. This section has discussed some of these possibilities, such as the post-museum, constructivist learning theory and the museum as a public space. All of these ideas reinforce the need of making our cultural institutions more accessible and open to the everyday public. The museum's role in society has had to be re-evaluated, "reposition[ing] themselves in relation to their audiences" (Hooper-Greenhill, 2000, p. 150). In the end the overarching theme is the shift in focus to the needs of the users. As stated by Hooper-Greenhill "cultural organizations have ... become more conscious of those to whom they are speaking" (2000, p. 142).

If museums transition appropriately, they will be in a position to have a central role in postmodern society (Hooper-Greenhill, 1999, p. 68). They become a fundamental candidate in the formation of a public space that supports public discourse. It is important, however, to consider the common themes behind public space, analyzing how a small-scale museum could support and facilitate the development of a rich interactive and social space.

3.6 Summary Chart

Theory: Post Museum Theory
Summary: As we move away from viewing visitors as a homogenous mass of passive recipients in the modernist museum to individuals as active participants in the post-museum, the museum must alter how it is organized.

Design Considerations:
- careful attention to the spatial arrangement
- space should be organized in such a fashion that the user has control over the order in which they can move through the space and what areas they feel they want to pause and stay longer at or skip over - no fixed path
- special consideration shall be placed on the style of communication - the way a visitor can interact with the environment, how objects are displayed (more inviting)
- encourage several ways of viewing objects - multiple styles
- breaking down the exhibits into smaller groups to help aid in the perception of a more informal, welcoming environment (interspersing exhibits throughout the space, mixing in other elements)
- developing the museum as a site of discourse and discussion (forum) - by transforming the space into a meeting ground for diverse people to engage in dialogue
- Provide a multi-purpose space that can hold events/lectures where people can join in the discussion of what is happening with heritage buildings
- stronger connection to community members by developing into an informal social gathering space that supports food/drink
- the post-museum looks towards broadening its users in order to develop into 'a nucleus of events.' Therefore the space should support alternative approaches that engage a diverse audience base (other programs should be put in place to support this).
- the center should open itself up to different community groups and uses - participatory model
- implement methods that support a greater degree of social interaction. [For example, exhibits that need more than one person in order for it to work (collaboration with others). Or events that allow community members to join in the conversation. Or exhibits that are co-curated with community members.]
- "spaces with more colour, more noise, and which are more physically complex" (Hooper-Greenhill, 2010, p.148).

Theory: Constructivist Learning Theory
Summary: This section discussed how visitors are no longer viewed as 'empty vessels to be filled' but are active participants in the creation of knowledge

Design Considerations:
- spaces that involve visitors
- provide opportunities for visitors to construct their own meaning in a two-way communication with the museum
- dissipate hierarchy
- connection to the familiar - link the old with the new to help learners make connections
- association with place - the connection the visitor makes with the building is important - consider carefully location, appearance, scale, and atmosphere as the building sets up how the visitor feels in the space and how they view the organization
- freedom of movement - provide multiple paths through space, no fixed entry/exit points in the exhibit area
- learning modalities - provide the learner with a range of choices, supporting diverse ways of learning
- comfort is a key consideration as it influences how long people stay in an environment - provide plug-in for people to work on laptops in space
- set up the museum to be more socially active rather than isolated - combine different functions and elements
- create a non-formal, boisterous, and animated environment
- orientation
- break-down one-way flow of knowledge, involving visitors to become co-authors
- accessibility - provide varying heights of displays, provide opportunities for people with visual impairments - tactile displays
- other resources - open storage areas where the extensive collections of the museum can be displayed openly
- collaboration - set up the center so that it can collaborate with other groups. Consider being able to break down the multi-purpose space into two smaller areas that can be rented out separately (audio-visual equip)
- expand audience base and use of space by allowing organizations to rent out multi-purpose space - provide separate entrance, washrooms facilities, and storage (coat, and tables and chairs)
- developmentally appropriate - develop a space that would be meaningful to both children and adults - layered text

Theory: Kolb Theory of Learning
Summary: Kolb outlines the range of choices that should be provided in a learning environment to support individuals arriving at their own conclusions.

Design Considerations:
- diverse array of options
- enable visitors to choose their own order and learning mode, each individual developing their own mix
- provide a balance between the four learning modes
- create a supportive environment for reflection
- provide ample opportunity for reflection and social interaction
- form a non-intimidating, inviting, supportive atmosphere
- develop wayfinding and landmarks in the space to help draw people through

Theory: Public Space as democratic space
Summary: This section addresses how a museum can develop into a communal gathering place of discourse within a community.

Design Considerations:
- integrate spaces that can support/facilitate public discourse - multi-purpose space for events, cafe and lounge area where people can gather and talk while being surrounded by exhibit material
- traditional spatial organizations must be reconsidered - a broader outlook on the concept of what a museum should provide and support must be made
- provide wide range of elements to draw in users that aren't typically museumgoers
- the museum can facilitate discourse - by challenging the unidirectional transmission of knowledge, becoming a place where people can hear others views, read others views (element of social media - people can join in the discussion via twitter or facebook), see other views
- develop a "public living space" where individuals can connect to one another
- break down elitism front - diminish authoritative voice to make a less intimidating, more inviting environment
- the space can reflect inclusivity by offering a new relationship between community members and Heritage Winnipeg by opening the office environment onto the exhibition space welcoming in passers-by to come in and chat, breaking down the elitism front while also giving the office more 'street presence'
- look at how the interior environment can contribute to the feeling of a public space [example - light, open vistas, seating]

Theory: Public Space as third place

Summary: Primary purpose of a third place is to connect individuals to one another in an informal environment.

Design Considerations:

- neutral ground - make sure the space/atmosphere feels like it is the publics and that each individual is in control of what they want to learn and gain from the environment
- conversation - create areas that support social interaction, conversational groupings, and loitering and lounging [consider different activities that would complement conversation (drinking coffee)]
- access - convenient location (in the heart of the Exchange District) on already established routes of pedestrian and vehicular activity, in close proximity to transit
- access - the space will have a partition halfway into the space so that it can keep the front portion with the cafe open for longer hours while closing down the other half
- the mood in a third place is playful - to support this, the design of the environment can have playful element to it (colorful seating)
- home away from home - create a comfortable, relaxing, non-intimidating environment
- as the Exchange District is growing to have a larger residential area there is a need for a place for community members to gather
- Old Market Square is already a natural social hub so it made sense to locate adjacent to it, so as to feed off its dynamic in order to grow even stronger
- acceptance and encouragement of noise, food, and beverage

Theory: Public Space as social space

Summary: This section discusses the work of William Whyte, his studies of human behavior and patterns of movement in public plazas as it will allow more informed decisions on how to organize space.

Design Considerations:

- as people attract people, it would make sense to have a large number of windows on the front facade (King St.) so people walking by or those at Old Market Square can see the activity going on inside
- as people gravitate towards objects in space to sit rather than in the middle of a large open space, careful consideration will need to be placed on the location and orientation of seating
- set up areas where people can stroll at their own pace, pause, sit and converse with others
- encourage and support gathering as an activity (have roots of seating by the cafe - provide plug-in-in capability for people with laptops, etc.)
- encourage broader social uses of space (multi-purpose space - hold events, lectures, classroom style)
- provide lots of sittable space, also different types of sittable space - private/secluded, more open
- moveability of seating arrangements is an important consideration to make a space socially comfortable for different types of people
- provide sitting area close to circulation path as the two complement each other
- right corners are ideal as they are perfect for face-to-face conversation
- flexibility is key as spatial requirements continually evolve and change for different events

- think of new ways of organizing space, rather than segregating elements and blocking off separate areas by walls, using the display to act as partitions
- Whyte lists food as one of the main factors in forming a socially active space, therefore, it is important to integrate this element in the space
- relationship to the street - secondary use stimulates impulse use, therefore site placement is an important consideration (locate on an active street) - have views from Old Market Square
- locate seating areas in close proximity to one another so that there is a greater chance of impromptu social interaction
- provide varied internal space to support a more diverse audience base
- development of a design element that prompts people to touch, talk, move around (triangulation - Winnipeg Street Car, pods coming off wall with exhibit elements displayed above them)

CHAPTER4
CASE STUDIES

4.1 Walker Art Center

Designer: Herzog & de Meuron
Site Location: Minneapolis, MN
Square Footage: 260,000
Completed: 2005

The guiding principles used during the development of the Walker Art Center's new expansion align similarly with the goals of my project. For that reason, I wanted to study how the designers went about re-envisioning the museum to develop into a 'town square' or forum for civic engagement.
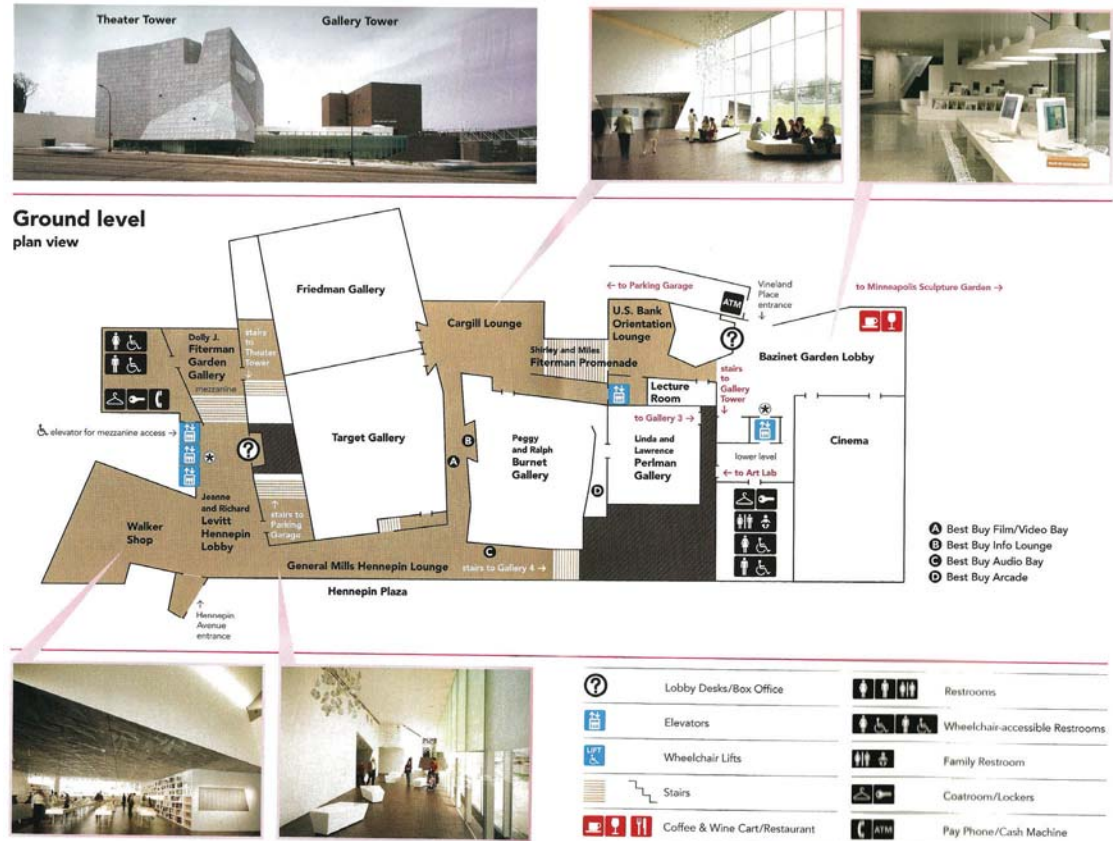
Figure 4.1.1 - Ground Floor Plan. Excerpted from the Walker Art Center Visitor Guide

The Walker Art Center's renovation/expansion began in 2003, starting with a re-examination of how the museum was envisioned. The original Barnes building exemplified the traditional view of museum architecture - a large, imposing structure with a lack of windows. The site and orientation of the building, away from the main thoroughfares of Lyndale and Hennepin Avenues, reinforced the traditional view. It was thought that traditional museums "favored their separation from prosaic activities and the hustle and bustle of the city street and tended toward a kind of transcendent setting that is more idyllic in nature" (Walker Art Center, 2005, p. 21). The re-envisioning of the museum started with the reorientation of the building, the expansion being located adjacent to the major thoroughfares so as to strengthen its connection and visibility to the city. A new outlook was taken on the materiality of the expanded facility, moving towards a more transparent institution that would highlight the activity going on in the interior. "The long glass curtain wall along Hennepin Avenue acts as a giant picture window framing the movement of both visitors inside and the street life outside" (Walker Art Center, 2005,

p. 22). The lower eight feet of the glass was left clear, while the upper section was etched in an attempt to make it more human-scaled. How the museum related and connected to the city and its people changed with the development of the Walker Art Center.

Figure 4.1.2 - Glass facade at night. Excerpted from Walker Art Center. (2005). *Expanding the Center : Walker Art Center and Herzog & de Meuron.* Minneapolis, Minn.: Walker Art Center.

The Walker Art Center's director and staff drafted a number of open-ended questions to guide the design for the new facility, including:

• "How can an art center become a forum for civic engagement?

• What exactly would the Walker 'town square' look and feel like?

• How could it be a venue for alternative ideas and diverse voices?

• How could the expanded facility itself act as a form of outreach?

• How can an atmosphere for experiencing art in differing ways be encouraged?

• How can we create empowering experiences?

• What story is the Walker trying to communicate to its audience?

• What can we learn from other museum typologies and experiences?

• How can technology facilitate learning and visitor interaction?

• How and what can the Walker learn from its community

partners and constituents?"
(Walker Art Center, 2005, pp. 17, 20, 29)

The questions act as a vital tool in the design process, as the group decides how they envision the new facility. It helped the planning group, consisting of senior staff members, curators, designers, educators and technologists push beyond traditional thinking. I found this method effective in providing a good foundation for the design process and see it aligning well with my design process. This was a defining step away from conventional thinking, as the designers began to set out new programming characteristics for their space. Furthermore, the group examined the institution through a number of lenses: object experiences, cognitive experiences, social experiences, and introspective experiences. Typically, museums have focused on only one of these views; however, as museums support a wide-ranged audience, by default they should support a diverse outlook. The concern is how to "actively design programs and hybridize spaces to offer a variety of these experiences?" (Walker Art Center, 2005, p. 20). How Walker Art Center went about this will be discussed later in this section.

The Walker Art Center's primary goal of audience engagement arose after the completion of a long-range plan for the facility. This shifted the focus away from objects and artifacts towards the formation of an active audience collaborating with the facility. The design group saw technology as one approach to facilitate active engagement but was mindful that it was not the only way. They understood that in order for a museum space to successfully draw a wide-ranged audience the environment needed to support a variety of approaches. Focus was placed on 'visitor-oriented journeys' so as to support a "more variable and personal [experience]... that encouraged serendipitous encounters and open-ended experiences" (Walker Art Center, 2005, p. 18). As Kathy Halbreich, the Director of the Walker Art Center put it, "the metaphor for the museum is no longer a church or a temple, but a lively forum or town square" (Walker Art Center, 2005, p. 28). The metaphor of the town square ended up being the driving force behind the design process, envisioning the space as "a place sparkling with conversation and debate stemming from the art presented" (Walker Art Center, 2005, p. 29). The Walker's

staff conducted interviews with a number of individuals to gauge public opinion regarding the idea of a town square. Respondents described a town square as "a place that feels: unstructured and flexible, commonly owned, safe for all opinions, family-friendly. At the heart of the community where exploration, connection, political speech, debate, performance, public art, entertainment, beauty, nature, self-expression, refuge, celebration, ritual, and challenge happens" (Walker Art Center, 2005, p. 29). The group looked at ways cultural institutions could form alternative social spaces that are full of conversation and debate. The goal was to move beyond the traditional "obligatory corporate atrium[s]... that are created for the occasional large gathering, but which mostly remain barren and unused. Instead, a more modestly scaled area could feel active with only a handful of people" (Walker Art Center, 2005, p. 19). Guidelines for the size and scale were taken from the book, A Pattern Language, which stated that

> Our observations suggest that open places intended as public squares should be very small. As a general rule, we have found that they work best when they

have a diameter of about 60 feet... it takes only 4 people to give life to a square with a diameter of 35 feet and only 12 to give life to a square with a diameter of 60 feet (Alexander, Ishikawa, & Silverstein, 1977, pp. 311–312).

It was determined that the concept of the town square would not take physical form in one particular space but rather is a philosophy of programming the space through the implementation of a number of design elements (Walker Art Center, 2005, p. 29). One example of this is the introduction of what they termed 'media bays,' seating bays carved into the walls in the major circulation pathways. These upholstered seating areas are equipped with monitors, headphones, and speakers so that individuals could sit and become engaged with information about the exhibition in a different way. As the group described them, the media bays were "part of a larger experiment in thinking beyond the artifact-centered experience... it was necessary to explore the possibility of a new kind of space - something more informal, even causal, for experiencing art" (Walker Art Center, 2005, p. 23). The lounges added to this "foster[ing]

experiences that galleries cannot always provide, whether it means enabling spirited conversations, presenting materials that would allow a deeper exploration of an artist or artwork, or just inviting a greater measure of relaxation" (Walker Art Center, 2005, p. 24).

Figure 4.1.3 - Media bays. Excerpted from Walker Art Center. (2005). *Expanding the Center : Walker Art Center and Herzog & de Meuron*. Minneapolis, Minn.: Walker Art Center.

As museum visitation patterns range from individuals, couples, to small and large groups, the Walker's planning group programmed lounging spaces of various sizes. In addition to the media bays, there were two larger lounges, one paralleling the city's busy street along Hennepin Avenue,

while the other faces a four-acre garden. One really begins
to feel the connection between the museum and the city
in the lounge facing Hennepin Avenue as the floor inside
follows the gentle slope of the street outside. Although quite
subtle, this connection strengthens the link between the
interior and exterior. Herzog & de Meuron played off the
site's unique qualities, setting it up as an intermediate zone
between the two. One can notice a number of juxtapositions
throughout the design, starting with the two lounges which
illustrate the "duality of the city and garden... characterized
as sharing the dynamics of a front and back porch - a
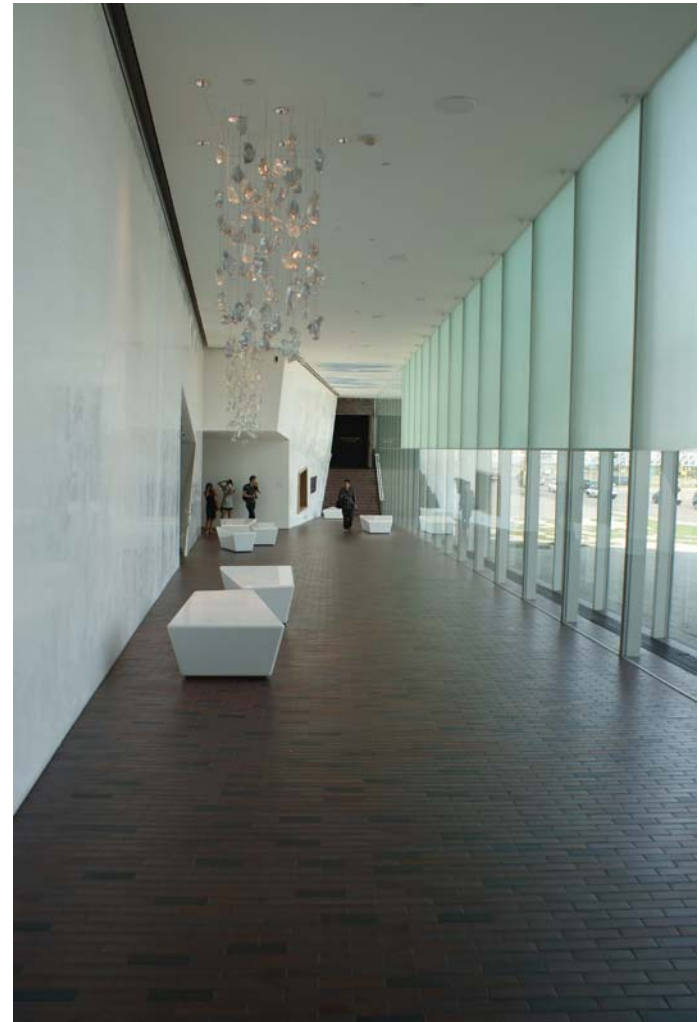
Figure 4.1.4 & 4.1.5 - The 'city' and 'nature' lounge. Images by Author.

connection to street life... and a more private, contemplative space" (Walker Art Center, 2005, p. 24). I found this design feature underlies the theme of the institution of providing a diverse array of options for individuals while they are in the space. Another juxtaposition can be found between the old and new building as Herzog & de Meuron created subtle links between the two. Such can be seen in the use of the Barnes building's dark brick facade as the flooring in the expansion (Figure 4.1.5). In addition, the stucco cubes of the new building are to be representative of an inverted version of the Barnes' interior gallery space (Walker Art Center, 2005, p.22).

The arcade, which is the Walker's educational gallery, hosts long-term installations. It is currently home to an "animated virtual dolphin programmed with artificial intelligence software that can answer questions posed by visitors" (Walker Art Center, 2005, p. 25). The Walker also contains interactive tables placed throughout the exhibition space acting as information kiosks for individuals to learn more about artworks they are interested in. These tables are "outfitted with audio and video resources and state of the art gesture recognition software" (Walker Art Center,

Figure 4.1.6 & 4.1.7 - 5. Exterior Shot. Excerpted from Walker Art Center. (2005). *Expanding the Center : Walker Art Center and Herzog & de Meuron.* Minneapolis, Minn.: Walker Art Center. 6. Juxtaposition between old and new building - Image by Author

2005, p. 26). It is set up so that two people can use it at once and if the two individuals each choose an item which have a correlation a virtual "third space" will be formed. This leads to the two characters on screen having a discussion with each other about the piece of work. This is meant to encourage the two individuals to begin discussion with one another. These elements showcase ways the Walker's exhibition space engages its visitors in a conversation, aligning with the Walker's educational mission which "positions the museum as a catalyst for inquiry instead of a repository of answers" (Walker Art Center, 2005, p. 26). The goal is to foster active engagement between the individual and others as well as the individual and the museum. I see these goals aligning with those of my designed facility.

Figure 4.1.10 - The arcade. Excerpted from Walker Art Center. (2005). *Expanding the Center : Walker Art Center and Herzog & de Meuron*. Minneapolis, Minn.: Walker Art Center.

Figure 4.1.8 & 4.1.9 - Interactive Table & "Third Space". Excerpted from Walker Art Center. (2005). *Expanding the Center : Walker Art Center and Herzog & de Meuron*. Minneapolis, Minn.: Walker Art Center.

The lobby in the Walker Art Center incorporates a gathering space, an information desk, and a long table with computers that provide access to exhibition catalogues, digital artworks and free wireless internet.   The space offers a comfortable lounge area including sofas and chairs in addition to a "stepped ziggurat structure" which acts as a "mini-amphitheatre [where] visitors can watch video and media presentations about exhibitions on view" (Walker Art Center, 2005, p. 25). The idea for the creation of this structure was inspired by the Barnes building's granite exterior steps, which had become a natural gathering spot. The structure blends into its surroundings as it grows from the ground, being clad in terrazzo, the same material on the floor.

Figure 4.1.11 & 4.1.12 - The lobby & stepped ziggurat structure. Excerpted from Walker Art Center. (2005). *Expanding the Center : Walker Art Center and Herzog & de Meuron.* Minneapolis, Minn.: Walker Art Center.

The museum professionals implemented what they termed a distributed learning approach, which gives control to the individual in the creation of knowledge and experiences. They called it the "free choice learning environment" as it supports numerous ways for learning to occur (Walker Art Center, 2005, p. 25). This approach is also supported through the layout of the space. It is organized in such a way that it allows viewers to be drawn to areas that interest them, rather than having to follow a linear route and go through every section in a precise order. A correlation can be seen between the Walker Art Center's distributed learning approach and George Hein's Constructivist Museum. Both envision the visitor as an active participant in the environment, supporting and encouraging individuals to form their own route and make their own connections. It was important that the spaces were relevant to a wide ranged audience, not singularly focused on children or adults. In this way, it would bring a diverse group of people together. It was noted that this approach was not meant to replace traditional methods but rather complement them.

Museums were traditionally seen as daytime destinations; however, the Walker's director wanted to change that, opening up the space to visitors at night for events, lectures, and performances. Although the galleries were closed, Herzog & de Meuron came up with a way that they would still remain a part of the space, visible to the visitors. This is accomplished through the use of perforated panels that would perform this dual function.

Figure 4.1.13 - Perforated Panels. Excerpted from Walker Art Center. (2005). *Expanding the Center : Walker Art Center and Herzog & de Meuron*. Minneapolis, Minn.: Walker Art Center.

The other major theme developed throughout the design process was the notion of civic engagement. The Walker's director and staff looked at ways to link the concept of town square and civic engagement as it saw the two leading to the formation of a stronger bond with the community. It was stated that the two concepts

> are related but not synonymous. Civic engagement begins when individuals recognize their personal values and connect them to social issues in the collective sphere. The town square is a communal atmosphere in which participants feel connected to their values, interests, and community (Walker Art Center, 2005, p. 29).

The Walker's director and staff ended up developing the 4C Model, which was meant to provide a guideline to curators and programmers in developing exhibitions, events and programs that were more socially engaging. The 4C model stands for, container, convener, connector, and catalyst - it was thought that if an institution provided these four roles it would support the development of a town square (Walker Art Center, 2005, p. 28). Under each category

they developed a list of considerations that support the development of each. After using this model to develop their program and it proving successful, they decided to make a workbook including these guidelines to help support other facilities form an institution that supports civic engagement. As the Walker Art Center's director made a strong commitment to the community she "strove to make ... a place where people from all walks of life may gather... [a place where] art acted as a catalyst for civic and social engagement" (Walker Art Center, 2005, p. 28). They looked at how connection could be made between community issues and contemporary art - developing what they termed the Spectrum of Civic Engagement. This spectrum was broken down into four categories, including: commentary, dialogue, action, and leadership. Similar to the 4C Model, a list of criteria to help guide the development was created. At the end of this section I have attached two pages from the workbook that outlines the 4C Model and the Spectrum of Civic Engagement (see Figure 4.1.14 & 4.1.15).

The goal of the Walker Art Center since its inception has been to create programs that build stronger relationships

with the community. The staff hopes to develop this relationship through the promotion of conversation, debate, and active participants. The Walker has moved beyond conventional models, creating a new formed space that fits with the outlined goals. In the end, I believe the design for the new facility succeeded in engaging with the city and its audience more fully by rethinking the programming of the space.

The 4C Model: Roles Art and Artists Play in the Town Square

Roles are about the kind of energy you want you program to have, or the spirit that already lies within the art. Will your experiential focus be on exploration, challenge, connection, celebration, reunion, action, or debate?

Civic Engagement Role of the Program

My program's primary civic role will be:

Container   Connector   Convener   Catalyst

This role may be appropriate when the work or program . . .

☐ Provides a physical space for people to be or create.

☐ Provides an atmosphere in which people feel empowered to express their opinions.

☐ Helps boost a community's collective self-esteem by celebrating an achievement or success.

☐ Provides a safe and encouraging atmosphere for the discussion of difficult community issues.

This role may be appropriate when . . .

☐ Ideas being addressed are linked together in unusual or novel ways.

☐ There are opportunities for participants to connect to their own heritage and culture.

☐ The work or program can bring together community members from different generations, cultural backgrounds, faiths, and lifestyles for shared experience and interaction.

Container
Physical, emotional or psychological space

Convener
The purpose of impetus for a gathering.

Connector
Linking people and ideas together

Catalyst
Provoking awareness, response or movement

This role may be appropriate when the work or program. . .

☐ Is in response to an event that has captured the community's attention or requires a communal response.

☐ Can help mark a community's life cycle or important historical events.

☐ Brings people together for deliberation or collective decision-making.

☐ Is of broad interest to the community and provides common ground for consensus-building among people with similar interests.

This role may be appropriate when the work or program . . .

☐ Brings people together to discuss a topic that lacks consensus or is a source of disagreement.

☐ Has the potential to mobilize new players or get people to take action on an issue.

☐ Assists in revealing the assumptions in a community regarding divisive civic issues.

☐ Serves as the focal point for the exploration of an issue, and allows participants to experience its different perspectives.

Figure 4.1.14 - The 4C Model. (Prim, Peters, & Schultz, 2005, p. 4)

The Spectrum of Civic Engagement Activities

The boundaries between these categories are often fluid, and programs may contain elements of one or more. Defining a primary outcome is helpful in focusing programs.

Civic Engagement Goals and Outcomes

My program's primary civic activity will provide opportunities for:

Commentary   Dialogue   Action   Leadership

Commentary	Dialogue	Action	Leadership
A public expression of personal opinion or belief in the form of written or spoken statements, explanations, or criticisms.	The process of individuals or groups sharing and learning about the beliefs, feelings, interests, or needs of others with the goal of improving understanding and trust.	A mode of addressing an issue, policy, or event in a direct manner that attempts to make an immediate or measurable change.	Leadership involves the ethical use of power and empowerment, leading by example, exerting influence, and inspiring others to realize their potential.

For Commentary, consider:

Can you provide easy access to information that visitors need to construct informed and considered opinions?

Can you create opportunities for individuals to capture and share their responses, opinions, or beliefs virtually or in person?

Can you create an environment that encourages people to develop opinions about an issue and is supportive to all views?

How?

For Dialogue, consider:

Can you encourage participants to learn about the views of others and share comments, thoughts, or feelings about issues in the work?

Can you make space for one-on-one conversations, small group discussion, or larger group dialogue?

Can you make a space for those voices and opinions that are not present in the dialogue or have been excluded?

How?

For Action, consider:

Can you create opportunities for participants to address the issues in a direct and active manner?

Can you provide information and resources for further action on the part of individuals or groups?

Can you encourage or support the formation of an organized group of concerned citizens?

How?

For Leadership, consider:

How can you lend institutional support or commitment for a particular community action or project?

How can you organize citizens around a particular project or issue through an Artist-in-Residence program or other events?

How can you show the way to a desired goal by supporting existing projects or by modeling an outcome?

How?

5

Figure 4.1.15 - Spectrum of Civic Engagement. (Prim et al., 2005, p. 5)

4.2 Museum in Chinese in America (MOCA)

Architect: Bialosky + Partners
Permanent gallery designed by: Maya Lin
Site Location: 215 Centre Street, New York, NY
Square Footage: 14, 000
Completed: 2009
LEED Silver certification

Figure 4.2.1 & 4.2.2 - 1. Centre Street Facade Excerpted from Maya Lin. (2012). Architecture - Museum of Chinese in America 2009. Maya Lin Studio. Retrieved August 9, 2012, from http://www.mayalin.com/ 2. Lafayette Street Facade - Image by author.

I selected MOCA as a case study as it has similar size, scale, and programmatic features to my design. I was also drawn to MOCA's combination of raw architectural qualities and modern design elements. The project showcases how a museum can actively involve and engage its audience through a number of different strategies.

This museum began as a community-based organization in 1980 known as the Chinatown History Project (CHP). From there it grew into The Museum of Chinese in America (MOCA), a small-scale museum designed to share the story of people of Chinese descent in the United States. MOCA developed into a participatory museum, inviting individuals to share their stories with the museum through

an online database called the' Story Map'. Certain stories are chosen then incorporated into the museum's exhibit. This approach, described as "from me to we" was conceived by museum consultant and exhibit designer Nina Simon, author of the book Participatory Museum, which will be discussed in the next case study. "From me to we" can be described as when an institution releases its control over the

Figure 4.2.3 - A. Centre Street Entrance B. Lafeyette Street entrance C. Section Facing South. Excerpted from Maya Lin. (2012). Architecture - Museum of Chinese in America 2009. Maya Lin Studio. Retrieved August 9, 2012, from http://www.mayalin.com/

exhibits, allowing individuals to become part collaborators and co-creators. Another example of a participatory design element used in a past exhibit was a module that had "a grid of old Chinatown streets and their buildings, and will also have overlays that show the changes in the built environment over time" (Tchen, 1992, p. 311). This module invited visitors to create and share their own mental maps of Chinatown, highlighting each individual's own spatial patterns and meanings of the environment.

MOCA "strives to be a model among interactive museums" with a goal of making "Chinese American history accessible to the general public,... be a platform for cultural dialogue,...[and] increase visibility of the myriad of voices

Figure 4.2.4 - Images showing courtyard and surrounding gallery. Images by author.

and identities that make up Chinese American history" (Museum of Chinese in America, 2009a). As a result, MOCA has "developed into a trusted community anchor and educational resource" (Museum of Chinese in America, 2009a). For MOCA, developing a participatory museum meant "engaging with our audiences in mutually exploring the memory and meaning of Chinatown's past" (Tchen, 1992, p. 291). This is done through a number of different strategies, one of which includes allowing visitors to add "their memories, photographs, documents, and personal memorabilia to the exhibition" (Tchen, 1992, p. 308).

Additionally, MOCA's directors advocate that the museum attendants listen and learn from the visitors as they are a vital component to the development of knowledge. "Staff will seek to engage visitors in discussion" so that they "will be drawn into a meaningful encounter" as the exhibition serves "as a tool for dialogue among parties who normally would not be communicating with one another" (Tchen, 1992, pp. 310). The exhibition space was designed to act as a stage on which numerous activities could occur at different times.

Figure 4.2.5 - Image of Exhibit - integration of media, photographs, and hands-on artefacts. Images by author.

The design of MOCA involved the adaptive reuse of an early 1900 historic building which was formerly a machine shop. Incorporated into the design are a lobby/gift shop, "multiple exhibition galleries, interactive display kiosks, a multipurpose classroom, a research center, and a flexible space for multidisciplinary public programs" (Museum of Chinese in America, 2009b). The layout of the space centers around a sky-lit courtyard, which was "left deliberately raw and untouched as a reminder of the past and to evoke a Chinese courtyard house" (The American Institute of Architects, 2009, para. 5). As you walk through the

space "short biographic films telling the stories of Chinese Americans through history" are projected on the windows that peer onto the courtyard (Museum of Chinese in America, 2009b). While in the courtyard, one can see all projections at once, having view of "the whole arc of the evolution of Chinese in America" (Davidson, 2009). This element visually connects the two-storey courtyard to the surrounding exhibition spaces.

What initially attracted me to this project was the simplicity in its design; however it still illustrated a strong connection to the museum's subject matter. I connected with this project

Figure 4.2.6 - Interior of room modeled after Chinatown store. Images by author.

on numerous levels: (1) the size and scale of the project, (2) the project's goals/mission, and (3) the design and aesthetics of the space which borders both elegance and industrial chic. Maya Lin was trying to form a relationship between old and new and I believe her design exemplified this through a number of elements. A key component of the site was that it faced both east - towards its roots in Chinatown, and west, towards Soho and beyond. The main entrance is located at 215 Centre Street on the east side, while the Lafeyette Street side was what Lin called the "evening entrance," for films and lectures (Davidson, 2009). When an individual is

walking through the space and makes it to the Lafeyette side, they enter a room that has been modeled after a traditional Chinatown store. A projection depicting Chinatown's streets in the 1940s plays on the glass, illustrating what the store owner would have seen at the time. As people view the room from the exterior, it is almost as if they are peering into the past. Here, Lin makes an interesting juxtaposition between Chinatown and what it has been developed to on the opposing side.   The design of the Centre Street facade creates another subtle connection between old and new, being composed of wood, concrete, glass and bronze.

Figure 4.2.7. Paint peeling off metal column Excerpted from (Tour of MOCA with Maya Lin, 2009).

The metal columns were left as is, with the paint peeling off them, reminiscent of their past. As the two elements are put against each other, an aesthetically pleasing contrast is made between the two, each needing the other to highlight its characteristics. Lin wanted to create this continual dialogue throughout the space between our past and present and this can be observed throughout the design.

Figure 4.2.8. - Front facade. Image by author.

4.3 Participatory Museum

This will not be a typical case study examination of one project but will rather highlight various techniques implemented in cultural institutions to increase active participation among visitors. The following examples of techniques are selected from Nina Simon's book *The Participatory Museum*. Simon is a museum consultant and exhibit-design expert, with a rich background in the field. Simon's thoughts align with my literature review as she affirms that visitors "want to do more than just 'attend' cultural institutions... [visitors] expect the ability to respond... discuss, share, and remix what they consume. When people can actively participate with cultural institutions, those places become central to cultural and community life" (Simon, 2010, p. ii). The book's focus is on presenting specific techniques and examples of ways cultural institutions can "reconnect with the public and demonstrate their value and relevance in contemporary life" through the development of participatory environments (Simon, 2010, p. i). Simon defines a participatory cultural institution as

> "a place where visitors can create, share, and connect with each other... Create means that visitors
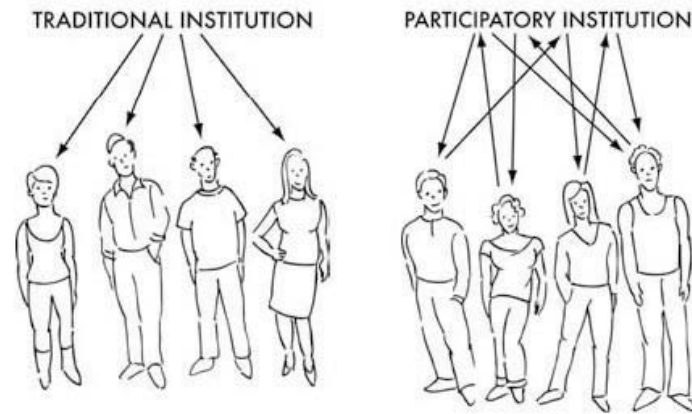
Figure 4.3.1 - Illustrating the difference between traditional and participatory institutions (Simon, 2010, p. 2).

contribute their own ideas, objects, and creative expression to the institution and to each other. Share means that people discuss, take home, remix, and redistribute both what they see and what they make during their visit. Connect means that visitors socialize with other people... who share their particular interests" (Simon, 2010, p. ii – iii).

Throughout the book, Simon uses the word scaffold to explain that in order for participatory experiences to be successful they must be set up in such a way so that they are clear and provide constraints. Constraints make participants feel more comfortable and confident in engaging. Simon

STAGE 5	Individuals Engage with Each Other Socially	**WE**
STAGE 4	Individual Interactions are Networked for Social Use	
STAGE 3	Individual Interactions are Networked in Aggregate	
STAGE 2	Individual Interacts with Content	
STAGE 1	Individual Consumes Content	**ME**
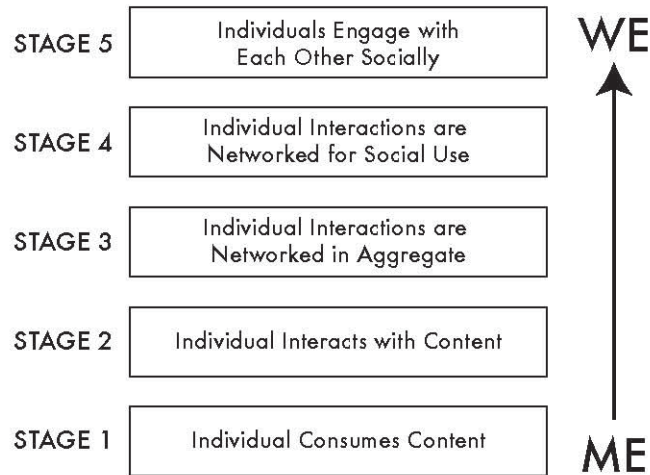
Figure 4.3.2 - Illustrating the five stages from Me to We (Simon, 2010, p. 26).

explains that it is a "misguided perception... that it's more respectful to allow visitors to do their own thing. But that idea reflects a misunderstanding of what motivates participation. Visitors don't want a blank slate for participation. They need well-scaffolded experiences..." (Simon, 2010, p. 25). This is an important aspect to keep in mind when developing the design of an exhibition environment.

Simon breaks the visitor experience into five stages, illustrated in the diagram above; a process described as moving from 'Me to We'. In order for the experience to advance from one stage to the next, the proper scaffolding needs to be put in place. The first stage would be visitors looking at things, stage two would involve touching artifacts, or asking questions. An example of stage three would have visitors voting on which exhibit they liked most, stage four would entail visitors engaging in dialogue about their surroundings and stage five would require visitors to work together to discover new ideas and answer each other's questions.

Simon illustrates the importance of scaffolding in an exhibit called Free2Choose at the Anne Frank Museum where visitors enter a room with a long, semi-circular bench facing a projection screen. Every few feet along the bench are controllers that enable visitors to vote on issues presented on screen. After everyone votes, the results are displayed. When Simon described the experience she said, "I found myself looking for people 'like me' in the crowd. But I had no way to identify them in the faceless group of button-pushers" (Simon, 2010, p. 93). Simon explains that this exhibit cannot move beyond stage three because it lacks the

proper scaffolding. "Even though you are densely packed in a room with other people expressing opinions...you don't turn to your neighbor and start talking... there is not enough scaffolding to help you cross the social barriers... the voting is not a social object that mediates and motivates engagement" (Simon, 2010, p. 94). She illustrates how the exhibit could advance to stage four or five by making the voting more public. She listed a number of ways this could be done:

• "When the results are shown, spotlights in the ceiling could illuminate areas of the room in different colors corresponding to who selected yes or no.
• Instead of voting in place, visitors could be directed to vote by moving to one side of the room or another.
• Visitors could be instructed to share voting stations and to have a brief discussion to come to a consensus vote" (Simon, 2010, p. 94).

As you can see, Simon did not stop after identifying the exhibit was stuck in stage three but rather provided the reader with examples of how it could be altered to make the experience more participatory.

Simon lists several techniques that could facilitate getting audiences more actively involved. These include crowd sourcing topics for exhibitions, having visitors rate exhibits/artifacts or post comments, and posing monthly community challenges for visitors to create or bring in objects related to a specific theme. These techniques assist in generating higher levels of social engagement and repeat visitation. When institutions view visitors as partners rather than consumers, it helps foster a sense of ownership and inclusion. Visitors are not just looking for the most authentic information but also visitor-contributed content as it provides a more personal, multi-vocal, and diverse view of the subject matter. Simon also notes that oversized objects in an exhibit space can also function as social objects as they "are surprising and can be experienced by many people at once" (Simon, 2010, p. 138). Having one of Winnipeg's last remaining wooden streetcars in the space will act as a vital social object, promoting conversation and dialogue regarding Winnipeg's history.

Simon states that museum maps are often found to be confusing or off-putting to visitors as they use abstract

names and titles to describe each exhibit, such as, TomorrowLand or Blue Wing. She calls for a new method of guiding visitors through space that is more understandable and relevant to the everyday user so that they can easily find what area would be most interesting and suitable to their way of learning. Simon describes how successful the online directory I Like Museums (for museums in North East England) helped individuals decide which museum would be most relevant to them, not by looking at the institutional content, but rather by selecting from a list of types of experiences one is seeking, such as, "I like military history, I like keeping kids happy, I like a nice cuppa, I like a place to think" (Simon, 2010, p. 36). This lead me to organize the space in the same manner, focusing on the types of experiences one could engage in, such as hands-on, active participation, traditional/didactic, a place to relax or watch people, or a place to drink/eat.

Simon examined a history museum that implemented video kiosks to invite visitors to share their thoughts/opinions on a topic being displayed. Other visitors would act as critics, sorting the videos into different categories. Visitors were then prompted to create a video in response to one made by another visitor, rather than an institutionally-provided query. Viewers then got to see long multi-vocal dialogues play out across several videos. Another use for video kiosks is inviting visitors to suggest other topics to be covered in the exhibition that can then be voted or commented on.

Simon highlights Signific, an online game platform that encouraged discourse among visitors. Essentially, it was "a comment board that encouraged people to engage in dialogue with each other" (Simon, 2010, p. 111). This was achieved through successful scaffolding, having a structured framework and clear objectives. Questions were posed and rather than allowing visitors to answer generically, it was set up so that they had to chose from one of the four types of responses: "momentum cards to add additional ideas, antagonism cards to raise disagreements, adaption cards to suggest other potential manifestations of the same idea, and investigation cards to ask questions" (Simon, 2010, p. 112). Responses were kept brief, limited to 140 characters, so that people could scan them quickly and focus on those they found most interesting. Simon describes how this could

easily be done physically using different colored post-it notes, "red for momentum, green for antagonism, blue for adaption, and so on" (Simon, 2010, p. 114). Again, rather than having visitors respond to an institutionally-provided prompt, they could add to other visitors comments, creating a threaded dialogue of debate and discourse.

Simon discusses the importance of hosting events/ projects in order to make the museum feel like part of the community. She describes hosting as a "strategic way to demonstrate [a cultural institution's unique ability to serve as 'town squares' for public engagement" (Simon, 2010, pp. 262–63). This encourages a different style of marketing for the museum which can lead to several benefits including:

> 1. "encourage the public to be comfortable using the institution for a wide range of reasons;
> 2. encourage visitors to creatively adapt and use the institution and its content;
> 3. to provide a space for diverse perspectives, exhibits, and performances;
> 4. to attract new audiences who may not see the institution as a place for their own interests"
> (Simon, 2010, p. 281).

The most important aspect of hosting is that it fosters a new view of the institution, altering the way people think about the museum.

I found this book successful as Simon analyzes participatory experiences through a number of different lenses, allowing the reader to grasp the main points of the book more strongly, leaving them eager and energized to implement her ideas. The point Simon concludes with is that there is a growing need for these participatory elements to be integrated into cultural institutions. She does not suggest they replace traditional methods, but rather act as "an 'and', not an 'or'" (Simon, 2010, p. 349). The goal of the participatory museum is to reconnect the institution with people, strengthening the relationship between the two but also between people within the institution. After finishing the book, I conclude that it has affected my perception of cultural institutions as well as any public environment that is attempting to stay relevant in contemporary society by implementing participatory methods. The reading provided me with a better understanding on how different kinds of participatory environments influence the way people move

through and interact with their surroundings and others in the space. It has also left me with a deeper breadth of knowledge and increased awareness of these elements in space, including how they can be altered to become even more successful.

4.4 Summary Chart

Case Study: Participatory Museum
Design Considerations:
- form a space where "visitors can create, share, and connect with each other" (Simon, 2010, p.ii).
- provide well-scaffolded experiences - stepped process
- stage 5 of scaffolding requires visitors to work together -visitors can be told to share voting stations, having to engage in dialogue to come up with a consensus vote
- facilitate getting audiences more actively involved - crowd sourcing topics for exhibits, having visitors rate exhibits, post comments, or posing monthly challenges for visitors to create or bring in objects related to a specific theme
- provide areas for visitor-contributed content, offering a more personal, multi-vocal, diverse view of the subject matter
- incorporate Winnipeg's streetcar into the space as oversized objects function as social objects, facilitating conversation and dialogue regarding Winnipeg's history
- careful attention to wayfinding - think of different ways to guide visitors through space that is more understandable and relevant than abstract names and titles - allowing visitors to chose the type of experience they are looking for: hands on, active participation, traditional /didactic, place to relax or watch people, place to drink/eat.
- possibly integrate video kiosks in the space - place for visitors to share their thoughts/opinions on a topic being displayed, while also allowing other visitors to act as critics sorting the videos and responding to ones of interest
- possibly integrate comment areas throughout the space, inviting visitors to share their thoughts/opinions
- Simon highlights the importance of hosting events as a "strategic way to demonstrate [a cultural institution's] unique ability to serve as 'town squares' for public engagement" (Simon, 2010, pp. 262, 63). They attract new audiences, fostering a new view of the institution. Integrating a MPR space within the interpretive center will allow for this.

Case Study: Walker Art Center
Design Considerations:

- connection and visibility to the city - carefully consider site location (locate on an already pre-established pedestrian and vehicular route)
- new outlook on materiality (transparent institution) in contrast to a traditional institution with its large, imposing structure and lack of windows - select a structure that can relate closely to the human-scale
- glass facade - highlight the activity going on inside to attract passersby
- the questions the Walker Art Center's planning group used to envision the new facility will also help me re-conceptualize what a museum should provide and support
- move beyond conventional thinking towards setting out new programming needs/standards for museum space (instead of a traditional atrium created for occasional large gatherings, a few smaller, modestly scaled areas could be provided)
- consider the general rule: only takes 4 people to make a 35' diameter feel active, while it takes 12 people for a 60' diameter
- to draw in a wide-ranged audience the environment needs to support a variety of elements and learning approaches
- provide a variety of experiences - similar to Kolb's theory - object experiences (CE), cognitive experiences (AC), social experiences (AE), introspective experiences (RO)
- hybridize spaces - public gathering space, MPR, social spaces, reflective spaces, didactic spaces
- shifted focus away from objects towards the formation of an active social environment - break up the exhibit space into smaller areas, while surrounding them with both social spaces, and other elements, such as, cafe, MPR, etc.
- "metaphor for the museum is no longer a temple, but a lively forum or town square" (Walker Art Center, 2005, p. 28) - create a space that exemplifies this

- look at ways cultural institutions can form alternative social spaces, full of conversation and debate
- Walker implemented 'media bays' to provide visitors with an alterative way of interacting with the exhibit - explore different possibilities for a more informal, even causal way of interacting with the space
- provide a number of different lounging options for groups of different sizes - option of moveability for some seating areas
- link between interior and exterior
- juxtaposition between old and new design elements
- Walker Art Center implemented a 'free choice of learning environment', which supported numerous ways of learning. This was also supported through the layout of the space, being organized in such a way so that the visitor did not have to follow a linear path but rather could form their own route through the space being drawn to the areas that interest them.
- museums were traditionally seen as daytime destinations, however the Walker's director wanted to change that, opening up the space to visitors at night for events, lectures, and performances. Although the galleries were closed, a part of the space remained through the use of perforated panels. --- I plan on doing something similar such as dividing the space in half so the front portion can remain open with the cafe, while the back area can be locked down, the Walker provides inspiration on the methods of dividing the space, while making it a visual design feature.

Case Study: Museum of Chinese in America
Design Considerations:

- invite/engage individuals to get actively involved with the exhibit (share their memories, photographs, documents, personal memorabilia and stories; draw overlays/mental maps of how the neighborhood has changed)
- design the exhibition space to act as a stage on which numerous activities could occur at the same time - key consideration will be flexibility, moveability, breaking down the MPR space so that two events can occur simultaneously
- evening entrance - partition the space in half, keeping the front area open with the cafe for public, while having a separate private entrance for the MPR space for events at night
- give some control for individuals to become collaborators/co-creators of the exhibits/programs(lectures/events) - open the office space onto the exhibition so that visitors are welcomed to walk in and talk with the activity programmers
- adaptive reuse of a historic building - highlight key features of the space (trusses, brick walls)
- MOCA provides a good outline for space programming as the size and scale is similar to my selected site
- MOCA's project goals/mission is a good outline for how I see my interpretive center developing
- aesthetics - simplicity in the design, borders both elegance and industrial chic
- juxtaposition between old and new elements, aesthetically pleasing contrast is made between the two, each needing the other to highlight its characteristics
- connection between interior and exterior through a glass facade

CHAPTER5
DESIGN
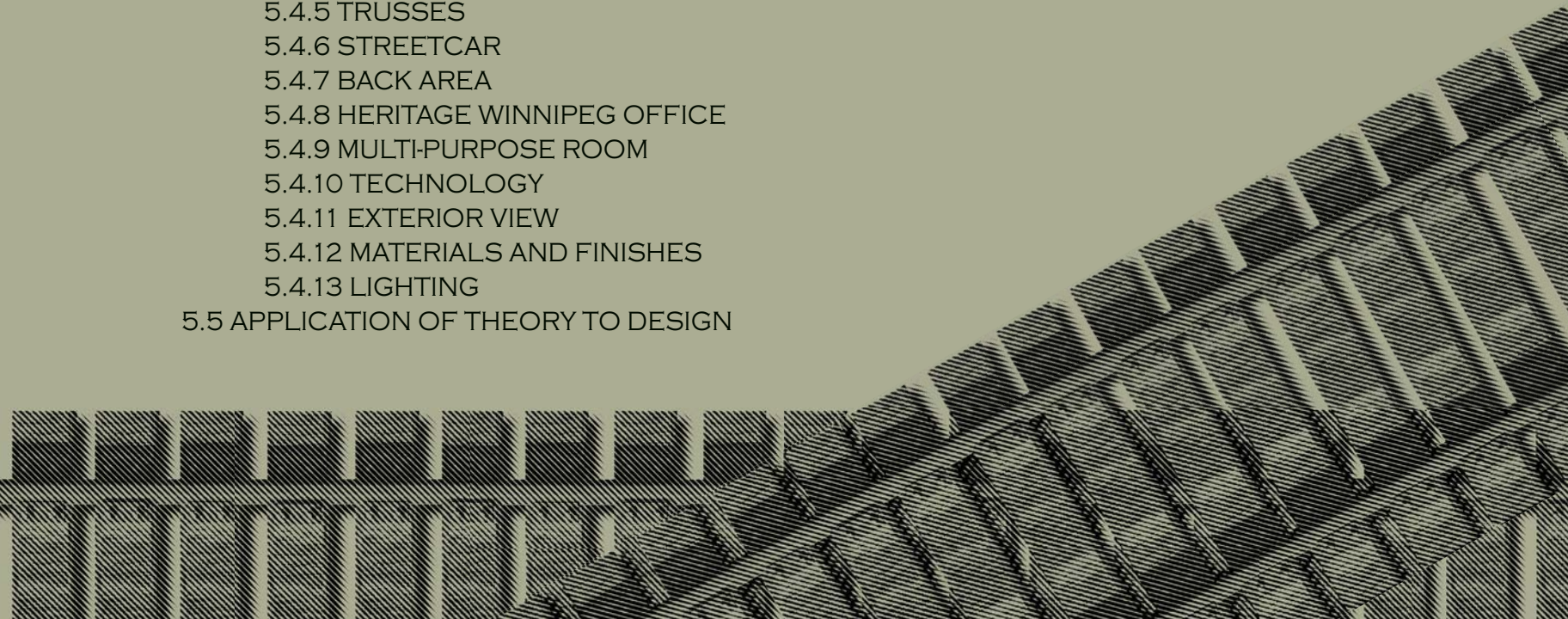
5.1 Programme

Client Analysis
Heritage Winnipeg is a not for profit organization that advocates for the "restoration, rehabilitation and preservation of Winnipeg's built environment"(Heritage Winnipeg, 2012). They seemed like a natural fit since a large portion of their efforts have focused on the Exchange District, as much of Winnipeg's history is based on the former activity in that area.

A key focus of Heritage Winnipeg is advocating for the awareness of heritage sites. A space which would act as both a learning/social center would facilitate growing the public's knowledge and awareness on heritage conservation issues. They will also require office and storage space in order for them to have all their facilities in one building.

"Heritage Winnipeg was established in 1978 as a cooperative effort between the City of Winnipeg, the Province of Manitoba and Heritage Canada Foundation to promote ...heritage conservation"(Heritage Winnipeg, 2012). The organization is funded by public grants and donations. Heritage Winnipeg organizes Doors Open Winnipeg, Manitoba Day Celebration, and Heritage Fairs; all of these elements would integrate well with the interpretive center.

Artspace Inc. is located in the Gault Building, at 100 Arthur Street, within view of Maw Garage. Artspace is a not for profit organization that supports the development of arts and culture in Manitoba. It is an "arts service organization that supports... the Manitoba arts and cultural community at large with administrative services and the provision of affordable creation, production, exhibition and administration space" (Artspace Inc., 2013). Artspace will be in partnership with Heritage Winnipeg, providing financial and managerial support. They will not be permanently based at the interpretive center however, a hotelling spot will be made available in the office space.

User Profile
[see Figure 5.1.1]
Primary Users: staff, visitors, families, school children
Secondary Users: tourists, custodian, organizations
Tertiary Users: speakers, maintenance staff

User	Identity	Activities	# of individuals
Primary: staff, visitors, families, school children	Staff: Heritage Winnipeg Director	• responsible for the overall direction of the interpretive center • plan, organize, direct, supervise, co-ordinate activities	1
	Artspace employee	• as a financial partner in the development of the interpretive center, a hotelling spot in the office is provided if they were needing to meet with a client in the space	one hotelling spot provided 1
	Manager	• responsible for the care of all objects and collections • responsible for the acquisition of all materials required to produce the exhibits • responsible for the financial management of the museum	1
	Activities Programmer/ Guide/Volunteer Coordinator	• organizes volunteer recruitment and training programs, acts as a liaison between staff and volunteers, assists in special event organization, gives lectures and demonstrations to groups, prepares materials	1
	Receptionist	• directs people, answers phone, handles paperwork, directs inquires	1
	Volunteers	• work in exhibit areas, advise visitors, assist in special events, fundraising, work in the gift shop	3 Total Staff: 4 (full-time) 1 (hotelling) ~3 (volunteers)
	Visitors, families, students	• can explore the exhibits, gift shop, multipurpose space, or lounge in the public gathering space (around cafe)	varies [max occupant load 250]

Figure 5.1.1 - User Profile

User	Identity	Activities	# of individuals
Secondary: tourists, custodian, organizations	Tourists	• people passing by, come in for a visit, walk through the interpretive center	varies
	Custodian	• responsible for cleaning the space	1
	Organizations renting out multipurpose space	• can rent out space for a period of time to hold events	max. people allowed: 150
Tertiary: speakers, maintenance staff	Speakers	• occasionally come for fundraising events	varies
	Maintenance staff	• responsible for maintenance of the space	1

Figure 5.1.1 - User Profile

Users Needs:

Psychological Needs:

• need to feel safe and comfortable

• need to socialize

• need for privacy (directors office, washrooms)

• participatory/interactive environment where people are active participants

• creative space

Special Needs:

• effective wayfinding

• handicap accessible - for mobile, visual and cognitive impairment

• good sightlines for wheelchair users (similar to children's sightlines)

• varied learning environments to appeal to a wide ranged audience

• large lettering for visually impaired - with high contrast colors between font and background

• minimize glare throughout space

vestibule
receptionist
washrooms
cafe/seating area
resource center pods
giftshop
multi-purpose room
exhibition space
shipping and receiving
bulk storage
meeting room
staff offices
staff lounge
services
storage
mechanical room

◆ mandatory adjacency
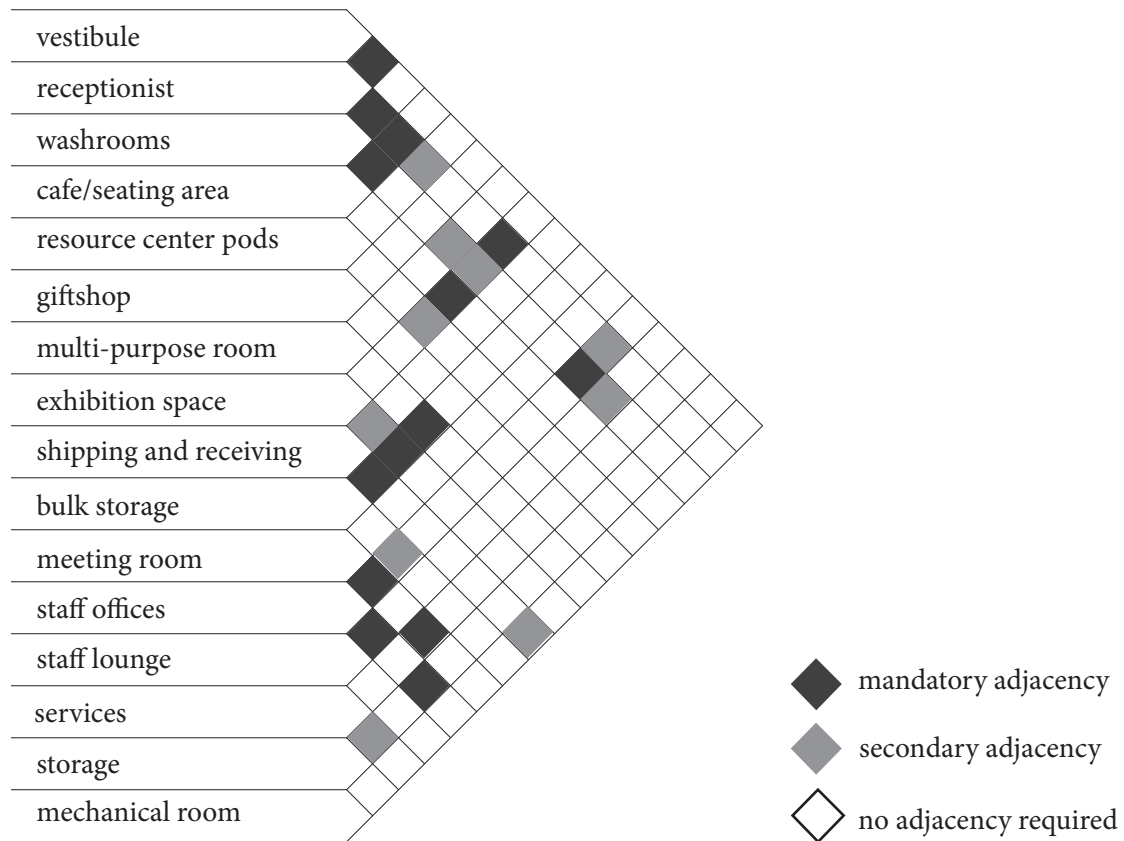
◆ secondary adjacency

◇ no adjacency required

Figure 5.1.2 - Adjacency Matrix

Functional and Aesthetic Requirement

[see Figure 5.1.3 for FFE]

 Listed below are some special color/material requirements:

• high contrast colors between foreground and background (whether it is on walls or signage, so that it is easier for the visually impaired)

• durable finishes

I would like to maintain as much of the original historic building's finishes as possible, celebrating the previous construction methods and highlighting the building's features.

I envision the space having a contrast between old and new, highlighting the key heritage elements of the past while complementing them with new elements that bring the space to life. I visualize the space having an open plan with the exhibit spaces flowing into the public gathering areas (cafe) so as to strengthen the connection between them both visually and physically. Daylight will filter in from the above skylights, washing over the space evenly. This will be supplemented by artificial light to highlight key elements in the space. The overall atmosphere of the space would be dynamic and laid-back (casual). Some of the characteristics to describe the space are: flexible, interactive, participatory, immersive, tactile, and responsive. As for the design of the space, the terms to describe it best are: industrial chic, raw/refined, old/new, rough/clean - these juxtapositions are meant to highlight the contrast of the traditional uses of the buildings in the Exchange to their new found use.

Section 11 Design Guidelines

Issue: Flexibility

Objective: Some of the spaces/elements in the space should be flexible to allow for multiple uses of the space.

Concept: Possibly make the multi-purpose room open onto the exhibition space so that it can become one large space.

Concept: Consider using moveable walls to partition the space into smaller areas at different times.

Concept: Allow for storage of elements like chairs, tables, speaker platform.

Issue: Social interaction

Objective: Interaction between individuals, the environment, and each other is an important part of the learning process.

Concept: Support social interaction by providing an array of areas for people to sit, converse, or interact with each other at a display.

Concept: Consider supporting discourse through the integration of a multi-purpose space that could hold presentations, lectures, or social events.

Concept: Consider integrating food, as it has been found to be one of the main factors in forming socially active spaces.

Issue: Control

Objective: Important to make the visitor feel in control over what areas they want to see in a post-museum/constructivist museum.

Concept: Consider laying out the space in such a way that there is no fixed path or forced route.

Concept: Consider providing a range of choices for individuals in the way they can interact with the space.

Concept: Support diverse ways of learning.

Issue: Atmosphere

Objective: It is vital to make the atmosphere of a post-museum/constructivist museum informal and welcoming.

Concept: Consider breaking down the exhibits into smaller areas to aid in the perception of a more informal, welcoming environment.

Concept: Consider incorporating elements not traditionally found within an exhibit environment (ex. cafe).

Concept: Develop the space so that it is on neutral ground - have other organizations/groups be able to rent out the space and use it for what they need. Open to the public, free of charge.

Concept: Consider developing a design that gives more color and life to the museum, the atmosphere being boisterous and animated.

Concept: Consider maximizing view inside from King St. in order to draw people in. Restore the King St. facade with plenty of windows, giving an open expansive view onto the interior and the activity taking place within it.

Room type	Quantity	Area (sqft.)	Activity/Function	FFE	Quantity	. LxWxH (in.)
Entrance -vestibule -receptionist desk -seating areas	1 1 1	150 150 400	• provide airlock for the space • information, orientation. • visual connection to other major areas is desirable. • waiting area, clear signage and wayfinding • display and promote educational materials and activities	desk (computer) rack for pamphlets hard seating soft seating chairs soft seating couches display shelves	1 1 3 3 1 8	60"x30"x29" 24"x24"x24" 17"x17"x20" 18"x18"x20" 54"x27"x20" 48"x12"x60"
Cafe/seating area	1	900	• provide light refreshments and drinks • place for people to gather and converse	counter food display case shelving modular seating (with opportunity for plug-in)	2 2 4	72"x24"x36" 48"x36"48" 48"x12"
Multi-purpose space Multi-purpose break-out space	1 1	2000 850	• an informal gathering space - can be used for fundraising events (speakers, lecture hall, films, conferences, socials, bingo) • can be broken down into two smaller spaces • possibility for walls to open onto lobby to expand the space at fundraising events (barn doors) • audio/visual and lighting controls should be provided • place to conduct workshops with school groups • break-out space includes the event vestibule entrance, coat storage, lounge seating, area for receiving table, etc.)	chairs folding tables speaker platform projector projector screen	85 35 1 1 1	17"x17"x20" 60"x24"x29" 20"x18"x40" 16"x11"x6" -
Public washrooms	2	600	• placed in an area for maximum convenience (near cafe, and near multi-purpose space) • special attention should be paid to wheelchair accessibility	water closets sinks mirror	10 7 4	28"x20"x26" 30"x22"x30"
Exhibit space	1	5500	• flexible, interactive, participatory and immersive - clear wayfinding - open, tactile, responsive, multi-sensory learning. • special consideration to color, graphics, lighting, sound to maximize visual impact. Proper mix of exhibit techniques.	displays exhibits seating	- - 6	- - 96"x18"x20"
Gift Shop	1	400	(to be located inside the streetcar) • display merchandise • lend/rent exhibit related books, objects, audio-visual materials, and games to teachers	shelves/display cash desk	varies 1	48"x12"x60" 60"x24"x36"

Figure 5.1.3 - List of Spaces

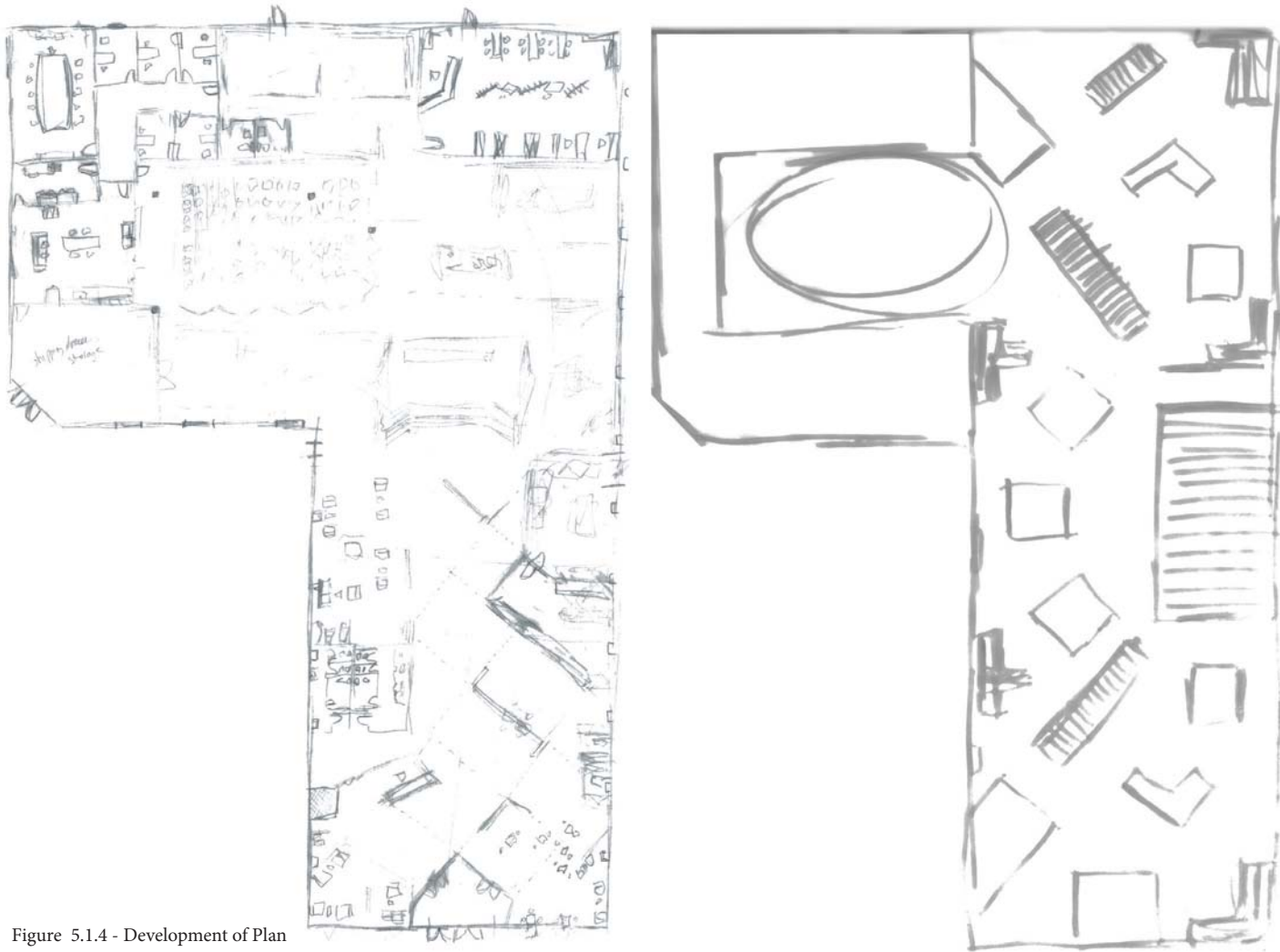| Room type	Quantity	Area (sqft.)	Activity/Function	FFE	Quantity	Dims. Lx-WxH (in.)
Media Bays	4	500	• quiet, organized • collection of materials - displayed in a relaxed area where visitors may explore resources	custom design element	4	
Open office - one enclosed office - flexible office furniture that can accommodate: - 2 additional workers -1 hotelling spot -flexible meeting area (space for 12 board members) - services - enclosed staff room (kitchenette)	1 1 1	100 1000 200	• to be separated spatially from the public areas while still provided visual connection • quiet, organized, workspace • flexible furniture that can adapt depending on use (workspace vs. meeting space) • provide space for xerox, printers, and storage • informal meeting space for volunteers and staff members • comfortable and relaxing lounge space	desks (computers) chairs filing cabinets table projector/projector screen whiteboard soft seating hard seating photocopier recycling bin storage lockers kitchenette - counter, refrigerator, sink, microwave	5 3 10 1 1 1 4 1 1 2 2	60"x24"x29" 17"x17"x20"
Storage area: -shipping and receiving -bulk storage	1 1	200 600	• delivery access for materials, supplies, artifacts and collections • large garage door, storage area • storage for exhibits in transition, folding chairs/tables from multipurpose space	shelves shelves	4 10	36"x15"x60" 36"x15"x60"
Mechanical room	1	300	• hvac equipment, fire & acoustically separated from the rest of the space	boiler a/c unit	- 	-
Total square feet x30% circulation		13850 18005				

Process

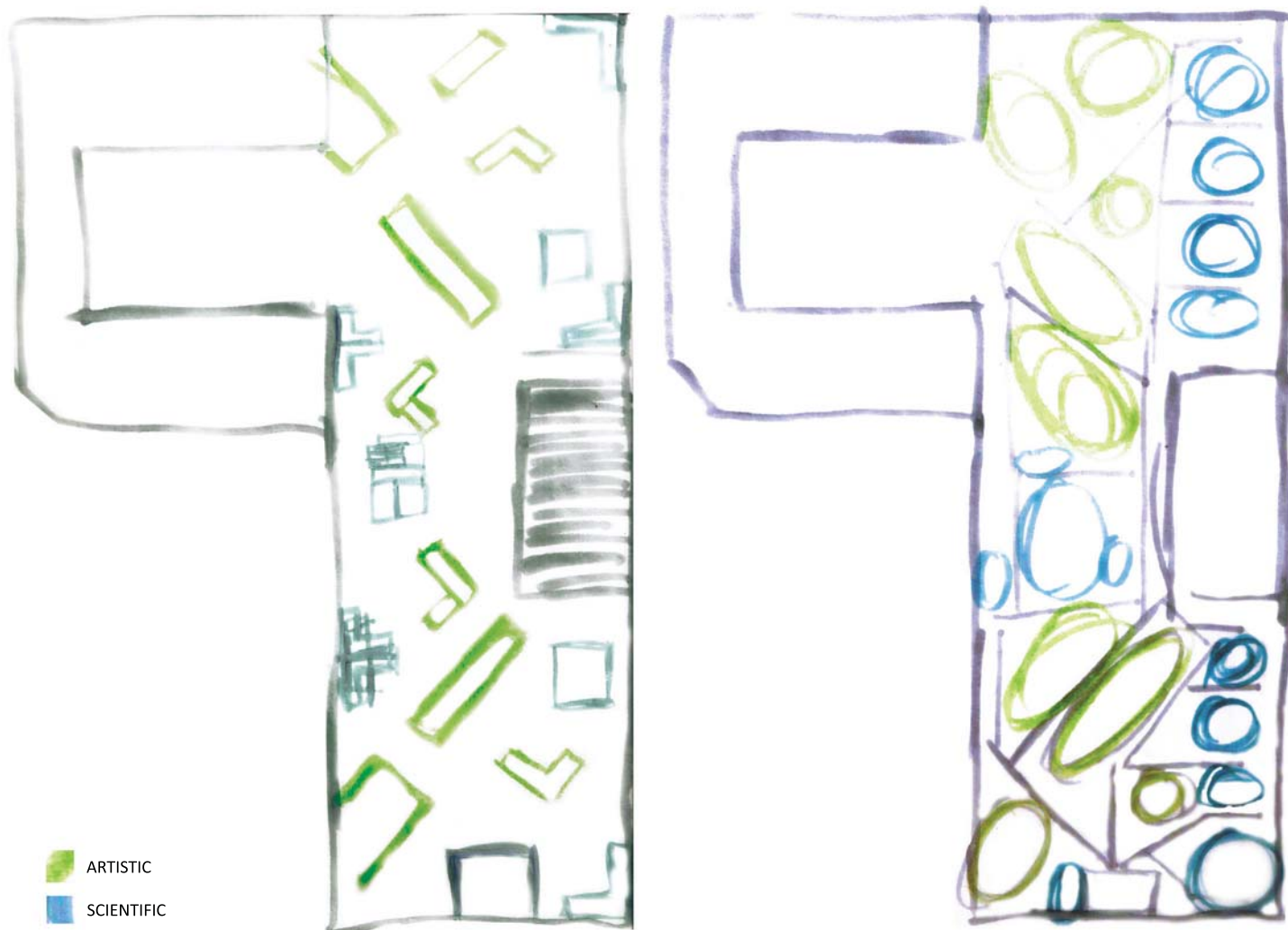Figure 5.1.4 - Development of Plan

ARTISTIC

SCIENTIFIC

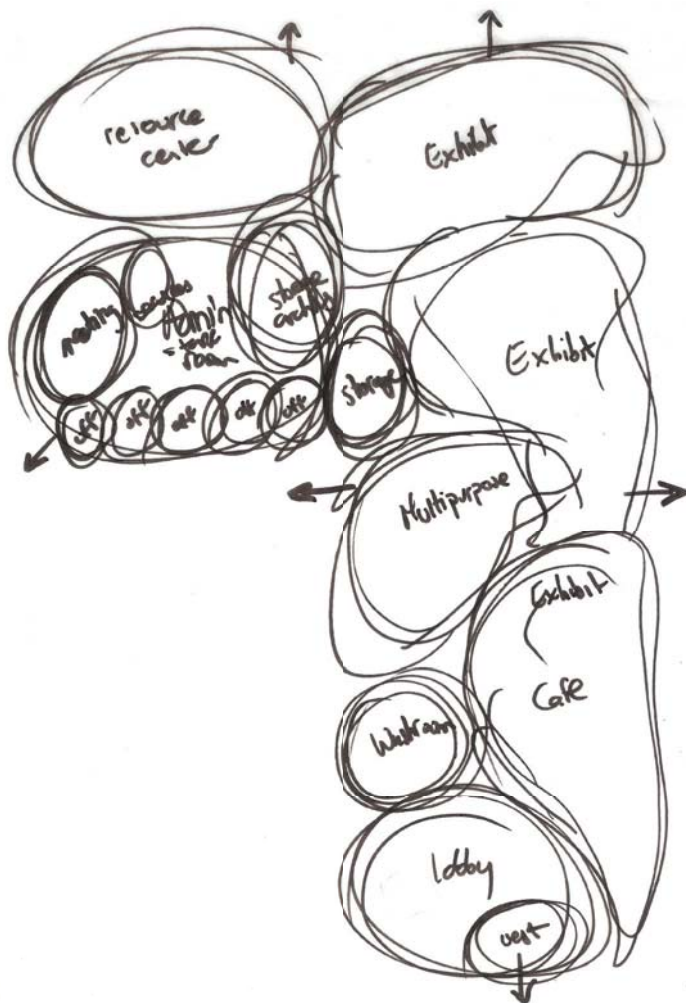Figure 5.1.5 - Development of Architectural Language

Figure 5.1.6 - Bubble diagrams

Figure 5.1.7 - Process

5.2 Design Overview

The design encompasses the adaptive reuse of Maw Garage/Sanford Building at 112 King Street, to become an interpretive center for Winnipeg's Exchange District. The building is located in the heart of the District adjacent to Old Market Square. The design involves the integration of exhibit elements and social spaces, such as lounge areas, a cafe, a multi-purpose space, as well as Heritage Winnipeg's office. The building provided much flexibility in the design, as it was built using steel girders and trusses, a construction method that was advanced for its time. This construction method resulted in an entire floor plate free from columns. As 112 King St. is a historically significant site, I wanted to pay tribute to the historical features of the building, retaining the original exposed brick walls as the backdrop to the exhibit while also highlighting the wood ceiling and trusses in Maw Garage. In addition, the King St. facade would be restored to its original condition with large expansive windows that would, in the past, draw users to view the newest automobile on display. Today, would provide users with a view into the Exchange District's past.

The aim of the design being to create a space that would challenge the idea of what a museum should offer and look like. The interior environment was re-conceptualized, exploring how elements could be organized, moving away from traditional notions such as an imposing structure with static, formal environments. An examination of post-museum theory, constructivist learning theory, and public space theories facilitated in the formation of a new museum design.

WILLIAM AVE.

PRINCESS ST.

132'-8"

112 KING STREET

MAIN
ENTRY

198'

BANNATYNE AVE.

KING ST.

MAIN ST.

0'   25'   50'   100'
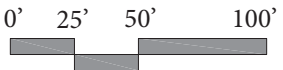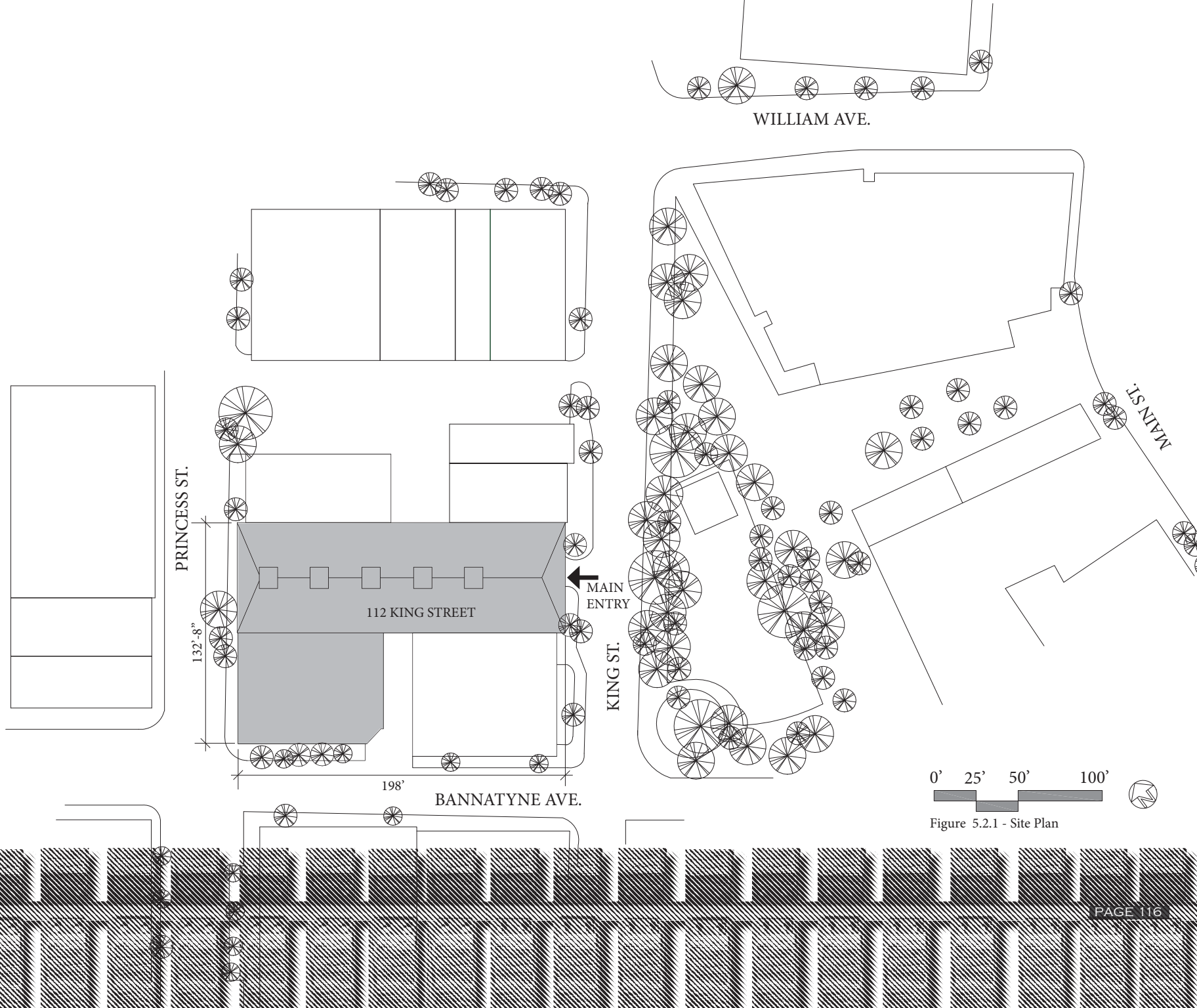
Figure 5.2.1 - Site Plan

5.3 Spatial Organization (interior zoning)

An effort was made to retain the on-grid off-grid architectural language developed early on in the design, however it was modified to be more subtle and less rigid. The long portion of the space, Maw Garage, is where the receptionist, exhibit, cafe and washrooms are located. The back area, the Sanford Building, is where the multi-purpose space, bathrooms, informal lounge area, storage, mechanical room and Heritage Winnipeg's offices are located. The entire space can be divided into two separate entities, so that the front portion located off King Street with the cafe can stay open for longer hours. This also gives individuals that rent out the MPR space the possibility to have their event flow out into the exhibit area while providing security and separation. The following section will describe each of the key elements in the space with more detail.

Figure 5.3.1 - Floor Plan

PRINCESS ST.

KING ST.

BANNATYNE AVE.

MEDIA BAY

GIFT SHOP

MEDIA BAY

MEDIA BAY

MEDIA BAY

RECEPTION DESK

MAIN ENTRANCE

CAFE

SEATING AREA

WOMEN'S WC

MEN'S WC

SEATING AREA

OFFICE

BREAK-OUT SPACE

STAFF ROOM

MULTI-PURPOSE ROOM

HERITAGE WINNIPEG OFFICE

BREAK-OUT SPACE FOR MPR

SHIPPING/RECEIVING AND STORAGE

COAT STORAGE

MEN'S WC

WOMEN'S WC

MECHANICAL ROOM

MPR ENTRANCE

0'   5'   10'   20'
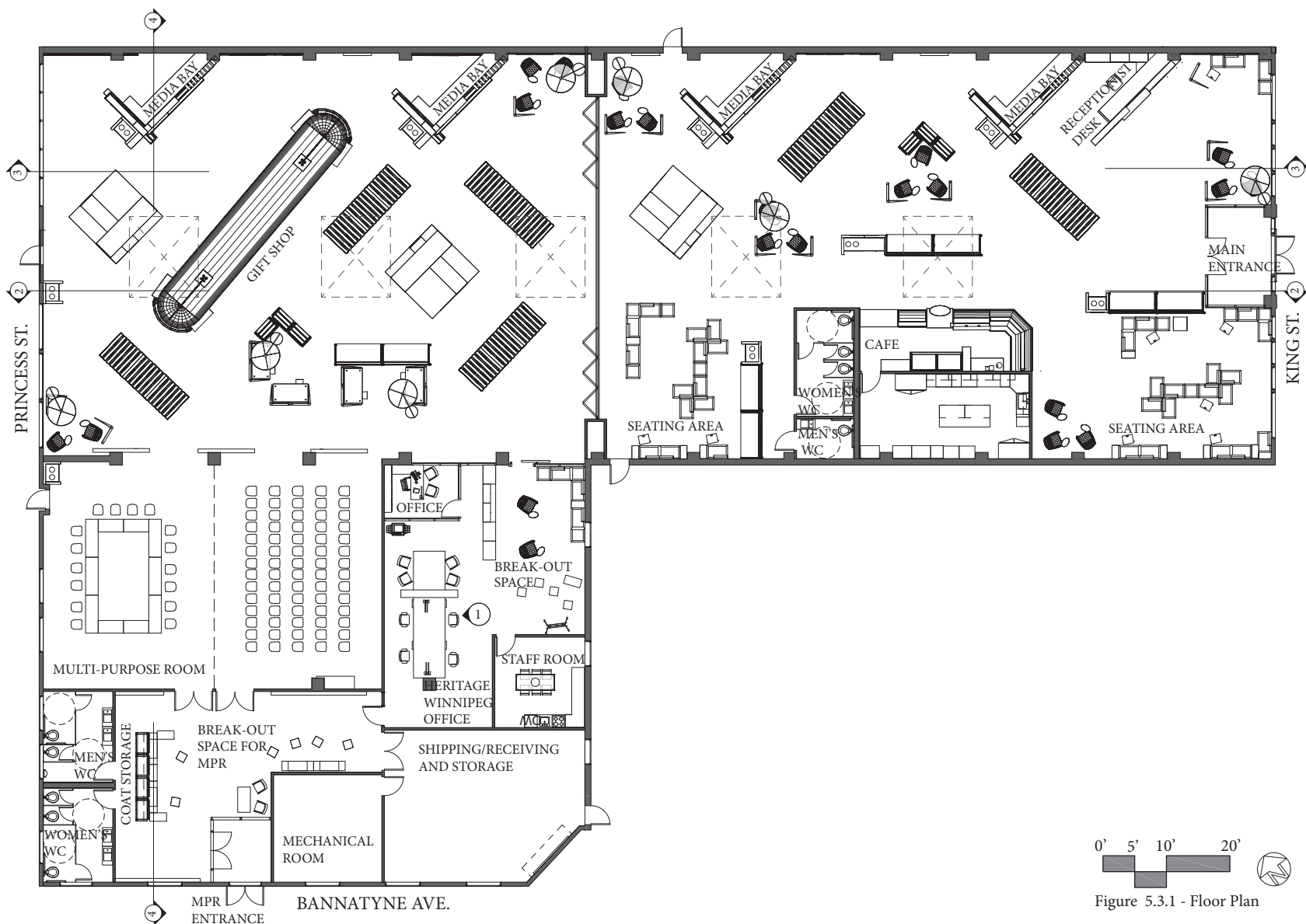
5.4 Design Elements

<u>5.4.1 Entry</u>
Upon entry off King Street, the visitor will be greeted by a receptionist who would help orient visitors, and answer any questions. From there the visitor has multiple paths on which they can follow. The space is organized in such a fashion so that the visitor does not have to follow a specific path, the individual being in control of which areas they could see first.

Figure 5.4.1.1 - Floor Plan

PRINCESS ST.

KING ST.

BANNATYNE AVE.

GIFT SHOP

MEDIA BAY

RECEPTIONIST DESK

MAIN ENTRANCE

CAFE

SEATING AREA

WOMEN'S WC

MEN'S WC

SEATING AREA

MULTI-PURPOSE ROOM

OFFICE

BREAK-OUT SPACE

STAFF ROOM

HERITAGE WINNIPEG OFFICE

MEN'S WC

COAT STORAGE

BREAK-OUT SPACE FOR MPR

SHIPPING/RECEIVING AND STORAGE

WOMEN'S WC

MECHANICAL ROOM

MPR ENTRANCE

0'   5'   10'   20'

Figure 5.4.1.2 - Axonometric

Figure 5.4.1.3 - Axonometric

5.4.2 Cafe

The cafe was placed near the front to attract people passing by into the space. Two seating areas are located on either side of the cafe balancing out the space. Teknion's DNA modular lounge seating was used in these areas because of the flexibility and access to power it provides. This would encourage people to use the space as a lounge area while also giving the exhibition environment the flexibility to move and customize the location and arrangements of the pieces for different events or times of the year.

The cafe becomes a focal point in the space, with lit 3form panels and heavy reclaimed beams forming its sub-structure. The inside wall of the cafe uses the same 3form back-lit watermelon color panels which are used in the exhibit for signage, however, in this instance is used to display the name of the cafe.
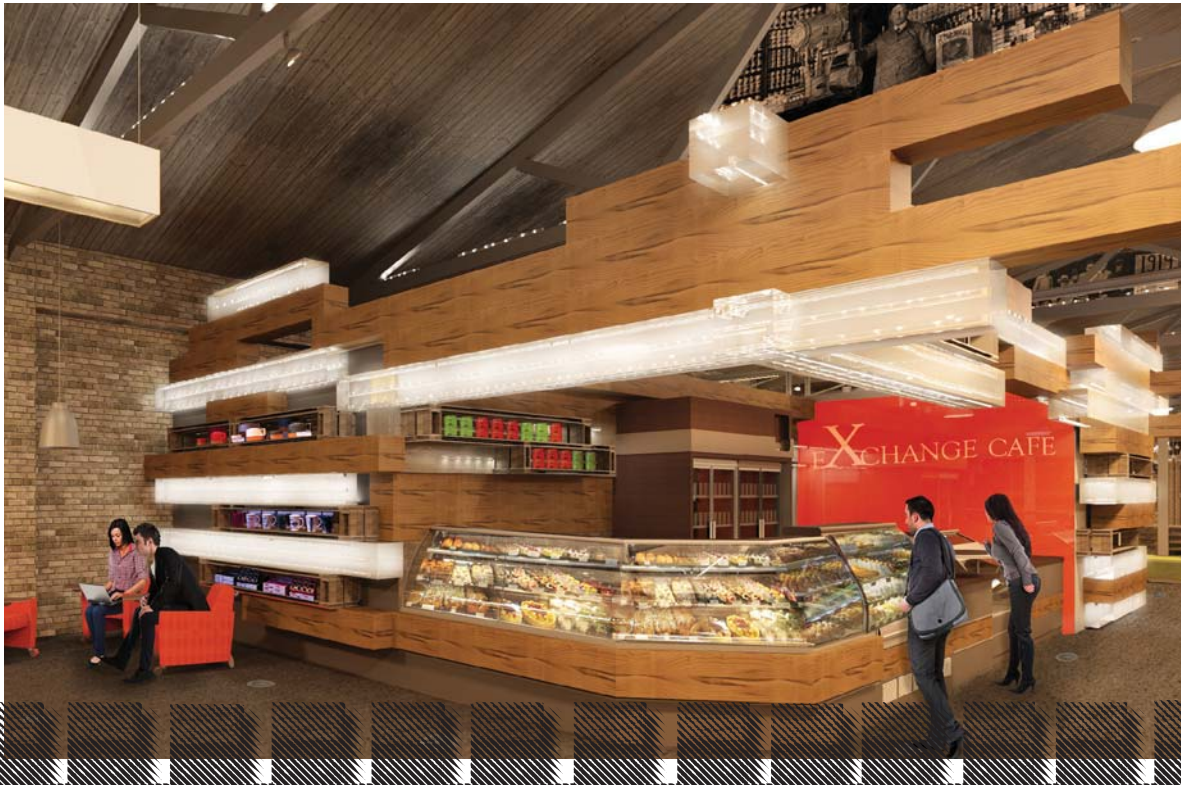

Figure 5.4.2.1 - Perspective of cafe

Figure 5.4.2.2 - Perspective of cafe seating area

5.4.3 Media Bays

The purpose and location of the research cubes were re-conceptualized, taking into consideration the comments and criticism received at my intermediate presentation. They now have developed into 'media bays' inspired by those in the Walker Art Center, resulting in them having a more social, and less isolated experience. As mentioned in the literature review section, providing different ways for the user to interact with the space is important in the constructivist museum so as to attract a broad range of users. The media bays do just this, using a different technique (media) to allow people to learn and receive knowledge. Headphones are placed inside the bays for users to learn about the stories of the Exchange District while watching video screens placed on the wall across from them. The media bays could be used in different ways depending on the current exhibit's goal. For example, if the goal was to get users interacting with one another the media bays could be used for crowd sourcing future exhibit topics, getting groups of people to listen and watch the different options, then discuss and vote together. In this arrangement, the audio would come from a sound cone installed above the bay so that users would not be isolated by headphones.

The sound cone would also prevent noise transfer to the surrounding areas. In the case study analysis section, the work of Nina Simon was explored, discussing the different exhibit options the center could integrate to get participants actively involved with one another. The design of the space provides the right flexibility and adaptability to meet these changing needs.
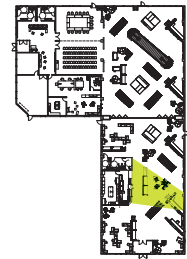
Figure 5.4.3.1 - Perspective from inside media bay

5.4.4 - 3form back-lit signage panels

Between the media bays are 3form color panels that are back-lit with signage describing the surrounding exhibit. Along with the media bays, these are carefully placed within the space so as to highlight the pre-existing rhythm, symmetry and harmony of the buildings structure. This is further emphasized by the design of the media bays, using equally spaced vertical wood beams going the height of the space to create a visual pattern. From the entrance perspective view, one can notice how these elements become wayfinding landmarks within the space.

Figure 5.4.4.1 - Perspective of front exhibit

5.4.5 Trusses

The truss structure is highlighted in the design as they are such an important feature of the space. This is done through the implementation of sheer fabric panels that have an exploded image of what the exhibit below it would be showcasing such as transportation history, architecture, grain trade, bankers row, wholesale/manufacturing, and so on.

5.4.6 Streetcar

The streetcar was moved to the back of the space, so that it would not block views in the front area while also acting as a landmark in the space, drawing people towards the back. It would also be visible by individuals walking down Princess Street which would potentially draw in more users into the space. The streetcar could result in Whyte's concept of triangulation which is when an "external stimulus provides a linkage between people and prompts strangers to talk to each other as though they were not" (Whyte, 1980, p. 94). It could also become a social object, as Nina Simon describes, encouraging and promoting conversation and dialogue. As this element in the space would be a major focus it was decided to locate the gift shop inside of it.

Figure 5.4.6.1 - Perspective of back exhibit

5.4.7 Back Area

The back area was designed so that (1) the Heritage Winnipeg office opened onto the exhibit environment providing them with more street presence (2) the multi-purpose space could become its own entity, having a separate entrance, which would lead to coat storage, an informal waiting/lounge space, and its own bathroom, and; (3) the opportunity to hold two events simultaneously in the space by utilizing a folding partition.

Figure 5.4.7.1 - Perspective of back entrance to multi-purpose space
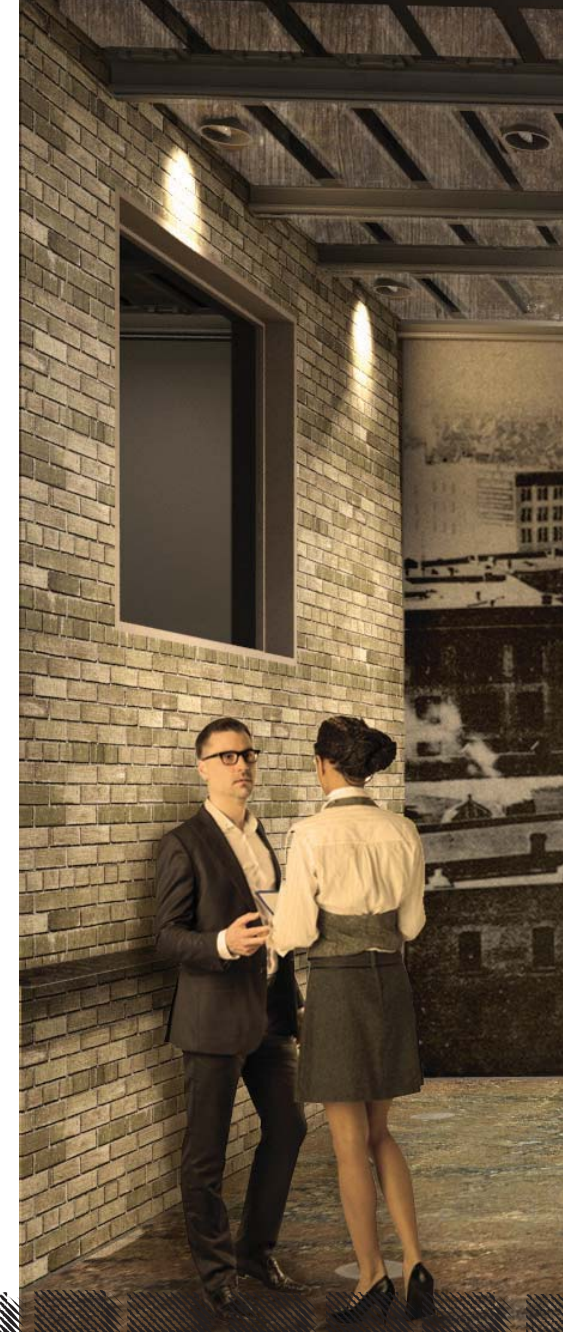
5.4.8 Multi-purpose Room

As the multi-purpose room is located in the Sanford building which does not have the beautiful truss structure to highlight like the Maw Garage portion, it was decided to give the space its own special feature. The ceiling was inspired by Armstrong's Woodworks Linear ceiling line that has wood slats with acoustical backing. Instead of using this product, a custom designed ceiling element that made reference to the Exchange District was created. As the growth of Winnipeg and the Exchange District was dependent on the railway, this was chosen as the basis behind the piece. This ceiling extends to the back entrance area/break-out space, visually connecting the two areas to one another.

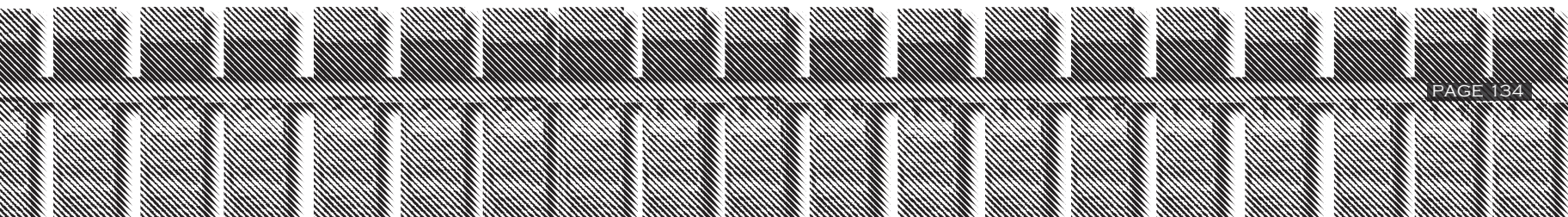Figure 5.4.8.3 - Perspective of multi-purpose space as one large lecture hall

Figure 5.4.8.1 - Perspective of one side of the multi-purpose space

Figure 5.4.8.2 - Perspective of multi-purpose space being subdivided

5.4.9 Heritage Winnipeg Office

The office space was reworked, after gaining a better understanding of Heritage Winnipeg's specific needs in a space like this. This led to the design of an open-office environment rather than several isolated offices. The only segregated areas are the lunchroom for staff and one office for the Executive Director of Heritage Winnipeg. The front portion of the office space was set-up so that it still felt like one of the informal lounge areas in the exhibit so that the general public would feel encouraged to enter the space. This space also has the opportunity to become the meeting ground for the Exchange District Walking tours to begin. As such, Chemetal's magnetic chalk board laminate product was selected to be on the back wall surface to support walking tour introductions. This area could also be used by Heritage Winnipeg and/or Artspace workers to meet and discuss work, using the wall to write notes, or put key messages for the public that are walking by or sitting in the space. A bookshelf with integrated seating on either side is used as a division between the public and private areas of the office, providing a much needed delineation of space while still leaving that open connection and welcoming feeling.

Instead of a separate meeting room in addition to the work areas, the two were integrated by the selection of furniture. Originally what was going to be separate cubicles became a long table with a sliding divider that has integrated audio/visual connection for presentations. This would give the users of the space the flexibility to divide the long work table in half, four people working on one side, while an informal meeting of four could occur on the other. Alternatively, one could slide the divider all the way to the end, making the whole table a workspace or a meeting space for eight.
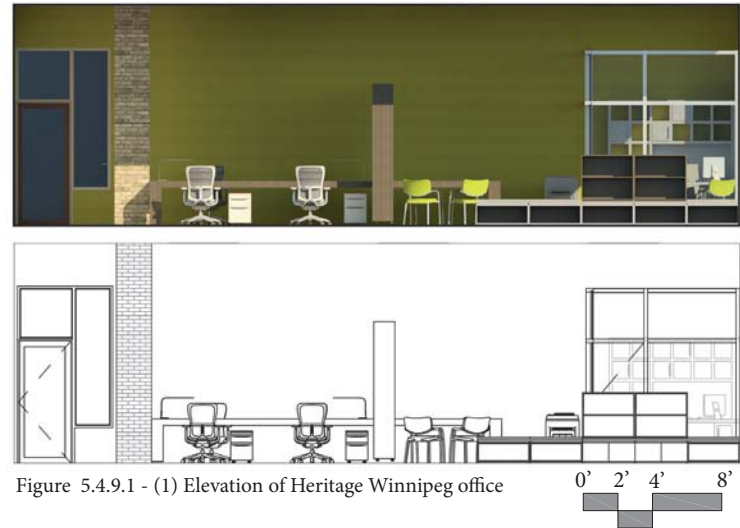

Figure 5.4.9.1 - (1) Elevation of Heritage Winnipeg office
0' 2' 4' 8'

Figure 5.4.9.2 - Perspective of Heritage Winnipeg office

5.4.10 Technology

Wireless internet will be provided throughout the entire facility free of charge. Data and power will be supplied through the raised access floor at key points such as the media bays, reception desk, Teknion DNA seating areas, cafe and office space. The multi-purpose space will be equipped with the appropriate technology and media for presentations or to function as a boardroom. For presentations, a podium will be supplied that will dock to different areas of the space to allow for connection to a projector, data, and power.

The communication strategy within the exhibit will include both permanent text based panels, in combination with media, such as video/audio exhibits for people to listen/ watch. QR codes will be implemented at keys areas throughout the exhibit to provide people with another way they can connect with the information. This will allow people to use their handheld technology to scan the QR code which will lead them to a webpage that would have more information about the exhibit. The person can then read about it there or later on their own time.

Figure 5.4.10.1 - Perspective of exhibit

5.4.11 Exterior View

The exterior perspectives show how at night time one would be drawn into the space by the King Street facade, restored to its original dramatic state, with large expansive windows framing the activity inside the center.
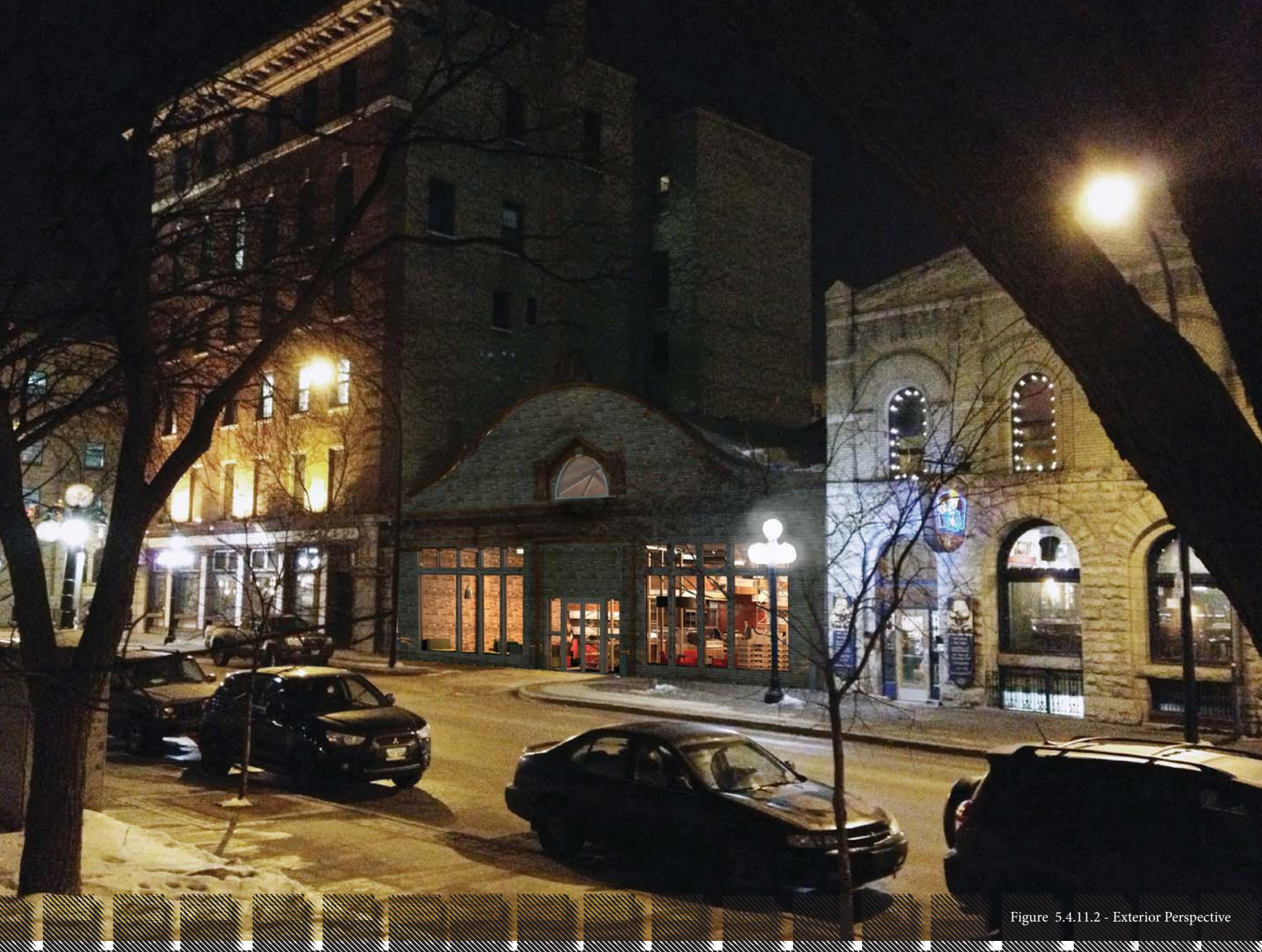
Figure 5.4.11.1 - Exterior Perspective

Figure 5.4.11.2 - Exterior Perspective

5.4.12 Materials and Finishes

The materiality of the space is a combination of elements both new and old. This was done so as to create a continual contrast between the industrial/warehouse aesthetic of the Exchange District with bright, colorful sleek elements.

Making reference to the wood beams in many of the old buildings in the Exchange District was important, so the receptionist desk, cafe, and media bays use reclaimed/salvaged wood beams from torn down buildings. The heaviness of the wood is broken up by the use of backlit ivory 3form blocks in the cafe, making it a focal point in the space. As for the media bays, a pressed glass product with grass inside was used to provide some physical separation while still providing visual transparency. Pallets were used throughout the space as the bases for large artifact displays. Shipping crates were integrated into the cafe for display of merchandise, whereas in the media bays the crates with an added protective layer of glass were used as display cases for exhibit items.

The raw concrete raised access floor would be kept exposed throughout the entire exhibit space. In both the office space and multi-purpose space a carpet tile would be used to lessen acoustical reverberation in the space. For the back entrance area to the multi-purpose space as well as all washrooms, a natural stone product by Julian Tile was selected.

The countertop for the cafe would be a sustainable and durable paperstone product, while upholstery on the seating adjacent to the cafe will be vinyl surface on the bottom with the back surface having a more lavish fabric.

KVADRAT
WATERBORN TRACK
524
[SEATING UPHOLSTERY]

KVADRAT
WATERBORN TRACK
J44
[MEDIA BAY SEATING UPHOLSTERY]

JULIAN TILE
TUSCANY STONE
PDR008 BECAGLI CLEND
18"X18" HONED STONE
[BATHROOMS AND BACK ENTRANCE]

IXL BRICK
[TO REPRESENT THE ORIGINAL
BRICK IN THE SPACE]

MAHARAM
PITCH 466186
007 APPLE
[CAF: SEATING UPHOLSTERY]

3FORM
CHROMA PEWTER
[LIT CAFE BLOCKS]

LIGHTBLOCKS
L1156-10B
[BACK-LIT SIGNAGE PANELS]

PAPERSTONE
GUNMETAL
[CAFE COUNTERTOP]

HAWORTH
TECCRETE
RAISED ACCESS FLOOR
[LEFT RAW IN EXHIBIT SPACE]

MAHARAM
DIVINA MELANGE BY KVADRAT
931
[CAFE SEATING UPHOLSTERY]

TO REPRESENT SALVAGED
WOOD FOR PALLET DISPLAYS

CHEMETAL
151
BLACK MAGNETIC
CHALKBOARD

3FORM
SEAWEED POURED
PRESSED GLASS

MAHARAM
DIVINA MD BY KVADRAT
943
[CAFE SEATING UPHOLSTERY]

CHEMETAL
328
CARAMEL
[BARN DOORS]

MAHARAM
CONJOINED ALPHABET 399515
004 JONQUIL
[WALL COVERING IN OFFICE]

MOUNTAIN LUMBER COMPANY
ANTIQUE AMERICAN CHESTNUT
[WILL BE USED IN COMBINATION WITH
SALVAGED WOOD FOR CAFE, MEDIA
BAYS, AND RECEPTION DESK]

RECLAIMED METAL
[USED FOR SCAFFOLDING EXHIBIT DISPLAYS]

INTERFACE FLOR
STYLE: 1271002500
COLOR: 102997 SAGE
[CARPET TILE IN MPR AND OFFICE]

Figure 5.4.12.1 - Material Board

5.4.13 Lighting Plan

As shown earlier in daylight studies (Figure 2.5.3), there is not a lot of natural light entering the space, as such implementing different layers of light is important. First, strip LED uplighting will be set on the trusses to illuminate the ceiling structure. Second, LED high bay fixtures were selected for general light throughout the space. The benefit of this type of lamp is that they are more energy efficient, durable, long lasting, they instantly turn on, don't heat up, less light distortion, flicker free, and provide light uniformity (LED Lighting Management, 2013). The LED high bays will also have daylight sensors so when there is enough daylight entering the space either through the front or back facades or skylights they will automatically shut off to conserve energy. Third, track lighting is dispersed throughout the space, connected to the trusses and the added metal shaped railroad tracks between them. These track lights will use ceramic metal halides as they have a "high efficacy, high colour rendition, reduced colour shift and imperceptible lamp to lamp colour rendition"(Eye Iwasaki, 2013). Wall washers were added to illuminate the vertical wall surfaces in the space and some feature lighting was used on the

3form color panels being back-lit with signage. Raw light bulbs hang over certain exhibit elements in the space to add depth and repetition while hanging pendants were added over the receptionist desk and in the soft seating areas by the cafe to designate mini zones within the larger environment. Steelcase campfire floor lamps were also used in some seating areas to create the same effect.

Light is a key tool to present material in an effective manner and for creating a welcoming atmosphere in museum environments. In regards to lighting, ERCO lighting for museum environments was researched, where the importance of special lighting tools such as certain wall washers that evenly illuminate vertical surfaces is discussed. Accent lighting is also key, as it will create points of interest by highlighting different elements in the exhibit. This lighting effect will only occur if there are different lighting levels within the exhibit, the larger the brightness contrast, the higher the level of accentuation. The accent lighting directs the user's attention to elements of importance in hopes of drawing them in, even if the user was just casually in the space grabbing coffee. Special lighting solutions will
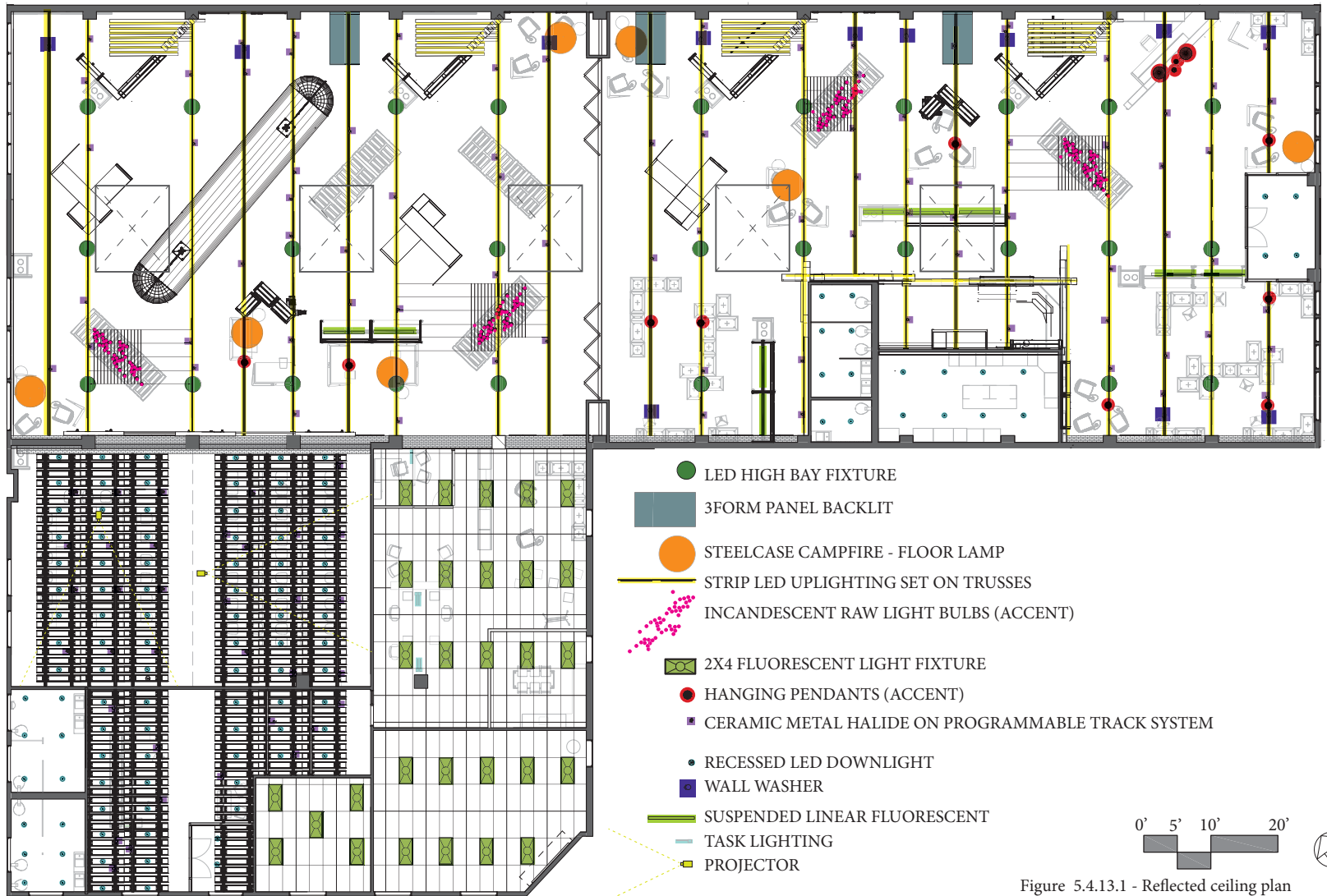
LED HIGH BAY FIXTURE

3FORM PANEL BACKLIT

STEELCASE CAMPFIRE - FLOOR LAMP

STRIP LED UPLIGHTING SET ON TRUSSES

INCANDESCENT RAW LIGHT BULBS (ACCENT)

2X4 FLUORESCENT LIGHT FIXTURE

HANGING PENDANTS (ACCENT)

CERAMIC METAL HALIDE ON PROGRAMMABLE TRACK SYSTEM

RECESSED LED DOWNLIGHT

WALL WASHER

SUSPENDED LINEAR FLUORESCENT

TASK LIGHTING

PROJECTOR

0'   5'   10'   20'

Figure 5.4.13.1 - Reflected ceiling plan

be used for exhibit material, one example being the back-lit black and white images of the Exchange District on the walls throughout the space. These features were added to strengthen the emotive force of the lighting concept.   The use of lights with different colour temperatures were also used to "augment the spatial differentiation or accentuation of objects"(ERCO, 2013a). A neutral basis will be provided with primarily white light, with varying brightness levels to produce contrasts. Using "a cold light colour intensifies perspective and creates an open feeling of space for the objects accentuated with warm white light"(ERCO, 2013a).

The lights will be programmable so that the space can be set to have different layers of light on for different events. This will change the mood of the environment, altering the light in the space to be more dramatic for an evening event. During the day there will be more of a uniform illumination throughout the space.   "Uniformity of the lighting allows the object to be appreciated in its entirety" (ERCO, 2013b) while integrating the entire exhibit as one. A controllable light system is also of great importance as it adds to the flexibility and adaptability of the space.

In the office space, acoustic ceiling tile was used with 2x4 fluorescent light fixtures, in addition to task lighting on the work surfaces. In the multipurpose room and back entrance area recessed downlights and track lights are attached to the dropped custom designed ceiling.

Figure 5.4.13.2 - Lighting Selection
1 Tom Dixon - accent lighting
over front information desk
2 Decode - Respun - accent lighting
in seating areas
3 3form - Wall/Ceiling Feature - backlit signage
4 Steelcase Campfire Big Lamp
5 Spencer Finch's Moon Dust installation -
example of look of raw light bulbs

1

2

3

4

5

5.5 Application of Theory to Design

As mentioned earlier, this project was informed by three key theories: post museum theory, constructivist learning theory/Kolb learning theory, and public space theories. This section will go through how each of these theories was applied to the design.

The design language is based on my translation and application of Kolb's theory of learning to the interior environment. This application resulted in a on grid, off grid layout of elements in the space (Figure 3.3.1.2). As described in the literature review, Kolb developed a framework involving four learning modes. He describes two as a scientific way of learning in contrast to the other two being artistic modes of learning. This was translated into the design by designating the scientific modes as on grid, while the artistic modes are represented by being off grid. This also decided which elements in the space were going to be fixed or flexible. The scientific modes, such as the streetcar, pallets with large artifact displays, and media bays along the wall are fixed, while the scaffolding displays and modular seating areas are flexible.

Other theories in the literature review were also applied to the design through different methods. For instance, in post-museum theory, the importance of breaking down the formal, static, environments of modernist museums to more informal social environments is highlighted. This was achieved by breaking down the exhibits into smaller sections so as to aid in the perception of a more informal, welcoming environment. Another attempt to support this concept was created by providing ample lounge areas throughout the exhibition space and by incorporating elements not traditionally found within an exhibit such as a cafe (Figure 5.4.2.2). The post-museum aims to have "spaces with more colour, more noise, and which are more physically complex" (Hooper-Greenhill, 2000, p. 148). Arguably, the proposed design embodies this statement, pushing the boundaries of what museum space should look and feel like. The post-museum is a re-envisioned expression of what the museum is and what it should support. Throughout the design process, this idea was continually used to question the design, such as, if something had to be organized in a certain fashion because it always had been, or if it would make more

sense another way that was not the norm. This opened up the design to elements with a look and feel one may not traditionally expect. As Hooper-Greenhill stated, the post-museum "is no longer a 'museum' but something new, yet related to the 'museum" (Marstine, 2006, p. 19).

In order to move away from the modernist museum's sense of power and authority over its users, the post-museum should be organized in such a fashion so that the user has control over the order in which they can move through the space and what areas they feel they want to pause and stay longer at or skip over. In order to support this the space is organized so that there are multiple paths one could follow, supporting individuals arriving at their own conclusions. Transitioning the museum away from "a site of worship and awe to one of discourse and critical reflection" (Marstine, 2006, p. 5) begins to open the museum up to people who are not traditionally museumgoers. This transforms the space into a meeting ground for diverse people to engage in dialogue. Having a multi-purpose space that opens onto the exhibition environment will provide the museum with a venue to support social gatherings or lectures community

members can join in on (Figure 5.4.8.1-3). As such, the post-museum shifts its focus away from the objects in space to its social role.

Post-museum theory discusses the importance of moving past purely didactic methods of "learning at a glance" (Hooper-Greenhill, 2007, p. 191) as this model views individuals as a homogenous mass who all learn the same. Constructivist learning theory builds off this idea, discussing in greater detail how to get participants actively involved in learning. Hein stated that the constructivist museum should provide a range of choices and multiple paths for individuals to choose from. Kolb outlines these choices that should be offered in a learning environment to support individuals arriving at their own conclusions. As such, within the design different areas are designated for specific modes of learning so individuals with different preferences on which style they prefer will be drawn to that area (Figure 3.3.1.2).

The atmosphere of the constructivist museum is stated to be informal, boisterous and animated. This concept is supported by designing the space as one continuous exhibit environment so people can see the activity going on in

different areas (Figure 5.4.4.1). This becomes especially important when considering the view from outside the building, large windows putting on view the activity going on in the interior, drawing people in (Figure 5.4.11.1-2 & Figure 5.5.1).

Public space theories were integrated into the design in a variety of ways. One of the key points translated into the design is the importance of a public space encouraging public discourse. Programming of the space was carefully examined to find ways to support this, such as providing break-out spaces in the office space that are open to the public, in addition to the multi-purpose space that becomes a meeting ground for lectures and events to be held.

An important aspect for a space to develop into a third place is by having long hours. To support this, the exhibit space is divided in two with a glass partition, so that the front portion with the cafe could have extended hours. Other considerations were the integration of more seating in the space, encouraging activity and noise by integrating a cafe and a lounge area that supports conversational groupings (Figure 5.4.2.2). An additional factor supporting loitering and lounging is the furniture selected. Teknion DNA provides plug-ins that are integrated into the furniture piece for people with laptops or any other electronic device that requires power.

Figure 5.5.1 - Perspective of Princess Street Exterior Elevation. Image adapted from the City of Winnipeg. (2009). Exchange District National Historic Site Streetscape Inventory. City of Winnipeg.
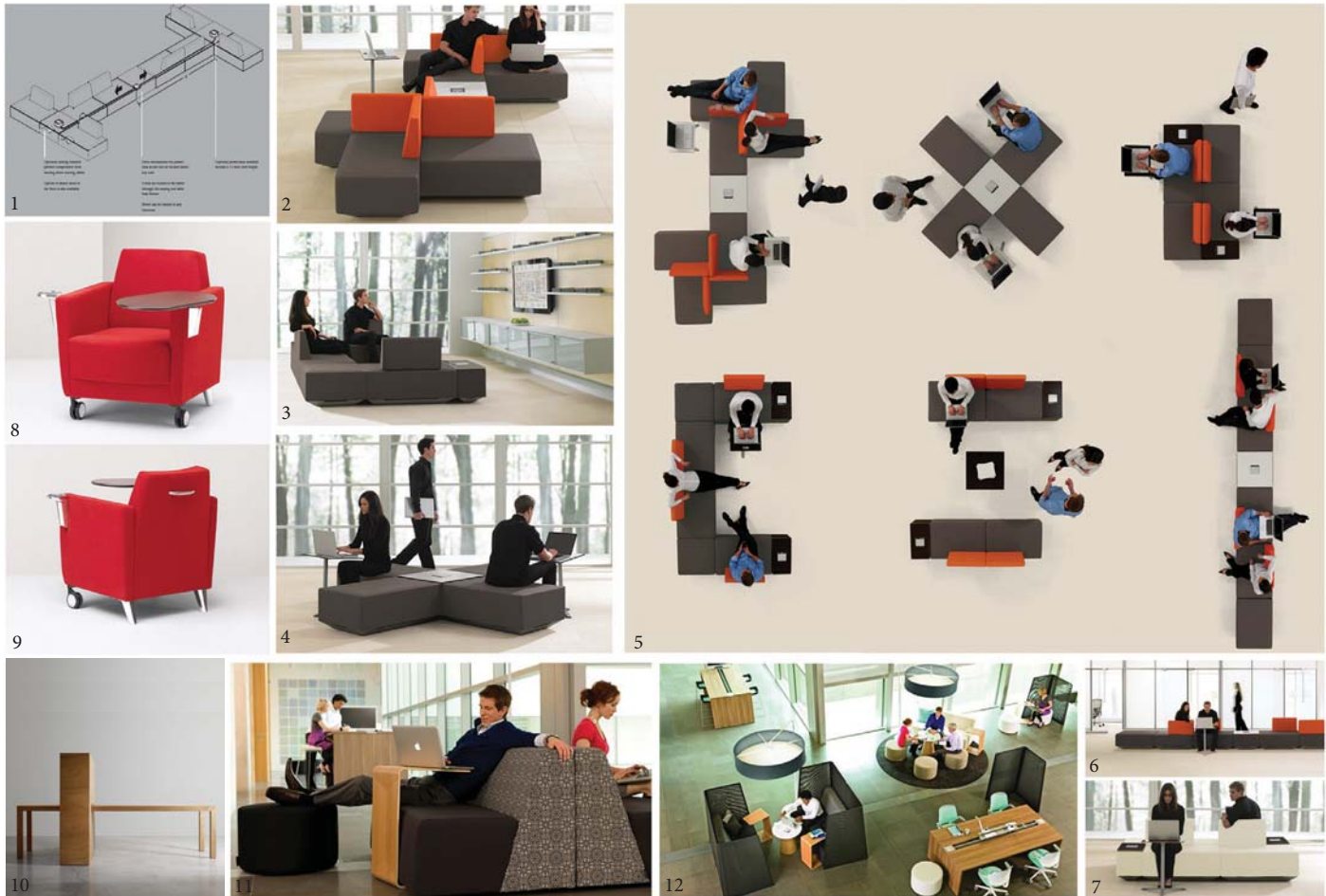
Figure 5.5.2 - Furniture Selection
1-7 Teknion DNA
8-9 Nienkamper Satori with tablet arm
10 Meta-Fora by Agata Monti for Adele-C
11-12 Steelcase Campfire

William Whyte discusses "what attracts people most, it would appear, is other people" (Whyte, 1980, p. 19). As such, the front and back facades were seen as important opportunities to place the interior's activity on view to attract more users into the space (Figure 5.4.11.1-2 & Figure 5.5.1).

Whyte also discusses how people gravitate towards landmark objects in space such as a flagpole or statue. I saw this as an opportunity to utilize these landmark objects as wayfinding elements in the space. For example, the media bays and back-lit 3form color panels are repeated consecutively along the wall (Figure 5.5.5), becoming a way a person can judge how far they are in the space or where to meet someone.

The streetcar and cafe also serve as major landmarks in the space as they are large key elements of the space. The other key point Whyte makes is the importance of the amount and type of sittable space, in addition to the moveability of the seating. Therefore, furniture that was modular, and could be easily moved and rearranged was selected. The Satori chair by Nienkamper was used in certain areas, as they are on castors and have a handle on its back that makes it easy for people to pull chairs over and create their own conversational groups (Figure 5.5.2). Whyte also listed food as a vital factor in forming a socially active space, making the cafe an important addition in the interpretive center. It is one of the key factors in drawing people in to get a coffee or snack but maybe something in one of the nearby exhibits intrigues them, resulting in an extended stay.

Figure 5.5.3 - (4) Latitudinal Section

Figure 5.5.4 - (2) Longitudinal Section

Figure 5.5.5 - (3) Longitudinal Section

0' 5' 10'   20'

5.6 Information Desk - Detail Drawing
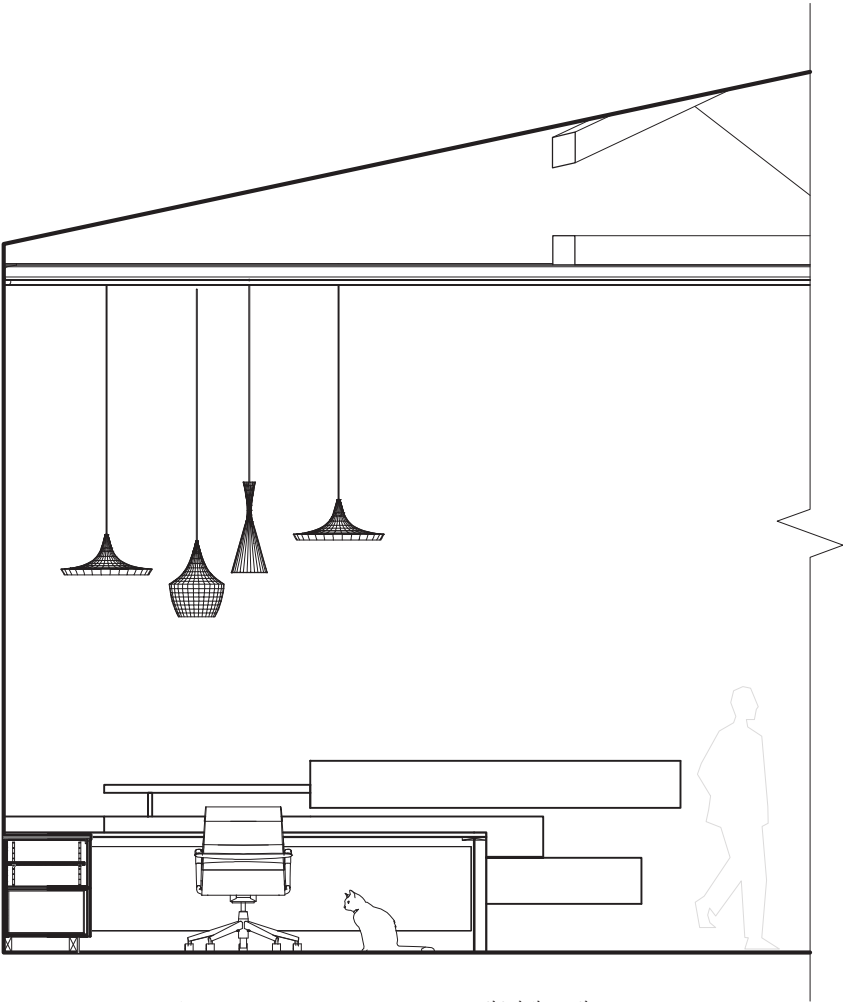
Figure 5.6.1 - Rear elevation   Scale: 1/4" = 1'-0"   0' 0.5' 1'   2'
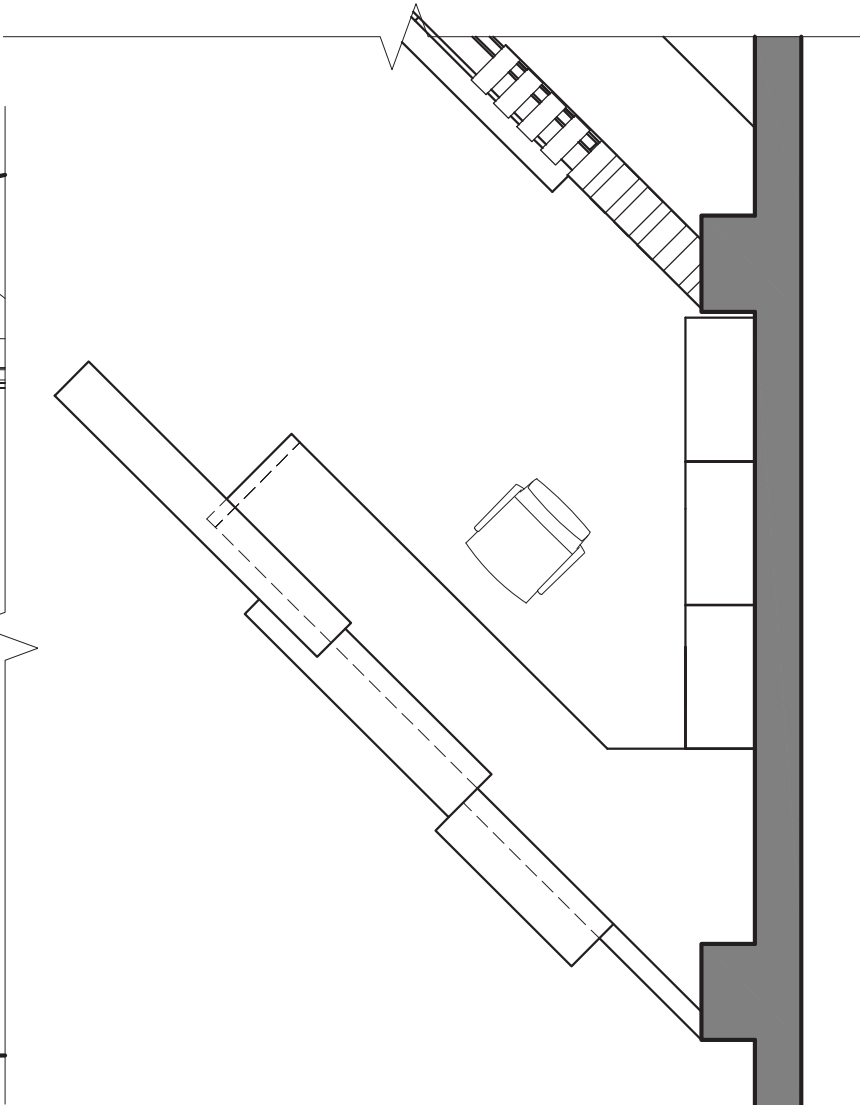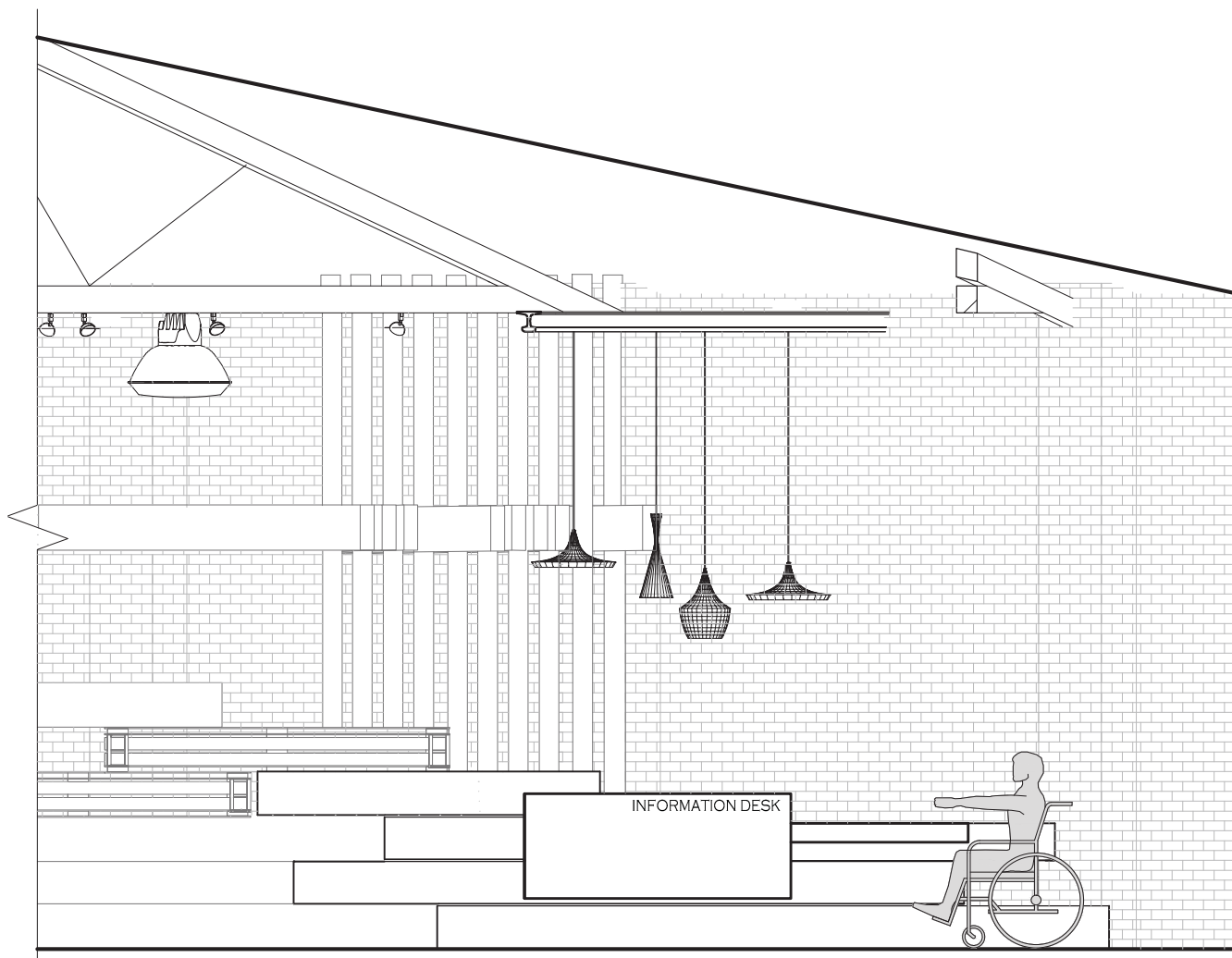
Figure 5.6.2 - Plan   Scale: 1/4" = 1'-0"

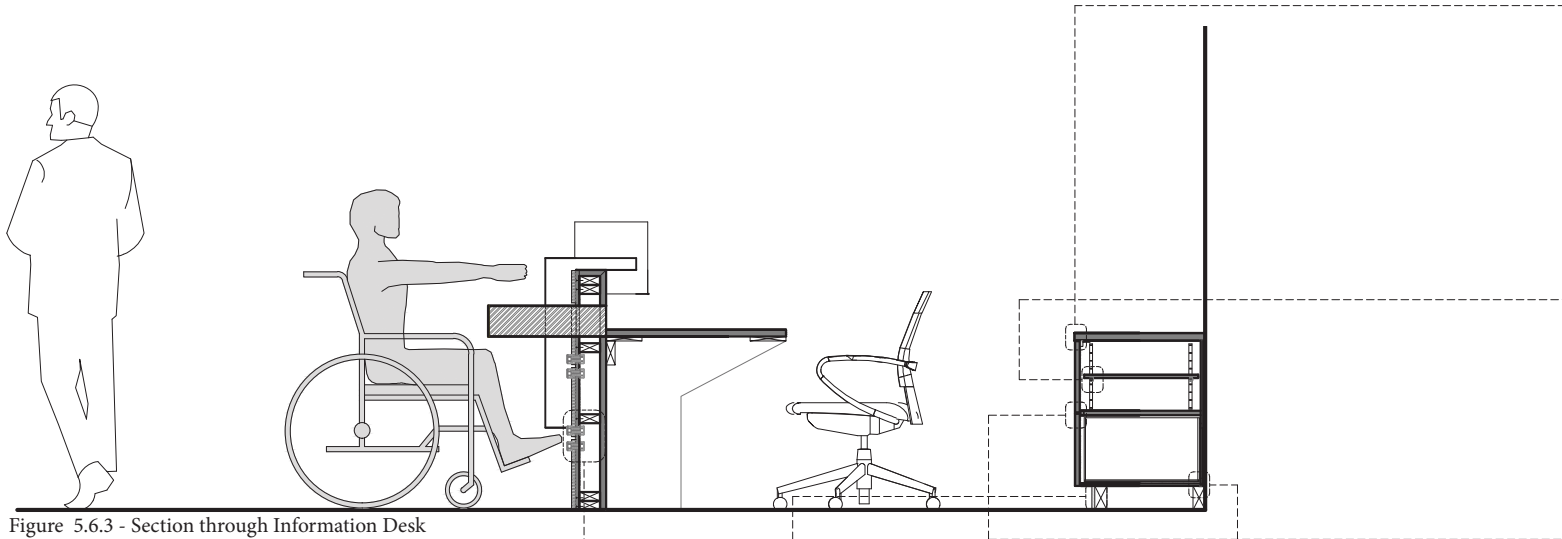Figure 5.6.3 - Front elevation   Scale: 1/4” = 1’-0”   0’ 0.5’ 1’   2’

INFORMATION DESK

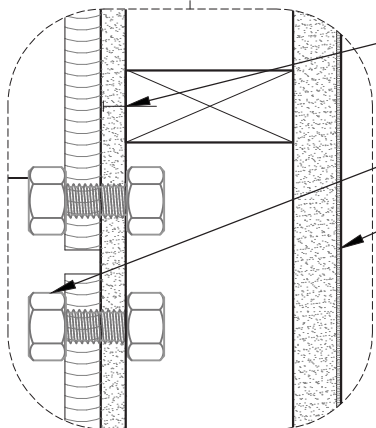Figure 5.6.3 - Section through Information Desk

0' 0.5' 1'   2'
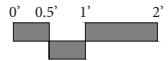
SCALE: 1/4" = 1'-0"

SCREW ATTACHING MDF
BACKING TO STUD
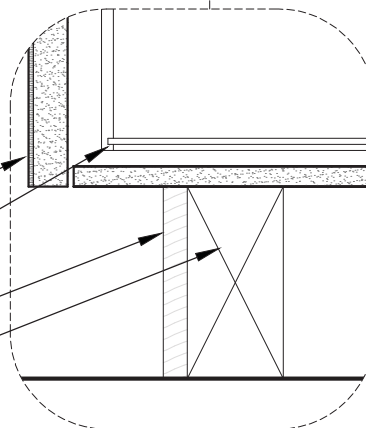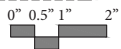
BOLT PASSING THROUGH FINISHED
WOOD WITH MDF BACKING

WOOD VENEER

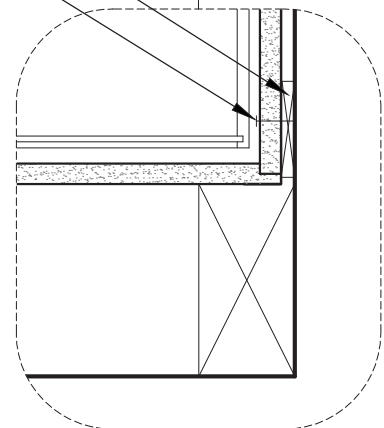SHELF ATTACHMENT -
THROUGH DADO

FINISHED BASE

SHIM

BLOCKING
CABINET SCREW
ATTACHED TO WALL

DESK FRONT
SCALE: 3" = 1'-0"

0" 0.5" 1"   2"
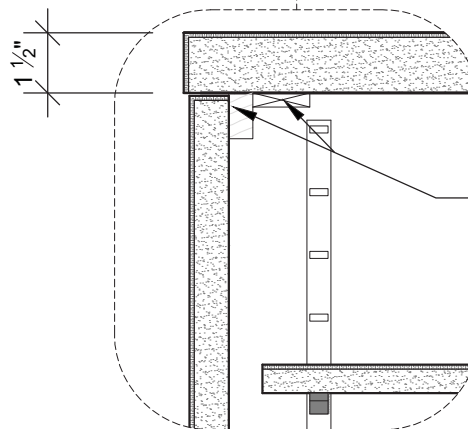
BASE
SCALE: 3" = 1'-0"

WALL ATTACHMENT
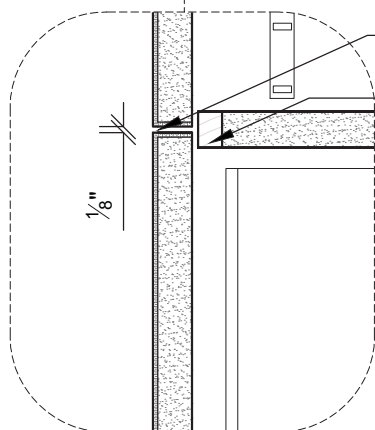SCALE: 3" = 1'-0"
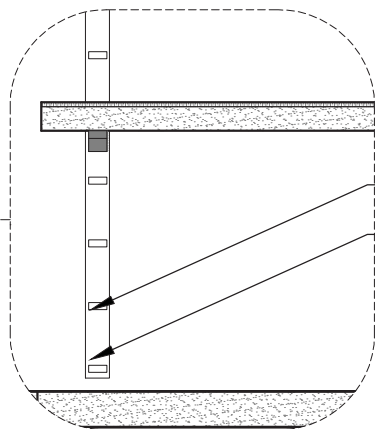
BRACKET

ADJUSTABLE SHELF
STANDARD

SHELF SUPPORT
SCALE: 3" = 1'-0"

1 ½"

CABINET FRAME

EDGE
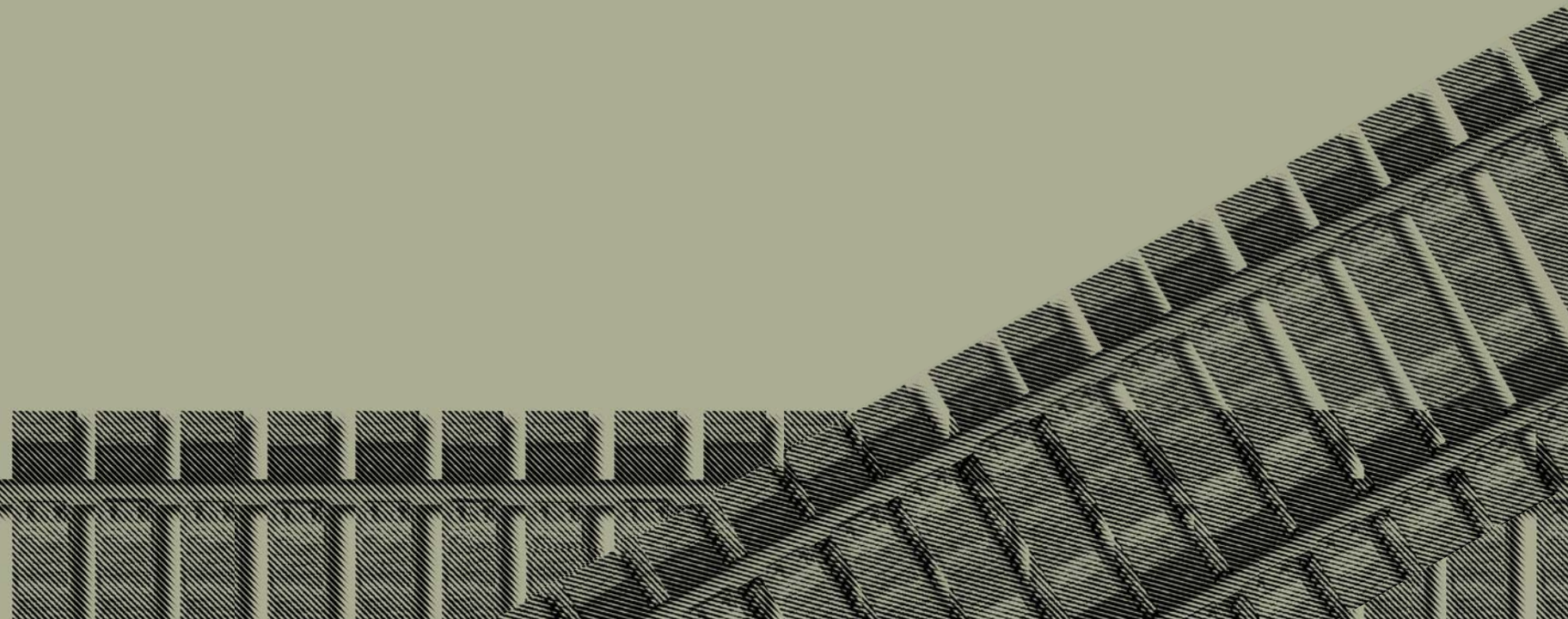SCALE: 3" = 1'-0"

FLUSH OVERLAY
CONSTRUCTION

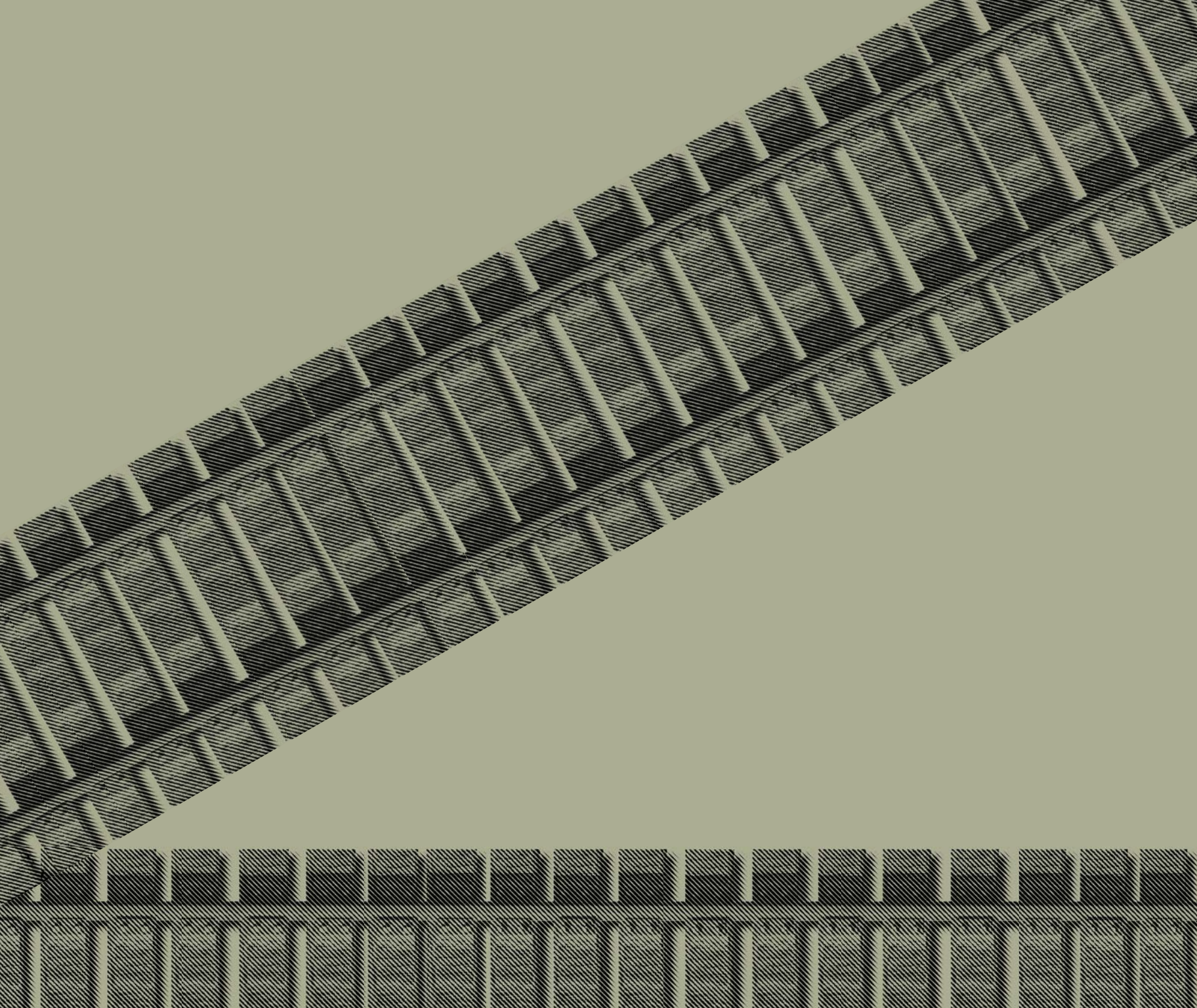SOLID WOOD OVER
PARTICLE BOARD

⅛"

FRAMING
SCALE: 3" = 1'-0"

CHAPTER 6
CONCLUSION

6 Conclusion

The overall objective of this practicum project was to examine the evolving view of the museum, looking at how interior environments can adapt to these changing views. The museum environment is no longer tied to traditional notions of an imposing structure with static, formal environments. From an examination of post-museum theory, constructivist learning theory, and public space theories, the definition of what a museum is, and what it should provide and support, was questioned. This proposal showcases a design that questions and rethinks what a museum is, based on my newly acquired knowledge. There are several ways this knowledge could be interpreted; my proposal showcases one possible direction.

From the onset of this project I examined how interior design could address one of the key issues that arose at Heritage Winnipeg's annual general meeting in July 2012. This was the lack of public education and awareness on heritage conservation issues. I saw an opportunity to question and consider how a museum could promote this further through design. This issue became the reason behind selecting public space theories in the literature review, as I saw them as a way to help a museum support this new need of public education and awareness. The museum as a public forum had already been discussed in theories; however, I felt that museums were not meeting the full potential of this idea. As stated earlier, museums had not modified anything within their programme to support and develop into such a space, so I used this opportunity to illustrate one way it could be done. The first step was to make the facade welcoming and take advantage of the street presence. The second step was by setting up the interior so that it would support the development of loitering, lounging, and conversational groupings. This was done by the selection and placement of furniture within the space, breaking up the exhibit into smaller areas. Development of the museum as a public space would broaden the range of people coming in contact with the organization and what it does in an informal setting. People could be just coming in for a coffee or to meet their friend, but while in the space see something that catches their eye or hear a lecture going on. The third aspect in supporting the museum's development into a public forum was to set the stage for public debate,

fostering discourse on heritage conservation issues. This was accomplished through the implementation of a multi-purpose space that could hold lectures, presentations, conferences, and events. The exhibit space would also support this cause by providing the user with multiple ways they can interact with the space, ranging from didactic to participatory methods. As Crick stated, these spaces "create opportunities for social interaction and community building and benefit organizations once they position themselves to achieve the status of third places" (2011, p. 63).

Another project objective was to investigate how museums could support a broader social use of their space through the incorporation of elements like a cafe, meeting space, multi-purpose space, and media bays. As Gurian stated, "the more varied the internal space, the more diverse the audience" (2001, p. 106). Flexibility becomes a key element to the design as spatial requirements continually evolve.
In spite of national recognition, the Exchange District has been overlooked as a vital element that made Winnipeg what it is today. I envision this project becoming a catalyst in fostering knowledge on the importance of the history

and meaning of the Exchange District. Renovating a large historic building that is currently in a state of disrepair also promotes further core area redevelopment in the surrounding area. The exhibit could also hold lectures for builders, designers, or interested public on the challenges and opportunities of developing heritage buildings, which is something Heritage Winnipeg is already currently supporting. The only difference is that the center would provide a space that has good visibility from a busy street, encouraging people passing by to come in. The Government of Canada stated "by investing in them [historic sites]... we ensure that they will continue to help support local economies and encourage more Canadians to explore and discover our national heritage" (2011b, para. 5). This would end up developing into an important loop cycling back and forth, the more support and encouragement there is for heritage structures, the more opportunities Canadians have in learning about their national heritage.

Through my design, I demonstrated how constructivist learning theory could be applied to the interior environment. For example, one of my project goals lists
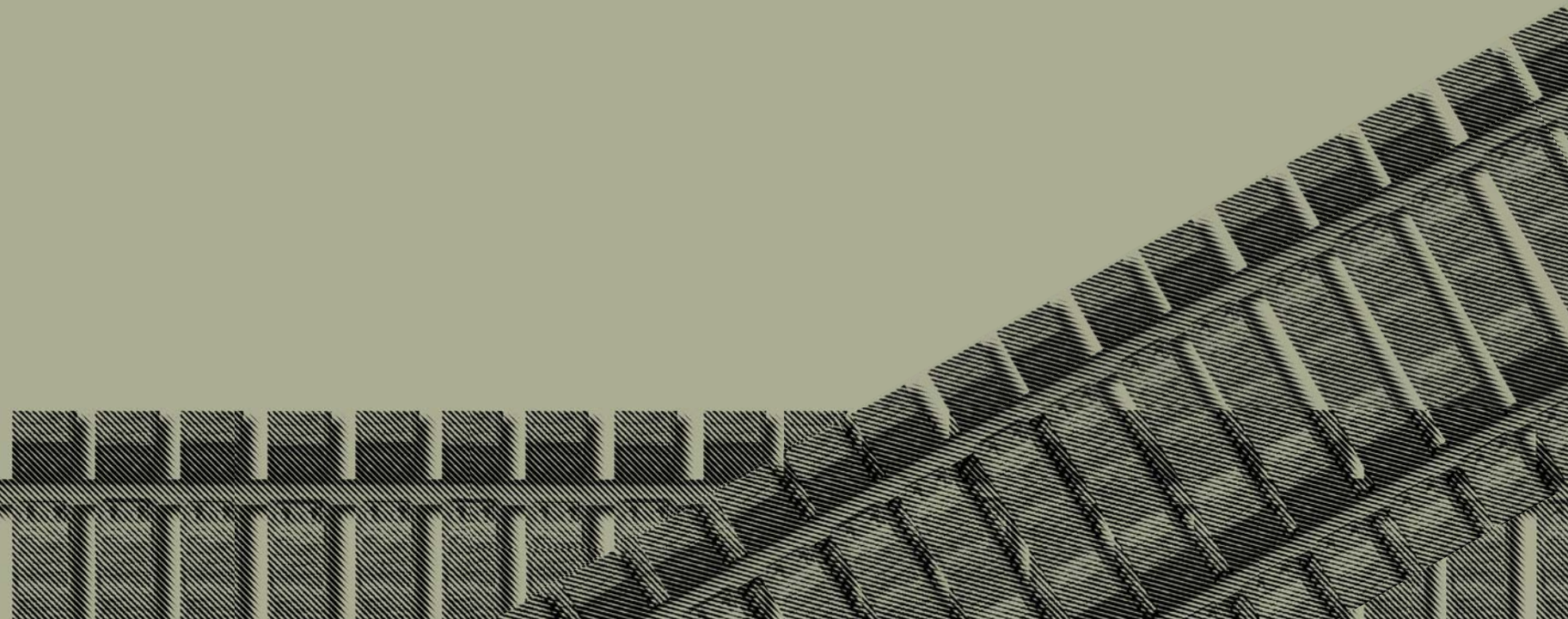
how constructivist learning theory can help facilitate active participation and encourage social interaction. This statement would only be supported through the physical construction of the space and intensive study of human interaction to find out if it were successful. Therefore, I cannot claim that my design has successfully achieved this; however, by using theory to support my design choices I feel that it could achieve these results.

In conclusion, the design proposal illustrates one possible way in which the theories selected could be used to design a new museum in the particular context of Winnipeg's Exchange District. From the knowledge gathered I was able to gain a thorough understanding of the history of museums, the learning styles used, and what one expects museums to offer and provide. Through this in-depth analysis, information gathered was then incorporated into a design that challenged the standard perception of what a museum is and what it could evolve into. A broader definition of a museum was formulated through this process, developing a design that showcases this new outlook.
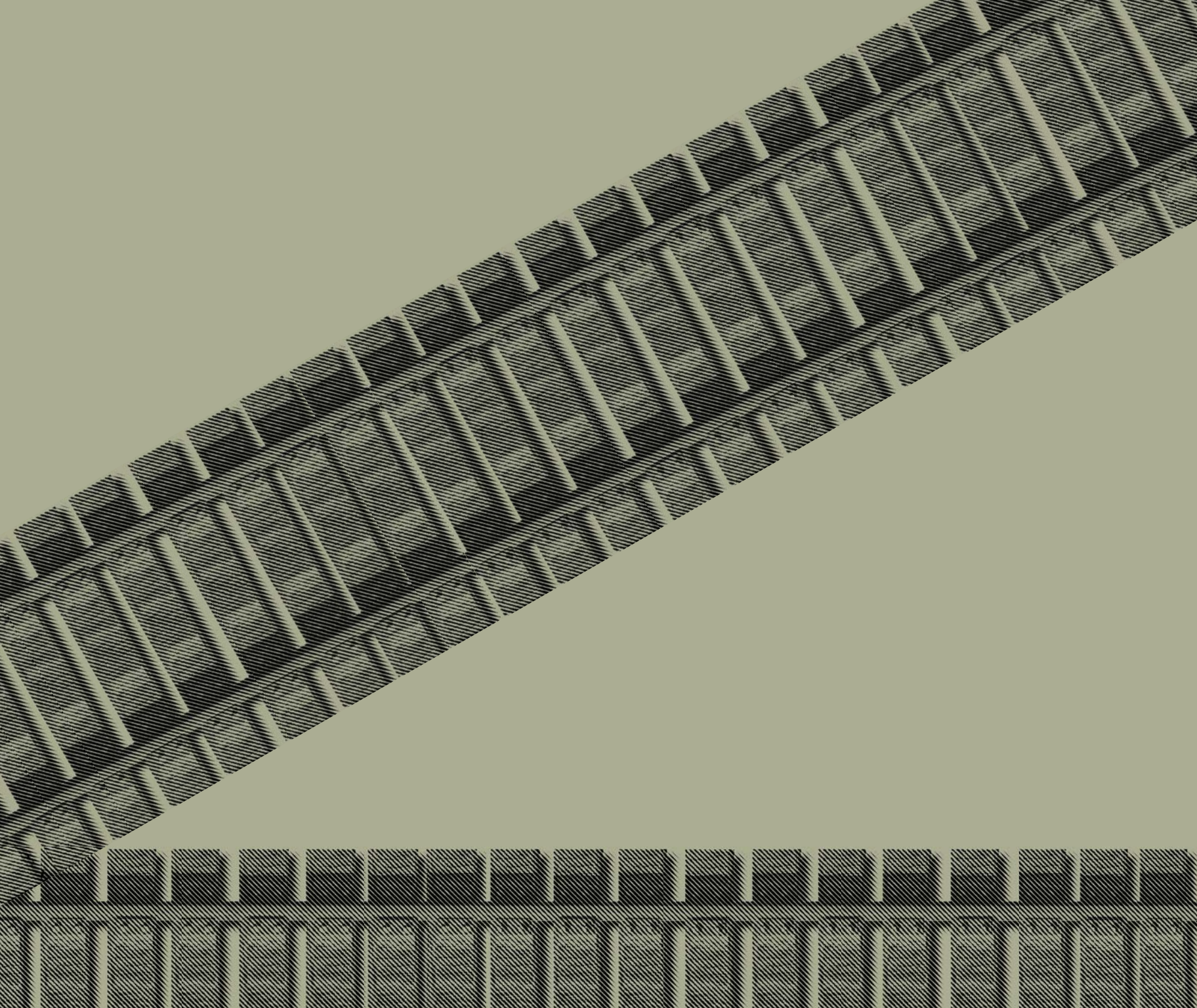
REFERENCES

References

3form. (2013). 3form installations. Department of Justice Science Facebook Suite at the University of Alabama at Birmingham. Retrieved July 11, 2013, from http://www.3-form.com/installations/item/1807-Department-of-Justice-Science-Facebook-Suite-at-the-University-of-Alabama-at-Birmingham/ Adele-c. (2013). Adele-c catalogue. *Adele-c*. Retrieved March 20, 2013, from http://www.adele-c.it/pdf/adele-c_catalogo_2013.pdf

Alexander, C., Ishikawa, S., & Silverstein, M. (1977). *A pattern language : towns, buildings, construction*. New York: Oxford University Press.

Artibise, A. F. J., & National Museum of Man (Canada). (1977). *Winnipeg : an illustrated history*. Toronto: J. Lorimer.

Artspace Inc. (2013). Who we are. *Artspace Inc.* Retrieved February 22, 2013, from http://art-space.ca/about/

Automoblie Sparks. (1909, December 18). *Winnipeg Telegram*, p. 18. Winnipeg, MB.

Barrett, J. (2012). *Museums and the Public Sphere*. Chichester; Malden, MA: Wiley-Blackwell.

Bennett, T. (1995). *The birth of the museum : history, theory, politics*. London; New York: Routledge.

Black, G. (2005). *The Engaging museum : [an interpretative approach to visitor involvement]*. London: Routledge.

Brooks, J. G., & Brooks, M. G. (1993). *In search of understanding : the case for constructivist classrooms*. Alexandria, Va.: Association for Supervision and Curriculum Development.

Bruce, C. (2006). Experience Music Project as a Post-Museum. In J. Marstine (ed.), *New Museum Theory and Practice : An Introduction* (pp. 129–151). Malden, MA: Blackwell.

Bruce, S. (1999). The Exchange District: A National Historic Site: Heritage Interpretation Strategy. University of Manitoba. Retrieved from http://www.winnipeg.ca/ppd/historic/pdf/ED_interp_strategy.pdf

Calhoun, C. (1992). *Habermas and the Public Sphere*. Cambridge, Massachusetts: MIT Press.

Cameron, D. E. (2004). The Museum, a Temple or the Forum. In G. Anderson (Ed.), *Reinventing the Museum* (pp. 61–79). Lanham, MD: AltaMira Press.

Canadian Commission on Building and Fire Codes. (2005). *National building code of Canada 2005*. Ottawa, Ontario: National Research Council Canada, Institute for Research in Construction.

City of Winnipeg. (2011). Winnipeg Plan 2020. City of Winnipeg. Retrieved from http://www.winnipeg.ca/cao/pdfs/plan_2020.pdf

City of Winnipeg. (2009). Exchange District National Historic Site Streetscape Inventory. City of Winnipeg. Retrieved from http://www.winnipeg.ca/ppd/planning/Secondary_Plans/Warehouse/ExchangeInventory.pdf

City of Winnipeg, & Statistics Canada. (2006). 2006 Census Data - Exchange District. City of Winnipeg. Retrieved from http://winnipeg.ca/census/2006/Community%20Areas/Downtown%20Neighbourhood%20Cluster/Neighbour-hoods/Downtown%20East/Downtown%20East%20Neighbourhoods/Exchange%20District/Exchange%20District.pdf

Coles, R. (1992). Whose Museums? *American Art*, 6(1), 6–11.

Crick, A. P. (2011). New Third Places: Opportunities and Challenges, *Advances in Culture, Tourism and Hospitality Research*(5), 63–77. doi:10.1108/S1871-3173(2011)0000005006

Davidson, J. (2009). Maya Lin's Big Dig. *NYMag.com*. Retrieved September 08, 2012, from http://nymag.com/guides/fallpreview/2009/architecture/58468/

Decode. (2013). Respun. *Decode*. Retrieved June 30, 2013, from http://www.decodelondon.com/products-page/lighting/respun/

Downtown Winnipeg BIZ. (2010). *Downtown Trends: Downtown Winnipeg Market Research 2010-2012*. Winnipeg, MB: Downtown Winnipeg BIZ.

Driscoll, M. P. (2000). *Psychology of learning for instruction*. Boston: Allyn and Bacon.

ERCO. (2013a). White and Colored - Differentiation using colour temperature. *ERCO Light Scout*. Retrieved April 10, 2013, from http://www.erco.com/projects/simula/white-and-coloured-4917/en/sim-1.php

ERCO. (2013b). Square and Round - Square: Uniform light for cubes. *ERCO Light Scout*. Retrieved from http://www.erco.com/projects/simula/square-and-round-4894/en/sim-1.php

Eye Iwasaki. (2013, April 15). Ceramic metal halide. *Light Sources*. Retrieved April 15, 2013, from http://www.eye.co.jp/sources/ceramic/features.html

Falk, J. H., Koran, J. J., Dierking, L. D., & Dreblow, L. (1985). Predicting Visitor Behavior. *Curator: The Museum Journal*, *28*(4), 249–258. doi:10.1111/j.2151-6952.1985.tb01753.x

Fosnot, C. T. (2005). *Constructivism : theory, perspectives, and practice*. New York, NY: Teachers College Press.

Government of Canada. (2011a, October 27). Harper Government Invests in Association of Manitoba Museums. media release,news publication. Retrieved August 13, 2012, from http://www.pch.gc.ca/eng/1319739213180

Government of Canada, P. C. (2011b, November 30). Canada News Centre - Government of Canada Supports the Preservation of Local History and Culture at the Exchange District National Historic Site of Canada. News Releases. Retrieved June 02, 2012, from http://news.gc.ca/web/article-eng.do?nid=640959

Gurian, E. H. (2001). Function Follows Form: How Mixed-Used Spaces in Museums Build Community. *Curator: The Museum Journal, 44*(1), 97–113. doi:10.1111/j.2151-6952.2001.tb00032.x

Habermas, J. (1989). *The Structural Transformation of the Public Sphere: Inquiry into a Category of Bourgeois Society*. Cambridge, Massachusetts: Polity Press.

Hein, G. (1998). *Learning in the museum*. London; New York: Routledge.

Hein, G. (1999). The Constructivist Museum. In E. Hooper-Greenhill (ed.), *The Educational Role of the Museum* (pp. 73–79). London: Routledge.

Heritage Winnipeg. (2010a). Exchange District Becomes National Historic Site. *Heritage Winnipeg*. Retrieved March 25, 2012, from http://www.heritagewinnipeg.com/exchange_district.html

Heritage Winnipeg. (2010b). The Exchange District. *Heritage Winnipeg*. Retrieved March 25, 2012, from http://www.heritagewinnipeg.com/exchange_district.html

Heritage Winnipeg. (2012). About Us. *Heritage Winnipeg*. Retrieved March 06, 2012, from http://www.heritagewinnipeg.com/aboutus/

Historical Buildings Committee. (1979). 291 Bannatyne Avenue. City of Winnipeg. Retrieved from http://www.winnipeg.ca/ppd/historic/pdf-consv/Bannatyne%20291-long.pdf

Hooper-Greenhill, E. (1999). Museum Learners as Active Postmodernists: Contextualizing Constructivism. In E. Hooper-Greenhill (ed.), *The Educational Role of the Museum* (pp. 67–72). London: Routledge.

Hooper-Greenhill, E. (2000). *Museums and the Interpretation of Visual Culture*. London; New York: Routledge.

Hooper-Greenhill, E. (2007). *Museums and education : purpose, pedagogy, performance*. London; New York: Routledge.

Huyssen, A. (1995). *Twilight memories : marking time in a culture of amnesia*. New York: Routledge.

ICOM. (2012). Museum Definition. Retrieved April 18, 2012, from http://icom.museum/who-we-are/the-vision/museum-definition.html

Izquierdo Tugas, P., Juan-Tresserras, J., Matamala Mellín, J. C., & Baeyens, H. (2005). Heritage Interpretation Centres: The Hicira Handbook. Diputació Barcelona. Retrieved from http://www.diba.cat/c/document_library/get_file?uuid=63952a92-928c-4eb9-a698-587bea5cf637&groupId=99058

Jeffres, L. W., Bracken, C. C., Jian, G., & Casey, M. F. (2009). The Impact of Third Places on Community Quality of Life. *Applied Research in Quality of Life*, *4*(4), 333–345. doi:10.1007/s11482-009-9084-8

Joseph Maw & Co. Limited. (1920, July 15). *Winnipeg Free Press*, p. 19.

Kolb, D. A. (1984). *Experiential learning : experience as the source of learning and development*. Englewood Cliffs, N.J.: Prentice-Hall.

Komus, M., & Historical Buildings Committee. (2006). *Winnipeg's Exchange District : a heritage guide to one of Canada's most celebrated neighbourhoods.* (J. Anderes, ed.). Winnipeg, MB: Exchange District BIZ; City of Winnipeg Historical Buildings Committee.

LED Lighting Management. (2013, April 18). LED High Bay Lighting Benefits. *LED Lighting Management*. Retrieved April 18, 2013, from http://ledlightingmanagement.com/led-lighting-management/content/led-high-bay-lighting-benefits

Lorenc, C. (1988). The Future of Winnipeg's Heritage Conservation Program. In Heritage Winnipeg (Ed.), *Issues in Heritage Preservation* (pp. 30–33). Winnipeg, MB: Heritage Winnipeg.

Lunn, K. (2001, January 10). The Exchange District National Historic Site of Canada Commemorative Integrity Statement. City of Winnipeg; Parks Canada; Manitoba Culture, Heritage and Tourism. Retrieved from http://www.winnipeg.ca/ppd/planning/Secondary_Plans/Warehouse/ExchangeDistrictCIS.pdf

Marstine, J. (2006). *New Museum Theory and Practice : An Introduction*. Malden, MA: Blackwell.

Martin, M. (2010, September 23). Albert Street stakeholders push for pedestrian mall. Retrieved August 13, 2012, from http://www.winnipegfreepress.com/arts-and-life/life/albert-street-stakeholders-push-for-pedestrian-mall-103605179.html

McDowell, D. J. (1988). Twenty Years of Advocacy with Winnipeg's Heritage Movement. In Heritage Winnipeg (Ed.), *Issues in Heritage Preservation* (pp. 2–7). Winnipeg, MB: Heritage Winnipeg.

Mitchell, D. (1995). The End of Public Space? People's Park, Definitions of the Public, and Democracy. *Annals of the Association of American Geographers*, *85*(1), 108–133.

MJB Consulting. (2009). Downtown Winnipeg Retail Market Analysis & General Positioning Strategy. Downtown Winnipeg BIZ. Retrieved from http://downtownwinnipegbiz.com/resource/file/DTWPGFinalReport%20Dec%202009.pdf

Museum of Chinese in America. (2009a). About. *Museum of Chinese in America*. Retrieved September 07, 2012, from http://www.mocanyc.org/about/

Museum of Chinese in America. (2009b). The Museum of Chinese in America Announces Grand Opening September 22, 2009. *Museum of Chinese in America*. Retrieved August 09, 2012, from http://www.mocanyc.org/about/news/museum_of_chinese_in_america_announces_grand_opening_september_22_2009

Nienkamper. (2013). Satori with Tablet Arm. *Nienkamper*. Retrieved March 20, 2013, from http://www.nienkamper.com/ products.aspx?id=7

Oldenburg, R. (1997). *Great Good Place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons, And Other Hangouts At The Heart Of A Community* (Second ed.). New York, NY: Da Capo Press.

Oldenburg, R. (2010). The Character of Third Places. In A. M. Orum & Z. P. Neal (Eds.), *Common Ground? Readings and Reflections on Public Space* (pp. 40–48). New York, NY: Routledge.

Oldenburg, R., & Brissett, D. (1982). The Third Place. *Qualitative Sociology*, *5*(4), 265–284.

Parr, J. H. (1959). Design for Display. *Curator: The Museum Journal*, *11*(4), 313–34.

Prim, R., Peters, S., & Schultz, S. (2005). Art and Civic Engagement: Mapping the Connections - The Workbook. Walker Art Center. Retrieved from http://media.walkerart.org/pdf/ceworkbook.pdf

Project for Public Spaces. (2012). William H. Whyte. *PPS Project for Public Spaces*. Retrieved July 19, 2012, from http://www.pps.org/reference/wwhyte/

Rostecki, R. R., & McFarland, J. D. (2000). *The Liveliest Place in the Dominion - A History of Winnipeg's Exchange District*. Winnipeg, MB: The Exchange District BIZ.

Simon, N. (2010). *The Participatory Museum*. Santa Cruz, CA: Museum 2.0.

Spencer Finch. (2013). Moon Dust (Apollo 17). *Spencer Finch*. Retrieved June 30, 2013, from http://www.spencerfinch.com/view/installations/35

Steelcase. (2013). Steelcase - Campfire. *Steelcase*. Retrieved March 20, 2013, from http://www.steelcase.com/en/products/category/seating/lounge/biglounge/pages/big-lounge.aspx

Styles, C. (2011). Dialogic Learning in Museum Space. *Ethos*, *19*(3), 12–20.

Tchen, J. K. W. (1992). Creating a Dialogic Museum. In I. Karp, C. M. Kreamer, & S. Lavine (eds.), *Museums and communities : the politics of public culture*. Washington: Smithsonian Institution Press.

Teknion. (2013). Teknion dna. Retrieved March 20, 2013, from http://www.teknion.ca/products/brochures/dna_ENG.pdf

Tom Dixon. (2013). Beat Light. *Tom Dixon*. Retrieved June 30, 2013, from http://www.tomdixon.net/products/us/beat-light-wide

Turnstone. (2013). Campfire Big Lamp. *Turnstone*. Retrieved June 30, 2013, from http://myturnstone.com/products/campfire-big-lamp/

The American Institute of Architects. (2009). Museum of Chinese in America Opens. *AIA*. Retrieved August 09, 2012, from http://info.aia.org/aiarchitect/thisweek09/1106/1106rc_chinesemuseum.cfm

The Forks. (n.d.). Winnipeg a Downtown View. The Forks. Retrieved from http://www.theforks.com/uploads/ck/files/Publications/FNP_DowntownView.pdf

Thompson, D. (1990). An Architectural View of the Visitor-Museum Experience. In S. Bitgood, A. Benefield, & D. Patterson (Eds.), *Visitor Studies: Theory, Research, and Practice* (Vol. 3, pp. 72–85). Jacksonville: Center for Social Design.

Tour of MOCA with Maya Lin. (2009). Retrieved from http://www.youtube.com/watch?v=976o62w45zg&feature=youtube_gdata_player

Tuan, Y. (1977). *Space and place : the perspective of experience*. Minneapolis: University of Minnesota Press.

Urban Edge Consulting. (2008). Downtown North Pre-Plan Assessment. City of Winnipeg. Retrieved from http://www.winnipeg.ca/ppd/planning/Secondary_Plans/Warehouse/EDPPA_Report.pdf

Vygotskii, L. S., & Cole, M. (1978). *Mind in society : the development of higher psychological processes*. Cambridge: Harvard University Press.

Walker Art Center. (2005). *Expanding the Center : Walker Art Center and Herzog & de Meuron*. Minneapolis, Minn.: Walker Art Center.

Western Canada Pictorial Index. (n.d.). Truck of A. Carruthers and Co. Ltd. parked in front of J. Maw and Company Garage.

Whyte, W. H. (1980). *The Social Life of Small Urban Spaces*. Washington, D.C.: Conservation Foundation.
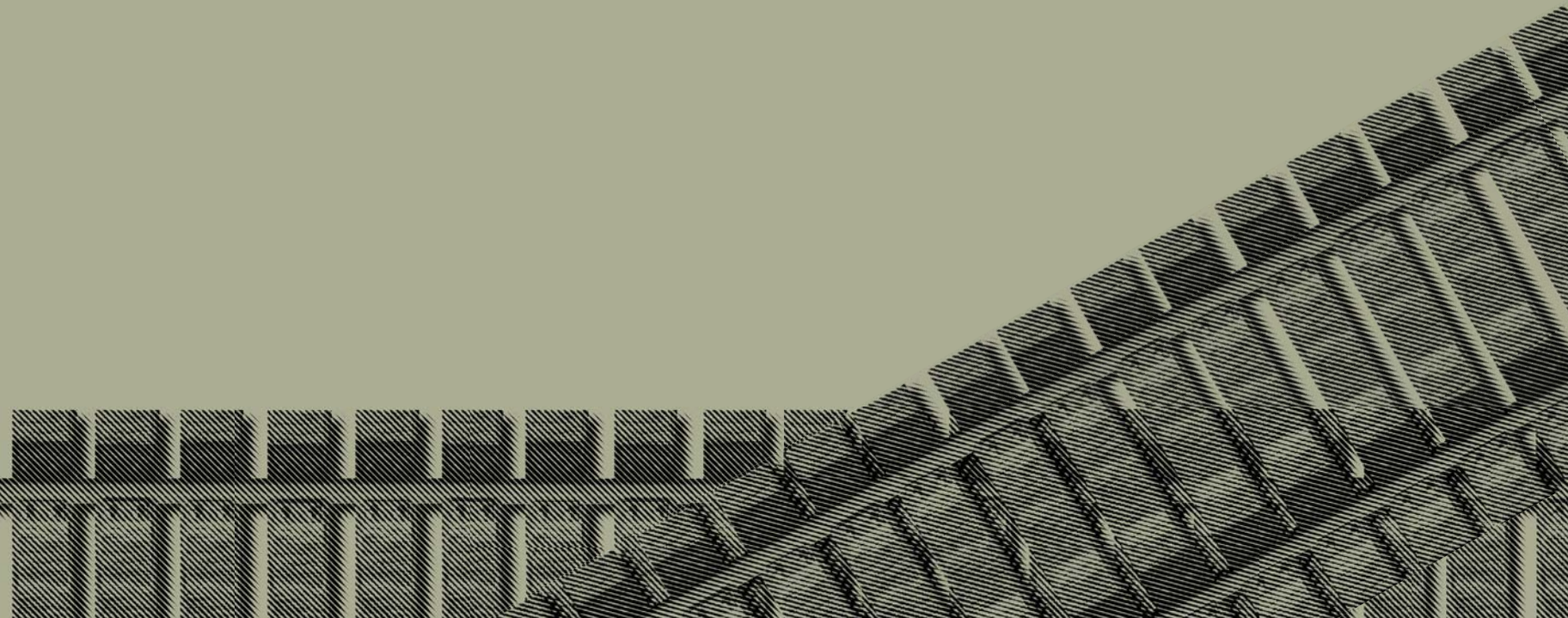
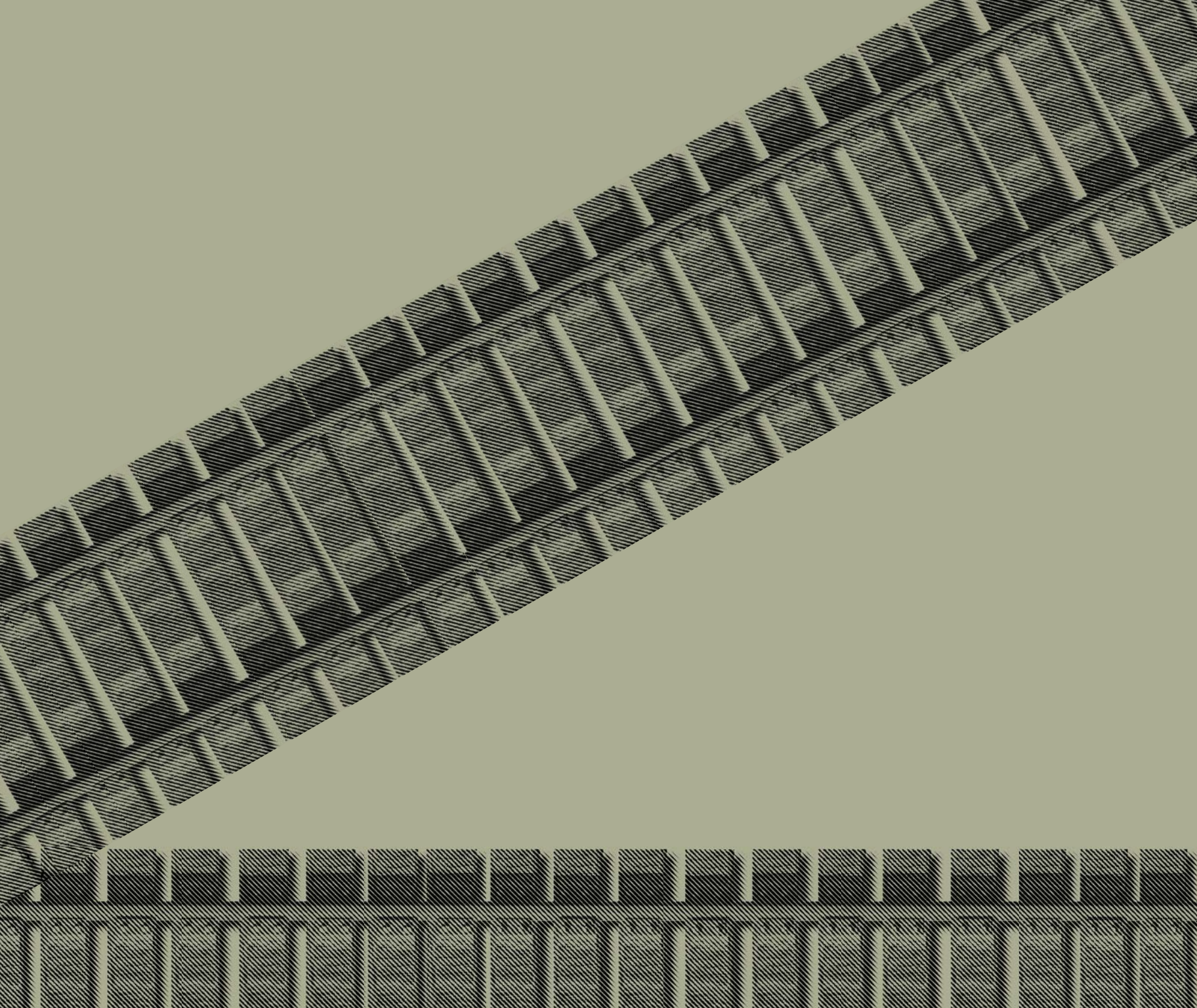Witcomb, A. (2003). *Re-imagining the museum : beyond the mausoleum*. New York, NY: Routledge.

APPENDIX

Technology Requirements

Appropriate heating and ventilation are required to provide an even distribution throughout the entire building.

An electrical service will be provided that will supply enough power for all electrical needs of the building including: lighting, tills, kitchenette, cafe, exit signage, smoke detectors, and the heating/cooling system. Data cabling (phone, fax, internet) will also need to be provided to all offices, multi-purpose space, and lounge areas. The meeting rooms and multi-purpose space should be supplied with audio/visual technology. Wi-Fi access will be available throughout the entire space. A security monitor system will also need to be installed throughout the space.

The plumbing requirements include the public washrooms, water fountains, kitchenette, and cafe. A sprinkler system will also need to be installed throughout the space.

Building Code Analysis

Table 3.1.2.1 Major Occupancy Classification (Canadian Commission on Building and Fire Codes, 2005, pp. Division B 3–2)

Group A Division 2 - Assembly occupancies not elsewhere classified in Group A (museum)

Examples of what falls under Group A Division 2 can be found in A.3.1.2.1.(1) of the building code:

• Art Galleries, auditoria, bowling alleys, churches and similar places of worship, clubs, community halls, courtrooms, dance halls, exhibition halls, gymnasia, lecture halls, libraries, licensed beverage establishments, museums, passenger stations and depots, recreational piers, restaurants, schools and colleges, non-residential, undertaking premises (Canadian Commission on Building and Fire Codes, 2005, p. Division B A–9).

The building code defines assembly occupancy as "the use of a building, or part thereof, by a gathering of persons for civic, political, travel, religious, social, educational, recreational or like purposes, or for the consumption of food and drink (Canadian Commission on Building and Fire Codes, 2005, pp. Division A 1–4)

Table 3.1.17.1 Occupant Load (Canadian Commission on Building and Fire Codes, 2005, pp. Division B 3–30)

Designed Occupancy Load: 250 persons (100 for the front

portion, 150 for the back portion - explained in further detail in section 3.7.2.2 Water Closets)

3.3.1.6 Travel Distance (Canadian Commission on Building and Fire Codes, 2005, pp. Division B 3–93-94)
For Group A in a non-sprinklered space the maximum distance to an egress doorway is 15m = 49'.
In a sprinklered space 25m = 82'.
A minimum of 2 egress exits should be provided.

3.4.2.3 Distance Between Exits (Canadian Commission on Building and Fire Codes, 2005, pp. Division B 3–113)
The least distance between existing exits from a floor area is not less than one half the diagonal dimension of the floor area.

3.4.2.5 Location of Exits (Canadian Commission on Building and Fire Codes, 2005, pp. Division B 3–114)
The exits are to be located so that the travel distance to at least one exit shall not be more than 98' (30m) in a non-sprinklered space. 131' (40m) in a sprinklered space.

3.7.2.2 Water Closets (Canadian Commission on Building and Fire Codes, 2005, pp. Division B 3–137)

As I divided my space into two entities (the front portion with the cafe, which would stay open for longer hours, and the back portion with the multi-purpose space) the total occupancy load of 250 persons was split. The front portion would have an occupancy load of 100 leaving the back portion with an occupancy load of 150. According to Table 3.7.2.2.A Water Closets for Assembly Occupancy I would need 1 male, 2 female water closets for 26-60 persons of each sex (total 100 persons). The back portion would need 2 male, 3 female water closets for 51-75 persons of each sex (total 150 persons).
• at least one lavatory shall be provided in a room containing one or two water closets or urinals, and at least one additional lavatory for each additional two water closets or urinals (sinks 1:2 water closets)

Section 3.8 Barrier-Free Design (Canadian Commission on Building and Fire Codes, 2005, pp. Division B 3–140)
• not less than 50% of the pedestrian entrances of a building shall be barrier-free, and shall be designed in accordance with Article 3.8.3.3
• the unobstructed width of a barrier-free path of travel shall

be not less than 920mm

• a barrier-free path of travel is permitted to include ramps, passenger elevators or other platform-equipped passenger-elevating devices to overcome a difference in level

• the width of a barrier-free path of travel that is more than 30m long shall be increased to no less than 1500 mm for a length of 1500mm at intervals not exceeding 30m

• in an assembly occupancy, the number of spaces designated for wheelchair use within rooms or areas with fixed seats shall conform to Table 3.8.2.1

• signs incorporating the international symbol of accessibility for person with physical disabilities shall be installed to indicate the location of a barrier-free entrance, washroom, shower, elevator, or parking space

• signs incorporating the symbol of accessibility for persons with hearing disabilities shall be installed to indicate the location of facilities for persons with hearing disabilities

• a ramp located in a barrier-free path of travel shall

a) have a width not less than 870mm between handrails

b) have a slope not more than 1 in 12

c) have a level area not less than 1500 by 1500mm at the top

and bottom and at intermediate levels of a ramp leading to a door

d)...etc.

3.8.2.3 Washrooms required to be barrier free (Canadian Commission on Building and Fire Codes, 2005, pp. Division B 3–142)

In a building in which water closets are required in accordance with Subsection 3.7.2., at least one barrier-free closet shall be provided in the entire storey, unless one is located along a barrier-free path of travel provided elsewhere in the building.

3.8.3.8 Water Closet Stalls (Canadian Commission on Building and Fire Codes, 2005, pp. Division B 3–145)

At least one water closet stall is required to be barrier-free and shall be not less than 1500mm wide by 1500 deep, have a door that can be latched from the inside with a closed fist, and provides a clear opening not less than 800mm wide when it is open.

Appendix B

Legend

Sprinkler

Figure 8.1 - Sprinkler Plan

R&e JOSEPH MAW & CO. LIMITED R&e

JOSEPH MAW & CO
AUTOMOBILES

Early in 1904, JOSEPH MAW & CO., LIMITED, carriage and implement dealers, opened the first automobile salesroom in Winnipeg.

The first garage in Winnipeg was a portion of their building the corner of William avenue and King street.

On the floor were six cars, built by R. E. OLDS, the first man to manufacture automobiles commercially in the world.

They were without headlights, windshields or tops, and developed the dizzy speed of fifteen miles an hour.

There were few paved streets in Winnipeg then, and a trip to Stonewall seemed as momentous as Captain Allcock's trip across the blue.

But OLDS' first automobile factory and MAW'S first garage marked the beginning of the Motor Age in Canada.

In 1907, JOSEPH MAW & CO., LIMITED, built the large garage at 112 King street, which is still occupied by his firm.

It was the first garage built in Canada without posts, and for a long time was the largest garage in Canada.

The wise citizens, who had shaken their heads at the "toy" called the automobile, said, "They'll never have that garage filled."

It was not long before that garage and a large track warehouse were taxed to capacity.

MAW SERVICE, the first automotive service in Winnipeg, kept always a little ahead of the demand.

In 1911, JOSEPH MAW & CO., LIMITED, received their first truck. It also was manufactured by R. E. OLDS, and was called the REO, as were OLDS' cars.

Today, having grown up with the automotive business from the very first, JOSEPH MAW & CO., LIMITED, still maintains its original position—"FIRST IN SERVICE."

REO cars, having grown up with the automotive business from the very first, still maintain their original position—"First in Quality and Value."

REO trucks, sharing the firstness of all the other firsts, still maintain without trouble their original position—"First in Numbers and Efficiency."

REO trucks dominate the commercial transportation fleets in Winnipeg today, as well as in most other cities.

JOSEPH MAW & CO., LIMITED
112-118 King Street, Winnipeg