

RAIC 690 THESIS

ONE DOOR: COMMUNITY MENTAL HEALTH CENTRE & TRANSITIONAL LIVING FACILITY

This proposal is submitted in partial fulfillment of the requirements for the Professional Diploma in Architecture with the Royal Architectural Institute of Canada Syllabus Program.

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DEDICATION:

To my mother,

Your unwavering support and belief in me have been my greatest source of strength. Your pride in my achievements has been my inspiration to keep pushing forward, even when the path seems difficult. This work is dedicated to you with all my love.

To my husband,

Your steadfast love, endless patience, and constant support have made this journey possible. You have been my rock, my confidant, and my greatest source of strength. This work is a testament to your belief in me.

ACKNOWLEDGMENT:

I would like to express my deepest gratitude to my mentors, Donald Ardiel and Tom Tillman. Your guidance, wisdom, and unwavering support have been invaluable throughout this journey. I am truly fortunate to have had the opportunity to learn from you, and am grateful for the time, energy, and dedication you invested in my success.

IN MEMORY:

In loving memory of Gerald Gallacher,

As my mentor in the Syllabus program for 10 years, Gerald's dedication to my growth left an indelible mark on my life. I am forever grateful for the time we shared and for the invaluable lessons you imparted.

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Take a quick drive through London's downtown and it is clear that we are in the grips of a mental health and addictions crisis. While the cost to society is growing at an estimated \$51 billion economic burden in Canada each year (Smetanin, 2011), the human cost is even greater with opioid overdoses accounting for more deaths than car accidents (Belzak, 2018), and an average of 11 suicides each day (Statistics Canada, 2020).

As mental health issues continue to impact a significant proportion of the population, an architectural response that prioritizes the design of spaces to improve the mental health outcomes of individuals can highlight the potential for architecture to contribute to a more holistic approach to mental health care.

Recognising that architecture on its own cannot create wholesale social change, an architect, in concert with mental health care professionals, can use their unique skillset to develop new and useful models to address mental health and addiction challenges. An architect can create new, extraordinary environments that meet the unique needs of an under-represented population while helping to address systemic issues in the current health care system. Focusing specifically on a solution to the mental health care gridlock within both the acute institutionalized and non-acute community care based mental health care systems, my thesis will identify why the current mental health care system has been unable to respond to ongoing mental health issues and will propose a new architectural focused, holistic response to mental health care.

Part 1 will examine the current mental health care response to acute care mental health patients in London, Ontario. This chapter will begin by looking at the steps a person who is facing a mental health or addiction crisis must take in order to receive care, as well as the many hurdles they must overcome in the mental health care system. It will continue by defining the Alternate Level of Care designation while examining the numerous categories of mental health and addictions, including which of these is more likely to require a high level of continued support and/or lead to a Psychiatric Alternate Level of Care designation.

Part 2 reviews the history of institutionalization within Canada and its outcomes. Beginning in the 1850s and continuing until the advent of deinstitutionalization in the 1960s, this chapter will examine how a program that started with good intentions eventually led to the lack of care, inhumane conditions, and stigmatization of an entire populace. Continuing into the early years of deinstitutionalization and community care from the 1960s – 2000s we will examine both past and present mental health care policies and whether or not they were successful.

Part 3 takes a closer look at the current community mental health care supports provided in London, Ontario. Expanding on Part 1, this chapter will examine how community mental health care supports are organised and utilized by clients while identifying issues and shortcomings in their delivery. Community mental health care was intended to provide services within the community to increase access to both programs and health professionals; however, the delivery of these programs can provide their own obstacles to clients. An emphasis on preventative measures, including early intervention, education and socialization can decrease the likelihood of acute mental health care relapses, yet special attention must be made to address clients who have a higher level of mental health deterioration (McGorry et al., 2008).

Part 4 foresees a new vision for the future of mental health care. By combining the information provided in previous chapters I will propose a new, architecturally focused response to mental health care. The proposed built form will provide a mental health focused community centre for scheduled or drop-in programs along with a transitional living facility for those no longer requiring the full support of hospital resources. A mix of room layouts will provide options for permanent, semi-permanent or occasional office space along with private and semi-private group meeting spaces. The building design will incorporate the evidence-based design architectural precedents described in Chapter 3 to improve mental health outcomes and will focus on a connection to nature while promoting relaxation and well-being. By creating an environment that supports and enhances personal wellbeing, architecture can improve the mental well being of all building users while also increasing the accessibility of supportive programs within the built environment.

Part 5 outlines a program for the development of a mental health focused community centre that responds to the issues outlined in the previous chapters. The program will outline the architectural based goals, objectives and quantitative requirements that will be used to create a building prototype.

Parts 6 through 11 use research and empirical evidence to inform the design of community mental health care buildings. The design guidelines explored in these chapters create a new building typology to support the well being of those struggling with mental illness.

Part 12 explores alternate scenarios that may be encountered when applying the proposed mental health community centre typology to different locations or populations. How do different designs maintain the proposed typology while also ensuring integration into surrounding site characteristics.

By the end of the document, readers will foresee a future for mental health care with 24/7 access to community mental health centres that can provide mental health services and accommodations for those with severe, complex, and persistent mental health challenges outside of a hospital setting, before their situations become dire. By applying evidence based architectural design concepts to create an inclusive mental health care facility, we can not only create a space for people to receive care, but also provide a retreat from daily stressors and a safe location for conversations with peers.

Examining the current social landscape both in London and across Canada, it doesn't take long to recognize that one of the largest issues impacting our society is mental health and addiction challenges. But with the number of people suffering from mental health and addiction challenges growing at an alarming rate, and mental health supports stretched to their limits, it can be hard for someone having a mental health crisis to find the appropriate care.

To understand mental health concerns is to recognize that it is not a condition that can be cured but can only be treated in such a way as to reduce symptoms and/or reoccurrence. So how exactly are we treating mental health patients? Let's imagine you are one of the one in five Canadians who experience a mental illness in Canada each year (Smetanin, 2011). For non-acute symptoms, there are many different treatment options offered by phone, online and in-person, and by many different organisations with each tailored to different age ranges, cultures, ethnicities and even employment categories. But it is also this abundance of treatment options that make it difficult to determine if you require a counsellor, social worker, therapist, psychologist, or psychiatrist, while also establishing what would be the best fit for your circumstances. Family doctors and community agencies offer mental health assessments to help diagnose mental health issues and identify services that could be helpful, but waitlists are long, with the Canadian Mental Health Association noting they are "currently experiencing a high referral volume, and therefore, it may take them longer to contact you" (Getting Started, 2023). Although improvements are being made to the current mental health care system to try and reduce wait times, those who have non-severe symptoms and don't require immediate care are waiting much longer than evidence suggests is best practice (Wait Times, 2020). But even worse are the wait times for acute mental health care.

The current mental health support system in London is organised to admit anyone having a mental health crisis to the emergency department at the Victoria Campus of the London Health Sciences Centre. Once admitted, patients who are in the midst of a crisis, which can present as mood swings, agitation, abusive behaviour, paranoia, anxiety, depression, self-harm or confusion, face wait times for mental health support of up to six days (Ennett, 2018). When I spoke to the Director of the Mental Health and Addictions Program at the London Health Sciences Centre on an average Wednesday afternoon in May 2022, they noted there were 22 mental health patients waiting in the emergency room for one of four emergency mental health beds.

If the patient is able to wait, they are assessed and either admitted to the Parkwood Institute of St. Joseph's Health Care London, which deals with complex and long-term mental health care cases, or are released back into the network of community support services. But with the length of stay at Parkwood an average of 30 to 50 days, with half of all patients staying 90 days or longer, and a third of patients occupying beds for more than a year, openings for new patients aren't readily available (Butler, 2020). This situation results in the majority of people having a mental health episode unable to secure a bed within the Parkwood Institute Mental Health Care Building and being returned to the community with little to no support and community services that can be hard to access (Children's, 2020).

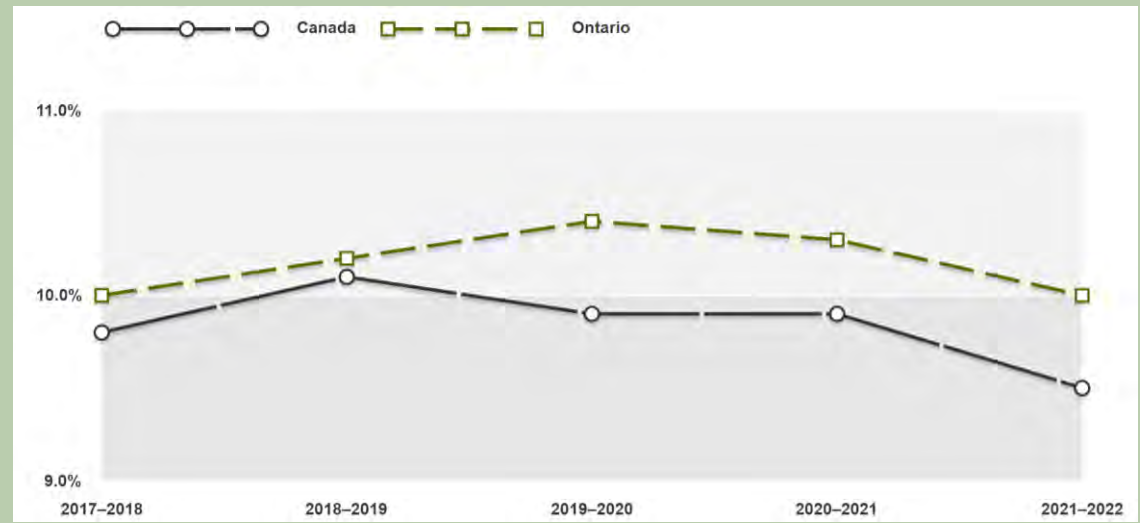


Fig.1: 10% of individuals in Ontario presenting to an emergency room or urgent care centre for help with mental health or substance use had four or more visits each year.

Further hindering the lack of accessible mental health care beds are patients classified as “psychiatric alternate level of care” (ALC). The term is applied to patients who have reached a stage where no further medical treatment is going to improve their situation and who need to be discharged to an environment of continued support and supervision. Although the proportion of ALC designated patients is relatively low compared to all mental health and addictions admissions, the number of ALC days that accrue over time is expensive at nearly seven times the cost of supportive housing (AMHO, 2018). With 300 to 400 mental health beds in Ontario occupied by ALC patients at any given time (Little, 2015) and with 60% of ALC stays longer than 90 days (Butterill et al., 2009), the issue quickly becomes costly and disruptive to the transitioning of patients out of hospital care. But with few facilities supporting people with complex mental health challenges and those that do having extended wait times, ALC patients end up staying in mental health hospitals for longer than required which effectively prevents access to care for other users.

Psychiatric ALC patients typically have complex health and social needs that make the transition to community living difficult without a high-level support system. ALC patients are also more likely to have psychotic disorders, problematic behaviour, difficulty with activities of daily living and a co-occurring substance use disorder (AMHO, 2018). According to a Waiting List Analysis completed in March 2018, nearly 60% of applicants (4,431 people) on the supportive housing waitlist had been waiting for two or more years, and the top 10% had been waiting 4.5 years or longer (Sirotych et al., 2018). In addition, it was noted that among applicants who were declined by housing providers, nearly 40 percent were identified as having support needs too high for the provider to meet (Sirotych et al., 2018).

Addressing alternate level of care challenges and ensuring patients have easy and timely access to supportive housing and community services requires a new model of care. One that provides mental health services and accommodations for those with complex continuing care mental health challenges outside of a hospital setting.

How does the word “asylum” which denotes protection, shelter, support, retreat, and sanctuary come to have a negative connotation? How does a spacious building with vaulted ceilings, large windows and sprawling grounds with luscious gardens become a place nobody wants to visit? Although the relocation of the mentally ill to asylums began with good intentions to provide better housing and support than what they were receiving in the community, it didn’t take long before patient care declined, and the asylums became a form of prison.

The pre-institutional era of mental illness prior to the 1850s was a time of neglect and fear. Most people with mental illness were cared for by family members and kept away from the general public. But those without family support were homeless, sent to jail or lived in poor houses. As cities grew, so did the number of mentally ill people due in part to a breakdown of social networks, increased stress, inequality, and higher rates of substance abuse. Citizens grew concerned with the number of mentally ill people roaming the streets and began to view them as a threat to public safety. This led to the creation of asylums which were to create a safe setting for the physical and spiritual care of the mentally ill.

**“The asylum was envisioned as a quiet, idyllic home where those with mental illness could be cured”
(Rosenblatt, 1984).**

Starting in the mid-1800s, the construction of asylums began in New Brunswick and quickly branched out to all other provinces. The first asylum in Ontario opened in 1841 at the site of what is now the Queen Street campus of the Centre for Addictions and Mental Health in Toronto. By 1891 there were three more asylums operating in Ontario and what was meant to be a peaceful retreat for the mentally ill quickly turned into campus’ that were overpopulated, understaffed, and where patients were segregated and mistreated (Hincks, 1850).

The early years of institutionalization began in earnest with a care-based philosophy. Restraint and coercion were to be minimized while routines of work and leisure were meant to occupy the mentally ill and ease their burdens. By all accounts, the activists who pushed for the treatment of the mentally ill population in institutions succeeded in creating a place of care and compassion. Institutionalization also eased the burden for a lot of families who no longer had to single handedly care for a mentally ill family member. However, institutionalization also served to hide the issue of mental illness from the community while creating negative beliefs and attitudes about mental health that persist to this day. The resulting stigma has perpetuated the false beliefs that people with mental illness are violent, lack intelligence, cannot be predictable or trusted, and are to blame for their illness or addiction. To this day, a diagnosis of mental illness all too often leads to discrimination from family, friends, employers, landlords, and on and on. In fact, a Toronto study involving young adults following their first episode of psychosis found that stigma was the main reason given for ignoring, denying, or hiding their experience (Boydell, Gladstone, and Volpe, 2006, 57).

**“The custodial, institution-based model of care for those with mental illness contributed to their stigmatization by segregation”
(Arboleda-Florez 2003, 646).**

Starting in the 1960s, new drug-based treatments for mental health were introduced. With the advent of oral medications for both psychosis and depression, it was believed that patients could be treated on an outpatient basis in a community setting. But early discussions of deinstitutionalization were met with fear from the public about re-introducing the mentally ill to the community. In addition, many smaller communities raised concerns regarding the number of jobs that would be lost as the mental institutions made up a large part of the community employment. And even physicians were unlikely to support community-based services that could threaten their existing privileges, as their payment structure was solely based on hospital services (Mulvale, Abelson, and Goering 2007, 379).

But no matter the arguments for maintaining the asylums, deinstitutionalization became inevitable when mental institutions became aging, outdated and in poor repair. With the introduction of new oral psychiatric drugs, existing treatments of electroconvulsive therapy, insulin coma and psychotherapy, all of which had questionable results, became obsolete and the asylums lacked any effective physical method of treating psychotic disorders. Combine that with growing post World War two civil rights movements that fought for the freedoms of all individuals, including those in mental institutions, and it was believed that institutionalization was no longer the best solution for the mentally ill. Instead, arguments were made for the relocation of patients to a community setting and that the reinstatement of their liberties and civil rights would have therapeutic benefits.

The post-institutional era of mental illness began in the 1960s and continued through the 70s and 80s. Psychiatric hospitals began downsizing into community-based facilities which were to be followed by new admissions being directed to community facilities and the establishment of community-based programs and support services. However, what was intended wasn't necessarily achieved. For many former hospital residents, the new system meant either abandonment, demonstrated by the increasing number of homeless mentally ill people; "trans-institutionalization": living in grim institution-like conditions such as those found in the large psychiatric boarding homes; or a return to family who suddenly had to cope with an enormous burden of care but with very limited support (Davis, 2014). The over optimism of the 1960s quickly led to a fragmented support system that continued through the 70s and 80s.

**“The contraction of traditional institutional psychiatric care outpaced the expansion of community-based services and supports”
(Livingston, Nicolls, and Brink, 2011).**

Improvements continued to be made to the community-based programs throughout the period of deinstitutionalization and it has been noted that patients released in one of the last waves pre-closure were less prone to encounter consequences such as jail or frequent hospitalization compared to those released in the earlier waves. (Davis, 2014). In addition, the Canadian government has put forth numerous reports directed at mental health care reform (1993 Putting People First: The Reform of Mental Health Services in Ontario, 1999 Making it Happen: Implementation Plan for Mental Health Reform), strengthening the mental health system (1999 Building a Community Mental Health System in Ontario, 2006 Out of the Shadows at Last: Transforming Mental Health, Mental Illness and Addiction Services in Canada) and invested a 52% increase to the community mental health and addiction system in 2004 along with drug treatment courts in 2000.

In 2014, St. Joseph's Health Care completed a 17-year program to transform the delivery of mental healthcare services as mandated by Ontario's Health Services Restructuring Commission (HSRC). The HSRC called for the transfer of management of the London and St. Thomas Psychiatric Hospitals to St. Joseph's Health Care London in February 2001, the transfer and/or closure of all mental health beds, and investment in building community-based services to enable persons with serious mental illnesses to achieve successful community living (Velji, 2016).

Lastly, the HSRC directed the building of the St. Joseph Mental Health Care Building for acute mental illnesses, and the Southwest Centre for Forensic Mental Health Care devoted to caring for people with mental illness who would have otherwise been incarcerated in the criminal justice system. The Southwest Local Health Integration Network (LHIN) has also made funding investments to strengthen community based mental health and addiction services including a \$7.8 million investment to provide 90 new community-based staffing positions in 2016 (Velji, 2016).

Overall, deinstitutionalization was successful in reducing the number of people living in institutions and ad/awareness campaigns have helped to reduce the stigma associated with mental illness. However, many patients were left in impoverished circumstances with treatment services that were inadequate. To this day people speak about the failure of deinstitutionalization and the perception of negligence has in some quarters fueled a cynical attitude towards future reforms in mental health services (Davis, 2014). In their 2008 Article "Is Deinstitutionalization a 'Failed Experiment'? The Ethics of Re-institutionalization", Morrow, Dagg and Pederson note:

In the minds of many people, the focus of medical treatment, especially for those who are severely ill, is the hospital... When confronted with the sometimes unusual behavior of a person with a mental illness, the immediate assumption made is that the individual concerned must need care in a hospital, and that their presence outside of the hospital is evidence of some kind of failure of delivery of health services... Hospitals provide a reassuring presence that is both highly visible and extremely tangible, and may for many epitomize care. It is hard then to understand that there are illnesses that may worsen in hospital or may be severe and yet not require hospital care, as is often the case with mental illnesses...

To repeat my opening statement, "examining the current social landscape both in London and across Canada, it doesn't take long to recognize that one of the largest issues impacting our society is mental health and addiction challenges", it's clear that although deinstitutionalization has improved the overall mental health outcomes for previously institutionalized patients, there are still significant shortcomings in community mental health care that will be reviewed further in Part 3.

Imagine having the most amazing day and not having anyone to share it with, or the worst day of your life and not having someone to help you. Imagine having a mental breakdown and there not being anyone in your life to call for support. You go to your doctor for help, are referred to a psychiatrist and are left alone for 4 months, during the hardest time of your life, before you are finally seen by a psychiatrist. Numerous tele-health programs exist, and the person on the end of the phone helps, but once the phone call ends you are left feeling alone again with thoughts of depression and anxiety rising.

Numerous worldwide health agencies have declared that both physical and mental health are equally important components of a person's overall health and well being. So why then, does London, Ontario have three major hospitals with 1,423 beds for physical care but only one mental health care building with 156 beds? Furthermore, why are there 18 community recreation centres but zero community mental health centres?

As was discussed in Part 1, the current focus of hospitalized mental health care is a response to acute symptoms focusing on the prevention of patient harm. Patients are placed in isolation and medicated while under supervision. Once the acute episode has been resolved, the patient is treated for a short period of time before being released into community care programs. This practice has come to be known as a treat and release system as the patient's long-term needs are rarely addressed. Once the patient is released into community care, hospital psychiatrists are no longer involved in the patient's care so they begin a search for mental health professionals who are both accepting new patients and are a good fit for their personality. But with 1 in 10 Canadians waiting 4 months or more before receiving community mental health counselling, most patients feel they have no other option than to remain with the psychiatrist to which they are assigned, even if they feel the care they are receiving is sub-par (Canadian Institute for Health Information, 2021). Eventually, the patient leaves the care of their psychiatrist and the cycle of mental health care decline leading to re-hospitalization continues.

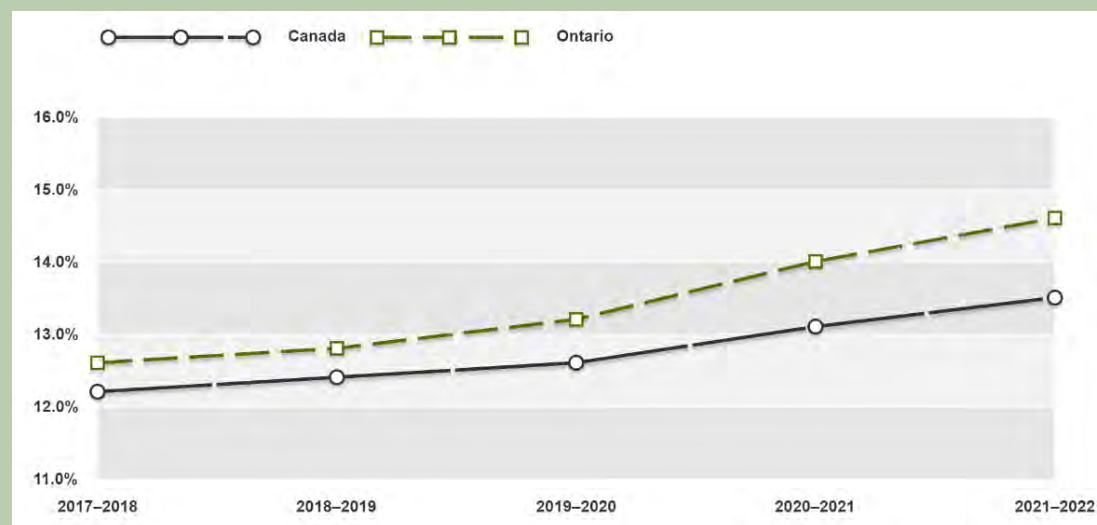


Fig.2 reveals that 14.5% of mental health and addictions patients admitted to a hospital in Ontario have had 3 or more separate episodes of care.

Although there are many reasons why a person with mental illness will be re-admitted to a hospital, the following chapter will examine three of the more common reasons: lack of social supports, homelessness & addictions, and complex mental health issues, along with the current community mental health care response and outcomes.

Social Supports:

In 2007, a study found that 13% of people with mental health and addiction needs presenting to the Emergency Department were seeking care for socio-structural stressors such as housing insecurity, financial strain, and legal/ justice system concerns (Coristine, 2007). More often than not, mental health patients lack social supports in the form of meaningful relationships with family, friends or community members. Whether due to burnout, the financial burden, a loss of hope, or many other reasons, their support system distances themselves from the mental health issues and the patient ends up losing a network of support that is so vital in providing psychological, physical and financial help. With social factors paramount in creating, maintaining and promoting health, a social network plays a major role in the incidence, prevalence and persistence of mental health. (Cokrin, 1997). In short, people need other people. They need the sense of belonging, care, support, knowledge, empathy, insight, and help that comes from friends, family, co-workers, neighbours and support workers.

Peer support and educational groups are offered by local services including the Canadian Mental Health Association, Connect for Mental Health Inc., etc. but these services are typically held Monday to Friday between 8 and 5 giving patients the choice between trying to maintain a job and income or improving their mental health.

Program Name	Day Offered	Time Offered
Drop-In	M, T, Th, F	10am-3pm
Clearing the Clutter (Hoarding)	T, W	10-12am, 1:20-2:30pm
Rent Smart	W, Th	1-3pm, 1:30-3:30pm
Women's Support	F	9:30-11:30am
Spanish Parent Support Group	F	1-3pm
Mood Walks	M	6-7pm
Feel the Beat	Th	4:30-6pm
Literary Circle	M	3-4pm
Letters from the Heart	M	3-4pm
Art Group	W	1-3pm
Breaking Free (Substance Use)	F	2-4pm
Forging Ahead (Substance Use)	M	2-3:30pm
Harm Reduction 101	T, Fri	10-11:30am, 9:30-11:30
Into to Wrap (Recovery)	Th	10-11:30am
Let's Talk About...Substance Use	W	2-3:30pm
Safe (Self Abuse Finally Ends)	W	6-7:30pm

Shower Hour	M	10-11:30am
Wecovery	Tu	12-1pm
Program Name	Day Offered	Time Offered
Wellness Social	M, Th	1-3pm, 2-3pm
Anxiety Management	M	11-12:30am
Calming The Angry Waves	M	2:30-4:30pm
Compassionate Communication	Fr	11:30-1:30pm
Connecting to the Moment	T	11:30-1:30pm
Emotional Intelligence	F	2:30-4:30pm
Emotional Regulation	Th	10-11am
Exploring Change	M	1-2:30pm
Coping Skills	T	1-2pm
Healthy Living	Th	1-2pm
Intersections (2SLGBTQIA+)	Th	2-3pm
Living Life to the Full (Autism Caregivers)	M	10:30-12am, 3:30-5pm
Mind Over Mood	W	9-11am
PAIR (Healthy Intimate Relationships)	Th	3-4:30pm
Sticks & Stones	W	3:30-4:30pm
Mindful Hour	F	11:30-1:00pm
Voices of Action	T	2:30-4pm

Fig.3 highlights the minimal programs offered by the Canadian Mental Health Association's winter programs outside of regular working hours.

With almost all primary health care and community based psychiatric care centres lacking 24-hour access, patients are directed to an already overloaded emergency department for non-acute issues. By providing a mental health focused community centre with an emphasis on education and socialization, and offered with expanded hours, we can decrease the likelihood of non-acute emergency room visits and acute mental health care relapses.

Homelessness & Addictions:

Current statistics note that 23% to 67% of homeless people have a co-occurring mental illness in Canada and more than 28% of people who were homeless for six months or more also had an addiction or substance abuse disorder (CAMH,2023). They are unable to find a bed at a shelter because of their substance abuse, but then turn to self medication with illicit substances to mitigate the emotional impacts of homelessness. The Homeless Hub notes that:

People with poor mental health are more susceptible to the three main factors that can lead to homelessness: poverty, disaffiliation, and personal vulnerability. Because they often lack the capacity to sustain employment, they have little income...loss of support leaves them fewer coping resources in times of trouble...homelessness, in turn, amplifies poor mental health. The stress of experiencing homelessness may exacerbate previous mental illness and encourage anxiety, fear, depression, sleeplessness, and substance abuse. (The Homeless Hub, n.d.)

Community based mental health services play a large role in preventing homelessness within the mental health population by providing housing outreach services. Similar to social support programs, if the housing outreach services were available on an extended hours basis they would be more accessible to mental health patients. In addition, by promoting a 'Housing First' policy, people with mental health issues can more readily focus on their mental health care and treatment routines instead of worrying about which shelter or doorway they are going to sleep in at night.

Complex Mental Illness:

Severe, complex and persistent mental illness are the most likely cause of a Psychiatric Alternate Level of Care designation. These patients could be schizophrenic and experience problems concentrating, thinking or communicating clearly with bouts of psychosis. They could also be dual-diagnosis patients who have both a mental illness and co-occurring developmental disability. But either way, a severe mental illness is treatable with the right supports, allowing a patient to be active and contribute to their community. Community based programs focus on education, problem resolution, medication management, counselling, and support with daily living, social skills, employment and activities. Patients can identify what triggers their episodes and learn to recognise the early warning signs of an episode in order to prevent a full relapse.

But community care falls short when patients are in need of immediate intensive services to help manage a psychotic episode. Assertive Community Treatment teams provide specialized intensive community-based services to those with severe, complex, and persistent mental illness, but the services are only available through the week during working hours. Access to 24-hour mental health care support outside of a hospital setting would allow patients to receive the additional support they require to transition through a psychotic episode without having to occupy space in a general medicine emergency department.

Case Studies:

There have been numerous attempts to address mental health issues across the world, each with varying levels of success. The most successful case study for community mental health care is in the City of Trieste, Italy. Recognised as demonstrating the world's best practice in community based mental health care by the World Health Organization, Trieste has outlawed the institutionalization of mental health patients and created community mental health centres that integrate housing, support, and employment services. However, the success of the Trieste mental health care model has not been without its issues. In 2007, due to political reforms, three community mental health centres were closed leaving only four centres for a population of 204,000 people, and other mental health centres with their daily open hours reduced from 24 to 12. The right-wing government continues to promote privatisation and the dismantling of what it considers to be left-wing psychiatry.

In the United States, the University of Southern California and Los Angeles County teamed up in 2022 to build a Restorative Care Village for those with mental illness, substance use disorders, homelessness and medical comorbidities. A four storey 96 bed recuperative care centre provides stable housing for those recently discharged from hospital and urgent care settings. In addition, four - three storey residential treatment buildings containing 64 beds act as a short-term alternative to hospitalization for mental health needs. The campus is to include on-site nursing support, health oversight, case management and connections to permanent housing supports. Although the supports will surely help those who utilize them, the restorative care village model responds to immediate mental health needs while failing to provide a continuum of care once patients leave the facility.



Fig.4: Aerial View of the USC/LAC Restorative Care Village by Cannon Design.



Fig.5: Exterior Rendering of Durham Modular Supportive Housing by Montgomery Sisam Architects Inc.

In Beaverton Ontario, the Region of Durham invested 25.2 million dollars to create a 38,000 square foot transitional housing facility for unhoused individuals. The 47 self contained bachelor suites are aimed at destigmatizing supportive housing and providing dignity to the residents. On-site access to mental health and addiction counselling, medical care, financial assistance, and support workers is available to help residents back on their feet. One side of the building is open to both residents and the public and includes the dining space, work rooms, meeting spaces and offices.

More locally, in February 2023 the City of London unveiled a new Whole of Community System Response to Health and Homelessness after three months of research with 70+ local organisations. Aimed at creating 12-15 hubs to house 25-30 people each in transitional, stabilization and crisis beds, the hubs would offer a 24/7 safe space with access to basic needs, health care, justice system services and housing supports. As of August 2024, the City of London's Community System Response has one hub under construction, aimed at youth that will provide 15 beds and 24/7 support along with access to basic needs and integration with the local hospital for outpatient support. The proposed Community System Response has considerable similarities to the recommendations of this thesis paper; however, the City of London has encountered a significant negative response from the community in response to several locations (cancelling one location/partnership) and continues to struggle with creating significant community partnerships to create & staff hubs. Without increased funding or incentives for additional mental health care supports, community support groups can only maintain the minimal support services that are currently offered, reacting to issues once they are a crisis instead of preventing them with proactive intervention.

- 47 SELF CONTAINED BACHELOR SUITES
- PUBLIC DINING, LOUNGE, WORK ROOMS, MEETING SPACES
- PRIVATE LOUNGE, LAUNDRY

- | | |
|-----------------------------|-----------------------|
| 1 READING ROOM | 11 INTAKE |
| 2 DINING ROOM | 12 FIRST AID |
| 3 KITCHEN & SERVERY | 13 STAFF LOUNGE |
| 4 DINING TERRACE | 14 LOUNGE |
| 5 MEETING | 15 MEN'S SUITE |
| 6 WASHROOM | 16 WOMEN'S SUITE |
| 7 ADMIN | 17 STAFF DESK |
| 8 SUPPORT ROOM | 18 BARRIER FREE SUITE |
| 9 MECHANICAL/
ELECTRICAL | 19 SUITE |
| 10 LAUNDRY | 20 ELEVATOR LOBBY |
| | 21 WINDOW SEAT |

- ADMIN/ SUPPORT SPACE

TYPICAL RESIDENTIAL FLOOR



GROUND FLOOR



Fig.6: Durham Modular Supportive Housing Floor Plans.

From coast to coast, there are no geographic, demographic, cultural or religious barriers to mental illness. It can affect anyone and everyone and to date there is no magic treatment or cure all. What is clear is that a continuum of care is required for individuals having mental health issues in order to receive ongoing and appropriate mental health care that includes prevention, early intervention, treatment and rehabilitation services.

To envision a renewed future for mental health care we need to begin by identifying the issues facing mental health care that have been identified in previous chapters and propose new solutions to the existing problems.

We started in Part 1 by identifying a lack of emergency care beds for mental health and addictions issues. London's main emergency room has 4 beds dedicated to mental health and substance abuse emergencies for a population of 515,000 people, of which 12.7% (65,405) report having a mental illness including depression, bipolar disorder, or mania (Statistics Canada, 2017). To alleviate the pressure of mental health and addiction patients presenting to the general hospital emergency department, the proposed building design will provide several short stay mental health beds for people who are in an immediate crisis. 24-hour staffing with a focus on violence and trauma response approaches to mental health care will support the patients in a relaxing setting. No more waiting 12 hours in a loud, uncomfortable, and overwhelming emergency department to be seen by a mental health professional.

Part 1 continued by identifying barriers to non-acute and acute mental health care supports. We identified Psychiatric Alternate Level of Care patients as those who no longer require the level of support provided in a hospital setting but remain there while on a multi-year waitlist for supportive housing. These patients are no longer in an acute stage of care but still require high level supports that are difficult to arrange and maintain outside of an institutional setting. In response to these challenges, the proposed building design will incorporate transitional housing facilities that will help fill the gap between hospitalization and supportive housing. The transitional housing facilities will provide structure, supervision and support for mental health and addictions while supporting life skills education when required. It is quite normal for a person with severe mental health issues to lack the knowledge of how to complete everyday tasks like making meals and doing laundry. By providing transitional housing facilities, the proposed design will make acute care beds available for those who require them the most, while also providing a safe and supportive temporary housing solution for Psychiatric Alternate Level of Care patients.

Part 2 examined the history of institutionalization and its affects on patients with mental illness. Although the institutionalization of mental health patients began with good intentions to provide both a physical and mental place of refuge, it quickly evolved into an overpopulated and understaffed setting of mistreatment where patients were stigmatized by their segregation from the healthy populace. Learning from past mistakes, the proposed design will include services that are inclusive for all people. Access to the building will be available for anyone who requires shelter, at any time of the day and programs will provide a spectrum of tools and services that can improve the day to day lives of a diverse range of users. By including people from all walks of life with minor to severe mental health issues, we create a space that is inclusive and makes talking about or dealing with mental illness something to be proud of. The stigma of mental illness is eliminated by acknowledging and celebrating people who actively work to maintain positive mental health.

In Part 3 we delved deeper into the community mental health care system where wait times for non-acute mental health care services, including assessments, are at an all time high. Patients wait up to 4 months to see a mental health professional that might not be the right fit for them, then wait another 4 months to see someone else, if even possible. In response to long wait times for mental health care, the proposed design will include services that are available without an appointment so patients can receive support for mental health issues while waiting for a more individualised appointment with a health care professional. Mental health care workers will split their hours between in building services, community-based services and shifts at the local mental health hospital. This will ensure the treatment of mental health patients continues from the hospital into the community as the mental health care team can follow up with each patient with no break in coverage.

Further in Part 3, it was noted that a lack of extended support and service hours not only hinders a patient's ability to maintain both a career and their mental health, but also increases the use of emergency departments for non-emergency visits including housing or financial issues. To provide full access to care for people who are both working and un-employed, the proposed design will include extended hour, including weekend, mental health programs and 24-hour acute care services. The mental health team will be educated in social support issues so they can help mental health patients overcome social-structural stressors such as housing, financial issues, and the legal system.

Part 3 continued by discussing homelessness, addictions, and severe mental health issues. The proposed design aims to alleviate homelessness and addictions issues by providing housing outreach services and advocating for a 'Housing First' policy. Access to community-based programs focused on problem resolution, medication management, counselling, and support with daily living, social skills, employment, and activities can help complex mental health patients identify what triggers their episodes and learn to recognise the early warning signs of an episode in order to prevent a full relapse. Access to short stay mental health beds will allow patients who have identified a risk of relapse a place to stay and receive intensive community-based support.

Finally, in order to create a renewed vision for mental health care you not only need to identify current issues in mental health care and architectural precedents for good mental health care design, but you must also have a framework for addressing the identified issues. In this case, the Anderson Model of Health Service Utilization will be applied to identify conditions that either facilitate or impede the utilization of health care services among the mentally ill. First developed in the 1960s, the Anderson Newman framework has gone through six iterations and was developed to study the factors leading to health service utilization, assess inequality in access to health services and to facilitate the policy-making process for equitable access to care and health services. (Chen, C. 2021).

The Anderson Model argues that an individual's access to and use of health services is a function of three factors:

1. Predisposing Factors: This includes any socio-cultural characteristics that exist prior to a individual's illness: Age, Gender, Education, Occupation, Ethnicity, Social networks and Culture. Attitude, values and knowledge towards the health care system.
2. Enabling Factors: The means and understanding of how to obtain care: Income, Insurance, a Family Doctor, Location/Ability to access services, Wait times, Extent and Quality of Social Relationships.
3. Need Factors: Perceived need can be described as "How people view their own general health and functional state, as well as how they experience symptoms of illness, pain and worries about their health and whether or not they judge their problems to be of sufficient importance and magnitude to seek professional help." (Anderson, 1995). Evaluated need represents a professional's judgement about an individual's health and their need for medical care.

The analysis of these three factors leads to two possible health behaviours: Personal Health Practices or the use of Health Services. For example, a person who has a negative image of the existing health care system, difficulty accessing available health services and who doesn't view their current mental health as concerning may choose to manage their mental health symptoms on their own. But if this same person had easy access to the health services and felt their need for mental health care was high enough, they may be more apt to utilize the provided health services.

Although some of the factors in The Anderson Model are out of an individual's control, there are some that can be addressed with new health care policies and practices to increase the likelihood that individuals utilize the provided health services.

- Change the public's attitude towards mental health care and the mental health care system. (Reduce the stigma surrounding mental health).
- Ensure mental health care is centralized and accessible to all.
- Eliminate wait times by increasing drop-in programs and providing 24/7 access to mental health care professionals.
- Encourage social interactions and relationships which may lead to an increased sense of perceived need.

Combine these suggestions with the recommendations from previous chapters,

- Increased transitional housing
- Employment Services
- Accountability
- Social Environment/ Relationships
- Medical Care (Virtual and On-site)
- Financial Assistance
- Rental & Tenant Support
- Life Skills Teaching/ Counselling
- Addictions Counselling

and a program for a new mental health care typology starts to unfold. A community based mental health care centre and transitional living facility.

If we truly wish to end the mental health and addiction issues that are rampant in our society than we must begin by recognising the issues and providing spaces that create a safe and supportive environment for individuals to access services and resources to manage their mental health conditions.

Introducing:

One Door: Community Mental Health Centre & Transitional Living Facilities

One Door: A single point of entry, an entrance that is seen, a threshold or transition between two spaces, two states of mind. A move from outside to inside, from cold to warmth, from sickness to health, from loneliness to connectedness. Such a simple concept, yet one that holds endless subtleties.

The One Door Community Mental Health Centres will provide therapeutically enriching environments offering 24/7 access to mental health supports. The building designs will incorporate a variety of architecturally designed spaces to encourage socialization and reduce the stigma of mental health care by supporting each other in a relaxed and informal setting. Group therapy and activity areas will foster discussion and collaboration to address mental health issues, while semi-private spaces will offer a safe space of refuge to reflect on mental health triggers before they escalate. Indoor and outdoor spaces will blend together creating a harmonious connection between the natural and built environment while creating a holistic healing environment that promotes mental health and well-being. Transitional living facilities will offer a space for those with chronic mental illness to receive the additional support they require to learn how to re-enter an independent living and community-based setting.

The culmination of the last four chapters has informed the following architectural based goals, as well as qualitative and quantitative requirements for the proposed building design.

Goals:

- Create a welcoming, accessible, inclusive environment that promotes a sense of comfort and safety for all individuals seeking mental health services.
- Incorporate a variety of spaces in different sizes and privacy levels that support a multitude of activities/ therapies.
- Promote socialization and a sense of community through the design of interior and exterior gathering spaces.
- Incorporate biophilic design and building strategies to enhance the intrinsic connection to natural spaces while supporting environmental sustainability.
- Provide transitional living facilities to support users with complex mental health issues re-enter the general population.
- Prioritize safety and security to ensure the well-being of all individuals using the community centre.

Qualitative Requirements:

Function:

- **Location:** Provide a centrally located, accessible building that is close to public transportation, green spaces and additional community resources.
- **Holistic:** Treatment focused on the whole person rather than symptoms. Physical, emotional, social and spiritual aspects of a person's life are all factors in their mental health and well being.
- **Wayfinding:** Provide simple connections to each programmatic element with clean and intuitive paths to reduce patient stress and anxiety.
- **Safety:** Enhanced space programming to ensure patients, visitors and staff are safe at all times.
- **Social Interaction:** The design will foster social interaction, such as open plan spaces and shared communal areas to improve mental health by promoting a sense of community and connection. By creating spaces that increase social interaction the building design can reduce feelings of isolation, promote positive emotions such as a sense of belonging, increase self-esteem, provide support from friends and peers, as well as enhance communication and social skills.
- **24/7 Support Services:**
 - Life Skills Education
 - Social Services Support
 - Problem Resolution
 - Medication Management
 - Counselling
 - Daily Living Supports
 - Dietary Support
 - Social Skills
 - Employment Services
 - Accountability
 - Addictions Support/ Counselling
 - Medical Care
 - Financial Assistance
 - Rental and Tenant Support
- **Sustainability:** Prioritize the protection and conservation of natural resources by reducing pollution, minimizing waste, preserving biodiversity and promoting sustainable land use practices.

Form:

- **Biophilic Design:** Create a space that fosters connections to nature through which we can improve mental health and well-being, enhance creativity and productivity, and promote environmental sustainability. By utilizing all three levels of engagement with nature: viewing nature, being in the presence of nature, and active participation in nature, the proposed building design will create a space that promotes mental and emotional well-being, helping to alleviate stress and anxiety while improving cognitive function.

- **Natural Light:** The use of large windows and skylights can create an environment that is not only aesthetically pleasing but also promotes mental health and well-being by regulating circadian rhythms, alleviating symptoms of depression and anxiety, and improving cognitive functions and productivity.
- **Acoustics:** Ensuring the proper acoustic treatment is applied in each programmatic space will minimize noise levels, enhance communication, promote privacy, and reduce distractions to create an environment that promotes relaxation, focus and productivity.
- **Indoor Air Quality:** The building location and orientation will be analysed to increase the amount of natural ventilation and light entering the building. Materials used in the building construction and interior design will be low-VOC to reduce the amount of harmful chemicals and pollutants in the air. A ventilation and filtration system will be carefully selected and designed, along with the size and placement of windows, to remove pollutants and control indoor air quality.
- **Finishes:** The design will emphasize the use of muted blue and green hues which have been associated with calmness and relaxation along with a reduction in stress and anxiety levels in healthcare settings. The design will also incorporate natural textures like wood and stone to expand on interior connections to nature which can have positive effects on mental health outcomes. In private living spaces, muted, dark finishes including wood reduce the visual connection to clinical atmospheres.

Quantitative Requirements:

Public Space: Spaces available for regular use by all community members.

- Biophilic Atrium/ Flex Space – TBD
 - An open, welcoming space incorporating natural elements such as plants, water, natural light and materials to promote connections with the natural environment. Blending of interior and exterior spaces creates a year-round communal space for social interaction and connectedness.
- Café + Seating – 1500sf
 - Active environment for conversations with peers incorporating both interior and exterior seating. Pay-it-forward purchasing system allows community members to purchase additional food and drink to be redeemed by those in need.
- Activity Room – 3000sf
 - Large room for various physical and mental activities. Emphasis on a flexible space to allow for programmatic changes as needs arise.
- Resource Room – 300sf
 - Space for quiet reading and reflection. A comfortable environment that minimizes noise and distractions.
- Reception – 200sf
 - A welcoming location for visitors to approach with questions. Open plan design creates a spacious, welcoming environment while providing a flexible workspace for staff.
- Meeting Rooms – 2 @ 150sf = 300sf
 2 @ 250 sf = 500sf
 1 @ 400sf
 - A mix of room sizes for small and medium group meetings/ support. Flexible space for numerous layouts of tables and chairs.
- Salon – 300sf
 - Geared to low-income households with an emphasis on overall health and hygiene.

- Laundry – 80sf
 - Residential washers and dryers for community use.
- Washrooms – 350sf
 - Non-gender specific washrooms to allow for inclusivity and dignity of all users.
- Universal Washrooms – 65sf
 - Large washroom space with full sized adult change table to provide accommodations for people with physical disabilities.
- Storage – 2 @ 100sf = 200sf
 - Space for storage of seasonal or program specific materials.
- Custodial – 60sf
 - Space for equipment and materials that allow for custodial maintenance.

Semi-Public Space: Spaces available for public use on an as needed/ appointment basis.

- Short Stay Overnight Beds – 4 @ 150sf = 600sf
 - Overnight accommodations for those experiences mental health issues that don't require the intensity of resources offered by a hospital. Available by both walk-in and emergency response referral.
- Showers – 2 @ 60sf = 120sf
 - Available for public use to maintain cleanliness and dignity to all who require it.
- Offices – 6 @ 150sf = 900sf
 - Flexible workspace for staff use in preparing or meeting with patients or community members.
- Meeting Room – 250sf
 - A meeting space for small group discussions.
- Staff Washrooms – 4 @ 40sf = 160sf
 - Non-gender specific washroom for staff use.
- Staff Break Room – 200sf
 - Place of respite removed from common areas. Quiet space with communal work areas.
- Storage – 100sf
 - Space for storage of seasonal or program specific materials.

Private Space: Spaces for use by transitional living residents only.

- Studio apartments – 12 @ 350sf each = 4,200sf.
 - Private rooms maintain a patient's dignity and sense of normalcy while also removing un-necessary questions regarding gender designations.
 - Emphasize patient autonomy, respect and privacy.
- Dining – 1000sf
 - Private dining space for transitional living residents only. Encourages social participation to help develop communication skills.

- Servery – 250sf
 - Small residential style servery for preparation of group meals. Staff chef teaches/ cooks one meal each day. Available 24/7 for residents to prepare additional snacks/ meals.
- Lounge – 400sf
 - Comfortable sitting area with tv/ games to encourage social interaction with other residents.
- Meeting Room – 250sf
 - A meeting space for small group discussions.
- Laundry – 80sf
 - Residential washers and dryers for resident use.
- Custodial – 60sf
 - Space for equipment and materials that allow for custodial maintenance.
- Storage
 - Space for storage of additional items to support the transitional living functions.

Service Space/ Misc.:

- Elevator – 75sf
 - Single elevator for multistorey access when required.
- Elevator Machine Room – 45sf
 - For elevator use.
- Stairs -2 @ 160sf each = 320sf
 - Safety requirement in case of emergency.
- Mechanical Room – 215sf
 - Mechanical systems will emphasize the reduction of energy consumption, minimizing environmental impact and increasing sustainability. Advanced technologies and innovative approaches will improve the efficiency and performance of building systems including heating, ventilation, air conditioning, and water management.
- Electrical/ IT Room – 150sf
 - Electrical systems will emphasize the reduction of energy consumption, minimizing environmental impact and increasing sustainability. Advanced technologies and innovative approaches will improve the efficiency and performance of electrical systems including lighting, building automation systems, renewable energy systems and energy storage systems.
- Garbage Room – 150sf
 - Waste management will be designed to reduce environmental impact of waste disposal by incorporating recycling and composting stations and waste reduction strategies.

Exterior Space:

- Liminal Space – TBD
 - Physically - a transitional space between exterior and interior, a doorway, walkway, portico, etc.

- Psychologically – a transitional moment in life, a spiritual awakening, a space of transformation and growth, where individuals have the opportunity to reflect, learn, and develop new skills or identities.
 - Careful design consideration must be made as it can also be a space of discomfort, anxiety, and vulnerability, as individuals confront the unknown and face the challenges associated with acknowledging their mental illness.
- Exterior Bike Storage – 100sf
 - Access controlled exterior bicycle storage for transitional housing residents and staff.
- Open Space
 - Outdoor space emphasizing green space and connection to nature while maintaining the safety of users. A mix of uses with varying sizes from large gathering areas for events to smaller quiet areas for contemplation.

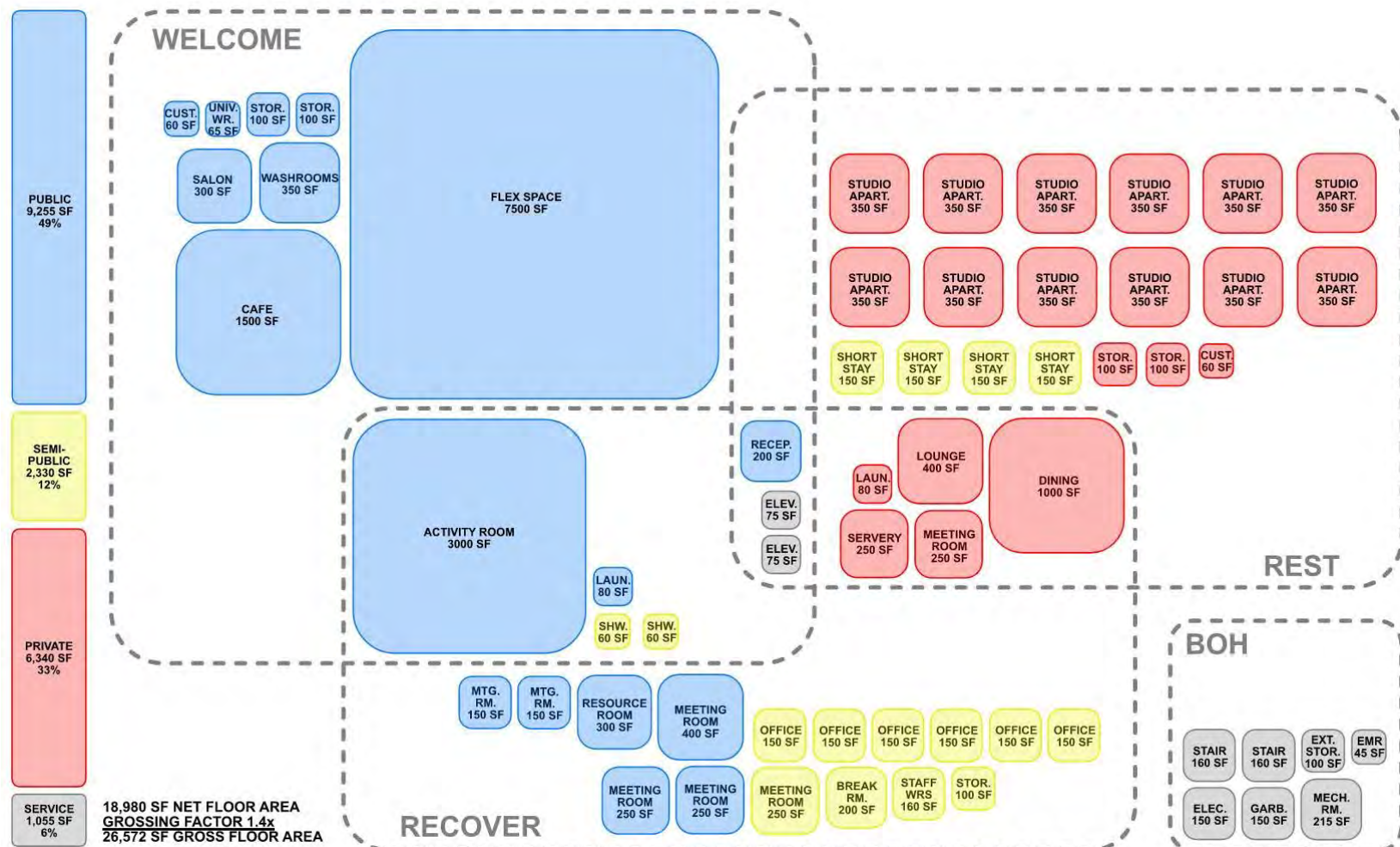


Fig.7: Functional program diagram.

In summary, creating a new archetype for community based mental health care involves a comprehensive process that requires a clear understanding of the current mental health care failings, the needs of the community, and the services that are required to respond to those failures/needs. But most importantly the creation of a new mental health care centre should prioritize the well-being and recovery of all individuals seeking mental health services.

One Door aims to alleviate the stress on the current acute care mental health system by redirecting non-acute mental health patients from general medicine emergency departments to a new, progressive 24/7 mental health care centre. The centre will focus on non-acute mental health care support, intervention and prevention in a community-based setting with both individual and group-based strategies. Services will be inclusive for all regardless of age, gender, culture, religion, income, or level of mental illness, reducing the stigma associated with mental health care by acknowledging and celebrating those who actively work to maintain positive mental health. Transitional housing facilities will allow London's acute care mental health facility to relocate alternate level of care patients to a space where they can receive increased support services without occupying a hospital bed better suited to acute care patients.

Ultimately, the design of a new community mental health centre with transitional housing will fill a gap in mental health care by creating a positive social space to promote mental health healing and recovery.

The building program was created to operate as part of a network of Community Mental Health Centres throughout the city. With a population nearing 450,000 people, I would propose the creation of 15 mental health centres that would each serve 20,000 – 35,000 people. This correlates to the 16 community recreation facilities that are currently operating within London, strengthening the fact that physical and mental health are both equally important to overall health and well-being. The boundaries for each mental health neighbourhood have been created using existing neighbourhood and planning district boundaries created by the City of London Planning Division with some districts being combined or altered slightly to meet the required population densities. Neighbourhood zones with a lower population density are located in the West, Northwest, Downtown and North East areas of the city where significant population growth has already begun. Neighbourhood zones with a higher population density are located on the South side of the city and encompass much larger geographical areas. These zones can be easily split into multiple smaller zones once residential development increases.

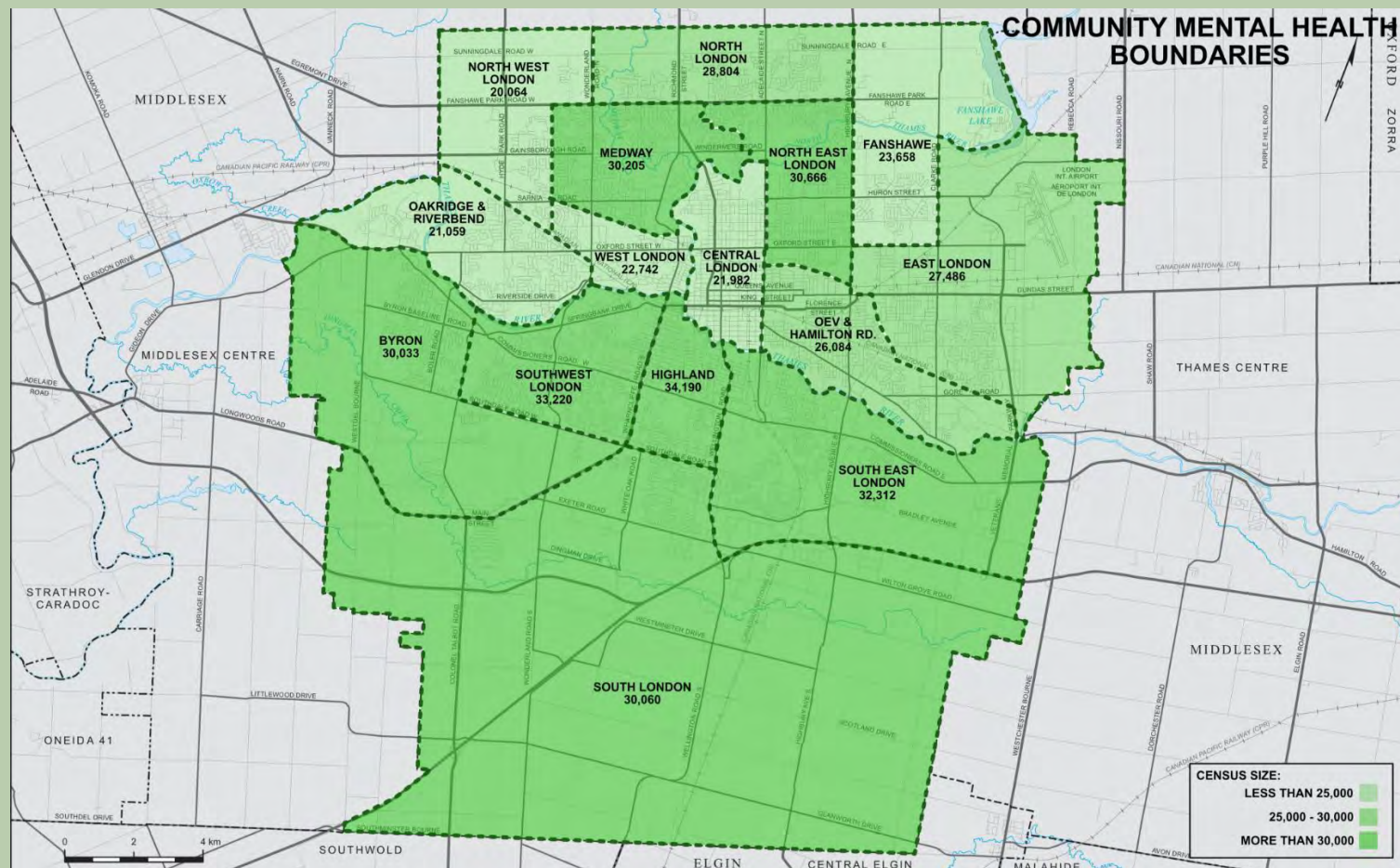


Fig.8: City of London proposed Community Mental Health Boundaries with respective population densities.

With each neighbourhood community mental health zone unique due to differences in topography, microclimate, vegetation, infrastructure, zoning, adjacencies, accessibility, economic vitality and safety (to name a few), each building design would be a unique response to the associated site diversity. By tailoring each building to be not only functional and aesthetically pleasing but also harmonious with their surroundings, we ensure that new buildings enhance the existing environment and contribute positively to the community.



Fig.9: Site analysis of 10 possible building sites in different Community Mental Health Zones.

The proposed site would prioritize accessibility and locations close to major transit routes while maintaining distance from residential neighbourhoods and childhood institutions, ensuring integration into existing neighbourhoods with minimal conflicts. The building program would also benefit from the proximity of amenities such as grocery, pharmacy and emergency services. The images on the following page provide a graphic representation of how the site selection is narrowed down based on the aforementioned requirements relative to the Argyle Community Mental Health Zone.



Fig.10: The East London Neighbourhood Zone with residential areas highlighted red to be removed from site selection viability.



Fig.11: A 400m radius around childcares and elementary schools to be eliminated from site selection viability.



Fig.12: Site locations with a 400m/5 min. walk (yellow) to transit nodes (red) to be prioritized.

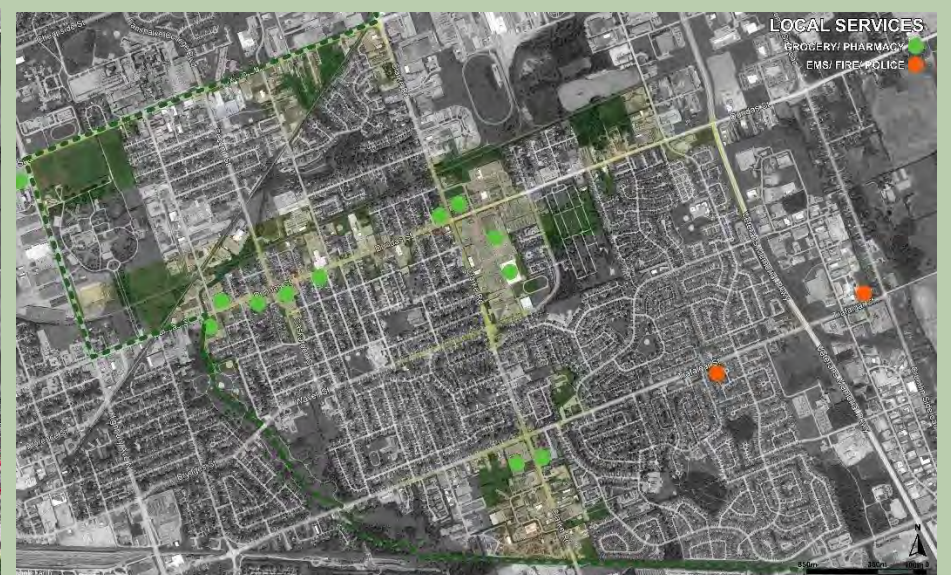


Fig.13: Site locations within walking distance to grocery stores and pharmacies to be prioritized.

Green spaces are increasingly recognized as vital components of urban planning and site selection. Large green spaces offer numerous benefits ranging from environmental sustainability to enhancing the well-being of urban populations, while access to green spaces has also been linked to improved mental health with studies showing that exposure to natural environments reduces stress, anxiety, and depression. Coverage ratios are critical in ensuring that green spaces are effectively integrated into urban planning, allocating a portion of the site to landscaping relative to the total area of a site. While there is no one-size-fits-all ratio, research suggests that a minimum of 20-30% of urban areas should be dedicated to green spaces to achieve significant environmental and social benefits (Gill, Handley, Ennos & Pauleit, 2007). However, with a key concept of the proposed program to provide significant natural space for healing (discussed further in Part 10), it is recommended that the required green space for a community mental health centre be double the standard recommendation for a minimum of 60% of the overall site area. Using the building area noted in the building program, we can assume the minimum required site area as follows:

1 Storey Building = 66,430 sq.ft. (1.53 acres) – 2 Storey Building = 33,215 sq.ft. (0.76 acres) – 3 Storey Building = 22,143 sq.ft. (0.51 acres)



Fig.14: Satellite view of East London Neighbourhood site along with site photos.



Fig.15: Site analysis of proposed Dundas Street building site.

Following the site selection guidelines, a 3.97-acre property on Dundas Street was the clear choice. The property provides direct access to public transportation running east/west on Dundas and is within a 5-minute walk to commercial shopping centres and a public transportation node located at the corner of Dundas Street and Clarke Road. An existing one storey building on the site is currently being used as office space for Ontario Works. The site itself is mostly asphalt that is now overgrown with scrub brush from its past as a used car dealership. The proposed building design would include the demolition of the existing building.

The design of the proposed Community Mental Health Centre began with a parti derived from the layout of homeless encampments along the Thames River. The groups of tents and makeshift shelters were arranged around a central gathering space, creating a sense of community. Each encampment was located within a greenspace to provide some privacy and a connection to nature while also being close to pathways for safety and direct connections to adjacent neighbourhoods. The parti image was generated using Enzo circles, a powerful Japanese zen symbol that is drawn using one stroke of a brush in a circular movement. No enso circle is perfect yet they are all beautiful which I felt was the perfect embodiment of those with mental illness.



Fig.16: Homeless encampment along river.

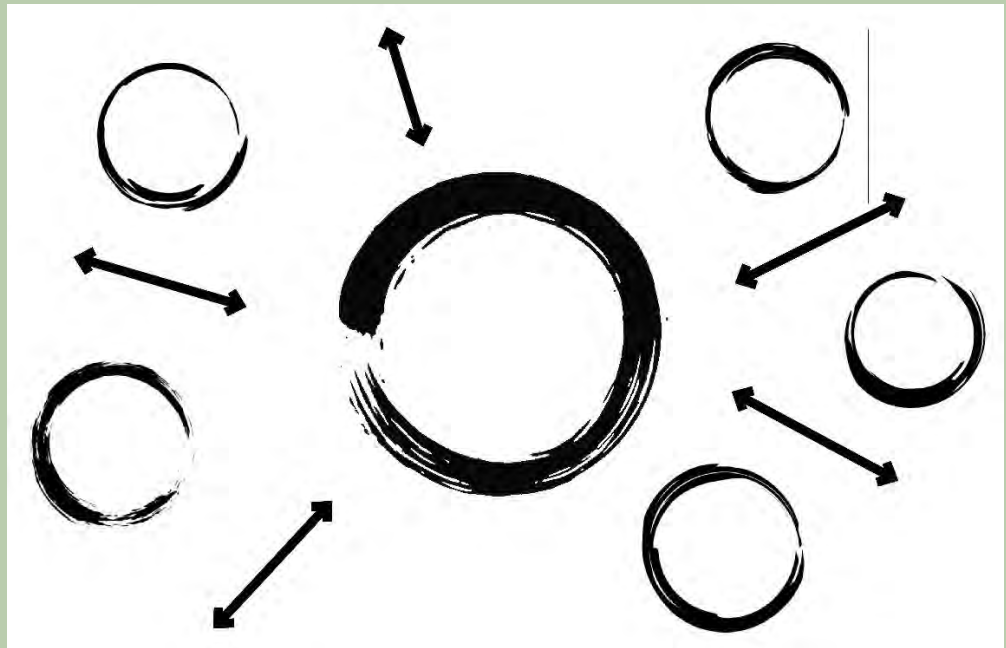


Fig.17: Parti sketch of programmatic elements around a central common space illustrated with enso circles.



Fig.18: View of Front Entrance looking South West.

The primary goal of the programmatic layout is to create both physical and mental transitions from quiet to active spaces within the building. This type of layout would allow users to enter the building via the activated street front into a dynamic community space, or if struggling with anxiety, to enter via a quieter side entrance into calm spaces.

Once inside, the same principle would be applied to circulation between programmatic elements. Entering into the calm office/meeting spaces and then moving into transitional spaces would provide countless options for social interaction in a more relaxed environment before transitioning once again to the more active community spaces that include a café and activity area.

Fig.19: Overall Ground Floor Plan

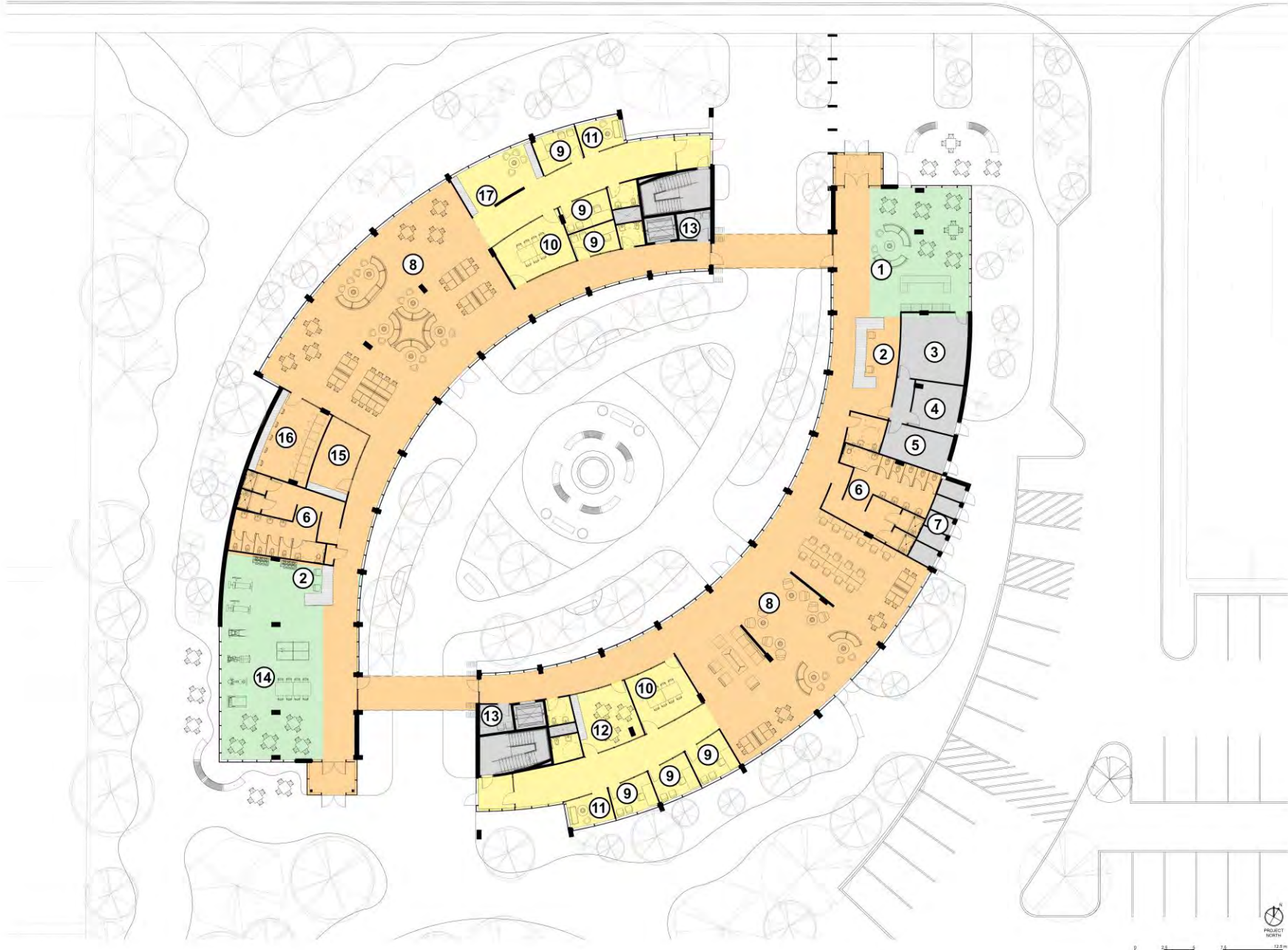
LEGEND:

- 1 CAFE
- 2 RECEPTION
- 3 KITCHEN
- 4 RECEIVING
- 5 GARBAGE
- 6 UNISEX WASHROOMS
- 7 USER STORAGE
- 8 LOUNGE
- 9 OFFICE
- 10 MEETING
- 11 QUIET/DE-ESCALATION
- 12 BREAK ROOM
- 13 CLINIC
- 14 ACTIVITY
- 15 SALON
- 16 LAUNDRY
- 17 RESOURCE

MAIN FLOOR PLAN

1835 DUNDAS STREET

- CALM SPACE
- TRANSITIONAL SPACE
- ACTIVE SPACE



SECOND FLOOR PLAN

1835 DUNDAS STREET



- LEGEND:
- 1 TRANSITIONAL ROOM
 - 2 SHORT STAY ROOM
 - 3 DINING
 - 4 MEETING
 - 5 LOUNGE
 - 6 LAUNDRY

The second floor is a secured resident only space for transitional housing and short stay users along with dining, lounge, laundry and a meeting space. The private second floor dining and lounge spaces are located directly above the main floor cafe and activity spaces with large glass screens to allow residents the opportunity to observe socialization in a larger, louder space without having to be directly involved. This lets residents gradually transition from a private/safe space to the larger more active spaces and eventually into the general public once proper housing is obtained.

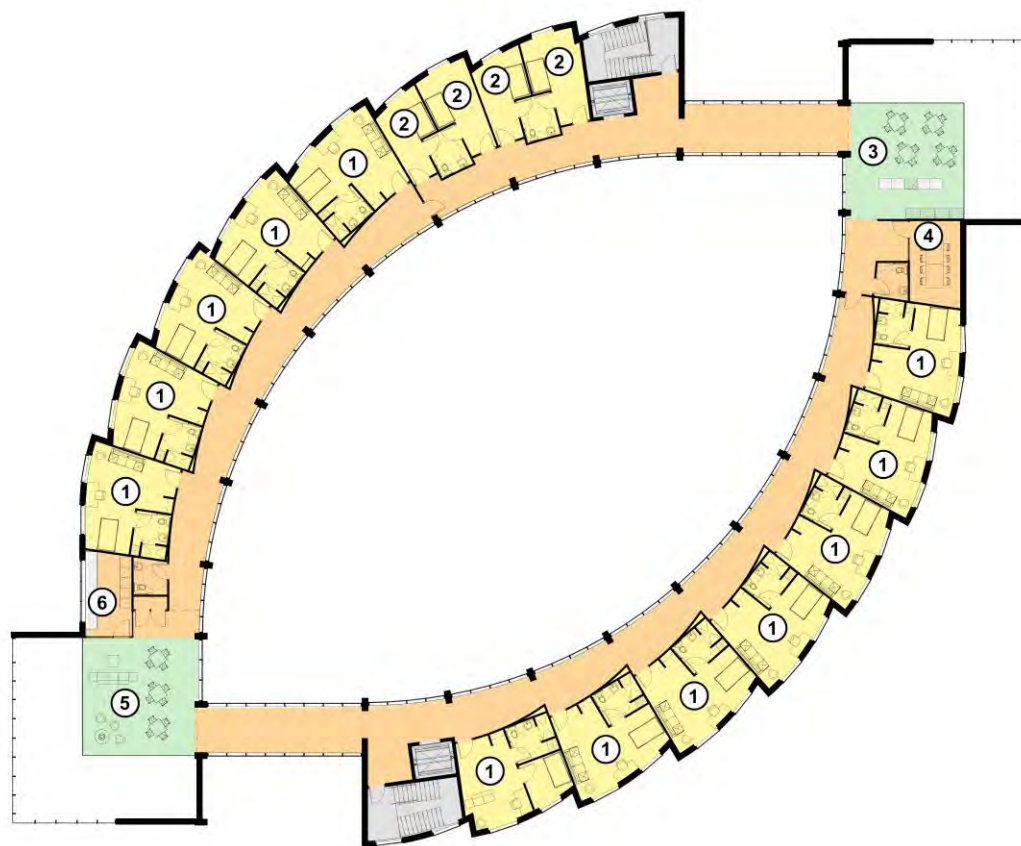


Fig.20: Overall Second Floor Plan

Numerous studies have shown that shared life experiences play a crucial role in mental health recovery for numerous reasons. From validation and understanding, to support, encouragement, learning, growth, reducing stigma, building resilience, creating community and promoting hope; shared experiences contribute to a more supportive, empathetic, and informed environment that is conducive to mental health and recovery.

"When people share their experiences and feelings with others who have had similar experiences, it can provide a sense of validation and understanding that is difficult to achieve otherwise." – National Alliance on Mental Illness

That is why a design that fosters social interaction, such as open plan spaces and shared communal areas is of primary importance in a mental health setting. Not only can a design that promotes a sense of community and connection improve mental health outcomes, but it can also reduce feelings of isolation, promote positive emotions such as a sense of belonging, increase self-esteem, provide support from friends and peers, as well as enhance communication and social skills.

"Social connections are crucial to our well-being. They not only make us happy, but they also influence our long-term health outcomes. Studies have found that people with stronger social relationships have a 50% increased likelihood of living longer." - Harvard Health Publishing

The proposed building design provides three main settings for inclusive social connections. More active social connections are provided at both the main and rear entrances to the building in the form of a café and activity space. These spaces are designed to encourage community engagement within the building to not only foster a sense of belonging but also reduce the stigma associated with mental illness. Open conversations about mental illness and recognising those who are working to maintain their mental health can encourage others to seek help and speak about their struggles.

33 Fig.21: View of Café looking South West



Fig.22: View of Activity Room looking South East



Multi-functional lounges located on both sides of the building provide a space for social interaction, helping to combat loneliness and isolation while promoting stronger relationships with family, friends and the community. The lounge is typically furnished with multiple seating arrangements from tables and chairs for more formal conversations to couches for a more relaxed setting. Ceiling recessed operable partitions can be used to divide the space for smaller gatherings or group therapy sessions.

Lastly, programmed outdoor spaces allow for social connections in a less formal, natural setting which can help reduce stress, enhance relaxation and create an engaging atmosphere for relationships with peers. Numerous locations around the building are provided with benches or boulders for sitting and the courtyard contains a firepit for more casual conversations throughout both the day and night.

Fig.23: View of West Lounge looking Northeast



By providing abundant opportunities for social engagement, the buildings design plays a pivotal role in mental health care and recovery, allowing for essential emotional support, understanding, and a sense of belonging amongst users. Engaging with others who share similar experiences can offer validation and reduce feelings of isolation, fostering an environment of empathy and mutual support. These connections encourage individuals to share coping strategies, learn new perspectives, and build resilience, significantly enhancing their recovery journey. Moreover, open discussions about mental health within supportive networks helps to reduce stigma, making it easier for individuals to seek help and speak openly about their struggles. Ultimately, social connections create a supportive community that promotes hope, empowerment, and sustained mental well-being.

Fig.24: View of Courtyard looking East



Beyond enhanced common areas for socialization, a mental health community centre needs to provide support spaces for users on their path to well being. These spaces encompass everything from medical support, crisis intervention/de-escalation, professional treatment by psychiatrist, psychologists, therapists and councillors, peer support groups, daily living assistance, education programs, financial supports, legal aid/advocacy and more. Crisis management and access to the building would be provided 24/7 with specific mental health support programs offered throughout the day, night and on weekends. Quiet rooms and de-escalation spaces in each wing provide a place for crisis intervention in a non-threatening environment away from prying eyes. When not being used for crisis intervention these spaces can provide a discreet location for reflection or retreat from stressors.

Fig.24: View of Quiet Space looking West



Informal meeting spaces create an environment that fosters relaxation, connection and open dialogue. By providing meeting spaces that are less intimidating and more comfortable, the proposed design helps reduce anxiety and stress, encouraging communication with professionals.

Fig.25: View of Lounge looking East



Fig.26: View of Lounge looking East



For those who are more comfortable with mental health treatment, formal meeting spaces and non-assigned offices are provided for outside agencies to provide support services. Each meeting/office space has large, glazed openings to maintain transparency while allowing direct views of adjacent green spaces to help reduce anxiety.

Transitional beds fill the gap between hospitalization and supportive housing allowing users a place to continue their mental health treatment outside of the hospital and learn to re-integrate with society while waiting for supportive housing openings within the community. Short stay beds are also provided to those in need and will reduce emergency room visits for non-acute mental health care issues. For users who are starting to fall into a mental health crisis, access to short stay beds will allow them to remove themselves from the stressors that may be causing the crisis while also being amongst peers and support services that can provide immediate support in a welcoming environment.



Fig.27: View of Transitional Bedroom

To summarize, support services for mental health that are available 24/7 offer comprehensive benefits that significantly enhance the well-being and recovery of individuals facing mental health challenges. These services provide essential medical support through access to mental health professionals, therapy, and medication management, ensuring that individuals receive appropriate and timely care. Emotional support is fostered through therapeutic relationships and peer support groups, creating environments of understanding and validation. Practical assistance with daily living, housing, and financial stability helps individuals manage their lives more effectively, reducing stress and improving overall quality of life. Educational and vocational programs aid in skill development and employment opportunities, fostering independence and self-esteem. Legal and advocacy services protect individuals' rights and ensure they receive fair treatment. Holistic wellness programs, including preventive care and activities promoting overall well-being contribute to long-term mental health stability. Overall, these multifaceted support services create a robust framework that empowers individuals to achieve better mental health outcomes and a higher quality of life.

The term “biophilia” relates to the innate human tendency to seek connections with nature. This connection with nature can manifest in a desire to be in nature, an appreciation for the beauty of natural landscapes, and a fascination with animals and other living organisms. Exposure to nature and green spaces has been shown to reduce stress and anxiety and improve mental health. In fact, a recent study has shown that spending at least 120 minutes a week in nature is associated with good health and wellbeing, with the study results consistent across all groups including those with long-term health issues (White, 2019). By incorporating green spaces and natural materials into a building design, Architects can provide a connection to nature that can have a positive effect on mental health while creating spaces that promote mental and emotional well-being, helping to alleviate stress and anxiety. The proposed building design creates connections to nature in four distinct ways: Access to natural light, viewing nature, being surrounded by nature and participating in nature. By providing four unique opportunities to make meaningful connections with nature, the building design can contribute to the health and well being of everyone visiting or residing at the community mental health centre.

Fig.28: View of Rear Entrance looking Northeast



Natural Light:

Access to natural light has been shown to have a positive impact on people's physical and mental wellbeing by affecting their mood, sleep patterns, productivity, increasing energy levels and reducing symptoms of depression and anxiety. Natural light also plays a crucial role in regulating the body's sleep-wake cycle, with exposure to natural light during the day helping to regulate sleep patterns and improve the quality of sleep. Natural light is the body's main source of Vitamin D which is essential for bone health, immune function, and overall wellbeing with natural light also shown to improve cognitive function, including attention, memory, and concentration.

In addition, natural light can also provide visual interest and variation to spaces. It can create a sense of depth and texture to spaces while highlighting architectural features. It changes throughout the day and year to create a dynamic, ever-changing visual environment, and the proper use of natural light in an architectural design can significantly reduce the need for artificial lighting and thereby lower energy consumption and costs. Overall, natural light can improve the aesthetic, functional, and environmental aspects of architecture while improving the physical and mental well-being of all occupants.

Viewing Nature:

In healthcare settings, numerous studies have found that patients who have a view of nature had significantly lower levels of stress, as measure by physiological indicators such as blood pressure and heart rate, compared to those with urban views (Ulrich, 1984). Further studies have shown that exposure to natural scenery reduces stress, lowers blood pressure, improves mood, and restores attention while fostering a positive mental state. With views of nature having such a profound impact on mental health and wellness, the building design provides extensive views to exterior greenspaces from all areas within the building.

Fig.29: View of East Lounge looking Southeast



Fig.30: View of East walkway looking South



Surrounded by Nature:

Exposure to nature and green spaces has been shown to reduce negative thought patterns while contributing to emotional well being and resilience. A 2006 large scale survey found that the presence of green spaces was significantly associated with higher levels of overall well-being and lower levels of self-reported health problems (Maas, Groenewegen, DeVries & Speeuwenberg, 2006). Based on these findings, the building site provides extensive landscaping and pathways for users to immerse themselves in nature and enjoy a stroll in a safe and inviting environment surrounded by peers. In addition, landscaping has been continued within the building with the use of green and moss walls along with extensive potted plants.

Participating in Nature:

Activities that incorporate participation in nature such as gardening, walking in the woods, bird watching or enjoying an outdoor fire, can alleviate symptoms of anxiety, depression and stress while fostering relaxation, mindfulness, and a sense of peace. In fact, participants of a study who walked in nature showed significant improvements in mood and reductions in anxiety compared to those who walked in urban environments (Berman, Jonides & Kaplan, 2008). From extensive pathways, landscaped areas and numerous gardens to an outdoor fire pit and koi pond, the building/ site design provides ample opportunities for users to participate in nature and contribute to their mental health and wellbeing. Within the building, second floor user bedrooms have operable windows that open onto garden boxes to plant flowers or herbs.



Fig.31: View of Courtyard looking North

It's clear that many individuals dealing with mental health issues already understand the benefits of immersing oneself in nature, whether intentionally or not, as you'll find most makeshift encampments located within nature, close to parks, trails or rivers. The peace and serenity offered by nature is oftentimes a programmatic element that can be overlooked as the building design itself takes precedence. By using the aforementioned guidelines for incorporating nature within a design, each community mental health centre will prioritize the use of green spaces both within and around the building along with direct views of nature and access to natural lighting from all spaces.

Throughout the building design the parti remained consistent with its original intent of providing programmatic elements around a central common space, similar to the layout of homeless encampments. The following sketch provides a narrative of how the parti influenced the building form; however, it should be noted that this evolution would be different for every site in response to site specific influences.

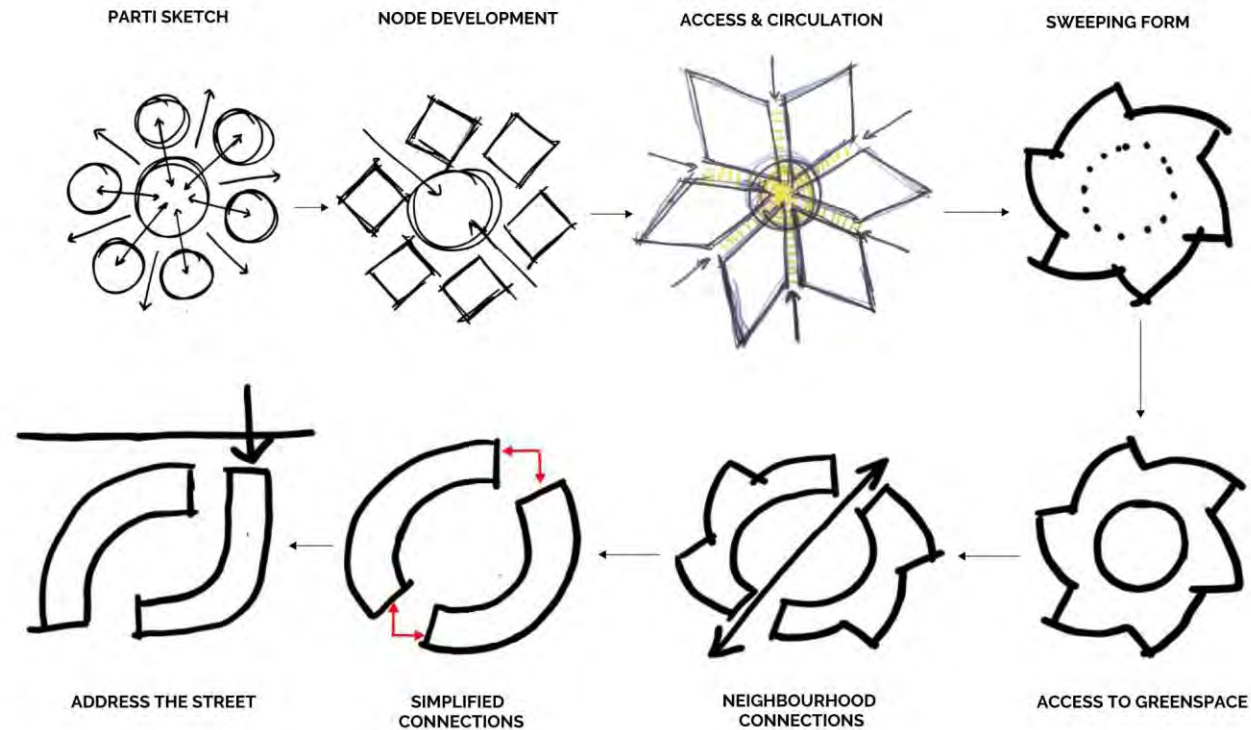


Fig.32: Parti Influence on Building Design

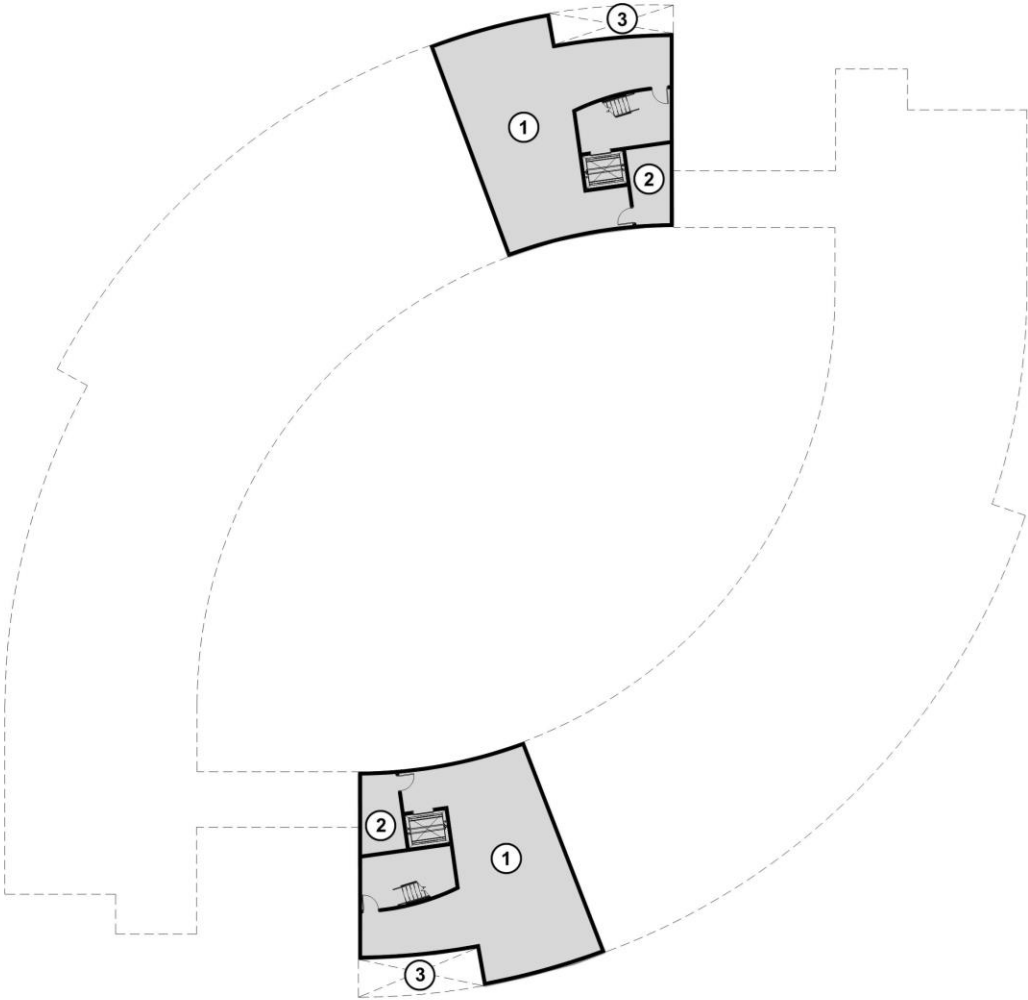
The buildings primary entrance addresses Dundas Street while fanning out into a gentle sweep around a central courtyard that allows direct exposure and access to exterior greenspaces while allowing natural light to flood all occupied spaces. Exterior seating in front of the café encourages community use while emphasizing relaxation in a natural setting. Extensive pathways surround the building, connecting to neighbourhood pathways and stretching into the rear yard to provide a quiet space to relax and recuperate. The parking lot follows the sweeping form of the building while incorporating natural bioswales to filter rainwater before redirecting it back to the site, avoiding discharge to local storm sewers.



The building contains two distinct basement levels that contain mechanical, electrical, elevator machine rooms, and water service rooms. Ground source heat pumps provide heating and cooling to all areas of the building. Individual temperature controls ensure occupant comfort is maintain in all spaces. A grey water reuse system recycles rain and wastewater for irrigation and toilet fixtures. Materials used in the building construction and interior design will be low-VOC (volatile organic compounds) to reduce the amount of harmful chemicals and pollutants in the air. A ventilation and filtration system will be carefully selected and designed to remove pollutants and control indoor air quality.

- LEGEND:
- 1 BUILDING SERVICES
 - 2 ELEVATOR MACHINE ROOM
 - 3 AREA WELL

Fig.34: Lower Level Floor Plan



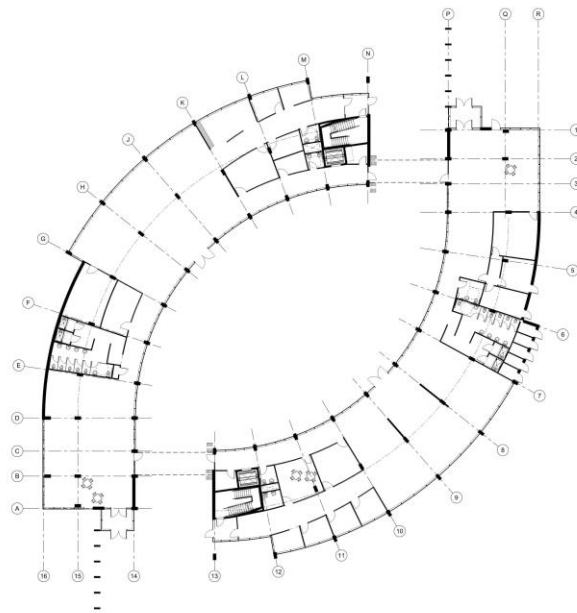


Fig.35: Main Floor Structure

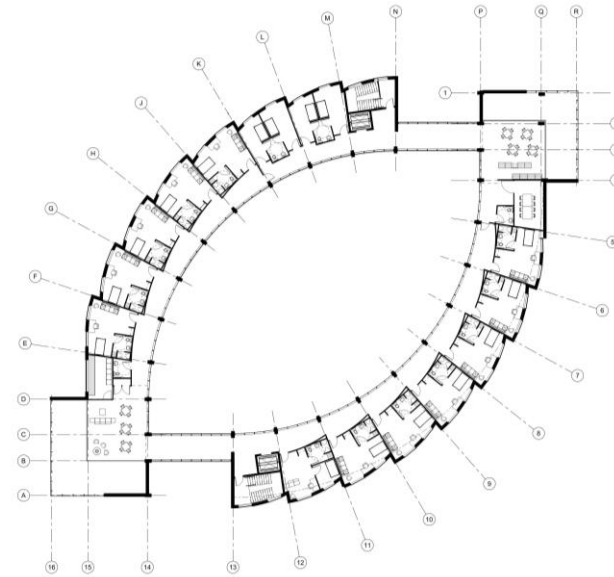


Fig.36: Second Floor Structure

The following architectural design elements are a few ways architects can enhance a building's environment to improve mental wellness:

Acoustics: The proper design of acoustics can enhance communications and reduce noise levels leading to improved speech intelligibility and reduced distractions. This is particularly important in mental health care as research has shown that excessive noise levels can lead to increased stress levels and fatigue while good acoustics can promote relaxation, focus and productivity (Stansfield et al., 2013; Ljungberg, 2014). The proper acoustic design of a building can impact communication and comfort and must be considered in the design process to ensure the building is functional, comfortable, and conducive to the health and well-being of all occupants.

Air Quality: Poor air quality and exposure to air pollution has been found to increase the risk of developing mental health issues including depression and anxiety, as well as cause physical symptoms such as headaches, dizziness, and fatigue which in turn can affect mood and cognitive functions (Liu, 2019). A properly designed building will take into consideration location, orientation, material selection, ventilation, filtration, and green design elements to improve the buildings air quality which in turn reduces negative health effects.

Colour and Textures: Colours and textures are critical elements of architectural design that can have a significant impact on mental health outcomes. Incorporating calming colours like blue and green along with natural textures like wood and stone has been found to reduce stress and anxiety levels and promote relaxation (Kwallek et al, 1988; Ryan et al., 2014). This is particularly important in mental health care designs where patients are often in a state of emotional distress and require a soothing environment to support recovery. The building design will emphasize the use of muted blue and green hues while also incorporating natural textures like wood and stone to expand on interior connections to nature. The building structure focuses on natural materials with an emphasis on heavy timber, wood framed acoustic curtain wall, brick and stone. In private living spaces, darker finishes including wood, reduce the visual connection to clinical atmospheres.

Security: Non-invasive security measures maintain direct sightlines for discrete visual observation and numerous exits from every space to ensure the safety of both staff and visitors.

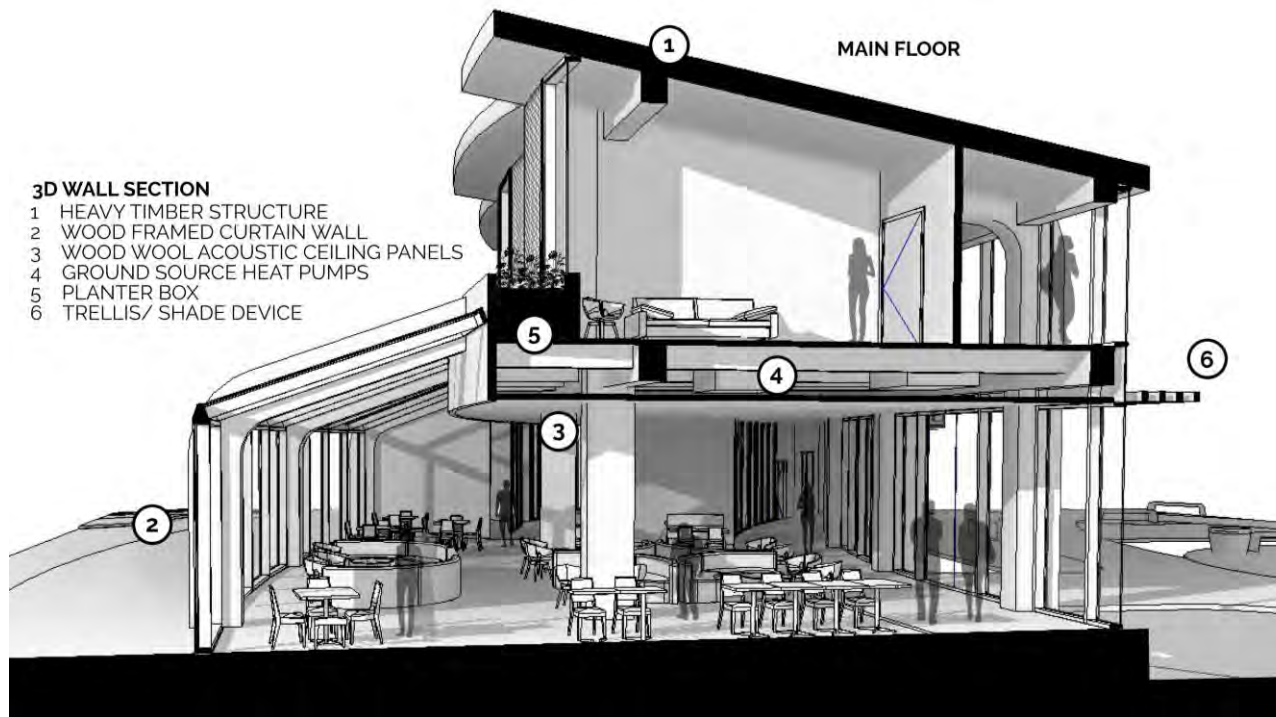


Fig.37: Building Section

No matter where we are, Architecture plays a role in our mental health and well-being. From increasing productivity, to reducing stress or anxiety, Architecture can invoke subtle or strong emotional responses that either positively or negatively alter a person's psyche. For a person with a mental health condition, these emotional responses are typically exaggerated. What would be considered a minor inconvenience for most is a much larger issue for those with a mental illness. By applying therapeutic design concepts to the built environment, an architect can create a building that contributes to the prevention and healing of mental health issues.

Although this thesis stipulates the design of 15 unique mental health community centres, following the guidelines outlined in the previous chapters, but only one has been fully designed, there have been a lot of “what-if” scenarios raised by peers and mentors. The following explorations address some of these scenarios and discusses the implications of creating a ‘one size fits all’ program for multiple neighbourhoods with unique characteristics.

The first exploration examined how the building program would change in response to a more residentially intensive area on the other side (ie. wealthier side) of the city. Starting from the beginning, a review of the Byron neighbourhood mental health zone was completed to determine an appropriate site. Since the Byron neighbourhood is a very residential based enclave, there were very few available properties that were close to amenities by maintained a distance from residential and childhood institutions. The chosen building site is close to the local shopping corridor, on a main transit line, and location just outside of neighbouring residential neighbourhoods. The site itself is a 2.95-acre lot currently zone as Open Space and has a sweeping five meter grade elevation change from the South down towards the Thames River to the North.

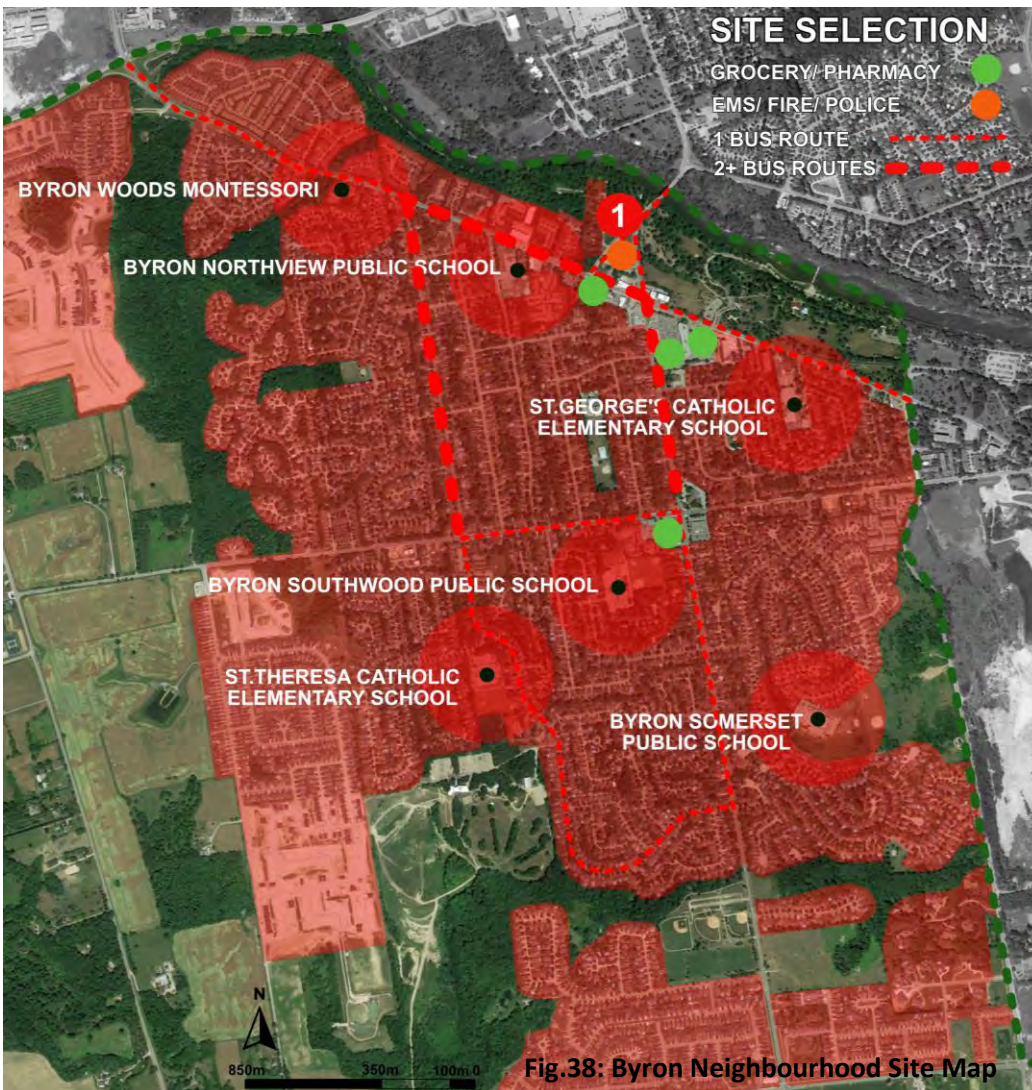


Fig.38: Byron Neighbourhood Site Map

Fig.39: Byron Neighbourhood Site Analysis



Fig.40: Byron Neighbourhood Site Photos

The building program itself can be modified based on the requirements of each location. Due to the more rural setting of this location, it would be assumed that drop-in services would be less utilized and additional assigned offices/meeting spaces would be required for scheduled support sessions. However, no matter the changes to the program requirements, the three main building design characteristics consisting of Inclusive Social Connections, 24/7 Support Spaces and Meaningful Connections to Nature are required to be maintained to ensure a successful Community Mental Health Centre. Both the parti concept of program space around a central common space and programmatic layout concept of transitions from calm to active spaces at a user's pace are maintained.

Fig.41: Byron Neighbourhood Community Mental Health Centre



The proposed building design would create a sweeping form beginning at the main administrative entrance off the parking lot centrally and extend up the West property line to the South. A long low incline ramp allows barrier free access from the lower level to the main level with adjacent rooms matching the grades to provide accessibility to all areas. The quiet office/meeting space of the lower level would gradually transition to semi-private lounge and meeting spaces before moving into the more active café. The café is situated at the main level building entrance encouraging community engagement. Continuing its sweeping form to the Northeast, the building program again transitions to semi-private office and lounge space before entering the private resident areas. The resident area extends to the North above the main entrance providing views towards the Thames River from the private dining and lounge area. The central courtyard gently slopes from the café to below the resident wing and extending to provide connections to the adjacent Thames Valley Multi-Use Pathway.

Another exploration involved the question of whether the program could be successful if applied to an adaptive reuse of an existing building. The chosen building for this exploration was the historic Elsie Perrin Williams Memorial Library. Originally built in 1940 as an art gallery and museum, the building was later renovated into a library in 1967. In 2001 the property was designated under the Ontario Heritage Act for its historic and architectural value. The buildings Art Deco architecture including Queenston limestone, black Virginia serpentine marble, carved Greek design and Socrates mask, fluted stone pilasters, central staircase, and more are all protected under the Heritage Act.

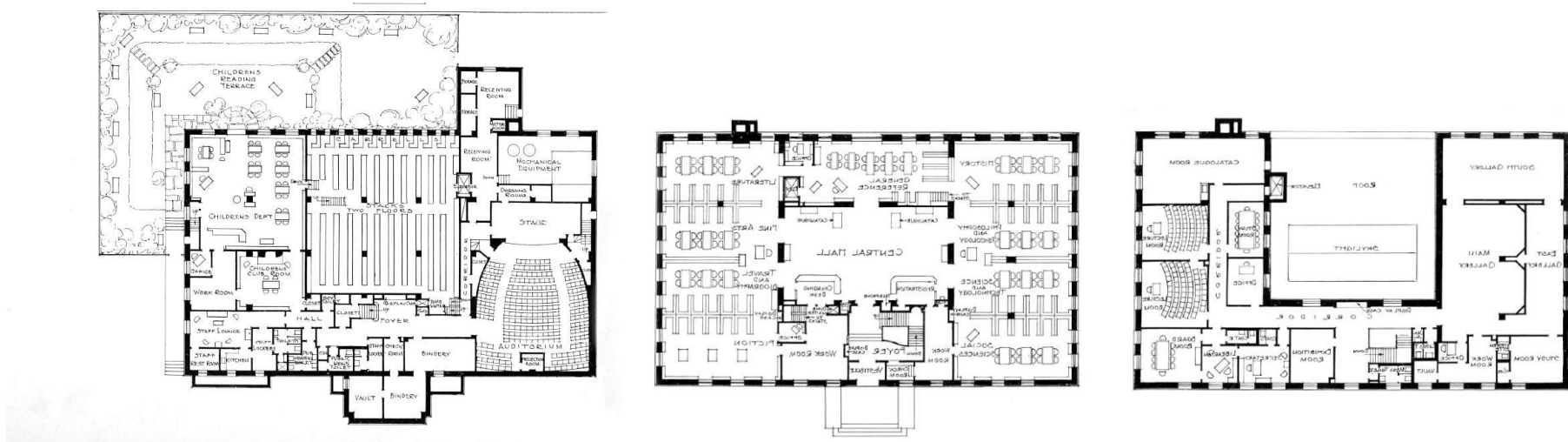
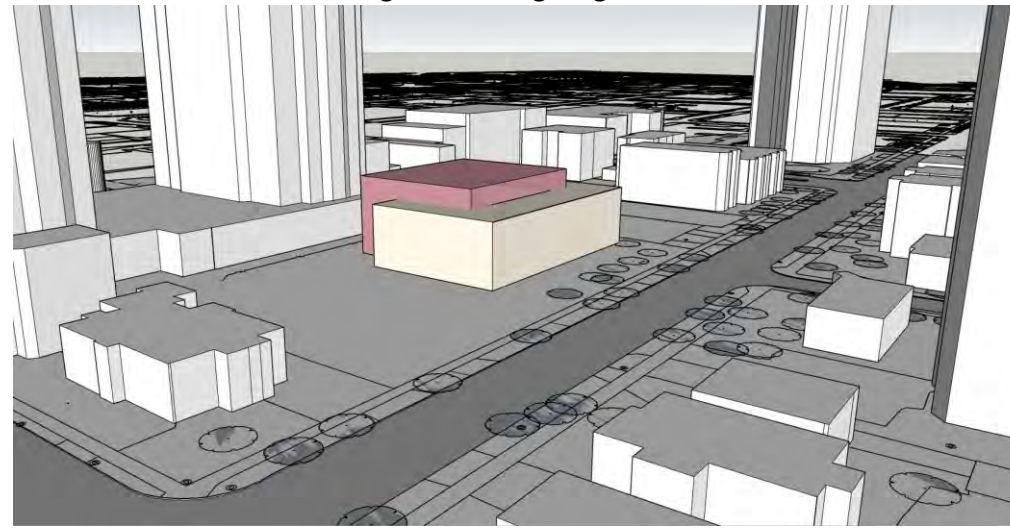


Fig.42: Lower, Main and Second Floor Plans of Elsie Perrin William Memorial Library

After completing schematic designs, massing diagrams and exploration of possible layouts using a transitional circulation path, it was determined that this location would not be a good fit for a Community Mental Health Centre. Although the building is in a great location to provide 24/7 support services and has a large enough floor space to provide adequate inclusive social spaces, it would be difficult to modify the existing floor plans to create a transitional circulation system from calm to active spaces. In addition, the site does not meet the guidelines of 60% open space for increased access to greenspaces and due to the buildings historical designation it would also be difficult to provide more openings and connections to green spaces both within and outside the building. So, although not impossible, the adaptive reuse of this building would be challenging and the successful integration of the recommended programmatic elements could be jeopardized resulting in a community centre that does not meet the mental health care needs of its users.

In conclusion, every community neighbourhood zone will have its own unique site with unique challenges and opportunities. By using the design guidelines outlined in the previous chapters, an architect can create community mental health centres that prioritize the health and wellbeing of those struggling with mental illness.

Fig.43: Massing Diagram



Thesis Statement:

As mental health issues continue to impact a significant proportion of the population, an architectural response that prioritizes inclusive social connections, 24-7 support spaces, and meaningful connection to nature can improve the mental health outcomes of marginalized individuals.

In closing, this document forms a guideline for the establishment of a network of community mental health centres that are paramount in addressing the multifaceted needs of individuals recovering from mental health challenges. By emphasising social connection, these centres will foster a sense of belonging amongst those with lived experience. Support spaces that are available at anytime throughout the year offer a safe space to receive care and treatment. Integrating abundant connections to nature within the centers is equally important to enhance mood, reduce stress, and improve overall mental health.

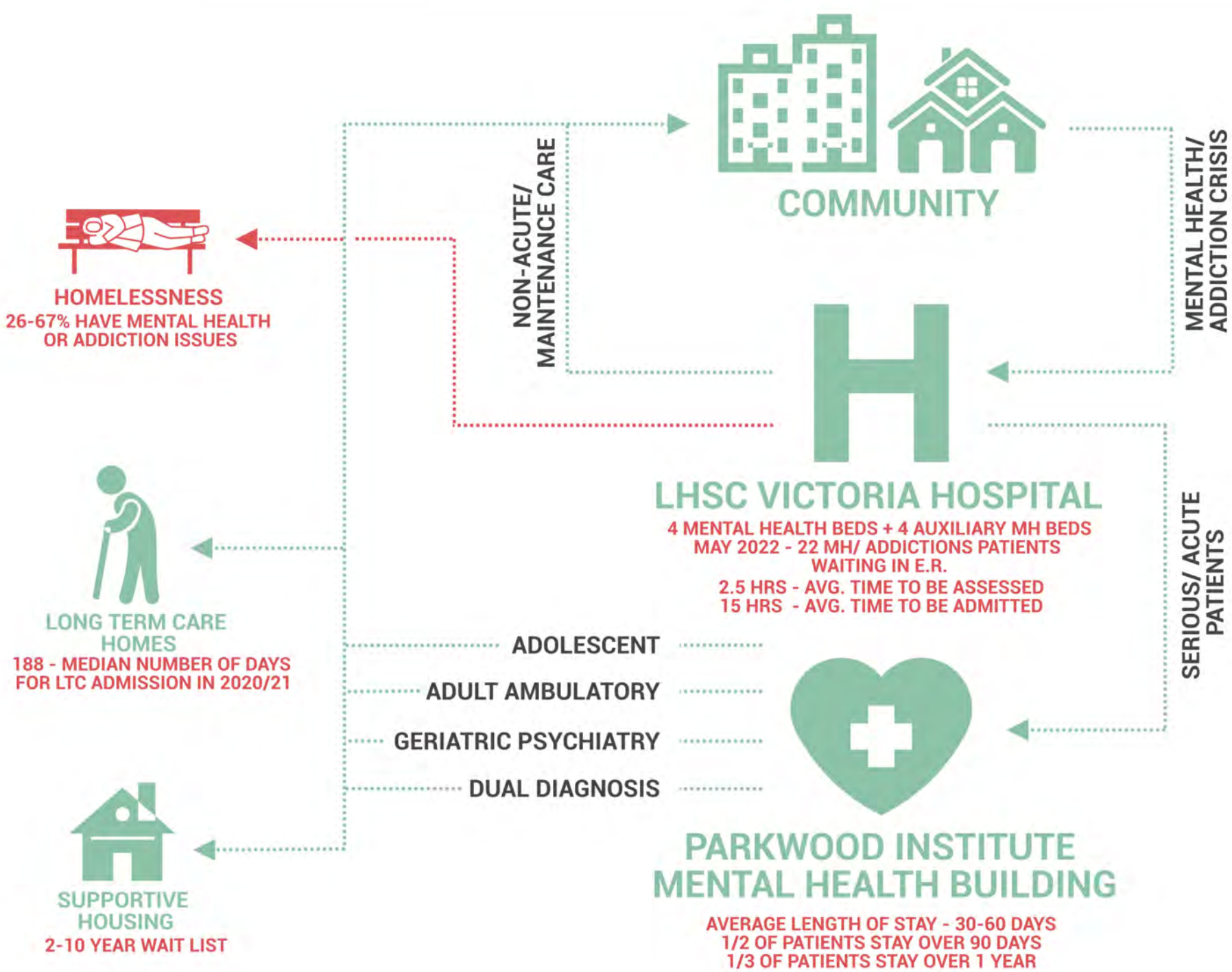
The centers will serve as hubs for community engagement, where individuals can build relationships, participate in group activities, and access resources that support their mental health journey. By holistically addressing the social, emotional and environmental aspects of mental health, community mental health centres will foster resilience and improve the quality of life of a diverse range of individuals. This strategy is crucial for building stronger, healthier communities where everyone has the opportunity to thrive.

- AMHO Addictions and Mental Health Ontario. (2018). *Snapshot. Better Served in the Community – Alternate Level of Care (ALC) Designated People with Mental Health & Addiction Issues*. Accessed January 02, 2023. https://amho.ca/wp-content/uploads/ALC-Snapshot_FINAL.pdf
- Andersen RM. (1995). Revisiting the behavioral model and access to medical care: does it matter? *J Health Soc Behav.* 36(March):1-10.
- Arboleda-Florez J. (2003). Considerations on the stigma of mental illness. *Canadian Journal of Psychiatry* 48: 645-50.
- Berman, M. G., Jonides, J., & Kaplan, S. (2008). The cognitive benefits of interacting with nature. *Psychological Science*, 19(12), 1207-1212.
- Boydell, K., B. Gladstone, and T. Volpe. 2006. Understanding help seeking delay in the prodrome in first episode psychosis. *Psychiatric Rehabilitation Journal* 30: 54-60.
- Butler, Colin. (2020, January 23). *London's mental health wards are bursting at the seams, new numbers show just how badly*. *CBC News: London*. <https://www.cbc.ca/news/canada/london/london-ontario-mental-health-1.5436476#:~:text=Except%20the%20%22glove%22%20in%20Parkwood%27s,capacity%20at%20102.9%20per%20cent>.
- Butterill, D., Lin, E., Durbin, J., Lunskey, Y., Urbanoski, K., & Soberman, H. (2009, September). From Hospital to Home: The Transitioning of Alternate Level of Care and Long-Stay Mental Health Clients. Retrieved January 14, 2023, from <http://quantumtransformationtechnologies.com/wp-content/uploads/2013/07/From-Hospital-to-Home-The-Transitioning-of-Alternate-Level-of-Care-and-Long-stay-Mental-Health-Clients-Steve-Lurie.pdf>
- CAMH Centre for Addictions and Mental Health. (2023). Housing and Mental Health. Accessed February 3, 2023. <https://ontario.cmha.ca/documents/housing-and-mental-health/>
- Canadian Institute for Health Information. (2021). *1 in 10 Canadians wait 4 months or more before receiving community mental health counselling* [story]. Accessed March 7, 2023. <https://www.cihi.ca/en/1-in-10-canadians-wait-4-months-or-more-before-receiving-community-mental-health-counselling>
- Chang, C., & Chen, P. (2005). Human Response to Window Views and Indoor Plants in the Workplace, *HortScience HortSci*, 40(5), 1354-1359. Retrieved Apr 3, 2023, from <https://doi.org/10.21273/HORTSCI.40.5.1354>
- Chen, C., Gu, D. (2021). Andersen Model. In: Gu, D., Dupre, M.E. (eds) *Encyclopedia of Gerontology and Population Aging*. Springer, Cham. https://doi.org/10.1007/978-3-319-69892-2_876-
- Children's Mental Health Ontario. (27 January, 2020). *28,000 Ontario Children and Youth are Waiting for Community Mental Health Services*. <https://cmho.org/28000-ontario-children-and-youth-are-waiting-for-community-mental-health-services/#:~:text=Wait%20times%3A%20The%20longest%20wait,the%20average%20is%2092%20days>.
- Cokrin, R. (1997). *Social basics of mental diseases*. Najarian Bahman, translator. Tehran: Roshad publication.

- Coristine, R., K. Hardford, E. Vingilis, and D. White. (2007). *Mental Health Triage in the ER: a qualitative study*. Journal of Evaluation in Clinical Practices 13(2): 303-309.
- Davis, S. (2014). Deinstitutionalization and Beyond. In *Community Mental Health in Canada: Theory, Policy, and Practice*. UBC Press: 197-202.
- Ennett, Gary. (2018, January 08). *How an LHSC exec plans to shorten 6-day psychiatric wait times*. CBC News: London.
<https://www.cbc.ca/news/canada/london/lhsc-wait-times-mental-illness-1.4477736>
- Getting Started*. CMHA Thames Valley Addiction and Mental Health Services. (2023, January 20). Retrieved March 7, 2023, from
<https://www.cmhatv.ca/start>
- Gill, S. E., Handley, J. F., Ennos, A. R., & Pauleit, S. (2007). Adapting Cities for Climate Change: The Role of the Green Infrastructure. *Built Environment* (1978), 33(1), 115-133.
- Harvard Health Publishing. (2021). The health benefits of strong relationships. Retrieved from https://www.health.harvard.edu/newsletter_article/the-health-benefits-of-strong-relationships
- Hincks, T. (1850). Report on the Provincial Lunatic Asylum, Toronto, for 1849. Toronto: Henry Rowsell.
- Kwallek, N., Lewis, C. M., & Robbins, A. S. (1988). Effects of office interior color on workers' mood and productivity. *Perceptual and Motor Skills*, 66(1), 123-128.
- Little, J. and Hirdes, J. (2015, September). *Long-Stay Alternate Level of Care in Ontario Mental Health Beds*. Retrieved January 20, 2023 from
<https://www.oha.com/Documents/Long-Stay%20Alternate%20Level%20of%20Care%20in%20Ontario%20Mental%20Health%20Beds.pdf>
- Liu X, Chen H, Liao X, et al. Association between air pollution and mental health outcomes: a narrative review. *Environmental Science and Pollution Research*. 2019;26(35):35226-35239. doi: 10.1007/s11356-019-06556-3
- Livingston J., T. Nicolls, and J. Brink. (2011). The impact of realigning a tertiary psychiatric hospital in British Columbia on other institutional sectors. *Psychiatric Services* 62:200-5.
- Ljungberg, J. K. (2014). Distraction of attention by sound. *PsyCh Journal*, 3(1)1-3.
- Maas, J., Verheij, R. A., Groenewegen, P. P., De Vries, S., & Spreeuwenberg, P. (2006). Green space, urbanity, and health: how strong is the relation?. *Journal of Epidemiology & Community Health*, 60(7), 587-592.
- McGorry, P. D., Killackey, E., & Yung, A. R. (2008). Early intervention in psychosis: concepts, evidence and future directions. *World psychiatry*, 7(3), 148-156
- Morrow, M., P. Dagg, and A. Pederson. 2008. Is deinstitutionalization a 'failed experiment'? The ethics of re-institutionalization. *Journal of Ethics in Mental Health*. 3:1-7.
- Mulvale, G, J. Abelson, and P. Goering (2007). Mental health service delivery in Ontario, Canada: How do policy legacies shape prospects for reform? *Health Economics, Policy and Law* 2:363-89.

- National Alliance on Mental Illness. (2021, April 19). The Importance of Explaining our Lived Experience. Retrieved July 30, 2024 from <https://www.nami.org/people/the-importance-of-explaining-our-lived-experience/>
- Rosenblatt, A. (1984). Concepts of the asylum in the care of the mentally ill. *Hospital and Community Psychiatry*. 35(3):244-250.
- Ryan, C. O., Browning, W. D., Clancy, J. O., Andrews, S. L., & Kallianpurkar, N. B. (2014). Biophilic design patterns: Emerging nature-based parameters for health and well-being in the built environment. *International Journal of Architectural Research: ArchNet-IJAR*, 8(2), 62-76
- Sirotych, F., Durbin, A., Suttor, G., Um, S.-gee, & Fang, L. (2018, March). Seeking Supportive Housing: Characteristics, Needs and Outcomes of Applicants to The Access Point. Wellesley Institute. Retrieved March 7, 2023, from <https://www.wellesleyinstitute.com/wp-content/uploads/2018/04/The-Access-Point-Waiting-List-Analysis-Full-Report.pdf>
- Smetanin et al. (2011). The life and economic impact of major mental illnesses in Canada: 2011-2041. Prepared for the Mental Health Commission of Canada. Toronto: RiskAnalytica.
- Stansfeld, S. A., Shipley, M. J., Head, J., & Fuhrer, R. (2013). Repeated exposure to occupational noise, blood pressure and hypertension: a meta-analysis. *Occupational and Environmental Medicine*, 70(1), 23-29.
- Statistics Canada. (2017). Health indicators, two-year period estimates, census metropolitan areas. Retrieved February 10, 2023, from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310046401>
- The Homeless Hub. (n.d.). Mental Health. Retrieved March 16, 2023, from <https://homelesshub.ca/about-homelessness/topics/mental-health>
- The University of Toronto Faculty of Applied Science and Engineering. (2019). Near-Road Air Pollution Pilot Study. Southern Ontario Centre for Atmospheric Aerosol Research. Retrieved March 26, 2023, from <https://www.socaa.utoronto.ca/wp-content/uploads/2019/10/SOCAAR-Near-Road-Air-Pollution-Pilot-Study-Summary-Report-Fall-2019-web-Final.pdf>
- Ulrich, R. S. (1984). View through a window may influence recovery from surgery. *Science*, 224(4647), 420-421.
- Velji, K., & Links, P. (2016, January). *Mental Healthcare Delivery in London-Middlesex Ontario – The Next Frontier*. Retrieved March 8, 2023, from <https://www.longwoods.com/publications/healthcare-quarterly/all/>
- Wait times for youth mental health services in Ontario at all-time high*. Canadian Mental Health Association Ontario. (2020, January 27). Retrieved March 7, 2023, from <https://ontario.cmha.ca/news/wait-times-for-youth-mental-health-services-in-ontario-at-all-time-high/#:~:text=Average%20wait%20time%20is%2067,type%20of%20treatment%20you%20need.>
- White MP, Alcock I, Grellier J, Wheeler BW, Hartig T, Warber SL, Bone A, Depledge MH, Fleming LE. *Spending at least 120 minutes a week in nature is associated with good health and wellbeing*. *Sci Rep* 2019; 9: 7730. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/31197192/>.

- Figure 1 - Canadian Institute for Health Information. *Frequent Emergency Room Visits for Help With Mental Health and Substance Use* [indicator]. Accessed February 7, 2023.
- Figure 2 - Canadian Institute for Health Information. *Repeat Hospital Stays for Mental Health and Substance Use* [indicator]. Accessed February 7, 2023.
- Figure 3 - "CMHA Middlesex Program Guide." CMHA Middlesex, 27 Feb. 2023, <https://cmhamiddlesex.ca/services/program-guide/>.
- Figure 4 - LAC + USC Restorative Care Village. CannonDesign. (n.d.). <https://www.cannondesign.com/work/lac-usc-restorative-care-village>.
- Figure 5 - Durham Modular Supportive Housing. Montgomery Sisam. (n.d.). <https://www.montgomerysisam.com/project/durham-modular-supportive-housing/>
- Figure 6 - 15 By Author
- Figure 16 - Charlotte's Tent City And An Update On Homelessness In The Queen City. WFAE 90.7. (2021, February). <https://www.wfae.org/show/charlotte-talks-with-mike-collins/2021-02-16/charlottes-tent-city-and-update-on-homelessness-in-the-queen-city>
- Figure 17 - 41 By Author
- Figure 42 - Elsie Perrin William Memorial Library. (n.d.). blueprints, London Room, London Ontario.
- Figure 43 - By Author



- HOLISTIC DESIGN PRINCIPLES:**
- SPACE UTILIZATION:** THE WAY THE SPACE IS USED AND ORGANIZED CAN AFFECT MENTAL HEALTH BY CREATING A SENSE OF SECURITY, PRIVACY, COMFORT AND ACCESSABILITY TO HELP REDUCE STRESS AND ANXIETY AND IMPROVE MENTAL HEALTH.
 - SOCIAL INTERACTION:** BY CREATING SPACES THAT INCREASE SOCIAL INTERACTION, ARCHITECTURE CAN REDUCE FEELINGS OF ISOLATION, PROMOTE POSITIVE EMOTIONS SUCH AS A SENSE OF BELONGING, INCREASE SELF-ESTEEM, PROVIDE SUPPORT FROM FRIENDS AND PEERS, AS WELL AS ENHANCE COMMUNICATION AND SOCIAL SKILLS.
 - CONNECTIONS TO NATURE:** INCORPORATING GREEN SPACES, ACCESS TO NATURAL LIGHT IN ALL SPACES, AND CREATING CONNECTIONS TO NATURE CAN POSITIVELY IMPACT MENTAL HEALTH AND PROMOTE EMOTIONAL WELL-BEING, HELPING TO ALLEVIATE STRESS AND ANXIETY.



TRANSITION TO COMMUNITY CARE ▶

THE INTRODUCTION OF ORAL DRUGS TO TREAT MENTAL ILLNESS ALLOWED FOR THE TRANSITION OF MENTAL HEALTH TREATMENT TO THE COMMUNITY; HOWEVER, THE CONTRACTION OF TRADITIONAL PSYCHIATRIC CARE OUTPACED THE EXPANSION OF COMMUNITY BASED SERVICES AND SUPPORTS.



CASE STUDY: LAC/USC RESTORATIVE CARE VILLAGE ▶

96 BED RECUPERATIVE CARE CENTRE PROVIDES STABLE HOUSING FOR THOSE RECENTLY RELEASED FROM HOSPITAL AND URGENT CARE SETTINGS. 64 BED RESIDENTIAL TREATMENT BUILDINGS ACT AS A SHORT TERM ALTERNATIVE TO HOSPITALIZATION FOR MENTAL HEALTH NEEDS.



◀ CASE STUDY: DURHAM REGION SUPPORTIVE HOUSING

47 BED TRANSITIONAL HOUSING FACILITY FOR UNHOUSED INDIVIDUALS WITH ON-SITE ACCESS TO MENTAL HEALTH AND ADDICTION COUNSELLING, MEDICAL CARE, FINANCIAL ASSISTANCE AND SUPPORT WORKERS.

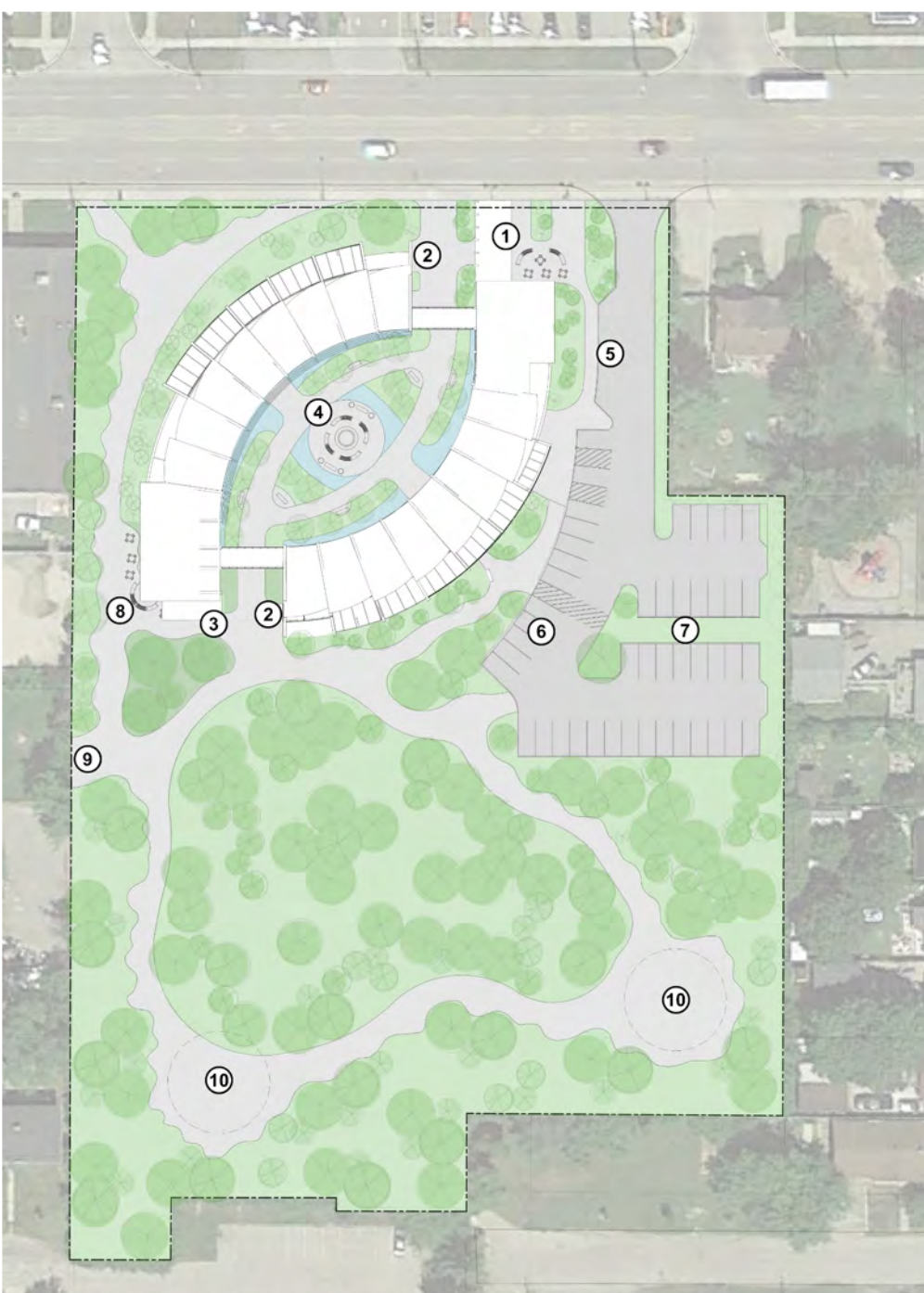
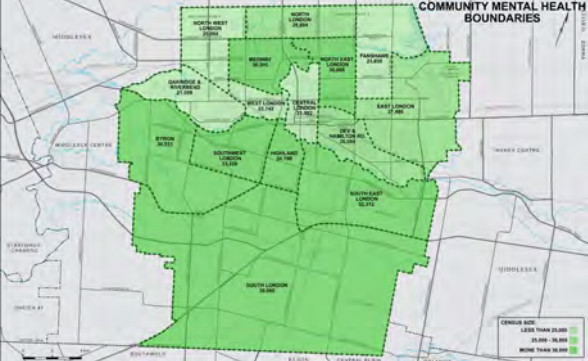
◀ INSTITUTIONALIZATION

ALTHOUGH CREATED WITH GOOD INTENTIONS, THE SEGREGATION OF THE MENTALLY ILL HID THE PROBLEM FROM THE COMMUNITY WHILE CREATING NEGATIVE BELIEFS AND ATTITUDES THAT PERSIST TO THIS DAY. MENTAL HEALTH INSTITUTIONS QUICKLY BECAME OVER-POPULATED, UNDER-STAFFED PROGRAMS IN BUILDINGS THAT REQUIRED SIGNIFICANT REPAIR.

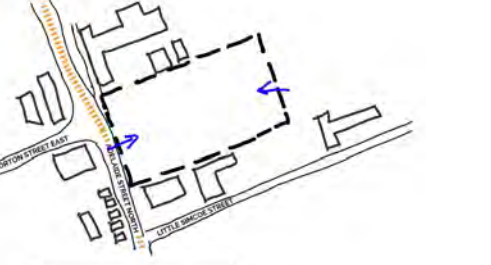
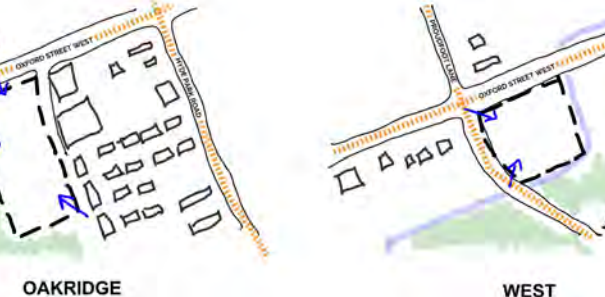
◀ CASE STUDY: TRIESTE, ITALY

RECOGNISED AS DEMONSTRATING THE WORLD'S BEST PRACTICE IN COMMUNITY BASED MENTAL HEALTH CARE, TRIESTE OUTLAWED THE INSTITUTIONALIZATION OF MENTAL HEALTH PATIENTS AND CREATED COMMUNITY MENTAL HEALTH CENTRES THAT INTEGRATE HOUSING, SUPPORT AND EMPLOYMENT SERVICES

SITE DIVERSITY:
EACH POTENTIAL BUILDING SITE PROVIDES ITS OWN NARRATIVE THROUGH THE INTERPLAY OF GEOGRAPHY, NEIGHBOURHOOD CONNECTIONS AND ADJACENCIES, CREATING THE RICH DIVERSITY TO OUR BUILT ENVIRONMENT.



COMMUNITY MENTAL HEALTH BOUNDARIES:
DIVIDED INTO 15 DISTINCT COMMUNITY MENTAL HEALTH DISTRICTS, EACH NEIGHBOURHOOD WILL CONTAIN A COMMUNITY MENTAL HEALTH CENTRE AND TRANSITIONAL HOUSING FACILITY.



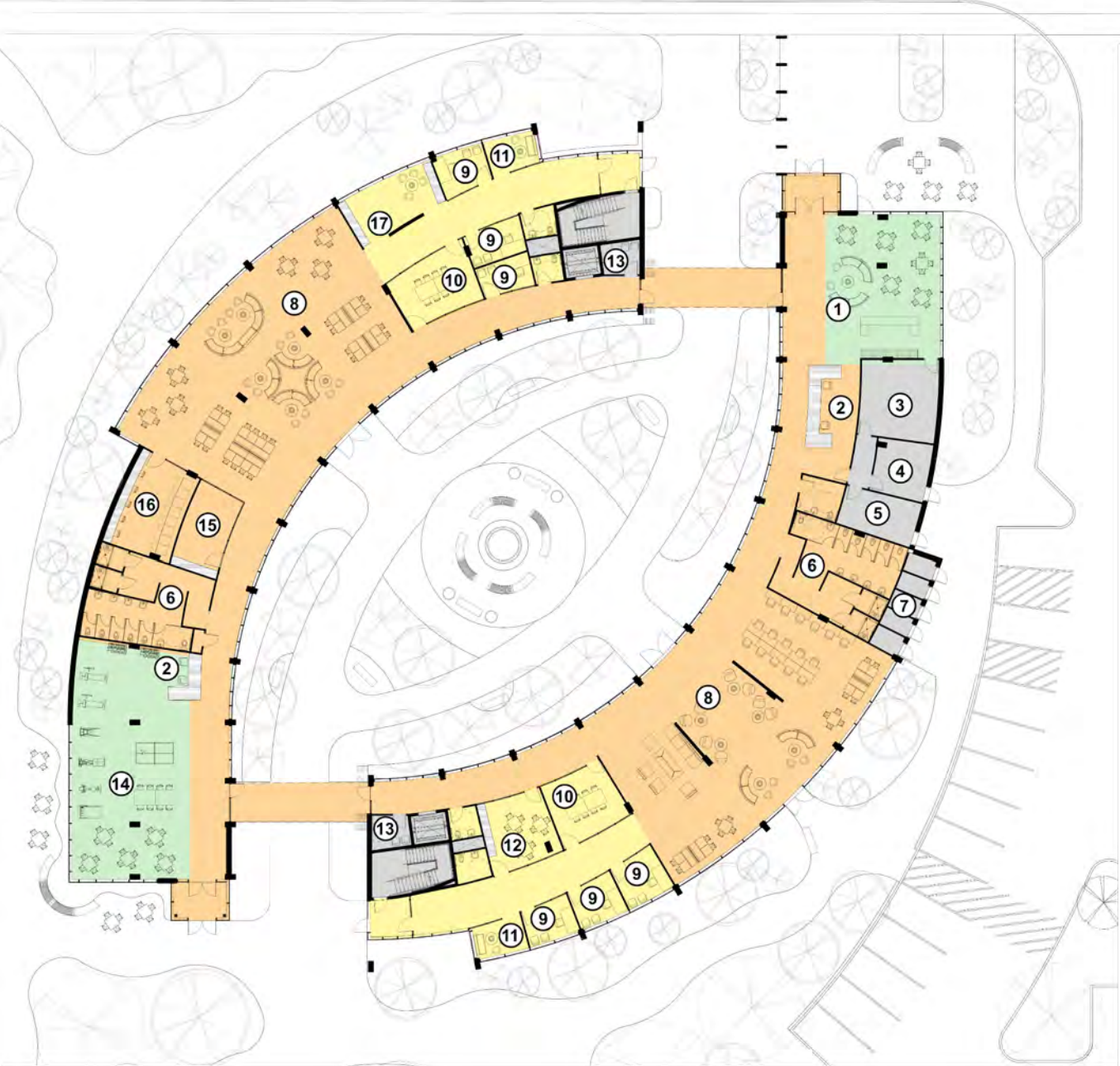
SITE SELECTION:
OPTIMIZING ACCESSIBILITY WHILE RESPECTING TRANQUILITY, THE SITE SELECTION PRIORITIZES PROXIMITY TO TRANSIT ARTERIES WHILE MAINTAINING DISTANCE FROM RESIDENTIAL NEIGHBOURHOODS AND CHILDHOOD INSTITUTIONS, ENSURING INTEGRATION TO EXISTING COMMUNITIES WITH MINIMAL CONFLICTS.

- LEGEND:**
- 01 PRINCIPLE ENTRANCE
 - 02 QUIET ENTRANCE
 - 03 ACTIVITY ENTRANCE
 - 04 COURTYARD
 - 05 DROP-OFF/ RECEIVING
 - 06 PARKING
 - 07 BIOSWALE
 - 08 OUTDOOR ACTIVITY
 - 09 NEIGHBOURHOOD CONNECTIONS
 - 10 COVERED SOCIAL SPACE



COMMUNITY CONNECTIONS:
BY STRATEGICALLY SITUATING VIBRANT SOCIAL SPACES NEAR THE STREET FRONT, THE DESIGN FOSTERS COMMUNITY ENGAGEMENT THAT CULTIVATES MEANINGFUL CONNECTIONS AMONG LOCAL RESIDENTS AND PASSERSBY.

MAIN FLOOR:



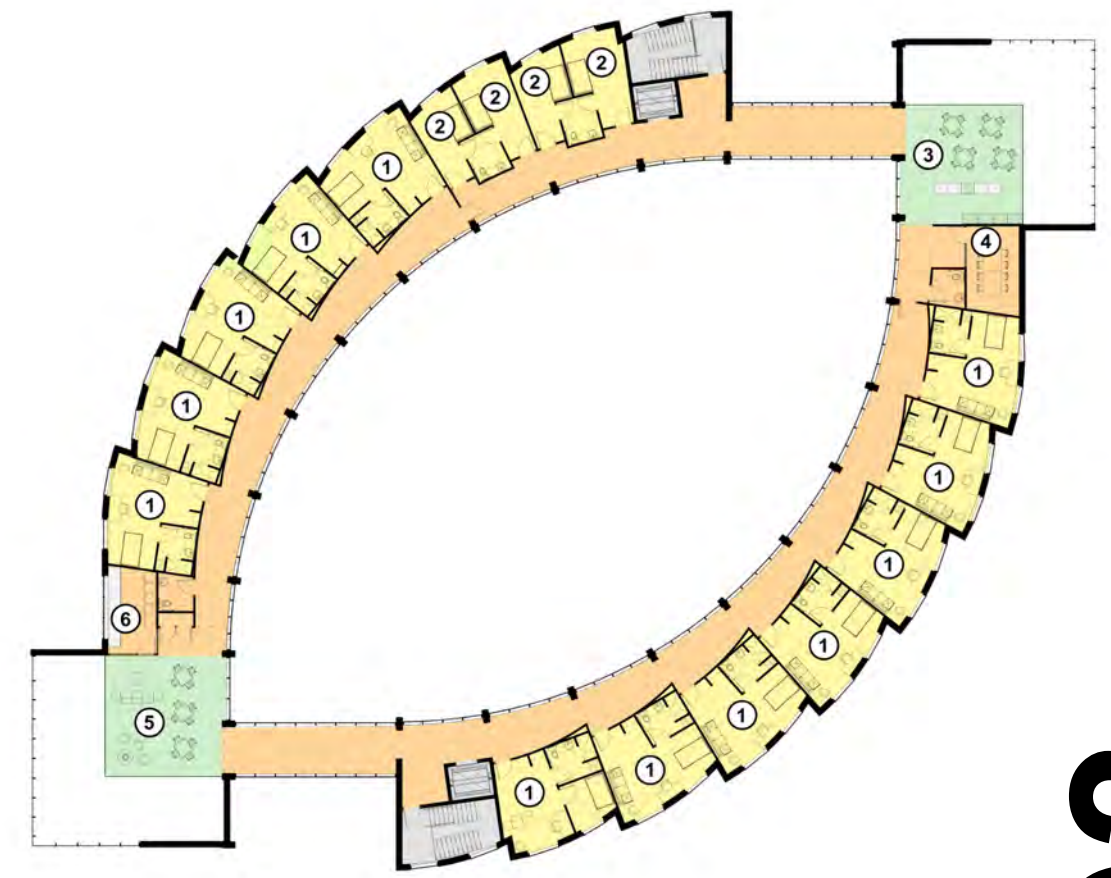
ACTIVE SPACES:
ACTIVE SPACES, HIGHLIGHTED IN GREEN, ARE SITUATED NEAR THE MAIN BUILDING ENTRANCES TO ENHANCE CONNECTIONS WITH THE COMMUNITY BY PROVIDING VIBRANT SOCIAL SPACES THAT ENHANCE COMMUNITY CONNECTIONS

LEGEND:

- 01 CAFE
- 02 RECEPTION
- 03 KITCHEN
- 04 RECEIVING
- 05 GARBAGE/ RECYCLING
- 06 WASHROOMS/SHOWERS
- 07 OUTDOOR USER STORAGE
- 08 LOUNGE
- 09 OFFICE
- 10 MEETING
- 11 QUIET/DE-ESCALATION SPACE
- 12 STAFF ROOM
- 13 CLINIC
- 14 ACTIVITY
- 15 SALON
- 16 LAUNDRY
- 17 RESOURCE ROOM

PROGRAMMATIC LAYOUT:

PHYSICAL AND MENTAL TRANSITIONS FROM QUIET TO ACTIVE SPACES CAN BE MADE AT A USERS PACE BY PROVIDING LIMINAL SPACE BETWEEN EACH PROGRAMMATIC ELEMENT



SECOND FLOOR:



QUIET SPACES:
QUIET SPACES PROVIDE DISCREET LOCATIONS FOR DE-ESCALATION, REFLECTION OR RETREAT.

SOCIAL CONNECTIONS:
LOUNGES ARE DESIGNED TO FOSTER SOCIAL INTERACTION HELPING TO COMBAT LONELINESS AND ISOLATION WHILE PROMOTING STRONGER RELATIONSHIPS WITH FAMILY, FRIENDS AND THE COMMUNITY.



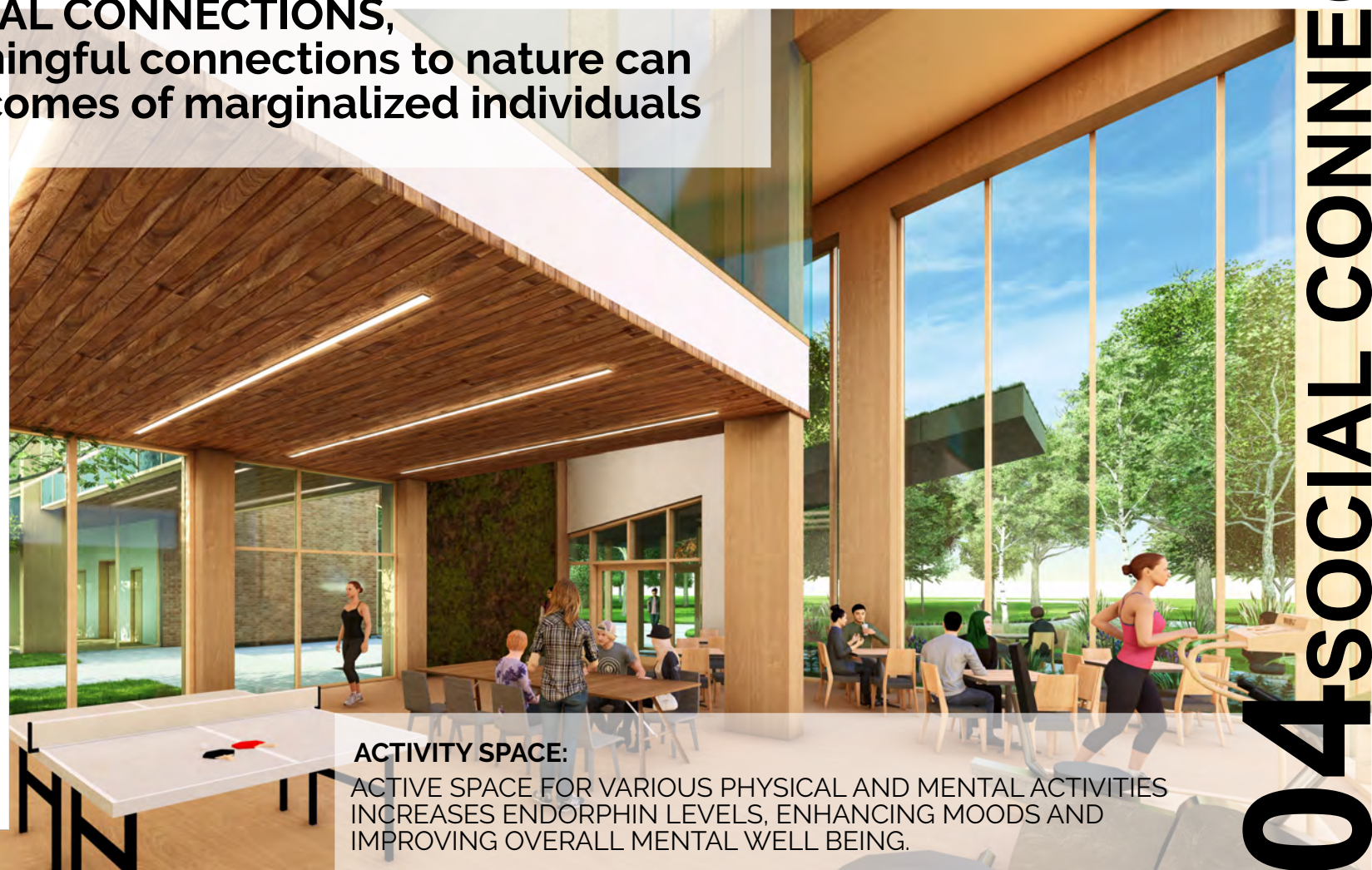
OUTDOOR SOCIAL CONNECTION:
SOCIAL CONNECTIONS IN AN OUTDOOR, NATURAL SETTING, REDUCES STRESS, ENHANCES RELAXATION AND CREATES AN ENGAGING ATMOSPHERE FOR RELATIONSHIPS WITH PEERS.



THESIS STATEMENT:
As mental health issues continue to impact a significant proportion of the population, an architectural response that prioritizes **INCLUSIVE SOCIAL CONNECTIONS**, 24-7 support spaces, and meaningful connections to nature can improve the mental health outcomes of marginalized individuals

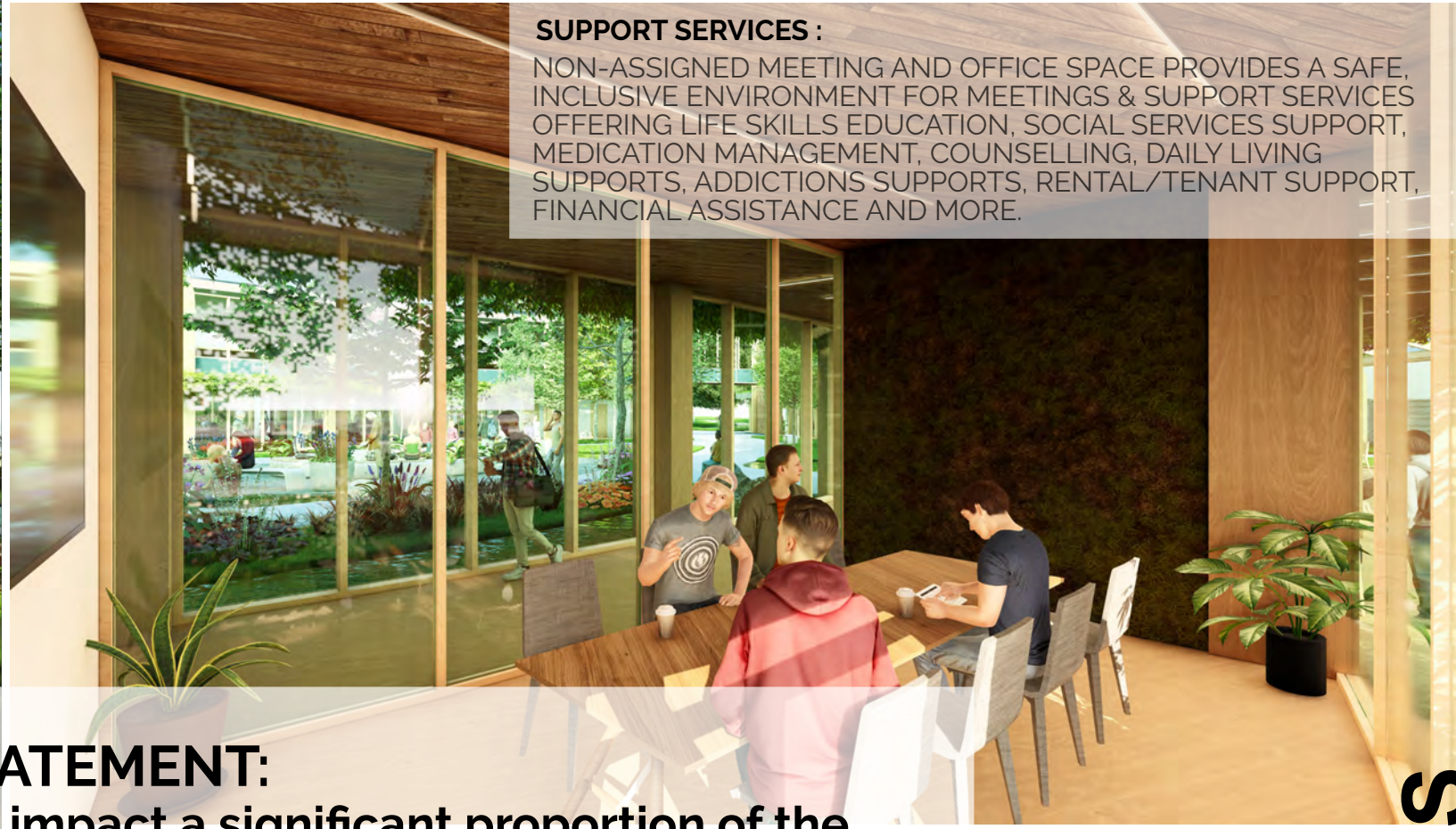


COMMUNITY CONNECTIONS:
BUILDING SOCIAL CONNECTIONS WITHIN THE COMMUNITY CAN FOSTER A SENSE OF BELONGING FOR THOSE DEALING WITH MENTAL ILLNESS WHILE ALSO REDUCING THE STIGMA ASSOCIATED WITH MENTAL ILLNESS.



ACTIVITY SPACE:
ACTIVE SPACE FOR VARIOUS PHYSICAL AND MENTAL ACTIVITIES INCREASES ENDORPHIN LEVELS, ENHANCING MOODS AND IMPROVING OVERALL MENTAL WELL BEING.

QUIET SPACES:
QUIET SPACES PROVIDE DISCREET LOCATIONS FOR DE-ESCALATION, REFLECTION OR RETREAT.



SUPPORT SERVICES :
NON-ASSIGNED MEETING AND OFFICE SPACE PROVIDES A SAFE, INCLUSIVE ENVIRONMENT FOR MEETINGS & SUPPORT SERVICES OFFERING LIFE SKILLS EDUCATION, SOCIAL SERVICES SUPPORT, MEDICATION MANAGEMENT, COUNSELLING, DAILY LIVING SUPPORTS, ADDICTIONS SUPPORTS, RENTAL/TENANT SUPPORT, FINANCIAL ASSISTANCE AND MORE.

THESIS STATEMENT:
As mental health issues continue to impact a significant proportion of the population, an architectural response that prioritizes inclusive social connections, 24-7 SUPPORT SPACES, and meaningful connections to nature can improve the mental health outcomes of marginalized individuals



COMMUNITY SUPPORT :
SOCIAL INTERACTION WITH PEERS CAN REDUCE FEELINGS OF ISOLATION, PROMOTE A SENSE OF COMMUNITY, INCREASE SELF-ESTEEM, PROVIDE SUPPORT AND ENHANCE COMMUNICATION AND SOCIAL SKILLS.



TRANSITIONAL & SHORT STAY HOUSING:
TRANSITIONAL BEDS FILL THE GAP BETWEEN HOSPITALIZATION AND SUPPORTIVE HOUSING. SHORT STAY BEDS REDUCE EMERGENCY ROOM VISITS FOR NON-ACUTE MENTAL HEALTH CARE ISSUES.

05 SUPPORT SPACES

PARTICIPATING IN NATURE:

ACTIVITIES THAT INCORPORATED PARTICIPATING IN NATURE SUCH AS GARDENING, WALKING IN THE WOODS, BIRD WATCHING OR ENJOYING AN OUTDOOR FIRE CAN ALLEVIATE SYMPTOMS OF ANXIETY, DEPRESSION AND STRESS WHILE FOSTERING RELAXATION, MINDFULNESS AND A SENSE OF PEACE.



SURROUNDED BY NATURE:

EXPOSURE TO NATURE AND GREEN SPACES HAS BEEN SHOWN TO REDUCE NEGATIVE THOUGHT PATTERNS WHILE CONTRIBUTING TO EMOTIONAL WELL-BEING AND RESILIENCE.



THESIS STATEMENT:

As mental health issues continue to impact a significant proportion of the population, an architectural response that prioritizes inclusive social connections, 24-7 support spaces, and meaningful CONNECTIONS TO NATURE can improve the mental health outcomes of marginalized individuals



VIEWING NATURE:

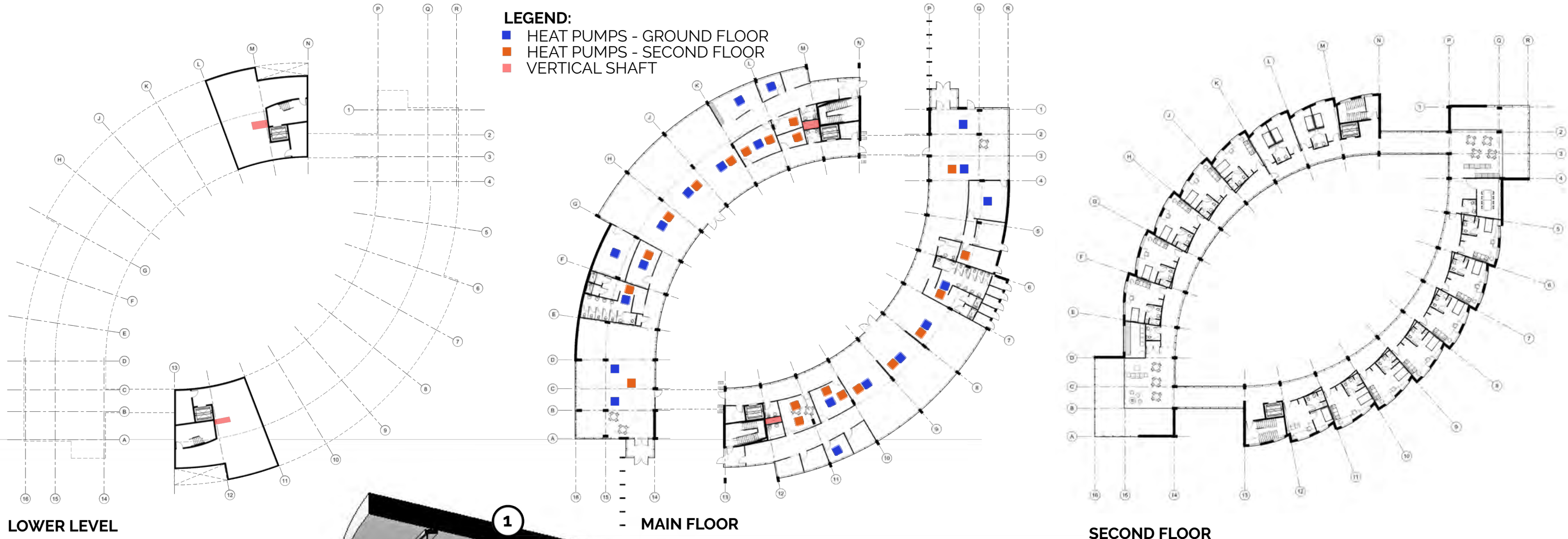
EXPOSURE TO NATURAL SCENERY HELPS REDUCE STRESS, LOWER BLOOD PRESSURE, AND IMPROVE MOOD BY PROMOTING RELAXATION, ENHANCING FOCUS AND FOSTERING A POSITIVE MENTAL STATE AND OVERALL WELL-BEING.



NATURAL LIGHT:

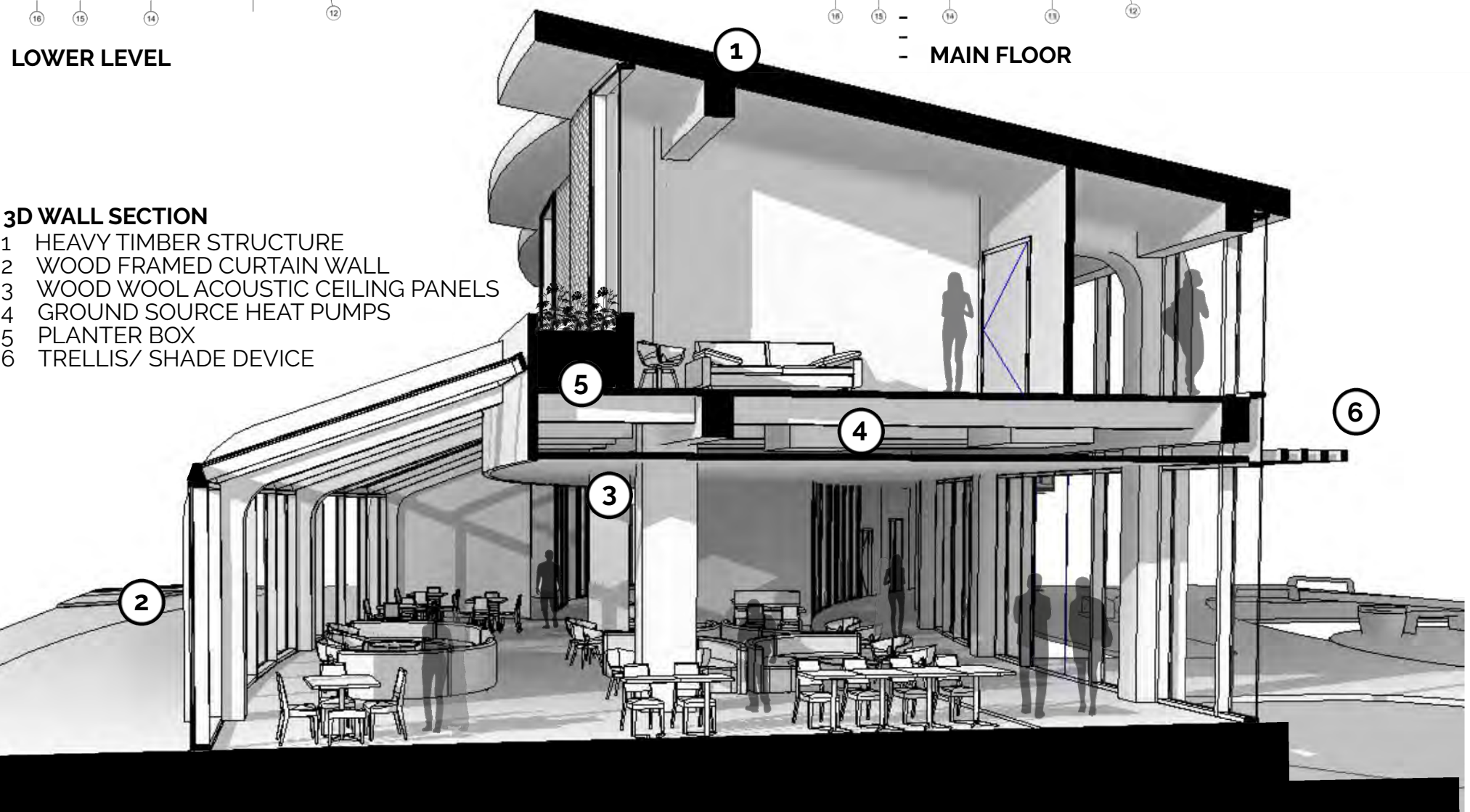
ACCESS TO NATURAL LIGHT HAS A POSITIVE IMPACT ON PHYSICAL AND MENTAL WELL BEING BY AFFECTING MOOD, SLEEP PATTERNS, PRODUCTIVITY, INCREASING ENERGY LEVELS AND REDUCING SYMPTOMS OF DEPRESSION AND ANXIETY.

06 CONNECTIONS TO NATURE



3D WALL SECTION

- 1 HEAVY TIMBER STRUCTURE
- 2 WOOD FRAMED CURTAIN WALL
- 3 WOOD WOOL ACOUSTIC CEILING PANELS
- 4 GROUND SOURCE HEAT PUMPS
- 5 PLANTER BOX
- 6 TRELLIS/ SHADE DEVICE



HVAC:

GROUND SOURCE HEAT PUMPS PROVIDE HEATING AND COOLING TO ALL AREAS OF THE BUILDING. INDIVIDUAL TEMPERATURE CONTROLS ENSURE OCCUPANT COMFORT IS MAINTAINED.

WATER SUSTAINABILITY:

A GREY WATER REUSE SYSTEM RECYCLES WASTEWATER FOR REUSE IN NON-POTABLE SOURCES.

ACOUSTICS:

WOOD-WOOL ACOUSTIC PANELS IMPROVE THE ACOUSTIC DESIGN OF COMMUNAL SPACES, REDUCING NOISE LEVELS LEADING TO IMPROVED SPEECH INTELLIGIBILITY AND REDUCED DISTRACTIONS WHILE PROMOTING RELAXATION, FOCUS AND PRODUCTIVITY.

