

**Liminal Dwelling:
Support for Street Residents, a Place of Re-integration and
Transition**

by

Kara Grace Burman

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Abstract

In this thesis, I will argue for the establishment of a 'shelter-first' tent city in the South East False Creek area; one that brings collaboration between the housed and unhoused. One which provides a safe and stable place to be, through a cost effective, human-scale approach that encourages transition of the unhoused to a more sustainable, permanent living situation. The architecture will not be the tent city itself, but the supportive services and buildings that encourage peer support, skill building, the sharing of a meal, opportunities for income, and networking through connection and integration into the greater community. I envision the architecture being a community center, that can host both the needs of the homeless, while providing resources for the greater community, and to develop a social platform for re-integration of the unhoused.

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Thank you to my supervisor Sarah Bonnemaïson, who's positivity and drive helped me see this project to the end.

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Chapter 1: Defining Homelessness

1.1 Motivation/Inspiration

When living in Vancouver in 2016, I met a woman, who lived in the park close to my house. I would see her when walking my roommate’s dog, Max, in the morning. She also had a dog, who would come over to greet Max. We would have short conversations while the dogs played together. After a few weeks, I asked her if she would feel comfortable telling me about her situation. She said she would, and she proceeded to tell me the story of her illness, losing her job, and getting evicted. She impressed me with her determination and smarts. She explained the research and thought she put into surviving in the city, the resources and facilities she found and used, how she decided to situate herself geographically, the actions



RESOURCES



HOME



ORIGINAL HOME



SERVICES

50 m

———— BUS ROUTE
 - - - - - FREQUENT WALK
 INFREQUENT WALK

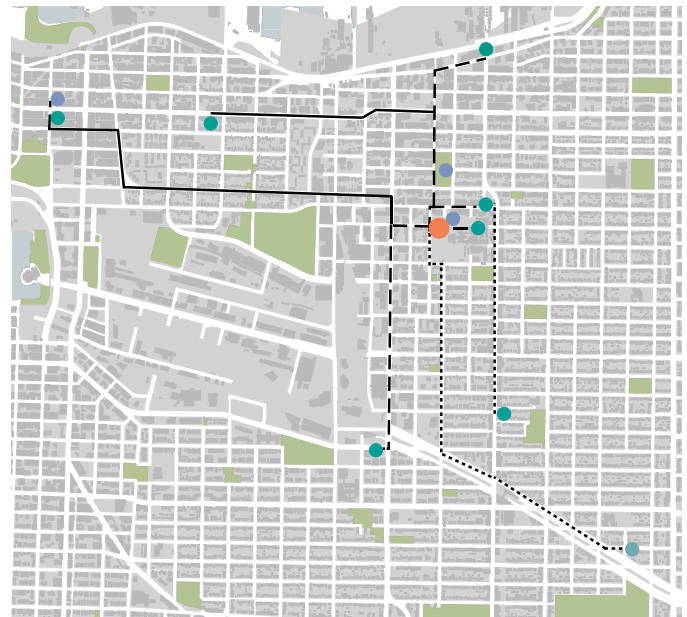


Figure 1: Mapping of the original location, services, resources and current base and her way of transportation

she was taking to ameliorate her situation in an effort to get a roof over her head once again. Understanding the legalities of place-making in public areas, how she transported her belongings and found places to store them, what was worth spending money on, where she could get sufficient, healthy food, and what services were available to answer her questions and provide help.

1.2 Thesis Questions

The questions that I address in my thesis are: How can we open the door for an additional response to homelessness? Can we provide more than a material product – that is, can we provide the tangible tools for an individual to improve their life? Can an architect advocate for a pluralistic notion of what home is and inclusion as opposed to exclusion in response to the homeless?

1.3 Definition of Homelessness

In my thesis, I use the term “homeless” and “homelessness” in the same manner as does the Greater Vancouver Regional Steering Committee on Homelessness (GVRSCH). The GVRSCH defines a person who experiences homelessness as an individual who does not pay rent and who does not have a place of their own to stay for more than 30 days. The GVRSCH divides the homeless into two types: 1) the sheltered homeless - individuals who have a temporary physical shelter, either in an emergency shelter, transition house, safe house, jail, detox facility or hospital; and 2) the unsheltered homeless - individuals who have no physical shelter and either live outdoors or find

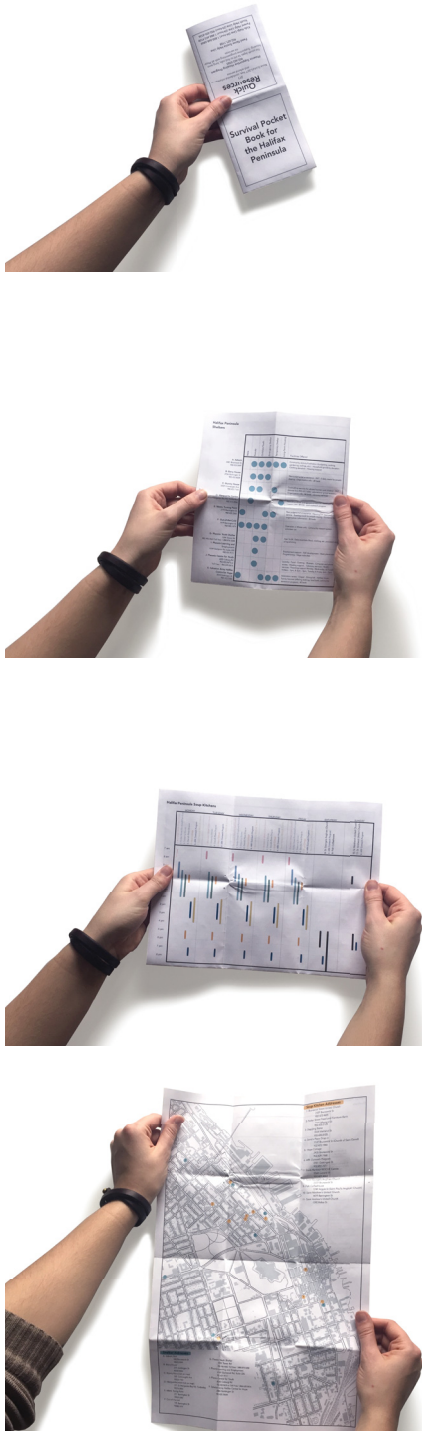


Figure 2-5: Resource Mapping Exercise on the Halifax Peninsula. Folding pocket book developed clarifying shelter requirements and resources, quick links, food sources (soup kitchens, food banks) hours of operations and map showing locations of all these various resources.

protection in doorways, parkades, parks or vehicles, or who are temporarily staying at someone else's home. The homeless, whether sheltered or unsheltered, do not have a fixed address (Greater Vancouver Regional Steering Committee on Homelessness 2014, i). I would like to point out, that this definition does not include any description other than the status of an individual's living situation. It is not a noun, giving title to an individual and consequently describing an individual's personal qualities, or status of their mental health or social habits. But so often this word is used holding judgements, negative connotations and stereotypes about individuals without homes. For this reason, I have tried to avoid using the word homeless in this way, instead using terms such as street resident, or unshoused.

1.4 Dwelling as a Verb

In my thesis, I also use the term "dwelling". What is a 'dwelling'? In North America, society considers a dwelling in the sense of the noun "dwelling" - that is, a living accommodation that is an owned or rented dwelling that meets the physical needs of the individual or individuals living within the dwelling. A dwelling has bedrooms to sleep in, a kitchen in which to prepare and consume food, and a bathroom for hygienic purposes. A successful dwelling provides the individual or individuals living in the dwelling with a feeling of safety, comfort and stability.

How do individuals who do not have a consistent place that offers these things (safety, comfort and stability) dwell without a dwelling?



Figure 6: Photograph of Wilkinson Building being used as shelter by the unhoused

The word “dwelling” is both a noun as described above, that is, the physical form of a dwelling, and a verb, that is, the process or activities that take place to create or to exist within (Turner 1972, 151). In “The Movable Dwelling and How it Came to America”, in *Discovering the Vernacular Landscape*, J.B. Jackson reminds us that the verb “to dwell” means to hesitate, linger or delay, and that it is derived from the word “abide”, which originates from the word “abode”, meaning to pause or stay. None of these definitions describes the specific programs that are required to dwell, nor do they describe the length of time that a person must live within a space to truly dwell within the space so that it becomes a dwelling. As J.B. Jackson says,

How long must we stay in a place for it to become a dwelling?... long enough for our presence to become customary... customary behavior... our habitual way of life (Jackson 1973, 91).

The importance of being able to influence one’s own environment stems from the idea of the individual: each individual differs from the next and one solution cannot suit everyone. One individual cannot determine the requirements of another individual. Therefore, every individual’s action of dwelling is subjective and cannot be related to any precise form (Habraken 1972, 12).

By asking “what is a dwelling?” and “what is the meaning of to dwell?”, I have developed a definition of dwelling that I will use throughout my thesis: “dwelling” is more than just a physical building or house, or private experience. “Dwelling” as I use it in my thesis means settling, or being able to move through an environment but staying long enough to make and keep community, finding a place in which the individual can feel comfortable and safe, with

stability, not just place making, but a space that can be used by the dweller for activities that make him or her feel at home. This means that the activity of dwelling requires two actions; the actions required by the body; sleep, nutrition and hygiene, and the actions required by the soul; interacting with others, making space, creating, finding satisfaction, and a feeling of belonging.

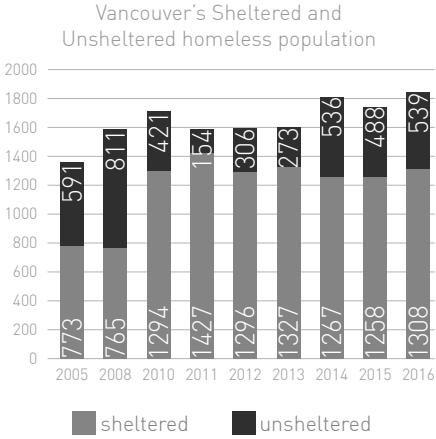


Figure 7: Graph of Vancouver's sheltered and unsheltered homeless population data adapted from Matt Thomson Consulting 2016.

1.5 Unhoused Population in Vancouver

For each of the last ten years, the City of Vancouver has conducted an annual city-wide count of people experiencing homelessness. It is conducted over a 24 hour time period in the middle of March. Its purposes are to estimate the number of individuals within the City who are unhoused and to gain greater insight about the demographic and trends that are occurring. On March 10, 2016, the most recent count was conducted. According to this count, there were 1,847 visible, sheltered and unsheltered homeless people in Vancouver. It is estimated that this number represents 65% of the total unhoused population in the greater Metro Vancouver area.

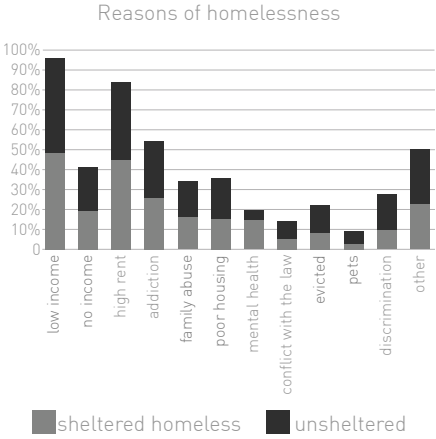


Figure 8: Graph of Vancouver's reasons for homelessness data adapted from Matt Thomson Consulting. 2016.

While conducting the count, surveyors ask questions of the street residents to develop a better understanding about their health, income, duration of homelessness, and the resources that they use (Matt Thompson Consulting 2016).

Reasons given by unhoused individuals in the latest count for being homeless included: low housing barriers, no income, and lack of affordable housing, as well as addiction, mental health and physical health. Seventy-six percent of individuals reported having one or more

health conditions, and 53% of these individuals also reported addiction or substance abuse. Thirty-five percent of individuals reported that their main source of income was income assistance or welfare, and 27% of these individuals reported reliance on disability benefits as well.

When asked how long they had been on the street, 39% reported that they had been on the street for 1 year or more. Individuals who reported being on the street for 1 year or more had a higher likelihood of being unsheltered homeless. The majority of individuals who reported that they do not stay in shelters said it was a matter of preference: they preferred being outdoors, rather than in places which were well known for bedbugs, crime and disruptive noise. Others reported that they stayed outdoors because they were turned away by shelters that were full or because they were not “appropriate” for the shelter approached. An individual might not be appropriate for a shelter because of intoxication, having a pet, or being the wrong age or gender for a specific shelter (Matt Thompson Consulting 2016).

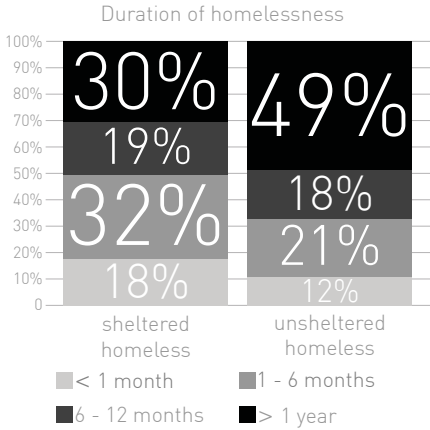


Figure 9: Graph of Vancouver’s duration of homelessness data adapted from Matt Thomson Consulting, 2016.

In 2008, the City of Vancouver endorsed the Federation of Canadian Municipalities (FCM) report on “Sustaining the Momentum: Recommendations for a Nation Action Plan on Housing and Homelessness.” This document outlines five targets to address homelessness. The first target is ending chronic homelessness in ten (10) years by focusing on the issues that contribute to chronic homelessness, such as mental health and addiction (Pomroy, Federation of Canadian Municipalities, and Canadian Electronic Library 2008). The ten year period to achieve this target has almost passed and the target has not yet been achieved.

More recently, in 2012, the City of Vancouver outlined its goals for addressing unhoused individuals in Vancouver and for providing affordable housing for all, as well as its strategies for how to accomplish these goals. The three strategies outlined were: increase the supply of affordable housing, encourage a mix of housing types in all neighborhoods, and enhance housing stability.

However, despite the good intentions of the City of Vancouver, homelessness has increased by 300% in the last 10 years. This increase has been attributed to the loss of Single Room Occupancy (SRO) hotels, a gap in supportive housing units, and insufficient health care and social safety systems offered to those that are homeless. Actions to address homelessness that have been successful have been: increasing the capacity of shelters in the winter months, Homeless Emergency Action Team (HEAT), provision of funding for the renovation of 200 supportive housing units, securing of funding from the provincial government for 1500 supportive housing units on City-owned sites, and the launch of the Urban Health Initiative. This latter initiative, done in partnership with Vancouver Coastal Health, provides primary care to low-barrier shelters, mental health training for frontline staff at homeless facilities, and implementation of food security initiatives (Context Ltd. 2011, 9).

Currently, SRO accommodation, available for individuals in the lowest income brackets, are being lost to conversions and rental increases in the cheapest areas, such as the Downtown Eastside (DTES), because of the gentrification occurring in the area. In the last 10 years, the City of Vancouver has financed the construction of several supportive housing developments, but even this initiative is not enough to meet the demand for low-income housing

for Vancouver's poor (Context Ltd. 2011, 7).

With the decrease in the number of non-market housing, there are low vacancy and turnover rates, and in the newly constructed market-rate rental housing, the rental rates usually far exceed what is affordable. Housing is considered to be affordable when it costs less than 30% of a persons' monthly income (Heben 2014, viii).

Actions by the City of Vancouver to address the shortages in affordable housing include developing the Short-Term Incentives for Rental (STIR) program and developing new zoning policies for single family lots to accept secondary suites (both basement suites and laneways houses) (Context Ltd. 2011, 9).

The City of Vancouver's ultimate goal is to have the shelter capacity to meet the needs of all unhoused individuals. This would require creating 2,900 new supportive housing units, as well as an additional 5,000 new social housing units (including 1,000 self-contained SRO units) and 11,000 new market rental housing units (Context Ltd. 2011, 12).

Chapter 2: Theoretical Framework

What, then, must we demand from architectural space in order that man may still call himself human? Primarily we must demand an imaginable structure that offers rich possibilities for identification (Preiser, Vischer and White for Norberg-Schulz 1991, 3).

2.1 Sociology

2.1.1 Cycle of Homelessness

Individuals can become homeless for many reasons that include high rent prices, high cost of living, lack of affordable housing, loss of a job, illness, injury, addiction, or a change in family situation or household dynamic. In Canada, the rising rate of homelessness is also attributable to the loss of federal funding for non-market housing, lower provincial social assistance rates, deinstitutionalization, and decreasing housing affordability relative to income (Rabinovitch, Pauly, Zhao 2016, 1). In the City of Vancouver, the rising rate of homelessness is amplified by the extremely high cost of both rent and high cost of living expenses. There are many tangible reasons for homelessness, but the root cause is often poor mental health. Having social support, healthy relationships, a sense of autonomy, accomplishment, purpose, personal growth and a roof over one's head, all play a huge role in one's mental health. As much as these factors have an influence on becoming homeless, they have an equal influence on regaining housing (Thompson et al. 2004, 423).

Homelessness is not a finite or static process, but a fluid and dynamic one, characterized by multiple transitions,

role exits and role entries (Peressini, McDonald 2000, 526).

Many resources are put in place both to aid the homeless and transition to housing. Such resources include counselling services, addictions centres, outreach programs and food programs. But even if more stable housing is found, there is always the chance of falling back into the cycle of homelessness if the root cause is not addressed.

2.1.2 Stigma of “The Homeless”

NIMBY is an acronym that stands for “Not in My Back Yard”. This concept comes up frequently during discussions about where centres or resources for unhoused individuals should be located. When a neighbourhood is suggested

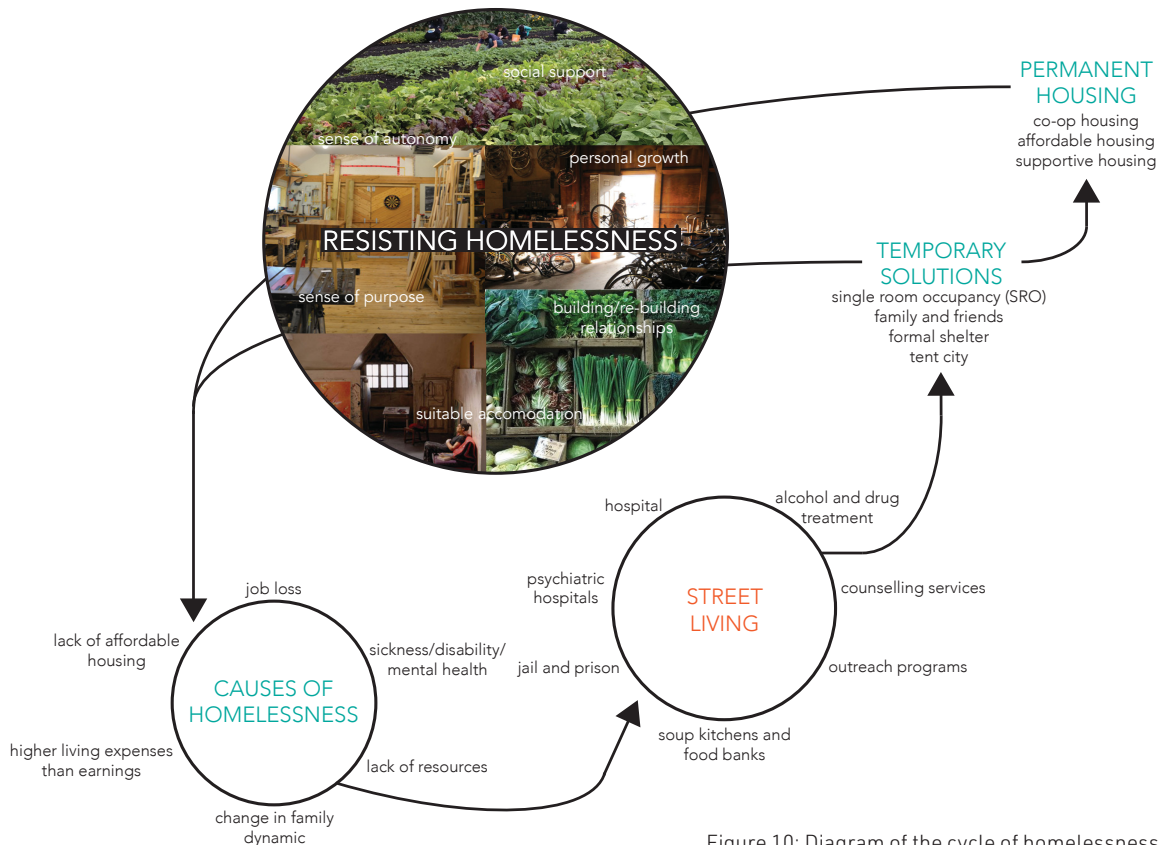


Figure 10: Diagram of the cycle of homelessness

for the development of a shelter, supportive housing or an addictions centre, residents living close to the proposed location resist, not wanting the development to take place in their area. There is an assumption that the homeless population who would be using or living in these sorts of developments would increase crime, litter, steal, be violent and decrease property values. In cities such as Vancouver, NIMBY-ism is a large reason for the homeless population being left isolated or isolated within certain areas, instead of it being accepted into all neighbourhoods in the City (The Homeless Hub 2017). A large portion of society discriminates against the homeless population, rationalizing their rejection or uncaring attitude towards the homeless population's way of living as acceptable, because that way of living is dysfunctional, or because it represents a loss of culture, or is connected with pathological afflictions and marginality (Letkemann 2004, 242-246). It is important to recognize that the homeless are human beings, and although they have found an alternative way of living than societal norms, they have the right to develop a positive sense of self, place, community and purpose.

2.1.3 Well-being, the Development of Community and Architecture

In *Social and Physical Factors for Building Happiness*, Toy and Guite (2008, 102-111) argue that there are two types of happiness; the first is hedonic happiness, which is superficial happiness, for which an individual seeks pleasure and avoids pain. The second is eudaimonic happiness, for which an individual seeks psychological and social well-being.

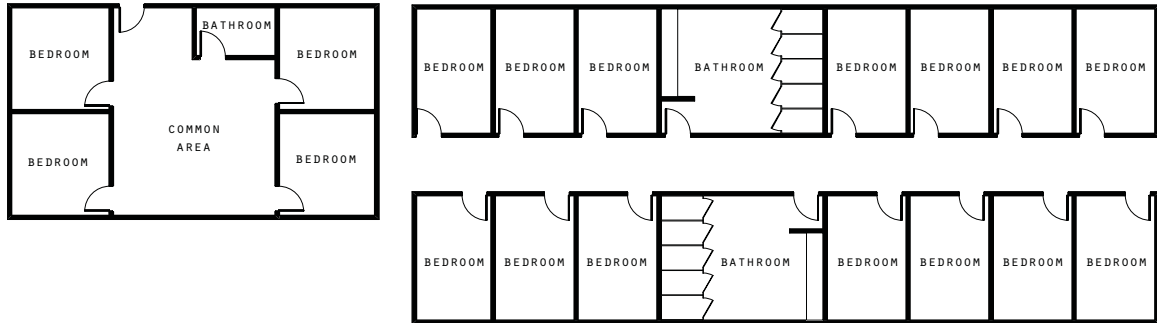


Figure 11: Diagram of comparison between residence hall vs. apartment style dormitories. Information adapted for diagram from Toy, Sarah, and Hilary Guite 2008, 102-111.

An individual's eudaimonic happiness is influenced by the built environment in two ways: the manner in which the built form shapes social interaction, and an individual's ability to adapt the built environment to suit his or her specific needs and preferences. Being able to choose when and who you are interacting with is important to an individual's well-being. Ultimately, built environment has a large role to play. A balance in the built environment must be found between the amount of personal space and the amount of space devoted to supporting sociability for an individual to share experiences with others. Where the balance lies between private and public is influenced by aesthetics, form and function. This social space must be for everyone, to provide a situation of equity no matter how low the social standing of an individual and to provide a platform to prevent individuals from being isolated from their community.

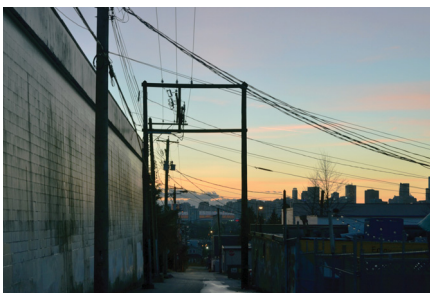


Figure 12: Photograph of East Vancouver's boundaries

Which makes a community a community and not merely an aggregate of individuals... a gathering place for the people, humanizing them by mutual contact, providing them with a shelter against haphazard traffic, and freeing them from the tension of rushing through a web of streets (Jackson 1984, 16).



Figure 13-16: City configurations showing grid pattern . Boundaries between public and private, solid and void

J.B. Jackson explains that relationships are fostered by boundaries, which stabilize relationships with what is outside. “They make residents out of the homeless, neighbors out of strangers, strangers out of enemies” (Jackson 1984, 15). Every small piece of vacant space in Vancouver has distinct boundaries; they may be a property fence, an adjacent building, or a pathway. Jackson argues that these boundaries are created by the political need to organize space, and only adjust by the boundaries’ of social or natural content and topography. For example, we can see how this phenomenon has grown with time, we can compare a European city, like Venice or Amsterdam with a North American city, such as Los Angeles or Manhattan. Cities that have existed for thousands of years have a much more organic form , while cities constructed in the last few centuries adopted an strict and uninformed grid, rarely differing. These boundaries are not put in place to protect what is within; they actually have very little to do with the society they surround.

A research project conducted in the borough of Greenwich in London reported in a study of the contribution of the physical environment to mental well-being across a wide range of factors. The researchers used a definition of “well-being” that had been developed by the Department for Environmental, Food and Rural Affairs (DEFRA) in the United Kingdom, which was:

a positive physical, social and mental state; it is not just the absence of pain, discomfort and incapacity. It requires that basic needs are met, that individuals have a sense of purpose, that they feel able to achieve important personal goals and participate in society. It is enhanced by conditions that include supportive personal relationships, strong and inclusive communities, good health, financial and personal security, rewarding

employment and a healthy and attractive environment (Royal Borough of Greenwich Health and Wellbeing Board 2015, 10).

In using this definition, the researchers noted that the most important factors for well-being are neighbourhood noise, a sense of over-crowding in the home, accessibility and quality of green spaces and community facilities, as well as the fear of crime. These factors are influenced by both the design of the home and the greater area, as well as social dynamics. The study looked for small scale, simple and low cost physical and social interventions that could be supported by the existing budget (Guite, et al. 2006, 1117-1126).

We are dealing with activities related to building and dwelling. It is about person considerations and decisions, the formulating of one's own desires and the coming to a judgement about a given work...assessing, choosing, manifestation, preferences, freedom, desire for change, desire to maintain, in short it all has to do with the need for a personal environment where one can do as one likes; indeed it concerns one of the strongest urges of man kind, the desire for possession (Habraken 1972, 12).

When looking at supportive housing options to address homelessness, the aim is to find a building model which encourages community development and individual empowerment that promotes housing stability. Quite often this sort of model is made up of several units consisting of individual rooms with shared living accommodation in a large-scale building (Novac et al. 1996). The most successful of these models is known as the "Housing First" model, in which permanent, safe and secure housing is provided without any requirements or conditions, such as

sobriety or forced participation in the programs that are offered.

Empowerment in terms of housing occurs through five main channels: knowledge (of rights), laws (formal rights that provide individuals with control over their housing), resources (to organize and gain information), agreements (contracts with landlords or land owners) and specific power transfer (to individuals of some management responsibilities) (Somerville 1998, 233-257). I believe this is the only way positive change can occur within such a rigid system.

2.2 Funding Strategies for Street Residents

2.2.1 Welfare and Social Security

Unhoused individuals have two types of government financial support in Canada; welfare and social security.

Welfare is a multi-billion dollar system of programs that transfer money and services to Canadians who are dealing with a variety of social needs. Some examples of these needs are: poverty, homelessness, unemployment, immigration, aging, illness, workplace injury and disability. Welfare is seen as a short term support system to help people transition into employment (Moscovitch 2015). Welfare is available to those who qualify.

Social security refers to the many government programs that replace a person's income in circumstances such as pregnancy (maternity or paternity leave), illness, accident, disability, the death or absence of a parent

(Canada Pension Plan), unemployment (Employment Insurance), old age or retirement (Canada Pension Plan). Social security is available only to those who have paid social security contributions during their life time. The money, when needed, comes from the fund administered by the government to which individuals have contributed over the years.

Both of these financial supports are formal structures that remove those that are in need, from the rest of society's economic system. This, along with many other self-developed coping strategies, have set unhoused individuals outside the usual economic realm.

The "homeless problem" is not seen as a problem of the economy or society, but instead, the fault of unhoused individuals themselves and their creation of stress on the economy and society. This, along with the lack of, or low

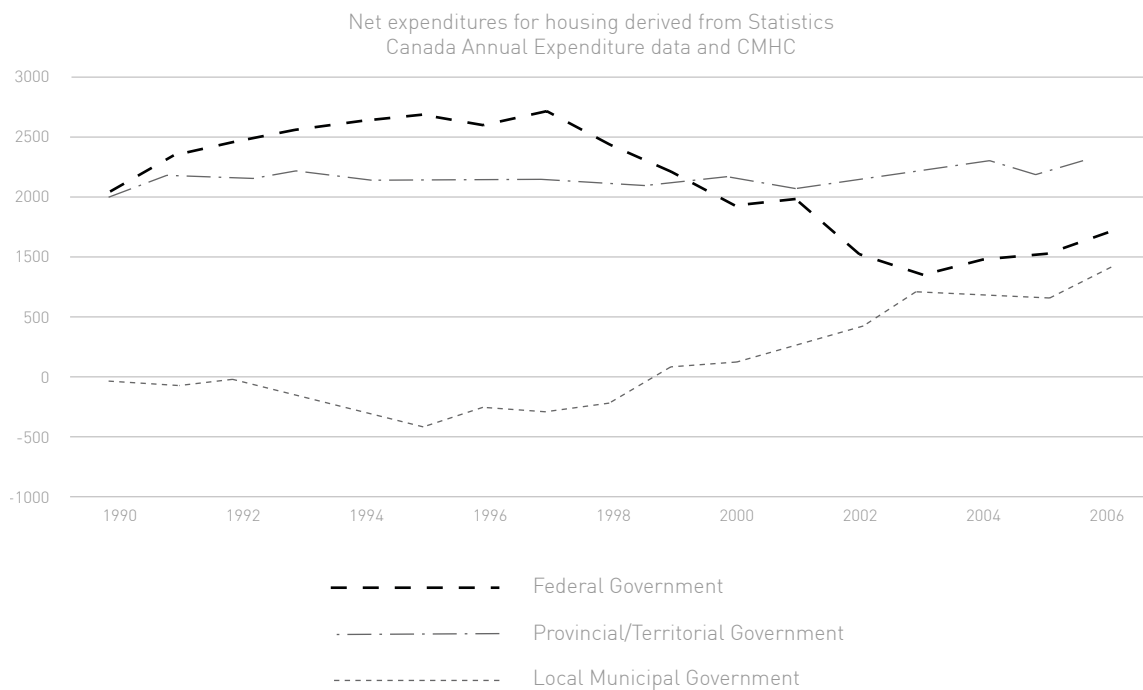


Figure 17: Graph of government expenditures on Vancouver's housing data adapted from Matt Thomson Consulting. Vancouver Homeless Count 2016.

income of the unhoused, excludes them from society and consequently creates the need for an alternative economy. Welfare and social security help to support the unhoused, but this help also serves to separate these individuals rather than to re-integrate them into the general public, just as so many other support organizations for the marginalized unintentionally do.

The ways in which unhoused individuals survive is what differentiates the unhoused from the housed. These ways include soup kitchens, food banks, social security and shelters. The organizations that provide these services typically do not include unhoused individuals in their governance and operations. Moreover, self-developed ways in which the unhoused help themselves such as bartering, non-cash transactions, bottle collection and dumpster diving are either frowned-upon and judged by the housed population or are considered illegal by governments.

Much of what is termed 'dysfunction' relates to what is seen as a rejection of, or uncaring attitude towards well-defined 'necessities.' That these might be perceived by the homeless as unnecessarily constraining, paternalistic and even ethnocentric, is commonly ignored or viewed as further evidence of a dysfunctional world view (Letkemann 2004, 246).

These life producing actions have also developed important social networks for the unhoused, helping the community of unhoused people use information and knowledge about where to obtain material resources, and food and shelter in an alternative economy of sorts, as well as how to develop patterns of interaction, networks and brokering. Constantly shifting sub-alliances between

groups create stronger bonds between the greater whole (Letkemann 2004, 252).

To be inclusive of the total population, there must be a pluralistic approach that is taken with policies that relate to the unhoused, and there must be an understanding of the alternative agency of the unhoused, that does not exclude, but instead changes the normative beliefs of what home looks like and the actions of life and existence, and allows for the coexistence of these differences (Feldman 2004, 22-24). In changing these policies and beliefs, it is necessary to involve the unhoused in representing their own population in the decisions and actions that affect their lives, so that their diversity will be saved from being simplified into one assumed homogenous group.

Soup warms without filling, sustains without satisfying. Soup is associated with the delicate, the invalid; it requires little effort to consume, little effort to digest. The body fed on soup is unlikely to thrive (Kawash 1998, 332).

2.3 Alternative Ways of Living

2.3.1 Tent Cities

The legal framework of cities in the United States of America (US) and most of Canada make tent cities unlawful through zoning, trespass laws and anti-camping regulations. But in British Columbia, the courts have ruled that a prohibition against camping outdoors in cities is a violation of the Canadian Charter of Rights and Freedoms in terms of one's right to adequate housing. In Vancouver, individuals are allowed to set up tents or make-shift shelters in public spaces between 7 pm and 9 am (Sinoski 2015).

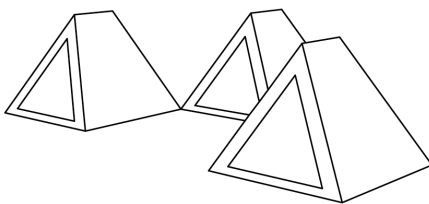


Figure 18: Amalgamation of tents

However, law enforcement continues to find ways of shutting down encampments and of forcing evictions of tent cities based on safety and sanitation. These actions by law enforcement have been found to be a violation of human rights and domestic law (Hunter, et al. 2014, 7).

Unfortunately, the underlying issue at hand is not being addressed: there is not sufficient housing for all. Therefore, there needs to be other accepted ways of living that do not involve forcing people to pack up and move. The unhoused must live within the public realm, with little distinction between public and private; environmental design actions in some cities are confronting this issue. Christopher Alexander argues that the order of organic process has been replaced by an artificial order of control, making it impossible to build an environment that is alive. Raised standards of living and code requirements create a reliance on the government to take action and provide options for housing.

Are there ways for others to take action? Is there a lenience to be made for users to create what they can?

The only way to build an environment that is alive is through gradual growth that is a reparative process, a process that is constantly evolving in reaction to existing conditions and includes the users in the design and making of their own environment (Alexander 1979, 225-242). Code requirements are created by technological growth and lessons from failures. Could alternatives to standard building be found, which still meet safety and performance standards outlined by the building code, so as to allow for easier and simpler ways to build?

The term "hard to house" defines people who come in

and out of different types of housing, and who do not stay consistently in one place for a prolonged period of time. I would argue that the term is insufficient. Perhaps this term shouldn't be about the people themselves, but the adequacy of the housing available for them. I would say that the "hard to house" have not been put in the "right" type of housing to suit their needs.

Unhoused individuals should be permitted to make decisions and take responsibility for their own lives, within their own means. People living in the camps have said that camps offer them safety, a sense of order and of community. In studies across the US, self-management, direct democracy, tolerance, mutual aid, and resourceful strategies have been found to assist unhoused individuals to live with less. Each tent city is a product of its local context: "geographical climate, style of government, attitude of the surrounding community, availability of services, and the intentions and personalities of its members are all critical characteristics that shape the organization of a tent city" (Heben 2014, 11). Tent cities provide ownership, even if it is only a small private space; but the way in which they create community is through the shared common spaces.

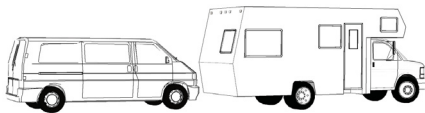


Figure 19: Vans and RVs

2.3.2 Van Living

It is not only the poorest members of society, who are living in unconventional ways. There is a growing population - a contemporary nomadic community - who are adapting to escalating cost of living and escaping the societal standard of living by adopting another alternative ways of living in this unaffordable City of Vancouver.

Cars, trailers, RVs, converted vans and buses can be seen parked in almost every part of the City of Vancouver; on residential streets, unused industrial lots, box store parking lots, as well as public parking lots. A recently amended City of Vancouver bylaw allows for tents to be set up in public parks throughout the night (as mentioned above). A mix of people are living this way: young students, retirees, couples and travelers, in a wide range of financial situations. For some, van living is their last resort before living on the streets, while others are actively choosing this way of life (Baker 2016).

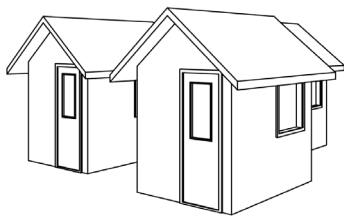


Figure 20: Amalgamation of tiny houses

2.3.3 Tiny House Movement

As of 2017, a few tent communities (tent cities) in the US have been semi-sanctioned by the city they occupy; that is, although the tent cities have not been formally recognized as legal, city authorities have not been actively shutting them down. As well, select tent cities have already transitioned or are in the process of transitioning from a tent city typology to a tiny house community or village. These tiny house communities or villages are finding success because they already have a strong sense of community: small private inside spaces and larger shared outside spaces for living. Classically, tiny houses are segregated from other housing types because of building code and zoning regulations. But for the unhoused, these code requirements and regulations have been disregarded by authorities because the breach of the code and regulations is a highly visible political issue.

This disregarding by authorities of the requirements of the building code and zoning regulations is opening doors

for the grassroots movement of ecological, small-scale living. These tiny houses not only assist in addressing the problem of insufficient housing for the unhoused, but reduces human impact on the natural environment by minimizing, localizing and sharing resources - which is much easier to do, when there is a community of tiny houses, than when there is a community of regular sized houses (Heben 2014, 50).

Andrew Heben, in *Tent City Urbanism* outlines four impacts that The Village Model has within its urban context. First is the physical impact: the tiny house village provides a person with ownership of a small private space with an abundance of shared common space, similar to the historical SRO model, which connects people with nature and connects them socially by distributing different functions into separate structures. Second is the social impact: a tiny house village has been found to create a small scale democratic community that allows for each voice to have value and social capital. Third is the economic impact: a tiny house village reduces inflated standards of living and provides a more human scale of development that is affordable and economically sustainable. Finally, the ecological impact: a tiny house village reduces human impact on the natural environment by minimizing, localizing and sharing resources (Heben 2014, 46-47).



Figure 21: Re-purposed warehouse building in East Van

2.4 The In-Between

Every city has spaces that can be considered “terrain vague”, which may be defined as derelict areas, wastelands or transgressive zones, that are neither slums nor open spaces but instead, are spaces that look empty and appear to have no current use. They may have once been spaces used for industry that are no longer supported by the post-industrial city. They are outside of the city’s formal circuits and structures, and need to find a new use, but in the meantime, sit vacant, waiting for a new use to emerge (Doron 2010, 247).

Instead of being viewed as blocked, inactive thresholds, these spaces should be seen as spaces in which to experiment, that is, spaces that may create opportunity for new forms of social interaction and relationships (Mariani and Barron 2014, 57).

In 1990, in the district of Mitte, in Berlin, a group of artist squatters appealed to the City of Berlin to save the building they resided in from being demolished. The City acquiesced to their appeal. The positive result meant that the building was temporarily protected from demolition. The building was called “Kunsthaus Tacheles” or “Art House Tacheles”. It contained a cinema, club, artist studios, workshops and gallery space. The artwork, graffiti-style paintings on the walls and sculptures made of rubble, poured out of the building into murals on the exterior walls. Kunsthaus Tacheles remained an integral part of Berlin’s art, activist, exhibition and communication scenes until the centre was shut down in 2011 (Kunsthaus Diaspora 2011).

Spaces like the Kunsthaus Tacheles keep the city street landscape alive and active instead of a place where pedestrians remain anonymous.

Space is not a container to be filled with, or to be emptied of, a specific content, space is rather a network of relations activated, rearranged, and made meaningful by human actions (Mariani and Barron 2014, 49).



Figure 22: Derelict lot in Vancouver with occupied camp trailers

Chapter 3: Design Methodology

3.1 Habitability and Adequate Housing

The Office of the United Nations High Commissioner's (OHCHR) defines "habitability" as: "adequate housing should provide for elements such as adequate space, protection from cold, damp, heat, rain, wind or other threats to health, structural hazards, and disease vectors" (OHCHR 2017). This definition of habitability is concerned with what the housing is, rather than what it does. However, for an individual, the success of housing is in how it suits the actions and needs of its inhabitants. As such, shouldn't habitability be based on how a house supports or impedes the user's activities? The requirements of these standards are unrealistic, often keeping the prices of housing out of reach for many and creating a reliance on government subsidies for housing to remain viable. The requirements of these standards are also a problem when people are living within their own means - living as they can - instead of living as they ought to be living.

Could OHCHR's definition of adequate housing be expanded? Could the Canadian building code and zoning by-laws be bypassed? If these things could be done, there would be an opportunity to develop a viable, temporary solution that respects the dweller's autonomy while meeting the formal concerns of the City of Vancouver, until more permanent housing can be developed. To address the unhoused population in Vancouver, could an alternative to emergency shelters and temporary or transitional housing provide a place that supports the actions that are necessary within a person's life?

In designing the methodology for my thesis, I have considered the work of four architects. I have considered the work and theories for mass housing of John Habraken (Habraken 1972). I have also considered the work of John Turner, using his planning methods of reconstruction and upgrades to a slum in Peru called Villa El Salvador (Turner 1972). Further, I have considered the work of Christopher Alexander, who argues for people to reclaim control of their built environment from design to building at any scale (Alexander 1977). Finally, I have considered the work of Ernst Friedrich Schumacher, whose theoretical framework of "intermediate technologies," now known as "appropriate technologies," gives the most concise and explicit approach to this type of project (Schumacher 1973).

John Habraken designed a supportive framework for dwellings that were open for interpretation in terms of program. The framework could adjust to "grow, develop and change with what goes on inside" (Hamdi for Habraken 1991, 39). Habraken's architectural work separated the responsibility of the individual from the responsibility of the community. He deemed it the responsibility of the community to provide roads for transportation, plumbing,

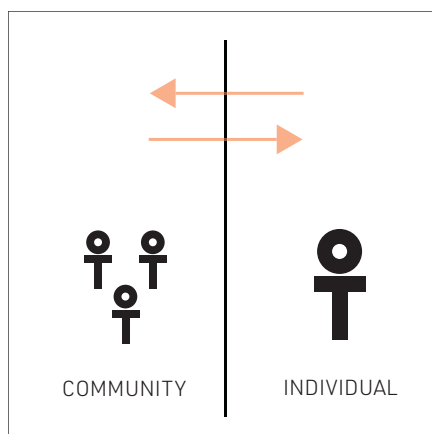


Figure 23: Habraken's diagram: community and individual balance in housing.

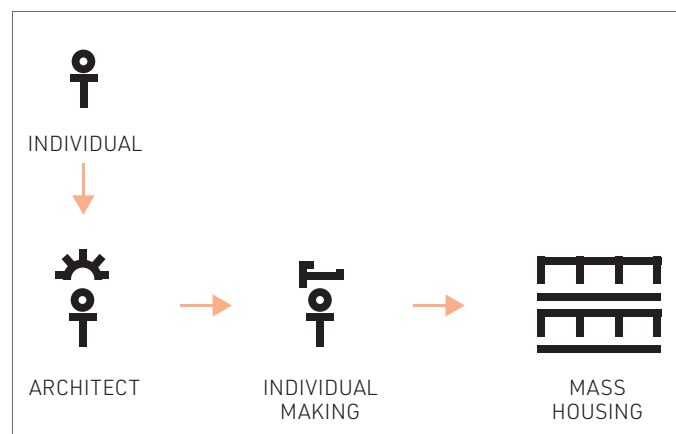


Figure 24: Habraken's diagram: Mass housing technique. Information for graphic 13 + 14 obtained from Habraken 1970.

roofs and the larger supporting network needed for the homes. Infill packages were provided by the community so that an individual could create his or her own dwelling, according to their following specific needs. His theory also related to the lifespan of the buildings as well: the support structure of a building has a lifespan of 80-100 years, while the infill packages has a much shorter lifespan of 20-25 years, considering the estimated time of residents within the space. In his book "Supports: An Alternative to Mass Housing", Habraken intentionally did not include images of his designs so as to convey that there was no specific way of providing "supports structures and infill packages". More recently, he published "Three R's for Housing", a book of diagrams he used to clarify the concepts covered in his previous book, but he did not include photographs of his work in the book. This approach was consistent with his ideas about stepping away from "signature architecture" and of developing a universal approach to architecture and urban design.

In my thesis, I have sought to integrate supports not only as infrastructure to support the dwelling, but also as support the performances of living. "Dwelling is an action, it is the sum of human actions within a certain framework, or a protected environment" (Habraken 1972, 18). Dwellings are an architecture of the everyday, dynamic, with the ability to change, easily understandable, additive, resilient and reliable (Hamdi for Habraken 1991, 45).

In these terms, dwelling is not static, and must involve those affected by the outcome. The dwellers need to be participants in the making of their surroundings. John Turner argues: "We must give up the futile or destructive attempt to impose our own will and we must support those who are fighting to regain the authority our executive

institutions and corporations have usurped" (Turner 1972, 175). Knowing that it is an ongoing practice, that nothing is final, the supportive network must be open to change. In Peru, John Turner studied how slums adapted and ameliorated through the promotion of self-management, self-help and self-building making the delivery of housing more efficient and more meaningful.

Modes of production that stimulated individual and social well-being... when people have no control over, nor responsibility for key decisions in the housing process... dwelling environments may instead become a barrier to personal fulfillment and a burden on the economy (Turner 1972, 241).

Similarly, Christopher Alexander delivers a method and building system, encouraging anyone to build at any scale. There is a sensitivity in the needs of each individual that cannot be prescribed by an architect or designer, or any other person for that matter. Alexander's book *A Pattern Language: Towns, Buildings, Construction* outlined a way for the everyday person to build, considering regional materials and shortages, cost, design and labor.

In my thesis, I have been guided by Schumacher's concepts of design and decision-making. Ernst Friedrich Schumacher advocates for developing a design with low capital costs, which uses local or found materials, keeping with grassroots decision making, working collectively, rather than relying upon individual efforts, the allowance for user control, supporting community empowerment and economic self-sufficiency (Schumacher 1973, 167-168). Although in my thesis I am designing a new building, which does not keep capital costs low, the use of pre-existing infrastructure and shelter aids in the initial cost. This is also in keeping with the physical traces of the place,

as well as reflecting the history of place.

In my thesis, I have proposed a “dwelling” that is not static and involves those affected by the outcome: the dwellers themselves need to be participants in the design, planning and making. In designing for the unhoused, it is important to give these individuals a sense of autonomy and control over their own lives.

3.2 Case Studies

The case studies of housing that I have researched fit into three categories; tent cities, tiny house villages and supportive housing for the unhoused. I have evaluated each of these categories of housing for street residents in terms of the formation or layouts of the places or facilities, where they fit into the city, how they support themselves financially, how they are run, and the services they provide for their users. The following matrix describes my findings. Appendix E shows the location of each of the case studies within the city, their physical formation, as well as more detailed information.

I now outline what I have learnt from each category and how I related it to the specifics of my thesis by discussing two examples from each of the categories of housing that I studied.

Right 2 Dream Too and *Camp Take Notice* are two very different tent cities. *Right 2 Dream Too* is located in the centre of Portland, Oregon. The centralized location brings recognition to the unhoused. While the tent city is not sanctioned by the City of Portland, the police turns a blind eye. It is understood that this tent city is a better

CASE
STUDY
MATRIX
TENTS

RIGHT 2 DREAM TOC
PORTLAND, OR

CAMP TAKE NOTICE
ANN ARBOR, MI

BUILDING TYPE		
CITY LOCATION	City center	Location varied
POPULATION ACCEPTANCE	 Homeless No substance abuse, no violence	 Homeless Regulations to follow
ADMINISTRATION	Self Governed	Self Governed
FUNDING		No organized support
SANCTION	Unsanctioned, property leased privately, seeking sanctioned land	Unsanctioned, considered squatters, very transient
OTHER SERVICES	Safety, stability and community, accomodation for longer term stays or nightly	Safety, stability and community
DESIGN PRINCIPAL	City center, public eye.	Entirely self-sustaining.

Figure 25: Case Study Matrix, further information can be found in Appendix E

way of creating stability for the people living there, rather than wandering the streets. The residents of the tent city understand that they are advocating for themselves, and that the better they present themselves to the city, the more that others will accept the camp. *Camp Take Notice* was located Ann Arbor, Michigan. The residents of the final iteration of the camp were evicted in 2012. This camp demonstrates how a camp may be self-governed, the formation of community, safety and stability, and the use by camp residents of resources provided to them city-wide.

Two of the tiny house villages that I have studied are: *Dignity Village* located within the City of Portland, Oregon and *Opportunity Village*, located within the City of Eugene, Oregon. Both of these tiny house villages are projects that have been accepted by their resident cities as an alternative transitional housing for the unhoused. *Dignity Village* has been transformed over time, adjusting to the needs of the people living within the community, and learning from the length of time it has been occupied. Houses have been creatively renovated by their users to adapt to their specific needs. Garden boxes have been built not only to produce food for the tenants, but also to

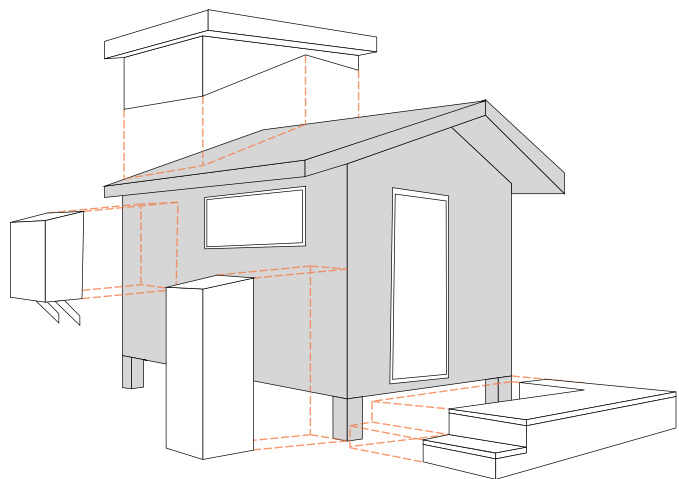


Figure 26: Transformation and adaptation of tiny house

CASE
STUDY
MATRIX
TINY
HOUSES

DIGNITY VILLAGE
PORTLAND, OR

OPPORTUNITY VILLAGE
EUGENE, OR







	DIGNITY VILLAGE PORTLAND, OR	OPPORTUNITY VILLAGE EUGENE, OR
BUILDING TYPE	 No prescribed design	 Prescribed design
CITY LOCATION	City periphery	City periphery
POPULATION ACCEPTANCE	 Homeless No substance abuse, no violence	 Homeless No substance abuse, no violence
ADMINISTRATION	Self Governed	Self Governed
FUNDING	Donated materials \$35/person/month 	Donated materials \$25/person/month 
SANCTION	Sanctioned if purpose remains as an alternative transitional accommodation	Land leased for 3 year term from city
OTHER SERVICES	Safety and stability. Skill building and community, raised garden beds	Safety and stability. Skill building and community
DESIGN PRINCIPAL	Incorporation of other activities, ie. garden boxes. Self-governed.	Incorporation of indoor and outdoor gathering spaces. Self-governed.

Figure 27: Case Study Matrix, further information can be found in Appendix E

give shade to the tiny houses to address the hot summer months. *Opportunity Village* has developed a more cohesive village plan, that provides outdoor communal space that is shared by the villagers. Both of these villages pay rent to the city: the rent consists of revenue from small projects in which the villagers share work of maintaining the village, as well as a small monthly rent. Therefore, the village is not a drain on the taxpayers of their respective cities.

Finally, two of the supportive housing case studies that I have studied are: *Star Apartments* and *New Genesis*, both located in Los Angeles, California. Both have unique ways of involving the users of the facility. Both are funded by the *Skid Row Housing Trust* of Los Angeles. Both are multi-use facilities: they contain communal living space on the upper floors, gathering spaces for both formal and informal activities on the second floor, and a clinic and counselling service on the main floor. The programs on the first floor are meant to support the greater community. *New Genesis* has gone a step further, incorporating businesses on the main floor that provide income for the facility to run. Most apartments are reserved for the unhoused who are most in need, but some are offered to the general public to allow for the development of a broader community.

CASE
STUDY
MATRIX
SUPPORT
HOUSE

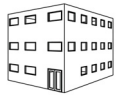
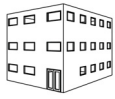
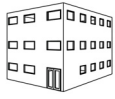



	STAR APARTMENT LOS ANGELES, CA	NEW GENESIS LOS ANGELES, CA	STRACHAN HOUSE TORONTO, ON
BUILDING TYPE			
CITY LOCATION	Skid Row (city center)	Skid Row (city center)	West of city center
POPULATION ACCEPTANCE	 Low-income individuals Housing First, prioritize most in need	 Low-income individuals and tenants Housing First, prioritizing most in need	 Housing First paradigm for Chronic Homeless
ADMINISTRATION	Skid Row Housing Trust	Skid Row Housing Trust	Homes First Society and self-governed
FUNDING	Finances for buiding from SRHT (government grants and donations) Tenants pay 30% income, government subsidized	Building financed by SRHT (gov. grants and donations) Tenants pay 30% income, government subsidized, business support activities	Finances for building from Homes First Foundation. Tenants pay 30% of income, government subsidized.
SANCTION			
OTHER SERVICES	Formal and informal activities, counselling, clinic for residents and other	Formal and informal activities, counselling, clinic for residents and other, other businesses incorporated into building	Renovated warehouse. Inclusive design process. Supportive housing, shared living areas, individual entrances and window to interior network of 'streets'
DESIGN PRINCIPAL	Resources for more than just residents. Connection with street.	Resources for more than just residents. Connection with street. Incorporation of businesses into support of facility	Shared living accomodation. Housing First paradigm.

Figure 28: Case Study Matrix, further information can be found in Appendix E

C A S E
S T U D Y
M A T R I X
S U P P O R T
H O U S E

VINZI RAST MIDDLE
VIENNA, AUSTRIA

VILLA VERDE
SANTIAGO, CHILE

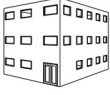



BUILDING TYPE		
CITY LOCATION	City center	City periphery
POPULATION ACCEPTANCE	 Homeless and students	Natural Disaster survivors
ADMINISTRATION	Self Governed	Government
FUNDING		Tenants pay 30% income, government subsidized
SANCTION		
OTHER SERVICES	Community, intgration into the neighbourhood/ city, pairing of students and homeless	Incremental building, homes to grow into, sense of autonomy
DESIGN PRINCIPAL	Using auxillary uses of facility to provide jobs for homeless residents	Ability for self-expression and autonomy. Giving the minimum, and expecting needed individual growth

Figure 29: Case Study Matrix, further information can be found in Appendix E

3.3 Role of the Architect

After all of this research on self-designed, self-built, community driven architecture, I wonder what role does that leave for the architect or designer? Turner and Habraken saw design as a way of cultivating a balanced, equitable environment for habitation through the implementation of carefully designed interventions that created a platform for the everyday person to join the professionals and institution in the conversation of creation (Hamdi 1990, 40).

We should study the built environment as an autonomous issue, not something we created but as something we can contribute to (John Habraken (De Drager, 2013).

I agree that the role of the architect or designer is to create a platform for positive social links to develop, that is, to develop the material environment, an infrastructure, that provides the material tools for the users to create a place that supports their needs.

Chapter 4: Site



Figure 30: Plan of False Creek area, highlighting the Downtown Eastside 'main-drag' East Hastings Street

4.1 Urban Analysis

To understand where best to build the necessary supports for this new tent city, I needed to determine the locations of the current resources and facilities that support the homeless population. Mapping homeless shelters, community centres, park space, libraries, non-market and supportive housing, and addiction centres allowed me to recognize that the Downtown Eastside (DTES) has most of the resources that support the homeless population and the rest of the City of Vancouver has very little of these resources. It is evident these resources are concentrated in this area because of the size of homeless population in this area. As convenient as it is for these resources to be focused in the DTES for those who reside in the area, their location in the one area, makes it incredibly difficult for those who would rather reside elsewhere to access these resources. So it became clear, that in addition to the tent city, a community centre will support services as well and community based activity would be necessary.

4.2 Site Selection

Just as tent city dwellers look for land to inhabit, first I looked for land within the City of Vancouver for my project site. In doing so, I considered accessibility to the DTES area, which is the current location of the majority of the homeless population and the current location of the majority of resources for the unhoused population. I felt the site needs to provide not only for the unhoused



Figure 31: Chosen Site under construction in 1996
Photograph by Dikeakos 1996.



Figure 32: Plan of False Creek area,
highlighting the homeless shelters shown in
black



Figure 33: Plan of False Creek area,
highlighting the libraries and public
community centers shown in black

population that is within the DTES area, but also be accessible by the unhoused who do not reside within the DTES. I considered the location of gaps that are available to be filled in other areas of the City. The surrounding neighbourhood needed to be open and welcoming, in a location where the shared programs of the centre would be valuable for the greater population. I looked for a site that would not be hidden away out of sight, but would be in the public eye, to give recognition to the unhoused. I also wanted to harness the continual evolution that the City of Vancouver is going through. The old City plan is transforming at a rapid pace, but the unhoused segment of society has not been engaged in the transformation. I also wanted to engage an area, that would benefit from cultivated land.

4.3 Chosen Site

I chose a site large enough to include urban agriculture on First Avenue, close to the Cambie Street Bridge and along the waterfront. Currently, this site includes a vacant concrete parking lot and a derelict warehouse, the Wilkinson Steel Building, a registered heritage building whose only current purpose is shelter for some unhoused individuals. The site is completely fenced and essentially inaccessible, although occasionally a vehicle or two can be seen to be parked tightly against the warehouse. This warehouse building will house the tent city. It has not been addressed in the revitalization plan of the City of Vancouver and is clearly in need of attention. To the east of the site, is Hinge Park, which is mostly landscaped, but also provides open grass space and a small community garden with a few raised planter beds.



Figure 34: Plan of False Creek area, highlighting the public green space, that allows someone to camp overnight shown in black

False Creek Flats, the larger area in which the site is located, has a history of being community land. It was originally used by First Nation peoples for hunting and fishing. When urbanization began, before the 1930s, when urban farms still existed, the False Creek Flats were



Figure 35: Image of False Creek in a time of great change. Photograph by Dikeakos 2002.

used as shared grazing land for livestock. Beginning in the 1930s, industrial warehouses took over the area, providing employment to blue-collar workers. Today, glass and steel has taken over the majority of the False Creek Flats area, creating an area with a high population density (Dikeakos 2010, 321).



Figure 36: Plan of False Creek area, highlighting the addictions centers shown in black and safe injection site shown in purple

Vancouver has so many progressive facilities and programs to support the unhoused such as counselling services, food programs, housing services, emergency shelters, non-market and supportive housing, addictions centres, and legalized public camping, but so many facilities are focused around the DTES where so many unhoused individuals live, leaving other parts of the City without convenient resources. For example, North America's first official safe injection site, InSite, opened in 2003, is located in the DTES. The clinic does not supply any drugs; it only provides a safe location for injected drug use. Medical staff are present to provide addiction treatment, mental health assistance and first aid (Vancouver Coastal Health 2014). In 2009, *Insite* recorded approximately 276,000 visits, an average of about 700 visits per day. In that one year, 484 overdoses occurred with no fatalities because of intervention by medical staff. *Insite* is accessible to those who aren't well-connected to health care services, and has been found to be a successful approach to the development of trusting relationships between users and staff and counsellors on site (Marshall et al. 2011, 1431)

Facilities such as *Insite* and other pop-up safe injection sites, that encourage people who are using drugs not to do so alone so that if an overdose occurs, there is someone around to respond quickly, within the DTES area, is the reason I have chosen a site which although outside of the DTES area, is within accessible proximity to the valuable

resources within the DTES.

A collective in the False Creek Flats area would provide unhoused individuals in that area, who have been more vulnerable for being outside the more supportive area of the DTES, with a more supportive situation of safety mechanisms and needed resources and in doing so, would provide a safer place for unhoused individuals in this area (Vancouver Coastal Health 2014).



Figure 37: Plan of False Creek area, highlighting the non-market/subsidized housing shown in black

There is a gap in subsidized housing, homeless shelters and resources in the False Creek Flats area. The high population of unhoused people in the DTES has concentrated the resources for unhoused individuals in that area, both for convenience for the residents, but also to keep people within the DTES area. As mentioned previously, the resources in the DTES area include food banks, soup kitchens, counselling facilities for addiction and mental health issues, homeless shelters and non-market housing. The False Creek Flats community has a lot of non-market housing, but it is incredibly difficult to get into such housing and the rest of the False Creek Flats area has very little to offer in terms of affordable housing.

To the west of the chosen site is the False Creek Co-operative Housing Association, which was founded in 1974; its motto is "People helping people". It is a community association that is already well-versed in multi-income integration, and so provides good precedence for assimilating economic classes in a residential neighbourhood. Neighbourhoods that have residential segregation, whether the segregation is based on race, skill or income, have a negative impact on the greater economic growth of the neighbourhood. In mixing income brackets, cultural values, and racial

and ethnic backgrounds in a neighbourhood, there is engagement with mainstream resources that promotes growth of income and a larger variation in employment opportunities (Huiping, et al. 2012).

The site I have chosen is adjacent to the waterfront walkway, so it is also a public site. Vancouver's waterfront walkway is a well-used path that follows the entire shoreline of the downtown area, Stanley Park, north and south shores of False Creek, all the way through West Vancouver to the University of British Columbia. It is used for commuting and enjoyable walks, for residents of Vancouver as well as visitors to the City, and is a continually active area. This location, therefore, provides an opportunity for unhoused individuals who reside in and utilize the facilities of the site, and housed from the broader community, to engage unintentionally.



Figure 38: Plan of False Creek area, highlighting the False Creek Flat Cooperative Housing highlighted in turquoise



Figure 39: Plan of False Creek area, highlighting the Waterfront Walkway shown in black

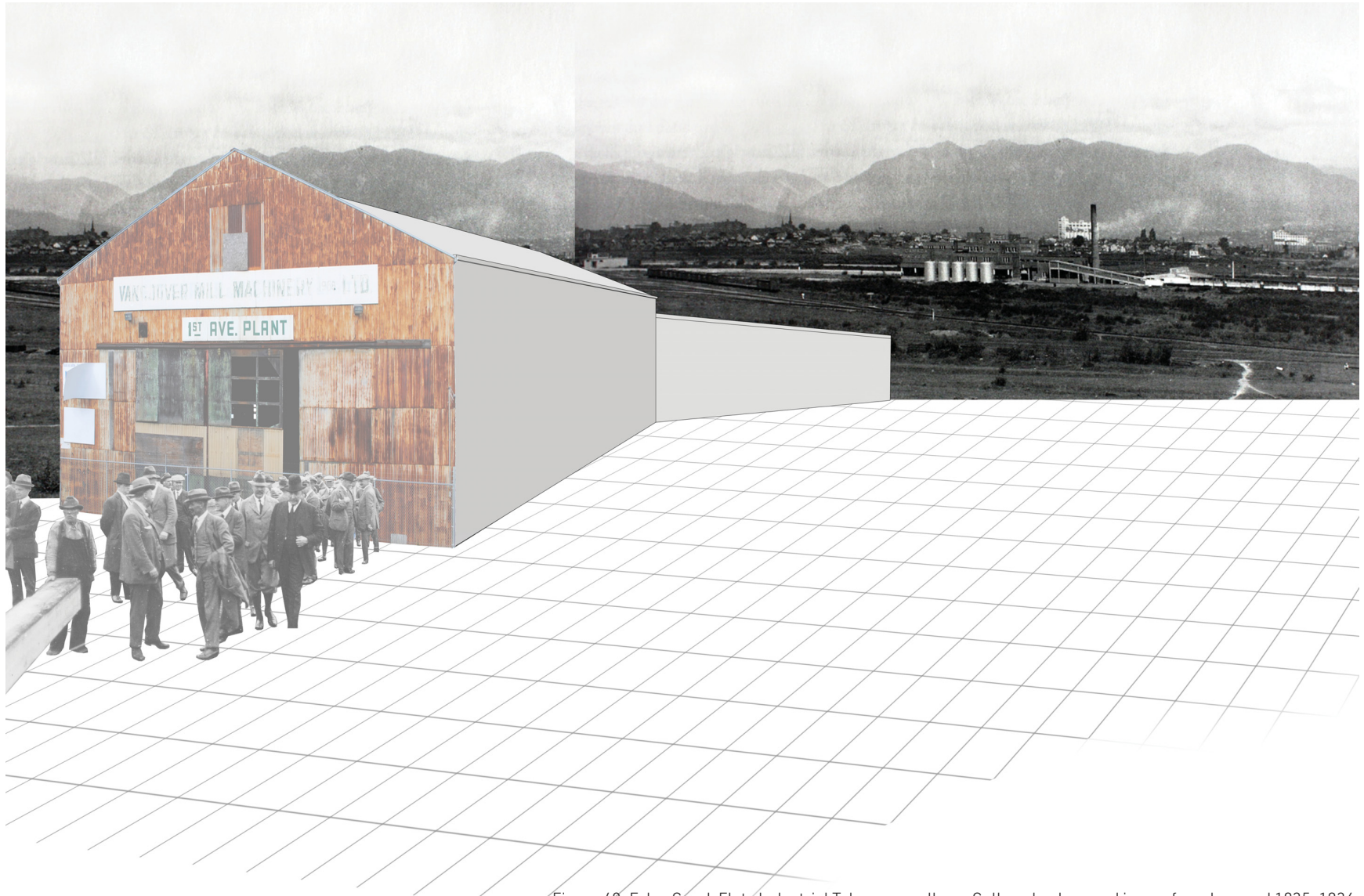
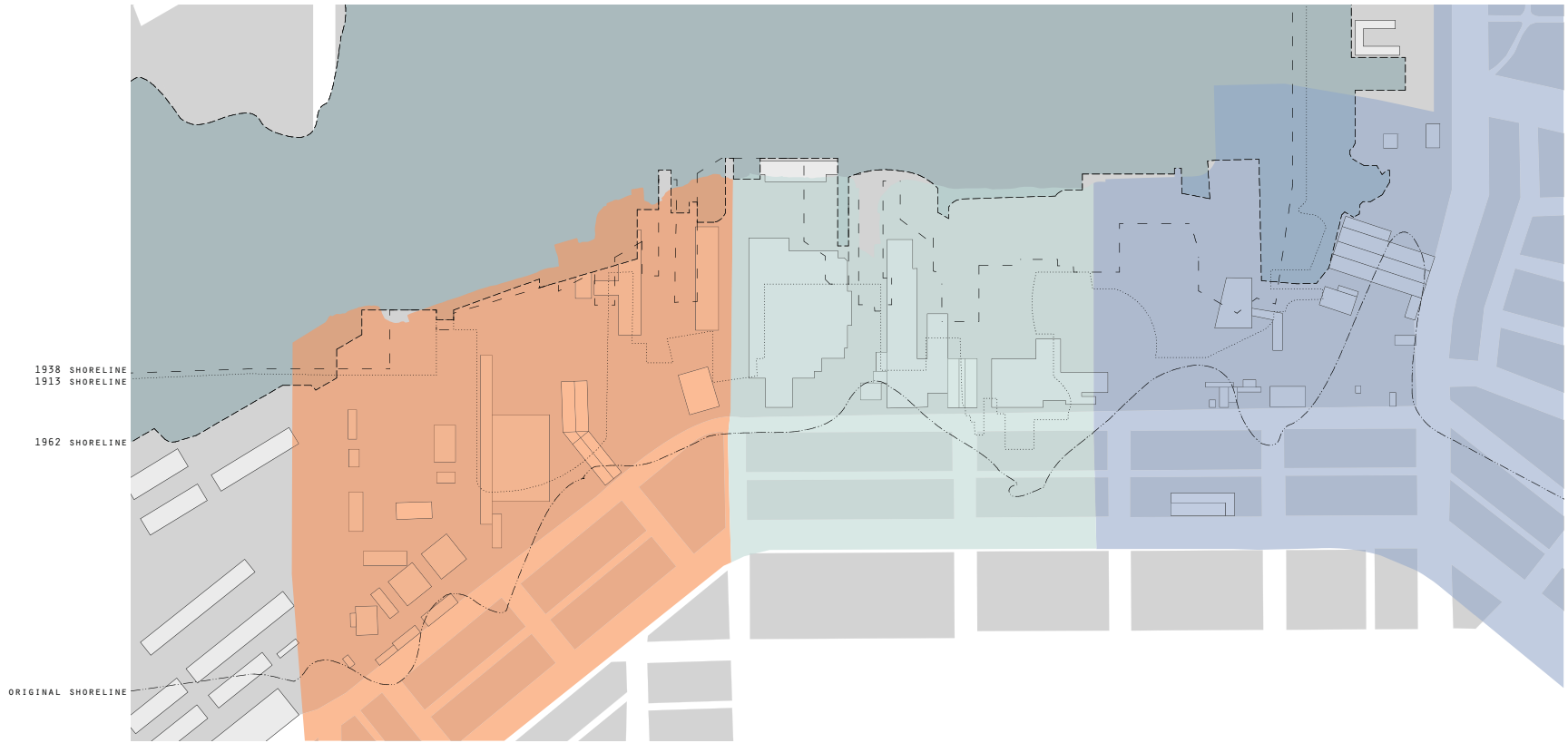
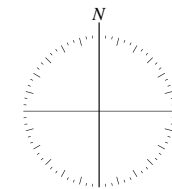


Figure 40: False Creek Flats Industrial Take-over collage. Collage background image from Leonard 1935-1936. 43



Historical Site Plan



LEGEND

WORK
YARD

SHIP
YARD

RAIL
YARD

Figure 41: False Creek Flats Historical Map data from City of Vancouver 2006. 44

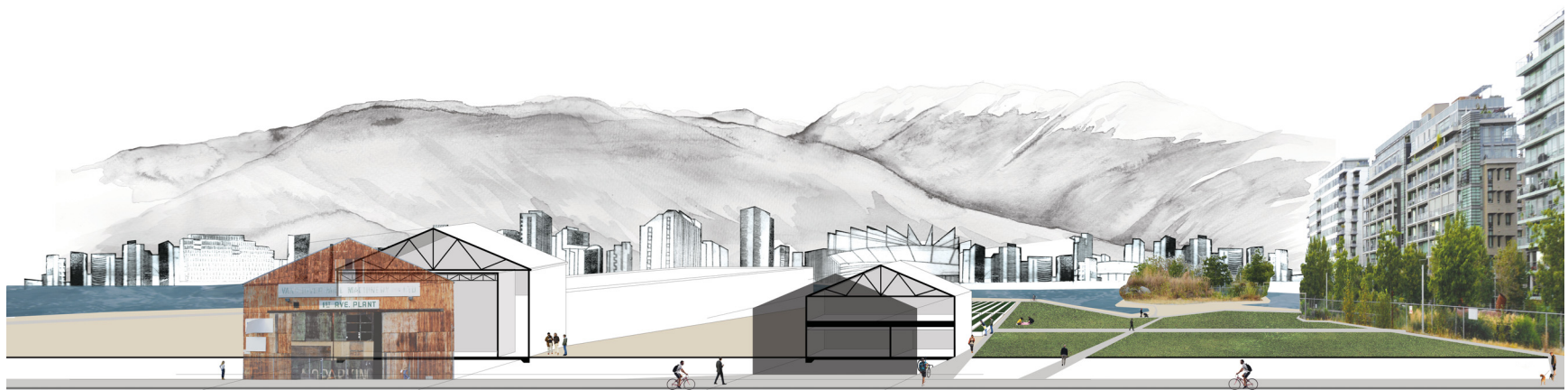


Figure 42: Site and Building Section showing relationship between buildings and their outdoor environments 51

Chapter 5: Design and Program

It is the basis of the desire of any group of human beings to have a place of their own, a place which gives them reality, presence, power of living, which feeds them body and soul... but every space is limited, and so the conflict arises between the limited space of any human group, even of mankind itself, and the unlimited claim which follows from the definition of this space (Tillich 1964).

When stepping out of the comforts of an apartment or house, one quickly realizes its short-comings, having to find alternative ways of existing. Simple amenities: hygienic facilities, cooking space, storage, or even a mailing address, all need clever solutions. The nest is a multi-use facility, offering resources and amenities for people seeking permanent housing. It provides services to help these individuals locate and connect with these facilities.

The design proposes to reuse the existing warehouse currently on site, as well as a newly constructed building for the supportive community centre. The warehouse will be used as a shelter for the tent city that will be erected in and around it. The newly constructed building will be the supportive community centre accessible to those experiencing homelessness as well as the greater community.

The program to be incorporated into the buildings and surrounding site are: hygienic facilities, a communal soup kitchen, a community bike shop for the large population in Vancouver who use bicycles as a mode of transportation

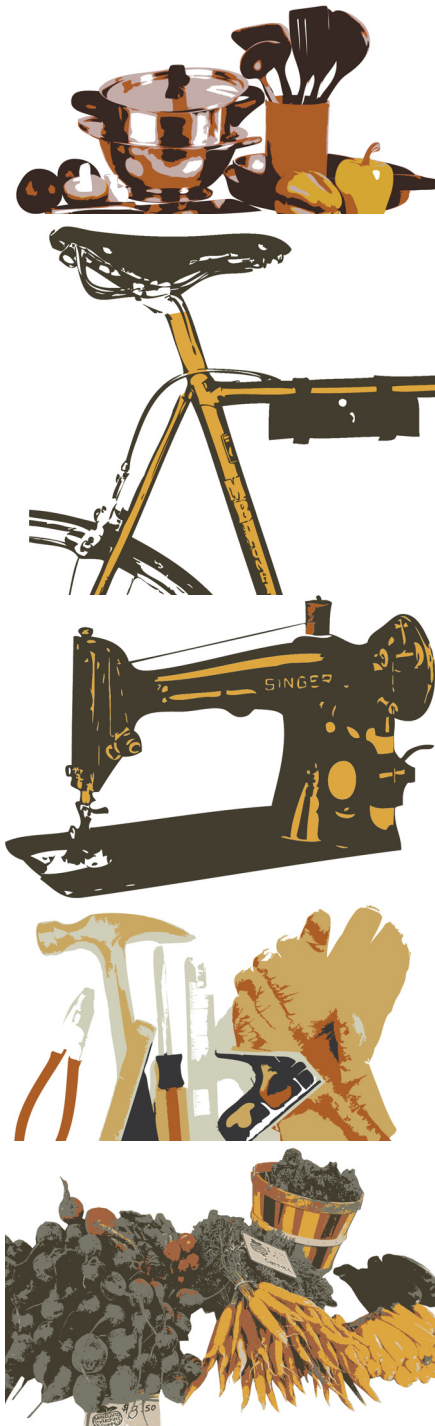


Figure 43-47: Graphic representation for the program of the Community Center

and a weekly market for the sale of produce from the community garden outside. The community centre will also include a multipurpose room to provide space for the opportunity for creative making such as mending and making of clothing to be worn and potentially sold, socializing, for informal gatherings or more formal events, and for organizing. The buildings will include a workshop as well. Creating space that offers choices for individuals is critical to the success of a tent city, because an important factor that contributes to an individual's positive mental health is an individual's ability to choose or create environments suitable for their needs. The buildings will also provide private office space and shared work space both for counselling services as well as organizations concerned in matters relating to helping marginalized individuals. Finally, the site will contain Vancouver's second official safe injection site.



Figure 48: Collage of community garden and Wilkinson Steel Building.
Collage background image from Leonard 1935-1936.

Ultimately, the goal is for architecture is to create a framework which provides for the physical needs of an individual while supporting the psychological needs of the individual as well. The architecture should create an inclusive framework that spurs redevelopment and empowerment of an individual's identity as well as a community's identity. What is used both tangibly and intangibly is at the discretion of the individual, without force. Control of their surroundings and their lives is put into the hands of the individual. The architecture relies on the involvement of the public and specifically, the users of the space and programs, to fulfil the architecture's purpose.

5.1 Incremental Building

Since my primary concern is to address the immediacy of the situation by providing for an individuals' most primary needs as quickly as possible and moving on from there, I used Abraham Maslow's hierarchy of needs to inspire the order of construction.

Abraham Maslow was a psychologist who is still well known today for creating a theoretical hierarchy of the needs of people, addressing both basic physical needs up to psychological and self-fulfilling needs. Maslow's hierarchy of needs is a pyramid scheme that requires achievement of the first level before movement to the second level and so on. Physiological needs are the first level (the base) of the pyramid; physiological needs include food, water, sleep, shelter and security. If these basic needs are not met, then an individual can think only about the things that aren't being met. An individual

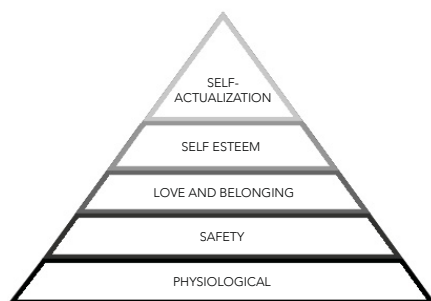


Figure 49: Maslow's Hierarchy of Needs.
Data adapted from Maslow 1943.

whose basic needs are not met thinks that if these basic things are obtained, then he or she will be happy and satisfied (Maslow 1943, 373).

Safety needs are at the next level in the hierarchy of needs following physiological needs, and include family stability, good health, routine, job protection and consistency, and monetary safety. When these safety needs are not being met, most individuals attempt to organize, put order to, or stabilize, their lives in an attempt to regain or obtain these needs (Maslow 1943, 376-379).

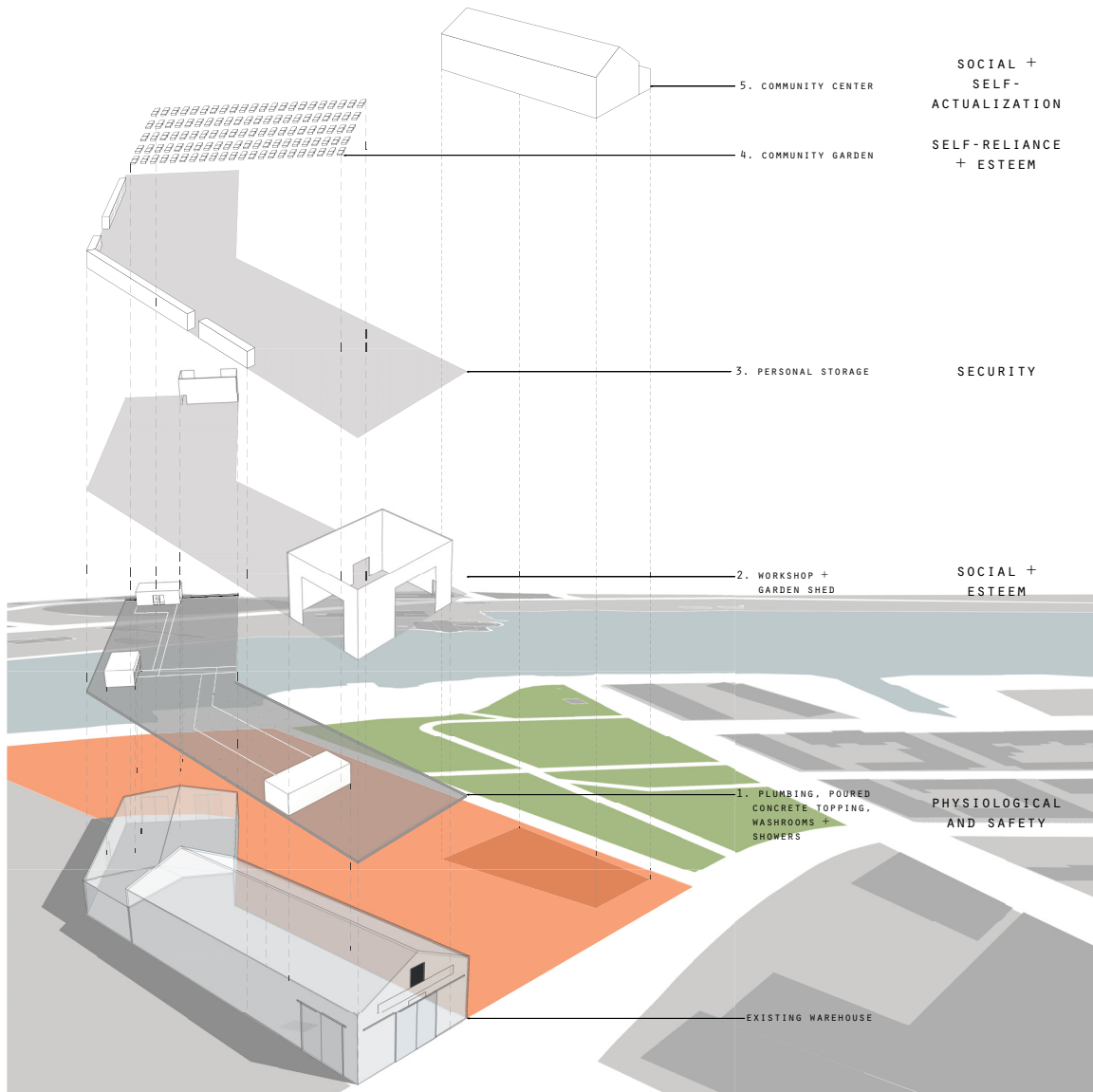


Figure 50: Incremental building diagram

Social needs are at the next level in the hierarchy of needs, and the first of the psychological needs in Maslow's hierarchy of needs. Social needs include love and relationships with friends, family and partners, and a sense of belonging both in place and within groups of people (Maslow 1943, 380).

Esteem needs comes next. These needs originate from one's self, but they are also achieved when one feels respect, recognition and appreciation from others. Esteem builds an individual's self-confidence and sense of adequacy. It gives a person the feeling of being useful and necessary in one's community and a place in this world (Maslow 1943, 381).

Self-actualization is the last level in the hierarchy of needs. It includes the recognition and fulfillment of one's potential and achievement of personal growth. This need doesn't involve fitting within a group, but rather fitting within one's self. A person's potential is often looked at, as what a person excels at naturally. But what a person is best at isn't always what gives a person the greatest sense of accomplishment or gratification; rather, it is finding what inspires that gives a person the greatest sense of accomplishment or gratification (Maslow 1943, 382).

5.2 Warehouse Renovations

To make the warehouse more accommodating for the tent city is the first step. This will involve installing plumbing for washrooms, showers and laundry, providing outlets and lighting, pouring a new reinforced slab, and installing new doors and windows. This is the beginning of addressing Maslow's first level of needs: physiological needs.

Next, a workshop will be set up within the warehouse, in an area close to First Avenue. This installation does not meet a specific need but allows for the ability to conveniently build small and larger projects on site, such as garden boxes, lockers to store personal possessions, benches, and so on. This workshop can also be used to host events that teach individuals how to build, which may be an opportunity not only for individuals living on site but also for individuals from the surrounding area. The warehouse space opens through a large overhead door to the canopied courtyard. This progression takes steps towards fulfilling Maslow's next level of needs: social needs. More than just being around others and creating relationships, it allows for individuals to be able to choose when to be around others. It is important to provide platform for acceptance, but also social reprieve.



Figure 51: Site being used unhoused in 2007 before the development of Olympic Village. Photograph by Dikeakos 2007.



Figure 52: Current Wilkinson Warehouse Building with new roof which shows the historical conservation agenda

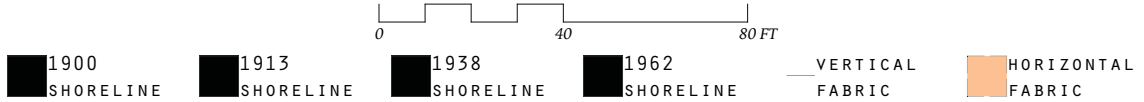
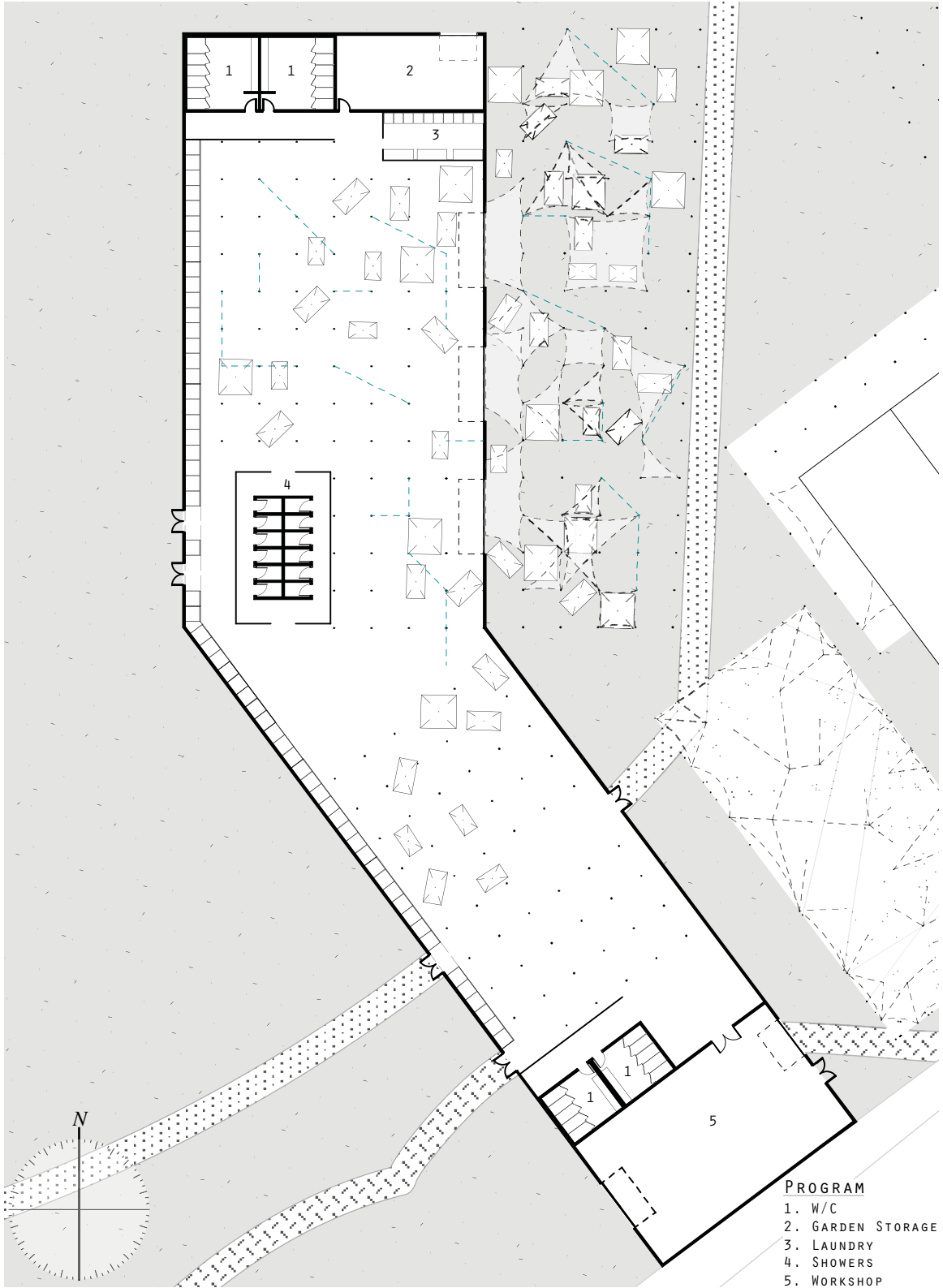


Figure 53: Wilkinson Warehouse Building renovation floor plan

5.3 Base, Post and Fabric Interventions

A layout of embedded bases will be installed to help the tent city configure within the warehouse and in other areas around the site. These bases will receive a 7 foot tall post, giving connection spots for fabric – tent flies, tarps, and so on to be attached from both the top and bottom. The fabric can provide further shelter or shade outdoors when attached horizontally between several posts, or divide, giving privacy between spaces, when stretched vertically or loosely hung between two posts to create a hammock.

This process will allow an individual to create their own space, by deciding where to place a post or where to place several posts, and how to hang their fabric so as to give themselves protection, separation or support. The use of these elements (bases, posts and fabric) will also address social health, by allowing individuals to determine for themselves their own balance between gathering with others and spending time alone.

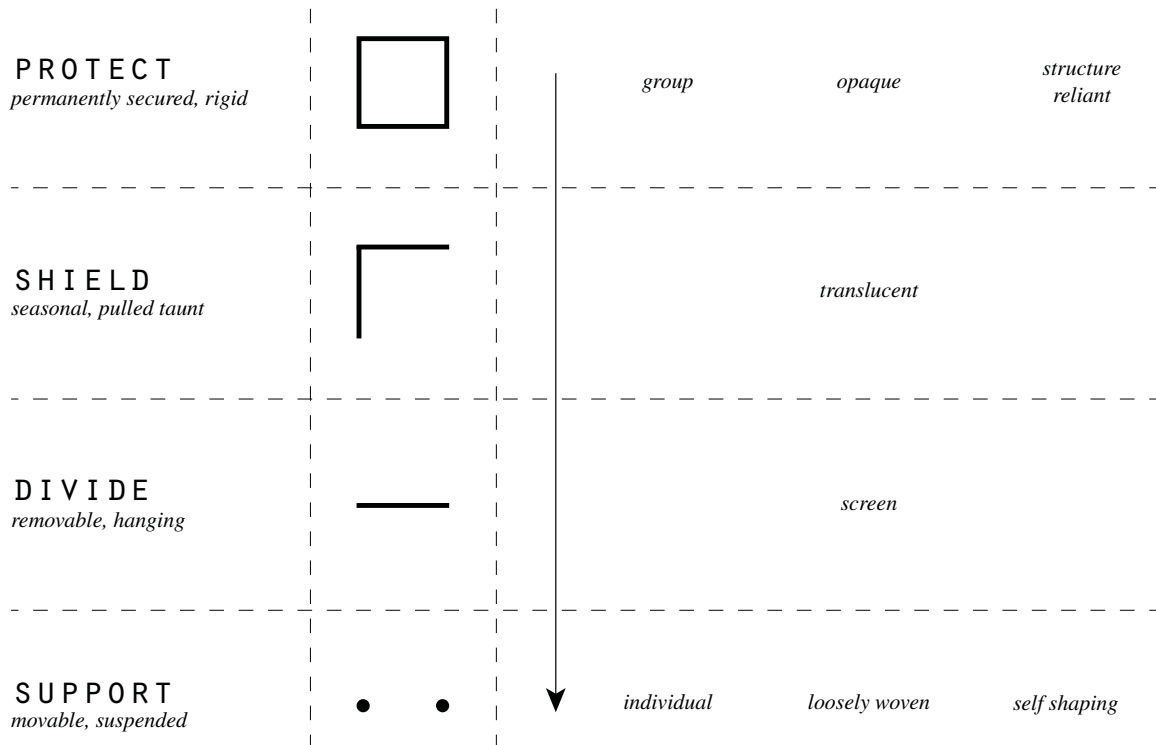


Figure 54: Fabric methodology matrix

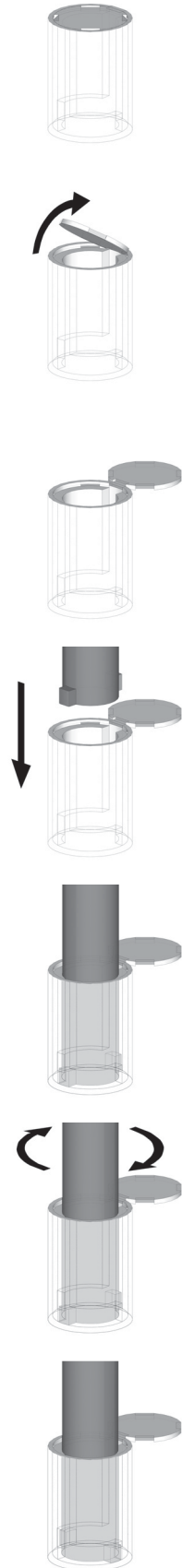


Figure 55: Base and post movement

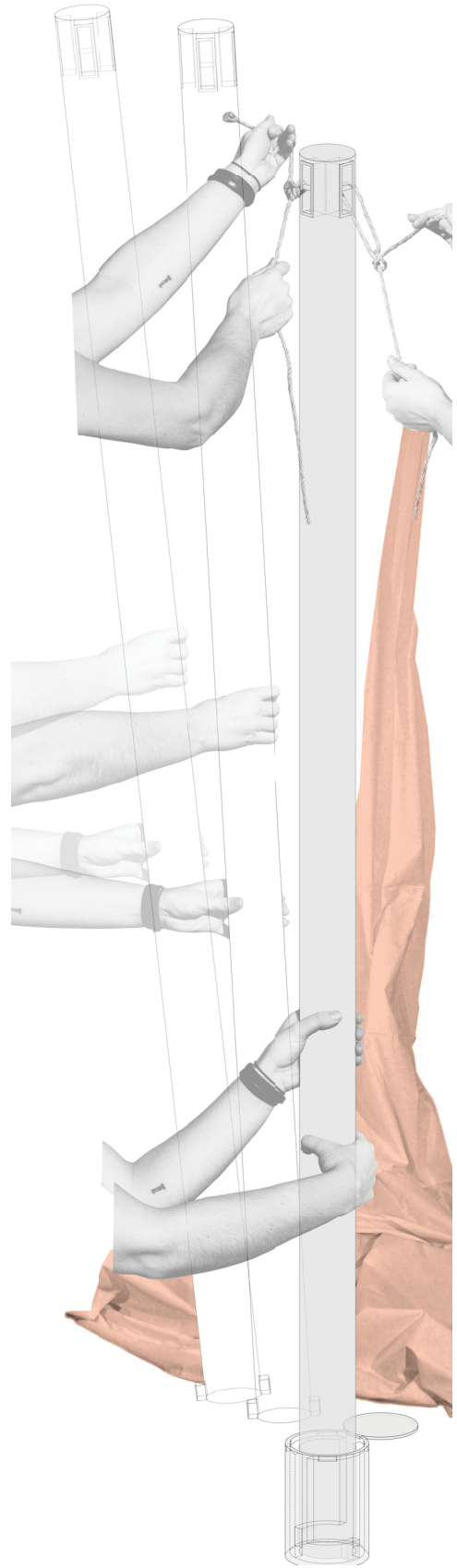


Figure 56: Base and post movement drawing

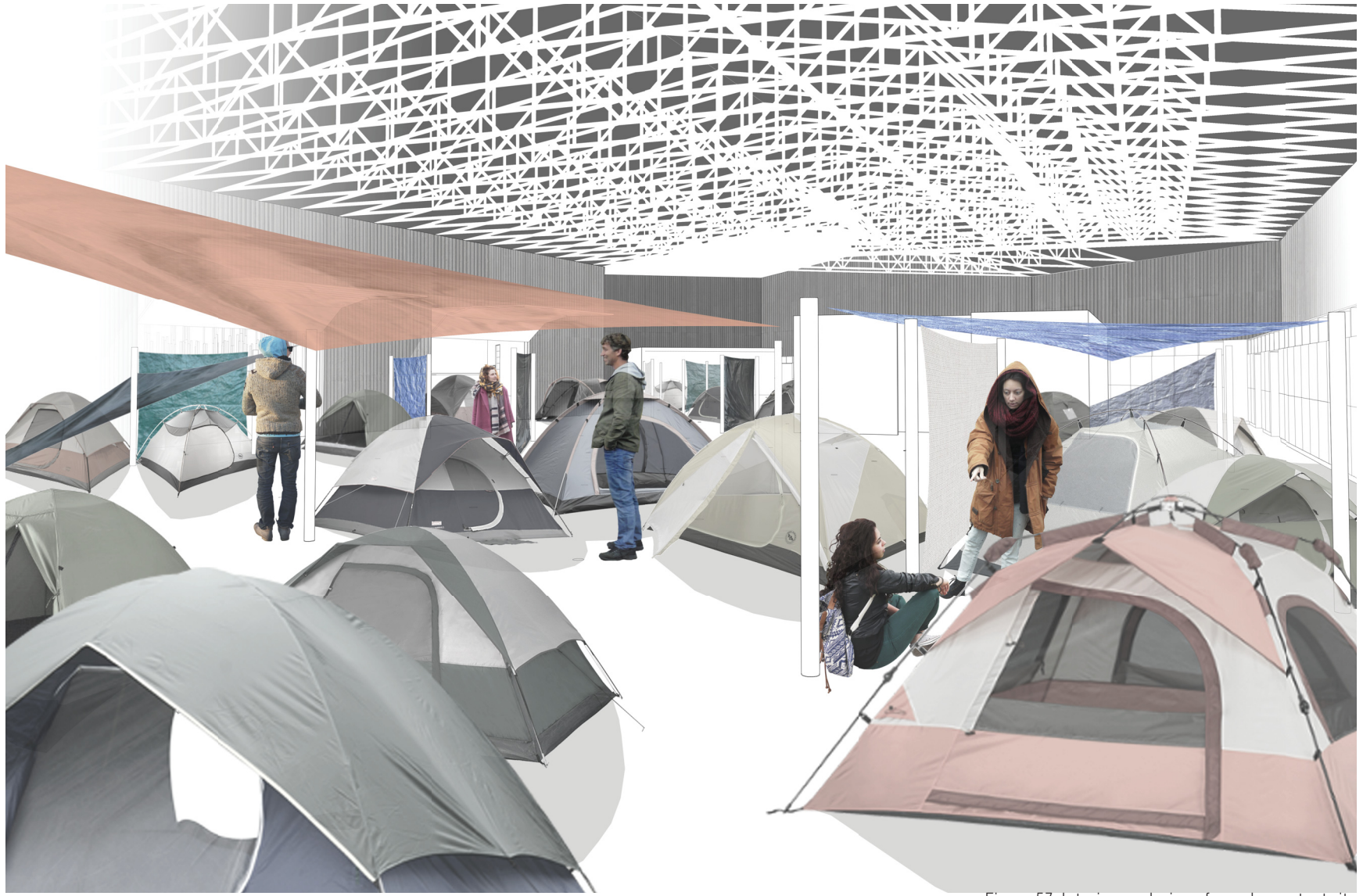


Figure 57: Interior rendering of warehouse tent city 51

5.4 Site Climate

The population will mainly living outdoors; therefore, it is important to understand and take into consideration how prevailing winds and shadows traverse the site throughout the year. It is also important to understand and take into consideration rainfall throughout the year and wind strength during the heaviest precipitation. Based on this analysis, openings in the warehouse and base and post grid should be located – that is, the locations for the tent city to spill out onto the site in areas that are protected from prevailing and strong winds and provide the most shade during summer afternoons.

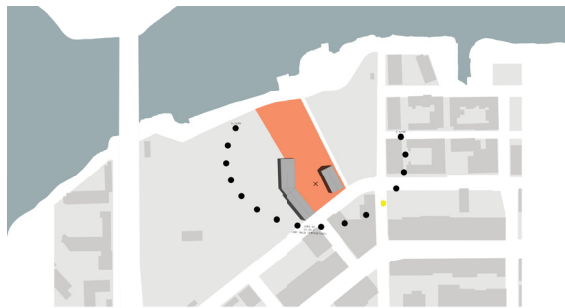


Figure 58 : Sun path diagram June 21 at 9AM



Figure 59 : Sun path diagram June 21 at 1PM



Figure 60 : Sun path diagram December 21 at 9AM



Figure 61 : Sun path diagram December 21 at 1PM

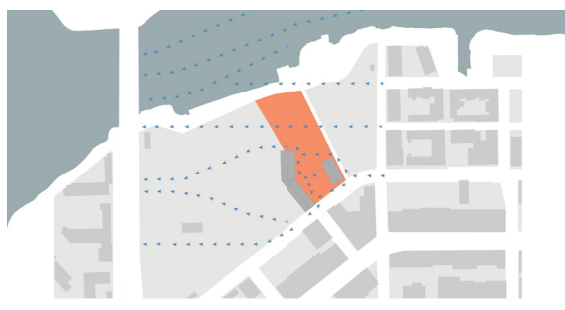


Figure 62 : Prevailing wind path diagram

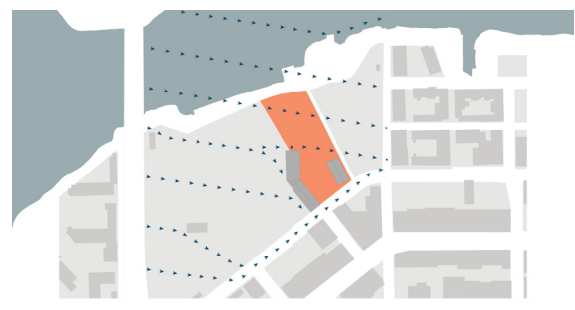


Figure 63 : Strongest wind path diagram

5.5 Pathways

Each sidewalk intersecting across the site will follow a phase of the shoreline over the last 100 years, starting with the original shoreline of the False Creek Flats and ending with the sculpted shoreline of the industrial era. This was in accordance with the Southeast False Creek Public Realm Plan, published in 2006, describing the intentions of preserving historic buildings still existing in the area, as well as featuring other historic markers, such as the various shorelines throughout time, and characteristics of the different types of industries that used to occupy the False Creek Flats: work yard, ship yard and rail yards.

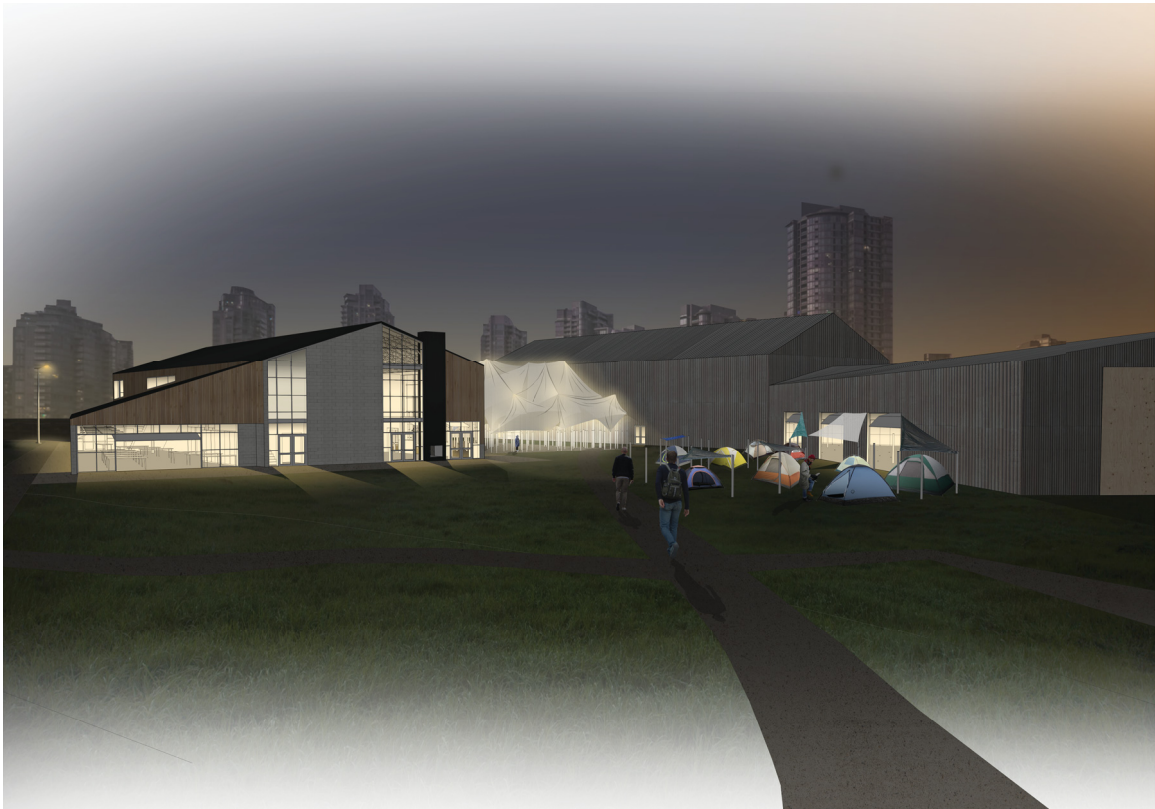
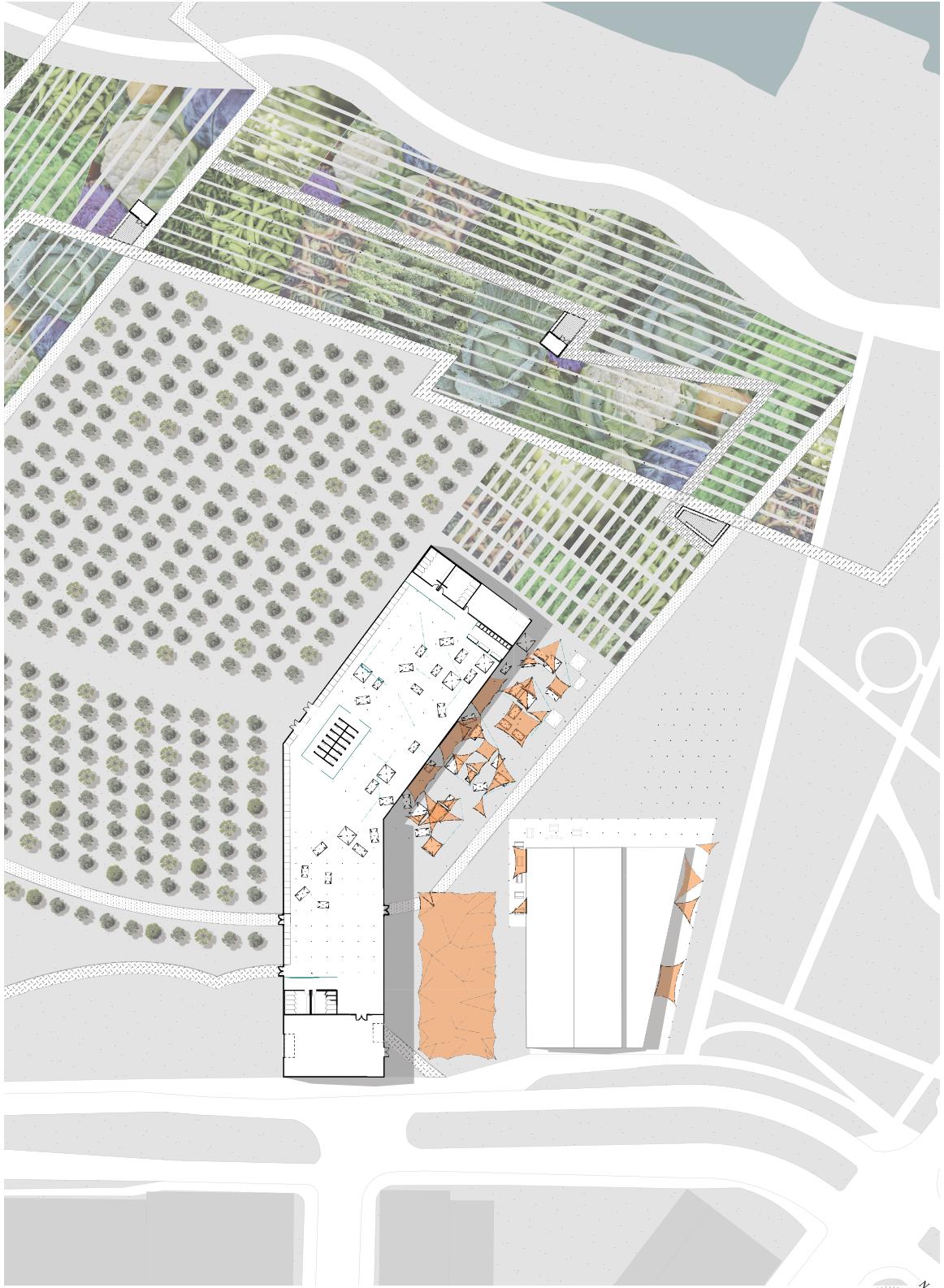


Figure 64 : Evening render from garden

5.6 Gardens

The pathways will divide the site into parcels of land to be occupied by garden beds and orchards. It would take years to create the expanse of garden beds and orchards that I have depicted in my site plans, but smaller growing interventions, that is, garden boxes, can provide opportunity to start growing within the season. Both Olympic Village and False Creek Housing Co-operative, two fairly dense communities, have little to no yard or garden space, and have utilized garden boxes. Just like the workshop, these garden boxes, can be an opportunity for the surrounding community.



LEGEND

1900 SHORELINE

1913 SHORELINE

1938 SHORELINE

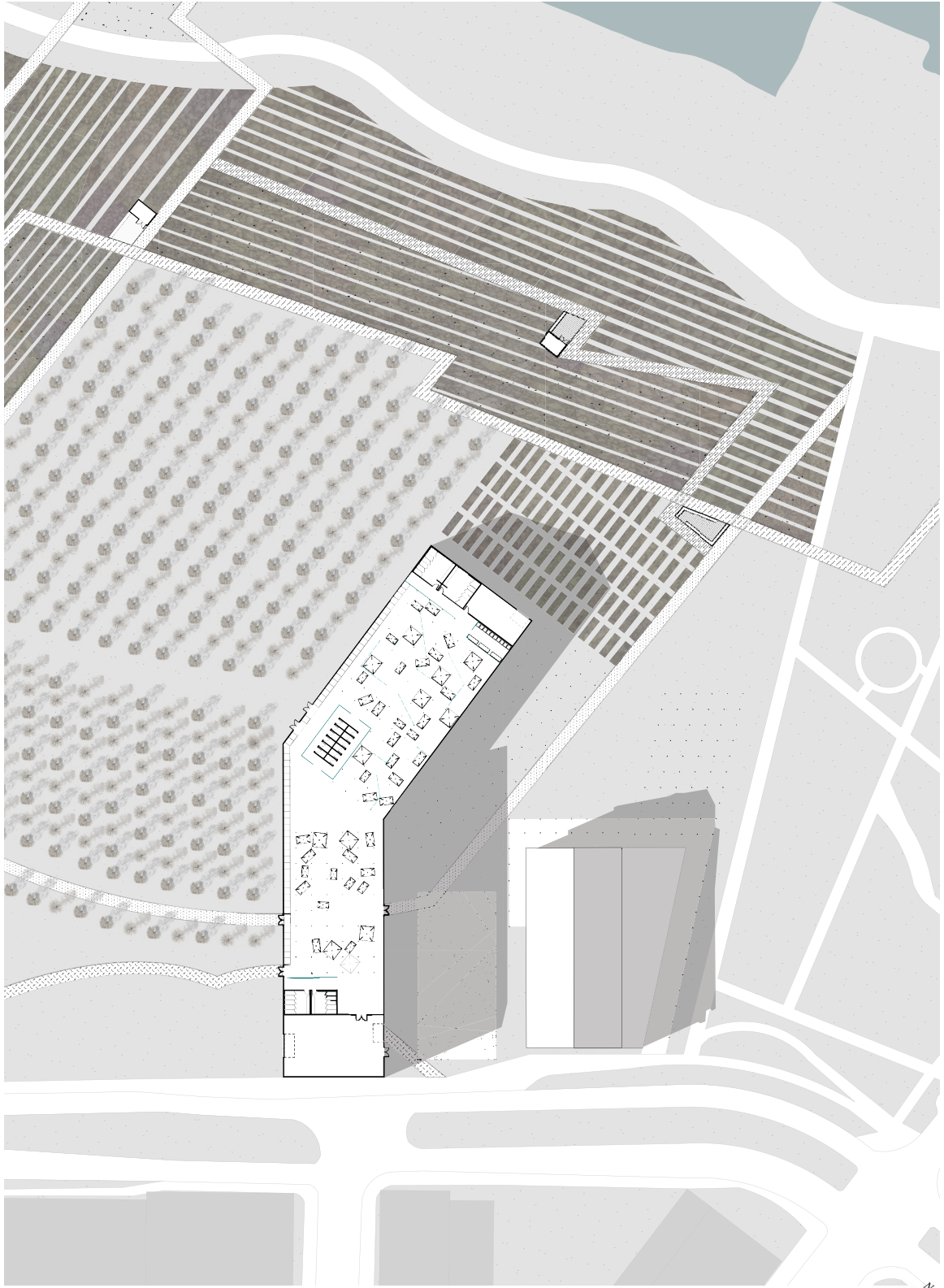
1962 SHORELINE

VERTICAL FABRIC

HORIZONTAL FABRIC



Figure 65 : Summer site plan



LEGEND

 1900 SHORELINE	 1913 SHORELINE	 1938 SHORELINE	 1962 SHORELINE	 VERTICAL FABRIC
--	--	--	--	---



Figure 66 : Winter site plan

5.7 Community Centre Program

The layout of the program is informed by the trajectories currently used by the public in and around the site. Each trajectory will bring an individual from a different activity in a different place - bike lanes, walking paths, the courtyard or the warehouse. Every façade will be porous and open, connecting the interior and exterior, not giving precedence to one particular side, but instead welcoming people from wherever they may approach. The chosen programs not will only provide a place to be, but jobs, a place to learn skills, and ways of contributing.

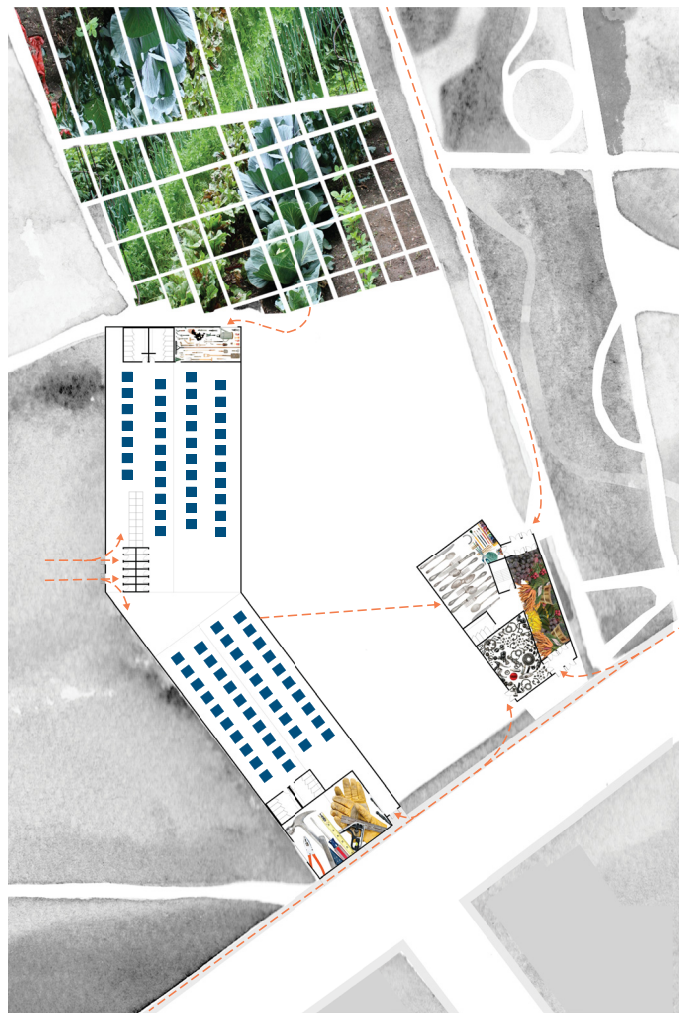


Figure 67: Site strategy plan, coordination of movement patterns of the surrounding area and program

5.8 Community Centre First Floor Plan

Knowing that Vancouver is full of cyclists, and there is a cross-city bike lane along First Avenue, I decided to pull the community bike shop closer to the street front. Its location will provide convenient access to cyclists, as well as opportunity for users of the bike shop to spill out into the courtyard.

The market will hug the existing sidewalk between the site and Hinge Park. This sidewalk connects the waterfront walkway and First Avenue and is both a bike lane and pedestrian walkway. It will be the most publicly used part of the site, fitting with the most publicly used part of the centre – the market. It also will connect with the most porous part of the centre, so that the building will become more inviting and will also let the market spill outside.



Figure 68 : Market rendering

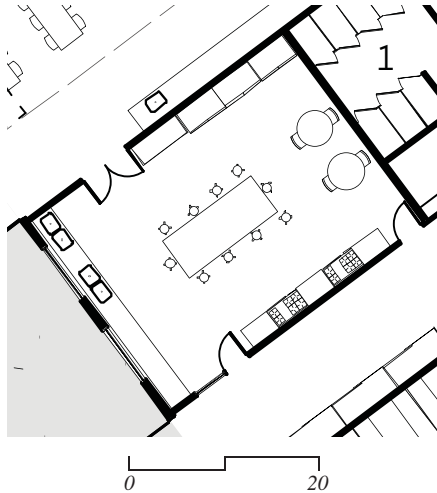


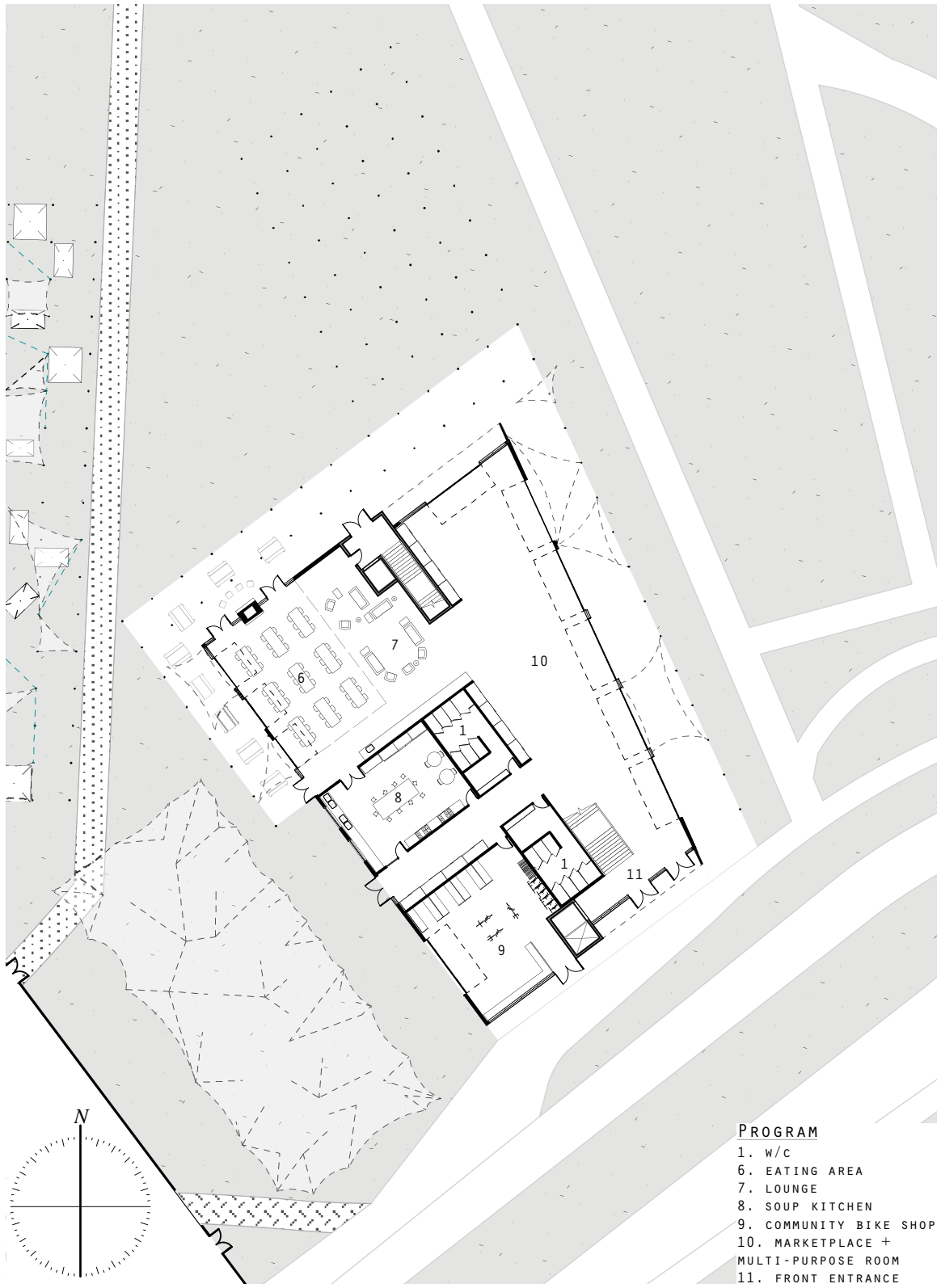
Figure 69 : Communal/soup kitchen plan

When the market is not active, the storage space along the west wall will allow for the rearrangement of the room to transition into multipurpose space for making, organizing or gathering.

The soup kitchen and eating area will be located on the side of the building closest to the warehouse, which will be convenient for those living on site. The kitchen will be arranged to encourage teamwork, focusing inwards towards a large island at which individuals may sit or stand while working together to create a meal. The eating area will be in a large, double height space with glass curtain wall and skylight, with long tables at which individuals may share a meal, and a fireplace at the end of the tables that will share both the kitchen and outdoor spaces. In the summertime, the eating area can move to the outdoor patio. Sharing the same space, the ceiling will drop down over the lounge, providing a more intimate space, without being closed off.



Figure 70 : Site model



- PROGRAM**
- 1. W/C
 - 6. EATING AREA
 - 7. LOUNGE
 - 8. SOUP KITCHEN
 - 9. COMMUNITY BIKE SHOP
 - 10. MARKETPLACE + MULTI-PURPOSE ROOM
 - 11. FRONT ENTRANCE

1900 SHORELINE
 1913 SHORELINE
 1938 SHORELINE
 1962 SHORELINE
 VERTICAL FABRIC
 HORIZONTAL FABRIC

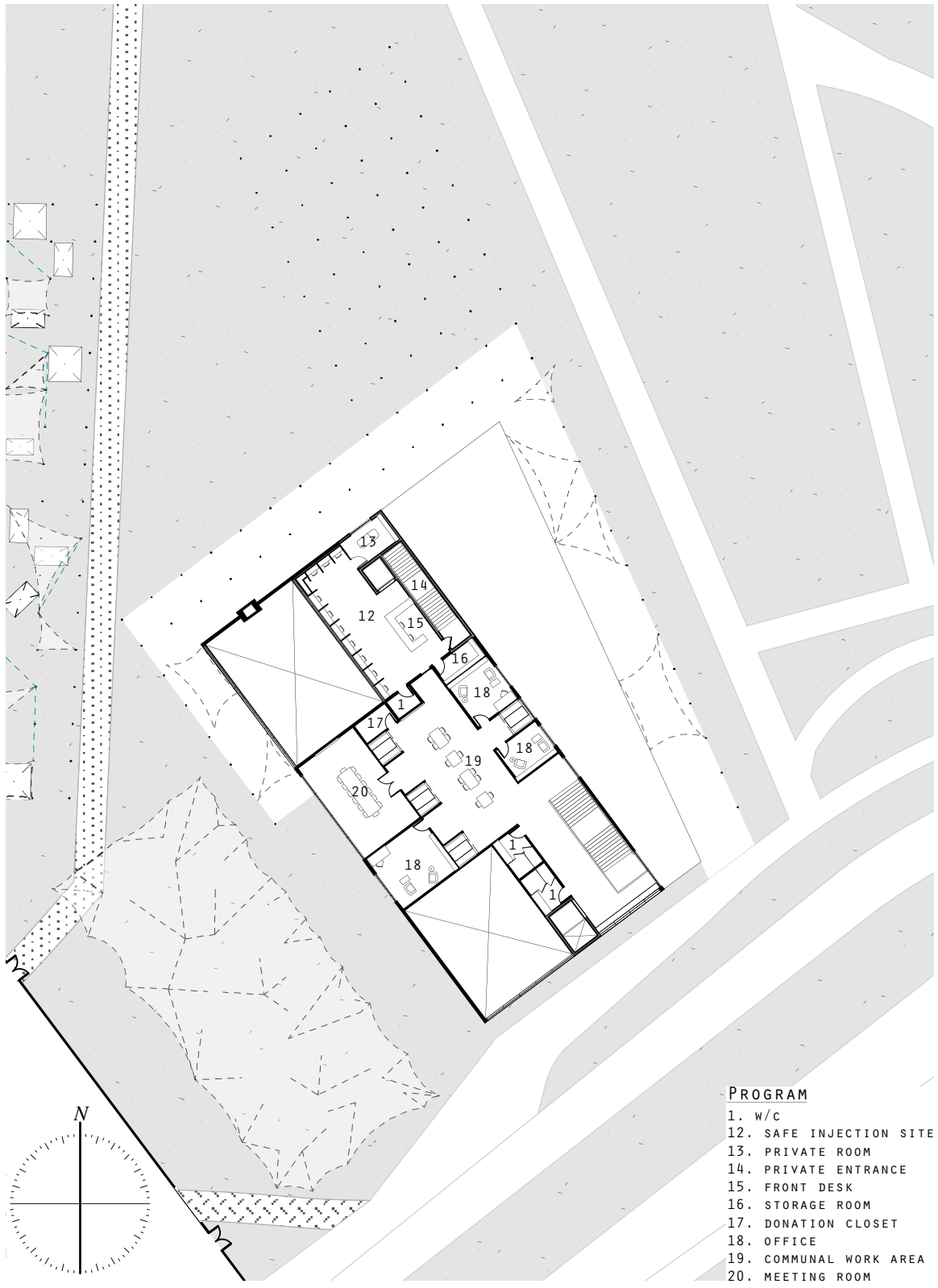
Figure 71 : Community centre first floor plan

5.9 Community Centre Second Floor

The second floor will have a smaller set of programs than the floor below. Arriving at the top of the stairs there will be several areas in which individuals may work; these areas will include small booths which provide space for a small group of individuals to work together, and tables and chairs that can be reconfigured to suit an individual or a couple, or pushed away to give space for a presentation. Along the perimeter of the space will be private offices for financial, housing, personal and employment counseling services, a donation closet, and a large meeting room. Again, this space is intended not only for the individuals who live on site to work or to find private reprieve, but also for individuals from outside organizations to share workspace and collaborate.

The north half of the second floor of the building will house a safe injection site. A question that came up for me early on in my research was if this site was to be accessible for all, or if there were to be rules and regulations not permitting the use of substances. Ultimately I wanted to create a safe place where all are welcome, without judgement.

The safe injection site in the community centre will have its own private entrance and elevator with 12 booths within an open space that is fully visible from the staff desk, a storage room for supplies, as well as a private room for medical emergencies. This will be the most private program in the building; its location in this area of the building will mean that there will be no distractions to those within and it will be out of sight from the public. Interior clerestory windows will provide a view of the sky and natural sunlight through the skylight above the eating area.



PROGRAM

- 1. W/C
- 12. SAFE INJECTION SITE
- 13. PRIVATE ROOM
- 14. PRIVATE ENTRANCE
- 15. FRONT DESK
- 16. STORAGE ROOM
- 17. DONATION CLOSET
- 18. OFFICE
- 19. COMMUNAL WORK AREA
- 20. MEETING ROOM

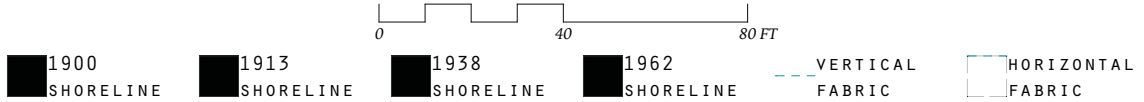


Figure 72 : Community centre second floor plan

5.10 Community Centre Design

The form of the community centre will draw from the history of the industrial building that existed in this area. The simple gable roof will match the pitch of the neighbouring warehouse buildings and will be in keeping with the same steel structure with riveted trusses and connections of those warehouse buildings. This kind of structure, used to span long distances so as to allow large machinery to be housed, will allow the community centre to be an open and versatile space. On the main floor, the spaces needing enclosure – washrooms, community bike shop and industrial kitchen - will be clustered together, to keep the rest of the main floor plan as open as possible.

5.11 Materials

The exterior will be clad with aluminum panels and vertical lap joint cedar. The aluminum will continue the relationship with the warehouse building, while the vertical cedar will create a feeling of warmth and invitation. Instead of pristine and sterile, finishes like OSB, plywood, wallpapered canvas, polished concrete and revealed structure will leave the building, feeling uninstitutional and approachable.

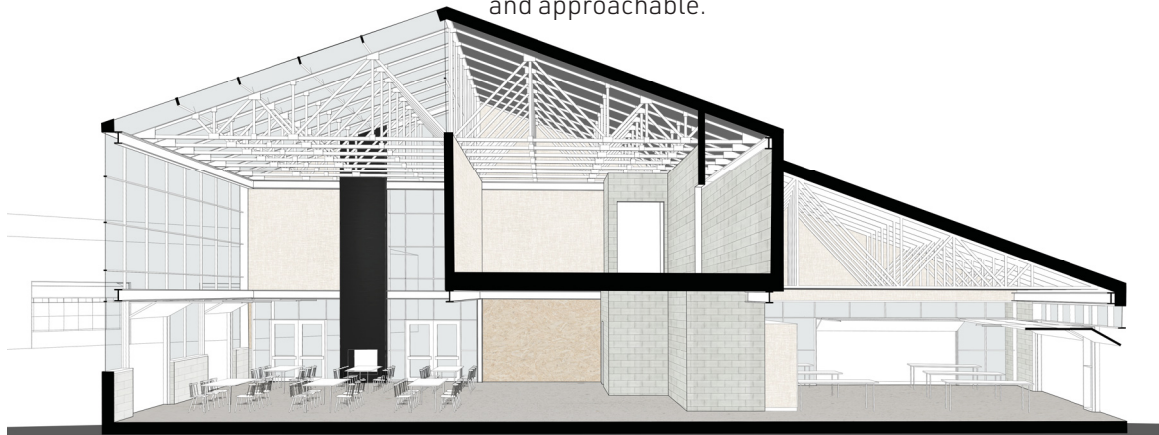


Figure 73: Community centre sectional rendering

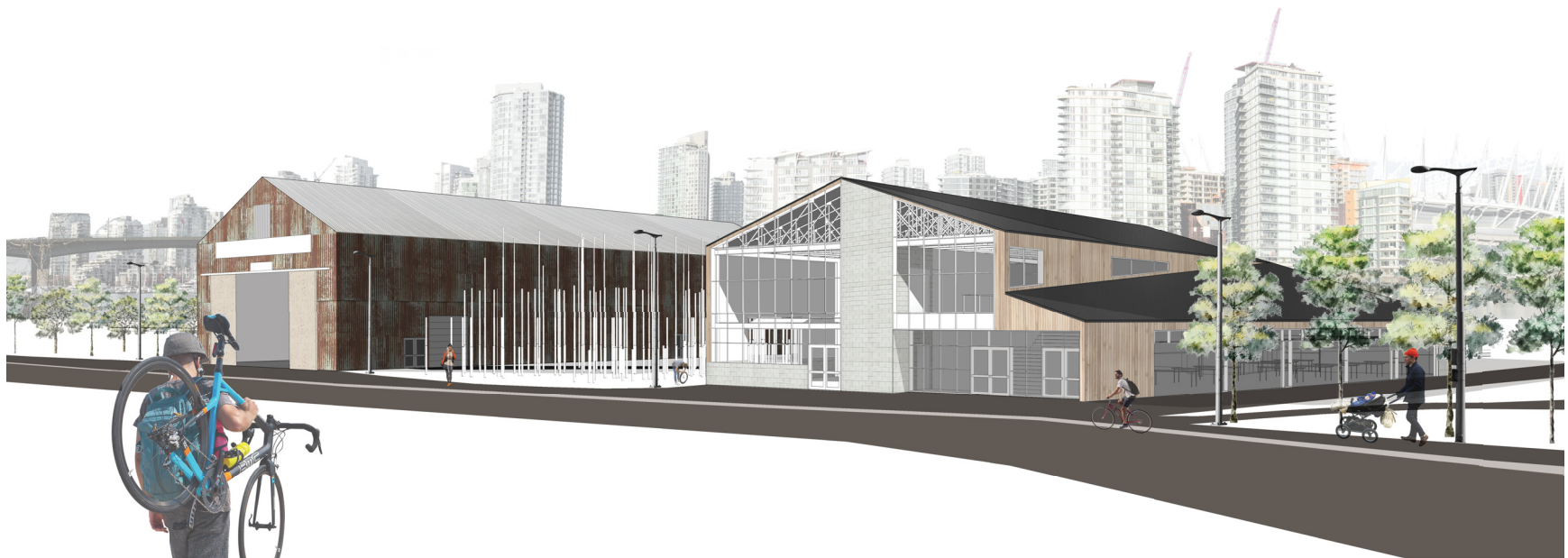


Figure 74 : Street front rendering 8

5.12 Courtyard

The base and posts will also inspire the design of the courtyard. The courtyard will be a place of gathering, collaborating and learning, and will be a platform for all of these actions. Retractable posts will be set by the trajectories between entrances of the community centre and warehouse, forming pathways within this forest of posts. Large canopies can be assembled in the manner dictated by the activity and space needed below the canopy.

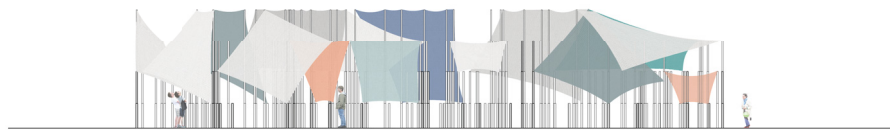


Figure 75 : Fabric canopy elevation

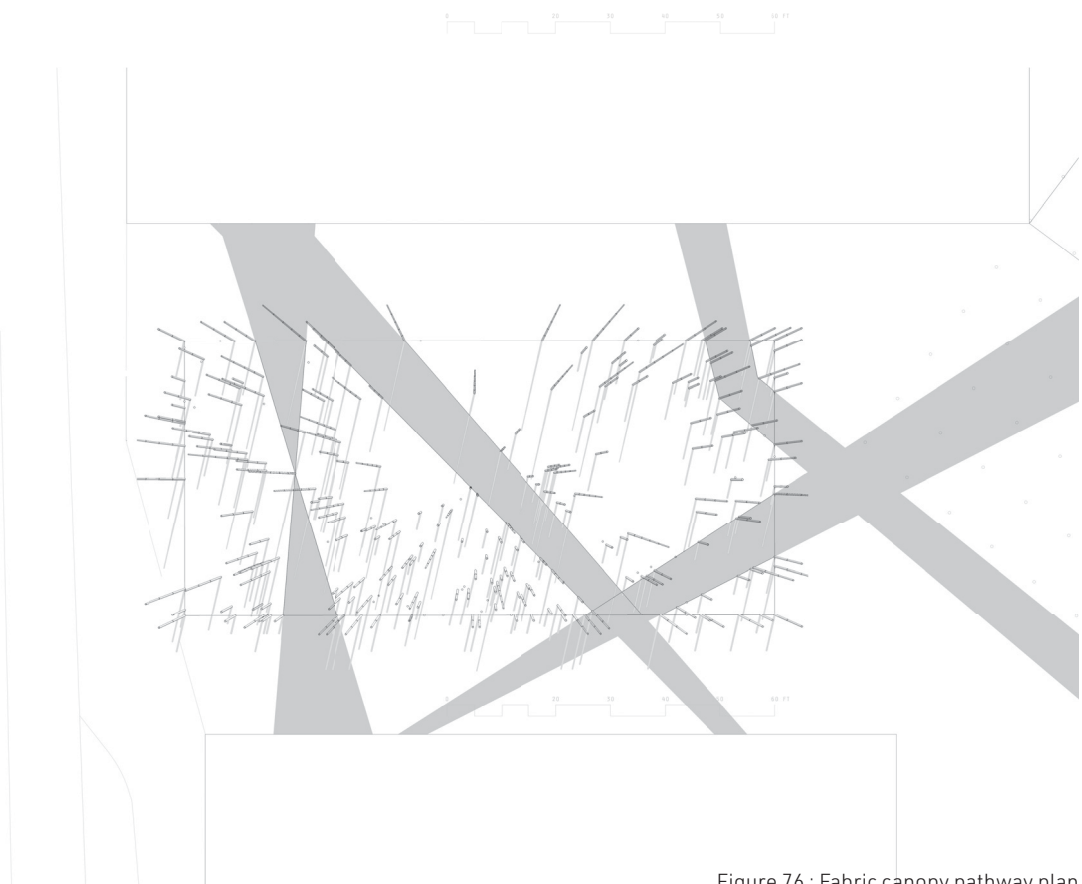


Figure 76 : Fabric canopy pathway plan

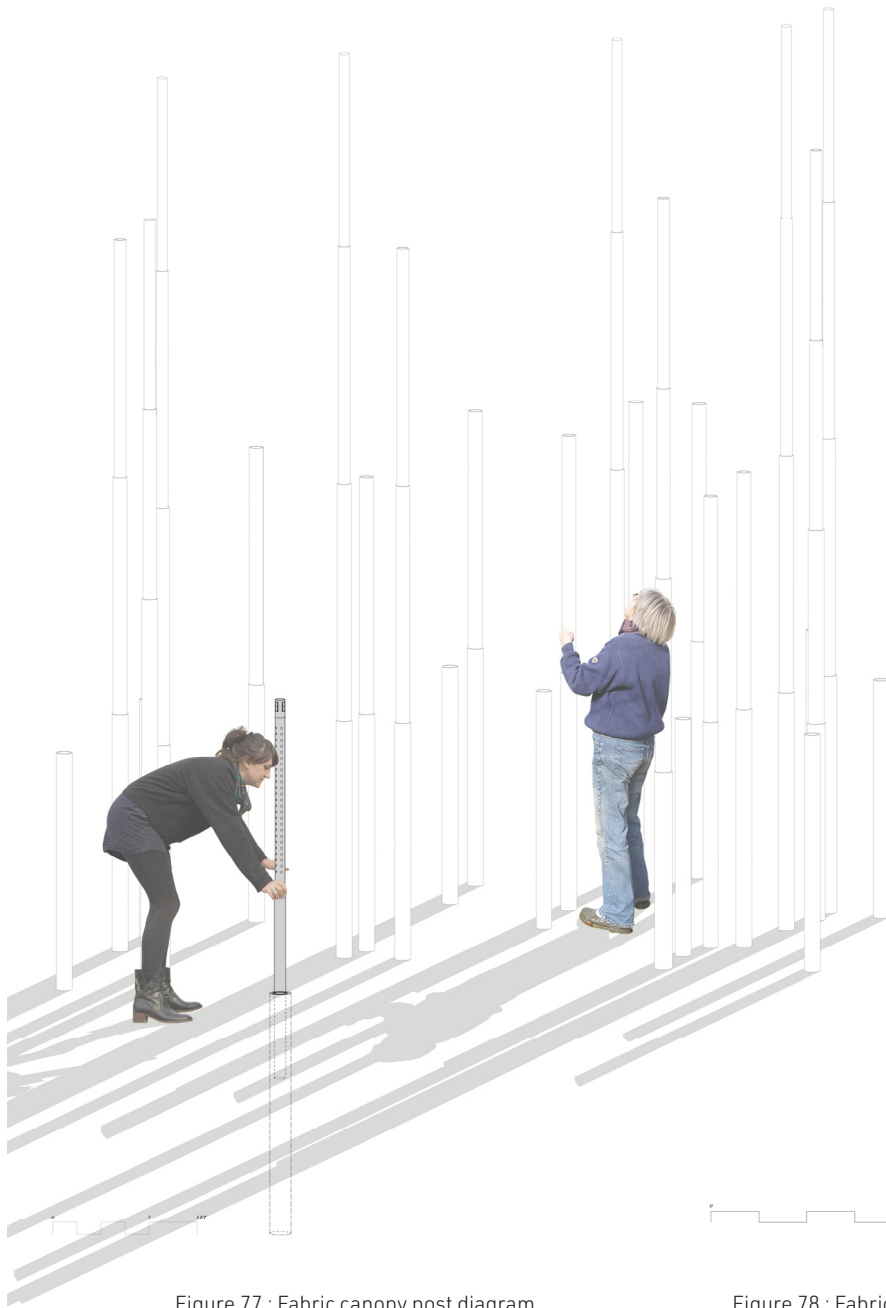


Figure 77 : Fabric canopy post diagram

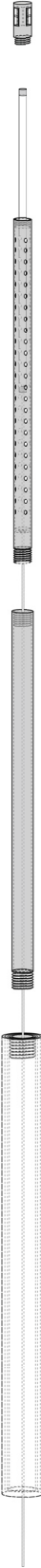


Figure 78 : Fabric canopy post exploded detail

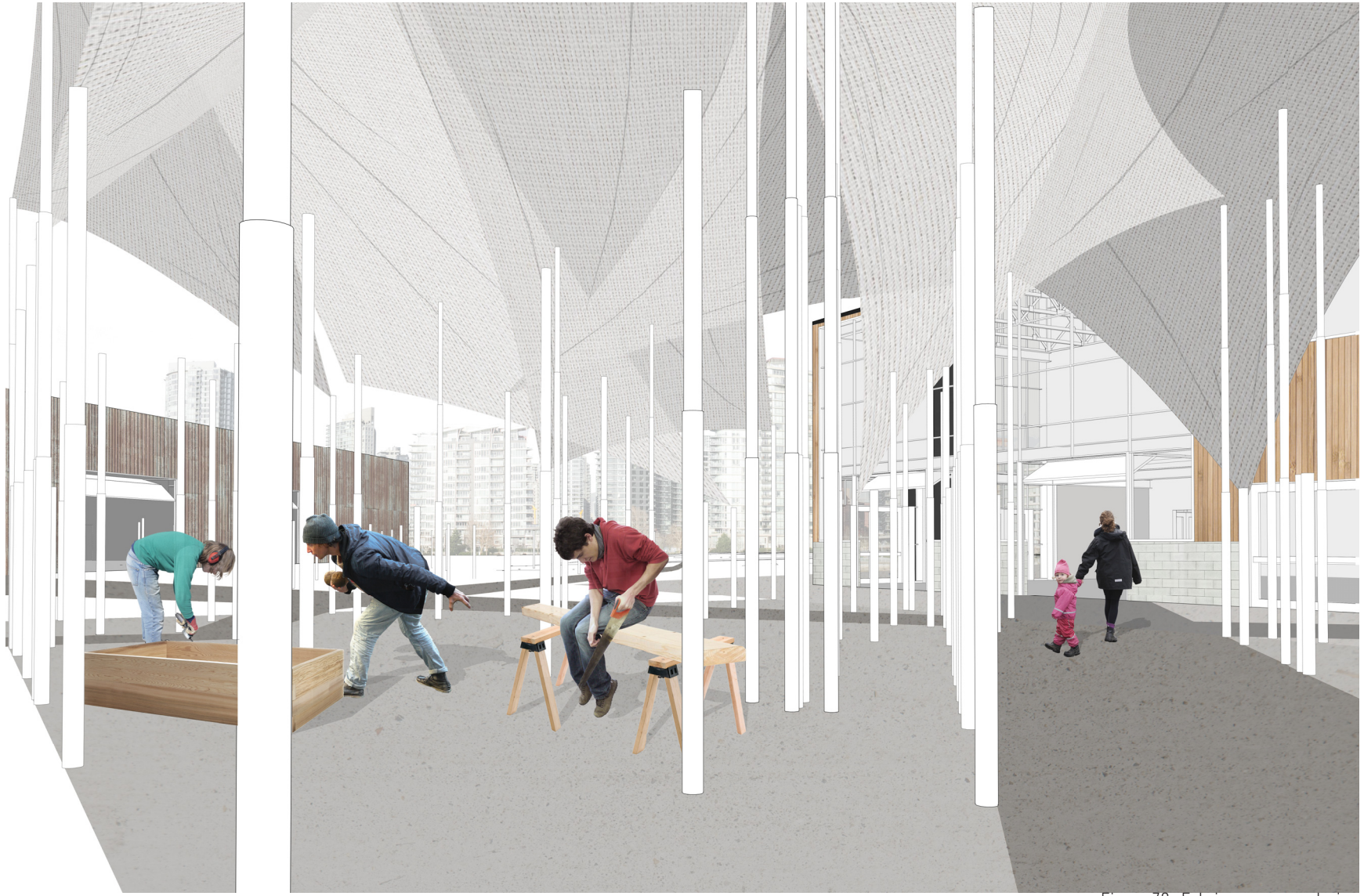


Figure 79 : Fabric canopy rendering 71

Chapter 6: Conclusion

My research on homelessness and the design proposal that is focused on an alternative way of supporting the unhoused in the public realm. Each design move is a way to improve connection, providing basic services, communal spaces to the rest of the city.

The focus was on social networks made specific to this particular site. Finding program that are needed within the area to connect those living on site with the greater community is the first step in re-integrating unhoused individuals as full fledged citizens. Could this approach be taken in other areas of Vancouver or other cities? While the use of the Wilkinson Building, or another unused warehouse building may not always be possible, I hope my research, as well as the broad gestures of my design, can be considered as a prototype for addressing the needs of unhoused individuals in other parts of Vancouver and elsewhere. Specifically, I hope that community centres will be considered not just as recreational facilities and places to gather, but take on the quality of a dwelling, in all senses of the word.

It is important to consider that this is a hypothetical project. Factors such as political will, funding and community involvement were considered, but this thesis has the obvious advantage of being unbounded by these factors. Understanding the documentation and political involvement that projects such as the proposal of this thesis, creates a challenge for socially-minded architects to create a network for projects like this to move forward and for change to occur. It is not solely the job of an

architect. No piece of architecture can create the changes envisioned in this thesis, on its own. The involvement of the public and in particular, the involvement of users of the architecture, are needed to carry out the envisioned changes. It is important that users of the architecture be there from the beginning to prevent misguided or misinterpreted prescription.

This thesis is not meant to replace current strategies or programs in place to aid the unhoused. Nor does it aspire to inspire people to change their lives. It is intended to propose another option to what is already offered. It provides support to unhoused individuals so that they can live their lives in the way that they currently are doing, but, hopefully, with more support than is currently available.

Appendix A: Definitions

Affordable or Subsidized Housing:

Affordable or subsidized housing can be provided by the City, government, non-profit, community and for-profit partners and it can be found or developed along the whole housing continuum. This includes SROs, market rental and affordable home ownership. The degree of affordability is dependent on the relationship between the cost of the house, and household income, therefore it is not a static concept (Context Ltd, 17).

Cooperative Housing:

Cooperative Housing Definition: "Housing co-operatives provide not-for-profit housing for their members. The members do not own equity in their housing. If they move, their home is returned to the co-op, to be offered to another individual or family who needs an affordable home. Some co-op households pay a reduced monthly rent (housing charge) geared to their income. Government funds cover the difference between this payment and the co-op's full charge. Other households pay the full monthly charge based on cost. Because co-ops charge their members only enough to cover costs, repairs, and reserves, they can offer housing that is much more affordable than average private sector rental costs. Co-op housing also offers security. Co-ops are controlled by their members who have a vote in decisions about their housing. There is no outside landlord. Each housing co-operative is a legal association, incorporated as a co-operative. Canada's housing co-ops are guided by international co-operative principles, adapted for housing co-op" (CHF Canada).

Emergency Shelter:

Temporary accommodation for the homeless, they prevent people from becoming street homeless. (Context Ltd, 17)

Housing First Paradigm Principles:

No requirements to obtain safe, secure and permanent housing, ie. Sobriety, mental health stability or abstinence. Choice in both housing and supports used. People are able to exercise choice regarding location and type of housing they receive (with restraints or availability and affordability). They are informed of the supports in place for them, and they choose which, if any they use. Instead of just meeting the basic needs of the user, it is focused on recovery of; one's well-being, social,

recreational, educational and occupational activities. This includes harm reduction for those with addictions, without the requirements of abstinence. It is individualized and client driven. This may address housing stability, health and mental health needs as well as life-skills. This includes income support and rent supplements. Social and community integration to avoid isolation and to maintain housing stability. This is supported through employment, vocational and recreational activities (Housing First, online paragraph 3-8).

Low Barrier or Non-Judgmental Shelter:

There are no standards of behavior, or requirements of mental health or addiction treatment to receive shelter in these facilities. Services and housing support is offered to anyone seeking and they are welcomed into a community of people who are in similar situations. (RainCity Housing, paragraph 4)

Non-Market or Social Housing:

Non-market housing or social housing is a type of subsidized housing, offered to low and moderate income individuals and families. They are owned and operated by the government or non-profit. The rents are fixed, but vary to enable a mix of incomes. This starts at the value of the shelter component of Income Assistance to 30% of a tenant's income. In Vancouver, these units are self-contained units, with private bathrooms, and kitchen (Context Ltd, 17).

SRO or Single Room Occupancy:

Single Room Occupancy hotels or SRO are the most affordable form of rental housing on the market. In Vancouver, the majority of SROs were built in the early 1900s to provide transitional housing for men working in the resource industries. The majority of SRO units are one room, with shared bathrooms and minimal cooking facilities. The majority of SROs in Vancouver have been bought by the government or a non-profit partner in the last 20 years (Context Ltd, 17).

Supportive Housing:

Supportive Housing is subsidized housing, that is also non-market housing to make this type of housing affordable. In addition, it also provides support services to its residents, who often live with health problems, or other disabilities and cannot live independently. Services provided are often mental health and other health support, life skill training as well as meal preparation. These can be both congregate or scattered apartments (Context Ltd, 17).

Appendix B: Resources Provided by the City of Vancouver

Homeless Emergency Action Team (HEAT)

Homeless Emergency Action Team program provides emergency shelter during the winter months. Recently the capacity of these shelters has been increased (Context Ltd, 9). The population that uses these shelters has a demographic that is much more similar to the unsheltered group of people experiencing homelessness in Vancouver. Individuals do not need to be sober to use this resource which is often a rule at some shelters. It understands that, not all individuals are the same, and often street residents are dealing with mental health issues and other illnesses (M. Thomson Consulting, 47).

Urban Health Initiative

Urban Health Initiative is connected with Vancouver Coastal Health to provide primary care in non-judgment shelters, training for staff and developing and implementing food security initiatives. This includes homeless shelters, non-market housing, food programs, counselling services and support programs (Context Ltd, 9).

Affordable housing for individuals experiencing homelessness

Renovation of facilities to convert to SRO units (Bosman Residence and Dunsmuir House) to provide stable, secure housing for the unsheltered. Development of 1500 supportive housing units, completed in 2013 which were funded by the province of BC.

Short-Term Incentives for Rental (STIR)

Short-Term Incentives for Rental (STIR) is a program providing incentives for new market rental housing to be developed. Incentives are usually leniencies with the permit process, either through expedited timelines, or reducing requirements. Implementation of new zoning policies allowing for secondary suites and laneway housing to densify areas primarily devoted to single family dwellings. And In new development projects and renovations, especially in the downtown area, to require 20% affordable market rental housing units (Context Ltd, 9).

Appendix C: Housing Typologies

Shelter for the unhoused can be separated into three categories; emergency shelters, single room occupancy accommodation and supportive housing.

Emergency shelters provide nightly accommodation for the unhoused, providing a bed and meals, and also services for connecting the unhoused with more permanent housing and support services (Context Ltd, 17). There are two types, purpose-built shelters that are available year-round and temporary shelters that are only available during the winter months, when weather conditions can be detrimental and life-threatening to people living and sleeping outdoors (City of Vancouver, Homeless Shelter Locations throughout Metro Vancouver, paragraph 3).

In the early 20th century, there were several options for lodging houses, for those with low incomes to choose from. Based on price, these ranged from dorms; private room with shared kitchen and washrooms, cages; large rooms broken into cubicles, shared bunk rooms and flops; large shared rooms, with a few feet of floor space. At this time, the population moving through this accommodation was more fluid, not only unhoused individuals occupied these spaces, but adults starting careers, artists, students and blue-collar workers. Mixed-use neighborhoods; stores, restaurants and public spaces filled in the other needs typically given by the residential home (Heben 2014, 17-18). Single room occupancy accommodations are the modern development of the cage accommodation. The success in these is the privacy they provide, giving the occupant the ability to lock their door and come and go as they please.

Supportive housing is subsidized by the government, that is also non-market housing, making it more affordable to those with low incomes. In addition, it also provides supportive services to its residents, who often live with health problems or other disabilities and cannot live independently. Services provided are often mental health and other health support, life skill training as well as meal preparation (Context Ltd 2008, 17).

Since 2002, the Greater Vancouver Regional Steering Committee on Homelessness (RSCH) has been conducting a count of homeless individuals count every three years. In 2014, 2,777 individuals were counted, out of this number, 1,820 (66%) were sheltered, while 957 (34%) were unsheltered.

Appendix D: Statistics

(All statistics taken from Vancouver Homeless Count 2016, produced by Matt Thomson Consulting for the City of Vancouver)

The city of Vancouver has conducted a city-wide count of people experiencing homelessness. It is conducted over a 24 hour time period, sometime in the middle of March, to estimate the number of individuals that are homeless and to gain greater insight as to the demographic and trends that are occurring. While doing the count, there are also survey questions, to develop a better understanding of the health, income, duration of homelessness and resources that are used. Out of the 1,847 individuals that were counted in Vancouver, 1,176 people completed the survey.

D.1 Health Conditions

Respondents were asked if they suffered from any medical conditions or illnesses, physical disabilities, addiction and substance use, and mental health issues.

- 76% - one or more health condition.
- 53% - addiction or substance abuse
- 42% - medical condition or illnesses
- 40% - mental health
- 31% - physical disability

D.2 Ways of Income

In 2016, there has been a decline in individuals reporting income assistance or welfare as a source of income, but there has been an increase in people claiming a sort of disability benefit or receiving employment insurance than any other year. There is also a large increase in how many sheltered and unsheltered homeless individuals reporting to have either part time or full time employment

- 35% - Income assistance or welfare
- 27% - Disability benefit
- 3% - Employment insurance
- 7% - Pension
- 23% - part time or full time employment
- 12% - no income

D.3 Time Frame

The great majority of people living on the streets have been there for over a year, showing that this is not normally a short term situation. There is a large difference between sheltered and unsheltered homeless people when responding to questions about the duration that they have been on the streets. Unsheltered homeless people tend to have been unhoused for a longer period of time.

	Sheltered Homeless	Unsheltered Homeless	Total
Under 1 month	18%	12%	15%
1 - 6 months	32%	21%	27%
6 months - 1 year	19%	18%	19%
1 year or more	30%	49%	39%

D.4 Where People Experiencing Homelessness Stay

Shelters in Vancouver cannot accommodate everyone, 74% of the homeless population said to have spent at least one night sleeping outside in the last 12 months. Out of the sheltered individuals that were surveyed, 62% responded saying that in the last year they had slept outside. For those that are unsheltered, they were asked for what reasons, they were not staying in a shelter.

- 35% - disliked, some reasons being, bedbugs, crime, noise
- 26% - were turned away, either because the shelter was full (22%) or that they were not appropriate (intoxicated, have a pet, wrong age or gender for a specific shelter) (4%)
- 25% - reported to preferring to sleep outdoors, not wanting to follow the rules of the shelter
- 57% - of unsheltered respondents have stayed in a shelter in the last 12 months
- 21% - of unsheltered men said they did not feel safe where they stayed the night before
- 19% - of unsheltered women said they did not feel safe where they stayed the night before

D.5 Goals

The City of Vancouver's ultimate goal is to end street homelessness and for all Vancouverites to have accessible and affordable housing. "The City of Vancouver's mission is to create a city of communities which cares about its people, its environment and the opportunities to live, work and prosper." (Context, Ltd., 5) To make this happen, three strategies outlined are to increase the supply of affordable housing, encourage a mix of housing types in all neighborhoods and finally to enhance housing stability.

Appendix E: Case Studies

E.1 Case Study: Right 2 Dream Too, Portland, OR

Right 2 Dream Too formed in 2011 on private land in downtown Portland, only a few days after the Occupy Portland protest. While city camping is not legal in Oregon, the mayor lets them stay with no set day of eviction.

The tent city is being supported by the non-profit Right to Survive, and given support by one of the founders of Dignity Village.

Right 2 Survive's mandate is about educating the houseless and housed people about their civil, human and constitutional rights. In doing this they hope to bridge the gap by removing misconceptions and stigmas that are associated with houselessness. Education is also to give the information to the houseless, so that they can stand up for themselves when their rights are being violated.

This is so fitting for this tent city because of location in Portland, giving it such a stage for the greater public to see and to bring recognition to this way of living.



Figure 80: View of Right 2 Dream Too from above
Photograph by Bayer 2012.

RIGHT 2 DREAM TOO

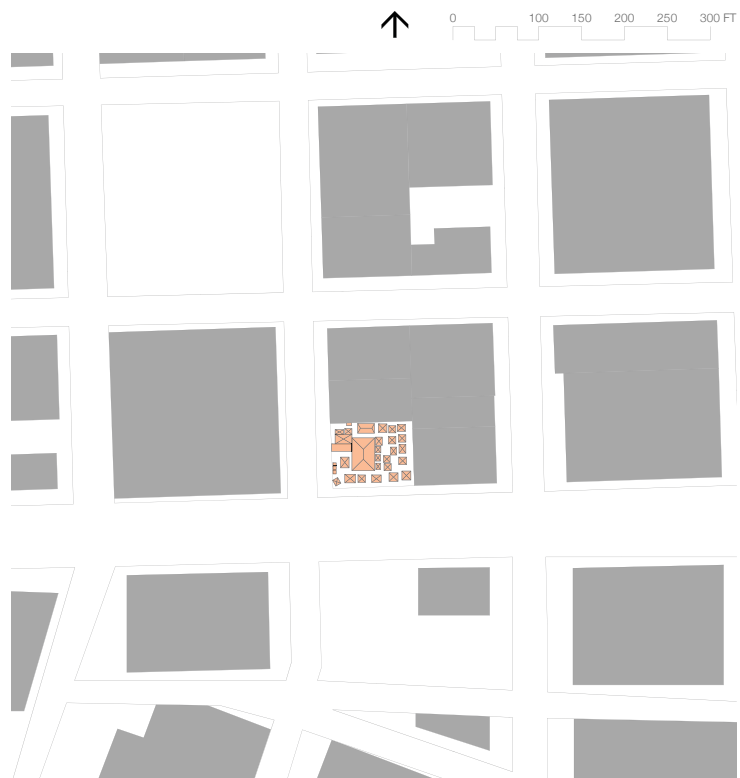


Figure 81: City and Site context of Right 2 Dream Too tent city

E.2 Case Study: Camp Take Notice, Ann Arbor, MI

Camp Take Notice's first site was occupied in the fall of 2008, it was started by a man who after becoming homeless, left Ann Arbor for Seattle out of shame. In Seattle he lived in two sanctioned tent cities. When he needed to return to Ann Arbor, he saw how a tent city could alleviate the pressure on the homeless shelter, while giving a community for the unhoused to live. It started as just himself, finding a place to camp outside, and inviting others that didn't have a place to stay to come with him.

Camp Take Notice has gone through 6 different locations. Each site was chosen, looking for certain criteria; proximity to bus stops for ease of transportation, on the periphery of the city, each within a wooded area to block light from betraying their location.

Between each move, population and time period varied as well as the secrecy of their location. The communities did have a set of rules to abide by, but in larger camp situations, often there would be a secondary camp set up away from the main one, referred to as a "wet camp" where those that were rejected could remain.

Originally there was no organized support for this camp, but with more publicity, a partnership with M.I.S.S.I.O.N (Michigan Itinerant Shelter System - Interdependent Out of Necessity).



Figure 82: Photograph of people and shelters of Camp Take Notice. Still taken from Collings 2012.

CAMP TAKE NOTICE

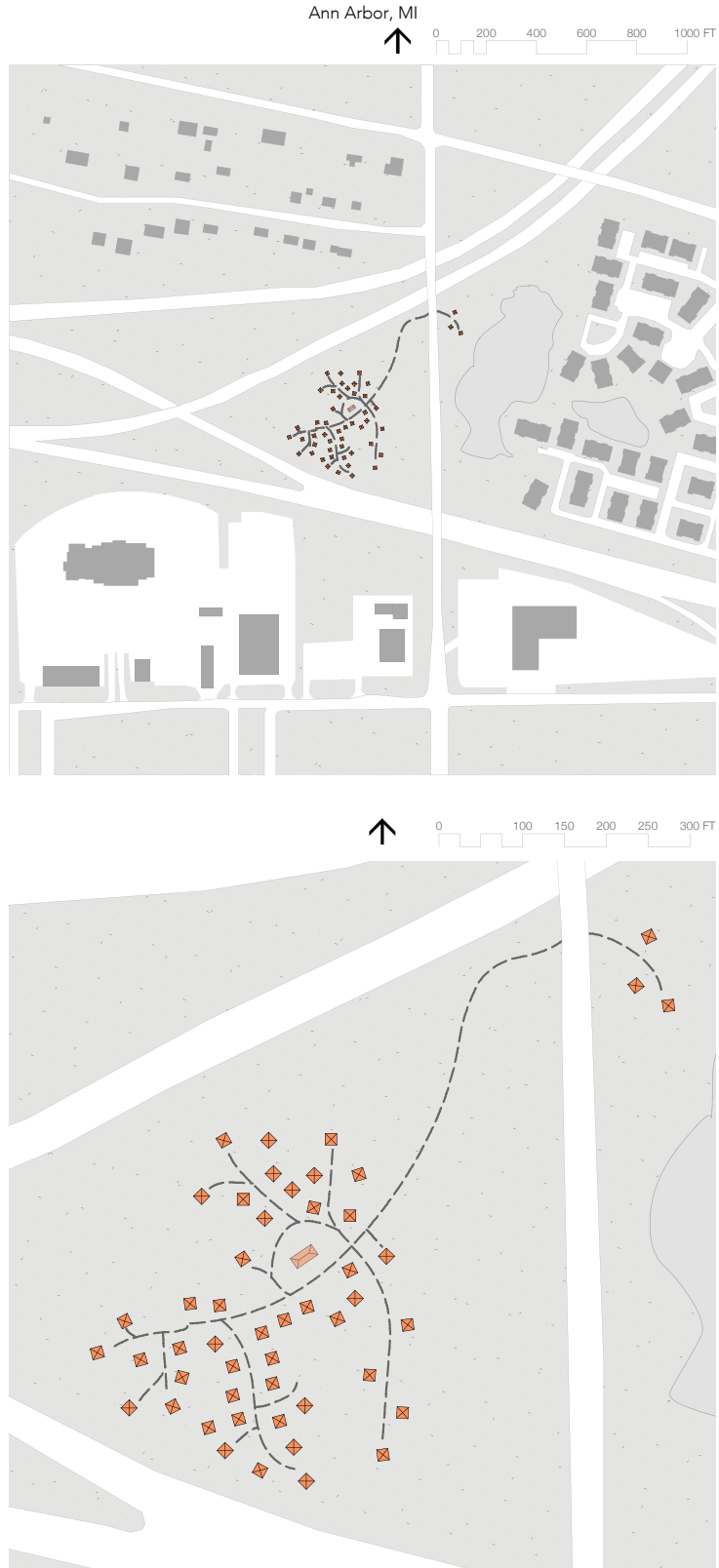


Figure 83: City and Site context of Camp Take Notice tent city

E.3 Case Study: Dignity Village, Portland, OR

In the US, there are a few examples of tent cities that have been sanctioned by the city they occupy. A few select tent cities have or are transitioning from a tent city typology, to a tiny house community or village.

The success they are finding are based off the fact, that these tent cities, already have a strong sense of community, small private space, and larger shared space for living. This is similar to the SRO model that is seen historically. Classically, tiny houses are found to be segregated because of building code, and zoning regulation, but for the unhoused, these regulations have been disregarded because of it being such a highly visible political issue. This is opening doors for the grass roots movement as well. These tiny houses do not only address the problem of homelessness, but reduces human impact on the natural environment by minimizing, localizing and sharing resources, which is much easier to do, when there is a gathering of tiny houses.

Dignity Village was the first tiny house village in the US, used as a prototype for many other tiny house villages. It has now been around for 15 years. It is in Portland, OR where it has been sanctioned on city land, as transitional housing for the unhoused (maximum of two years). The tiny houses are mostly made from reused materials, the majority without electricity with shared washrooms and a shower for the community. The tiny houses find success in the communal spaces provided around camp.



Figure 84: Photograph of the renovations done to a tiny house in Dignity Village. Photograph by Heben 2014.

Dignity Village is a non-profit organization that is operated through a membership and in-house council method. Councillors are elected every year. Villagers pay \$35/month to contribute to the operational costs of the camp so there is no cost to the city, or to tax payers. The rest of the budget comes from small revenue sources, and private and in-kind donations. Dignity Village strives to provide a safe, stable and sanitary environment for the unhoused without violence, theft, drugs or alcohol and disruption.

The length of time Dignity Village has been open for has allowed for improvements to be made, and additions to be added to the tiny houses. The garden boxes installed throughout the village not only provided food for the villagers, but provide shading in the hot months for the tiny houses on the asphalt-covered site.

This project is successful for two reasons, it allows for unhoused individuals to obtain a house of their own. It keeps with the idea of community that is so lacking in affordable housing, by keeping the private space small, while sharing common spaces. Offering everything of a modern house, but separating its functions into different structures.



Figure 85: Photograph of the garden boxes on site at Dignity Village.
Photograph taken by Heben 2014.

DIGNITY VILLAGE

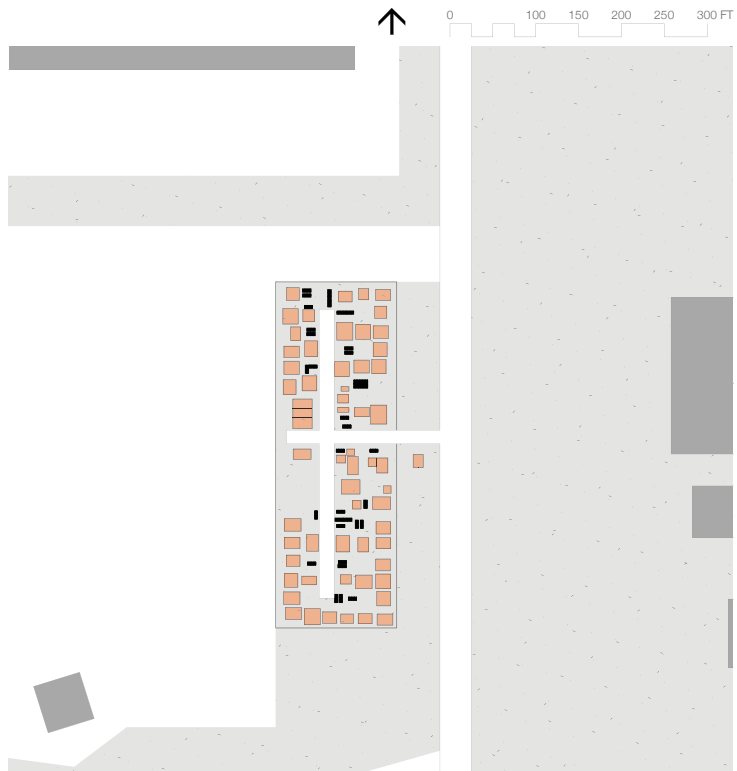
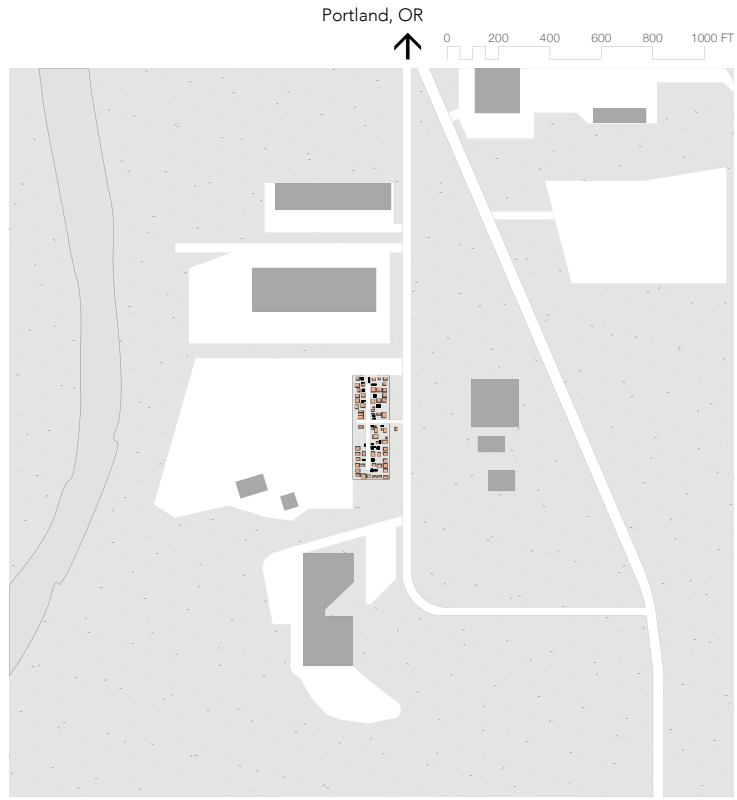


Figure 86: City and Site context of Dignity Village

E.5 Case Study: Opportunity Village and Eugene Safe Spot, Eugene, OR

Opportunity Village was opened in 2013 in Eugene, Oregon. Unlike at Dignity Village, a specific design was developed for the 30 tiny houses on site. The houses are built by the unhoused residents and volunteers from the community. This action brings the idea of integration and acceptance. The tiny houses are supported by common facilities, such as the washrooms, kitchen and communal areas.

The site is city owned, an agreement between Opportunity Village the city of Eugene exists to regulate how the site is used. Just like at Dignity Village, Opportunity is self-governed as well, allowing for the villagers to be able to make decisions and play an active role in how the village operates. Again, using the same model as Dignity, the villagers need to abide by certain rules to be able to stay, firstly, no violence against oneself or others, no theft, no drugs or alcohol on the premises, and no disruption. What makes Opportunity Village unique is its connection and support of Eugene Safe Spot.

While Opportunity Village is seen as transitional housing for the unhoused, with the idea for staying for longer period of time (maximum 2 years) Eugene Safe Spot requires much less commitment. There exists a much more transient community that does not want to commit to staying in one place for a month or more. The population is made up of two types; hosts and over-nighters. Hosts stay more frequently, enforcing the rules, while over-nighters check in with the hosts to stay for the night. Eugene Safe Spot offers tent platforms and Conestoga huts for users to stay in overnight.



Figure 87: Photograph of variations of the consistent tiny houses at Opportunity Village. Photograph by Nash 2015.

OPPORTUNITY VILLAGE

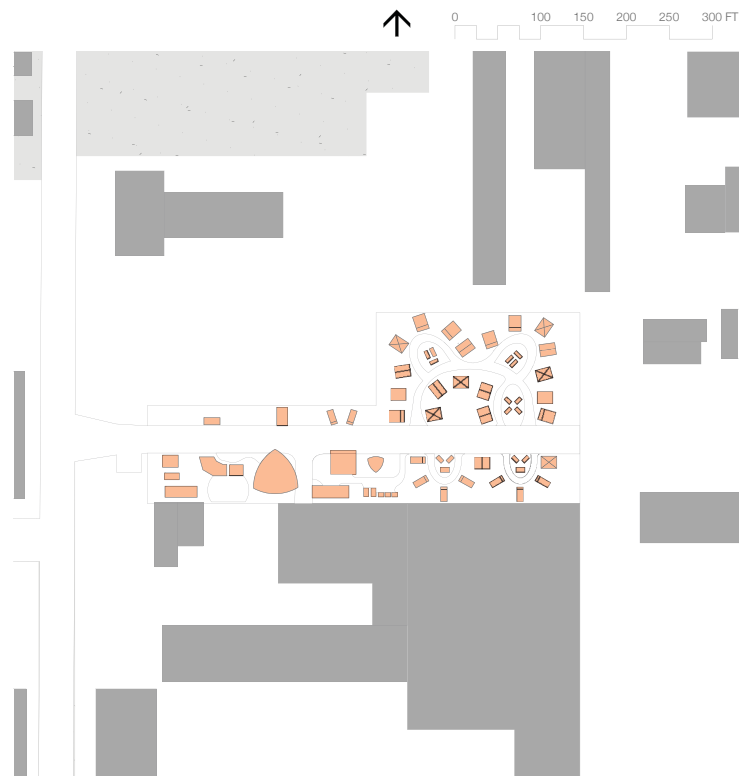
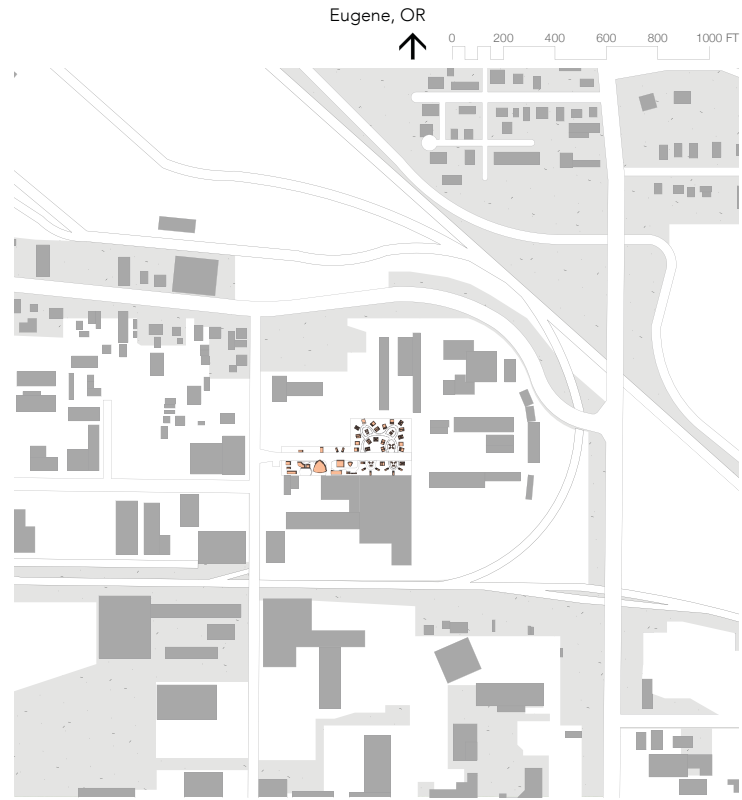


Figure 88: City and Site context of Opportunity Village

E.6 Case Study: Star Apartments, Los Angeles, CA

Founded in 1989, Skid Row Housing Trust, is a non-profit organization, who's mission is to provide low income housing for the large homeless population, somewhere between 5,000 and 11,000, in LA's infamous Skid Row. They work with small, innovative architecture firms, which this type of housing is in need of. Amongst the Trust's 26 permanent housing complexes, 4 of these projects have been designed by Michael Maltzan Architecture.

These centres practice a medical approach called "trauma-informed care." This approach takes into account a person's past when providing services. This can include the design of the facility they provide it in. The majority of the tenants in these complexes moved from one institution after another, clinics, shelters, addiction recovery centres, prison, "places typically designed via budget-driven utilitarianism." This often resulting in institutions, with much to be desired, unwelcoming, indistinguishable spaces. "How do we design buildings that create the best environment for people to live in and recover from the effects of homelessness and other disabilities?" asks Mike Alvidrez, the executive director of the Trust. "We are always trying to mitigate some of the ill effects of homelessness by bringing in good design, ample light and generous landscaping." This is the model that the Trust implements in all of their projects.

In 1976, the growing population of homeless people in Skid Row, needed action. LA passed a redevelopment plan for the area, now known as the policy of containment. This plan addressed the need for housing and services, pushing all other affluent businesses and residents to other parts of the downtown area, entirely isolating this population. Through its unique design for the Skid Row area, Star Apartments, as well as many of the other Skid Row Housing Trust projects, announces the presence of this transient and marginalized people in the area. Surrounded by one and two storey



Figure 89: Photograph of open storeys of Star Apartments.
Photograph by Michael Maltzan Architecture 2016.

buildings, Star Apartments draws attention to the predicament at hand. In an interview with Anthony Haynes, a resident of Star Apartments, he described the initial feeling of moving of the streets, "Inside the unfamiliar privacy of four walls and a ceiling, without the distraction of the constant action on the streets, the silence can feel deafening." In this, lies the answer to successful architecture for these people, providing large communal areas, as well as formalized activity programs. Michael Maltzan Architecture's Star Apartment addresses this through its organization. Three principal spatial zones are stacked. At street level, a public health zone offers a health and medical clinic (15,000 sf) to both the residents of the building, but for the rest of Skid Row's residents as well. The main floor also provides the headquarters of the LA County Department of Health Services (DHS) Housing for Health Division. The second level provides community and wellness programs. This spaces all offers an outdoor track and sports courts, community kitchen and garden courtyard. The final zone is four floors of terraced residences.



Figure 90: Photograph of interior courtyard/lightwell space of the third and fourth floor of Star Apartments. Photograph by Michael Maltzan Architecture 2016.



Figure 91: Photograph of outdoor space on the second floor of Star Apartments. Photograph by Michael Maltzan Architecture 2016.

STAR APARTMENTS



Figure 92: City and Site context of Star Apartments



Figure 93: Photograph of one of the businesses located in New Genesis. Photograph by KFA 2016.

E.7 Case Study: New Genesis, Los Angeles, CA

In 2012, the Skid Row Housing Trust has gone one further. California's Community Redevelopment Agency had provided the majority of funding for these projects was dismantled. The Trust overcame this, instead of relying on funding to run the onsite services for the unhoused, two commercial storefronts to create the first self-sustaining mixed-use model. These storefronts, an ice cream shop and restaurant, supported the onsite services through their leases.



Figure 94: Photograph of the exterior shared stairwell in the center of the facility. Photograph by KFA 2016.

New Genesis, designed by Killefer Flammang Architects, is a mixed use, mixed income (both low income, and market rate housing) facility. This building introduces the interaction between residents and the businesses and general public below. The Skid Row Housing Trust buildings have the ability to welcome residents to interact with the surrounding community, but also creates a sanctuary to retreat to.

New Genesis provides 106 units, only 79 of these units are reserved for recently homeless individuals, suffering from either physically disability or mental illness. As part of the application for these 79 spaces, individuals need to have been homeless for over one year, and require

documentation of this disability. These requirements are set in place, so that it is known that these spaces are being given to the people the most in need. In mixing these two populations, New Genesis offers a way of integrating the unhoused back into society with more ease.

Killefer Flammang Architects creates architecture that respects and strive to improves the communities they work in. "For us, design begins by immersing ourselves in a site and its surroundings, responding to it with empathy and careful consideration. A great building is a good neighbor."

NEW GENESIS

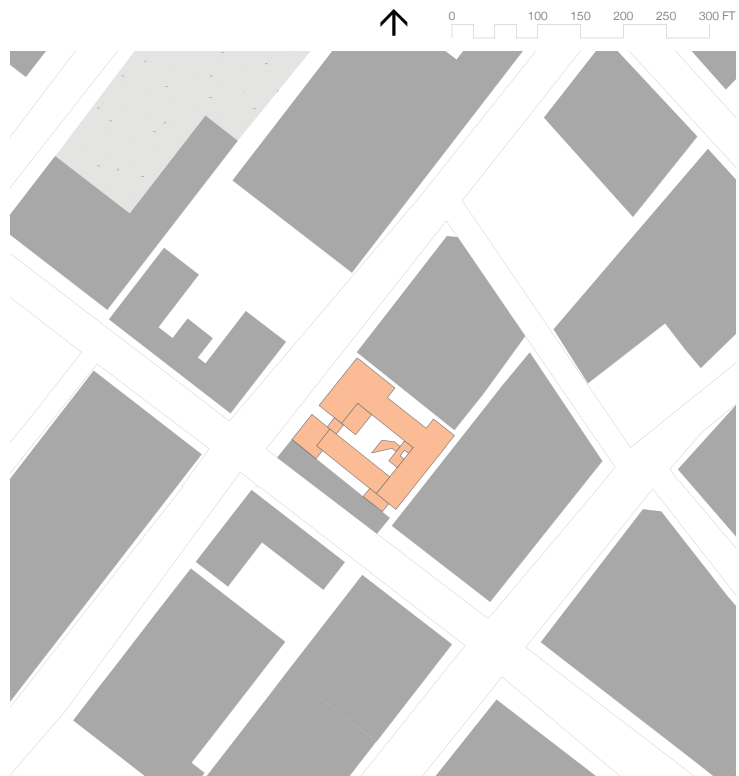


Figure 95: City and Site context of New Genesis

E.8 Case Study: Villa Verde and other Incremental Building Project, Constitucion, Chile

On February 27, 2010, there was an earthquake that caused a tsunami in Chile, the city of Constitucion was drastically affected by this natural disaster, leaving 500 people dead and 80% of buildings were left in ruins.

Elemental, an architecture firm based in Santiago, Chile was hired to create a new master plan for the city. To address the huge number of homeless families and individuals they used a building methodology outlined by John F. C. Turner in his book, 'Housing is a Verb'.

Housing should not be static; it should be an on-going project when given to the residents, making them co-creators, in partnership with the government that builds the most difficult parts of the home (foundation, plumbing, electrical) as well as the surrounding infrastructure. The owners will use their own time, labour and money to complete it.

Just meeting Chile's minimum standards for low income housing, Elemental developed the project Villa Verde, a series of 2 storey homes with a wall running down the middle, splitting the house in two. One side complete and livable, the other just a frame around empty space to be filled in and finished by the occupant.

Elemental has since done several other projects like it, in Iquique, Chile, costing only \$7500 a unit.



Figure 96: Photograph of a Villa Verde unit, starting to be infilled by owner.
Photograph by Elemental 2016.



Figure 97: Photograph of a Quinta Monroy units, starting to be infilled by owners.
Photograph by Elemental 2016.

VILLA VERDE

Constitución, Chile



Figure 98: City and Site context of Villa Verde

E.9 Case Study: VinziRast- Middle, Vienna, Austria

VinziRast-middle is bringing the students and homeless individuals to live, work and learn together under one roof. The project is in Vienna, one of five projects developed by VinziRast.

Homeless people are so often cast aside, excluded from society. VinziRast-middle believes that through community development, building relationships and active interaction, the once homeless, can be more widely accepted and respected within society, all while giving cheap accommodation to students as well.

In 2009, student protests at the University of Vienna to democratize the universities in Austria, as well as eradicating tuition fees. During this protest, many auditoriums were occupied by the students and homeless people came in to stay as well. At the end of the protest, many students wished to continue this relationship because of the exchange and cooperation that occurred.

A building was acquired to house the project, formerly a tenement, but many renovations were required. Volunteers, many unhoused individuals and residents assisted with these renovations, providing employment. The renovation was designed by architects Gaupenraub +/-, an architecture firm from Vienna. The new space provided accommodation to thirty people, divided between ten units, each with a kitchenette and bathroom to be shared. Each of the three storeys has a communal kitchen and living room. Study spaces, work rooms and a rooftop garden allow for informal shared activities. The main floor offers a cafe, bar and restaurant, provides access to the residence above, but also an inclusion of everyone. It acts as a pathway, welcome to all.



Figure 99: Photograph of interior courtyard of VinziRast Middle.
Photograph by White 2016.

VINZIRAST MIDDLE

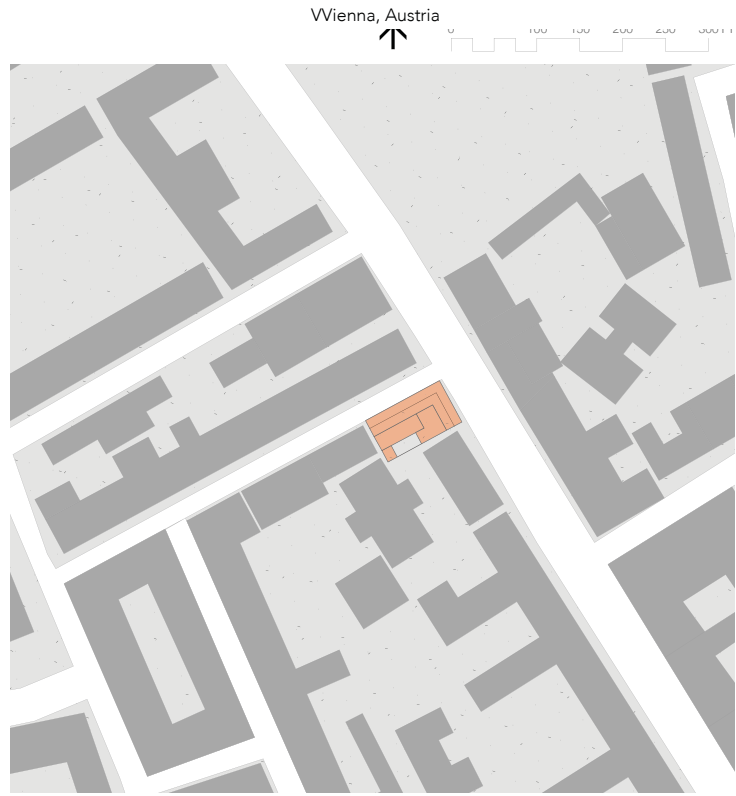


Figure 100: City and Site context of Vinzi Rast Middle

E.10 Case Study: Strachan House, Toronto, ON

In 1998, Strachan House was a warehouse building in the west end of Toronto was renovated to become a homeless shelter. Using the original StreetCity as a prototype, Levitt Goodman worked with the Homes First staff and tenants during the design process.

Strachan House consists of 12 houses, each with their own kitchen, bathroom and common area which is connected to a network of streets within the warehouse building. It practices housing first, having space for seventy-six single men and women to have a home. Each accommodation has a front door and window onto the network of streets.

It is considered supportive housing with staff that are 24/7, with a capacity of 88 individuals. Each resident has their own accommodation, but washrooms and kitchens are shared. Skills are taught, offering basic cooking lessons, etc. Councillors and public health nurses visit. There is also a secondary type of accommodation for potential residents that is more of a hostel format.

Strachan House is supported through affordable housing subsidies, asking for 30% of each tenant's income to pay for costs of running the facility.

Levitt Goodman has since done other affordable housing projects for the houseless in Toronto and the surrounding area; Eva's Phoenix, Eva's Phoenix Brant Street for Youth, Bellwoods Centre for Community Living and New Edwin Hotel.



Figure 101: Photograph of exterior of Strachan House's renovated warehouse building, looking toward's Toronto's downtown. Photograph by Homes First 2012.

STRACHAN HOUSE

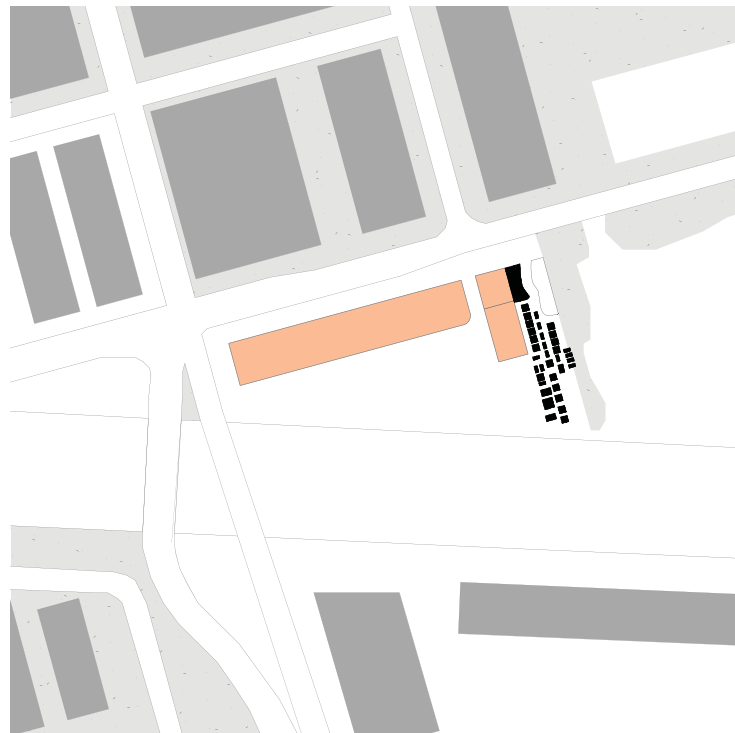
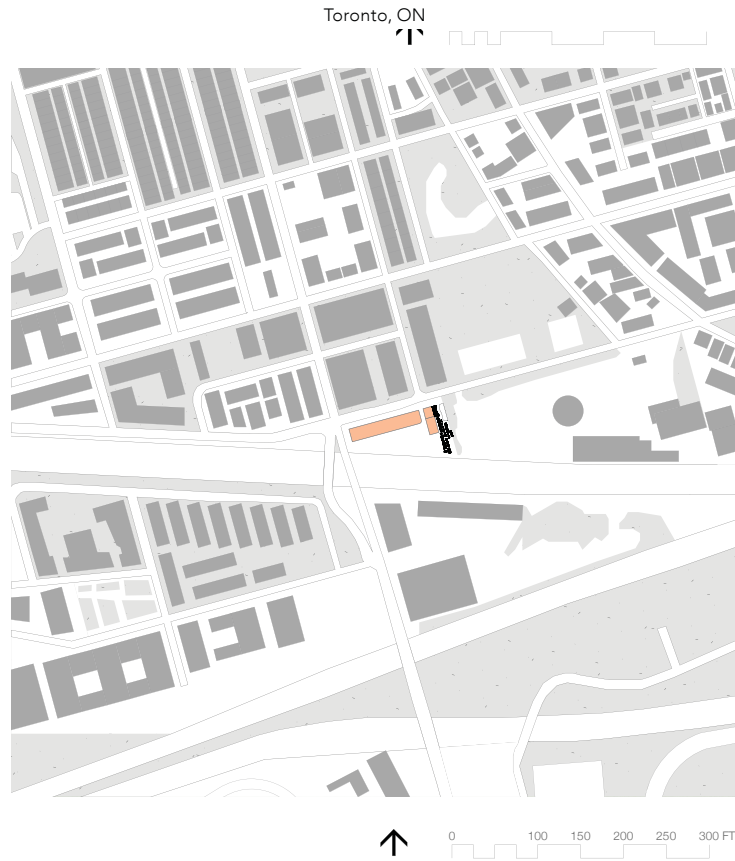


Figure 102: City and Site context of Strachan House

Appendix F: Documentation Between Dignity Village and Portland City Council

How the village became a sanctioned site

Excerpt taken from Oregon State Law: Chapter 446: Manufactured Dwellings and Structures; Parks; Tourist Facilities; Ownership Records; Dealers and Dealerships (446.155 - 446.285) Section 265 : Manufactured Structure Construction and Safety Standards for Transitional Housing Accommodations with clarifications taken from Tourist Facilities, Exemptions from License requirements (446.325)

ORS 446.265 Statute allowing for 6 municipalities to designate up to two sites as campgrounds to be used for "transitional housing accommodations" for people who lack permanent shelter that cannot find other low income housing options.

446.265 Transitional housing accommodations; regulation and limitations; definition.

(1) A municipality may approve the establishment of a campground inside an urban growth boundary to be used for providing transitional housing accommodations. The accommodations may consist of separate facilities, in the form of yurts, for use as living units by one or more individuals or by families. The person establishing the accommodations may provide access to water, toilet, shower, laundry, cooking, telephone or other services either through separate or shared facilities. The accommodations shall provide parking facilities and walkways.

(2) Transitional housing accommodations described under subsection (1) of this section shall be limited to persons who lack permanent shelter and cannot be placed in other low income housing. A municipality may limit the maximum amount of time that an individual or a family may use the accommodations.

(3) Campgrounds providing transitional housing accommodations described under this section may be operated by private persons or nonprofit organizations. The shared facilities of the campgrounds are subject to regulation under the recreation park specialty code described under ORS 446.310 to 446.350. The transitional housing accommodations are not subject to ORS chapter 90.

(4) To the extent deemed relevant by the Department of Consumer and Business Services, the construction and installation of yurts on campgrounds used for providing transitional housing accommodations established under this section is subject to the manufactured structures specialty code described in ORS 446.155. Transitional housing accommodations not appurtenant to a yurt are subject to regulation as provided under subsection (3) of this section.

(5) Campgrounds established for providing transitional housing accommodations shall not be allowed on more than two parcels in a municipality. In approving the use of parcels for a campground, the municipality shall give preference to locations that have access to grocery stores and public transit services.

(6) As used in this section, "yurt" means a round, domed tent of canvas or other weather resistant material, having a rigid framework, wooden floor, one or more windows or skylights and that may have plumbing, electrical service or heat. [1999 c.758 §6]

446.325 Exemptions from license requirement.

(1) Public entities, private persons or nonprofit organizations described under ORS 446.265 (3), timber companies and private utilities shall not establish or operate a recreation park without complying with the rules of the Oregon Health Authority and securing the approval of the Director of the Oregon Health Authority or designee but shall be exempt from the licensing requirement of ORS

446.320. The director or designee may delegate, to a health official having sufficient environmental health specialists, the authority to approve such recreation parks.

(2) ORS 446.310 to 446.350 do not apply to: (a) Any structure designed for and occupied as a single family residence in which no more than two sleeping rooms are provided on a daily or weekly basis for the use of no more than a total of six travelers or transients at any one time for a charge or fee paid or to be paid for the rental or use of the facilities; b) Any temporary camping sites used solely and incidentally in the course of backpacking, hiking, horseback packing, canoeing, rafting or other expedition, unless the expedition is part of an organizational camp program; or (c) A yurt, as defined in ORS 446.265, that is used as a living unit in transitional housing accommodations. [1969 c.533 §4; 1983 c.707 §10; 1999 c.758 §8; 2003 c.547 §113; 2009 c.595 §817]

446.330 Rules.

In accordance with ORS chapter 183, the Oregon Health Authority may adopt any rules necessary for the administration of ORS 446.310 to 446.350 and 446.990, including but not limited to rules, concerning the construction, operation and use of tourist facilities that are necessary to protect the health and welfare of persons using these facilities. The rules shall pertain but not be restricted to water supply, final sewage disposal, surface drainage, maintenance, insect and rodent control, garbage disposal, designation and maintenance of camping space and the cleanliness of the premises. [1969 c.533 §5; 1973 c.560 §16; 1983 c.707 §16; 1985 c.809 §2; 2009 c.595 §818].

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