Research Is An Offering: Decolonizing Interior Spaces for Indigenous Belonging in Academia

by

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Taanishi toot li moond,

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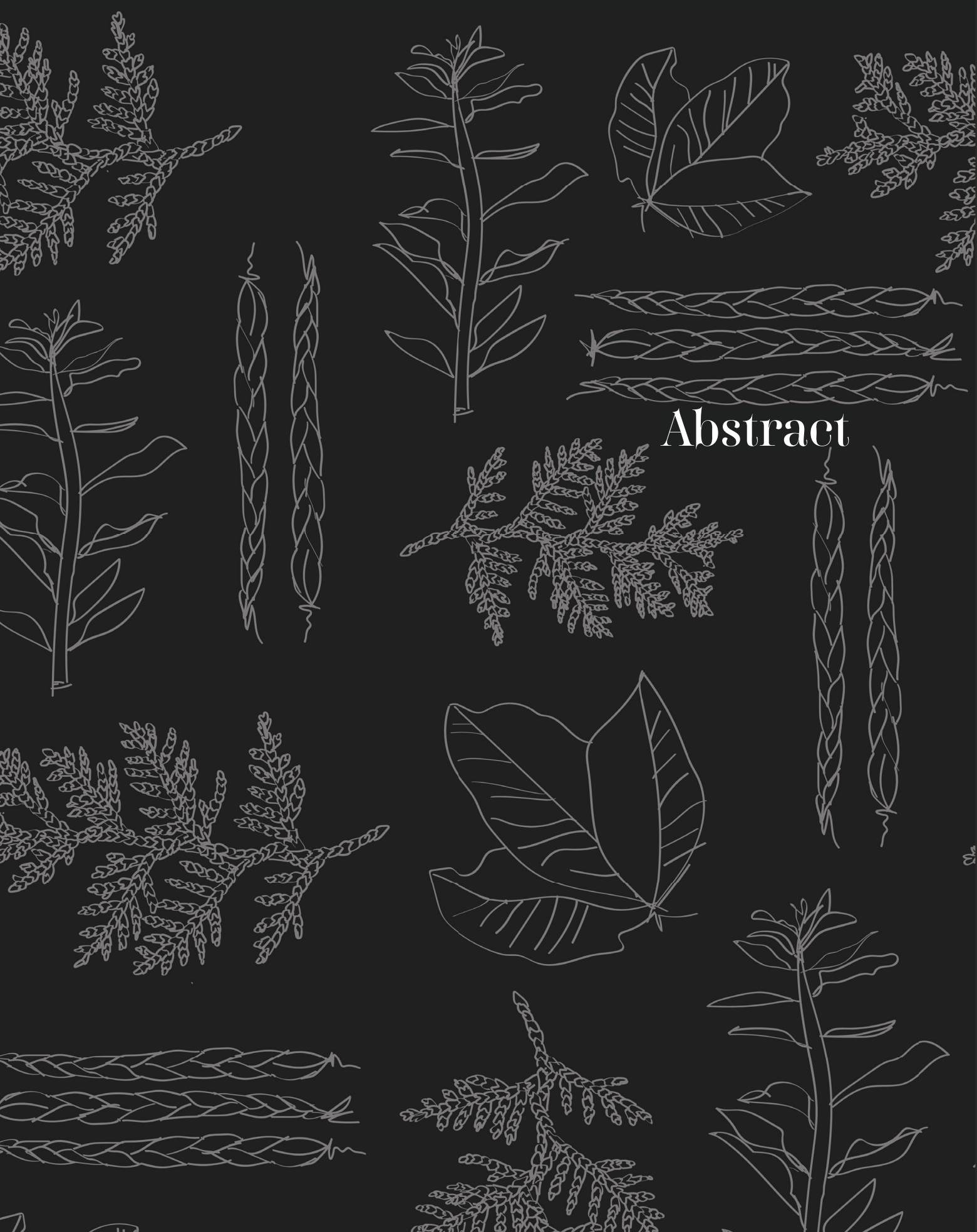
Maarsii



Abstract

This project used interior design to reimagine an academic research space as a place that encourages Indigenous research practices and fosters belonging. Post-secondary education is essential to the continuation of countless disciplines and the betterment of Canadian people. However, in its current Western state, the Canadian post-secondary system is not in a place that properly accommodates the Indigenous student population. Historically, it has received an inequitable, much less an enthusiastic promoter of Indigenous research and academia. Modern institutions do not possess the infrastructure for encouraging knowledge keeping or extensive cultural integration, nor the interest in preserving Indigenous language, history or culture, which can negatively affect the work and lives of First Nations, Métis and Inuit scholars.

Academic spaces designed specifically for Indigenous students and professionals and their particular research methodologies and knowledge types have become a typology of recent importance. The concern comes from increased interest among Indigenous students and added support of Indigenous peoples to pursue post-secondary education by Indigenous governments, the federal government, and other advocate organizations. While many institutions have a relatively insignificant discourse on what constitutes Indigenous physical space in academic environments, there exist positive opportunities for revaluating the roles of Indigenous students and researchers in physical, academic environments.

This project explored Indigenous placemaking to derive a unique typology and set of spaces that will take up space in the current academic research model and strengthen Indigenous roots in Canadian academia. This project had two objectives: one, to create a concrete, dedicated space for the creation and circulation of Indigenous knowledge for application in both academic research and community efforts, and two, to understand how a sense of "place" for Indigenous students is able to be improved upon using interior design within an academic, physical space. The result is Mâtinawewin (Cree, "the act of making an offering"), a collaborative, holistic, community-focused research centre that embodies its name.

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Chapter 1: Introduction

1.1 Practicum Overview: Studies on Indigenous Students in Post Secondary Education and Research

Since the genesis of academia as it is seen today, there has been a gap in educational attainment in Canada between Indigenous and non-Indigenous populations. In 2006, 41% of Indigenous people aged 25 to 64 had completed a post-secondary certificate, diploma or degree, while 56% of non-Indigenous people had attained those levels.[1] This discrepancy grows when considering the statistics for only university-level studies: in 2006, Indigenous university attainment of the same demographic grew to 8%, while non-Indigenous attainment reached 23%.[2] By 2011, each group had reached 9.8% and 26.5% for degree completion, respectively.[3] Though there was an improvement for each demographic, there is still a substantial unaddressed distance between the two groups. These findings reveal that the perceived educational gap between these groups is directly tied to the distance between them in university attainment.[4]

What allows this disparity to perpetuate? Public perceptions of post-secondary education from Indigenous and non-Indigenous perspectives have been a significant influence. Numerous social, economic, and academic factors contribute to choices made by Indigenous students, all of which I cannot address in this practicum. However, these choices are exacerbated by the lack of Indigenous representation and the lingering colonial structure of secondary and post-secondary education in Canada in many ways.[5] Post-secondary institutions in Canada are still operating under provisions acceptable under colonial standards. Those standards aimed to weaken cultural knowledge and ties to traditional identity, contributing to difficulty integrating community involvement and non-traditional academic concepts in post-secondary education.[6]

While the acuteness of this phenomenon has waned, and there is now a somewhat increased sense of acceptance for attending Indigenous students, the curriculum, facilities, and overall culture of a contemporary university campus remain biased towards Western models of education.[7] Changing how academia appeals to and welcomes Indigenous peoples will require more than placing Indigenous students and curricula into a discriminatory system. Belonging will only be achieved by restructuring the typical academic path of study

1 Canadian Council on Learning, "The State of Aboriginal Learning in Canada: A Holistic Approach to Measuring Success", accessed June 25, 2020. https://www-deslibris-ca.uml.idm.oclc.org/ID/222503. 46.

2 Ibid.

3 StatsCan 2011, "The educational attainment of Aboriginal peoples in Canada." Accessed October 03, 2020. https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003_3-eng.cfm.

4 Canadian Council on Learning, "The State of Aboriginal Learning in Canada: A Holistic Approach to Measuring Success", 46.

5 Anita Olsen Harper and Shirley Thompson, "Structural Oppressions Facing Indigenous Students in Canadian Education", Fourth World Journal 15, no. 2 (2017), 43.

6 Ibid.

7 Ibid.

and research to both accept innovation and return to traditional knowledge systems and land- and community-based knowledge.

Included in the percentage of Indigenous people to receive a university certification is a much smaller group of those who hold a graduate degree or higher. In 2019, 88.6% of Indigenous enrollment at the University of Manitoba were categorized as undergraduates (2311 students), while 261 Indigenous-identifying students pursued graduate level studies.[8] These numbers contrast the total enrollment of students, which were 25,710 and 3851 in undergraduate and graduate studies, respectively.[9] The 2019-2020 school year saw the largest population of Indigenous students ever enrolled at the university and represents one of Canada's largest Indigenous student populations.[10]

The University of Manitoba seeks to continue to improve these numbers. The 2015-2020 University of Manitoba Strategic Plan contains several goals for improving curriculum and programming for Indigenous graduate students. These goals include revamping campus research practices to suit Indigenous methodologies better, increasing retention of Indigenous graduate students and faculty, and reinforcing Indigenous culture in the campus environment.[11] There is hope in the University's administration that there will be a more outstanding balance of Western and Indigenous ways of learning and research methods through these supporting actions.[12] Implementing these changes at a physical scale will help improve and continue to emphasize the experiences of Indigenous scholars and communities and create opportunities for people at all levels of study.

Reframing the idea of how research is defined is also imperative to the positive remodelling of academia, epistemologically as well as physically. Knowledge of Indigenous communities in North America that was collected in the name of Western academic research ultimately contributed to normalizing how poorly Indigenous peoples were treated and continue to be discriminated against.[13] It is problematic that institutions allow these practices to continue as they perpetuate the idea of Indigenous communities as "other" or "less than."[14] It is also essential to develop spaces that accommodate Indigenous research methods and knowledge outside of the written word. Indigenous scholarship has been

8 University of Manitoba Office of Institutional Analysis, "Canadian Indigenous Students By Faculty/College/School Compared to Overall Student Population", in Selected Institutional Statistics 2018-2019 ed. Office of Institutional Analysis, Winnipeg: University of Manitoba, 2019.

9 University of Manitoba Office of Institutional Analysis, "Canadian Indigenous Students By Faculty/College/School Compared to Overall Student Population", in Selected Institutional Statistics 2018-2019 ed. Office of Institutional Analysis, Winnipeg: University of Manitoba, 2019.

10 University of Manitoba, "Facts and Figures | Indigenous Achievement", accessed September 02, 2020. http://umanitoba.ca/about/factandfigures/#our-students.

11 University of Manitoba, "Taking Our Place: University of Manitoba Strategic Plan 2015-2020". Accessed September 02, 2020. http://umanitoba.ca/sites/default/files/2020-06/um-strategic-plan-2015-2020.pdf. 14-17.

12 University of Manitoba, "Taking Our Place: University of Manitoba Strategic Plan 2015-2020". 16.

13 Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, New York: Zed Books, 2008. 1.

14 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 2.

a leader in anti-oppressive approaches to research, changing hegemonic perceptions of Indigenous peoples and their various belief sets and methodologies.[15]

Finding a sense of belonging in post-secondary environments is crucial for the success of Indigenous students. Holding physical space in university environments to close the attainment gap for Indigenous students will help strengthen Indigenous communities and create opportunities for the self-actualization and self-determination of Indigenous peoples. Indspire, a leading Canadian non-profit that awards educational funding for First Nations, Métis and Inuit students, administered a survey for recipients of their awards. The survey asked about the difficulties recipients faced while attending post-secondary education. Recipients were also asked about implementing the Calls for Action following the Truth and Reconciliation Commission in their university experience.[16] Respondents reported a significant problem within Canadian institutions was a missing sense of culture, identity and belonging.[17] These results suggest a need for Indigenous students to belong to the spaces they enter, be able to speak for themselves and their own experiences, and feel a sense of belonging rather than marginalization or otherness.[18] It is important to note that these findings apply mainly in places not dedicated to Indigenous post-secondary institutions.

On the contrary, students in settings identified as Indigenous- run that give precedence to culture and language had more positive experiences.[19] Indigenous students today want to see themselves and their identities reflected in physical space as more than a tokenization. They want to be allowed to belong to once inaccessible settings.

15 Jeffrey Paul Ansloos. "To Speak in Our Own Ways About the World, Without Shame": Reflections on Indigenous Resurgence in Anti-Oppressive Research", in *Creating Social Change Through Creativity: Anti-Oppressive Arts-Based Research Methodologies*, ed. Capous-Desyllas and Morgaine (London: Palgrave MacMillan), 2018. 3-4.

16 Indspire, "Post-Secondary Experience of Indigenous Students Following the Truth and Reconciliation Commission". Last modified September 2018. Accessed July 16, 2020. https://indspire.ca/wp-content/uploads/2019/10/PSE-Experience-Indigenous-Students-Survey-Summary-Sept2018.pdf. 2.

17 Indspire, "Post-Secondary Experience of Indigenous Students Following the Truth and Reconciliation Commission", 4.

18 Ibid.

19 Ibid.

1.2 Research Questions

1. How can interior space be designed to introduce Indigenous identity in an academic space?
2. How can interior design help balance visual and oral knowledge for the benefit of an Indigenous research agenda?
3. What academic interior spaces can be designed to support community involvement through Indigenous knowledge and ceremony?

1.3 Key Terms

Indigenous

The Indigenous Student Center at the University of Manitoba uses the word "Indigenous" to refer to the land's original peoples and their descendants, specifically First Nations, Métis and Inuit peoples.[20] In Manitoba, Indigenous groups include Anishinaabe, Cree, Oji-Cree, Dene, Dakota, and Métis Peoples. Though there is criticism that using the word Indigenous is not descriptive enough, it tends to get used more frequently since it is associated with fewer negative connotations than "aboriginal" or "native."[21] Though many choose to identify with the latter terms, this practicum uses the word Indigenous as it is the most inclusive and unbiased. This practicum also refers to Indigenous groups, communities, and nations as Indigenous Peoples (plural) to acknowledge the diversity of Indigeneity on Turtle Island (referring to what is politically known as Canada and the United States, derived from origin stories of various nations in North America).

20 Celeste McKay Consulting. "Briefing Note on Terminology". Last modified April 2015. Accessed August 24, 2020. https://umanitoba.ca/student/indigenous/terminology.html#:~:text=The%20terms%20%E2%80%9CAboriginal%E2%80%9D%20and%20%E2%80%9C,all%20Aboriginal%20or%20Indigenous%20peoples.&text=For%20these%20reasons%20%E2%80%9CIndigenous%E2%80%9D%20is%20increasingly%20preferred%20in%20Canada.

21 Celeste McKay Consulting. "Briefing Note on Terminology".

Indigenous Knowledge

There is no single agreed-upon definition of Indigenous Knowledge (IK). Likely, this is because there are around 5000 different Indigenous groups worldwide across 90 countries.[22] Local or Indigenous Knowledge can be described as a network of knowledge, beliefs and traditions intended to preserve, communicate, and contextualize Indigenous relationships with culture and landscape over time.[23] Indigenous Knowledge, or epistemologies, is significant to the transfer of information. They are not primarily written; Indigenous Knowledge can be conveyed through social interaction, oral narratives and traditions, rituals and ceremonies, making, symbols and cosmology.[24] Understanding the characteristics of Indigenous Knowledge is vital for this practicum to distinguish their differences from typical Western modes of knowledge.

Holistic

When speaking of Indigenous Peoples, the word holistic refers to the idea that culture and identity permeate all parts of life, which distinguishes Indigenous ways of life from those of Western inhabitants.[25] It is the idea that every practice, governing body and culture, are interdependent rather than the Western tendency to compartmentalize.[26] Loss of cultural holism was a side-effect of residential schools and other assimilation efforts by Western inhabitants in recent Canadian history and has led to problems concerning identity, socio-economic status and mental health for Indigenous populations.[27] Therefore, re-cultivating Indigenous holistic ways of life have become the basis of current efforts to reject assimilation and encourage cultural holism to combat the sense of fragmentation that has persisted in Indigenous communities.

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22 Cultural Survival, "The Issues", accessed September 5, 2020. https://www.culturalsurvival.org/issues.

23 Margaret Bruchac, "Indigenous Knowledge and Traditional Knowledge", in Encyclopedia of Global Archaeology Volume 10, ed. C. Smith. New York: Springer, 2014. 3814.

24 Ibid.

25 Duane Champagne, "Understanding Holistic Indigenous Cultures", last modified October 18, 2014. Accessed September 16, 2020. https://indiancountrytoday.com/archive/understanding-holistic-indigenous-cultures-8QR0Z67ItUG5he7UwX_SRg.

26 Ibid.

27 Ibid.

1.4 Project Limitations and Benefits

1.4.1 Locating Myself in the Project

Mâtinawewin was inspired by my time both as a student with Métis and settler ancestry and as an employee in Indigenous Student Recruitment at the University. Since I was not raised with Indigenous values and traditions, it was not until I reached University that I was able to embrace that side of my heritage and culture. After working in recruitment and witnessing the spectrum of experiences Indigenous students have in academics, I became increasingly interested in understanding how to improve the University experience for other Indigenous students.

When I started studying design in 2014, the Indigenous academic community at the University was growing in acceptance and making a place for itself in curriculum and advocacy. Indigenous built space that reflected First Nations, Métis and Inuit identity was limited to Migizii Agamik (Bald Eagle Lodge). Today, there is high demand for Indigenous Knowledge and representation in all fields and faculties. The sheer number of books, articles, exhibitions, and dissertations on the desire for change in Canadian institutions and architecture that I could have included in this practicum is evidence of a widely perceived need to improve Indigenous representation in the design of university environments. I feel that this practicum reflects what is possible when evaluating the need for Indigenous space in academia.

This practicum project has allowed me to combine what I have learned about both the future potential for Indigenous Knowledge in academics and my interest in creating interior spaces that exhibit holistic Indigenous worldviews and values. Being an interior design student has made me aware of how Eurocentric interior design education can be and how disconnected our discipline has become from Indigenous principles, especially considering our geographical context on Treaty 1 territory as a major intersection of Indigenous Peoples and university goals for reconciliation and integration. Interior design is missing a connection to the land and traditional teachings; though interiors are inherently connected to the individual and their spirit, so much of the work is left to the field of architecture. I'm glad for the chance to explore and contribute to the body of Indigenous-centered interior design and to explore drawing cultural and ethical concepts from traditional and transdisciplinary sources. I hope that these ideas continue to develop in interior design theory and add to the efforts that Indigenous students, faculty, partners, and community members have contributed to our education, environments, and networks in my time as a student.

1.4.2 Limitations

Project limitations included finding accurate, recent data on post-secondary experiences of students identifying as Indigenous within and outside of Manitoba. Statistics Canada has no data on Indigenous peoples more recent than the 2011 census and the 2006 Inquiry into Aboriginal Peoples in Canada; seemingly, there are statistics and census data due for dissemination in the next few years but are not yet available. Trends are apparent that echo the existing qualitative and quantitative data, which helped the research process for this project. The reasoning for this may also include the fact that more grassroots efforts are emerging and that Indigenous researchers are promisingly doing Indigenous research rather than large quantities of data being collected on Indigenous communities.

The literature review of this practicum is built on supporting claims for involving contemporary and traditional Indigenous thought in the design process specific to institutional interior design as it relates to the Indigenous student population. However, a lack of references to Indigenous interior design and existing examples limited the literature review and available precedents for analysis. A significant body of literature substantiates claims examining necessary changes for improving the Indigenous post-secondary student experience, yet little regarding how to direct this need to the interior design community or strategies for deriving change. Therefore, the methodologies for this practicum centred on analyzing Indigenous theory, epistemology and tradition as a framework for designing change. The typology for Mâtinawewin is also a complex combination of various typologies that are not often seen together in totality. Ultimately, the lack of precedents for this project drove me to use programmatically similar precedents but not Indigenous-specific interiors.

The building analysis of the project was limited to past interactions with the site when it was a public space, information from past owners and stakeholders, and the exterior facades. The site for most of the duration of the practicum was occupied by SSCOPE, a non-profit organization that offered housing to unsheltered individuals and individuals with mental health issues. The building occupancy meant that acquiring interior photography was disallowed for the safety and privacy of those sheltering at 865 Main Street.

1.5 Summary of Chapters

This document is grouped into five chapters to outline the research and design processes that led to its final design. The introduction, Chapter 1.0, provides a rationale for undertaking this project, including a statistical background and set of issues, research questions to be answered by the practicum process, key terms, and limitations for the project.

Chapter 2.0, Literature Review, examines the interwoven relationships between selected theories, stories, and frameworks in the context of the cardinal directions of the medicine wheel. Examining literature in this context creates opportunities to develop new methods of Indigenous architectural representation in post-secondary environments. This section focuses on research methodologies and Indigenous worldviews because of their value in interpreting Indigenous research processes.

Chapter 3.0 Precedent Study analyzes three existing projects and one future project to compare them to the theories investigated in Chapter 2.0 Literature review and assess their positive and negative relevance to the final design of the practicum project. The projects included the Jewish Documentation and Research Center of Mexico, the Owsley Brown II History Center, the future University of Sydney Indigenous College, and Migizii Agamik. Interiors were analyzed through cultural, aesthetic, programmatic and typological lenses.

Chapter 4.0 Site and Building Analysis outlines the decisions made leading to selecting 815 Main Street as the site for Mâtinawewin. The building's history is introduced to contextualize cultural and social ties to the community. This chapter iterates the reasoning and benefits for locating the project in urban Winnipeg and the opportunities afforded by the choice of the building,

Chapter 5.0 Design Programme defines the psychological, behavioural and spatial requirements for each type of user expected to occupy the spaces designed for the project. This section also outlines the functional and aesthetic requirements for the overall project.

Chapter 6.0 Design Analysis will be completed after the Intermediate examination and will go over Mâtinawewin's overall design concepts, design details, spatial planning, and material rationale. This section will include plans, reflected ceiling plans, sections, elevations, and rendered perspectives of the interior and exterior of the space.

Chapter 7.0 Conclusions finalizes the project with reflections on the research and design in the practicum by returning to the research questions initially posed in Chapter 1.0 Introduction. Recommendations for further analysis and development are offered based on the practicum experience and results from each research question.

Chapter 2.0
Literature Review

2.1 Introduction

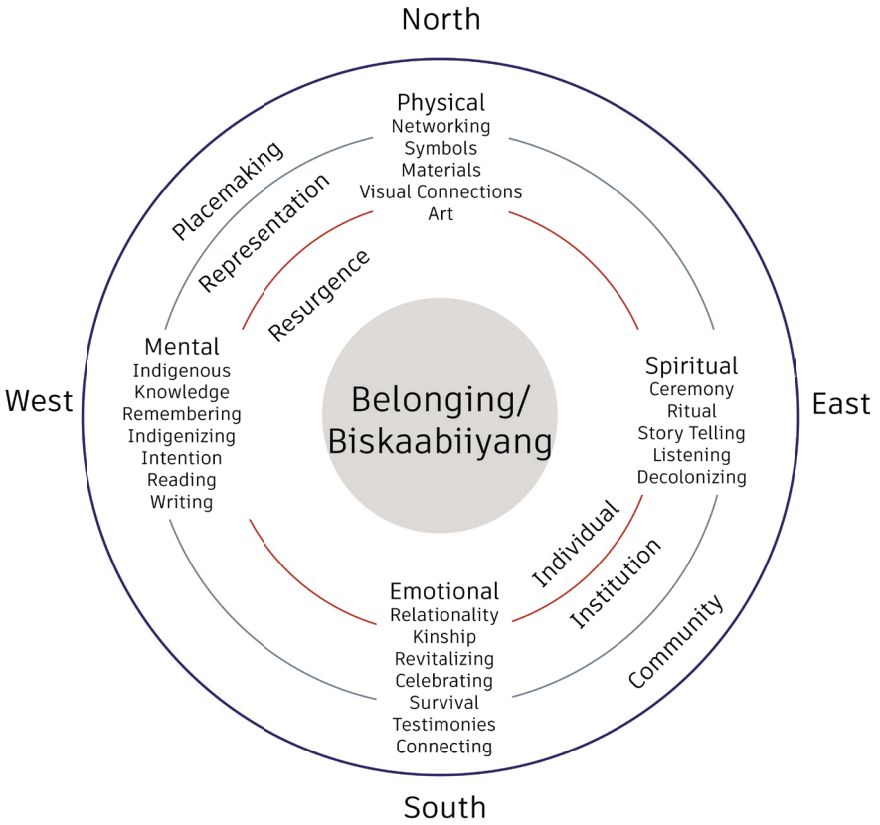

Figure 1: Indigenous Interior Design Holistic Framework

Reinforced by the teachings of the traditional medicine wheel, the four cardinal Directions reflect the holistic nature of relationality and identity for Indigenous peoples. Each Direction presides over a different element of one's worldview. The East represents spiritual connections and historical contexts. The Southern doorway represents emotional connections and relationships. It calls for renewal at relational levels, community collaboration and the contextualization of issues.[28] The West represents mental connections, asserts and respects Indigenous knowledge and ancestral ways of knowing, and is anti-colonial in practice. The North doorway concerns physical actions and methodologies that heal and teach, physical connections and collective work, and diversity between Indigenous cultures. Each Direction is interrelated and interdependent, showing that a change in one direction is a change in all, and a balance must be achieved in all Directions.[29] These concepts were centred as design strategies for the design of Mâtinawewin, backed up by the literature analyzed in the review,

28 Kathy Absolon, "Indigenous Wholistic Theory: A Knowledge Set for Practice", First Peoples Child & Family Review 5, no. 2 (2010):81.
29 Absolon, "Indigenous Wholistic Theory: A Knowledge Set for Practice", 78.

to work toward a new definition of identity for the Indigenous academic population.

Regarding Indigenous Peoples, the concept of identity is complex and relational. It is a holistic idea that connects and permeates all aspects of life. There are many economic, political, spatial, and cultural barriers to identifying as Indigenous in Canada; colonial societies naturally attempt to strip Indigenous Peoples of their connections to land, ceremony, language histories and spirit to suppress non-Western thought. This loss of identity has led to problems that Indigenous populations and communities face today, including racism, assimilation, loss of language and spiritual knowledge, mental health issues and cultural ignorance. Lack of visual representation in institutional environments is also a cause of lost identity for Indigenous students who seek higher learning. Searching for identity was influential for this literature review and the practicum to fully acknowledge the importance of solidifying identity in physical space through interior design immersed in Indigenous Knowledge systems.

Framed as teachings representing each doorway as an influential aspect of the practicum, the sections of this literature review present insight into the need for physical change in a typical university environment by outlining Indigenous-specific ways of knowing and research methodologies and analyzing their potential as components in a holistic interior design framework. At all stages, Indigenous success in post-secondary study connects to belonging and self-representation in built environments, whether inherently, symbolically, or literally.[30] Changing how the university respects community involvement in Knowledge sharing and accepts new standards for inclusivity are to be examined by using interior design as a medium.

Indigenous-focused educational environments can be reshaped in various ways: interior design can be utilized to reflect identity, be reinforced by ethical and cultural values, and provide functions explicitly for the benefit of Indigenous research that reform perceptions of data collection and dissemination. Each section of the literature review contributed to developing a final interior design framework that informed the design programme for Mâtinawewin and the final design.

2.2 East: The Spirit

2.2.1 Indigenous Holistic Theory

Indigenous Holistic Theory was the starting point for this Mâtinawewin, as cultural holism is vital for many cultures of Indigenous peoples living on Turtle Island. Conceptually, this project explored relationships between old and new knowledge and innovated how it is

30 Indspire, "Post-Secondary Experience of Indigenous Students Following the Truth and Reconciliation Commission", 4.

obtained. It is about using interior design to understand how knowledge can connect and equalize. Indigenous Holistic theory is significant to this project as it encapsulates academic opportunities to be explored and acts as a foundation for cultural and epistemological ideas to be utilized.

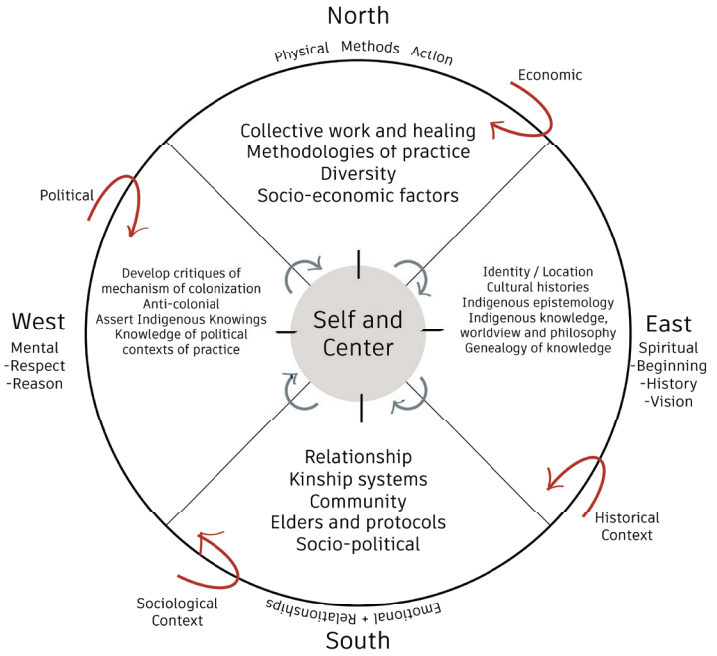

Figure 2: Indigenous Holistic Framework

At the center of authentic Indigenous identity, among and between history, ceremony, language and the land, are relationships.[31] Indigenous Holistic theory is a whole, ecological, cyclical, and rational way of knowing.[32] It is both epistemology and strategy that has been used for millennia and passed on through each generation as a centring point for life.[33] It embodies the concept of relativity and balance between all beings and makes us understand that all aspects of life are connected to a more extensive system, parts of a whole. It is often represented by the teachings of the Medicine Wheel, the Four Directions, and Circles.[34] Indigenous Holistic theory helps to understand our realities and experiences by considering the influences of all elements of the whole on our individual and collective beings.[35] Indigenous Holistic Theory also implies that combining perspectives and collaboration is a more effective

31 Taiaiake Alfred and Jeff Corntassel. "Being Indigenous: Resurgences against Contemporary Colonialism". Government and Opposition 40, Issue 4 (2005): 609.
32 Absolon, "Indigenous Wholistic Theory: A Knowledge Set for Practice", 76.
33 Ibid.
34 Ibid.
35 Ibid.

means of problem-solving.[36] It represents both a general yet complex Indigenous worldview and an independently created worldview that should be acknowledged and carried through Indigenous spaces of knowledge and culture; identity and culture are inherently tied to one another, nested and unopposable.[37]

Indigenous Holistic Theory as an Indigenous epistemology is represented by each of the Four Directions, with the Center representing one's self, connected to each doorway. If looking at imbalances in identity in institutional environments, the Eastern doorway would be the starting point for advancement. This doorway is the connection to history through spirit and identity, aspects which most arguably divide modern Western academia from Indigenous principles.[38] Spiritual and mythological teachings are often disregarded as having no purpose or benefit to Western academics.[39] Spirituality is inherent in Indigenous epistemology and reinforces holistic ideas; spirituality sees everything in relation to Creation, the earth, and all sacred life.[40]

Indigenous epistemologies exist with responsibilities to follow orally passed on instructions and knowledge, ceremonies, constantly relearning practices, protocols and rituals, and nurturing mutual relationships.[41] Following this spiritual path effectively removes the barrier between Western and Indigenous academic practices and dims the focus on existing Western frameworks or thought patterns.[42] It can be argued that Indigenous students and researchers cannot fully identify with and therefore be supported by academic environments without providing space for and belief in spirituality in the sphere of scholarly research. Creating environments that foster these practices can be a strategy to normalize spiritual associations in academia and reaffirm the role of Indigenous knowledge in research and post-secondary education.

Indigenous Holistic Theory is crucial to the thesis of this project and underlines potential solutions to the problems outlined. Interior design is considered a holistic practice. Consistency in and between spaces is mandatory so that an interior can operate functionally and aesthetically for the user. Designed spaces must work independently and are best when the effects they have support and benefit each other. Specifically, in academia, Indigenous worldviews, traditions, and values are foundational to the continuation of balance; once removed, an imbalance is created in the continuation of culture, language, knowledge, and acceptance of Indigenous peoples.[43] By incorporating physical space in post-secondary

36 Marie Battiste, "Introduction: Unfolding the Lessons of Colonization", In Reclaiming Indigenous Voice and Vision, ed. Marie Battiste (Vancouver: UBC Press, 2000), xvi.
37 Wayne Warry, *Ending Denial: Understanding Aboriginal Issues* (Toronto: Broadview Press, 2007), 108.
38 Ibid.
39 Donald,"From What Does Ethical Relationality Flow?" Counterpoints 478 (2016): 15.
40 Kathy Absolon, "Indigenous Wholistic Theory: A Knowledge Set for Practice". 78.
41 Kathy Absolon, "Indigenous Wholistic Theory: A Knowledge Set for Practice". 78.
42 Peter Cole, "Aboriginalizing Methodology: Considering the canoe", Qualitative Studies in Education 15, no. 4 (2002): 451.
43 Absolon, "Indigenous Wholistic Theory: A Knowledge Set for Practice", 78.

settings designed to reinforce holistic views, interior design can begin to break institutional standards previously preferred. Influencing interior design functionally and aesthetically with concepts drawn from holistic Indigenous epistemologies and research methods will create an environment inherently tied to Indigenous Knowledge.

Indigenous Holistic Theory, though critically important to the understanding of Indigenous epistemologies and, therefore, numerous identities, is not a strategy that is immediately suitable for all situations and practices. Absolon encourages practitioners to use Indigenous Holistic theory to develop their own framework of thought with specific contextual criteria; combining Holistic theory with current anti-colonial theory helps to successfully assert the power of Indigenous knowledge and its role in developing future knowledge.[44] A framework helps in finding imbalances and problems in areas that may require improvement. At the culmination of this literature review, based on an analysis of various other Indigenous theories and ideas, a Holistic framework will be constructed as a visual representation of the strategy for the project and the basis of the functional programme.

2.2.2 Ethical Relationality

Ethical Relationality guides relationships between all peoples, living things and environments. Ethical forms of relationality are emphasized to support life and living for all perceptive beings in organically productive ways.[45] Ethical Relationality is interpreted as an ecological understanding of organic connectivity that becomes apparent to human beings when honouring the sacred ecology that supports life and living.[46] It supports the conceptualization of difference in ecological terms as necessary for living.[47] Ethical Relationality guides all to seek an understanding of how our different histories, memories, and experiences reflect and affect one another.[48] Overall, Ethical Relationality reminds us that a singularly human perspective disregards history, ecology and mythology and is therefore ineffective in reinforcing relationships, which can be taken as a design methodology.

Ethical Relationality is to be considered at the built human scale when designing for Indigenous communities. As stated, a criticism of architecture geared towards Indigenous audiences typically employs Indigenous aesthetics without regard for context, meaning or more profound thought. Relationality is a strategy to avoid this and weave a more substantial

44 Absolon, "Indigenous Wholistic Theory: A Knowledge Set for Practice", 78.
45 Dwayne Donald, "From What Does Ethical Relationality Flow?", 10.
46 Donald, "From What Does Ethical Relationality Flow?", 11.
47 Ibid.
48 Ibid.

justification for design choices in Indigenous spaces, regardless of the design discipline involved. Indigenous design ensures Indigenous cultures and those who practice them resonate with the thoughts, concepts, and contexts offered, which is a product of ethical relationality. Winnipeg and the University of Manitoba are located on Treaty One territory, the traditional territory of the Anishinaabeg, Cree, Oji-Cree, Dene, and Dakota peoples and the homeland of the Red River Métis Nation. Therefore, concepts implemented in design in a place should reflect the teachings of those nations. Ethical relationality emulates two Cree teachings closely associated with relationality that can also influence interior design: wicihitowin and wahkohtowin, which were studied in this practicum.

Wicihitowin refers to the valuable energy generated when people face each other as relatives and build trusting relationships by connecting with others respectfully.[49] Design at its best effect enables users to interact beneficially. By influencing the project's programme with this notion, changes to the expected atmosphere of a research space can influence the success of its environment. The human-to-human exchanges in interior environments can reflect the teachings of wicihitowin to create productivity, understanding and collaboration.

Wahkohtowin refers to kinship and teaches us to extend our relational network to include the more-than-human beings among us.[50] Today it is often associated with human kin only, but wahkotowin refers to all creation and its interrelationships: human to human, plants, animals, the water and earth.[51] Relationality at this level fosters connections between humans and the land, the sun, the water and the wind- the natural environment humans require for survival.[52] Ensuring that these connections permeate physical space enables humans to occupy space and create a place with meaning. Wahkotowin shares principles with Indigenous placemaking and has an innate bond to traditional Cree teachings. Built space must honour these connections and consider the relationships between the user, the materials used to create, and the spirit of the interior space.

2.2.3 Biskaabiiyang

The Anishinaabe process of Biskaabiiyang, or "returning to ourselves," encapsulates decolonization via resurgence. It refers to returning to values, philosophies and other cultural victims of assimilation and bringing them into existence in the future.[53] Biskaabiiyang is an Indigenous way of carrying oneself through life while recollecting lost knowledge and traditions and therefore is an effective research process. It stitches together cultures and

49 Donald, "From What Does Ethical Relationality Flow?", 10.
50 Donald, "From What Does Ethical Relationality Flow?", 10.
51 Maria Campbell, "We need to return to the principles of Wahkotowin," Eagle Feather News (Saskatoon, SK), Nov 2007.
52 Donald, "From What Does Ethical Relationality Flow?", 10.
53 Leanne Betasamosake Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, Winnipeg: Arbeiter Ring Publishing, 2014, 50.

lifeways individually and collectively in a way that each supports the other in the act of resistance and resurgence.[54]

Fostering the Indigenous intellectual community using Biskaabiiyang as a frame of thought will encourage self-determination while walking in both worlds. It is a reclamation of culture that supports today's Indigenous peoples and their values rather than returning to the past.[55] Biskaabiiyang is a process that was effective in designing Indigenous academic space. It advocates for traditional and modern ways of thought and can be imprinted on physical space in the same ways. It represents a continuation of knowledge by recognizing the importance of what was lost through a current lens and how it can be utilized to recover and prosper Indigenous communities in Canada.

Table 1: Eastern Doorway Theories

Theory	Theorist	Concept	Application
Indigenous Holistic Theory	Traditional Indigenous worldview, Kathy Absolon	• All aspects of life are interconnected; one's spiritual, mental, emotional and physical states should be balanced. • Worldviews can be adapted to support the needs of a discipline or movement.	• Connection and sight lines • Balance between interior spaces • Regard to the effect of interior spaces on each state of being • Cyclical organization, avoid fragmentation
Ethical Relationality	Dwayne Donald, Maria Campbell	• Authentic Indigeneity stems from respectful connections between oneself, others, the community, the natural environment, and kinship with living things	• Holistic research functions with less emphasis on the institution • Organic/natural forms and materials • Elemental inspiration • Contextual design elements and aesthetics.
Biskaabiiyang	Traditional Anishinaabeg Teaching	• "Returning to ourselves"- Traditional resurgence theory where reviving Indigenous culture within oneself enables the community to return to culturally rich ways.	• Creating space and programming to include community members/ individuals from outside the academy interested in receiving teachings • Place to develop one's beliefs in order to support those of the community

54 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 51.
55 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 51.

2.3 South: The Heart

2.3.1 Indigenous Resurgence Theory

A key characteristic of Indigenous scholarship and research is that it should reflect the researcher's identity, values, and experiences. As it is associated with Indigenous peoples, identity is closely related to the idea of resistance. With a similar definition to a renaissance, Indigenous resurgence theory is rooted in the act of resistance and celebrating the revitalization of identity through existence.[56] At their basest level, resurgence and Indigenization is a method of healing.[57] Indigenous resurgence is often associated with promoting Indigenous scholarship and research at all levels to surpass merely acceptance in academia and becoming an equitable, more substantial participant in institutional learning. It is a focus in Indigenous urbanism as urban environments are where most Indigenous populations reside yet have fewer physical ties to Indigenous culture.[58]

Leanne Betasamosake Simpson is an established theorist of Indigenous Resurgence and explains it as a "flourishing of the Indigenous inside"; communities reinvesting and regenerating Indigenous knowledge, spiritual traditions, languages, and self-government will lead to nation-culture-based resurgences and diversity.[59] It is a radical overtaking of Western thought by de-marginalizing Indigenous theory and, therefore, Indigenous worldviews.[60] Resurgence means eventually reaching a point in time where Indigenous peoples can move beyond survival and begin to flourish mentally, spiritually and culturally.[61]

Though there are differences among Indigenous communities around the world, survival and the effort to continue to practice traditions culturally, politically and physically is what is shared by all Peoples.[62] Indigenous Resurgence is a progressive mindset that can lead to acknowledging the shortcomings of Western theory to implement new infrastructure and traditions to better support Indigenous academia.[63] Simpson theorizes that Western theory, though helpful in acting as a standard body of thought among researchers, fails to acknowledge the fault of colonialism in the destruction of Indigenous ways of thought.[64] Indigenous Knowledge systems seek to dismantle colonialism and its monopoly on academia

56 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence,* 15.
57 Ansloos, "To Speak in Our Own Ways About the World, Without Shame": Reflections on Indigenous Resurgence in Anti-Oppressive Research", 14.
58 Sarem Nejad and Ryan Walker. "Contemporary Urban Indigenous Placemaking in Canada". In *The Handbook of Contemporary Indigenous Architecture*, ed. Grant et. al., Singapore: Springer, 2018, 223.
59 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 17.
60 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 15.
61 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 17.
62 Alfred and Corntassel, "Being Indigenous: Resurgences against Contemporary Colonialism", 597.
63 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 15.
64 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 31.

while creating pathways to equality for all academic participants.[65] This pattern of thought seeks the inclusion of various traditional implementations into the Indigenous academic identity that the majority exist outside the norm of current educational principles, such as:

- Language revitalization,
- Ceremonial and spiritual pursuits,
- Reinvesting in Indigenous political and intellectual traditions,
- Artistic and performance-based traditions
- Inclusion of Elders, land-based education, and Indigenous vision and intent.[66]

These principles are community-enabled supports and activities. Community is to be shaped by example rather than force; education shaped by example results in a community enriched by reason and knowledge.[67] Taiaiake Alfred and Jeff Corntassel also offer five mantras of a resurgent Indigenous movement that mirror Simpson's sentiments, of which four are relevant to this discourse:

The land is life. Reclamation of Indigenous heritage is inherently tied to terrain and geography to ancestral contextualize teachings and values. The land gives strength independent of colonial powers and connects the past to future efforts in authenticity, autonomy and Indigenous existence.[68]

Language is Power. Recovering ways of knowing and relating from outside of the colonial ideational framework comes from the regeneration of Indigenous languages.[69]

Freedom is the Other Side of Fear. Overcoming colonial fears and norms must come from spiritually grounded action and contention.[70]

Change Happens One Warrior at a Time. Reconstituting mentoring and learning-teaching relationships that foster real and human development and community solidarity is the best movement toward decolonization. The change will emanate from directly guided teaching in small, personal groups and one-on-one mentoring towards a new path.[71]

These concepts exist in university settings but are weakened due to the fragmented nature of the typical campus. Programming a space that encapsulates these activities and values a whole entity rather than implemented where the academy sees appropriate can

65 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 32.
66 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 17.
67 Douglas Cardinal, *of the spirit* (Edmonton: NeWest Press, 1977), 35.
68 Alfred and Corntassel, "Being Indigenous: Resurgences against Contemporary Colonialism", 613.
69 Ibid.
70 Ibid.
71 Ibid.

further connect programs and fundamentally shape interior space to back up Indigenous Resurgence theory. The land, ceremony, language, overcoming colonial fears via resurgence and integrating Elders and community mentoring must be placed into the vernacular of post-secondary education for Indigenous placemaking in educational environments.

2.3.1.1 Storytelling

The act and process of storytelling and performance is an essential aspect of Indigenous Resurgence in academia that contests the typical process of from which knowledge comes. Oral tradition is decolonizing in nature since it is a process of remembering, visioning, and creating a reality in which culture is respected and relational. It becomes a lens that aids in envisioning a way out of cognitive imperialism (a leftover concept of neo-assimilation that promotes the idea that Indigenous Peoples do not belong in academic settings due to their different ways of knowing[72]). This is because storytelling is inherently specific to each individual, community, and People.[73]

Storytelling is both a strategy and a process. It emphasizes how things are done and returns the power and energy of the storyteller for rebuilding personal values and cultural ways of life, an act of resurgence.[74] Storytelling as a research process also reinforces holistic principles as it brings together individuals to create relationships based on knowledge and experience in ways that decolonize space and practice. Oral traditions and performance-based contributions to knowledge have a powerful sense of context and interactivity that contest intellectual colonialism, making them significantly different from reading or viewing.[75]

Storytelling allows us to apply our own lenses and experiences to our work or from those that catalogue and protect traditional knowledge.[76] Visioning new realities and passing on knowledge through storytelling can be accomplished through visual art, performance, music, film and video. Nevertheless, the message and story found within those media can be different from that observed in its original context.[77] For this reason, future institutional learning and the spaces that accommodate it must embrace a variety of means of knowledge collection and circulation to accurately and holistically allow Knowledge holders and researchers to continue the tradition of performance-based teachings and interpretation.

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72 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 32.
73 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 33.
74 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence,* 32.
75 Simpson, *Dancing On Our Turtle's Back: Stories of Nishnaabeg Re-Creation, Resurgence and a New Emergence*, 34.
76 Kimberley Wilde, "Storytelling as a Methodology", in *Native Voices in Research*, ed. Jill Oakes, Rick Riewe, Kimberley Wilde, Alison Edmunds and Alison Dubois (Winnipeg: Aboriginal Issues Press, 2003), 192.
77 Wilde, "Storytelling as a Methodology", 191.

Breaking down pre-existing conceptions of what an academic space entails, essentially healing these perspectives, can be strategized through resurgence. Cognitive imperialism can be opposed by building space that includes and endorses thinking, inside and outside of literature, on topics once thought inaccessible to Indigenous students. This cannot be accomplished only from an academic perspective; scholarship and research incorporating community-based knowledge in all its forms will holistically improve both contributors.

Identity and research are reflexive. Using storytelling as a research methodology and providing space that backs this up makes a bridge between academic and oral traditions.[78] Scholarship must always reflect the researcher to be congruent with Indigenous principles, concluding that the spaces in which knowledge is created, given, analyzed, and improved should also reflect the researcher. These spaces must be relational and collaborate with, rather than impede on, each other.

Table 2: Southern Doorway Theories

Theory	Theorist	Concept	Application
Indigenous Resurgence	Leanne Simpson, Taiaiake Alfred and Jeff Corntassel, Jeffrey Ansloos	• Indigenous identity can be rejuvenated through the practice and revival of traditional rituals, Knowledges and languages and the discovery of their interpretation in contemporary context.	• Allow space for practicing ceremony, connecting with Elders, storytelling • Research space as a reflection of Indigenous identity and empowerment • Visual cultural connection

78 Wilde, "Storytelling as a Methodology", 191.

2.4 Western Doorway: The Mind

2.4.1 Two-Eyed Seeing

Western-Indigenous dynamics are complicated and cyclical, especially in institutional environments. As seen in previous sections, Indigenous representation has been lacking in university settings, leading to poor attainment and unwillingness in these settings to adapt to Indigenous Knowledge practices. University education is required for many professional qualifications; therefore, the constraints of post-secondary education must be adhered to by anyone seeking to attain a university degree. This supposed itinerary toward success has resulted in alienation for Indigenous students, as the side effects of attending a colonial institution include lost languages, values, and practices to receive university qualifications and engage in curricula that promote Western agendas.[79] Indigenous Resurgence and holism theory seeks to find the balance between these two worlds since both are required to advance academia for Indigenous and non-Indigenous scholars, which is the thesis of Two-Eyed Seeing Theory.

Two-Eyed Seeing Theory is attributed to Mi'kmaw elders Albert and Murdena Marshall. It aims to weave Indigenous ways of knowing and mainstream knowledge to benefit post-secondary education.[80] Two-Eyed Seeing brings Indigenous Traditional Knowledge to the same level of importance as conventionally accepted knowledge in research and classroom-based learning.[81] It acknowledges the multitude of worldviews that can be applied in these settings, promoting diversity in learning environments.[82] Two-Eyed Seeing also acknowledges the need for Traditional Knowledge to be influenced by Knowledge Holders, elders, and collective consciousness.[83] The theory is primarily applied to curriculum development; however, analyzing it for its application in physical space can reveal points of interest in its consideration in interior design.

Two-Eyed Seeing is an active practice. Knowledge Holders are central to inclusion. Elders are a crucial source of Traditional Knowledge and hold transdisciplinary Knowledge yet can be very far removed from influence in university environments, which affects the

79 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 134.
80 Cheryl Bartlett, Murdena Marshall and Albert Marshall, "Two-Eyed Seeing and other lessons learned within a co-learning journey of bringing together indigenous and mainstream knowledges and ways of knowing", Canadian journal of science, mathematics and technology education 9, no. 3 (2009): 332.
81 Bartlett, Marshall and Marshall, "Two-Eyed Seeing and other lessons learned within a co-learning journey of bringing together indigenous and mainstream knowledges and ways of knowing", 336.
82 Ibid.
83 Ibid.

authenticity of Knowledge and, in turn, creates imbalances in how research is conducted.[84] However, the overarching goal of Indigenous scholarship is not to forsake Western academia altogether; walking between both worlds recognizes the strategies and benefits that can be afforded to all students and researchers to find new perspectives and worldviews applicable to multiple disciplines. Two-Eyed Seeing helps to identify those strategies while identifying the imbalances and inequalities in academia.

2.4.2 The Indigenous Research Agenda

An observation regarding Indigenous research is the disparity between what is colloquially considered "research" and how Indigenous researchers view their processes and activities. Since there is a perceived connection between research and those who are advanced or have unquestionable expertise in a subject, hesitation in claiming an Indigenous-based study or research project as research is frequent. Indigenous Knowledge in research is stigmatized and often requires justification for its views outside the dominant system.[85] This concept of superior knowledge can create insecurity for Indigenous peoples towards their knowledge and increases the divergence between Western and Indigenous knowledge. One key aspect that differentiates Indigenous research from Western science is that while both focus on transformative, beneficial action, Indigenous research is motivated by politics and resistance rather than remaining objectively neutral, making it the target of delegitimization.[86]

A problem inherent in the consideration of research and higher education in Indigenous communities lies in the unethical perception that Indigenous people are subjects rather than researchers.[87] It has been the precedent that Indigenous research is simply research on Indigenous issues carried out by white researchers on behalf of Indigenous people, which removes power from the communities or nations in question. These ideas are perpetuated without a call for change if Indigenous research is not stressed. Therefore, researchers and professionals making decisions for Indigenous communities rather than with them have become a commonplace problem. Notions of difference and prevalence among people over others create deep-seated issues and are rarely questioned.

Changing this narrative is fundamental to the continuation and progression of Indigenous research. To accomplish this, Linda Tuhiwai Smith proposes the Indigenous research

84 Bartlett, Marshall and Marshall, "Two-Eyed Seeing and other lessons learned within a co-learning journey of bringing together indigenous and mainstream knowledges and ways of knowing", 337.
85 Shawn Wilson, *Research Is Ceremony: Indigenous Research Methods*, Winnipeg: Fernwood Publishing, 2008, 55.
86 Smith, Decolonizing Methodologies: Research and Indigenous Peoples, 117.
87 Ibid.

agenda, which is made of a programme and set of approaches situated within decolonization politics and focused on the goal of self-determination of Indigenous peoples.[88] An Indigenous research agenda takes a similar approach to Indigenous Holism in both appearance and process with concentric rings acknowledging characteristic interdependency, yet is specific to the natural goals of Indigenous research and broad in scope, which aims to find some similarities between a typical research programme.[89]

Each direction is associated with a common goal in Indigenous research that correlates with Indigenous Holism. The Eastern Doorway remains political and spiritual with a focus on decolonization. The South focuses on transformation, specifically the relationships between scientific, political and social factors. The West, the Mental Doorway, equates to mobilization and connections at the local, nation-to-nation, regional and global levels, while the Northern Doorway signifies healing physically, spiritually and socially.[90] This framework is a tool that can be utilized in both Indigenous and Western research that still emphasizes Indigenous research implications and their interdependence.[91]

2.4.3 Twenty-Five Indigenous Projects

25 Indigenous projects identified by Smith pursued by Indigenous communities are intersecting within the Indigenous research agenda. They are aspects of methodologies envisioned across various practices and professions that bring specificity to Indigenous research and reinforce holistic ideas in research. Though these projects, or research methods, are not specifically Indigenous, they are characteristic and give insight to the ethical and procedural parameters of Indigenous research.[92] The Projects are critical to addressing as they are policies that may be seen as unorthodox to research in a conventional sense and, therefore, may not be represented in the typical university environment. Each offers the opportunity for relating to other scopes or areas of research, while some are more objectively specific to the nature of Indigenous research.

The 25 Projects all interrelate yet can be grouped to identify different concepts, strategies, and necessities to connect them to theories and practices earlier analyzed in the literature review. The 25 Projects can be theorized as a framework for interior designers; activities and needs can be derived from each project for acclimating to educational settings to adapt functionally for an Indigenous scholarship. A relevant selection of these Projects will be conclusive for this literature review, synthesize concepts and introduce programmatic

88 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 116.
89 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples,* 117.
90 Ibid.
91 Description of "Indigenous Research Agenda" framework in Smith, Linda Tuhiwai, *Indigenous Research Agenda in Decolonizing Methodologies: Research and Indigenous Peoples* (New York: Zed Books, 2008). 117. Figure 6.1.) Copyright could not be obtained for image use.
92 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 143.

elements for the final design.

2.4.3.1 Resurgence: Indigenizing, Revitalizing, Remembering, and Celebrating Survival

Indigenizing. Indigenizing has two strategies: one, defining a new sense of Indigeneity that reflects traditional ideals and contemporary characteristics of being Indigenous. It is an act to remove the connotations surrounding Indigenous cultures as being primitive or otherwise out of touch with modern society and reconnecting with contemporary spiritual practices and ceremonies without being labelled superstition.[93] The second is to acclimate non-Indigenous persons to re-centring language, landscapes, themes and stories and learning the lost connections between them and Indigenous peoples.[94] This strategy is where the trend of inserting Indigenous visual content and aesthetics in design for its face value originated; introduction without teaching results in a forced idea of Indigenous design. Therefore, it is necessary to design space that is Indigenous at the superficial level and at the formal and programmatic level, eventually at the subconscious level through its inherent connection to Indigenous method and process. Indigenization is employed to privilege the Indigenous voice.[95]

Revitalizing. Revitalization is critical in all Indigenous scholarship, especially in language study and practice. Language programs are crucial to revitalizing connections to Indigenous traditions and have inspired educational changes, broadcasting, publishing and community-based programs.[96] Revitalization is best when implemented at all levels of education- early learning is especially effective for language learning, but its use in post-secondary study is fundamentally vital for skill-building and continuation.

Remembering. This Project refers to acknowledging the painful pasts of Indigenous peoples and their responses to this pain.[97] Systemic oppression in the form of residential schools, government boundaries and cultural destruction is majorly omitted from collective memory in a conscious attempt to heal.[98] Remembering in Indigenous research focuses on projects and fuels intentions with memories of dehumanization to transform and heal communities still affected by this history and its lasting effects.

Celebrating survival. In opposition to Remembering, Celebrating Survival is an

93 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples,* 146.
94 Ibid.
95 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 147.
96 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 147.
97 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 146.
98 Ibid.

encouraging project and has similar concepts to those addressed regarding Indigenous Resurgence and Biskaabiiyang. It represents the ideals of Indigenous researchers not having to focus on the destruction of Indigenous cultures and identities but on the positive aspects of cultural reinstatement, a celebration of Indigeneity and acknowledging the retention of spiritual values and authenticity.[99] Interior space can be an act of celebration in how decisions are made, the aesthetic and atmosphere of the space, and focusing on diversity, connectedness and holism as a method of resistance. The effort toward the survival of Indigenous Knowledge is to be acknowledged with physical space to protect, heal and honour it.

2.4.3.2 Research Agenda: Claiming, Testimonies, Intervening. Writing, Reading, Connecting, Storytelling, Networking, and Creating.

Claiming. Indigenous research practices continue to reflect principles of Indigenous Resurgence as they strive to create a place for Indigenous communities at the academic table. Claiming and reclaiming have become a dynamic process for writing and establishing Indigenous histories as differentiating factors between nations and regions. These histories become legitimate teaching resources for justice and future Indigenous-non-Indigenous relations.[100] Claiming is a physical act as it is philosophical; space for claiming as a research methodology must be reinforced by an environment that is "claimed" by Indigenous scholars.

Testimonies. Testimonies represent a performance-based methodology in presenting oral evidence to an audience in a formal and truthful pattern.[101] This formality allows for structure and order while addressing emotional and personal connections to knowledge. Questioning and listening are activities associated with testimonies that require a specific atmosphere and environment to support the testimony. It is similar to survey as a research methodology but lends itself to building trust and context to prescribed issues.

Intervening. Intervening as a research action is a process of being proactive and becoming involved as a worker for change.[102] Intervention is based on designing structural and cultural changes.[103] Intervening is directed at changing institutions that deal with Indigenous issues more than Indigenous peoples themselves. Intervention holds attractive value to interior design. It causes active groups to reassess their stances on policy, training, programme development and ethics.[104] Mâtinawewin concerns many stakeholders and users and aims to develop new cooperation between them. Intervention as physical space opens

99 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 145.
100 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 143.
101 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 144.
102 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 147.
103 Ibid.
104 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 147.

dialogue and defends the rights of Indigenous peoples in its systems.

Writing. Writing connects Indigenous and Western research methodologies in its universal acceptance in its dissemination. As Western literature originated for Western consumption, the same has been established for Indigenous audiences.[105] Academic and vernacular sources have grown to include poetry, songs, fiction and non-fiction and screenplays in accordance with Indigenous values and oral and visual traditions.[106] These methods effectively draw both Indigenous and non-Indigenous audiences and scholars, creating opportunities for dialogues between them.

Reading. Reading has a complicated relationship with Indigenous scholarship. Reading is necessary for today's academy to establish and support claims for the sake of research and comprehend what informs both sides of the Indigenous-Western dynamic. It is reinforced by the teachings of Two-Eyed Seeing and avoids new types of colonialism as well as a return to assimilative tactics. Rereading imperial history for post-colonial and cultural studies provides a different, critical approach to history than was acceptable. [107] This implies that Indigenous academic space cannot only consist of Indigenous cultural strategies and rituals but integrate Western narratives for their purpose in criticism and collective memory. Interior physical space must accommodate these narratives for educational purposes rather than for influence over space.

Connecting. Connection was emphasized by Indigenous Holistic Theory and Ethical Relationality and is fundamental to Indigenous research. Connecting has many definitions. Meaningful connections in research include Indigenous people and their land and culture, rituals and today's practices, identity and place, and Indigenous practices with allied research efforts.[108] In the case of this practicum, a connection is essential to the synthesis of learning between all users. Advancing the Indigenous research agenda requires the decompartmentalization of standard university settings; inclusion and acceptance of community members, undergraduates, graduate and doctoral scholars and Elders into research processes can validate changes to post-secondary systems.

Storytelling. Oral histories, perspectives and storytelling are powerful tools in Indigenous research.[109] Each story solidifies each Indigenous person's collective place.[110] Storytelling is a contentious topic in research as belief exists in its subjectivity, leading to its disrepute in research methodologies and axiologies. As a research tool, storytelling returns the power to the teller from the researcher. Storytelling is to be analyzed to invoke a shared

105 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 147.
106 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 150.
107 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples,* 149.
108 Ibid.
109 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples,* 144.
110 Ibid.

and personal understanding of culture, quality, motifs and traditions.[111] Storytelling as an oral tradition is a critical cultural practice that is absent in current research practices and must be reinstated as a method to represent Indigenous Knowledge in scholarship truly.

Networking. Networking has become a favourable medium for stimulating information flows, educating people quickly about issues and creating international talking circles.[112] Indigenous research involves the personality and purpose of those involved more than Western research. Research, and by extension all post-secondary education, is benefitted by integrating multiple views, experiences and communities. Interior space can reinforce these activities and connections rather than individualize processes. The interior of this Mâtinawewin focuses on this effort in networking and aiding users to connect through collaboration at the academic and social levels.

Creating. The ability to create and the spirit of creating is at the basis of Indigenous scholarship and sets it apart from typical research methods. Imaginative solutions allow Indigenous communities and researchers to envision new realities and discoveries collectively and connect with specific connections to heritage and tradition.[113] Creativity presents opportunities for the Indigenous community of Winnipeg to better identify with university learning. However, there is an expectation for outcomes and deliverables; the university is an environment that is becoming more adept at fostering creative practices for problem-solving and innovation. This Project will be evident in the final design as building academic space to reinforce creativity and community in research can advance Indigenous research goals.

111 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 145.
112 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 156.
113 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 159.

Table 3: Western Doorway Theories

Theory	Theorist	Concept	Application
Two-Eyed Seeing	Albert and Murdena Marshall	• Walking between Indigenous and Western worlds allows for multiple worldviews, to contextualize Indigenous values in contemporary times, and bringing Elder Knowledge into research environments.	• Environment which embodies innovation and holistic values • Spaces for public dissemination for increased awareness and conversation • Involvement of Elders in programming
Indigenous Research Agenda	Linda Tuhiwai Smith	• Indigenous research and scholarship are fundamentally different from Western research for its value of emotion, personal experience and healing.	• Mixed-typology space with atypical research amenities • Limiting institutional atmosphere, focus on comfort, spirit and accessibility
25 Indigenous Projects	Linda Tuhiwai Smith	• A set of values and activities carried out by Indigenous researchers as a resurgent and holistic practice.	• Program research methods as an activity as well as an identity • Implementing Indigenous methods as personal process as well as communal process

2.5 Northern Doorway: The Body

2.5.1 Urban Indigenous Placemaking

Indigenous architecture is about resisting the hegemonic norms of dominant Western placemaking culture. Instead, Indigenous architecture celebrates Indigenous culture by using processes through which Indigenous protocols, methods and values are prioritized.[114] A common myth affects urban Indigenous populations that implies living in a city environment means forgoing Indigenous culture, called urban assimilation.[115] Indigenous cultural revitalization at large began in the city. However, due to the lack of visible cultural markers and available Indigenous organizations, there is no such thing as a defined "Indigenous" neighbourhood or region.[116] Positive physical symbols of Indigeneity bring place attachment and presence to urban communities and are essential to the production of urban space since there, unfortunately are negative connotations that affect urban Indigenous populations.[117]

Historically, urban environments have disrupted Indigenous physical identity to limit Indigenous engagement in public space. In turn, this limited engagement has led to the need for spatial justice for all urban inhabitants and, as such, presents an objective for the widespread implementation of Indigenous architectural principles.[118] This concept is fundamental in educational settings to normalize community involvement in post-secondary learning and break down existing norms of the university system. Education should disregard ideas of elitism and visage and be based on togetherness rather than fragmentation.[119] Indigenous placemaking builds upon the theories of place propagated by Henri Lefebvre and Tim Cresswell by infusing them with Indigenous worldviews and experiences to develop physical meaning framed and defined by Indigenous cultures and identities.[120]

Indigenous definitions of place support the act of redefining boundaries between institutional and community learning. Indigenous conceptions of land ownership and power differ significantly from Eurocentric ideals, strengthening the argument for implementing

114 Nejad, Sarem and Ryan Walker. "Contemporary Urban Indigenous Placemaking in Canada", 230.
115 Wayne Warry, *Ending Denial: Understanding Aboriginal Issues*, 111.
116 Ibid.
117 Nejad and Walker "Contemporary Urban Indigenous Placemaking in Canada", 223.
118 Nejad and Walker "Contemporary Urban Indigenous Placemaking in Canada", 226.
119 Douglas Cardinal, *of the spirit* , 35.
120 Nejad and Walker "Contemporary Urban Indigenous Placemaking in Canada", 225.

different knowledge-sharing systems and structures.[121] University institutions are currently designed to have developed a standard of fragmentation in planning and programme; buildings and services are usually distant and compartmentalized.[122] Social integration and accessibility can attract diverse people and allow them to identify with a setting or location, which changes the place to become a focus of local identity.[123]

The idea of place as it relates to Indigenous culture has many implications. Sarem Nejad and Ryan Walker claim that place and belonging are generated by Indigenous representation in physical settings (the aesthetic of space), activities (the function of space), and meanings (the visible symbolism of space).[124] Indigenous placemaking is also influenced by values, desires, aspirations and worldviews.[125] Interiors are an ideal vessel for these principles as interior space is most closely connected to the human experience and is influenced by the needs and wants of the user.

Indigenous placemaking also asserts that injecting stories, rituals, knowledge and values into the built form can create distinction and positive symbolic capital for Indigenous communities.[126] The current understanding of Indigenous architecture is that it must be comprised of a perceived Indigenous symbolism and aesthetic, a purely visual and formal conception of Indigenous identity. This idea is problematic for re-establishing Indigenous cultural design in urban environments since it can lead to tokenism and further disinterest in its implementation. Indigenous architecture is not simply the vehicle for showcasing Indigenous artistic forms. It celebrates Indigenous cultures through Indigenous protocols, processes, and methods related to physical traits to contribute to making place in environments that would rather suppress Indigenous identity.[127]

Indigenous architecture is determined by Indigenous Knowledge of environment, geography, climate, and spirituality and exhibits elements privileging Indigenous culture.[128] Indigenous spaces embody traditions and values at more than the visible level. Creating new architecture that enhances the Indigenous experience by changing societal norms in programming and design will help achieve spatial justice for urban Indigenous peoples.[129]

The qualities of Indigenous placemaking were integral to the design of Mâtinawewin as they formed an expectation that identity should be evident in Indigenous designs in all aspects, visual or otherwise. There is currently an emphasis on implementing Indigenous

121 Nejad and Walker "Contemporary Urban Indigenous Placemaking in Canada", 224.
122 Douglas Cardinal, *of the spirit*, 35.
123 Ali Madanipour, "Roles and Challenges of Urban Design", Journal of Urban Design 11, no. 2 (2006): 187, https://doi.org/10.1080/13574800600644035.
124 Nejad and Walker "Contemporary Urban Indigenous Placemaking in Canada", 225.
125 Ibid.
126 Nejad and Walker "Contemporary Urban Indigenous Placemaking in Canada", 230.
127 Nejad and Walker "Contemporary Urban Indigenous Placemaking in Canada", 230.
128 Stewart, Patrick. "Indigenous architecture through indigenous knowledge : dim sagalts'apkw nisim̓[together we will build a village]." PhD diss. (University of British Columbia, 2015), 35.
129 Nejad and Walker "Contemporary Urban Indigenous Placemaking in Canada", 230.

traditions and knowledge in architecture and urban design, which can be seen in most of the literature pertaining to Indigenous design; there is little regard for the importance of interiors in this process. Building a body of knowledge for Indigenous interior design is significant since each discipline offers a different scope of knowledge and influence, which can contribute toward different innovations.

2.5.2 Ethical Space Theory

Ethical Space as an idea is derived from the work of Roger Poole in his book Towards Deep Subjectivity, where he theorized it as the space that is created by connections and confrontation between two differing intentions.[130] This space can develop politically, economically, physically and philosophically. Indigenous Ethicist and researcher Willie Ermine furthers these ideas to include ethical spaces between cultural ideologies, namely between Indigenous and Western systems that focus on their differences and diversities.[131]

As a theory, Ethical Space is a way of labelling existing dynamics in Indigenous-non-Indigenous relations, perpetuating power imbalances and unspoken stereotypes; it offers no solutions for reconnecting these communities and simply establishes that their disparity inherently exists. Naming this theory as a physical space allows each human community to establish uniqueness and contrast with each other's traditions and views.[132] Many of the problems Indigenous communities face result from cultural distance and intolerance- as a practice, these can be addressed by making this ethical space a productive bridge between two opposing intentions.

This practicum is a physical representation of the possibilities of improving Indigenous-Western ethical space. Therefore it is beneficial to examine the latent opportunities associated with embodying positive aspects of Ethical Space. Ethical space represents a neutral zone between entities and cultures. One can step outside of allegiances and the status quo and enter a meeting place that accommodates multiple ways of thought.[133] This practicum project proposes a new type of Indigenous academic space that brings together worldviews and intentions from many backgrounds.

Indigenous inclusion is rising in Western academic environments, but Indigenous people remain at a disadvantage and are prone to mental, spiritual, and physical discomfort. Integrating the idea of ethical space would invite collaboration and cooperation between

130 Roger Poole, *Towards Deep Subjectivity,* (London: Allen Lane The Penguin Press, 1972), 5.
131 Willie Ermine, "The Ethical Space of Engagement", Indigenous Law Journal 6, Issue 1 (2007): 194.
132 Ermine, "The Ethical Space of Engagement", 194.
133 Ermine, "The Ethical Space of Engagement", 202.

Indigenous peoples and Western institutions. Indigenous Ethical Space encourages the inclusion and action of Indigenous Knowledge holders and elders in tandem with allies to articulate assets and define Indigenous issues and rights at the educational level. These notions are also evident in Resurgence theory. The purpose of ethical space as a practice is to shift existing perspectives on Indigenous cultures toward reconciliation and engagement.[134] The notion of an agreement to interact must always be preceded by affirming human diversity created by philosophical and cultural differences.[135] The ethical space is a stage for cross-cultural conversation in the pursuit of ethically engaging diversity at the institutional, traditional and community levels. Ethical Space as a partnership model can foster a cooperative spirit for Indigenous peoples and Western institutions to create new currents of thought that flow in different directions and overrun old ways of thinking.[136]

Table 4: Northern Doorway Theories

Theory	Theorist	Concept	Application
Urban Indigenous Placemaking	Nejad and Walker	Human belonging in built environments is reliant on inherent and physical representation, and celebration/ value of identity.	-Expectation for Indigenous architecture to reflect Indigenous identity characteristically -Bespoke concepts for specific contexts
Ethical Space	Willie Ermine	Space that brings together differing intentions for the sake of knowledge can improve relationships and further society.	-Space to connect Indigenous and non-Indigenous while keeping focus on cultural importance of space -Social space, gathering space for story telling and teachings, communal workspace for collaboration

134 Ermine, "The Ethical Space of Engagement", 202.
135 Ibid.
136 Ermine, "The Ethical Space of Engagement", 203.

2.6 Conclusions

First Nations architect Douglas Cardinal wrote, "to be part of the dominant society's educational system is to participate in the destruction of our individuality, pride, and worth as human beings." [137] Cardinal's statement is just one of many longstanding criticisms of Eurocentric education and demands transformative action toward systems born of Indigenous Knowledge and process. It describes Indigenous Peoples' need to fight for space explicitly made for them rather than be forced to fit into an unsuitable mould. This practicum aims to encourage change for university institutions in urban Indigenous communities to destigmatize community involvement in post-secondary settings by normalizing Indigenous methodologies and cultural expression implementation. Two pathways by which the Indigenous Research Agenda is being advanced are community-based initiatives and space reclaimed within the academy that centers on Indigenous issues and research.[138]

The idea of Indigenous academic spaces is new and has shown promise for the safety and advancement of Indigenous researchers and their work. After analyzing potential means of creating new spaces for Indigenous students, this practicum project differs from relating projects by removing itself from the larger academic environment, leading to inclusion in an area of the city which would change how the university influences a new area. Imagining university involvement in urban areas specific to Indigenous researchers also looks at how impactful access to an academic gathering place could be for branching between academia and the outside community.

This literature review emphasizes the relevance of physical, psychological and cultural Indigenous concepts to Indigenous belonging in the built environment and improves one's grasp of how closely tied they are in space and society. Research was once a practice that segregated, marginalized, and devalued Indigenous peoples; mending those relationships and Indigenizing research practices collectively have been a slow but necessary process. Delineating academic practices and spaces in urban settings that reframe what an institution looks, feels, and operates like can foster new opinions and connections within those environments in a way that, rather than returning to harmful practices, helps to acknowledge past wrongdoings and encourages self-determined innovation and change. Developing a locale that bridges Indigenous Knowledge bolstered by the community and Western institutional knowledge

137 Douglas Cardinal, *of the spirit*, 45.
138 Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 125.

must embrace a new institution model that values knowledge, identity and experience outside of the normalized frame of post-secondary education.

Figure 1: Indigenous Interior Design Holistic Framework is a guide for reconciling Indigenous worldviews in interior environments and fostering belonging in institutional spaces. This image represents analysis concerning theories, suggested activities, stories, and teachings explored in the literature review relevant to creating respectful, thoughtfully designed, and balanced places. Interior design at its fundamental levels is concerned with user experience and environmental comfort, steps for which this framework attempts to outline. A holistic framework is helpful for the discipline's efforts to avoid superficiality without meaning, balance user needs, and include unexpected or atypical concepts.

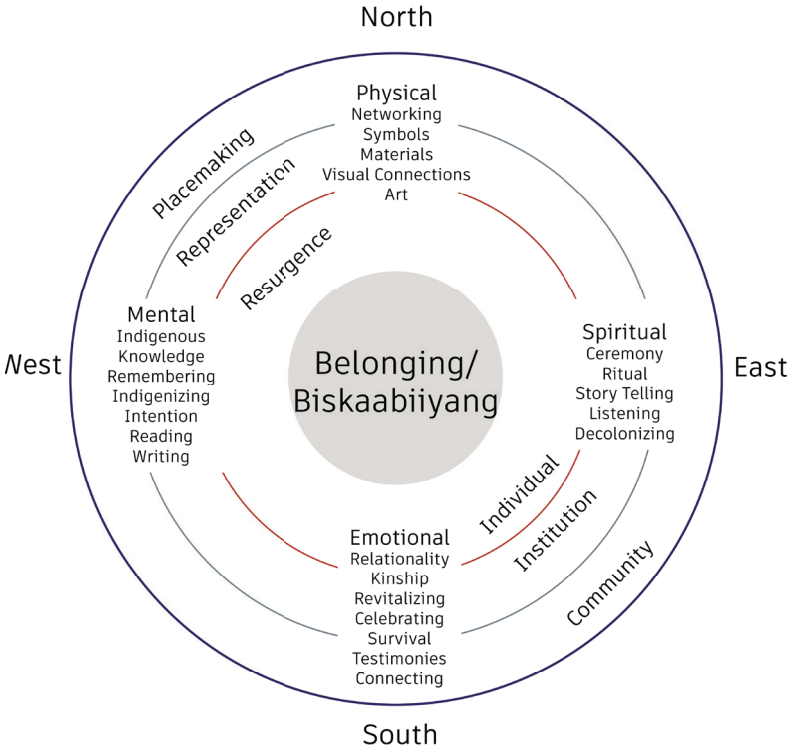


Figure 1: Indigenous Interior Design Holistic Framework

The framework also positions design and programming requirements with one another, intending to encourage belonging at the center. Non-hierarchy is a vital part of this project; while spaces may be larger or smaller, focal or withdrawn, seeing the whole as an interrelated set of ideas and objectives created a holistically integrated experience to support each anticipated user and their productivity in the facility. Concentric rings represent aspects of the framework and, by extension, the project.

Within the whole are interwoven strategies that, to foster belonging, are grouped with all ideas presented in the framework. One of these is theoretical architectural methods (between the North and West doorways to suggest Physical and Mental strategies) towards belonging. At the grandest level is placemaking, a broad strategy for establishing a demographic and cultural presence. The next level is representation, creating visible connections to culture and identity in space. The final strategy is a resurgence, reviving one's internal identity that

permeates the action and environment around them to culminate in layers of belonging.

On the other half of the framework, between the Eastern and Southern doorways, are relational connections that nurture a thriving sense of belonging. The project aims to connect at the community, institutional and individual levels to weave together a network that works together to further Indigenous scholarship and remove stigmatic elitism from the vernacular of post-secondary education. Mâtinawewin creates a new sense of identity for Indigenous post-secondary students and their respective communities.

Chapter 3.0
Precedent Analysis

3.1 Introduction

Along with the literature review, four precedents were analyzed to inform the design of the proposed research center. Each one represents a design choice for the final proposal of the practicum. Precedents were studied for their value in influencing the programme, cultural value, and atmosphere. Precedents were also helpful for looking for potential programmatic and aesthetic gaps to fill. Mâtinawewin is a collection of spaces that would support the other, some of which are not often seen together in an academic or community-focused environment.

3.2 Jewish Documentation and Research Center of Mexico

Ezra Cherem Behar and Alan Cherem Hamui
Mexico City, Mexico
20 537 ft2
2018

This adaptive reuse project was derived from a need for cultural preservation in Mexico City's Jewish community.[139] A new building was constructed and attached to the Rodfe Sedek synagogue to create a space which houses a museum and an archival library which aims to strengthen the relationship between the city and the heritage of its Jewish residents.[140] Connection to old and new are a highlighted idea in this project as it reinforces the purpose of the project. The building also acts as a learning center with the capacity for presentations, lectures, and exhibitions.

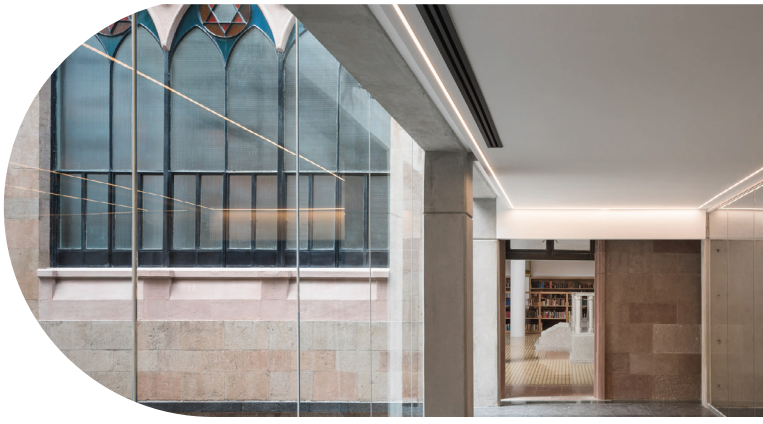


Figure 3: Jewish Documentation and Research Center of Mexico

138 Danae Santibanez, "Jewish Documentation and Research Center of Mexico (CDIJUM) / Ezra Cherem Behar & Alan Cherem Hamui." Accessed April 05, 2019. https://www.archdaily.com/909348/jewish-documentation-and-research-center-of-mexico-cdijum-ezra-cherem-behar-and-alan-cherem-hamui.

140 Santibanez, "Jewish Documentation and Research Center of Mexico (CDIJUM) / Ezra Cherem Behar & Alan Cherem Hamui."

The Jewish Documentation and Research Center of Mexico was the precedent that was found to be closest to the anticipated programme outcome for this practicum. It's a revolutionary project for the future of
document and culture preservation for a demographically underrepresented religion in that region. It employs familiar holistic aspects in the design of the space and is within an environment that holds significant meaning for its intended users. The programme has a solid connection to both culture and religion and academic research, and though it is not an explicitly Indigenous project, the Research Center is reminiscent of one as it strives to support its users at the social and institutional levels to maintain networking and productivity with its variety of work and social spaces. The connection to Judaism via the attachment to the Rodfe Sedek synagogue is also innovative for an academic environment; it welcomes subjectivity through accepting culture and religion as a partner to research, which is rarely seen in such settings and is ideal for a research center with an Indigenous programme. Ceremony is a vital part of Knowledge that is missing in typical university space, and this project would benefit from structures that protect these actions.

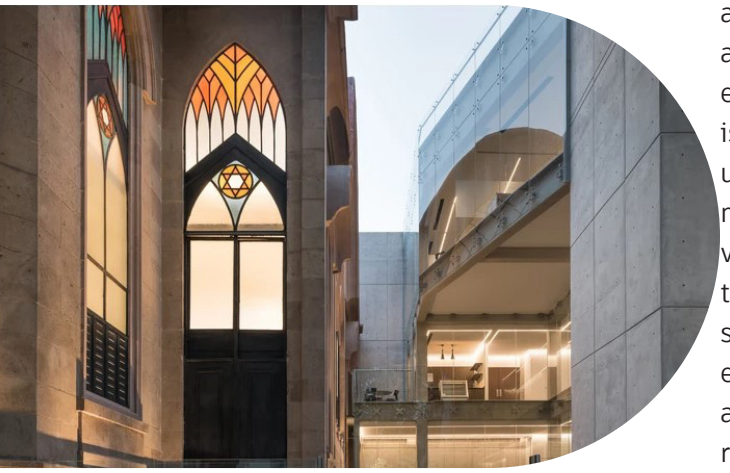


Figure 4: Jewish Documentation and Research Center of Mexico

This practicum project aimed to differ from the Jewish Documentation and Research Center in a few ways; though it does aim to pay tribute to culture with the connection ofthe synagogue, there is a disconnect in aesthetics and atmosphere between the interior spaces that accommodate cultural practice and research. There is an expectedly institutional atmosphere in the research spaces of this Research Center. This practicum seeks to change what is expected of academic space by reinforcing Indigenous culture and ceremony in physical space, so this needs to be reflected in all areas regardless of function. Having a strong sense of place by utilizing consistent atmospheric criteria will help to establish the function of the proposed research center.

3.3 Owsley Brown II History Center

de Leon and Primmer Architecture Workshop
Louisville, Kentucky
2017
25 000 ft2

The Owsley Brown II History Center is a cultural center and archive for physical and digital documents and is operated by the Filson Historical Society in Louisville, Kentucky.[141] It collects, curates, and archives the history and narrative of its region and is home to a range of programs and cultural resources to support the historical society and the city of Louisville. It offers multi-use event spaces, archival storage, a digitization lab, and a public plaza connecting each structure.[142] The space was designed with its surrounding context and in-depth research of the area's history and neighbourhood in mind.[143]

Material studies and selections were essential to this project to convey a correct sense of history while achieving contemporary aesthetics that supported the programme and connection to the site. This idea is vital to the practicum: the interior reflects its site in the urban context of Winnipeg and instills a physical sense of Indigeneity that is perceptible to users. There is a fascinating natural connection gained by material choice that succeeds in lessening the sense of institution in the project's interior design, creating a sense of place in its interiors.

Figure 5: Owsley Brown II History Center

The Owsley Brown II History Center focuses too intensely on preservation and less than is desired for Mâtinawewin on dissemination. The archive is of a typical design that reinforces distance and inaccessibility. While maintaining security and openness, Mâtinawewin employs a more accessible type of archival system to promote connecting history to the present as an active place of research. Mâtinawewin seeks a visual relationship with its users as well as the research conducted there. A disconnect exists between spaces in the Owsley Brown II center that is not ideal for the proposed research center; Mâtinawewin develops knowledge through togetherness, performance and belonging. The Owsley Brown II Center is based on individual work and the value of objects and does not allow space conducive to collective knowledge. To truly advance the application of Indigenous Knowledge in Western institutions, space must

141 Gonzalez, Maria Francisca, "Owsley Brown II History Center / de Leon & Primmer Architecture Workshop". Accessed April 05 2019. https://www.archdaily.com/890378/owsley-brown-ii-history-center-de-leon-and-primmer-architecture-workshop.

142 Gonzalez, "Owsley Brown II History Center / de Leon & Primmer Architecture Workshop".

143 Ibid.

be allocated for performance and visually based sources of knowledge to enhance tactility and inspiration.

3.4 University of Sydney Indigenous College

BVN Architects
Sydney, Australia
TBD
Expected 2023

To better support Indigenous Australian students and increase Indigenous enrollment at the university, the University of Technology Sydney (UTS) has begun construction of an Indigenous Residential College that is expected to be completed in 2023. It is expected to be the largest of its kind and will be informed by Indigenous perspectives and cultures at all levels of design. The project will include residences for approximately 250 Indigenous and non-Indigenous students, communal living areas, a cultural center, and various public spaces that accommodate educational, cultural, community and industry events.[144] By providing a living place designed for the Indigenous student community, UTS is trying to remove barriers that exist for Indigenous students to attend university in a way that respects heritage and perceptions to help Indigenous peoples feel welcome in the campus environment.

Figure 6: UTS Indigenous College

This project identifies the need for dedicated Indigenous space in university settings with the capacity for various programmatic elements outside the norm. UTS saw a lapse in physical representation as cultural isolation for Indigenous students and recognized it as a potential factor in their absence.[145] Celebrating culture in academic settings at this scope is ideal for the proposed practicum project. Holistic design and theory are evident in this proposal as distinguishing factors for the users' success. This example of Indigenous

144 University of Technology Sydney, "Indigenous Residential College", accessed March 07, 2020. https://www.uts.edu.au/partners-and-community/initiatives/indigenous-residential-college/about-college.
145 University of Technology Sydney, "Indigenous Residential College".

architecture is inspired and informed by Indigenous cultural perspectives in its interior design, among other critical decisions to be made, which is a goal of the practicum.

In acknowledging Indigenous diversity, an Australian project like the proposed UTS Indigenous College will have principle differences from a similar project in North America. The UTS Indigenous College is a residential project at its core, which leads to questioning how it will connect to the educational sphere of its university environment. Though there are plans for the inclusion of space at the social level, there are few ideas for improving connections to applying Indigenous Knowledge to both the social, education and physical environment.

Indigenous Resurgence and the many Indigenous research methodologies that have been addressed in this practicum see togetherness, embodied knowledge and collective thinking as a prime opportunity for revitalizing Indigenous worldviews. Mâtinawewin would benefit from including places that embrace Indigenous research and knowledge sharing at a level higher than social gathering. Though this proposed practicum has no focus on residential design, there will still be an instilled sense of community that will add to the development and sharing of knowledge.

3.5 Migizii Agamik (Bald Eagle Lodge)

Prairie Architects Inc.
University of Manitoba Campus, Winnipeg Manitoba
16,000 sq ft
2008

Figure 7: Migizii Agamik Interior View

Migizii Agamik acts as a home away from home for Indigenous students, faculty and Access Programs at the University of Manitoba. It is a central gathering place in the Fort Garry campus that was built to signify a commitment to making Indigenous students welcome at the University through a space that reflects their needs and cultures.[146] Bald

146 Prairie Architects Inc. " Migizii Agamik (Bald Eagle Lodge)". Accessed August 11, 2021. https://www.prairiearchitects.ca/migizii-agamik.

Eagle Lodge houses a flexible area for studying and gathering, a computer lab, various offices for staff members, faculty, student groups, and academic help programs, and a healing room for ceremony, meetings, and classes.[147] It was the first space on campus to be designed specifically for smudging ceremonies. Migizii Agamik has been the Indigenous landmark for the University since it was completed in 2008 and is incredibly important to the Indigenous student population as a physical reminder of belonging and safety.

The design of Migizii Agamik relies heavily on Indigenous principles and knowledge. An integrated design process was employed, and expertise was consulted from Elders and Knowledge Keepers, artists, alumni, University administrators, and other Indigenous and non-Indigenous professionals.[148] A holistic Indigenous design approach inspired materiality, wayfinding and form.[149] The building also has attained the LEED® Gold standard as a respectful acknowledgement of the land, energy and natural resources.

Migizii Agamik represents the drive for Indigenous students to access a place that has historically been unwelcoming. Any of my Indigenous colleagues will say it is a cornerstone of their University experience where they feel at ease in an institutional environment. It also welcomes dialogue and invites non-Indigenous students and researchers to ask for knowledge in an accessible but consensual and respectful way as, excitingly, many of my fellow design students are doing. Migizii Agamik was the initial inspiration for Mâtinawewin.

When considering the topic of Indigenous engagement and belonging in academia, I looked at the positive influence of Migizii Agamik in the greater campus environment. I also looked at where it could be expanded to address the increasing Indigenous student population, the need to increase graduate student enrollment and involvement, and the urban Winnipeg community, which is not adequately connected to the University. This distance leads to opportunities missed. Migizii Agamik has become limited with increased popularity, so Mâtinawewin was planned with more flexible and convertible spaces while keeping the openness within the student centre.

Bald Eagle Lodge also is planned with lots of private space for faculty and employees, but this plan may be too private and traditional to allow collaboration and inspiration that a more open plan could provide. The plan feels very compartmentalized, separating many of the centre's functions. Mâtinawewin offers space for higher-level Indigenous researchers to work amongst each other in private but closely-connected environments.

147 University of Manitoba. "Migizii Agamik- Bald Eagle Lodge". Accessed August 11, 2021. https://umanitoba.ca/admin/indigenous_connect/5558.html.

148 Prairie Architects, "" Migizii Agamik (Bald Eagle Lodge)".

149 Prairie Architects, "" Migizii Agamik (Bald Eagle Lodge)".

Figure 8: Migizii Agamik Exterior View

Chapter 4.0
Building and Site Analysis

4.1 Introduction

The selected site explores the opportunities of integrating the practicum project into urban Winnipeg. Building and Site Analysis outlines the constraints and advantages of the site in terms of the selected building and its surrounding neighbourhoods. Literature analysis and precedent study led to selecting the desired site: 815 Main Street in Winnipeg, Manitoba.

4.2 Site Selection and Analysis

Finding opportunities for connection, enhancing identity and belonging and improving educational accessibility is essential for Winnipeg, Manitoba, as its urban fabric shifts and grows. Winnipeg has the largest Indigenous population out of all major cities in Canada.[150] In 2016, 12% of Winnipeg's population identified as First Nations, Métis or Inuit, making up 12% of its total population.[151] Though Winnipeg is occupied by a substantial amount of Indigenous-identifying people, Point Douglas and several North End neighbourhoods are home to a sizeable number of this population which is a large distance from the University of Manitoba. Mâtinawewin is positioned in the intersection of many Downtown and North Winnipeg neighbourhoods; making a dedicated campus in this neighbourhood that is directly in tune with the goals of Indigenous researchers and community members can make this accumulation of Knowledge accessible to a wider audience.

The most important consideration for the design regarding the urban site and location was to ensure this placement of a post-secondary facility is not seen as an assimilative opportunity. It is more comparable to a cultural and educational hub designed to benefit the urban Indigenous community and its current and future students. The Point Douglas neighbourhoods have been given much attention in recent years by urban planners, designers, landscape architects, and grassroots community groups to improve its urban fabric to represent its Indigenous communities better. The site is near many inner-city high schools and adult education centers which can benefit from a repository of Indigenous Knowledge. And though it is not necessarily associated with post-secondary learning, it is in a high-traffic part of the city that is home to a high volume of programs and physical space dedicated to the arts, learning and training centers, culture, hospitality and social hubs, and memory institutions.

4.2.1 Opportunities of the Site

Site Opportunities

Located in an isolated spot which allows for expansions, parking, and exterior programming opportunities
Cultural and historical Indigenous connections
Existing sustainable building features
Storefront style front façade allows lots of natural light and interaction
Delivery loading dock
Opportunities for vertical development/double-height spaces
No heritage restrictions for interior or exterior adaptation

Constraints

At the hypothetical level, not a constraint, but the current state of the building would require significant interior renovation and removal of appliances if the design proposal was implemented.

150 City of Winnipeg. "City of Winnipeg Community and Financial Trends- June 2020". Accessed October 03, 2020. https://winnipeg.ca/cao/pdfs/CommunityFinancialTrends-2020.pdf. 11.
151 Ibid.

4.3 Building History

Figure 9: 815 Main South Entrance

The Euclid Block Building is comprised of two connected buildings located at 815 Main Street in Winnipeg, Manitoba and was built between 1903 and 1904. It is most known for its time as Neechi Commons, a Food Co-Op. At this time, it featured a supermarket, fruit and vegetable courtyard, restaurant and catering businesses, and an Indigenous arts centre.[152]

Neechi Commons saw demographic, economic and cultural issues affecting the Indigenous population in and around the North Point Douglas and Lord Selkirk neighbourhoods and sought to achieve cultural and economic balance and self-reliance for these primarily Indigenous communities.[153] The revitalization of Main Street and north-end neighbourhoods was tied to economic and social healing and aimed to provide an opportunity for Winnipeg inhabitants of all demographics to support reconciliation between Indigenous Peoples and society as an entity.[154]

Neechi Commons was a Winnipeg staple in Indigenous art, food, literature, community development, and collaboration. Once Neechi Commons ceased operations (as has the highly important Winnipeg Indian Métis Friendship Center, another crucial North End program), the Co-Op commissioned outreach into the local community to find desirable and viable businesses, amenities and programs that would benefit the community in its place. The suggested interventions included an Indigenous education and training center, Indigenous arts centre, community healing center, young people's enrichment hub, and a main street community center.[155] Creating a place that connects the University community and the North End neighbourhoods with respectful and equitable means to share, support and heal can foster a relationship not before seen that will benefit both parties to move forward toward decolonization and reconciliation.

152 Neechi Commons, "Revitalization", Accessed July 15, 2020, https://neechi.ca/revitalization/.
153 Ibid.
154 Ibid.
155 Ibid.

4.4 Current State of the Building, Benefits and Limitations

Figure 10: 815 Main Exterior Street View

The building is two levels and one basement level offering roughly 28000 square feet before circulation and sits in a prominent place amongst its surrounding buildings.[156] The building has a distinct storefront with large glazed sections that allow for ample natural light and clear views of the activity in the space. The building underwent a significant renovation in 2012, designed by Wins Bridgman of BridgmanCollaborative Architects Ltd. The redesign focused on technology and sustainable building amendments, including skylights and a geothermal heating and cooling system.[157] The building has no heritage designation and is, therefore, more easily adapted to fit the new client's needs.

4.4.1 Opportunities of the Building

Building Opportunities
Cultural relevance and connection
Access to Indigenous communities for community-based research
In an area without existing University of Manitoba influence
Daytime public areas and major thoroughfares/bus routes for safety and transportation
Connection to existing museums, arts and research centers, and archives
Connection to schools and adult learning/training centers
Parking available
Space for future expansion is available
Variety of commercial amenities nearby, including food stores and bakeries, pharmacy, and gas.

Constraints
No immediate/close green space
Walking and biking are available but not ideal
Traffic from Main Street can be loud

156 Neechi Commons, "Site Description", Accessed July 15, 2020, https://neechi.ca/site-description/.
157 Neechi Commons, "Site Description".

Figure 11: Map of Nearby Amenities

Mâtinawewin

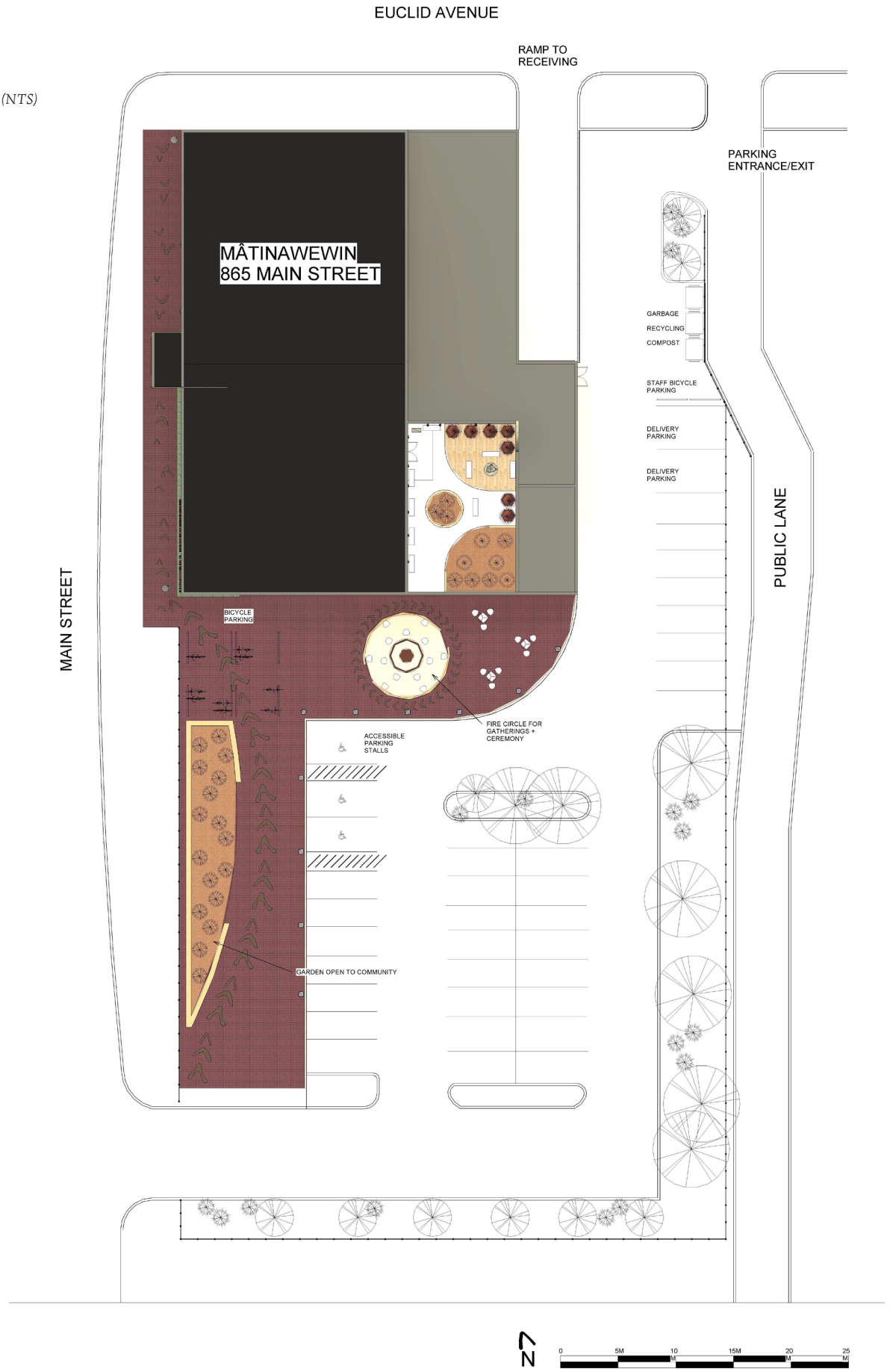
Food and Drink

Cultural Connections

Schools and Educational Centers

Arts and Research Amenities

Figure 12: Site Map (NTS)



Chapter 5.0
Design Programme

5.1 Research is an Offering: Mâtinawewin, the Spirit of the Project

Mâtinawewin as a name for the research center was decided on after conversations with my advisors, Knowledge Keepers I trust, literature that taught me about different ceremonial procedures and processes, and my friends.

I remember going out to lunch with my friends from the Indigenous Design and Planning Student Association. We were celebrating the launch of our publication Voices of the Land when we were able to with pandemic restrictions. We went around the table to talk about the work we were up to, and I spoke about how I had been tasked with thinking about what "research" meant to me and how it could influence interior design. The topic was broad, and the scope of Indigenous research was undefined and unbound. Thinking out loud, I spoke about topics I could look at, and we shared Elder teachings and stories we had been given to try to solve this problem. One of these teachings involved why we offer tobacco to those we respect and who hold knowledge, and I interjected- "research is an offering," and the table got goosebumps. We were not sure why then, but it was the answer I had been looking for. This was the project's spirit, and I was determined to explain how.

In his book One Drum: Stories and Ceremonies for a Planet, Richard Wagamese tells a story about how he learned about tobacco offerings, which helped and inspired me on this particular ceremony.

This is the process of the tobacco offering:
Find your materials
Find tobacco
Sit and contemplate
Think about thankfulness and gratitude
Make your bundles for each thought, each gratitude
When you can't think anymore, offer the tobacco back to the land and to Creation.

Gratitude is expressing beliefs in gifts, some that you can't see. When you are thankful, you are creating energy as part of an immense energy that contributes to collective healing. Offering energy leads to wholeness.[158] Making offerings of tobacco or other medicines is also traditionally done when asking for knowledge or expertise from an Elder or Knowledge Keeper, showing the same faith and gratitude toward the gift that is being given and the energy that is being passed from one to another.

This process is how I see research. Research is born from an inequality, a question,

158 Richard Wagamese, *One Drum: Stories and Ceremonies for a Planet* (Madeira Park: Douglas & MacIntyre, 2017). 97.

an incomplete problem. We take it upon ourselves to gather knowledge and material. We travel to new places and meet people who can help us in our search for answers. We offer ourselves, our time, our passion in helping people, to finding new knowledge and ways of thinking. While research is inevitably overwhelming, it is also healing. We show gratitude for the knowledge we are given to the reciprocity we are shown in our journey. Research is continuously growing with very little given as an "answer," but each bit of energy we give back to Creation, to collective energy, is our offering, our gift.

Thinking in this way has been an effort in walking in two worlds, seeing with two eyes. There needs to be built places where this process, this way of thinking, is reflected in their interior functions, aesthetics, and atmosphere. Academic spaces must not only be functional for the benefit of research but must physically remind us that thinking is multi-directional. Knowledge comes from a plethora of methods and places, and what we are accomplishing as Indigenous researchers are contributing to something greater.

5.2 Body of the Project- Project and Design Objectives

Mâtinawewin is a satellite campus for the University of Manitoba for Indigenous researchers, students, faculty members and community members who wish to listen to, share, read, or view research, knowledge, and experience. To provide a welcoming environment, Mâtinawewin provides:

- A culturally comforting and inspiring space.
- Spaces that foster personal and working connections.
- A safe environment for university members while maintaining a center accessible to the public.
- A variety of amenities and repositories for knowledge and gathering.
- Consider decolonization as a key factor in interior design.

The design concepts and language were derived from a number of places: Indigenous Holistic Theory and Two-Eyed Seeing, Urban Indigenous Placemaking, Resurgence Theory, the Indigenous Research Agenda, storytelling, and the act of offering medicines. The objectives stemming from these concepts are as follows:

- Have the materiality speak to the land, its inhabitants, and traditional medicines.
- Create an academic environment that de-institutionalizes research for Indigenous students.
- Create a research center that develops one's beliefs and personal ties to culture and heritage.
- Allow access to critical cultural staples, such as Elders, ceremony, smudge, medicines, and food.
- Develop the haptic and interactive qualities that can influence an academic space.
- Offer places for disseminating research and knowledge through spoken word, written, and visual media.
- Highlight the need for research spaces capable of personal and communal processes.
- Develop the research center as a social and cultural space on equal standing with research functions.

5.3 Building Code Analysis- Occupancy

Name of Project:	Mâtinawewin
Location:	865 Main Street

Project Description:	Change of Use/ Alteration
Major Occupancy:	Group A(2), Group D
Building Area:	1268 m2
Gross Area:	1955 m2
Number of Storeys:	2 above grade
Number of streets/firefighter access:	2
Building classification:	D up to 2 storeys
Sprinkler system proposed:	entire building
Standpipe required:	No
Fire alarm required:	Yes
Water service/supply is adequate:	Yes
High Building:	No
Construction Restrictions:	Both Combustible + Non-combustible
Actual Construction:	Non-combustible
Mezzanine(s) Area m2:	N/A

Occupant load based on:	design of building
First Floor:	446 persons
Second Floor:	54 persons

Required Fire Resistance Rating:	Floors: 1 hr minimum
	Roof: 1 hr minimum

Male/Female Count @ 50% / 50%

		Occupant Load	BC Table Number	Fixtures Req.	Fixtures Provided
First Floor:	M	223	3.7.2.2	5	5
	F	223	3.7.2.2	9	9
Second Floor:	M	27	3.7.2.2	1	1
	F	27	3.7.2.2	2	2

5.4 Leadership (Client)

Mâtinawewin will be the responsibility of the University of Manitoba. The University has satellite campuses across Winnipeg and Manitoba, and is associated with Université St. Boniface College. It acknowledges its need for widening opportunities for the Indigenous students and the Indigenous community in curriculum and physical space in its 2015-2020 strategic plan Taking Our Place.[159] The University of Manitoba Pathways to Indigenous Achievement Vision statement states:

"The University will work with a variety of partners to make Manitoba the national centre for Indigenous education and research and in particular, to allow First Nation, Métis and Inuit students to be prepared for and to achieve education success in the full range of academic programs we offer. Our goal is to build and expand an Indigenous presence and visibility at the University of Manitoba and the broader Indigenous and non-Indigenous communities that will result in improved access, recruitment, retention and completion for First Nations, Métis and Inuit learners".[160]

Strengthening these aspects on its main Fort Garry campus is required but funding an Indigenous Knowledge research center in urban Winnipeg would have substantially positive effects. Designing a culturally appropriate and innovative knowledge center that operates outside of the atmosphere and function of the typical institutional system, welcomes insights and worldviews from outside of the academy and invites the community to take part in its programming can draw relationships and collaboration not previously seen in this manner due to the conceived notions of what each must represent.

5.5 Beings

This is a list of primary, secondary and tertiary users who will exist at Mâtinawewin that details the needs of each group. This section will outline the programmatic elements required for each group to succeed in this space, which is important for its variety in types of users and their educational and personal backgrounds, cultures and identities. This practicum is designed to influence the relationality and productive cooperation built between users. It, therefore, aims to be a welcoming environment for all who would benefit from an Indigenous-centered research and study space. Anticipated activities were derived from the 25 Indigenous research projects outlined in the literature review and influenced projected

159 University of Manitoba, "Taking Our Place: University of Manitoba Strategic Plan 2015-2020", 16.
160 University of Manitoba, "Pathways to Indigenous Achievement", Accessed September 03, 2020, http://umanitoba.ca/admin/indigenous_connect/3388.html.

spaces and interrelation between users. Users were based on the hypothetical holistic integration of dynamics which would create beneficial connections between Indigenous-non-Indigenous student relations, student-researcher-partner collaborations and institution-community learning opportunities. The co-existence of these parties can redefine what comprises a learning institution in favour of equitable relationships and delineate what academic space means to Indigenous urban environments.

5.5.1 Primary Beings

Those who will spend the most time in this space can be divided into three groups: the students and researchers who take advantage of the center for Knowledge sharing and productive work time. These users come from a variety of different educational backgrounds and therefore need an effective mixture of working environments. Both public and private working spaces will be required that have access to the Knowledge archive spaces and collaborative work areas. These individuals will have access to the space via swipe card 24/7. The second group represents the facility director, faculty members and administrative staff. Private office space will be required for this group to carry out administrative duties, oversee daily operations and activities, and store private belongings and supplies. Staff will be available during typical weekly hours and require dedicated space for their time at work. The third group is made of Elders, Indigenous Knowledge Holders and community leaders who are involved in meetings, classes, events, speaking circles and ceremonies. The research centre would benefit from space dedicated to their involvement, connecting them further to curriculum and research in many disciplines. Decisions made in the content available in this facility would also benefit from their accessibility.

5.5.2 Secondary Beings

Those who will interact with the secondary public spaces of the research center are considered secondary users. These spaces include a larger communal space for gathering and sharing that would accommodate events and lectures, a gallery-style space that would be accessible to the public and house visual research and art exhibits, and a café space stocked with products from community businesses in the spirit of Neechi Commons. Guests at these events, visitors to the gallery, and patrons and employees of the café will be the secondary users.

5.5.3 Tertiary Beings

Tertiary users such as custodial and maintenance staff, delivery workers and tradespeople need access to less of the overall space but must have access to non-public

entryways and administrative spaces, loading and storage areas and infringe as little as possible when repairing or cleaning the facility. Accessibility and efficiency are two spatial factors which must be met for these users.

Primary Beings:

Indigenous and Non-Indigenous post-secondary students
Researchers (Graduate level and up)
Faculty and Administrative Staff
Elders, Indigenous Knowledge Holders and Community leaders
Facility Director

Secondary Beings:

Visitors and Event Guests
Café Staff

Tertiary Users:

Custodial and Maintenance Staff
Delivery Workers
Trades workers

5.6 The Needs of Primary Beings

5.6.1 Primary Being Behavioral Needs

Table 5: Primary Being Behavioural Needs

User	Quantity (Est)	Activities	Frequency
Indigenous and Non-Indigenous Post-Secondary students Quantity: ~70	~50	Access facility materials and resources for coursework Attend classes, events or lectures Network and socialize Student group meetings	Daily, 24- hour access. Largest volume Mon-Fri 8:00 am to 8:00pm. Saturday 10:00am to 6:00pm.
Researchers (Graduate level/ Professional)	~20	Access facility materials and resources for research Attend classes, events and lectures Collaborate with and mentor students Connect with Elders and community members	Daily, 24- hour access. Largest volume Mon-Fri 8:00 am to 8:00pm. Saturday 10:00am to 6:00pm.
Elders, Indigenous Knowledge Holders and Community leaders	5	Advise students and researchers Lead ceremony, talking circles Offer support and direction	Drop-In hours Mon-Fri 1:00pm-5:00 pm Participation in events and ceremonies
Facility Director	1	Oversee management of facility functions Be connection to main campus Typical computer-based tasks	Mon-Fri 8:00am – 5:30pm
Faculty and Administrative Staff	4	Advise students and researchers Offer support and direction Typical computer- based tasks Organize and oversee administrative tasks	Mon-Fri 8:00am – 5:30pm

5.6.2 Primary Being Psychological and Spatial Needs

Table 6: Primary Being Psychological and Spatial Needs

User	Values	Aesthetics	Privacy Needs
Indigenous and Non-Indigenous Post-Secondary students Quantity: Maximum 55	-Belonging -Representation and cultural expression -Collaboration -Creativity -Productivity	-Natural light and views to exterior -Simple interior elements -Non-institutional atmosphere -Connection to exterior/natural materials and elements	-Semi-private to private spaces for working and meeting -Ability to work both independently, in small groups and large groups -Personal storage would be ideal
Researchers (Graduate level/Professional)	-Belonging -Reflection of Indigenous research principles -Representation and cultural expression -Collaboration and independence -Creativity -Productivity	-Focused environment -Natural light and views to exterior -Simple interior elements -Non-institutional atmosphere -Connection to exterior/natural materials and elements	-Semi-private to private spaces for working and meeting -Ability to work both independently, in small groups and large groups -Personal storage would be ideal
Elders, Indigenous Knowledge Holders and Community leaders	-Cultural expression -Mentorship -Connection -Approachability -Communication	-Connection to land and nature -Views to exterior -Space suitable for ceremony -Cultural connections	Drop-In hours Mon-Fri 1:00pm-5:00 pm Participation in events and ceremonies
Facility Director	-Cultural expression -Mentorship -Connection -Approachability -Communication	-Central location -Location near entrance -Views to exterior -Space suitable for ceremony -Cultural connections	-Private meeting spaces -Connection to all areas in institution -Accessible design -Central location
Faculty and Administrative Staff	-Organization -Visibility -Mentorship -Cultural expression and representation -Productive environment for students and researchers	-Focused environment -Natural light and views to exterior -Non-institutional atmosphere -Connection to exterior/natural materials and elements	-Private meeting spaces -Connection to all areas in institution -Accessible design -Central location

5.7 Verbs (List of Spaces)

All Beings

Welcoming (Entry/Administrative Office/Lobby)
Seeing (Gallery/Exhibition)
Feasting (Café and Lounge)
Surveying (Security Office)
Growing (Medicine Garden)
Creating (Common Workspace)
Celebrating (Gathering Place)
Researching (Private Work Desks)
Storytelling (Teaching Space)
Reading (Library)
Speaking (Podcast/Broadcasting studio)
Public Washrooms

Staff

Working (Staff offices)
Teaching (Elders' Offices)
Meeting (Conference Room)
Staff Lounge and Washroom

Storage/ Maintenance

Custodial Space
Mechanical Room
Electrical/Server Room
Security
Storage
Loading

5.8 Functional and Aesthetic Requirements

The following Table 6 outlines the functional and aesthetic qualities used to design the research center.

Space	Function	Furniture, Fixtures and Equipment	Atmosphere	Square Footage
Entering	Welcome and establish atmosphere, receive and direct users	Open space, soft seating	Welcoming, clean and durable	125 ft2
Welcoming	Work area for administrative employees, Welcome, check-in and information point for visitors	Computer workstation, Office storage, personal storage	Organized, accessible, visible, necessary privacy	100 ft2
Feasting	User and guest area for coffee and food items, area for brought food preparation. Must be in proximity to loading area.	For Café: dry and refrigerated storage, coffee brewing system, Point-of- Sale system, Transaction and preparation counter, counter display, disposal. For Lounge: Reconfigurable non-stationary furniture, surfaces, preparation surfaces, sink, microwaves.	Easy to clean, accessible, communal, social, not inhibiting to other activities	2000 ft2
Public Washrooms	Male/Female washrooms for users of the research center	Toilet, ADA grab bars and fixtures, mirror, soap dispenser, hand dryer, sink with faucet,	Public, simple, non-porous, durable and easy to clean	800 ft2
Surveying	Accessible office for surveillance and patrol	Computer workstation w/ multiple monitors, Office storage, personal storage,	Organized, accessible, visible, necessary privacy	100 ft2
Creating	Open space for collaborative work, socially open space for productive work, and formal and flexible gatherings	Flexible seating and surfaces, individual furniture systems, storage opportunity, speaker system	Open, focal point, collaborative, culturally expressive, organic	2000 ft2
Celebrating	Area for ceremony, gatherings and speaking circles, storytelling	Fixed seating, circular layout, smudge capable, flexible surfaces	Protected, focal, open, representative	1100 ft2
Seeing	Location for physical results of research and artistic exhibits	Reconfigurable display systems, customizable lighting, open space for physical objects	Focal, visible, open, neutral for focus on objects and art pieces, interactive	1200 ft2
Reading	Storage for written knowledge, storage for various files, photos, and records	Library and archival storage, seating solutions, computer workstation with surface and storage for library employees	Warm, welcoming inclusive, casual, quiet	1200 ft2
Storytelling	Informal meeting places for classes, presentations, meetings	Non-fixed furniture, flexible furniture solutions, potentially presentation screens and projectors	Productive, open, warm, visible to outside, comfortable	600ft2 per

Space	Function	Furniture, Fixtures and Equipment	Atmosphere	Square Footage
Speaking	Recording studio for various capabilities, music playing, podcast recording	Recording setup including microphones, speakers, recording equipment and software, work surfaces, seating, soundproofing material	Quiet, soundproof, enclosed	100 ft2
Working	Shared workspace for institution staff and facility director	Work surfaces, seating, personal and office storage	Private, quiet, acoustic control, equitable	600 ft2
Teaching	Shared workspace and recuperation space for Elders and guest mentors	Soft seating, work surfaces and table, personal storage	Relaxing, organic, secure, acoustic control	500ft2
Growing	Rooftop garden for medicine teachings, ceremonies, and meeting	Seating, burning receptacle, impermanent or permanent growing beds for plants	Private, relaxing, welcoming	1500ft2
Meeting	Meeting space for director, employees and Elders	Large communal surface, ergonomic seating, projector, screen	Welcoming, acoustic control, communal	300 ft2
Staff Lounge	Space for staff to recuperate, eat and rest	Tables and soft seating, preparation surface, refrigerator, microwave,	Relaxing, social, semi-private, comfortable	450 ft2
Staff Washroom	Universal/accessible toilet room	Toilet, ADA grab bars and fixtures, mirror, soap dispenser, hand dryer, sink with faucet,	Public, simple, non-porous, durable and easy to clean	60 ft2
Custodial Room	Storage for cleaning, maintenance and repair materials	Mop sink, floor drain, open storage	Washable, non-porous, durable	40 ft2 x 3 = 120 ft2
Electrical/ Server Room	Service area, location of local server hardware	Industrial equipment NIC	Uninvasive, accessible	300 ft2
Mechanical Room	Room for HVAC access and other necessary access to building systems	Industrial equipment, NIC	Uninvasive, accessible	300 ft2
Storage and Loading	Various storage, incoming deliveries,	Shelving, open space	Accessible to existing loading bay, accessible to interior spaces, acoustic control	1250 ft2

14709ft2
+ 30% circulation

= 19120ft2

5.8.1 Adjacency Matrix

Adjacency charts outline the parameters by which the various spaces in the project were designed into the layout. The first is a typical adjacency matrix that compares functions of space and their relationships. By defining the aesthetic and functional aspects of each space, adjacencies between each space were identified as mandatory or secondary based on their spatial benefits or were otherwise made to have no adjacency and be separated.

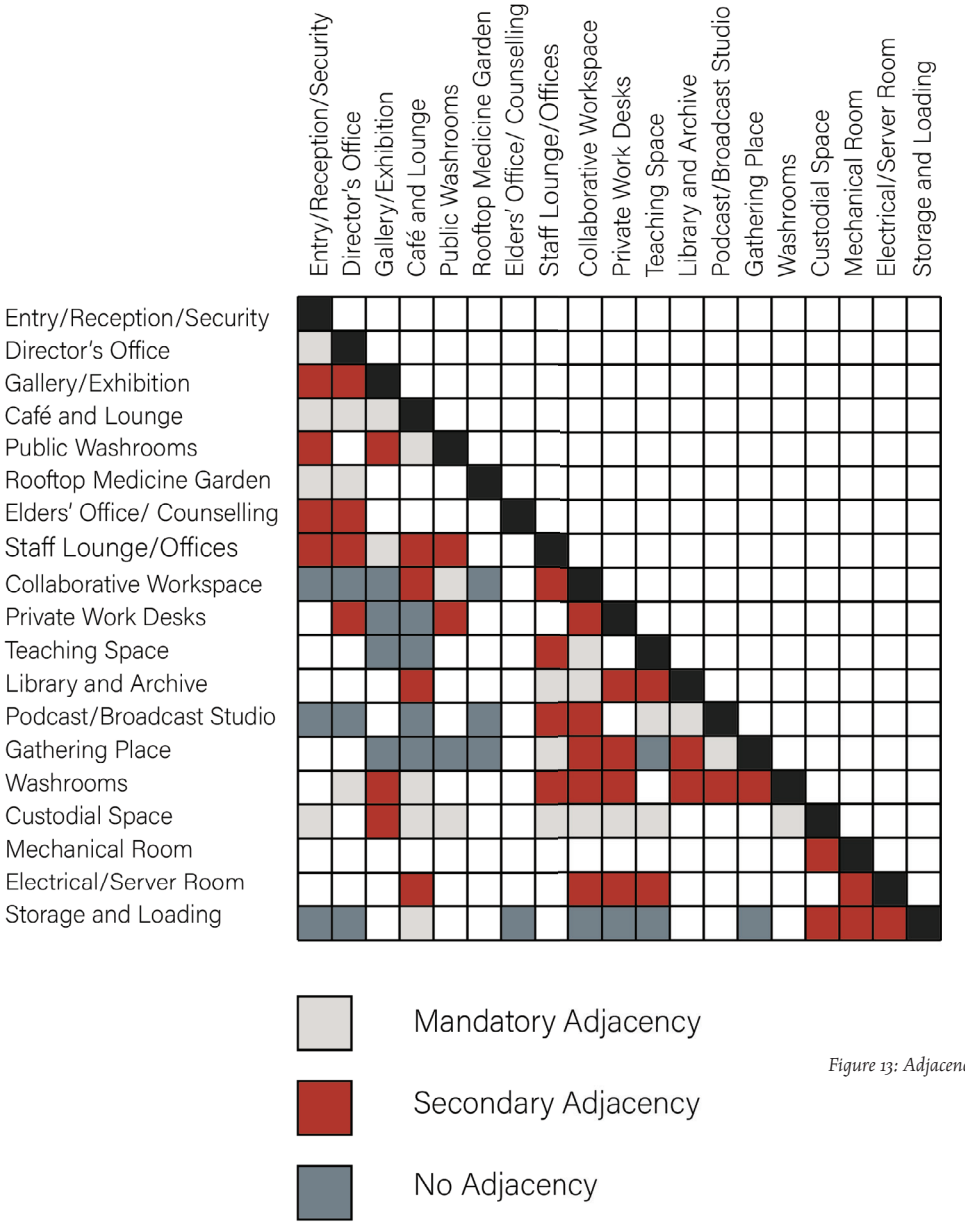


Figure 13: Adjacency Matrix

The following adjacencies use the "verbs" of each space and show the connections between public and private functions while showing how each verb works amongst and in correlation to the others.

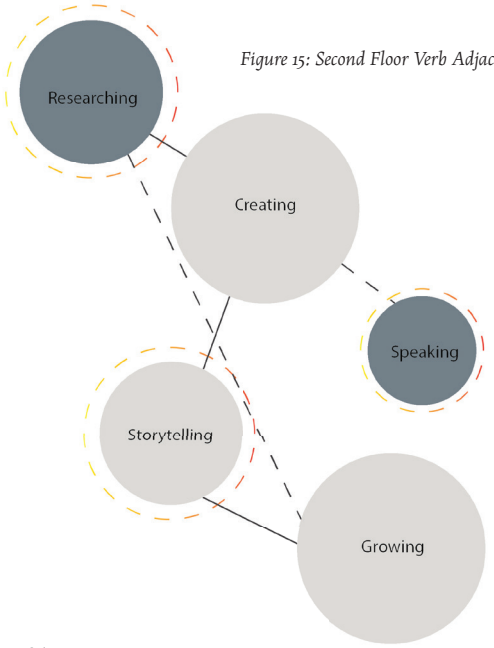


Figure 15: Second Floor Verb Adjacencies

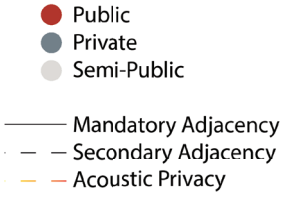
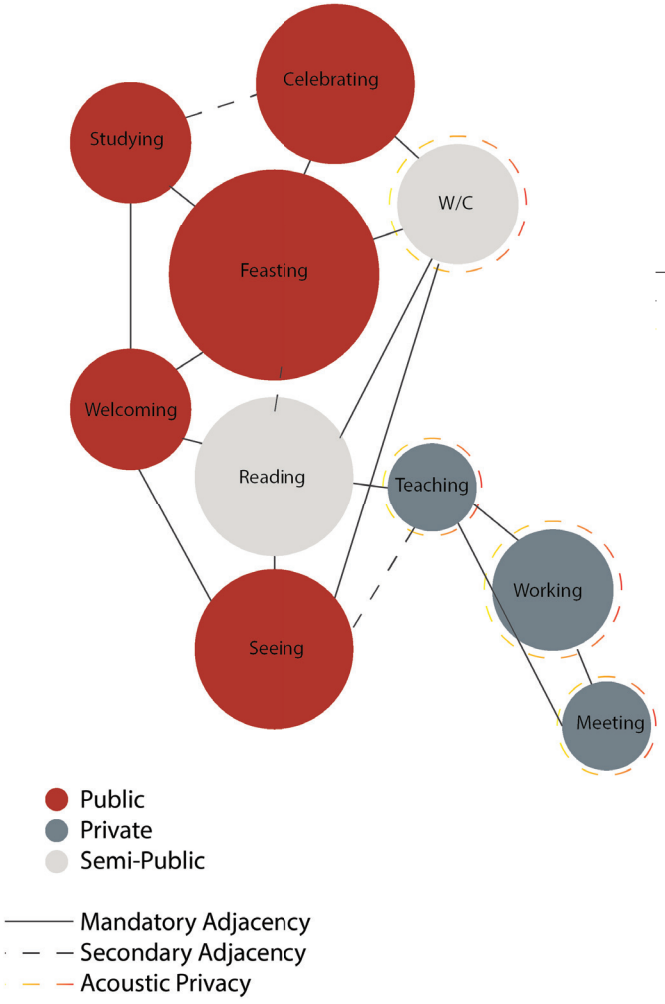


Figure 14: First Floor Verb Adjacencies



Chapter 6.0
Design Proposal

"Medicine burns when touched by fire. The smoke curls and spirals upward, plumes of it rising, swirling, pushing themselves in ribbons higher and higher until the smell of it becomes the ancient aroma of blessing, teaching and communion. Within its fragrant cloud you can feel peace descend on you. There is Spirit here".[161]

Richard Wagamese, One Drum: Stories and Ceremonies for a Planet

161 Richard Wagamese, *One Drum: Stories and Ceremonies for a Planet*, 15.

6.1 Introduction

This chapter details the design choices made in developing the Mâtinawewin research center. To encourage Indigenous involvement and belonging at the post-secondary and research levels, the project aimed to use Indigenous teachings, the consciousness of the urban Indigenous environment, and the key differences that set Indigenous research apart in creating a bespoke, welcoming academic space. The scope of the project included the full two storeys of the chosen site, 865 Main Street.

This design is the culmination of the previous chapters that focused on the Indigenous academic disparity (Chapter 1), Indigenous research methodologies and traditional Indigenous teachings (Chapter 2), precedent studies (Chapter 3), the context of the building and site (Chapter 4) and exploring the idea of spirit and defining those who would use the space (Chapter 5). Elements and theories which informed the design are discussed, as well as the spatial planning and connections between spaces. The verbs identified around the space affect each other and their benefit to the typology, which defines the vertical and horizontal organization.

Figure 16: Exterior Perspective

Figure 17: Approaching Perspective

Figure 18: Growing Perspective

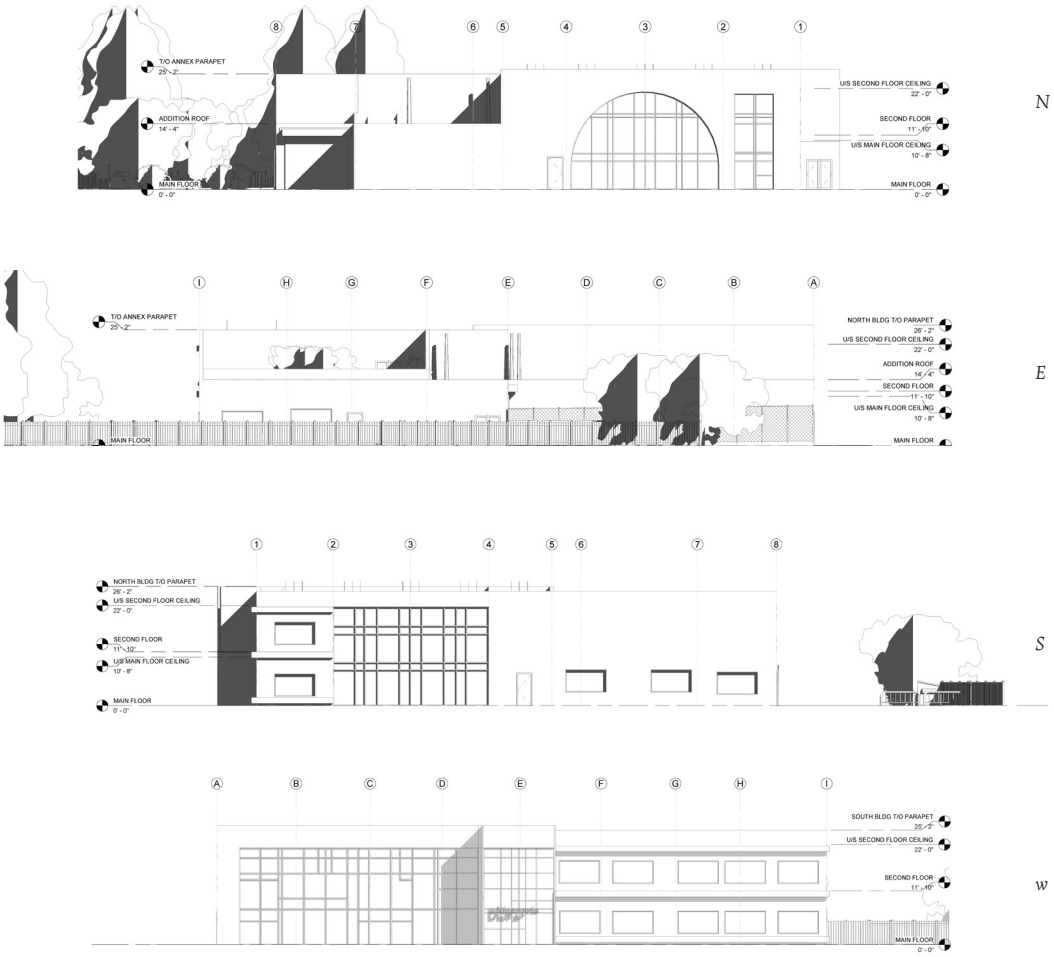


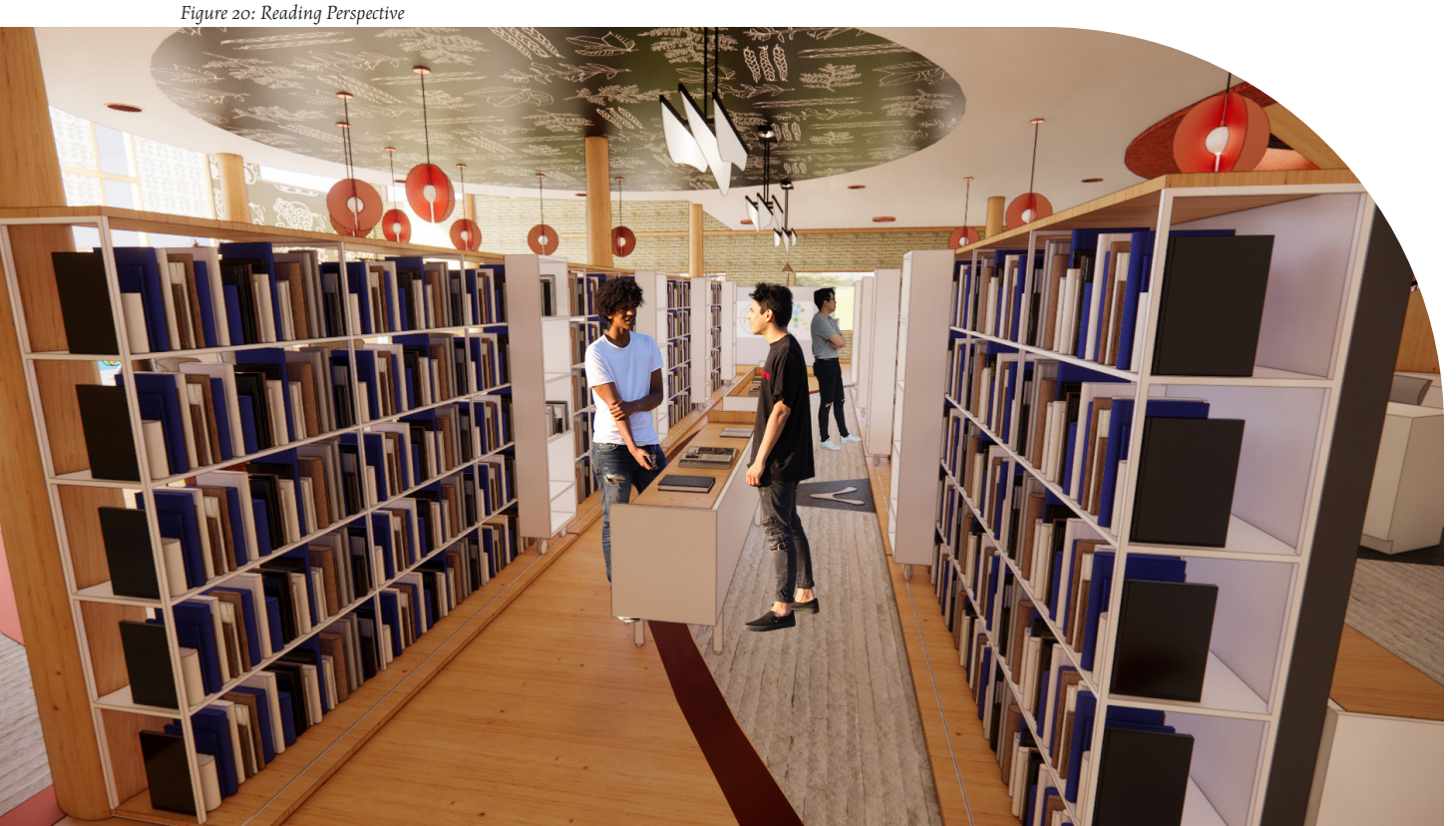
Figure 19: Exterior Elevations (NTS)

6.2 Space Planning

Mâtinawewin makes public and private functions work together vertically by prioritizing the communal parts of the design to the center of the building and drawing the private areas to the outskirts while keeping them essential to the overall layout. The first floor is comprised of a primarily open concept plan which holds all the public communal spaces: celebrating, feasting, reading, studying, and seeing. Office space for the staff (Working) can also be found on the first floor in a private spot accessible for counselling. Only private and semi-private uses occupy the second floor: researching, creating, storytelling, speaking and growing.

The planning of Matinawewin was inspired by equal parts holistic theory and storytelling. The research center is truly connected at all points and avoids fragmentation by blurring the lines between each space. Sight lines stretch the length of the building in many areas of the center to connect each function appropriately. Indigenous Holistic Theory led Mâtinawewin to be organized cyclically; each area bleeds into the next to create a pathway that meanders throughout the building. On the other hand, the space is designed to be explored and moved around in because of its openness and opportunity for unplanned interaction. The central staircase is evidence of this; each run follows the cardinal and secondary directions of the compass, mirroring the medicine wheel's doorways while offering a new path each time one moves between floors. This part of the design achieves a balance of efficiency and discovery.

Figure 20: Reading Perspective



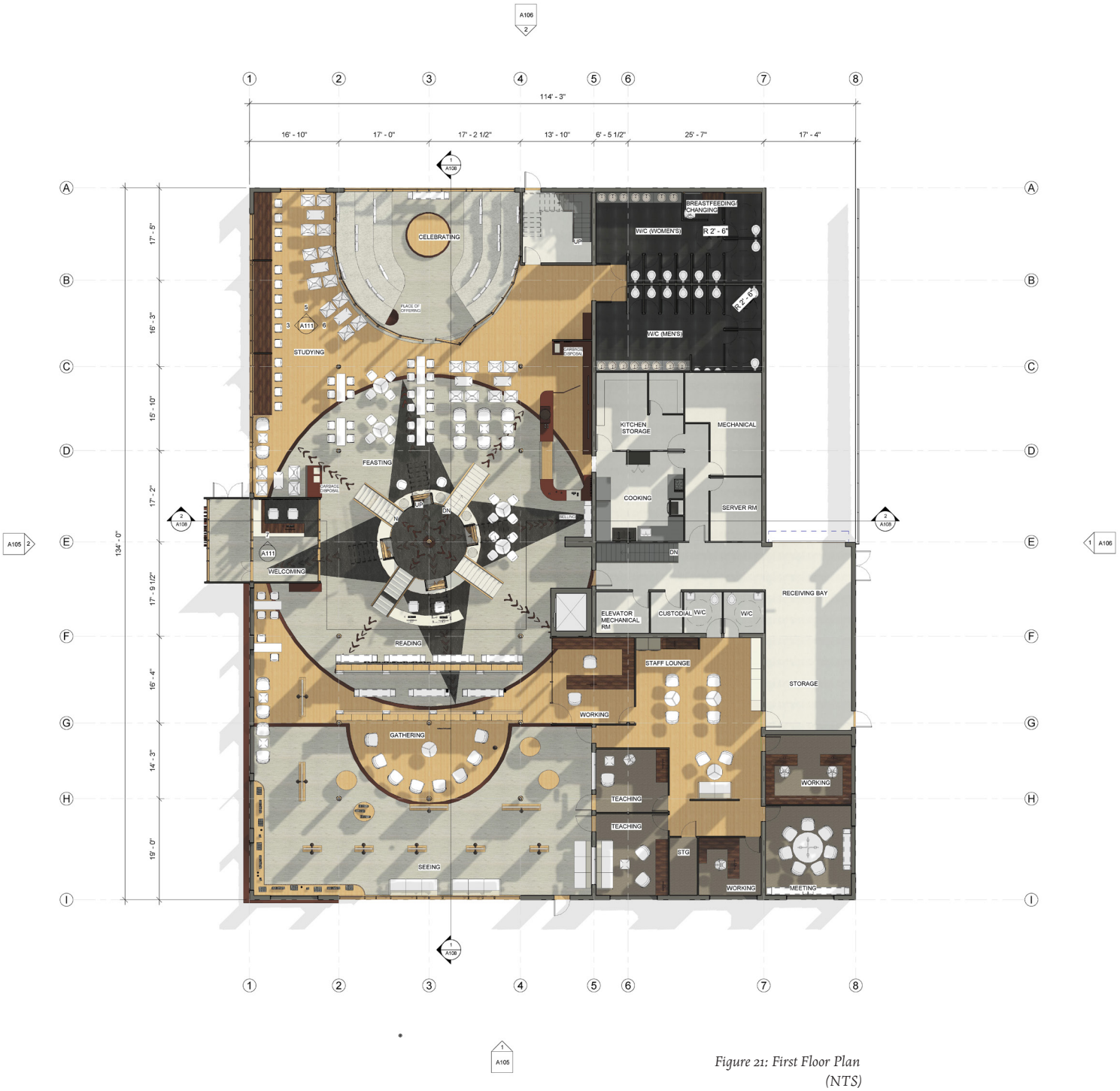


Figure 21: First Floor Plan (NTS)

N

Figure 22: Feasting Perspective

Figure 23: Grounding Stair and Ceiling Detail Perspective

Figure 24: Welcoming Perspective

Figure 25: Feasting Elevation (NTS)
Figure 26 (Left): Celebrating Elevation (NTS)

Spaces were planned to be highly flexible. Envisioning ceremony, performance, art and research exhibitions here led to the creation of functional but impermanent spaces. The gathering space utilizes operable walls on the main floor that opens the space up to the possibility of larger events. Acknowledging these acts as forms of research was crucial to the design concept to solidify the idea that more than the written word is valuable to Indigenous researchers.

The first floor focuses on social and collaborative research methods, community engagement, and creating a cyclical route for various sources of knowledge. From paying attention to the uses of the building and the necessity for security, the main entrance was addressed in a sensitive but effective manner. Including a secure entrance to the design that blended with the language in the rest of the building allowed for implementing open social spaces while acknowledging privacy and safety in areas that needed it.

Moving to the left of the main entrance, spaces for Feasting, Studying and Celebrating blend with one another in a flexible open space. Non-fixed furniture is utilized here to maximize the variety of functions that can be achieved here. Consistency is achieved throughout with materiality and wide sight lines. Guests to Mâtinawewin can sit and use the space to study and visit, while researchers can meet with clients or community members for their work in a friendly and neutral environment. Gatherings can congregate here, or private ceremonies or teachings can be given within the celebration space. The central design detail in the Celebration space is the chandelier-like fixture composed of prayer ties which is an opportunity for community members, researchers, and students from local schools and beings from other invited organizations to offer their own thoughts and energy to the space.

To the right of the main entrance are the Reading and Seeing spaces, along with the Working functions of Mâtinawewin. These areas are designed to draw in curiosity as the views from the street into these spaces are highlighted. Flexibility and maneuverability were vital to these areas so they could best suit the needs of the media being presented. The Seeing space can be seen from the mezzanine above, creating a well-lit and open environment for those who visit exhibits or use the space for reading or studying. Teaching Spaces that Elders would use formeeting with students and faculty are accessible from the Seeing area, drawing people into the space to experience the building before conversing or receiving knowledge. The overall atmosphere of the first floor is lively, exciting, and colorful with Indigenous art being the primary visual theme throughout.

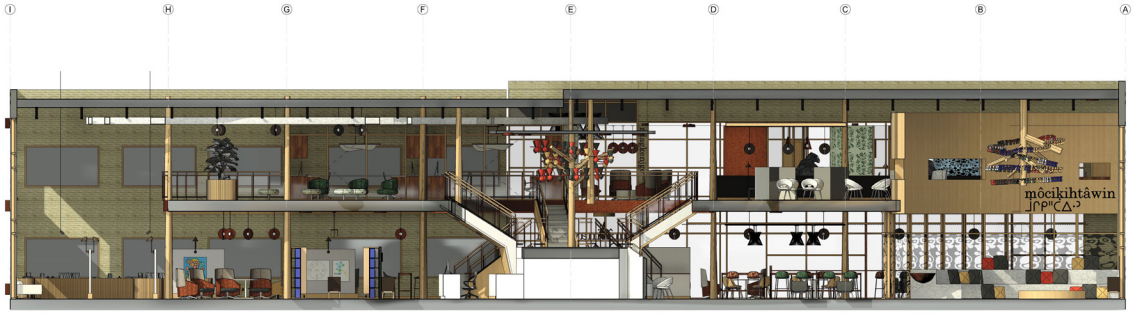


Figure 27 (Above): Building Sections (NTS)
Figure 28 (Below): Celebrating Perspective

Figure 29: Celebrating Ceiling Detail Perspective

connected to the first by the central staircase, elevator, and a mezzanine at each end to allow for both visual connection and to allow the largest amount of natural light possible in the space. A communal Creating space is the first sight upon moving up the North staircase, a place for meeting with research participants, working amongst a large group of researchers or students, and completing larger-scale work. The round Research offices alongside this space offer visual interest and efficient places for studying, meeting, and personal storage and have views of the exterior and into Mâtinawewin. The adjacent hall also provides a secondary, calmer space for meeting with community members. These are the functions of the East and North doorways.

The storytelling circle and medicine garden are to the southeast, connected to the Spiritual and Emotional doorways. Access to the medicine garden is adjacent to the Storytelling area, which provides opportunities for school groups and other workshops to learn about traditional medicines and offerings. This floor also houses a broadcasting studio that can be rented for live streams and podcast recording and for playing or recording music.

Figure 30: Research and Meeting Elevation (NTS)

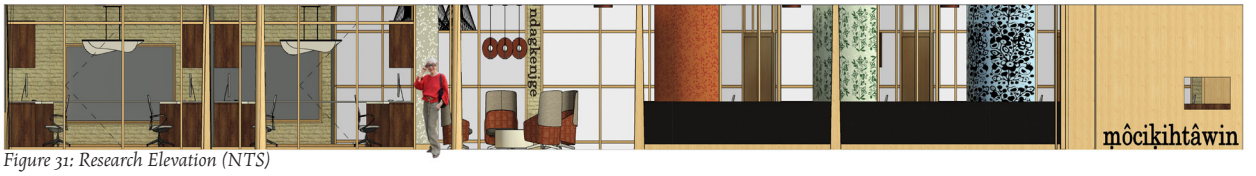


Figure 31: Research Elevation (NTS)

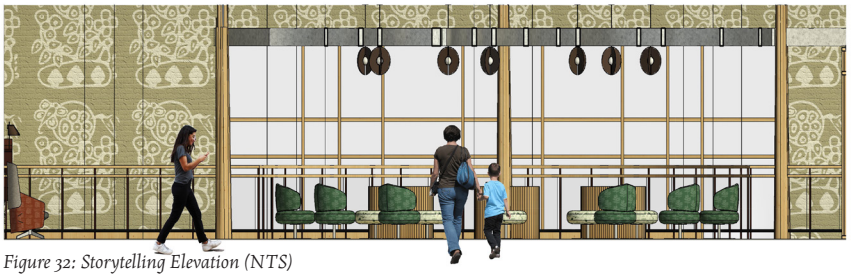


Figure 32: Storytelling Elevation (NTS)

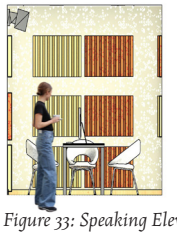


Figure 33: Speaking Elevation (NTS)

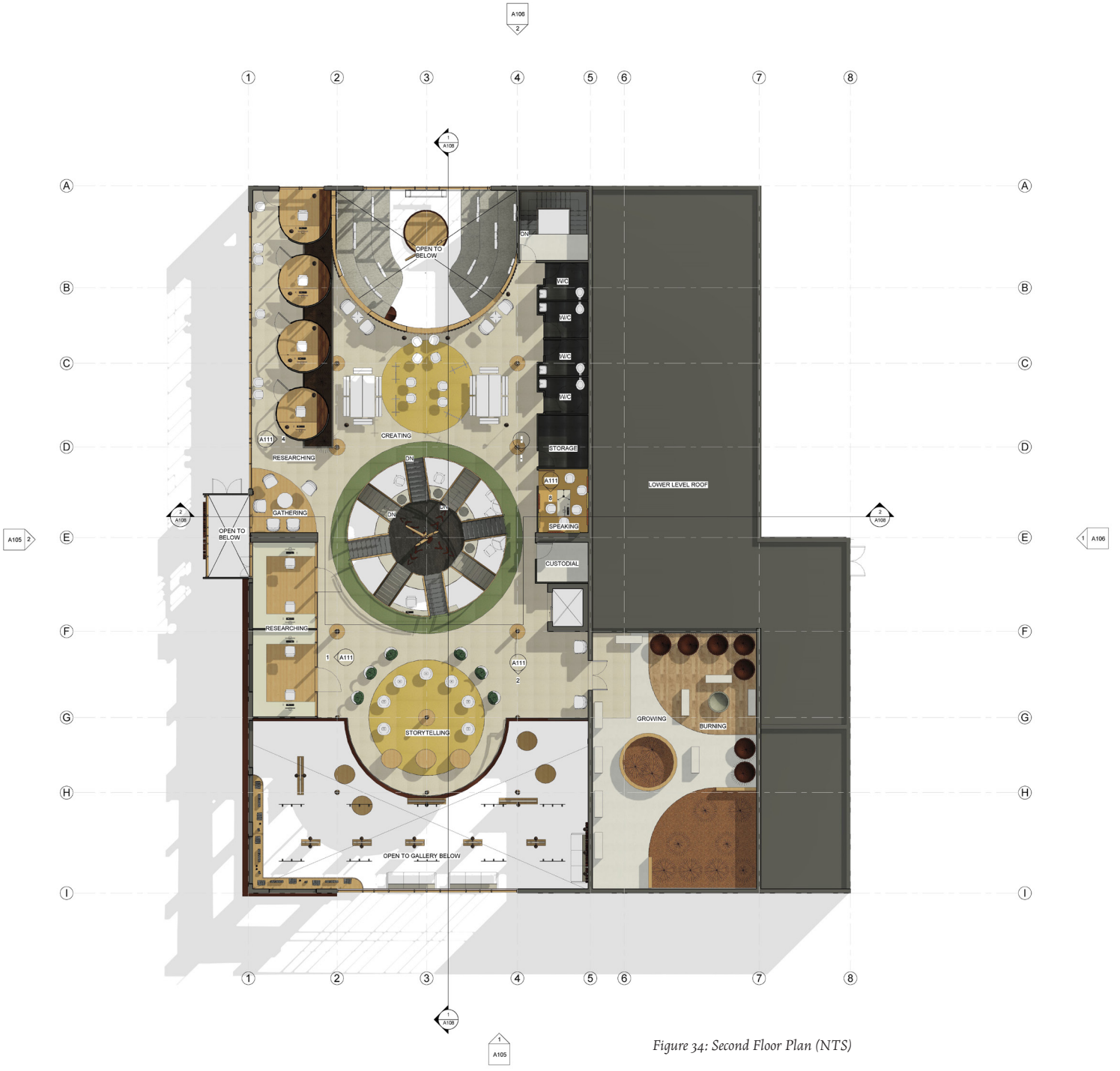


Figure 34: Second Floor Plan (NTS)

N

Figure 35: Researching Perspective

6.3 Design Development, Materiality and Concept

The final design iteration of Mâtinawewin is depicted in this chapter through floor plans, reflected ceiling plans, elevations, sections, and rendered perspectives.

The material finishes chosen for the interior were of the most critical aspects of the design. The palette was developed upon considering the various aspects of making an offering. Smoke, burning, wood, cloth, sacred medicines, and copper are all evocative of typical offerings to reflect the spirit of the design. The primary goal of the materials was to invoke a connection to the land through organic colour and texture while maintaining a primarily geometric design language throughout most of the space. A set of textiles and wall covering patterns were designed that use four sacred medicines (tobacco, cedar, sage and sweetgrass) that range from subtle to graphic. Plants, in general, symbolize transformation. Many First Nations use tobacco, sage, sweet grass, or cedar for ceremonial, healing, and purification purposes. Each plant symbolizes different things to different nations, but specific prayers and rituals always prescribe the plant collection, preparation, and use.

Gifts or offerings include art, made objects, food, sacred medicines, and knowledge. The various spaces of Mâtinawewin reflect this by using the 25 Indigenous projects as a base for its programme. Offering built space that celebrates these ideas grounds the research center in its identity. Making an offering is to acknowledge the willingness of the storyteller to share their time and knowledge and to recognize that knowledge has value, all of which Mâtinawewin strives to embody.

Alongside focusing on offering as a design concept, Two-Eyed Seeing and Resurgence theory led to the aesthetic and function becoming a combination of contemporary and traditional styles. Walking between two worlds is reflected in the environment to embody innovation and traditional holistic values. The design of Mâtinawewin sought to increase the conversation of Indigenous research and its specific methodologies.

Figure 36: Longitudinal Elevation (NTS)

Figure 37: Creating Perspective

Figure 38: Speaking Perspective

Smoke and medicine were an inspiration for the material aesthetic and design details. The ceiling above the Storytelling space is reminiscent of smoke in the night sky through the use of PET felt baffles. For many First Nations Peoples, tobacco represents honesty that is carried in one's heart when words are spoken between people. The smoke represents one's visible thoughts; tobacco travels ahead of the words so that honesty will be received in a kind and respectful way. I was also given a teaching that smoke is a direct connection to Creator. The smoke we create when smudging and burning ceremonial fire is a direct path for our good thoughts and intentions to Creator, which seemed perfect for a space reclaiming good thoughts and intentions for academic research.

Figure 39: Seeing Perspective

Figure 40: Storytelling Perspective

Chapter 7.0 Conclusions

7.1 Summary

The overall aim of this project was to demonstrate the need for Indigenous interiors in academic environments as a support for Indigenous belonging, decolonizing architecture, and a recognition for sources of knowledge outside of typical Western methodologies and epistemologies. Removing the otherness from Indigenous students and researchers by offering a Two-Eyed, holistic approach to post-secondary learning is Mâtinawewin. The proposal sought to utilize interior design as activism, creating a pathway for institutional design to consider a new direction for the future of academic space making.

The questions for the practicum posited in Chapter 1 helped direct the project and were challenged throughout the process. This section tells the story of how these questions were answered.

How can interior space be designed to introduce Indigenous identity in an academic space?

In the beginning stages of this practicum project, identity was the driving topic throughout the literature and precedent studies. The idea was that by defining the Indigenous identity in the context of academia, it would be easier to name which themes and symbols would be necessary for an academic space to reclaim it as Indigenous. It soon became apparent that the idea of identity somehow had both an incredibly large and small scope of understanding. Identity is complex, relational, and requires context to be truly useful. At the same time, Indigenous identity is different for each being; we are each on our path of identity, which may be a very confident path or just beginning. Realizing this concept, this project became a question of welcoming Indigenous identity as it finds a place in academia. How do we move forward by intertwining traditional Knowledge and Indigenous epistemologies with the Western academic institution, with the goal of integration and morphing rather than inclusion? How do we normalize an Indigenous identity in interior space rather than tokenize it?

Completely ingraining Indigenous methodologies, social research customs, and aesthetics into Mâtinawewin was the solution. The center needed to, at some level, reflect an academic research space while removing as much of the expected institutional atmosphere as possible. An aspect of Indigeneity that I have started studying is innateness, which means several things to me. As Indigenous people, the things we do and make, by nature, are Indigenous, and I wanted this project to reflect this effortlessly. We as designers need to stitch the identity of any project with its innate characteristics, however it may call for. An academic space where people can connect at the community, institutional, and individual levels that weaves together a network works to further Indigenous scholarship and changes the vernacular of post-secondary education, resulting in building an identity for those who are a part of it.

How can interior design help balance visual and oral knowledge for the benefit of an Indigenous research agenda?

Tuhiwai's Indigenous research agenda itself was where many of the design solutions themselves were derived. Understanding the interdependence of Indigenous research methodologies was paramount to acknowledging them as part of a holistic, resurgent practice that would benefit from specialized environments that embodied them. Even understanding how writing and what informs it differs from Western methodologies, such as storytelling, Indigenizing and intervention. These concepts were important to how spaces were selected and organized within Mâtinawewin. Allocating places for speaking, ceremony and performance, various meeting and working places, and spaces for sharing knowledge and media as each being creates it was prioritized.

The 25 Projects and Ethical Space Theory were an inspiration to experiment with changes to how design drawings and conceptual images can be decolonized—thinking about how spaces connect and how spaces can be defined solely by their uses and how someone would use them rather than a programmed name. For example, "teaching" and "seeing" are used as space identifiers rather than "classroom" or "counselling room" and "gallery. This method brings equality to interior space as it generalizes rather than discriminates and creates a sense of accessibility for the individual. Acknowledging interior spaces as verbs, especially in the instance of Mâtinawewin, creates a balance between the different areas in the design programme by making each simple function important to the spatial planning.

What academic interior spaces can be designed to support community involvement through Indigenous knowledge and ceremony?

For interior environments, we see the need for flexible space and community engagement depicted in Urban Placemaking Theory, Indigenous Resurgence Theory, and the notion of Biskabiiyang as a strengthening of the Indigenous inside. The synthesis of this project is a research center that is meant to be resurgent and inspiring.

Programming the center to welcome smudge, ceremony, and enabling the practice of cultivating and learning about medicines, making offerings, and conserving oral knowledge was critical for celebrating survival and helping to achieve integration. Safety is considered in the design programme and spatial layout while remaining sensitive and unobtrusive. The first-floor flexible Feasting, Studying, and Celebrating spaces, as well as the Seeing space, are meant to adapt to the need at any given time, meaning that the center is never a barrier to sharing knowledge and can welcome large groups of people when required. Auxiliary spaces are also encouraged to become assets to the community and can reciprocate by offering spaces that can benefit relevant organizations such as local schools, student groups, craft circles and workshops.

7.2 Final Remarks and Recommendations

I'm glad to have contributed to the promising and vital direction the practice of architecture is headed. In my time as a student of architecture and interior design, the change that I've seen in the inclusion of diversity in academia has grown exponentially, and our campus has begun to integrate Indigenous-centered spaces and art in many built environments. As time passes, I hope this information will expand and inspire interior design practitioners to think about Indigenous architecture and its necessary place in our urban fabric critically.

The scope of Mâtinawewin, at this stage, focuses on revitalization and community involvement through academic re-definition, healing through cultural integration and offering productive, welcoming built space back to the urban fabric of Winnipeg. With limited space and time, as well as a sensitive arrangement of interior spaces at play, there are several directions I would have liked to have taken this project if allowed.

One of the most sensitive aspects I would have liked to include is a child-minding centre connected or adjacent to Mâtinawewin. Access for adult and returning students is incredibly important for post-secondary programs to adopt and maintain, and in the case of this research center, childcare would make the circle of hypothetical users larger with convenience. In the case of this practicum, the space in the selected building would not allow for the addition of child-minding or daycare occupancies. Childcare, as national and regional building codes and by-laws are concerned, is also incredibly complex, requires meticulous consideration, and must adhere to the strictest of design and accessibility standards. If given the opportunity to construct a similar typology, designers should consider the benefit of childcare to mature academics. It was ensured that parents using Mâtinawewin had access to infant changing stations in washrooms and a breastfeeding room for use by adult students and guests.

One of the initial thoughts behind this project was to include a museum or archive to the programme of Mâtinawewin. Since beginning the project, there has been heavy discourse over the role of museums and other repositories regarding Indigenous Peoples, their cultures, and material artifacts. Museums and their role in the future is a complex issue and could be the subject of a practicum on its own, so the topic was left from the literature review and the programme. The project evolved into prioritizing research as the primary activity in the space. The site of Mâtinawewin is also near several existing museums, archives, and galleries that could serve this purpose if needed by those that would use the space.

Smudging, the practice of burning medicines for healing and cleansing, is an important tradition in Indigenous education and paramount to integrating Indigenous teaching in post-secondary institutions. Smudging in interior space requires special consideration at the HVAC and architectural levels. Each space designated for smudging must have ventilation directly to the exterior of the building with the appropriate smoke detectors within the system and in the room. Ensuring proper ventilation for the project makes the site

and building analysis for adaptive reuse projects crucial, since planning for smudging spaces can be made difficult by existing spatial layouts. In the case of this practicum, the building choice would make it easy for smoke to be vented to the exterior through a wall or ceiling were HVAC to be considered further. Fire protection and firestop that meets the standards of provincial by-laws/building code and the National Building Code of Canada is crucially important in smudge-friendly spaces (though not explicitly stated as a directive as of the NBCC 2015). Smoke barriers are to be in place on the underside of the ceiling in spaces with mezzanines or in double-height situations.

The amount of information on Indigenous methodology and academic integration that has come into the fold since beginning this practicum is incredible. This means two things: one, places like Mâtinawewin are starting to be considered and built, which is exciting and helpful for rationalizing an Indigenous-focused research space of this scale, and two, the sources and frameworks used in this practicum are a small selection of what is now available. While this new body of work may have been an asset to the work in this project, it excites me to see that large-scale work is being done to welcome Indigenous students to post-secondary institutions, and that those students are achieving and inspiring others to follow their path to their own identity and culture.

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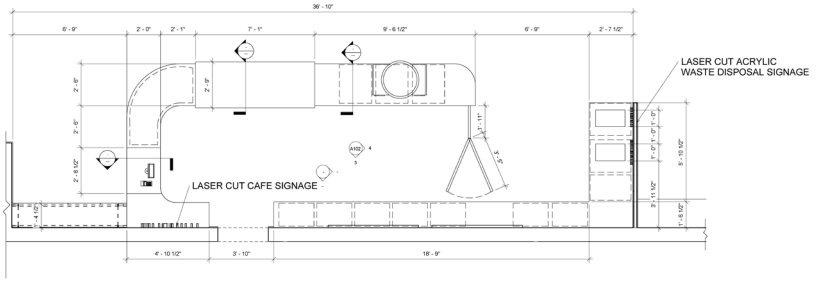
APPENDIX A: Design Details

The following drawings are millwork details found in Mâtinawewin. The first set of drawings are detailed plans, elevations, sections, and an axonometric of the café found in the Feasting space. The second set shows details for the surfaces on which knowledge is displayed in the



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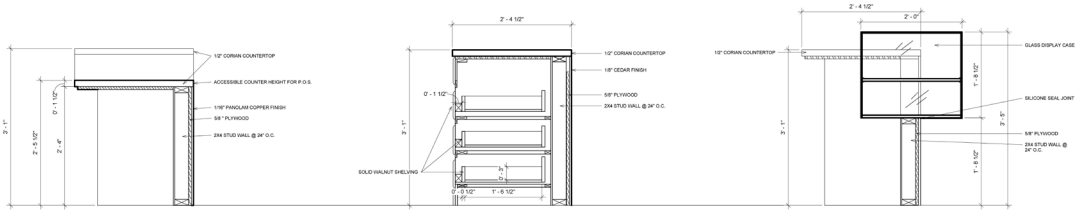

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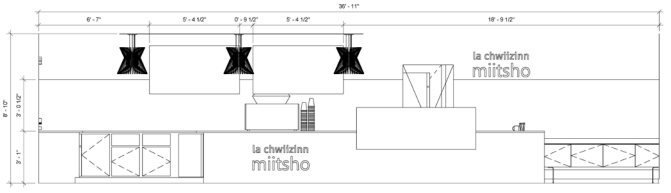

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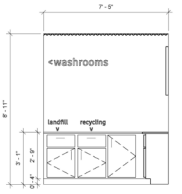

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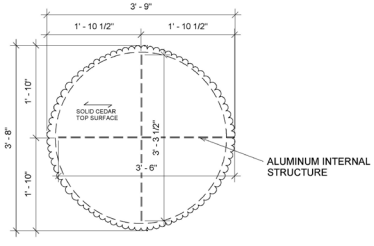

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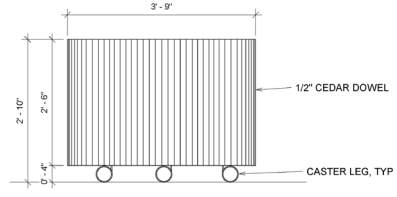

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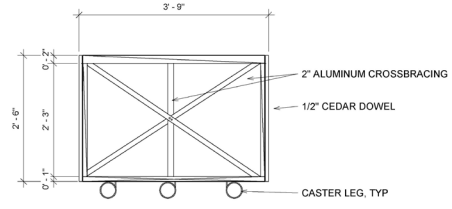

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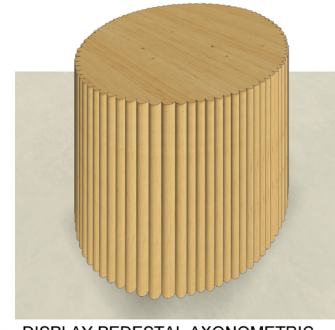

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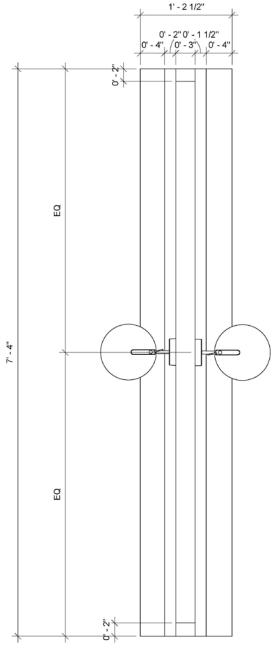

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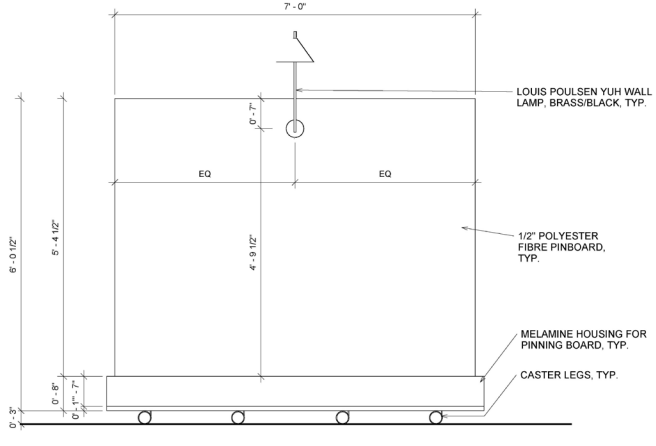

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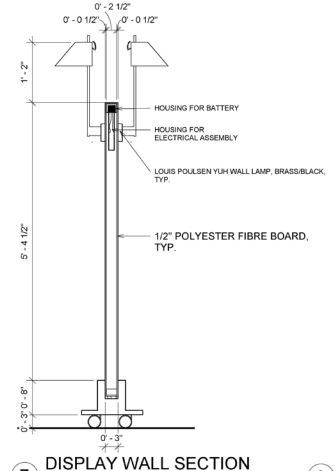

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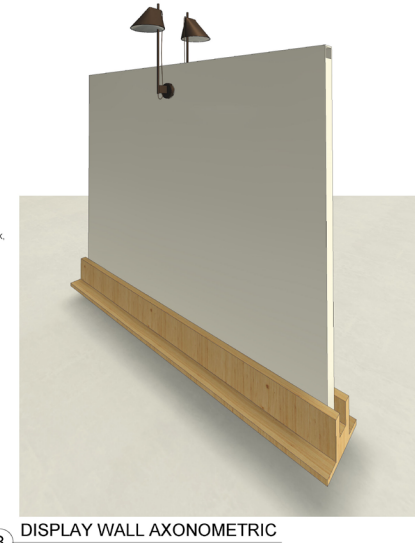

8 DISPLAY WALL AXONOMETRIC

APPENDIX B: NBCC Code Review

The following code review is excerpted from the 2015 National Building Code of Canada as it pertains to the practicum project:

3.1 General

3.1.3 Multiple Occupancy Requirements
3.1.3.1 Separation of Multiple Major Occupancies

1) Except as permitted by Sentences (2) and (3), major occupancies shall be separated from adjoining major occupancies by fire separations having fire-resistance ratings conforming to Table 3.1.3.1.

3) In a building conforming to the requirements of Articles 3.2.8.2. to 3.2.8.8., the requirements of Sentence (1) for fire separations between major occupancies do not apply at the vertical plane around the perimeter of an opening through the horizontal fire separation. (National Research Council Canada, 2015, pp. 3-2, 3-3).

3.1.13.8. Noncombustible Construction

1) In a building required to be of noncombustible construction,

a) the flame-spread ratings required by Subsection 3.1.5. shall apply in addition to the requirements in this Subsection, and

b) the flame-spread ratings for exits in this Subsection shall also apply to any surface in the exit that would be exposed by cutting through the material in any direction, except that this requirement does not apply to doors, heavy timber construction in a sprinklered building and fire-retardant-treated wood (National Research Council Canada, 2015, pp. 3-34).

3.1.17 Occupant Load
3.1.17.1 Occupant Load Determination

Level 1 Total Occupant Load = 446 Persons (m2/person)
Level 2 Total Occupant Load = 54 Persons (m2/person)

3.2 Fire Safety
3.2.2.4 Buildings with Multiple Major Occupancies

1) "The requirements restricting fire spread and collapse for a building of a single major occupancy clas sification are provided in this Subsection according to its building height and building area" (National Research Council Canada, 2015, pp. 3-40).

2) "If a building contains more than one major occupancy, classified in more than one Group or Division, the requirements of this Subsection concerning building size and construction relative to major occupancy shall apply according to Articles 3.2.2.5. to 3.2.2.8" (National Research Council Canada, 2015, pp. 3-40).

3.2.2.6. Multiple Major Occupancies

1) "Except as permitted by Articles 3.2.2.7. and 3.2.2.8., in a building containing more than one major occupancy, the requirements of this Subsection for the most restricted major occupancy contained shall apply to the whole building." (National Research Council Canada, 2015, pp. 3-40).

3.2.2.7. Superimposed Major Occupancies

1) "Except as permitted by Article 3.2.2.8. and as required by Sentence 3.2.2.18(2), in a building in which one major occupancy is located entirely above another major occupancy, the requirements in this Subsection for each portion of the building containing a major occupancy shall apply to that portion as if the entire building was of that

major occupancy." (National Research Council Canada, 2015, pp. 3-40).

2) If one major occupancy is located above another major occupancies shall be determined on the basis of the requirements of this Subsection for the lower major occupancy. (See also Article 3.1.3.1.) (National Research Council Canada, 2015, pp. 3-40).

3.2.2.10 Streets

Every building shall face a street located in conformance with the requirements of Articles 3.2.5.4 and 3.2.5.5. for access routes. (National Research Council Canada, 2015, pp. 3-41).

3.2.5.5 Location of Access Routes:

Access routes required by Articles 3.2.5.4 shall be located so that the principal entrance and every access opening required by Articles 3.2.5.1 and 3.2.5.2 are located not less than 3 m and not more than 15 m from the closest portion of the access route required for fire department use, measured horizontally from the face of the building. (National Research Council Canada, 2015, pp. 3-41).

3.2.2.11. Exterior Balconies

1) An exterior balcony shall be constructed in accordance with the type of construction required by Articles 3.2.2.20. to 3.2.2.90., as applicable to the occupancy classification of the building. (National Research Council Canada, 2015, pp. 3-41).

3.2.2.26. Group A, Division 2, up to 2 Storeys, Increased Area, Sprinklered

1) A building classified as Group A, Division 2 is permitted to conform to Sentence (2) provided

a) except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the building is sprinklered throughout,

b) it is not more than 2 storeys in building height, and

c) it has a building area not more than

i) 4 800 m2 if 1 storey in building height, or

ii) 2 400 m2 if 2 storeys in building height.

2) The building referred to in Sentence (1) is permitted to be of combustible construction or noncombustible construction used singly or in combination, and

a) floor assemblies shall be fire separations and, if of combustible construction, shall have a fire-resistance rating not less than 45 min,

b) mezzanines shall have, if of combustible construction, a fire-resistance rating not less than 45 min, and

c) loadbearing walls, columns and arches supporting an assembly required to have a fire-resistance rating shall

i) have a fire-resistance rating not less than 45 min, or

ii) be of noncombustible construction. (National Research Council Canada, 2015, pp. 3-45).

3.2.6.2. Limits to Smoke Movement

1) "A building to which this Subsection applies shall be designed in accordance Sentences (2) to (5) and Article 3.2.6.3. to limit the danger to occupants and firefighters from exposure to smoke in a building fire." (National Research Council Canada, 2015, pp. 3-97).

2) "A building referred to in Sentence (1) shall be designed so that, during a period of 2 h after the start of a fire, each exit stair serving storeys below the lowest exit level will not contain more than 1% by volume of

contaminated air from the fire floor, assuming an outdoor temperature equal to the January design temperature on a 2.5% basis determined in accordance with Subsection 1.1.3. (See Appendix B.)" (National Building Code, Pg. 3-97).

2) "Each stairway that serves storeys above the lowest exit level shall have a vent to the outdoors, and

a) has an openable area of 0.05m2 for every door between the stair shaft and a floor area, but not less than 1.8m2,

b) opens directly to the outdoors or into a vestibule that has a similar opening to the outdoors, and

c) has a door or closure that

i) is openable manually, and

ii) can remain in the open position during a fire emergency." (National Research Council Canada, 2015, pp. 97.)

4) "Measures shall be taken to limit movement of smoke from a fire in a floor area below the lowest exit storey into upper storeys. (See Appendix B.)" (National Research Council Canada, 2015, pp. 3-97).

3.2.8. Mezzanines and Openings through Floor Assemblies

3.2.8.1 Application

1) "Except as permitted by Article 3.2.8.2. and Sentence 3.3.4.2.(3), the portions of a floor area or mezzanine that do not terminate at an exterior wall, a firewall or a vertical shaft stall

a) terminate at a vertical fire separation having a fire-resistance rating not less than that required for the floor assembly and extending from the floor assembly to the underside of the floor or roof assembly above, or

b) be protected in conformance with the requirements of Articles 3.2.8.3. to 3.2.8.9." (National Research Council Canada, 2010, pp. 3-103.)

2) "The penetration of a floor assembly by an exit or a vertical service space shall conform to the requirements of Sections 3.4., 3.5. and 3.6." (National Research Council Canada, 2010, pp. 3-95).

3.2.8.3. Sprinklers

1) "A building containing an interconnected floor space shall be sprinklered throughout." (National Research Council Canada, 2010, pp. 3-95).

3.2.8.6. Draft Stops

1) "A draft stop shall be provided at each floor level within an interconnected floor space, immediately adjacent to and surrounding the opening, and shall be not less than 500mm deep measured from ceiling level down to the underside of the draft stop." (National Research Council Canada, 2015, pp. 3-104).

3.2.8.8. Mechanical Exhaust System

1) "A mechanical exhaust system shall be provided to remove air from an interconnected floor space at a rate of 4 air changes per hour. (See Appendix A.)" (National Research Council Canada, 2015, pp. 3-104).

2) "The mechanical exhaust system required by Sentence (1) shall be actuated by a switch located on the storey containing the entrance for firefighter access referred to in Articles 3.2.5.4. and 3.2.5.5. near the annunciator for the fire alarm system." (National Research Council Canada, 2015, pp. 3-104).

3.3.1.19. Transparent Doors and Panels

1) Except as permitted by Sentence (5), a glass or transparent door shall be designed and constructed so that the existence and position of the door is readily apparent, by attaching visually contrasting hardware, bars or other permanent fixtures to it. (National Research Council Canada, 2015, pp. 3-112).

2) The visibility of fully glazed transparent doors, sidelights and panels shall be enhanced through the inclusion of mullions, markings or other elements that

a) are visually contrasting,
b) are at least 50 mm high,
c) extend the full width of the door, sidelight or panel, and
d) are located between 1 350 mm and 1 500 mm above the floor. (National Research Council Canada, 2015, pp. 3-112).

3) A glass door shall be constructed of
a) laminated or tempered safety glass conforming to CAN/CGSB-12.1-M, "Tempered or Laminated Safety Glass," or
b) wired glass conforming to CAN/CGSB-12.11-M, "Wired Safety Glass." (National Research Council Canada, 2015, pp. 3-112).

4) Except as permitted by Sentence (5), transparent panels used in an access to exit that, because of their physical configuration or design, could be mistaken as a means of egress shall be made inaccessible by barriers or railings. (National Research Council Canada, 2015, pp. 3-112).

5) Sliding glass partitions that separate a public corridor from an adjacent occupancy and that are open during normal working hours need not conform to Sentences (1) and (4), provided the partitions are suitably marked in conformance with Sentence (2) to indicate their existence and position. (National Research Council Canada, 2015, pp. 3-112).

6) Where vision glass is provided in doors or transparent sidelights, the lowest edge of the glass shall be no higher than 900 mm above floor level. 7) Glass in doors and in sidelights that could be mistaken for doors, within or at the entrances to dwelling units and in public areas, shall conform to the requirements of Article 9.6.1.4. 8) A window in a public area that extends to less than 1 000 mm above the floor and is located above the second storey in a building of residential occupancy, shall be protected by a barrier or railing to not less than 1 070 mm above the floor, or the window shall be non-openable and designed to withstand the lateral design loads for balcony guards required by Article 4.1.5.14. (National Research Council Canada, 2015, pp. 3-112).

3.3.2.13. Libraries

1) Except as permitted by Sentence (2), a library book storage room that is not normally accessible to the public shall be separated from the remainder of the building by a fire separation with a fire-resistance rating not less than 2 h if it
a) is more than 250 m2 in area, or
b) contains book stacks that
i) aremore than 10mhigh, or
ii) penetrate more than one floor assembly. (National Research Council Canada, 2015, pp. 3-118).

2) The fire separation required by Sentence (1) is not required if the book storage room is sprinklered.

3) Open book shelves are permitted above and below a mezzanine floor in a library building provided the height of the shelves is not more than 2.1 m but not more than 75% of the floor-to-ceiling height of the space above or below the mezzanine floor assembly. (National Research Council Canada, 2015, pp. 3-118).

3.4 Exits

3.4.2 Number and Location of Exits from Floor Areas

3.4.2.1 Minimum Number of Exits:

1) Except as permitted by Sentences (2) to (4), every floor area intended for occupancy shall be served by at least 2 exits.

2) A floor area in a building not more than 2 storeys in building height, is permitted to be served by one exit provided the total occupant load served by the exit is not more than 60, and
a) in a floor area that is not sprinklered throughout, the floor area and the travel distance are not

more than the values in Table 3.4.2.1.-A, or

b) in a floor area that is sprinklered throughout

i) the travel distance is not more than 25 m, and

ii) the floor area is not more than the value in Table 3.4.2.1.-B. (National Research Council Canada, 2015, pp. 3-129).

3) Except as permitted by Sentence (4), if Sentence (2) permits a single exit from a floor area classified as Group B or Group C occupancy, the exit shall be an exterior doorway not more than 1.5 m above adjacent ground level. (National Research Council Canada, 2015, pp. 3-130).

5) Exits are not required directly from rooftop enclosures that are provided with access to exits in conformance with Sentences 3.3.1.3.(5) and (6)(National Research Council Canada, 2015, pp. 3-130).

3.4.2.5 Location of Exits:

1) Except as permitted by Sentences (2) and 3.3.2.5.(6), If more than one exit is required from a floor area, the exits shall be located so that the travel distance to at least one exits shall be not more than 30m in an assembly occupancy as per 3.4.2.5(f). (National Research Council Canada, 2015, pp. 3-131).

3.7 Health Requirements

3.7.2.2 Water Closets

The number of water closets required for assembly occupancies shall conform to Table 3.7.2.2. - A.

Level 1: 223 Males, 5

223 Females 9 = 14 total

Level 2: 27 Males 1,

27 Females, 2 = 3 total (UTRs)

3.7.2.3 Lavatories

1) At least one lavatory shall be provided in a room containing one or 2 water closets or urinals, and at least one additional lavatory shall be provided for each additional 2 water closets or urinals. (National Research Council Canada, 2015, pp. 3-159).

3.8 Accessibility

3.8.3.2 Barrier Free Path of Travel:

1) The unobstructed width of a barrier free path of travel shall be not less than 1100mm as per 3.8.1.3(1). (National Research Council Canada, 2015, pp. 3-165).

3.8.3.11. Water-Closet Stalls

1) Water-closet stalls and enclosures required by Sentence 3.8.2.8.(5) shall

a) be not less than 1 500 mm wide by 1 500 mm deep,

b) have a clear floor space of 1 500 mm by 1 500 mm in front of the accessible stall,

c) be equipped with a door that

i) can be latched from the inside with a mechanism conforming to Clause 3.8.3.8.(1)(b),

ii) is aligned with either the transfer space adjacent to the water closet or with a clear floor space not less than 1 500 mm by 1 500 mm within the stall,

iii) provides a clear opening not less than 850 mm wide when it is open,

iv) is self-closing so that, when at rest, the door is ajar by no more than 50 mm beyond

the jamb,

v) swings outward, unless there is sufficient floor space within the stall for the door to swing inward in addition to a clear floor space of at least 800 mm by 1 350 mm (see Note A-3.8.3.11.(1)(c)(v)),

vi) where the door swings outward, is provided with a horizontal, D-shaped, visually contrasting door pull not less than 140 mm long located on the inside such that its midpoint is 200 mm to 300 mm from the hinged side of the door and 800 mm to 1 000 mm above the floor (see Note A-3.8.3.11.(1)(c)(vi)), and

vii) is provided with a horizontal, D-shaped, visually contrasting door pull not less than 140 mm long located on the outside such that its midpoint is 120 mm to 220 mm from the latch side and 800 mm to 1 000 mm above the floor,

d) have a water closet located so that the distance between the centre line of the fixture and the wall on one side is 460 mm to 480 mm,

e) be equipped with an L-shaped grab bar that

i) is mounted on the side wall closest to the water closet,

ii) has horizontal and vertical components not less than 760 mm long mounted with the horizontal component 750 mm to 850 mm above the floor and the vertical component 150 mm in front of the water closet (see Note A-3.8.3.11.(1)(e)(ii)), and

iii) complies with Article 3.7.2.8.,

f) be equipped with either one grab bar at least 600 mm long and centred over the water closet, or two grab bars at least 300 mm long and located either side of the flush valve, that

i) conform to Article 3.7.2.8.,

ii) are mounted on the rear wall, and

iii) are mounted at the same height as the grab bar on the side wall or 100 mm above the top of the attached water tank, if applicable,

g) be equipped with a coat hook mounted not more than 1 200 mm above the floor on a side wall and projecting not more than 50 mm from the wall, and

h) be equipped with a toilet paper dispenser mounted on the side wall closest to the water closet such that

i) the bottom of the dispenser is 600 mm to 800 mm above the floor, and

ii) the closest edge of the dispenser is 300 mm from the front of the water closet.

(National Research Council Canada, 2015, pp. 3-168-169).

3.8.3.12. Universal Washrooms

(See Note A-3.8.3.12.)

1) A universal washroom shall

a) be served by a barrier-free path of travel,

b) have a door complying with Article 3.8.3.6. that

i) has a latch-operating mechanism located 900 mm to 1 000 mm above the floor that complies with Clause 3.8.3.8.(1)(b) and is capable of being locked from the inside, and released from the outside in case of emergency, and

ii) if it is an outward swinging door that is not self-closing, has a door pull not less than 140 mm long located on the inside so that its midpoint is not less than 200 mm and not more than 300 mm from the hinged side of the door and not less than 900 mm and not more than 1 000 mm above the floor (see Note A-3.8.3.11.(1)(c)(vi)),

c) have one lavatory conforming to Article 3.8.3.15.,

d) have one water closet conforming to Article 3.8.3.13. and Clause 3.8.3.11.(1)(d), with a clear floor space at least 900 mm wide that is parallel and adjacent to the open side of the water closet,

e) have grab bars conforming to Clauses 3.8.3.11.(1)(e) and (f),

f) have a coat hook conforming to Clause 3.8.3.11.(1)(g),

g) have a toilet paper dispenser conforming to Clause 3.8.3.11.(1)(h), h) unless a counter is provided, have a shelf located not more than 1 200 mm above the floor, and

i) be designed to permit a wheelchair to turn in an open space not less than 1 500 mm in diameter. (National Research Council Canada, 2015, pp. 3-169-170).

3.8.3.13. Water Closets

1) A water closet for a person with physical disabilities shall

a) be equipped with a seat located 430 mm to 460 mm above the floor,

b) flush automatically or be equipped with a flushing control that

i) is located 500 mm to 900 mm above the floor,

ii) is located no more than 350 mm from the transfer side, and

iii) complies with Clause 3.8.3.8.(1)(b),

c) be equipped with a seat lid or other back support, and

d) where it has a tank, have a securely attached tank top. (National Research Council Canada, 2015, pp. 3-170).

3.8.3.14. Urinals

1) Urinals described in Sentence 3.8.2.8.(6) shall

a) be wall-mounted, with the rim located not more than 430 mm above the floor,

b) be adjacent to an accessible route,

c) have a clear width of approach of 800 mm centred on the urinal and unobstructed by privacy screens,

d) have no step in front of it,

e) have a flush control that

i) is automatic, or

ii) complies with Clause 3.8.3.8.(1)(b) and is located 900 mm to 1 100 mm above the floor, and

f) have a vertically mounted grab bar installed on each side that

i) complies with Article 3.7.2.8.,

ii) is not less than 600 mm long, with its centre line 1 000 mm above the floor, and

iii) is located not more than 380 mm from the centre line of the urinal. (National Research Council Canada, 2015, pp. 3-170).