

CONCEPT

Terrawood is a veteran living community centered around social sustainability that allows the residents to be involved in the community and have a strong sense of belonging and safety. Terrawood facilitates support to help the transition back to civilian life after service with the Canadian Armed Forces. Social sustainability is implemented in the design by the use of natural materials and organic forms to create a supportive environment. Connection to the surrounding landscape is central to the design as natural light and biophilia will be used to create an enhanced quality of life.

MATERIAL CONSIDERATIONS

- Installation of vinyl wood flooring throughout the space in consideration of acoustical efficiency and sustainable material use in a commercial setting
- Consistent installation of local lightweight pine with a low-VOC stain on wall millwork behind reception, residential unit facades, flex space, and on the drop-down ceiling featured in the multi-purpose room
- Hardware in the space will mostly consist of copper material for its inherent antimicrobial properties and suitability for post-pandemic times
- LEED compliant textile and carpet materials with an antimicrobial treatment
- Seamless, non-porous solid surface countertop for easy sanitation and durability

RESEARCH

Social Sustainability

The ability to understand what users need in a space with consideration of their well-being is a key element in designing a living community. According to David Sim and Jan Gehl's *Soft City*, one of the principles that establish a socially sustainable design is providing a choice to users in an enclosed space. This can be done by creating a versatile design that accommodates all user's social needs. Another principle is prioritizing walking needs. This includes layout consistency, spacious sidewalks, and varied surfaces. The last principle is the flexible correlation between indoor and outdoor space. The design can "invite indoor activities out and outdoor activities in," allowing users to recognize nature as part of the designed infrastructure.

Covid-19 Adaptations/ Materials

Due to the Covid-19 pandemic, maintaining social distance from one another has become a worldwide practice that prevents the spread of the virus. This is one of the many challenging adaptations that is taken into consideration in the design industry. Ensuring a 6ft wide primary circulation and low-contact design solutions are crucial as this complies with today's health requirements. Partitions and divisions are also vital as this instantly creates a separation without restricting the option for an open layout. Lastly, a study from *The New England Journal of Medicine* discovered that SARS-CoV-2 (Covid-19 virus) remains active for a longer period of time on some materials. It lasts for 2-3 days on plastic and stainless-steel surfaces, 24 hours on cardboard, and 4 hours on copper. They recognize that copper and its alloys are naturally antimicrobial. Microbe-killing agents added in paint and primers, and other self-cleaning materials are also available.

Veteran's Needs

For veterans, many factors influence the transition back to civilian life. Finding and keeping jobs can be difficult as military experience does not always translate into civilian employment qualifications and many veterans feel as though they are starting over completely. Mental health is one of the biggest challenges veterans face with increased numbers of PTSD and/or depression and substance abuse/self-medication. Often employers are unwilling to hire a veteran with suspected mental health issues. According to the *Pew research center*, "One out of every ten veterans alive today was seriously injured at some point while serving in the military, and three-quarters of those injuries occurred in combat." 46% of unemployed disabled veterans say that their disability is preventing them from getting a job. Civilian life differs greatly from the structured cohesion many veterans are used to and there is a strong military identity that veterans feel. After leaving the military, veterans often have difficulty connecting with civilians, resulting in loneliness but find comfort around people with similar experiences and shared military identity.

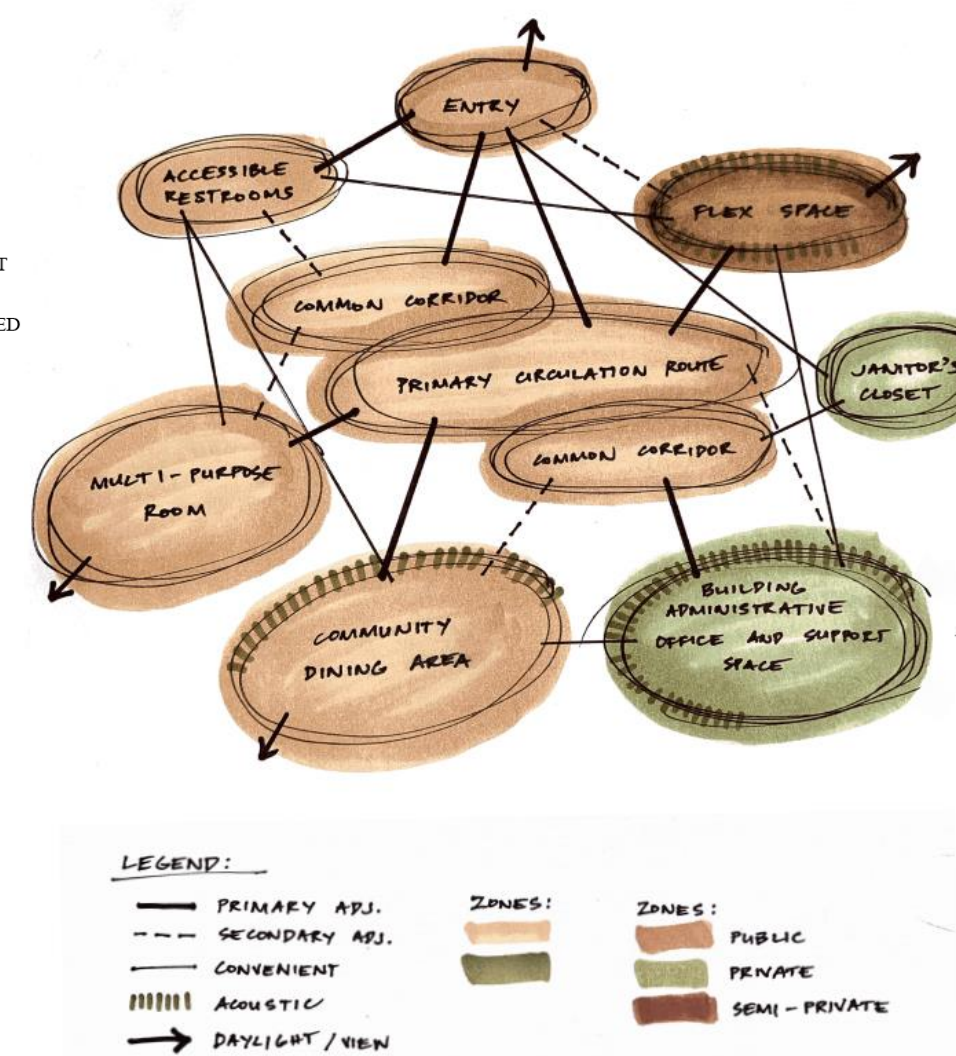
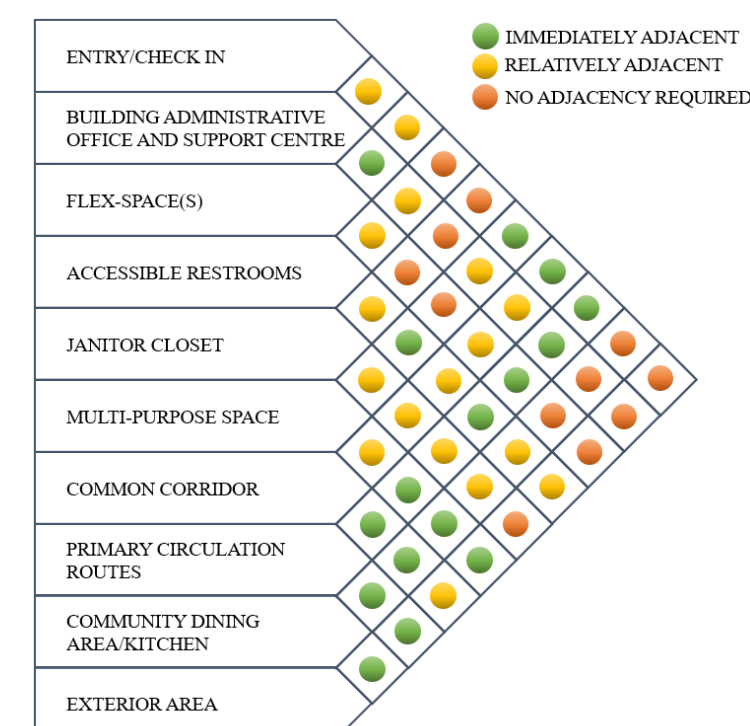
Social Infrastructure

Understanding social infrastructure as it relates to both fundamental physiological and emotional needs is important when designing healthy and functional spaces. Designers have the ability to create spaces where people connect, learn, and support each other. According to Bijl-Brouwer, in order to design for social infrastructures, we need to put "service professionals and their colleagues at the center." It is to encourage human beings to continuously support and empower each other and themselves that we are to design such spaces.

Universal Access Requirements

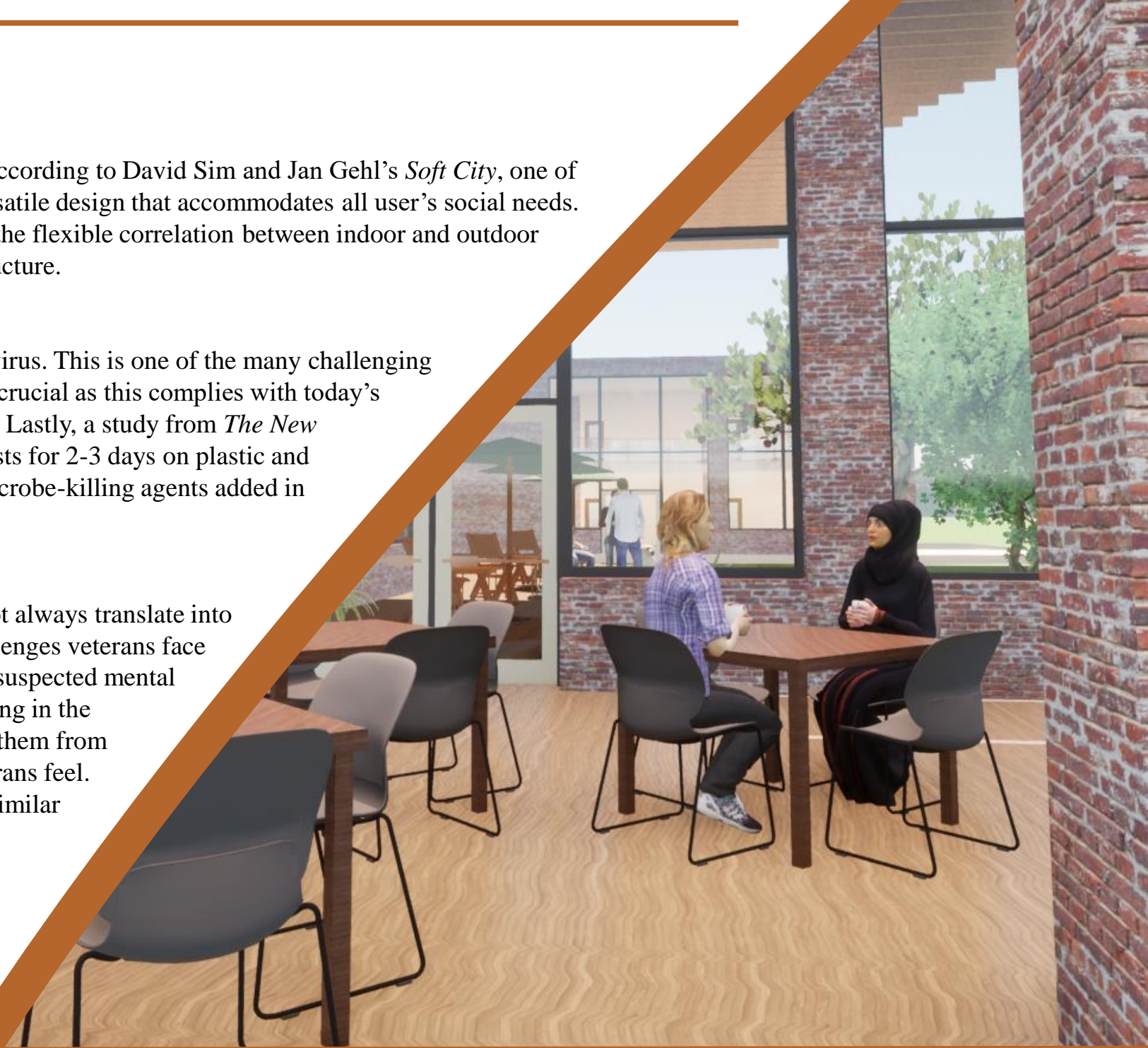
Rocque, Langevin, Chalhouni, and Gorayeb describe methods of designing that can achieve universal accessibility. The first is inclusive design: to meet the needs of the largest possible number of potential users. The second is specific design: to meet the needs of users with specific challenges which inclusive design does not yet offer a solution. According to *Universal Design Project 2020*, seven principles are widely recognized as key considerations for effective universal design: equitable use, flexibility in use, simple and intuitive use, perceptible information, tolerance for error, low physical effort, and size and space for approach. Examples of features and considerations that facilitate accessibility are ample handrails, tactile indicators, accessible restrooms, turning circles, low profile transitions between flooring, acoustical controls, and quality of lighting.

DEVELOPMENT



OBJECTIVES

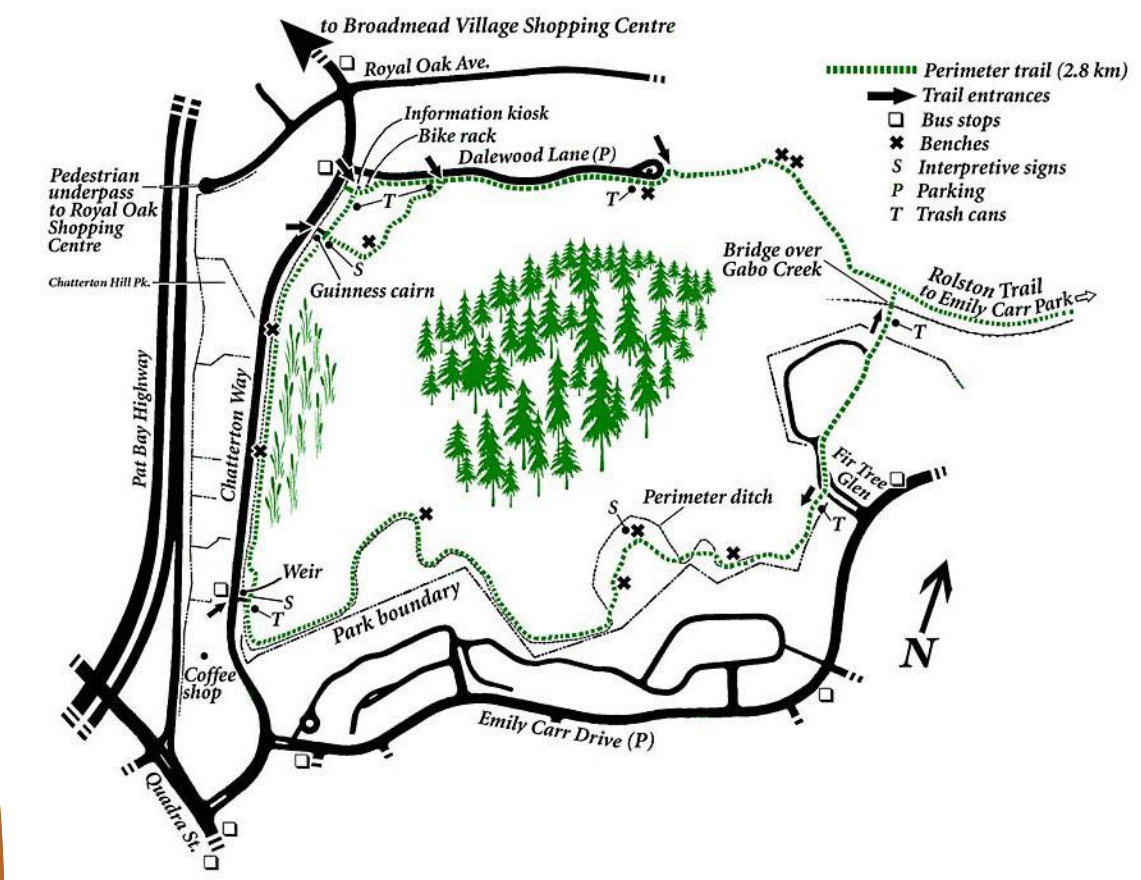
- 1 To promote well-being by fostering a supportive community and providing mental health services in an inviting space that incorporates nature in the design
- 2 To stimulate active living by making walking a priority throughout the space and giving the users the flexibility to choose and make use of the space however is needed
- 3 To design a universally accessible space with an open-concept organic layout that caters to all social needs, spacious circulation routes, and Covid-19 adaptable finishes/materials



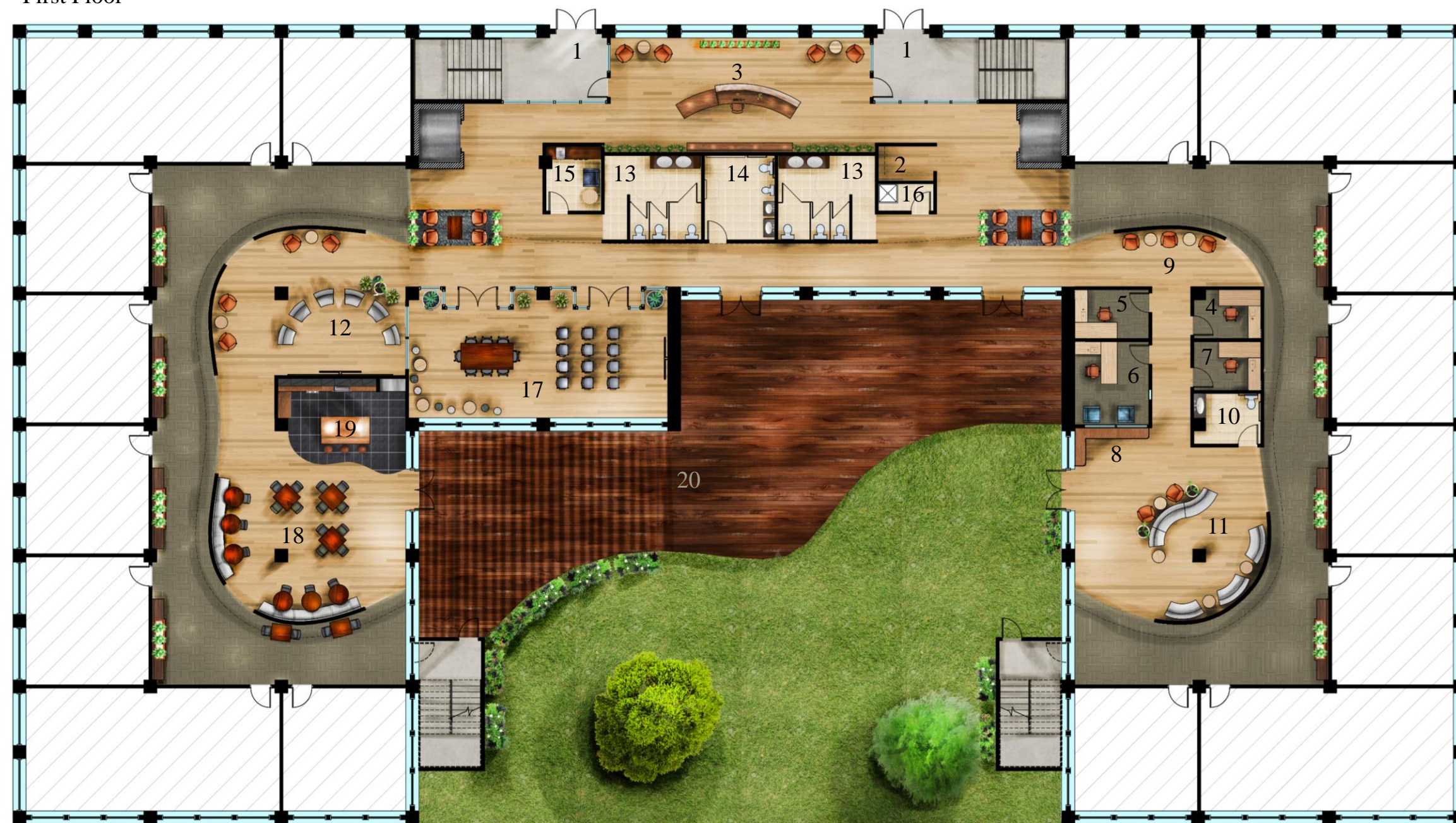


LOCATION

The proposed location for Terrawood is in the Royal Oak region of Saanich, BC. This area is out of the crowded downtown but still benefits from the amenities and job opportunities of the big city. The location has many beautiful parks and nature reserves with plenty of amenities within walking distance. The veteran community will be backed onto the beautiful Rithet's Bog Park with the courtyard opening to the gently sloping hills. There is a pedestrian underpass to the Royal Oak Shopping Centre and a road to the Broadmead Village Shopping Centre. Both centres have amenities such as grocery stores and restaurants less than a kilometre (0.62 Miles) away. According to Veteran's Affairs Canada, there are 9,211 veterans in the Victoria area as Victoria is the capital city of British Columbia and home to Canadian Forces Base Esquimalt.



First Floor



1. ENTRY – 24/7 monitored front desk
2. MAIL ROOM – Accommodates 40 personal postal boxes
3. CHECK IN – Includes a barrier-free accessible reception desk
4. BUILDING MANAGER'S OFFICE – Private office
5. MGR. OF VET. SUPPORT SERVICES' OFFICE – Private office
6. HEAD OF COUNSELING SERVICES' OFFICE – One-on-one counseling
7. ADMINISTRATION ASSISTANT'S OFFICE – Private office
8. COPY & FILING AREA – Resource area for staff members
9. WAITING AREA FOR COUNSELING – Accommodates 3-4 people
10. STAFF RESTROOM – Private, (equally accessible as the public restrooms)
11. FLEX SPACE 1 – Small group gatherings and discussion/meeting space
12. FLEX SPACE 2 – Lounge with electric fireplace and television, flexible furniture seating to open to the main corridor when needed.
13. GENDER NEUTRAL RESTROOMS (X2)- Universally accessible with no-touch "labyrinth" style washroom entrances
14. FAMILY RESTROOM – Available for public use
15. LACTATION ROOM – Available for public use
16. JANITOR CLOSET – Only accessible to staff members
17. MULTI-PURPOSE SPACE(S) – Flexible configuration for larger gatherings when appropriate, features a drop-down wooden ceiling for acoustic control.
18. COMMUNITY DINING AREA – Space for community members to bring their own meals, located beside the exterior area
19. COMMUNITY KITCHEN – Space for meals to be prepared (either by residents or vendors) when appropriate. May also host cooking classes
20. EXTERIOR AREA – Large deck for gathering and seating for outdoor eating, opens to a large yard for service animals

A mezzanine curves around each side of the double volume community space, allowing access to the units on the second floor.

