Redesigning Lives: Learning How Space Impacts Residents in Affordable Supportive Housing Initiatives

REDESIGNING LIVES: LEARNING HOW SPACE IMPACTS RESIDENTS IN AFFORDABLE SUPPORTIVE HOUSING INITIATIVES

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The researchers also want to acknowledge the contributions of all of the student researchers on their fantastic interdisciplinary research team.

In particular, we are thankful for the work of Destanee Bucko throughout the 2019/20 Academic Year in the data gathering, analysis and preliminary writing of the literature review.

LETTER FROM THE RESEARCHERS

When we proposed this research in the Winter of 2019, we had no idea that our world would be transformed within a year. Our first research dissemination event was booked for March 27, 2020 which was postponed, as was the release of our research report. It feels like many things have been put on hold in the past nine months.

We want to acknowledge, however, that housing insecurity and homelessness are two of the things that have not been put on hold during COVID-19. They have, in fact, become even more precarious issues with an unstable economy and health concerns. COVID-19 has also magnified what many experts have called a mental health crisis in Canada (CAMH, 2020).

We appreciate the many dedicated staff at Indwell, Invizij Architects and the development team at Schilthuis Construction who continue to support and serve the tenants at the various Indwell sites and continue to build new supportive affordable housing developments.

Thank you for inviting us into your process and telling us your story.

Dr. Shannon Pirie and Dr. Bethany Osborne

December 2020

1.

INTRODUCTION

Redesigning Lives: Learning How Space Impacts Residents in Affordable Supportive Housing Initiatives is a research project funded through a SSHRC Explore Grant awarded to Dr. Shannon Pirie and Dr. Bethany Osborne in March 2019. This research was a collaborative venture between the Faculty of Applied Science and Technology and the Faculty of Applied Health and Community Studies at Sheridan College. The goal of this research was to look at the impact that design can make to mental health and wellbeing and community-building through the lens of affordable and supportive housing. Bringing together the strengths of the two disciplines, this research looked at physical design and how it intersects with social determinants of health (SDOH).

2.

THE RESEARCH TEAM

Dr. Shannon Pirie's doctoral work focused on affordable and social housing in large city centres across Canada, via the lens of architectural devices and the notion of home. Using the device as an entry point into design, Shannon's teaching is centred on a core understanding of building science and the integration of sustainable approaches that improve the environmental impact of buildings, with particular emphasis on the creation of quality spaces for people.

Dr. Bethany Osborne has worked with marginalized communities for the past two decades and teaches about gentrification and social determinants of health. Bethany worked in Regent Park, the largest affordable housing development in Canada, and supported residents in creating a community development plan as the region transitioned into a 25-year revitalization. When she moved to the City of Hamilton four years ago, she was interested in the Indwell projects because of their innovative approach to affordable supportive housing.

The research team was comprised of eight Research Assistants from the following programs: Social Service Worker, General Arts and Science, Architectural Technology. Research Assistants were responsible for transcribing and coding the video interviews, creating drawings, contributing to the literature review, writing up the findings of the interview data and preparing the online gallery. The Research Assistants were **Destanee Bucko** – Social Service Worker program; **Cory Haslett** – General Arts and Science program; **Mallika Sothinathan** – Social Service Worker program; and **Ingrid Tubon**, **Samantha Aiello**, **Stefanija Stameska**, **Yuting (Claire) Gong** and **Carolina Daza Jaramillo** from the Architectural Technology program.

3.

BACKGROUND AND SCOPE

Within the literature on Social Determinants of Health, there is a consensus that stable housing plays an important role in good mental health. However, there have been very few substantive studies on the impacts of design in that process (Hernadez & Suglia, 2016). From of architectural and design perspectives, there has been a long-standing interest in creating thoughtfully-designed affordable living spaces that address both the individual and community. Many such large-scale attempts have failed, for a number of reasons including their neglect of local scale, their inherent maintenance challenges, and most significantly, the stigmatization of both people and places that they create (Dunn, 2012). In addition to this, these 1960s ideological panaceas have more recently caused large-scale displacement of individuals and discontinuity of community through their drastic revitalization and reconfiguration into mixed-income neighbourhoods. One such example is Regent Park in Toronto which has seen a complete demolition and redesign into socially-mixed housing over the past several years. While the reintroduction of services such as grocery stores and shops, and infrastructure such as community centres and schools bring with them many positives, the path to get there is fraught with discontinuity for many. Of further detriment to stable housing conditions, it is significant to note that when attempts are not made to socially mixed redevelopments, low-income residents are fully displaced, along with their previous residences, to make way for high-priced condos which provide high-yield results for developers (Chong, 2018).

This investigation looks at developments that are local, community-based adaptive reuse projects that addresses issues of social and affordable housing for approximately 600 residents on a manageable scale. Based in Hamilton, Ontario, they are led by a community partner who "creates affordable housing communities that support people seeking health, wellness and belonging," (Indwell, 2020) and is mindful of the social determinants of health. This partner is, as well, mindful of the impact that buildings and their construction have on the environment.

Indwell is an independent Hamilton-based Christian charity that has evolved from renting and purchasing buildings for their tenants, to designing and constructing their own since 1970. For the last ten years, Indwell has become a trailblazer in creating affordable supportive housing that reflects the community in which it is situated. In partnership with Hamilton's Invizij Architects, their housing developments in the Hamilton-Wentworth Region, are also formidable for their emphasis on sustainable building science and construction technology. It is this intersection between sustainability and community-minded health and wellness that makes them unique within the framework of supportive housing. Locations that had been abandoned to all but the desperate are infused with new life using principles of design that incorporate both cutting edge

environmental design principles (i.e. Passive House principles) and an intent towards community-building. Indwell has repurposed these discarded buildings and returned them to the community, transforming both the landscape and community morale. These developments are built to provide either affordable, or affordable and supportive housing options depending on the needs of their occupants. They have been purposeful in thinking about the design of their buildings, partnering with Invizij Architects who have a commitment to leading environmental design (Cubitt & Cubitt, 2018) and have worked with Indwell to create community space both inside and outside the restored properties. The team has been steadfast in their thinking when it comes to the needs of residents who struggle with addictions, mental health or other poverty-related issues. With their collective effort to refine and create durable spaces that address the dignity of the individual and the making of community, they are essentially redefining the housing typology for this demographic, keeping at the forefront the tenet that adequate housing contributes directly to mental health and wellbeing, thus creating the potential for transformed lives and communities (CMHA, n.d.).

Globally, there are very few housing projects or development models that are similar to what Indwell and Invzij Architects delivers. No one has examined or reviewed the short-term and longer term impacts that this kind of project can have on communities and residents, especially with regard to the synergies created between socially responsible design and environmentally-committed building science. With this in mind, the purpose of this short-term study is to identify and interview the key players in order to better understand their method of development and project execution. It is clear that the team works with intention and outlining their specific objectives enables us to lay the groundwork for a more in-depth study on the correlation between sustainable design approaches and better health outcomes that are not only physical, but also related to social determinants of health.

This study received ethics approval from the Sheridan Research Ethics Board in May 2019. Data collection began in May 2019 and was completed at the end of June 2019.

4.

LITERATURE REVIEW

Authors' Note:

There are very few articles that address the specific phenomenon of interest to us in this research study. We searched for others who may have similar interests or may be using similar lenses. This review reflects their research and recognizes that because health impacts the whole person, we had to consult many different disciplines to see how they approached the issue of housing as a social determinant of health and design. We recognize that the literature that is reflected in this review is heavily weighted on the social impacts of housing – including mental health and wellbeing. This is because the research and the literature reflect more work in this area. The contribution of design to mental health and wellbeing – in the area of affordable or supportive affordable housing is underexplored. Many of the articles that have been published on housing and the social determinants of health are US or UK based, and so we are also aware that there is a need to generate more empirical research and evidence of both the need for and the value of affordable housing, and good design on positive health outcomes within a Canadian context.

Affordable Housing, Design and Their Impact on Health and Wellbeing

Introduction

Social Determinants of Health (SDOH) are aspects of one's life which can impact them either positively or negatively in their development. Housing is a key SDOH that is a basic human right and its provision is important to our wellbeing (CMHA, n.d.). The impact of housing on health is now widely considered by policy makers to ensure effective intervention. Housing is one of the best-researched SDOH, and selected housing interventions for low-income people have been found to improve health outcomes and decrease health care costs (Taylor, 2018). A basic human right, housing is a necessity for living a physically and mentally healthy life (Raphael et al., 2020, p.38). There are many health benefits that stem from the provision of affordable housing options (Maqbool et al., 2015; Kottke, 2017). A number of research studies concentrate on the physical impacts of inadequate housing (Pomeroy & Marquis-Bissonnette, 2016) while others address the impact on mental health and wellbeing (Gibson et al., 2011). Krieger and Higgins (2002) make the point that physical impacts are easier to measure and provide evidence of those impacts on mental health and wellbeing.

As a highly-industrialized country, Canada, is experiencing a housing crisis and has been for several decades

and the precariousness of housing is further aggravated in 2020 as a result of COVID-19 (MacKinnon & Cooper, 2020). Physical distancing and safe health practices, such as hand-washing that are essential to limiting the spread of the disease, are even more difficult to achieve without adequate housing. Furthermore, the economic hardships faced by an increasingly large segment of the population serve to further highlight the inadequacy of housing for many (Tetley, 2020). Over the past thirty years, rents have risen well beyond the cost of living, particularly in urban areas. Raphael et al. (2020) refer to the inability to afford a place to live as housing insecurity, which, they say, is a 'precursor to homelessness'(p.38). Accordingly, inadequate housing has three criteria that makes it so:

- affordability, in which the household spends 30 % or more of their income on shelter costs;
- suitability, by which housing is inappropriate for the size and composition of a household—for example, insufficient space for household size (overcrowding); and
- adequacy, in which the housing requires major repairs, such as those related to plumbing, or has structural damage. (Raphael et al., 2020, p.39; also reflected in Braveman, Dekker, Egerter, Sadegh-Nobari, & Pollack, 2011).

The definition above does not explicitly address the quality of housing that is considered affordable. Another framework for measuring housing as an SDOH devises three intersecting constructs: adequate housing conditions, affordability, and residential stability (Hernandez & Suglia, 2016, p.27). If any of these constructs are unmet, an array of negative impacts on mental and physical health become evident. When overall need for housing is met, there is the potential for long-term positive outcomes such as better health and wellbeing, decreased need for health services and increased self-reliance (Baxter, Tweed, Katikireddi & Thomson, 2019).

Both definitions share affordability as a common attribute. If rent or mortgages cannot be paid, the need for housing cannot be met and one's health becomes precarious. Affordability of housing can have seriously adverse health impacts on individuals and families. The importance of affordability in terms of high housing costs can lead to stress as a result of fear of eviction as well as living in overcrowded conditions (Hernandez & Suglia, 2016, p.27). Studies show that many families resort to living in overcrowded conditions in an attempt to lower hosing costs which can result in potential spread of infectious disease as a result of increased exposure as well as impacting one's mental health due to "...lack of personal space or privacy, enforced intimate proximity to people in the home with communicable diseases, and potentially excessive social or external demands" (Leventhal, & Newman, 2010, para.11).

If, from the outset, we can provide the means to make housing more affordable, we can focus on other factors such as the experience of the space – the value of experience and the feasibility of meeting other basic needs for residents, such as suitability, condition and stability.

Housing Condition and Stability – at What Price?

There is ample research on housing as an SDOH and how the lack of certain inherent aspects will have negative impacts on healthy development. Returning to Hernandez & Suglia's (2016) framework, we want to further explore the notion of adequate housing conditions (p.27). Poor conditions, in terms of the physical structure of the building, can have great influence on the health of its residents from both a corporeal and mental standpoint. Examples include, but are not limited to the following: mould, pest infestation, peeling paint, drafts and energy inefficiencies, and physical crowding which directly impact physical health (Hernandez & Suglia, 2016, p.27). A specific example of a health impact is dampness. Dampness in the home has been directly tied to the development of respiratory illnesses such as asthma (Raphael et al., 2020, p.39). Dampness has also been tied to worsening pre-existing respiratory conditions in residents (Raphael et al., 2020, p.39). In addition, studies show that poor housing conditions can impact learning in terms of childhood development; "Poor housing has been linked to cognitive delays in children from exposure to neurotoxins" (Hernandez & Suglia, 2016, p.28). Poor housing conditions have also been linked to more accidents for its residents as a result of structural deficiencies (Hernandez & Suglia, 2016, p.28). In summary, if the housing itself is not physically safe, residents will be subject to harm both in the short- and long-term. As a result, a clear understanding of the mechanics of building science is imperative to anyone constructing housing that is meant to last.

Residential stability can have further adverse health impacts; "instability, defined as frequent moves or in its most extreme form, homelessness, may indirectly impact health." (Hernandez & Suglia, 2016, p.27). Residential stability also refers to the area in which the individuals and families live, not just the frequency of moves. Typically, areas that have lower rates of affordability are low in social capital and overall are considered to be poor areas; "Another study showed that children in areas with higher rates of unaffordable housing tended to have worse health, more behavioral problems and lower school performance" (Braveman, Dekker, Egerter, Sadegh-Nobari, & Pollack, 2011). If we consider then the area in which housing is achieved, it is imperative to look around the neighbourhood and understand how a new or renovated building can have an impact beyond its property line and vice versa.

When referencing the three intersecting constructs of housing as SDOHs; adequate housing conditions, affordability, and residential stability (Hernandez & Suglia, 2016, p.27), it is evident that for all three to be considered obtained is often unachievable as a result of individual's means for living, their location, or supply. Often for one of the constructs to be met, for example, affordability; quality, or adequate housing conditions are sacrificed (As cited in Hernandez & Suglia, 2016, p. 29). This illustrates that although one's housing may be affordable, they are still considered to be in an inadequate housing state because of either its condition or lack of stability, which will in turn negatively impact their physical and/or mental wellbeing. It is not a surprise, therefore, that more affordable areas where inexpensive housing is found are typically not high in social capital.

As for residential stability, affordability can lead to instability as families or individuals may be forced to move frequently in search of affordability leading to impacts on physical and/or mental health. We can therefore conclude that affordability does not mean high quality; and high quality usually means

unaffordability. Residential stability is elusive when either affordability or adequate housing conditions are sacrificed for one another. And when that happens, homelessness is often the result.

Housing Policy and Homelessness

Housing, specifically affordable housing, is a public policy issue; "a homelessness emergency exists in many Canadian cities" (Raphael et al., p.38). Lack of affordable housing, along with an array of physical

Figure 1: Core Housing Need in Canada (2016 Census Data)

The 2016 Census found that 12.7% of all Canadians were in core housing need:	
Toronto	19.1%
Vancouver	17.6%
Montreal	10.9%
Renters constitute a significant percentage of this population in urban centres: (and many are paying >30 per cent of their income on housing with many paying more than 50% (indicating imminent homelessness)	
Toronto	Renters 47% of population in urban centres 47% paying > 30%; 23% paying > 50%
Vancouver	Renters 53% of population in urban centres 44% paying >30%; 23% paying >50%
Montreal	Renters 63% of population in urban centres 36% paying >30%; 18% paying >50%

and mental health concerns as mentioned above, can lead to homelessness which itself causes a further array of physical and mental health concerns. Studies show that "homeless people experience a much greater rate of a wide range of physical and mental health problems than the general population. Likelihood of early death among homeless people is 8-10 times greater than the general population." (Raphael et al., p.39). The Ontario Human Rights Commission's 2008 report "Right at Home" points to data that shows 30% to 35% of the homeless population in general, and up to 75% of homeless women in particular, suffer from a mental illness (OHRC, 2008). The Wellesley Institute (2010) reports that individuals who are homeless or vulnerably-housed are at risk of the onset of new mental health problems. Additionally, the Ontario Human Rights

Commission (2008) reports that having a safe place to live is a vital part of recovery from mental illnesses and addictions.

When the requirements of adequate housing conditions and affordability are met, the next step is to move toward increased residential stability. A resident of a home which has adequate housing conditions and meets the standards of affordability, will in turn, not have to frequently move to seek adequate shelter, increasing residential stability. For housing, as an SDOH, to ultimately present a positive impact in an individual's life, high quality of housing must meet deep affordability; specifically, when referring to publicly-available, supportive housing, in order to combat the issue of homelessness. This requires an intentionality in design, both in the process and in the physical spaces that are created, to ensure that people get to the housing and that they stay (Baxter et al., 2019).

The Impact of Housing on Health and Wellbeing

Shaw's model of the impact of housing on health is derived from a combination of both physical and psycho-social factors. At the heart of her model is the belief that housing is a basic human right, not just basic shelter but "security of tenure; availability of services, materials, facilities, and infrastructure; affordability; habitability; accessibility; and location and cultural adequacy" (p.397).

Figure 2: Direct and indirect (hard and soft) ways in which housing can affect health

<table>
<tr><td rowspan="2"></td><td>Direct</td><td>Indirect</td></tr>
<tr><td>Indirect/household level</td><td>Area/neighbourhood level</td></tr>
<tr><td rowspan="3">Hard/physical/material</td><td>Material/physical effects of housing on health- damp, cold, mold, heat, homelessness</td><td>Availability of services, facilities; features of the natural and built environment</td></tr>
<tr><td colspan="2">Indicator (and part) of SES-income, wealth</td></tr>
<tr><td colspan="2">Proximity to services</td></tr>
<tr><td rowspan="2">Soft/social/meaningful</td><td>Effect of poor housing, insecurity and debt on mental health</td><td>Household & area culture and behaviours</td></tr>
<tr><td>Feeling of 'home', social status, and ontological security</td><td>Community, social capital, social fragmentation</td></tr>
</table>

Shaw categorizes (*Figure 2*) the different types of impacts housing can have on health. Much of her paper

is devoted to the physical impacts of housing on health, but she also devotes some time to studies that have looked at the impact of housing on mental health and wellbeing. She makes a distinct connection between the 'hard' which are easier to measure and the 'soft' impacts, which are often more difficult to measure (Halpern, 1995; Macintyre et al., 2003; Weich et al., 2002).

Within the research studies that have been conducted looking at the psycho-social impacts of design that contribute to social isolation, there are sub-populations that appear more frequently than others, such as such as older adults living in residential facilities, are explored more in the literature than the homeless population (Castenson, 2018). And although there are some studies that look at design and mental health in lower income communities, and communities, like the homeless community who face multiple barriers (López et al., 2019), the majority of studies of this type focused on older adults who had secure housing but were facing the challenge of social isolation (i.e. Kalita, 2017; Engineer et al. 2018; Kasden, 2020).

The Contribution of Housing Design to Mental Health and Community Building

In this literature review, we have focused on the importance of addressing the SDOH because of their impact on both physical and mental health and wellbeing. Lai & Rios (2017) point to both housing condition and quality as well as community design as key in how individuals experience good health. There is significant evidence that sub-par housing conditions such as poor indoor air quality, high lead levels in paint, houses that are damp, high noise levels, presence of pests, and overcrowding can contribute to health problems such as asthma, infectious and chronic diseases, and mental health issues such as stress, anxiety, and depression (Krieger & Higgins, 2002; Srinivasan, O'Fallon, & Dearry, 2003).

Affordable housing must meet the adequate housing conditions of the physical structure to maximize positive impact. However, there is always a tension between design elements and affordable housing when it comes down to bottom line and budget (CMHC, 2018). Indwell, with their use of the Passive House model within their affordable housing developments is an exception to this and seems to be, if not the sole, at least the largest affordable housing provider using this approach in Canada (Cubitt &Cubitt, 2018). "Architects, planners, and developers play roles in ensuring that the built environment is health-promoting. Factors such as walkability, access to services, healthy food, transportation, and safety all translate to better health" (De Scisciolo, Egger, & Ayala, 2018). In addition, quality design and construction are also of high importance; "...quality design and construction, coupled with regular building maintenance, can help to prevent illness and contribute to improved physical and mental wellbeing" (De Scisciolo, Egger, & Ayala, 2018).

When looking at the specific type of building that is most beneficial to health and wellbeing, "the physical infrastructure of housing should capitalize on modern building practices that emphasize high performance metrics in energy efficiency, ventilation, lighting, thermal comfort and the use of environmentally sound materials." (Hernandez & Suglia, 2016).

The consideration of quality design and construction, coupled with modern building practices measured by

performance metrics, is an interesting way to look at the design of housing. In fact, we would argue that the two are not mutually exclusive and when deliberately integrated into the entire development and delivery process of a building, there is the potential for the creation of housing that will contribute positively to the SDOHs. The challenge is in the judgement [imagining] of what constitutes quality design. While it is an important factor that is difficult to measure, Professor Magnus Rönn emphasizes that "good solutions rely upon knowledge of the cultural setting where the project belongs" (2010). In fact, this is exactly what works for Indwell as the developer of its own buildings. It is steeped in its own culture and understands better than anyone else what its residents need to thrive and can therefore insist on design that meets their threshold of quality, as they have designed for themselves.

Designing for the Whole Person

The literature discusses multiple barriers that some individuals face when seeking housing. We discussed earlier in this review that housing instability can very quickly turn into homelessness (Raphael et al., 2020). There are also a number of groups of people who are in particularly vulnerable situations when it comes to the risk of housing instability and the possibility of homelessness. Indeed, these are what the UN calls 'deep disparities' in access to adequate, affordable, safe, and secure housing for Indigenous peoples, women, members of racialized communities, persons with disabilities, trans and gender-diverse people, older adults, children and young people, migrants, refugees, asylum-seekers and stateless persons (Farha, 2018).

In addition to providing physical design features, the literature also discusses the importance of designing for the needs of the whole person. This means that there need to be more affordable supportable housing options developed that take the needs of the whole person into consideration. Housing First is a part of Canada's Homelessness Strategy and it involves moving people experiencing homelessness – particularly chronic homelessness – rapidly from the street or shelter to supportive programing (Government of Canada, 2019). The alternative to this is supporting people through temporary programs until they 'deal' with their other issues (i.e. substance abuse issues). However, the lack of housing and stability can often aggravate these issues, making it difficult for individuals to resolve them and they are caught in a cycle of homelessness and temporary shelters and programs (Dohler et al, 2016).

Designing supportive affordable housing for the whole person can have many benefits including increased physical and mental health (Dohler et al., 2016). In their research based on studies of supportive, affordable housing (i.e. for persons with disabilities, older adults, or people in recovery) conducted in both Canada and the US, Dohler et al (2016) found that there were a number of important design considerations when planning for successful developments:

- **Permanence and affordability:** Tenants pay no more than 30% of their income for rent; they cannot be evicted for reasons unrelated to being a good tenant.
- **Services are housing-oriented:** Services aim to help tenants remain housed

- **Services are multi-disciplinary: Services are flexible;** Service providers may help tenants address physical health, mental health, and substance use conditions and may involve multiple service agencies working together
- **Services are voluntary but assertive:** Services are voluntary; tenants will not lose their housing simply because they do not participate in services. But providers offer supportive services *assertively*, which means that they will continue to show up and check on someone even if tenants do not request help
- **Integration:** Tenants are able to live independently but should have access to public transportation, grocery stores, parks, and other neighbourhood amenities
- **Emphasis on choice:** Supportive housing maximizes client choice
- **Low barriers to entry:** Supportive housing providers do not require clients to hit benchmarks before moving into housing or put other screening barriers in the way.

There are six principles of the Housing First program – and the sixth principle states (Government of Ontario, 2019):

Strength-based and promoting self-sufficiency: The goal is to ensure clients are ready and able to access regular supports within a reasonable timeframe, allowing for a successful exit from the Housing First program. The focus is on strengthening and building on the skills and abilities of the client, based on self-determined goals, which could include employment, education, social integration, improvements to health or other goals that will help to stabilize the client's situation and lead to self-sufficiency.

When housing is designed with the whole person in mind, people who have been homeless, become people who are housed and part of a community because the 'game has changed', and there is space to grow, to learn and to succeed at their own pace.

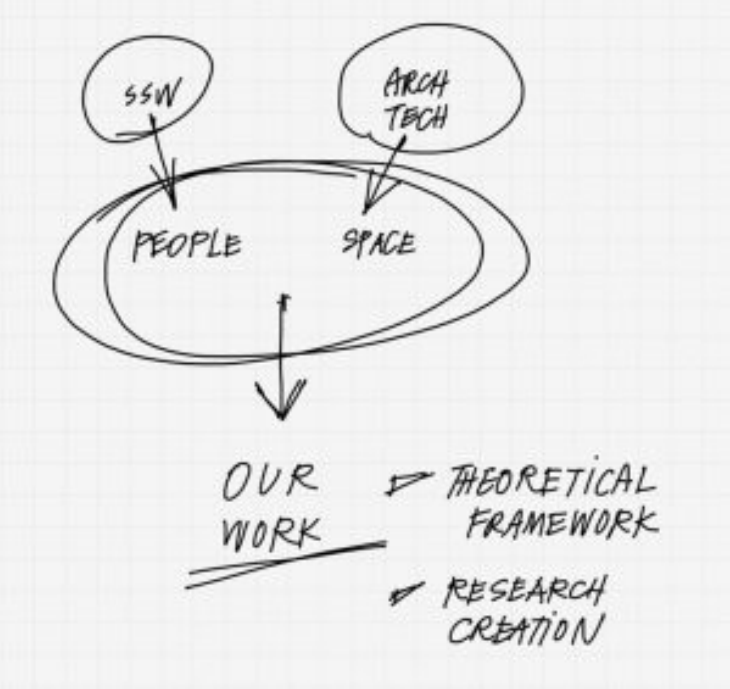
Conclusion and Invitation

The literature demonstrates the importance of affordable and supportive housing, and the significance of ensuring its quality. Good quality, safe, and intrinsically sound housing has clear benefits for our communities and, in particular, for the vulnerable members within them. The literature also points to the need for an intentionality in the physical and purposeful design of affordable housing that will support the whole person. In the pages ahead, we invite you into a case study, where this kind of **intentional approach** has been taking form and supporting tenants for the past decade.

5.

THE RESEARCH

Figure 3: Our Research Approach



In approaching this research from the two very different disciplines of Architecture and Community Studies, we quickly realized that although our typical data sources are different (one being grounded in building science and the other in personal narratives and experiences), the goal of understanding how to further the cause of intentional design to create supportive and dignified housing was a shared one. Our collective interest in people and space was the foundation of this exploratory work and will a primary axis on which further research will be conducted.

6.

METHODOLOGY

Interviews

This exploratory research consisted of data collected through in-person interviews with key stakeholders. We conducted semi-structured interviews with key stakeholders involved in the Indwell/Invizij Affordable Supportive Housing project in order to assess scope, background, history, approach, intent, and record initial impacts observations. Key stakeholders were selected based on consultations with Graham Cubitt, from Indwell and Emma Cubitt, from Invizij Architects.

Participants included project and organizational administrators, housing workers, the head architect, the construction lead for the Parkdale Landing Project (the first large scale Passive House Multi-dwelling building built in Hamilton), a politician involved in housing projects and a key member of the Affordable Housing office from the City of Hamilton. A total of eight individuals participated in the interviews between May and June 2019. One of the interview participants participated in two interviews, where the second interview was part of a site tour of the Parkdale Landing site. This brought the total number of interviews to nine.

The key stakeholders, in accordance with the terms of the Ethics protocol, agreed to be identified. This was essential because of the different roles that each of the research participant plays and because of the exploratory nature of the research. The research participants were as follows:

Jeff Neven, Executive Director, Indwell

Graham Cubitt, Director of Projects and Development, Indwell

Jess Brand, Assistant Program Director, Indwell

Steven Rolfe, Director of Mental Health Services, Indwell

Emma Cubitt, Principal Architect, Invizij Architects

Henry Schilthuis, Construction Lead, Schilthuis Construction

Nrinder Nann, Hamilton City Counsellor, Ward 3

Bruce McLean, Housing Development Officer, City of Hamilton

Semi-structured interviews took place in various locations in Hamilton, Ontario. Participants were asked to respond to a series of common questions that addressed scope, background, history, approach, intent, and initial observations of impacts. All of the questions had a particular focus on the intersection of design, mental health and community building. Questions varied in each interview as the key stakeholders had different areas of expertise (i.e. the head architect and the construction lead had more technical expertise while the housing

workers and project and organizational administrators were able to comment more on impacts on residents and program design). A full list of these questions can be found in Appendix 2.

Researchers' Note: It is important to note that initially we approached an additional two people to participate in key informant interviews. Both of these individuals were politicians who had been involved in the past in supporting Indwells' housing projects and were recommended by Emma and Graham Cubitt. Both politicians chose to not participate in the interviews. A clear reason for their unwillingness to participate was not provided. Nrinder Nann, a current City Councillor, did agree to be interviewed and contributed from her perspective, as someone committed to affordable housing in the City of Hamilton.

Plotting Design, Space and Building Science

In addition to the interviews, Architectural Technology students, under the direction of Dr. Shannon Pirie, created a visual analysis of the Parkdale Landing building following the site tour. You can find these drawings in Appendix 1. An analysis of community infrastructure, distances to services and health resources, and general walkability of the area was undertaken. Clearly the area is one that is impacted by its proximity to industry and perhaps most significantly to its corner location at the intersection of two very busy four lane thoroughfares. The emphasis is vehicle-centric, indicating a need to erect boundaries of many kinds between residents and aggressive traffic. Next, an analysis of local demographics in the areas of wellbeing, affordability and social housing set the stage for a better understanding of the community that this building services. Finally, at the micro level, a 3D model of the building showing the adjacencies of space, and an analysis of functional areas demonstrates the relationship between the allotment of private spaces, communal spaces and community-related spaces. As we further analyze more buildings by Indwell, we will use this data to identify unique features of their supportive and affordable models as compared to other similar residential buildings.

The Architectural Technology team also paid significant attention to the small-scale detailing observed in this building in comparison to other non-Passive House standard buildings during the in-person tour and in a follow-up presentation by the building's contractor Schulthuis Construction. The conundrum that faces architecture science is the perceived increase to cost and time that is the result of building sustainably. The need for specific products and materials from non-local sources can be intimidating from detailing, specifications and tender perspectives. Yet in talking with Indwell, Invizij Architects, and Schulthuis Construction, the extra cost of construction was minimal and the sourcing of materials was not a factor that contributed significantly to any delays. Emphasis, however, was placed on the care of installation and sequencing of materials in order to ensure a measured performance as prescribed by the Passive House methodology. As demonstrated in their design intentionality as it related to community, the development team was intentional with its approach to building science principles and to the physical realities of the surrounding community.

Data Analysis

Interviews

The interviews were audio-recorded and then transcribed by research assistants working on the project. The research team then coded the interviews using qualitative content analysis. We coded the data, categorized it and from those different categories, distinct themes that answered our research findings emerged.

Artefacts/Drawings

In addition to the interview data, we also took photographs while on site visits and our research team the created analysis drawings mentioned above. Using text from the interviews and photographs of the building, we created multi-layered collages representing emergent distinct themes. The decision to use collage as an exploratory research method stemmed from the desire to deconstruct the visual and auditory data gathered for this project. Collage has been used as a qualitative, arts-based research methodology since the end of the 20th century. "It is our contention that collage, functioning as a form of analytic memo, exercises the kinds of non-linear and preconscious modes of thinking that are needed to facilitate contextualizing forms of analysis, potentially bringing tacit understandings about the researcher, the participants, and the context to the surface in insightful, useful, and different ways. This non-textual form of representation delays but then enriches a textual explication which might otherwise limit these possibilities." (Davis, Butler-Kisber, 1999)

In our case, it is a way of creating a deeper and new understanding of two different data-gathering formats: interviews based on a place and photographs of a particular place. By [merging] the two together, we are seeing the work in a new intersection that enables us to use the streetscape of Parkdale Landing as a theatre stage within the community, allowing us to express the words of those who have a hand in creating it. The interviews, largely internal, personal, and unlikely to move much beyond this research paper, are now exposed as pieces of art and tell the narrative of an evolving neighbourhood, beyond that which can be done by a building's façade alone.

Furthermore, the use of collage in this research has been a way in which we, as experts in two very different domains, can communicate with each other on a level beyond exchanging field-related literature. We have used collage as a common language to express our interpretations of the data and to tease out themes that bring our two areas of work together. This multi-disciplinary approach allows each of us, as artists in our own right, to create a shared dialogue that not only transcends our academic disciplines, but also brings together architectural thinking and community studies in a new and unique light.

As initially proposed, the output of this particular research project was to include a multi-disciplinary lecture where we would discuss our findings alongside members of the team that delivered the building, from the developer to the architect. At the same time, we would share our original collages and other work produced in reaction to our research, including textile and clay pieces by our principal researchers. As a result of the

pandemic, this aspect of the work has been put on hold and will appear online in a digital gallery. In addition, the collages are integrated into the research findings section of this report, in order to achieve what we had hoped they would, an awakening of a different consciousness in ourselves and in our viewers, prompting further reflection on the topics of community, housing, building science, and design.

This report, therefore, is a way of connecting our voices in our specific areas of research and as researchers in our own right. We are working together from a feminist perspective of learning about each other as we move through this research project. We began this work as strangers, turned research collaborators and to teammates, exploring affordable housing through each other's unique lens.

7.

RESEARCH FINDINGS

This research project set out to:

1. Highlight the scope of the Affordable Housing initiatives that Indwell and Invizij Architects have built in Hamilton, Woodstock and Simcoe
2. Determine the purposes and intent behind the partnership between Indwell and Invizij Architects
3. Look at the role that design plays in creating community space both inside and outside the restored properties, thinking about the needs of residents who struggle with addictions, mental health or other poverty-related issues.
4. Examine the synergies created between socially responsible design and environmentally-committed building science.

Over the course of our interviews, we learned about the structure of Indwell, including their financial structure, and some of the choices that informed their particular focus and niche in the affordable, supportive housing market. These were important foundational pieces, and we wanted to share them up front rather than integrating them into the thematic data.

We learned from the interviews that Indwell considers themselves to be a private organization, but with full public transparency as a registered charity. Jeff Neven, the Executive Director shared:

> We are a private organization meaning we're a non-government(al) organization. This means we have some different tools available than if we were fully public. But as a registered charity, all of our actions are for public benefit and with full transparency. You can access our audited financial statements. So that is very different from the private sector.

Jeff also felt that Indwell distinguish themselves from other developers because "... we offer greater depth of affordability and length of affordability than the private sector can compete with." Much of this had to do with the approach to environmental sustainability that will be discussed later in the Research Findings under the Purposeful Design section.

Indwell decided a number of years ago that they would seek to become developers of their own projects, which would afford them more autonomy and control in these processes. They work with an architecture firm, contractors, and engineers/surveyors (we interviewed the architect and contractor as part of this research study) who are essential partners in the process. Graham explained the process:

> We are a charity that develops affordable housing with supports. We're a little unusual in the sense that we do our own development in-house. Not that we do our own architecture, or our own mechanical engineering or planning or surveying. We hire technical consultants for all of those activities. But we project manage the developments in-house from the ideation stage through to completion.
>
> We were interested in building the capacity to be developers of our own housing because then we could be very responsive to the needs and opportunities we saw. We have a highly vested interest in our organization's success, on behalf of our tenants. Pushing a project through all the barriers is half the battle sometimes. Not that you can't get that determination when hiring a consultant, but there's a different kind of vested interest in a project succeeding when we are doing it ourselves.

Their approach is one that Jeff feels speaks for itself, because of the impact that it has had over the past decade. Although they receive some government grants to do their work, they are dependent on private donations and funding to sustain their core develop work. Jeff shared:

> We have thousands of people who want to make our country, or province, or cities better, and want to do it for the sake of loving their neighbors. I think that's a more sustaining proposition than an investor who is just looking to make as much cash as quickly as they can get it. I think we have some advantage actually, for instance a majority of our financing comes from individuals – about one hundred and eighty people have lent us 26 million dollars, unsecured, and they trust us with that.

It is also important to note that while Indwell has chosen to focus their housing developments on a particular segment of the people who could benefit from affordable housing: people living with disabilities including mental health and addiction issues, they acknowledge that there are many other populations that need and would benefit from affordable housing. This was part of Indwell's history, as Graham Cubitt shared:

> That was Indwell's founding; people had nowhere to go but the street when they were discharged from mental health facilities. There were no supportive housing options, and homelessness started. We wondered how we could actually create a context where people could live well?

They began to provide supportive, affordable housing to individuals who were homeless, living in shelters, had been institutionalized, on the street, and at high risk for chronic homelessness. Steven Rolfe, Indwell's Director of Mental Health Services shared:

> The Housing First programs that operate in our city have done a remarkable job, they have placed something like 600 people into housing in the last two and a half years but it's mostly market housing and they don't have the funding to provide long term services or supports. We're always going to feel the pressure to continue to provide service to those tenants. When we look at specific people or demographics overall, the overwhelming need is for housing single-person households. That's why a good chunk of our focus goes toward building studio and one-bedroom apartments.

In terms of their housing projects, these projects are often what is termed as 'adaptive reuse'. This is process that adapts buildings for new uses while retaining their historic features. An adaptive reuse model can prolong

a building's life by retaining some or all of the building's systems, including the structure, shell, or even the interior materials (Joachim, 2002). Graham explains the rationale behind this approach in Indwell's projects:

> We probably have a preference towards rehabilitating from the narrative perspective of redemption, that something terrible can be made new without destroying it. We like this because it parallels our lives. From the pragmatic side, these are often more complicated sites so they have less value in the market and they are more affordable. Our experience has been that it is cheaper to retrofit or rehabilitate a building than to build new. Sometimes it is just expediency; it has the footprint that it has, or the zoning that it has because it's there, and it would be harder to get that particular zoning if we started over [with a new property].

Beyond these framing pieces lies the story of Indwell, as told through the data. What is it about the ways that the Indwell communities are built, how do the intentional design of services and of spaces contribute to increased mental health and wellness? What is the value of using environmental sustainability like Passive Housing when building affordable housing? We invite you to learn the answers to these questions through our data analysis.

As we analyzed the data, we recognized that themes that defined the Indwell model/approach fell under two thematic areas: Cultivating Community and Relationships and Purposeful Design.

8.

CULTIVATING COMMUNITY AND RELATIONSHIPS

One of the people we were privileged to talk to over the course of the interview process was Nrinder Nann, who is the Ward 3 City Councillor and a supporter of the importance of affordable housing. She emphasized the need for affordable housing:

> Everybody needs affordable housing, whether you're a newcomer coming into the city, whether you're a new immigrant coming into the city, whether you're somebody who's gone through.....circumstances that have pushed you into the margins financially, whether you are somebody who can't get a living wage in the city. The demographic is very diverse, and so we know that the health of our communities and the health of our city is strengthened when we have a diversity of people engaging and participating.

She sees that often, however, when affordable housing is created, it is done so in 'stigmatized' buildings or 'ghettoized' pockets of neighbourhoods. When this happens, she says:

> We're concentrating people with a particular set of experiences and circumstances into one geographic area. The challenge of doing this is that you continue to create an impoverished community, versus when we mix that up and bring people into every single neighborhood, regardless of income and affordability and other social conditions or circumstances they might be facing, then we begin to break down the stigma and break down the social walls and start to create a sense of a commonality.

This is where the Indwell approach to cultivating community and relationship building throughout the development process becomes key.

The Importance of Working Together

Central to the mandate of Indwell is the commitment to building relationships. This is a concept that extends to the tenants who end up living in Indwell's buildings, the many people who are a part of the communities that their residential properties are located in, and the people who were essential to establishing new residential builds. This can be anyone from the politicians who support the procurement of land, to the construction crews that work on the builds.

Collaboration and Planning

Having a base of supporters that shares Indwell's vision for supportive, affordable housing is essential. Graham Cubitt also talked about this approach as being key to their growth as an organization. Many of the buildings that Indwell seeks or is invited to re-develop are derelict buildings, and the kind of buildings that lenders are not enthusiastic about providing a traditional mortgage for:

> Personal loans from our supporters has been one of the key ways that we've been able to grow. Having a support constituency that said, "We believe in this approach, and we want to see solutions for homelessness, supportive housing, community development. We'll loan the money to buy these properties, unsecured." Because it's an old bar or a derelict factory, they're not great collateral. Individuals who believe in Indwell loan us the money to get the land and we can then win the funding RFP and then can build the project. We usually build that upfront loan cost into the project and then pay back those loans at the end or refinance them as a long-term normal mortgage.

This, Graham says, is just one example of the creative options for finance and funding they have looked at when working with a community. When Indwell is approached by a particular community – this could be a municipality (i.e. Simcoe, Norfolk, City of Hamilton) or a private organization (i.e. Hughson St. Baptist Church). Graham shared:

> It's just finding different ways to bring the resources of the community together around a solution.....being willing to look at all kinds of creative routes to fund projects.

For Indwell, the process from the beginning is always collaborative with whoever they are partnering with – be it a larger municipality or a smaller private partner. Graham Cubitt stated:

> We talk within our team and with outside agencies or community groups, city administrations, whomever, about the shortage or the gaps in the spectrum of housing. My role is to listen closely and then try to figure out how to create a new path, new program, a new project which can address the specific needs. It's not just about building units.

Graham Cubitt gave examples of the process they engaged in with their developments in Norfolk Inn in Simcoe, ON and the Harvey Woods Lofts in Woodstock:

> Municipal staff are often the starting point for housing conversations. Norfolk Inn in Simcoe, and Harvey Woods Lofts in Woodstock were both projects where the County said, "Hey, you know we really need more housing in the community, and we've got this problem building, or this vacant derelict building; any chance you guys could take a look at it and see what you could do?"

There can be challenges in the process, particularly in smaller communities, when looking for funding, but the process is in place. Graham reported that it can be harder "in a smaller [communities] like Simcoe, in Norfolk County where you've only got 67,000 people, you don't get as much funding as in a place like Hamilton

which has over 500,000 people. It may take two or three years to accumulate the 2 million dollars they need for a project. However, in the end, it is a matter of working through various scenarios, talking about the opportunities and challenges, and then coming up with a plan together."

Building a Collaborative Team

Indwell partners have developed a partnership with the Hamilton-based architecture firm Invizij. We interviewed the Principal Architect, Emma Cubitt. Although Invizij does not solely focus on building supportive, affordable housing, their connection with Indwell was born out of the passion that Emma had for housing solutions:

> I was drawn to affordable housing much more than market condos, because the non-profit housing providers have a different value system that they work under so they would choose something that has long term benefits over just flipping something for more profit at the beginning. So, it's just been a natural fit to work with the affordable housing providers. It also works with my value system of providing good places to live for people who wouldn't be able to afford it otherwise.

Emma often works with Indwell on projects that involve adaptive reuse, repurposing derelict buildings in neighbourhoods and giving them a new 'lease' on life:

> I personally have an infinity for adaptive reuse because I think they're really interesting projects to work on, especially when we start with something that was terrible and create something that's so wonderful. Also, sometimes you have a really interesting building to start with, like when Indwell did a factory conversion. It was just intrinsically beautiful to begin with and we made it even nicer.

Another important partner on the Indwell development team has been the contractor Henry Schilthuis, from Schilthuis Construction. Henry and his team have worked with Indwell on a number of projects, including Parkdale Landing, their first Passive House project. Henry talked about his working relationship with Indwell:

> Our [first project with Indwell was] building Hambleton Hall in Simcoe. Indwell does projects with others as well.....we're not doing all their work. Each time we do a project, especially as we're getting into [building] Passive House, is kind of working together and seeing what works, what doesn't work, where can we create value?

Henry sees himself as an integral part of the team, and essential to carrying out the project within budget and time constraints:

> Some of the modelling that we try to do with construction management is leaning toward IPD (Integrated Project Delivery). It's a more collaborative process working together with the owner, the consultants, and the contractor, and saying, "How can we build something that's going to be on time, going to be within budget constraints (that you have because social housing has budget constraints), and how can we make this work as a model going forward?" For us as a contractor, it's easier sometimes to just go bid a job and make your profit margin. In this kind of project, it's kind of an open-book session. With the time and material, we're not going to

> lose money, and we're definitely going to cover our costs, and hopefully at the end of the day there is some profit because everybody is still in business to make money.

The Indwell Development team works closely with the architect and the construction manager, managing the different projects (there are 6-10 projects underway at a time). Graham shared there are other people involved in the process from the Indwell team:

> Within our broader organization we work with our Executive Director, Director of Finance, our Program Director and regional program managers, our Director of Mental Health Services, and our Facilities team. All of those people have a role informing the development team. Even though their full-time focus is not the development work, it's really about the feedback loop. Our maintenance team is very important- we put in technologies and we put in systems or equipment or materials. You want to make sure you can maintain facilities and that you're not just having to replace stuff the first time it breaks down. The feedback loop is important for us.

What this looks like in practice is having processes that streamline the development of projects. Graham Cubitt gave an example of working with Invizij:

> You develop a shorthand, you don't have to discuss many things every time you dive into a project because you've worked through it before. We can get from an idea to a concept in two weeks now instead of two months.

This process starts from finding and securing land and ends up once a project is passed over to the Indwell Program Team that supports tenants. Graham explains the process:

> Finding sites, working out deals for securing the land, then working with our design team in conjunction with our program team to say, "Okay we're trying to create a program that is going meet these sorts of needs; is it one bedroom apartments, are we looking at bachelor units, are we talking about a retro fit or new-build, is it families we're trying to support?" We then fit all of that together with the site and design the building with our team, and then go through construction, and then hand it over to our Program Team to carry on running it for the long-term.

Collaborative Decision-making

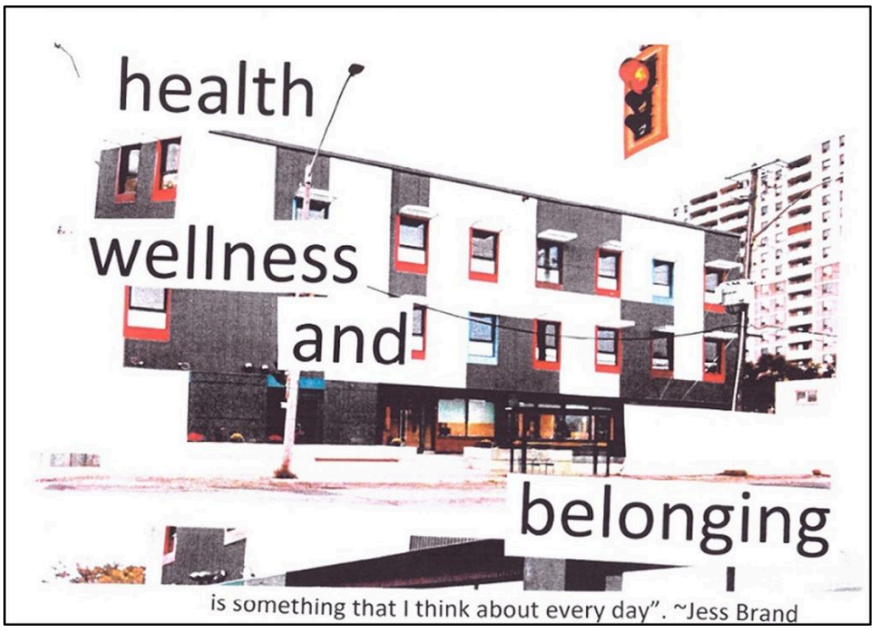
Working on large projects can often be challenging especially when it comes to making decisions. Jeff Neven felt that one of the greatest strengths that Indwell has is its management structure:

> I think our management structure has been one of our greatest assets. We have five senior managers and we make almost every major decision in consensus. I could pull rank, but I can't think of a time that I've had to. We have very differing opinions, we argue (sometimes fiercely), but we come out of the room on the same page – sometimes it takes a week to come out of the room, proverbially! – (but) I think that's one of our strengths. I'm a firm believer in that not one of us has all of the strengths needed to grow as an organization.

Building Health, Wellness and Belonging

Creating a Sense of Belonging

Figure 4: Original Collage by Bethany Osborne and Shannon Pirie



Central to Indwell's vision and mission is their commitment to creating housing communities that embody health, wellness and belonging. As we reviewed the data that we collected through our interviews, there were a number of themes that emerged which demonstrated the ways that they work to achieve this: from initial design, to the process of building, to the supportive programming that they build into each of their projects.

Many of our research participants talked about the importance they placed on creating a sense of belonging inside the Indwell communities. Fundamental to this was the concept of listening to tenants. Graham Cubitt, Director of Programs and Development talked about the importance of listening to tenants to find out what is working and what is not. That, he said, allows us to learn "this is a terrible idea, this is a great idea". He went on to say that they were then able to respond to feedback and allow that to shape the way that they do programming or improve building designs.

Jess Brand, the Assistant Program Director, shared that creating community space was important in Indwell buildings from the beginning. People need to have their own space but there also needs to be intentional space for community. She shared that particularly for people who have lived in institutions or other less than ideal housing situations, social spaces at times have not always been positive experiences. So, they make it a priority to create positive community programming in each building.

> Take for instance our common rooms, it's not the furniture that brings people together. However, we do sit and

> we have tea there. Teatime is something you can see in each of our programs..... our weekly teatime breaks down barriers.

Graham Cubitt talked about the importance of the community room in the Indwell buildings, that it is an accessible space that people can use:

> We don't lock the community room, we don't make people reserve it or pay a deposit. If tenants want to have a family gathering or special event, they can book it, but otherwise it's open and available. Kids in the building will go over there to ride their trikes or play, or people do art or have book clubs, or whatever else they organize.

Health and Wellness at the Forefront

When you have a sense of belonging, it goes a long way in providing you with the tools and resources that you need to cultivate both good physical and mental health and wellbeing. Belonging combats social isolation, which the research shows can contribute to a whole host of negative impacts on health (Novotney, 2019). Our research participants discussed the importance of intentionally integrating health and wellness initiatives into their approach to both building communities and delivering services.

Jeff Neven, Executive Director at Indwell, talked about the intentional inclusion of food serveries within the design of buildings:

> We always have common spaces with some type of community kitchen or servery because people come together around food. If people want to make tea, host a potluck, or there is a community meal for the holidays. It's a place for people to gather.

Steven Rolfe talked about the importance of creating community space to provide opportunities for connection:

> A great program means more than having Ministry of Health funding. We know for an amazing program it's absolutely vital that there is space to foster community. When there is space for neighbors come together, the building becomes central to this process. Take Strathearne Suites for example- the apartments are very modest, very functional units. Creating that community kitchen, computer lab, and a lounge was an outlet space for people to connect outside their own apartments.

At the Parkdale Landing site, they are taking the food programming space one step further and have hired a professional chef and staff to support a culinary academy and job-creation program, with an on-site opportunity for tenants to learn important employability skills.

A number of Indwell's developments have on-site nursing staff to support the needs of tenants (e.g. Parkdale Landing, Strathearne Suites). This is dependent on the intention of the housing development. In the case of Strathearne Suites, there are more enhanced supports available for tenants making the transition from hospital or institutional settings. Whether or not the development has a nursing staff on site, the service model provides an opportunity for tenants to reach out for support, on a regular or at an interim basis (Jess

Brand, interview transcript). Steven Rolfe spoke about the similar phenomenon in his interview: when you put access to professional services on site, people use them, and subsequently don't need to go to the emergency department as often as they used to. Tenants are more likely to find and go to their primary care provider because they can develop a relationship with them instead of relying on emergency interventions (interview transcript).

Graham Cubitt spoke to one of the challenges that Indwell faces in supporting their tenants, and why it is so important to ensure that the supports are integrated into their model:

> Many of our tenants have had very little self-determination. If you are street homeless, you have a certain amount of autonomy and independence – it's free and easy, but it's also super difficult. Making the shift to living in a building with community standards can be a challenge. When you are on the street, you don't have to deal with the constraints of being indoors and you can do things like smoke whenever you want to. We have non-smoking buildings, and so there's a learning curve to integrating with the community standards. Many of our tenants have lived in hospitals or some form of institution their whole life and so it's a new experience to have your own apartment with its responsibilities. In either case, it may be a new thing to deal with an electric bill. It's our program team that helps people navigate this challenge.

A number of our tenants have physical mobility challenges as well. We're often helping tenants figure out the benefits of living in an accessible building compared to living in buildings with very low accessibility where they were always struggling just to get over threshold(s).

Working together with tenants to ensure that they find their place within the community is central to the process of belonging.

Supporting Each Other in Difficult Times

Equally important to the process of belonging is being aware of the needs of tenants as they experience difficult times. Health and wellness can extend to supporting tenants of the community during difficult times, such as dealing the death of a community member. Graham Cubitt acknowledged that "the flip side of building relationships is that people grieve more intensely when you know your neighbour." Indwell staff work to ensure that "they focus on building relationships, and a sense of solidarity within the community because peer support is important to recovery and wellness." (Graham Cubitt, interview transcript):

> [It has] a ripple effect in a community when people grieve. What we often do is host an event – a memorial service or some kind of time to come together to reflect because many of our tenants don't have strong family or community connections. They could theoretically die and no one would know, they would just disappear. Its dehumanizing to not be known. For someone to be remembered in their death, is important for the community.

Learning to Live in Community – We Need Each Other

Figure 5: Original Collage by Shannon Pirie and Bethany Osborne

Over the course of our interviews, many described the importance of learning to live in a community. Because of the demographic that Indwell targets, they are often coming from circumstances where they have had long term housing instability. Tenants joining an Indwell community may have had both positive and negative experiences of living in community and that will impact the way that they join their new community. Steven Rolfe defines the community who ends up at Indwell as "a group of people that need community, they need affordability, they need some support for a variety of reasons but they all have gifts and abilities, and there's just so much that goes on here that conveys what happens when you create space for people to flourish" (interview transcript).

As Jeff Neven describes the Indwell community, he says:

> The phrase that we use is "knowable communities". It really comes down to knowing your neighbours. When you're walking through the front door and somebody is following you in, and you turn around, do you know if that person is supposed to be there or not? And we found that with forty to sixty units you can know whether that person is supposed to be there or not, especially over time. This adds safety.....and you can build a lot of community supports where people can use their abilities and gifts for benefit of their neighbors.

Jeff went on to share that within these knowable communities, it is important to create spaces where people get together and learn what it is they are good at. "Tapping into that, on a good day, we ask our tenants, what are you good at? And how can you contribute that to a community" (interview transcript).

The interviews were punctuated with stories of how tenants learned to live in community, and learned to

need each other. In our interview with Jess Brand, she shared: "Each person is carrying this incredible story with them [and what] happens is that when people come into affordable supportive housing and they're actually able to get their feet underneath them, those stories can be transformational because they are in the context of support" (interview transcript). Jess shared one of those stories:

> We have an art group that has been running for the past number of years. This past winter, we had a tenant join the art group who most neighbours didn't really know much about, except that he never changed the old scarf he wore on his head. He's had beautiful hats given to him [but he] would just wear the same scarf on his head all the time. He started doing art and all of a sudden we saw creativity, and all these ideas that I had no idea were going on in his head started appearing.....He produces art and he's proud of it and he's bringing us in and opening up like never before. His neighbours are all talking about it because they've never seen anything like it.

Jeff Neven spoke to the importance of developing networks, something that we might take for granted:

> I'm thinking about somebody who had to have surgery and they had a dog, so they were putting off going for the surgery because they couldn't afford to use a kennel. But because of the building's community, another tenant stepped up and said, "Oh, I'll take your dog so you can go have the surgery." Without networks, you might not get the surgery and it could be life-threatening. Often it comes down to a simple thing like who is going to look after my dog?

When he recalls of the success of building a safe community where people were known to each other, Jeff Neven recalled a conversation that he had with a female tenant who was in a wheelchair:

> She said, "Well, when I fall out of my chair, my neighbor comes and lifts me back into my chair." I asked: "What? How often does this happen?" And she said, "Oh, you know, once or twice a week."
>
> "And how does your neighbor get in?"
>
> "I don't lock my door, it's a safe place".
>
> When you know your neighbors and you feel safe and they can help, you're in a good community.

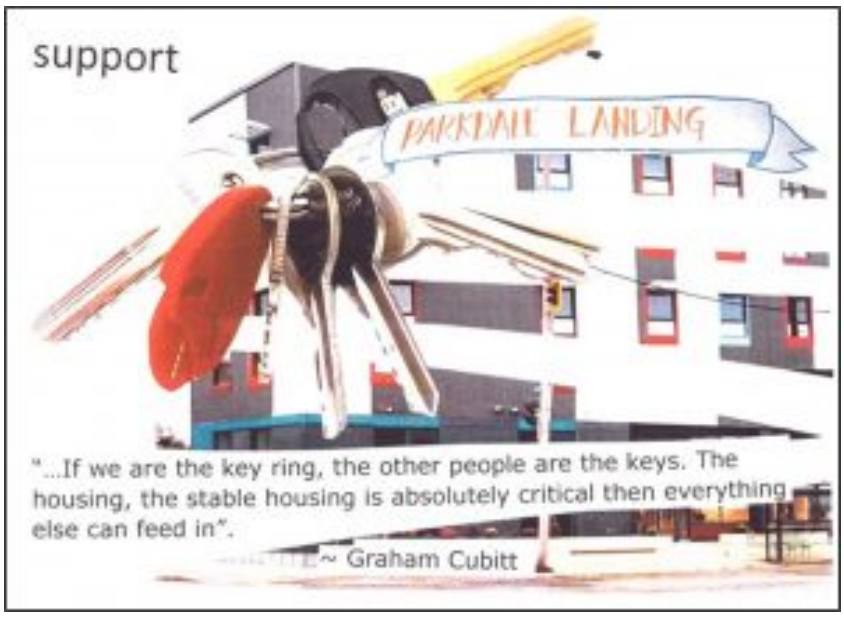
Jess Brand summed up the importance of learning to be in community and to need each other, in this final quote that she shared in her interview:

> We're actually just trying to create the ideal community, one that we would want for ourselves. We're in a society that is so cut off, we're set up to be individualized, and there's the blessed few who are actually able to make community.

We have some awesome streets out there and neighborhoods. But the way things are set up, our default mode is for people to isolate themselves. We're actively trying to push against that and create community where people can be known, are invited to connect, to come to things and see what's happening, to decide to participate, or help a neighbor, the ways that we all want for our best selves.

The Importance of Making Connections

Figure 6: Original Collage by Shannon Pirie and Bethany Osborne



Through the interviews, it became clear that central to Indwell's model for supporting their tenants was the importance of developing partnerships with different stakeholders who wanted to support and invest in their tenants. Graham Cubitt used the metaphor of a keyring when he described this approach:

> It's like if we are the key ring, the other people are the keys. The housing, the stable housing, is absolutely critical then everything else can feed in. It could be a 12-step program like AA or Narcotics Anonymous, a community knitting club, an arts group or any number of things. Our multi-purpose room gets used a lot by other community groups coming in to support tenants. We don't want to be all of those things to tenants because then it becomes limiting for them, and we want to maximize their tentacles into community supports.

Steven Rolfe spoke to this same phenomenon, and also talked about why Indwell has made the decision to include not just health providers but also community groups in the people they invite into the communal spaces:

> What if we actually try to involve other groups that are not mental health oriented that some of our tenants could actually join in? Some of the activities offered by churches, volunteers, other kinds of community groups coming in, and Public Health doing community health create a space where our tenants actually connect or interact with all generations. This ends up being healthier than if we had just stacked up a slate of mental health activities.

Graham Cubitt talked about putting the supports that people need around them in order to help them succeed in his interview. He shared:

> We often say, "If we were in this position ourselves, what would we like to have?" And we'd like to have somebody who is onsite as an addictions worker, rather than waiting until next Thursday for an appointment. It's trying to figure out what's most successful, what's most effective. Community building is a really important part of our program; so spaces are designed around community.

There were a number of examples shared of how connecting out with these partnerships enhances community life for tenants. Jeff Neven shared the story of Sybil:

> We have a volunteer named Sybil who loves to sew. She goes around to all our different sites and she mends tenants' clothing and does alterations. Every year our tenants are invited to our fundraising gala for a formal dinner. One of our tenants hadn't owned a dress in a very long time but found one she liked at a thrift store. It was ill-fitting, but Sybil altered it so it fit perfectly. When our tenant walked into the banquet hall she started doing twirls. An adult woman over the moon because she had a dress that fits and was able to attend a gala. That's community at work!

Jeff and Graham shared about food security programs that connect tenants to both the source of their food and to learning employability skills. Jeff shared:

> We have a group of volunteers called Church Out Serving; it's mostly retired vegetable growers that have just incredible gardens. They help our tenants and they've now built support networks through gardening and our tenants are now growing vegetables. Our tenants can grow for themselves, but the majority of the produce actually goes to food banks. That's where our tenants work hard at giving back. Another program that runs at our Perkins Centre is a partnership with Environment Hamilton called the Good Food Box. My family gets one of the 450 good food boxes, all sorted here – and most of the volunteers are our tenants.

Graham shared:

> The community food-focused spaces are very important. In most of our buildings it is usually two residential stoves, some refrigeration, usually a commercial dishwasher just to make sure everybody is happy with sanitation. But then having a big island where people can get together and cook together, do life skills training, or we find a lot of our tenants just self-organize cooking clubs. They'll get together one week and read all the flyers, make up a list of things they want to make based on what's on sale, and then get together the next week and each bring something from the list and then make some meals together. That is the kind of thing we want to foster. At Parkdale Landing, we have a commercial kitchen space and plan to develop more programming to support tenants in developing their employability skills.

And there are many instances when people from the community contribute to different areas of need. Sometimes in direct connection with tenants (i.e. cooking meals) but other times, contributing to the maintenance of the buildings. Jeff Neven describes this important community connection:

> We have this group of retired guys – mostly men right now, but women from time to time as well, who come do maintenance. Painting, apartment turnover, who really get satisfaction and fulfillment out of that. This is their chance to once a week go and contribute and it's in just so many different areas that are essential to the functioning of our communities.

Building Relationships with the Surrounding Community

When Nrinder Nann talked about building affordable housing, she spoke poignantly that "fundamentally at the end of the day, we're neighbours". She went on to say:

> We deserve to be able to communicate, to be able to live within a geographic area harmoniously. If we're stigmatizing those who need affordable units as being some sort of negative character, I think that we have a lot of work to do to demystify that. I think those with privilege who have a particular concept of who needs affordable housing need to start asking themselves some deep self-reflective questions.

One of the themes that came through clearly in the interviews, was the importance of building relationships with the external community. What can often happen when affordable housing units are built is that the housing units become stigmatized or ghettoized as social housing units in otherwise 'nice' neighbourhoods, or in neighbourhoods that are in the process of gentrification. Much thought appears to be given to the process of building relationships with the communities where the housing units are going to be established from the beginning of the process. The reactions that surrounding communities have can differ, as they learn about the new housing development. Graham Cubitt shared:

> New communities that we're going into can be hesitant. They wonder: "What is this going to be like? Am I going to lose? Is this going to be like a zero-sum game? Who are those people?" When communities have a strong sense of self-awareness of their own needs, it can actually make things easier. The conversations at these meetings sound like this "Where do I sign up, how do I get my son or daughter in here?" Those are the kind of questions we get all the time.

The reactions can also be quite extreme, as Jess Brand shared:

> Affordable housing becomes part of reimagining and redeveloping and new life in our neighbourhoods. I always think about this one night; I was at the Perkins Centre– it had been open about a year – and we actually had the police come in to support a tenant who was really struggling, and the police officer said to me 'Yah, so this used to be Rookies' Bar. We would never come in here without back-up'. And it's so great to hear that about affordable housing.

When Indwell bought George and Mary's Tavern and proposed to turn it into Parkdale Landing, supportive affordable housing, people were surprised because of the decay it had represented to the community. People from the community applauded the change, as described by Steven Rolfe:

> I went to a community meeting and we announced that we had actually purchased George and Mary's Tavern and people applauded, and said "Good on you – brave, but good on you. We needed this change, we needed this difference in our community". The doors opened, and we actually had seventy people coming through the building on the opening weekend and the primary comment is "you guys have no idea how much you've changed this neighbourhood with this particular building."

As part of the community engagement process with Parkdale Landing, the community was clear about the kinds of community benefits they would like to see. Indwell worked to create those benefits and that strengthened the relationship. Jeff Neven describes the process:

> We ask, how do we develop things for community benefit? I think about Parkdale Landing, the building that we bought there; when we engaged the community, they were pretty quick to tell us that they wanted a variety store. They were very good about letting the strip club and human trafficking go, but we worked to keep the variety store, then connected the variety store to Public Health who was doing a project on healthy corner stores. While we were not involved in that business, making the linkages and connections to try to figure out how a variety store can get better food and produce.

It has also been really important to Indwell to follow up on their commitment with action. Action can so often speak louder than words to the people living in the community. This was the case the very first winter after Indwell purchased the Parkdale Landing site:

> There were 18 people living here when we bought the place. There was no heat, there were rodents and pests and everything else. The old landlord was the kind that said, "I don't ask any questions – just pay your rent on time." That was the culture of the building and by extension, the culture of the surrounding neighbourhood. At the end of the year when winter came and we did normal things like shovel the sidewalks, the neighbours responded "This is the first time in 30 years that the sidewalks have been shoveled".

Sometimes the reactions can be curiously mixed: positive towards the redevelopment of derelict buildings, but negative towards the potential that the new tenants may not "deserve" the new buildings. Steven Rolfe shared:

> One of the things we encounter in new places is people raising the issue: "You're going to build what, where?" when we show people that we're going to build beautiful and impactful building that actually alter streetscapes in a positive ways. People often can't wrap their head around two things: why would poor people with disabilities be living there, and why wouldn't we offer that to someone else who could pay more rent? We also hear: "Isn't that too good for those people?" attitude in some ways. What we believe, of course, is that you build the best possible housing for people that need it most because it improves their health.

Communicating the value of the people coming into the community is what often takes time and effort and the consistent ongoing work of the Program teams that are involved at each of the Indwell sites (interview transcript).

Being consistent and building a good reputation over the past decade has been important for community relationships as well. Graham Cubitt shared that having built a number of housing developments in Hamilton in the past few years has had a positive impact:

> We have built a really good reputation in the community – we have five other buildings in this neighbourhood, within a couple kilometers, and they are some of the best buildings in the neighbourhood.

As Emma Cubitt from Invizij reflected on how Indwell actively engages the communities that they are proposing to develop housing projects in, she summarized their process and its importance:

Indwell does a very good job of reaching out to the community in the early stages of the project and asking for honest input on the form to the project and the amenities that will be provided that others in the community can use, and how it's going to impact the neighbourhood. We did that with the Hughson Street Baptist Church project where we had probably six or eight community meetings over time that were just updates, and a lot of them provided input for us that we used to change the design. Those were really helpful sessions. Having that community input from the start is important

9.

PURPOSEFUL DESIGN

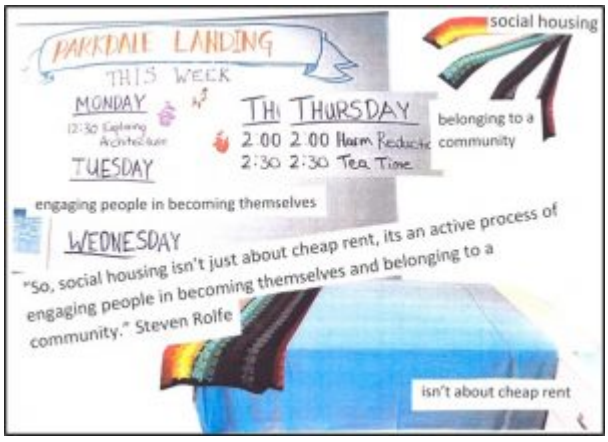
There are many ways in which our research participants discussed being purposeful about design. This extended from the design of intentional supportive programming, to designing for mental health and wellness, to the approach for environmental sustainability that Indwell has begun to use in their housing design: the Passive House design standard. Steven Rolfe spoke about the importance of all of these coming together to create Indwell's model/approach:

> In addition to the environmental considerations or design considerations for accessible, comfortable, manageable spaces, there's also the whole human side. This includes facilitating goal setting, working with people in developing independent living skills, personal management, and health care management.

One of the things that distinguished the Indwell Supportive Affordable Housing Model/Approach was the purposeful design that came together within the service design and the creation of the physical spaces.

Intentional Supportive Service Design

Figure 7: Original Collage by Shannon Pirie and Bethany Osborne



As we discussed design with our research participants, it became clear that it was not just physical design that played an important role in the success of Indwell programs. Intentional design plays a role long after tenants arrive at an Indwell site and has an impact on their activities of daily living. Part of that has to do with the kind of support that tenants need, and the need varies depending on the site (i.e. the Strathearne Suites

and Parkdale Landing sites provide more support than the Perkins Centre program because of the needs of the tenants). Graham Cubitt talked about the supports in the buildings "[ranging] depending on which one of [the buildings] someone is in, including instrumental support with finances and community integration" (interview transcript). Jeff Neven speaks to the importance of the supportive service design from an historical perspective:

> In the early days of Indwell (1970s), people weren't necessarily coming to us for the affordability, although it was that too It was really around the supports. But there is now such a lack of affordability that the market has to offer and there is a growing gap between people's housing costs and ODSP (Ontario Disability Support Program), that our tenants seek both.

Steven Rolfe spoke to the importance of being intentional in delivering services. For him, he said, it is not so much about whether the academic literature backs him up, it's something that he has seen with his own eyes. If you do not follow up with tenants who have multiple challenges, they won't do as well. People always have the option to opt out of support, but they know it is there:

> Jury's out on which particular model of supportive housing is most effective, but we've already got randomized control studies on around it, for example Pathways to Housing, all the Housing First data. It all basically says that if people go live in housing and you follow up with meaningful support, they do better. This means that they don't go back to jail, they don't go back to hospital, they tend to stay housed, and they tend to do better health-wise and personally. This is crucial to what Indwell is, so the design is a pretty good place to start. You also have to follow up with the supports. If you're going to have folks with multiple challenges, you have to follow up with a knock on the door and say, "How are you doing, we care about you." We've been clear about that with our perspective tenants, because this environment is not for everybody. We let people know that we're attentive, we are not going to ignore you, we are going to knock on your door. This is a community, this is a place where people want to feel like they belong and that they are safe, and we're going to check on how you are doing.

For Graham Cubitt, it is significant to remember that the people within the Indwell programs are independent tenants, and so service delivery needs to be designed around that premise:

> It's all about independence – people are independent tenants; it's not a group home. We don't lock the doors at a certain time. There is no curfew, so people are independent. They can live their lives. If you look around, you can see we do have security cameras in the building. It's important to tenants that we have them for their security. It's really unsettling when we are dealing with people needing higher levels of support just how often people have not had confidence in their own security.

For Bruce McLean, Housing Development Officer, from Affordable Housing at the City of Hamilton, this type of approach is an emerging one, and comes with its own challenges because neither the Federal nor Provincial governments specifically fund program supports:

> I think what we are seeing is program space tied into the residential component, now that's often a challenge to finance because housing programs of the province and federal government don't necessarily fund the programs and supports that would go with the housing. But when it can be done, and Indwell has done it, and Good

> Shepherd has done it and other groups are trying to do it, then you just see the value of program space. For example, this might be a daycare, senior supports, café – being a part of the same complex.

Indwell creatively draws from different sources of funding including the Ministry of Health to support their tenants, but there is not one source of funding that provides for both the physical building and the program supports (Graham Cubitt, interview transcript).

For Jess Brand, one of the most significant things about the Indwell housing is that it is permanent housing. With many of the tenants moving into Indwell buildings from temporary spaces, or from years of housing insecurity, this can be a difficult adjustment, but one that they are willing to work at to keep:

> I think that one of the really, really, significant things about working with Indwell is that it is permanent housing. This makes a big difference for people in finally achieving housing stability. It also indirectly creates a challenge: once people move in they don't quickly leave. They want to stay because it's become home. This means that we don't have turn-over, so we need more housing to help more people. As a result, we are always looking for new housing development possibilities. The waiting lists for supportive housing are just so long.

And for Steven Rolfe, that long-term commitment to tenants is key. It provides an opportunity to walk alongside tenants, particularly as they struggle with complex issues such as mental health:

> It makes total sense to have longer term relationships with folks that have longer term health issues, because those are going to be around for a long time. Having a stable relationship with people is key.

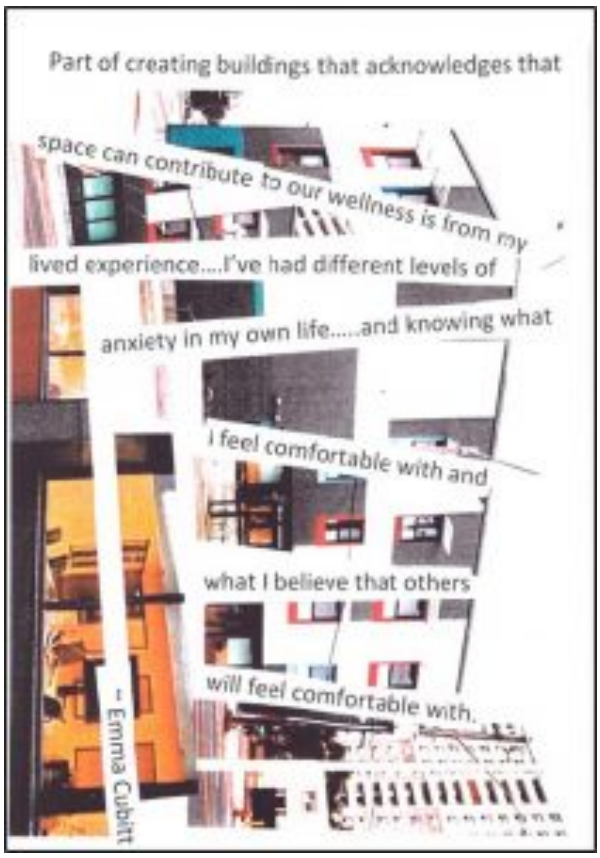
Jess Brand illustrated the importance of that relationship as she described an interaction with a tenant who was struggling to pay his rent:

> We seek to work with tenants to problem-solve about why they were getting behind on their rent. We know our rent is affordable with their income. And we talk to them about budgeting. This might entail working with them to figure out what organizations out there can help with finances. Or maybe they just made some poor decisions and then we make plans with them to catch-up.
>
> It's different from some of the tenant experiences we've witnessed at the Landlord and Tenant Board (LTB). We've seen tenants who have never met their landlord or the person who cares for their building they are in conflict with. They don't know that person at all, and that person doesn't know them. In contrast, we are sitting there with our tenant and we have a plan together for what we're going to agree to. We're at the LTB just because we need somebody to officially recognize the agreement for us. Our approach worked with this person to continue to rent their apartment and retain stability.

In addition to the relationship, are the important elements that go into the design of spaces that promote both mental health and wellness.

Designing for Mental Health and Wellness

Figure 8: Original collage by Shannon Pirie and Bethany Osborne



There are many elements that combine to create spaces that promote good mental health and wellness. Steven Rolfe spoke to the importance of physical design to the Indwell team in his interview:

> Why wouldn't we build a place that we would want to live in ourselves? Why wouldn't we create an environment where people are well cared for? That's an extension of our values.

In the following section, we examine the intentional design that Indwell and Invizij architects have integrated into their design to promote mental health and wellness. These include accessibility, light, transformed physical spaces, responsive design and creating choice.

For Bruce McLean from the Affordable Housing Division at the City of Hamilton, it is these design elements that sets Indwell apart as an affordable housing provider:

> The unique merging of design and programming connected through the 'lens' of mental health services is what I see Indwell doing. They have multiple projects, or programs and someone can come into them depending on where they're at in life and with their health. It's part of Parkdale and part of Strathearne's design model, so that's a game changer; it's great to see.

Accessibility

Accessibility is a key element of design integrated into all Indwell buildings. There are building standards set by the AODA (Accessibility for Ontarians with Disability Act), but Indwell and Invizij Architects have committed to making each of their buildings universally accessible, beyond complying to building code standards. Accessibility can be about navigating within the unit, within the building, or even connecting with needed resources within the community.

Jess Brand talked about the importance of hallways as a space not just for navigating from here to there, but also as a place to connect:

> There's also the way that hallways work. They are wide enough to actually talk a little bit in the corridor, or by the elevator. That space is actually one that our tenants love because there is often a big window at the end of the elevator hallway and there is space so that while you're waiting for the elevator you're able to talk in that space. People feel safer and they will talk with one another.

In thinking about the unique needs of their tenants as well as incorporating Universal Design principles, there are other design features that Indwell and team have integrated into the physical design of the buildings. Recognizing that a number of their tenants live with schizophrenia and are particularly sensitive to sound, they have gone beyond minimum standards for sound transmission between apartments. Graham Cubitt:

> We do have many tenants who live with schizophrenia. Some of the design considerations that we would make would be around something called STC or ASTC which is a measurement for measuring sound transmission through separations.....There are minimum code standards for sound transmission between apartments. We try to go above that; the feedback that we've gotten from tenants with schizophrenia is, "Listen, I have constant voices in my head, its helpful if I can differentiate between those voices and my neighbor talking though the wall." That is feedback we pay attention to.

Similar considerations have been made when designing for those tenants who may have some type of visual or audio impairment. Graham talked about the different design elements that they have integrated into their units to ensure inclusive design:

> All apartments and common areas have an integrated alarm system with a strobe light so that someone with a vision or hearing impairment can recognize it. Some of the contrast walls are related to spatial orientation; if you are completely visually impaired, you won't be able to see it but if you are moderately visually impaired, the contrast makes a difference. In cheap designs, everything is beige. We don't do that. We have wood-grained cabinetry and walls that are different colours. Things like that help people to orient in their space who does have visual impairments.

In newer buildings, accessibility standards can be designed in, but Graham talked about some of the challenges of retrofitting older buildings to meet accessibility standards:

> All of our new buildings are built to be accessible, and we've retrofitted 1960s apartments buildings wherever

> possible. We've done things like taking out stairs from the entry lobbies. Almost all of our buildings are accessible now.

In current buildings, however, the buildings meet both accessibility standards and take into consideration the needs of tenants who may need barrier-free access. Graham talked about Indwell's newest building and the barrier-free units:

> There are eight fully barrier-free units in this building (Parkdale Landing) so lowered countertops, all the fixtures are lowered, switches, etc. so that if you do utilize a wheelchair, you can access your whole apartment. The shower is wider, has grab-bars, and even has a flip-down seat.

Graham Cubitt discussed the importance of being able to navigate from the building to external resources, which was an important consideration in site selection. Public transit is very important for tenants, along with walkability to parks and services (interview transcription). Nrinder Nann placed real value on this kind of accessibility as well. She shared:

> There is real importance for people being able to walk to get to the amenities they need. They need to be able to access transit and to be able to access amenities like grocery stores that offer fresh produce at an affordable rate or emergency food supports. It's important that affordable housing units are designed in a way that allows people the ability to get what they need.

The Importance of Light

Natural light and access to light was mentioned as a key design feature across al interviews. Jess Brand shared: "And what has consistently been part of our community space is sunlight, windows, openness, brightness. Lack of clutter. Access in terms of mobility" (interview transcript). Steven Rolfe spoke about the importance of natural light for creating safe spaces:

> The central light well was one of the results of dealing with a difficult building footprint. We built around it and it allowed natural light to come right in. It also gave opportunity to put windows internally, which meant that when people are coming out into their hallway, one, they see natural light, and two, they see that there might be some people downstairs in activities that they could join.

Jeff Neven picked up on that same theme when he talked about the function of the windows in the laundry room:

> All of our laundry rooms have windows into spaces as well as exterior windows wherever possible, so that there is light. We want people to do laundry, so if it feels safe and you feel good being in there, people use the facilities more regularly.

Because the units within the Indwell buildings are more modest living spaces, Graham Cubitt explains the importance of natural light and why it is integrated into their designs:

> We know from all of our experience and feedback loops – whether living there ourselves or talking with our tenants, natural light is super important if you're going to design smaller spaces. It is a key consideration for everything that we do – making sure it has great natural light.

And light does not just extend to the inclusion of natural light. Graham Cubitt explained their design approach to lighting within the units, to provide choice, warmth and to create space:

> We make sure we specify the colour temperature on lightbulbs. Newer LED bulbs are not like the old incandescent bulbs that are all the same colour. Newer lights, LEDs or fluorescents are available bright white or the soft white, the warm or daylight. They are measured in degrees Kelvin. Some colour temperatures are really hostile to live under. Not everybody notices it- but for people who do, they really do and it has a huge impact on mental health. We always choose 2700 or 3000 Kelvins as the colour temperature of the bulbs, versus 4000+ which is too common. It really impacts the feel and colour of the space and everything else about it.

He went on to describe the impact that choice can have in a smaller unit, and the value that Indwell places on quality of life versus cost when it comes to the inclusion of multiple light fixtures within the unit:

> Its cheaper to install one ceiling light rather than four, but we think about what we would like in an apartment. We don't want to go from no light to really bright – zero light to 100% light. You might want to be able to come into your apartment, or wake up, and be able to turn on some light immediately but not all. Or maybe you want the ceiling fan to run without the light, especially in the summertime, so being able to turn those things on and off separately is really important for quality of life.

Transforming Communal Space

Throughout the interviews, research participants talked about being intentional in designing the communal spaces. This can extend from the hallways to the recreation spaces. Emma Cubitt, the Primary Architect from Invizij spoke to the process of design and why they prioritize the design of the community spaces in buildings:

> With all the projects that I work on, the whole building focuses on these community spaces, especially with the Indwell projects where they have some oversight of supports with tenants. They will have support staff on site, so having them located near the entry is important for easy check-ins. Making designs so it's as easy as possible to make those connections is important.

Steven Rolfe confirmed the importance of designing community spaces for cultivating a sense of community within the Indwell buildings:

> One of the important things about designing community spaces is they facilitate relationships which are the basis of everything that we do. You have to have a space where you can meet people, you have to have a space where you can have an interaction that is more than just knocking on somebody's door. It's the encounters that you have in the hallways, in the community spaces where you build the relationships and build trust. Many folks have significant issues trusting others, simply because they've had lives where everything and everyone has broken trust, so building it up again takes time and space.

When Emma designs for common spaces, she is intentional about internal windows. This isa strategy to reduce and abate anxiety in the surrounding area. She also designs hallways to provide options for movement, so that tenants do not feel trapped in the interior spaces. The purpose of exterior windows is to provide both light, as well as an increased sense of safety:

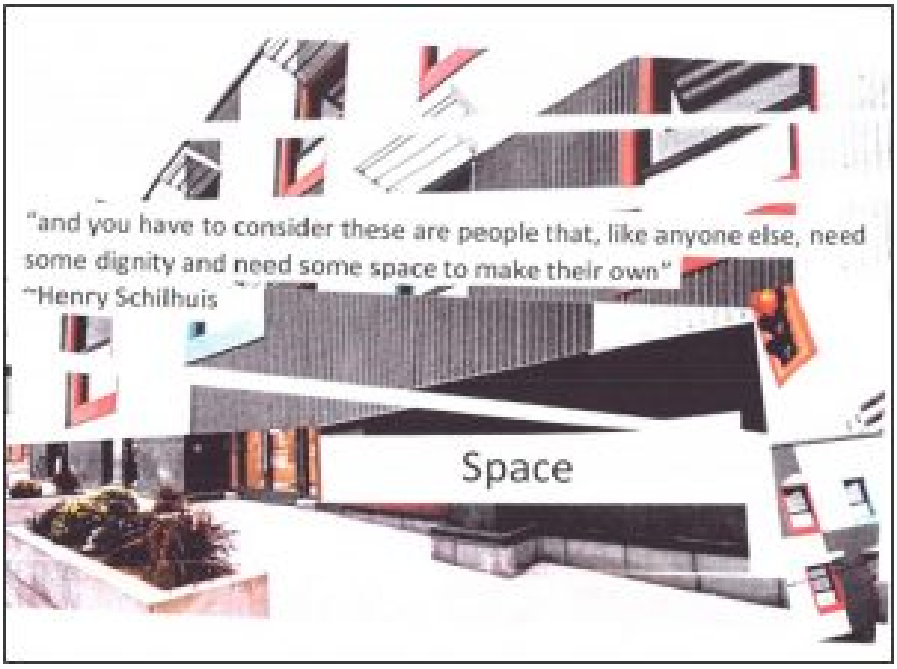
> We always have lots of windows in our common spaces looking from the corridors into the room, for many reasons including safety for people that are inside, A lot of Indwell's tenants have different anxiety disorders so having a sense that you can see what's happening beyond your space is important. In the design of the apartment layout or other spaces, my goal is to always have two directions that you can go. If somebody is coming towards you and you feel uncomfortable, you can kind of escape. We try and have circular corridors or routes where possible. I also create views of the outdoors in the corridors where possible, so you don't just feel like you're in an enclosed space

Graham mentioned that simple design elements like door placements of the doors can have a significant impact, based on the life histories and experiences of tenants:

> I mentioned the many of our tenants have spent time in psychiatric hospital. Hallways can look like an institution and so we pay attention to finishes and colors. If you go through this building, you'll see that the doors are set back in instead of just a straight long hallway with doors opening into the hallway, like a hospital might. This is intentional and can convey a lot to our tenants unconsciously.

Creating Choice

Figure 9: Original Collage by Bethany Osborne and Shannon Pirie



One of the design elements that emerged from the interviews was the importance of creating choice. Henry talked about the importance of dignity and autonomy in his interview when he shared: "...and you have to consider these are people that, like any else, need some dignity and need some space to make their own" (interview transcript). Graham talked about the value of creating the opportunity for choice and how that becomes integrated in multiple ways into the design of units:

> I think one of the big things is options. You don't want to design a space where you can only put your bed in one spot, you can only put your sofa in one place and that's the only place it's going to fit. Because people want to have the ability to change things up, and that is something we take into consideration.

This choice translates into the kinds of doors that have been installed in the units as well, as Graham Cubitt explains:

> Hinge doors versus sliding doors is another design feature. We use a lot of tracks and sliding doors, like barn-door style, because as a single person at home you rarely close the interior doors. Doors that don't have to swing make a big difference for space and creates options for our tenants.

The intentionality of design translates into the design and flow of units as well. Graham talked about creating units with circular layouts. He also talked about the importance of choice when choosing finishes. Although tenants do not have the option of choosing the finishes for flooring or millwork, tenants do have the option to paint a unit if they want to. Indwell considers these design elements important:

> Sometimes we have circular layouts within a suite, using doorways, not passageways, closets that are accessible from two sides, things like that. As well as finishes. You can make an apartment look really cheap by using basic builder's grade finishes and painting it all beige, or you can make it look exceptional by using slightly better but very cost-effective finishes. Things like the colours of millwork or a painted backsplash don't cost very much more, but make you feel like you're living in a high quality apartment compared to a cheap apartment.

Emma talked about a number of the design features that were integrated into the Parkdale Landing site to create space and provide choice for users:

> It depends on the scale of the apartments, but natural light is always really important, along with having higher ceilings so that the units feel bigger than the actual physical floor space. We try to make a large room that will be living space and kitchen so that you can be working in one space and see what's going on in the other space.

She went on to describe the way that tenants could consider the multi-use space, and the impact of the design. For her, the Passive Housing elements contribute significantly to the design possibilities (The Passive House elements will be discussed at length in the section on Passive House- Environmental Sustainability):

> Another benefit of the Passive House design is that you're not losing a quarter of your space because it's too drafty or uncomfortable to sit near the exterior wall. It's all useable and comfortable. We also have ceiling fans to move air around even more. I've been using a design element in one-bedroom apartments for the last two projects, having a wall that goes up about eight feet between the living room and bedroom but not all the way

> to the ceiling and then we have a door close to the windows so if you have the door open you could maybe have your bedroom be multi-function as the office and the bedroom. You can see the office part through that door but not the bedroom part, and it makes it feel like, you know, almost twice as big. The bedroom window becomes visible from the living room, so it's kind of like borrowed space.

Responsive Design

Because Indwell has been providing housing for decades, they have had the opportunity to do a lot of learning over that time. It has been important to hear from tenants about what is working and what is not working about both physical and service design. For some members of the design team, learning about what works and what does not means spending some time living in the building once it is open. Steven Rolfe shared that "[his] own perception of what people needed to live and to be successful before [he] started this work was very different then, than it is now."

Emma saw real value in living in the different buildings that she had designed, and felt that this was an important part of her design practice:

> I have had the wonderful opportunity to live in some of Indwell's apartment buildings. The first one was when I first moved to Hamilton, and Graham and I were the superintendents in an existing 1960's Indwell apartment building. It was my first time experiencing a typical apartment where there weren't any windows in the corridor and it just felt oppressive in that space. I remember just living there and thinking, how would I do this differently? Even if there are staircases at both ends (which is very common), I knew I would create exit doors with big windows going into those staircases.

Graham and I live in each of the Indwell buildings that I design in the first few weeks after they open to experience the design. We learn things from that experience every time, which helps us to consistently improve our design process on each new project.

Steven Rolfe discussed the value of integrating a feedback loop into improving both space and service delivery:

> We just keep learning more about our tenants the more they were interacting in the spaces. We have learned that people who are living in studio apartments, really enjoy going out and enjoy a meal together. Creating every opportunity for people to do that is imperative; people like to cook food, people like to talk about food, people like to eat food together. As a result, a lot of energy goes into the design of where people are eating.

Being responsive in design can mean that you need to problem solve for issues that your tenants face, which can cause conflicts with the external community. This has been the case with smoke shelters and Indwell tenants. Graham Cubitt discussed this issue and the solution in his interview:

> We do have non-smoking rules in our buildings, so where do people go outside to smoke? It isn't our first choice to build smoking shelters but we recognize that it is something that is essential to meet the need of approximately 30% of our tenants. People don't want to stand in the rain and to avoid getting wet, they'll just stand in the

> doorway and smoke so they stay dry, which creates lots of other problems. We rethought the problem around a potential spot for people to socialize and design attractive shelters. We also thought about how people being outside smoking impacts our neighbourhood. Nobody likes seeing a building where everybody's just standing outside smoking, coughing, or talking loudly all night.

Henry Schilthuis, the Construction Manager also discussed the rationale for some of the design decisions related to spaces for smokers. He spoke to the design decision at Parkdale Landing to provide a smoking area in a patio area on the second floor of the building:

> Every neighbourhood is different. The problem here in this area is there are folks that take advantage of people in social housing, especially people with addictions. The worst thing that you can do is send somebody out to the sidewalk to smoke in the middle of the night, or to the backyard..... By building a space that's separated by access and elevated to the second floor from the sidewalk, it helps keep the tenants protected while they can go out for a smoke. They're not as exposed to the danger that's out there and they are also not isolated from their community.

Emma spoke to the same design feature, and talked about it as a responsive feature, but also how one design element can fulfill many different purposes:

> It depends on the site and different considerations, but space for tenants to smoke outdoors is always an important part of our conversations, for better or worse. It's a reality for a lot of tenants and we figure out a place that is safe and can still build community for people who are smokers. When projects are in neighbourhoods that either don't have the site space available for it or maybe there's drug dealing that happens in the neighbourhood, so you want to try and help tenants stay safe. We have been doing more raised patios, first at Parkdale Landing where there is a big patio which will have community garden plots and a pergola for people to sit under in the sun or the rain. In the second phase McQuesten Lofts build, each floor has its own patio which can probably fit up to ten people or so, but I'm sure fewer people will be there at any one time. These balconies are on the sunny side of the building and there's going to be some higher up ones designated for smoking, while the rest are not. It's an important part of the considerations that people can have outdoor space for their mental health.

In buildings where a patio like the one at Parkdale Landing is not possible, Indwell has integrated a smoking shelter into the landscape design of their buildings. Graham described this responsive design solution:

> They are nice, sturdy, well-built shelters where people can sit. They're semi-transparent in the sense that the wood slats are designed so you can see through them but you can't necessarily see people just sitting there smoking. We try to position those in such a way that they are respectful to the neighbourhood, but allow people to feel dignified, that they are not just stuck behind a garbage dumpster.

One of the other responsive design elements Indwell has integrated into their buildings is the inclusion of beautiful independent washrooms in each apartment. This may seem obvious as a required feature, but many tenants report how thankful they are to have their own private, secure, and functional washroom, having past experience of unstable housing situations, where shared or public washrooms may have included a level of insecurity and/or vulnerability. Graham shared perspective for washroom designs in units:

> Good washrooms: they're really important. For those of us who have not experienced very complex life circumstances, we don't realize what it's like to live with the insecurity of being violated in a washroom space. We've heard from many tenants over the years about their experiences of being victimized sexually, or having their personal belongings tampered with, in shared washroom spaces. We realized that a shared washroom was a big problem for a lot of people, and so all of our new builds have private washrooms within each apartments. This makes it possible for each tenant to have their own household space.

In addition to living in each of the Indwell buildings that she designs, Emma also ensures that she creates opportunities to get feedback from tenants once they have lived in the units. This is to guarantee that there is a consistent feedback loop, with an interest to be improving on design for tenants:

> I like meeting with people after they have been living in the project for a few months to hear how it's going and if there is anything they love or that they wish was different. There have been especially interesting, useful focus groups with people who are living in the barrier-free units to hear how they experience their unit and if there's anything that's difficult to reach or that they'd wish was different. Especially when it's a person with mobility issues, I really like to hear that first-hand feedback.

Passive House- Environmental Sustainability

Passive House design is significant to the Indwell housing design process. For Indwell, the move towards using a Passive House design emerged from the desire to be responsible both environmentally and fiscally. Graham talked about this as being the question that they posed to themselves as an organization: What does it mean to merge high performance with deep affordability? Passive House was a design strategy to bring these two worlds together (interview transcript). For Emma, the move towards Passive House made a lot of sense because of the financial and economic sustainability: "I think having sustainability at the core of housing just makes sense because housing is a basic human need and having it be sustainable just makes sense for the direction that were going" (interview transcript). For Emma, from the perspective of responding to building codes and environmental sustainability, Passive House was also an important responsive direction. She feels that doing the minimum in terms of responding to environmental codes is not sufficient, to respond to future needs in terms of climate targets:

> Most developers today are supposedly building to code, but the code has a lot of gaps in terms of sustainability and they just try to do the bare minimum. But the minimum is not good enough for what we need to be building in order to meet any sort of targets to combat climate change.

As Nrinder Nann reflected on the importance of Passive House builds, she also pointed to the value of the model from an environmental perspective, an affordability perspective, and for the tenants within the buildings:

> Building passive buildings and homes is essential for our ability to stay on this planet. From an environmental perspective, but also from an affordability perspective, passive design ends up being much more affordable to live

> in. It allows residents to stretch their dollars where they need to be and not worry about paying their utility bill versus their rent versus their food, and I think Passive House design facilitates that by saying, you know, there's a lower cost to the price of living in this facility, which enables residents to participate more fully in life.

As Indwell began to look at evolving environmental standards as well as sustainability costs, and consulted with their design team, including Invizij and Schilthuis Construction, they realized that Passive Housing is a good design strategy:

> The Parkdale Landing building itself was an adaptive reuse of an existing building; it used to be an old tavern and rooming house. The work in this building was very thorough, we stripped everything out of the existing building – all of the electrical, plumbing, mechanical, interior walls – everything went. Because we started with the bare structure in mind, we thought about how we would create a highly energy-efficient building that's good for the long term. That's when we started thinking that Passive House was a good design strategy. It was our first Passive House project.

At that point, there were very few multi-dwelling Passive House projects in Canada, and so there was a lot of research, as well as learning, that accompanied their first build at Parkdale Landing. Indwell, Invizij Architects and Schilthuis Construction have since built five Passive House developments since their first multi-unit development, Parkdale Landing, which opened in September 2018.

Henry talked about the learning process in his interview:

> Paying attention to the details is very important. Because we were learning on this one – you can't learn everything in a course and a couple seminars, we engaged a residential contractor from Oakville who had done some Passive House detailing and work(ed) with them. They oversaw us a little at the beginning and helped us with some initial details such as air barriers, window install and taping, and just gave us some pointers on how to achieve the performance testing. It was important to engage the people that were already very knowledgeable about [Passive Housing].

For Emma, like Henry, it was important to involve a community of practitioners who could work and learn with her team:

> We had a new consultant on our team who helped guide some of the very collaborative meetings where we had the contractor and all the consultants where we worked through all the Passive House details. We threw out ideas, and went back and forth about what was going to be best. We were meeting every two weeks to figure out Passive House and how to do this building in a way to make it work.

There were a number of Passive House elements that contributed to the design and overall comfort of tenants. Emma spoke to a number of those elements in her interview:

> The way that the Passive House elements work in these apartments, there's always fresh air coming into the apartment at a temperature very similar to the ambient temperature in the building, so you don't have that kind of hot and cold differential. It's the same with the windows because they are so good thermally with the triple

> glazing, thermal breaks, and air tightness, that they stay close to the room's temperature even in mid-winter. And with the insulation in the walls you can sit right next to a window and never feel a draft. That's a real benefit.

Graham pointed out another feature of the Parkdale Landing Passive House design: the sunshades that hang horizontally on the outside of the building at the top of each window. Their purpose is to contribute to a cooling effect:

> Under certain sun conditions when the sun is high, the shades will actually block the sun's rays from hitting the window, reducing solar heat gain through the glazing. You can still see out of course, but it stops the solar rays from entering which helps keep the apartments from overheating in the summer.

Graham talked about the importance of the ventilation system for producing quality air flow within the units:

> All the heating and cooling in this building is through the ventilation system. There is constant ventilation into every unit as part of Passive House. Really high air quality is important for wellness; we are constantly pushing fresh air into the apartment through the living area, then extracting it through the washroom vent back outdoors. The air streams don't mix, but the energy is recovered through the ERV.

Because Parkdale Landing was one of the first multi-residential Passive House developments in Canada, there were a number of challenges associated with the build. Part of the learning curve was discovering not just how to do the build well, but where to source the different materials that were needed to build to Passive House standards. Emma described some of the challenges:

> Working out the Passive House details for larger, taller building was a real learning curve. Initially the details we found were more related to standard residential combustible construction or more just standard residential, multi residential construction techniques. There were few details for non-combustible PH multi-residential. We were developing our own and talking with many different experts in the field. One of our go-to experts was RDH who became our building envelope consultants. They do a lot of their own research, so we were relying on a lot of the research they've done in the past. There are a few companies in North America that are selling Passive House products specifically so, we were learning a lot from them about what kinds of tapes and membranes to be using. We have learned from the suppliers and we have learned from other teams, like owners or design teams of other Passive House projects, and from our Passive House consultants who have other experiences as well. With some of it we were actually developing some of these wall types for the first time in the Canadian context.

Despite facing these challenges, Parkdale Landing officially opened in the Fall of 2018, and 57 tenants now call Parkdale Landing home. Graham believes that Indwell is now the largest Passive House multi-residential developer in Canada:

> We've become, I think at the moment anyway, Canada's largest Passive House multi-residential developer. We've got five projects built, with roughly a dozen more in design development using Passive House.

10.

DISCUSSION

In her interview, Nrinder Nann talked about the inspiration that Parkdale Landing and its Passive House design utilized within the City of Hamilton:

> I know that it's definitely inspiring other affordable housing built in the city, and it's also spurred a conversation – whether it's Indwell or whether it's City Housing Hamilton and other buildings, seeing the results of the Passive House design and what that means for an environment where capital and operating dollars are dwindling.

We set out to explore the relationship between design, mental health and community building and sought to answer our research questions: What is it about the ways that the Indwell communities are built, how do the intentional design of services and of spaces contribute to increased mental health and wellness? What is the value of using environmental sustainability like Passive Housing when building affordable housing? Through that process, we discovered that there were many interconnections through Cultivating Community and Relationships and Purposeful Design.

We also learned that Indwell's story and their model of Purposeful Design from start to finish has had a transformative impact on the lives of the tenants who have had the opportunity to find housing at one of their developments. As we think about further research, we would love to hear about those transformational impacts first-hand from tenants.

We believe that Indwell's model and approach to creating sustainable, supportive, affordable housing in the region is one that can be learned from, and that the principles can be applied in other contexts. Indwell is taking action and creating long term solutions for affordable, supportive, and sustainable housing at a time when there is both a mental health (CAMH, 2020) and a housing crisis across Canada (CMHC, 2020). We are in desperate need of good strong models to lead us into possibilities and solutions.

Indwell's story is not finished yet. In his interview in the summer of 2019, Graham Cubitt spoke about future developments, one of them being McQuesten Lofts, which will be a partner development to Parkdale Landing. This housing development will open in the Fall of 2020:

> We opened this building in September 2018. You can see those orange ribbons (points to construction ribbons in the vacant lot beside the Parkdale landing building). There is actually going to be a 50-unit apartment building that will go up next to this building. It will be four storeys and the community gardens here will be accessible to the tenants in this complex. There will be a large landscaped area with native plants [Medicine Garden], designed to support our partnership with two Indigenous housing organizations.

The Medicine Garden with twelve traditional plantings referred to is currently under construction (at the time of the writing of this report in December 2020) and will be an important part of the new building development. This is another example of responsive action to meet housing needs in the City of Hamilton and across the region. It also continues to illustrate the importance that Indwell places on collaboration, community, and partnership.

It is our hope that as you read this research report, that you have learned something new: that you have been inspired by Indwell's commitment to building community, to environmental sustainability, to designing buildings that are responsive to the mental health and well-being of tenants, to designing an integrated service model that supports tenant success, or other purposeful design elements that we discussed throughout the report.

It was clear to us that their approach was something that Indwell, Invizij Architects, and Schilthuis Construction were eager to share. They wanted us to understand what it was that they did because they have seen the positive impact that it has had on tenants and on communities. We want to end with something that Steven Rolfe shared in his interview:

> Why wouldn't we build a place that we would want to live in ourselves? Why wouldn't we create an environment where people are well cared for? That's an extension of our values.

And so, this model of affordable, supportive and sustainable housing stems from a commitment to the values of health, wellness and belonging. It is something that stakeholders believe in and have seen the impact it can have in transforming communities. And it is this kind of transformation that communities across Canada are looking for as they navigate the needs for affordable housing and housing that meets the needs of a diverse group of tenants seeking a place to call home.

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APPENDIX 1: PARKDALE LANDING SITE ANALYSIS DRAWINGS


PARKDALE LANDING, HAMILTON – HOUSING INITIATIVE
3rd Floor
2nd Floor
1st Floor
PARKDALE LANDING
Phase 1 and 2
NEIGHBOURHOOD


PARKDALE LANDING, HAMILTON – SPACE CHART
PRIVATE
SHARED PRIVATE
PUBLIC (RESIDENTS AND VISITORS)
CORRIDOR/ACCESS/ SERVICES
1st FLOOR – 1130 sm
6 Apartment Units – 156 sm
Client Meeting Room 119- 28 sm
Radio/Multi use-135 sm
188 sm
Private Office Rm. 101 B – 14sm
Meeting Rm 1 109 – 34 sm
Retail A 113-168 sm
Program Office Rm. 101A-19 sm
Meeting Rm. 2 108- 28 sm
Retail B 114-90 sm
Open Office 101-57 sm
Office 118-20 sm
Kitchen 110 – 135 sm
Dishwash 110 A – 66 sm
2ND FLOOR – 1121 sm
25 Apartment Units – 406 sm
Roof Terrace 230 201 sm
209 sm
Common Rm. 229 45 sm
3rd FLOOR – 920 sm
26 Units – 646 sm
Common Rm 327 – 28sm
180 sm
Laundry Rm 328 + 17sm
Total: 1519 sm
Total: 90 sm
Total: 664 sm
Total: 577 sm
48%
3%
22%
18%
3rd Floor
2nd Floor
1st Floor

APPENDIX 2: INTERVIEW QUESTIONS

Interview Questions

General Questions (for all participants)

1. What role do you play or have you played in the Indwell building projects? (What does that role look like in everyday practice?)

2. How many people are on your team (or do similar work to the work that you are doing?)

3. How long have you been involved in the Indwell building projects?

Specific questions (dependant on the role of the interview participant)

Residents

4. Who are your residents? (What is the range of residents?) What is the criteria for getting a spot in an Indwell building?

5. Do you have different types of housing? Does this impact the design?

6. What are the different impacts that you have seen on residents over the past decade as they have moved into your buildings? (what have you measured?)

7. How long is your waiting list?

8. What kind of funding challenges have you faced? (what are the strategies that you have employed to fund your different projects? You currently have 7 projects and 6 in development)

Design

9. Can you describe the process that goes into selecting a building site? (How do you interact with the community where the site will be constructed?)

10. Can you describe the role that design has played in the development and construction of the different Indwell buildings?

11. Why did you decide to use Passive Housing principles in the Indwell projects?

12. Why do you think it is important that your buildings incorporate design ideas like Passive Housing?

13. How does the concept of community impact the way that you consider the design of your buildings?

14. Which types of spaces are given design priority in your developments? (Are there ratios of public, semi-public, and private spaces?)

15. What is the importance of spaces outside of the Indwell projects, such as porches, sidewalks, smoking areas, parking, community spaces, parks, or community gardens?