

A photograph of a crowd of people at a protest, overlaid with a semi-transparent green filter. In the center, a person holds a sign that reads "#MARCH 4WOMEN". Other signs are visible in the background, some with the letter "W".

# A CLIENT-FOCUSED ABORTION HEALTH CENTRE

Creating a sense of comfort and security through the built environment

**Kara Boboski**





## **A Client-Focused Abortion Health Centre:**

Creating a sense of comfort and security through the  
built environment

A Practicum Submitted to the Faculty of Graduate Studies  
of The University of Manitoba in partial fulfillment of the  
requirements of the degree of

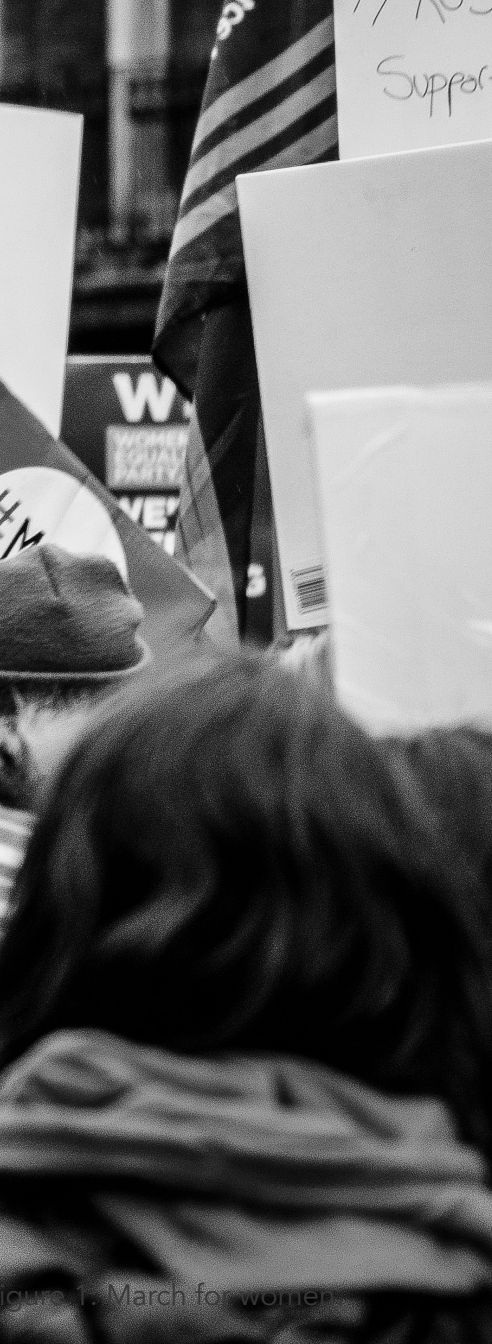
## **Master of Interior Design**

Department of Interior Design  
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## ABSTRACT

Despite political advancements surrounded by abortion rights, issues of comfort and anxiety within abortion provider facilities still remain. Those who undergo an abortion may be faced with difficult situations that can place them in a vulnerable and emotional position. The intent of this practicum was to highlight the issues faced by both clients, and healthcare providers involved with abortion provider facilities, and address these challenges through design interventions.

This practicum took into account issues of safety, comfort, and anxiety through a combination of theoretical literature, design precedents, and programming. Concepts that informed this practicum include supportive design theory and positive distractions explored by theorist Roger Ulrich, environmental comfort, and security techniques. This design practicum proposes a client-focused abortion health centre for the city of Winnipeg, Manitoba, Canada, aiming to support the emotional and physical well-being of the users in the facility.



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## IMPORTANT TERMS AND ACRONYMS

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**Abortion:** “The termination of a pregnancy, resulting in the expulsion of the embryo or fetus” (Merriam-Webster, 2018).

**Abortion Provider Facility (APF):** The clinical setting in which the termination of pregnancies occur by professional medical personnel. This term is used in lieu of the term clinic, as not every facility which provides abortions is a clinic, and may also provide other health services.

**Anxiety:** “Feeling uneasy or nervous over an impending or anticipated ill” (Merriam-Webster, 2018).

**Client:** A person receiving professional medical advice or care. Client is used in the context of this practicum as the term patient holds an insitutional connotation. Furthermore, the term client is also used in lieu of the term woman as it is gender inclusive, and not all biological women may identify as such.

**Comfort:** “To give strength and hope, or to ease the grief of trouble” (Merriam-Webster, 2018).

**Security:** “Freedom from danger, fear or anxiety” (Merriam-Webster, 2018).

**Well-Being:** “The state of being happy, healthy, or prosperous” (Merriam-Webster, 2018).

**VR (Virtual Reality):** “An artificial environment which is experienced through sensory stimuli (such as sights and sounds) provided by a computer and in which one’s actions partially determine what happens in the environment” (Merriam-Webster, 2018).

# 1

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# PROJECT OVERVIEW

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# 1 INTRODUCTION

This practicum focuses on the design of a client-focused abortion health centre for the city of Winnipeg, Manitoba, Canada. The establishment of legal abortion providers has led to a substantial decrease in fatalities and injury related to abortions in Canada. However, issues of comfort and anxiety within abortion provider facilities (APFs) still remain. The research for this practicum focuses primarily on issues surrounding abortion providers and women undergoing an abortion.

## 1.2 PURPOSE

The intent of this practicum was to highlight the numerous challenges that women may face when terminating pregnancies and address these challenges with design interventions. Through the design of the built environment, this practicum took into account issues of safety, comfort, and anxiety for both women undergoing an abortion and respective staff members. A combination of theoretical literature, design precedents, and programming were used to inform the design decisions of this project.

## 1.3 OBJECTIVES

The objectives of this project address both the physical and emotional needs of both staff members and women undergoing abortions at an abortion provider facility. Many women who terminate their pregnancies may be faced with difficult situations that can place them in a vulnerable and emotional position. The aim of this project was to impose a sense of comfort within the setting of an abortion provider, while mitigating stress and anxiety. The design of the abortion health centre reduces stressors by implementing

supportive design theory, positive distractions, environmental comfort, and security techniques that support the emotional and physical well-being of the users in the facility.

## **1.4 RATIONALE & CONTEXT**

The inspiration for this practicum came from the lack of public discussion around abortion, and the stigma surrounding a common medical procedure. In Canada 80% of women use some form of contraception. However, nearly 50% of pregnancies in Canada are unplanned (The Society of Obstetricians and Gynecologists of Canada [SOGC], n.d.). As a result, for every 1,000 pregnancies, 12-16 of them are terminated annually (Stettner, 2002). Today, abortion procedures are extremely safe, with a success rate of almost 100 percent. In 2016, 98% of women who had an abortion reported zero complications (Abortion Rights Coalition of Canada, 2018). The commonality of abortions in Canada have progressed tremendously thanks to many tenacious women's rights activists.

When it comes to reproductive rights, Canada has a unique history. In the late 1960's, Doctor Henry Morgentaler led a movement paving the way for abortion rights. Dr. Morgentaler sought to provide a safe and legal platform for women to seek abortions. As a result, the Supreme Court of Canada ruled to decriminalize access to abortion in 1969, eventually leading to universal access.

In the context of Manitoba, the roadblocks of abortion rights have been slowly erased, making abortions safer and more accessible. Prior to the legalization of the procedure, thousands of women were injured from unsafe abortion methods (Abortion Rights Coalition of Canada, 2018a). Despite the threat of life imprisonment, many illegal abortions were still performed in support of women wishing to abort (Stettner, 2002).

Today, abortion services in Manitoba are limited to a mere three APFs, including two in Winnipeg and one in Brandon. With a population of 1.3 million people this can be problematic, especially for Northern residents. It can be quite difficult and sometimes impossible for women living in rural areas to have abortions as they are forced to travel far distances. The current ratio of APF's in Manitoba is 1 to 320,500 people, slightly below that of larger provinces such as Ontario or British Columbia(Canadian Health Coalition & Action Canada for Sexual Health and Rights, n.d.).

The apparent lack of abortion providers has resulted in wait times as long as three weeks, and that's just for a consultation. This can be a challenge for women as abortions are a time sensitive process. The waiting period is imperative as medical abortions are only available up to nine weeks gestation, and surgical abortions up to 19 weeks in Manitoba (Abortion Rights Coalition of Canada, 2018).

Following universal access to abortion in Manitoba, the medication (Mifegymiso) for medical abortions became approved for use in 2005. Initially, Mifegymiso was only available through prescriptions from doctors who had received specific training. However, legislation has progressively changed allowing any physician to prescribe, and pharmacist to dispense the medication (Health Canada, n.d.).

While initially the medication was only available out-of-pocket, it is now currently covered by Medicare (Canada's publicly funded health system) through the three provincially funded abortion providers in Manitoba. Otherwise, the medication can cost women upwards of \$350. In comparison to other provinces such as Alberta, New Brunswick, Ontario and Quebec, these costs are covered under universal cost coverage to anyone with a health card (Action Canada, n.d.).

In light of these facts, it is evident that accessing abortions services in Manitoba can be a challenging and stressful process none the less. With that in mind, the premise for this project was based on the growing need for abortion providers in Manitoba, launching an exploration into ways in which APFs can be enhanced with client comfort in mind.

## 1.5 QUESTIONS OF INQUIRY

This practicum was based around three questions of inquiry. These questions were formed in response to the difficulties that staff and women undergoing an abortion often face.

1. How can positive distraction inform the design of a comfortable and stress-free environment for women who choose to undergo abortion?
2. How can security measures meet the needs of an abortion provider facility without imposing distress on clients or staff?
3. How can the design of an abortion provider facility respond to the users' emotional and physical needs?

# 2

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# LITERATURE REVIEW

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## 2.1 INTRODUCTION

Trauma, shame, and intimidation represent only a handful of emotions that clients may often experience during an abortion (Kimport, et al., 2012). It is no wonder, then, that experiences within an APF are often seen as negative. Waiting in a clinic is not a pleasant experience. In fact, many people who visit healthcare typologies in general, experience significant amounts of stress (Sherwin et al., 2013). Those undergoing an abortion frequently experience this type of stress to an even further extent.

According to Lie, Robson, and May (2008), who conducted a narrative review of qualitative studies on the experiences of an abortion, the decision to terminate a pregnancy can come with numerous emotions. These emotions include guilt, distress, anxiety, grief, and emptiness. The study highlighted a correlation found between these experiences and gestational age. The clients perceived medical termination as a ‘loss’, while surgical termination was perceived as a ‘death’ (Lie, Robson & May, 2008, p.5). This study highlights just how intense emotions can be for those undergoing an abortion. The client’s perceptions of loss and death demonstrate the feelings of grief that may occur in the process of termination, emphasizing the sensitivity of APF environments.

Due to the complex nature of abortions, the appointments for such tend to be long-winded, frequently reflecting negatively on the clients who are undergoing an abortion. Intense emotions paired with the taxing nature of an abortion appointment can largely influence a client’s experience at an APF. The design of healthcare environments and APF’s can influence the well-being of clients and greatly affect their psychological needs. This practicum project demonstrates why thoughtful design of the built environment can be important in the context of an APF.

The following chapter addresses the challenges faced by clients in the context of an APF by reviewing literature, precedents, and programming. The literature review was conducted from the perspective of client’s experiential accounts within existing APF’s. These narratives offered a lens to examine challenges faced by

clients, while providing a platform to which this research was based on.

The theory of supportive design explored ways in which the physical environment can impact a client's experience with the presence of stress in healthcare settings. The theories of positive distraction and environmental comfort outlined the various ways that sensorial qualities can contribute or detract from a positive patient experience. The analysis of positive distraction and supportive design demonstrated that the built environment could elicit an emotional response, which can then be manipulated to provoke positive reactions. Lastly, various security techniques were explored to gain an understanding of potential security schemes that can benefit APF's, without imposing negative perceptions on the users.

It is apparent that the environments of APF's are conducive to stress and anxiety. The challenge of this practicum was to address stress and anxiety, which can become exasperated with poor design decisions. The exploration of supportive design, positive distraction, environmental comfort, and security techniques informed the design of an environment with goals of supporting both visitor and staff well-being.

## **2.2 SUPPORTIVE DESIGN**

Everyone experiences stress at one time or another, and is an ordinary experience of life. Stress can be helpful at times, but it can also defy one's sense of well-being. As mentioned earlier, poor healthcare design can have adverse effects on users. Some of the consequences include experiences of anxiety, delirium, elevated blood pressure, and even an increased intake of pain medication (Ulrich, 1991). Stress is ultimately caused by stressors, which are defined as environmental stimuli (Ulrich, 1991). Stressors can also vary in an extensive list of factors involving severity, controllability, predictability, ambiguity, uncertainty, complexity, volatility, chronicity, and intermittence (Ainsman, 2015). The built environment is conducive to said stressors when designed without consideration of such, especially within an APF.



Theorist Roger Ulrich (1991), emphasizes the effects of poor healthcare design through his theory of supportive design. The theory is based on the principle that design in which is supportive, should foster opportunities for clients to cope with stress and promote wellness. These opportunities include (a) access to positive distractions in physical surroundings (b) a sense of control with respect to physical-social surroundings, and (c) access to social support (Ulrich, 1991). With this in mind, it can be difficult to achieve the feeling of wellness when stress is present, especially in the setting of an APF. By drawing on the findings of Ulrich's studies, one can develop an informed decision during the design process of by ensuring there are ample opportunities for user wellness.

### 2.2.2 Stress

*“My anxiety and stress were so intense that my brain shut off and went into survival mode, kind of like I was meditating.”*

(throwaway27394725254, 2019)

The theory of supportive to design proposes that healthcare facilities should refrain from presenting obstacles to coping with stress, and should not contain stressors (Ulrich, 1991). While Cyrus Martin (2014) suggests stress is normal and a vital component of the life cycle, stress can also cause adverse psychological and physiological effects. Much like Martin, Hymie Ainsman (2015), suggests that while stress is seen as a negative aspect, it can also have beneficial influences on the mind and body. Stress triggers a sense of alertness, preparing the body to deal with potentially harmful events (Ainsman, 2015). This premise highlights a significant question surrounding these two sides of stress. That is, at what point do these stressors become beneficial or adverse? The examination of how stress is derived can shed light on the topic, so as to prevent certain stress-inducing scenarios within the built environment.

A few instances of stressors that can occur in the setting of an APF include lack of personal control and privacy, presence of protesters, separation from support persons, and undesirable environmental factors such as lighting, temperature, and noise. For instance, poorly designed wayfinding techniques are a common

obstacle in healthcare typologies. If it is unclear where to go, visitors arriving for their appointment can have trouble navigating the environment. This can cause confusion and frustration. The disorientation, in turn, can create a traumatic event for the visitor. These types of scenarios are referred to as “hard settings”, which are situations that contain features that are in themselves stressors. Hard settings raise obstacles to coping with stress and increase the total burden of illness, or in this case, the terminating of a pregnancy (Ulrich, 1991).

While the environment of an APF can be seen as a hard setting in itself, the implementation of stress-reducing features can assist in lessening the effects of these hard settings. On one hand, some clients can avoid these hard settings entirely by opting for a medical termination. Medical terminations enable women to experience an abortion in the comforts of whichever environment they choose, with whomever they choose. This allows them to bypass the stressors that come with surgical termination. However, medical termination is not always an option, and some women may have no other choice than to have a surgical abortion. Nevertheless, whether they are in favour of the surgical abortion or not, the stressors can still be present.

With respect to hard settings, there are several aspects of an abortion that can be daunting for women. The thought of undergoing a procedure including needles and noisy equipment is a common point of apprehension and may impose a deep sense of stress and uncertainty. Young females especially, who have not been exposed to healthcare environments as much as geriatric clients, for example, can be particularly hesitant about such a procedure.

A volunteer APF counsellor in Winnipeg has indicated that the majority of the clients in which she counsels prior to the abortion are most anxious about what to expect during the procedure itself. She has expressed that the thought of having an intravenous line administered is particularly discouraging for many young females (Anonymous, 2018). On top of that, those choosing to terminate their pregnancies may also feel anxious about undergoing an irreversible procedure. While some people are absolutely certain about the

decision to terminate, some can feel quite conflicted. In light of this, both environmental and psychological influences can play a role in client stress, especially when there are unknown factors involved.

With these aspects in mind, steps should be taken to reduce the effects of these stressors in order to design a facility that can be supportive of its users. Ulrich (1991), believes it is important to consider targeting stress-reducing features to combat hard settings. These features include control with respect to physical-social surroundings, social support, and positive distraction which will be discussed in the following sections.

### 2.2.3 Control and Privacy

*“The pre-op “meet the doctor” room was incredibly dated and creepy, and having a window next to me in the operating room that felt more like a weird strip mall, alongside other fears, ultimately led to a complete panic attack where I bailed and ended up getting a medical abortion at home.”*

(Ecosynn, 2018)

The routines established in hospitals and institutions alike, can impose a feeling of powerlessness among clients and visitors. Limited in their range of activities and little control over the surrounding physical environment, clients often feel helpless in healthcare institutions (Andrade and Devlin, 2015). Undesirable noise, confusing aspects of wayfinding, invasion of privacy, and lack of control over lighting and temperature, are all factors that may diminish one’s sense of control (Ulrich, 1991). Although, when an individual has control over a particular stressor, the negative effects of the stressor are reduced or even eliminated altogether (Evans and Cohen, 1987). While it may be challenging to offer clients complete control over their surroundings, it is possible to address some of these stressors through the design of the facility itself.

To foster a sense of control and privacy for visitors, Ulrich (1991) suggests providing choice in contact along with flexibility within the space. Choice in contact involves providing visitors with options for

both privacy and socialization. Providing environmental flexibility along with various options for visitors can help facilitate choice in contact. The option for privacy and social contact can be imperative for an APF. Clients with previous experience at an APF have conveyed a desire for some form of privacy to be able to express their feelings in private (Abortion, n.d.). For instance, an open waiting room can be seen as an obstacle to someone awaiting an abortion as they may feel uncomfortable displaying their emotions to others. The lack of privacy can subsequently force them to suppress their emotions. They might be uncomfortable revealing intense emotions around strangers, therefore restricting their ability to cope with stress at that present time.

On the contrary, others may desire the opposite, finding solace by confiding in others. Helen Malcolm (2005), sheds light on the design of hospital spaces in her article “Does Privacy Matter? Former patients discuss their perceptions of privacy in shared hospital rooms”. In one of the studies conducted by Malcolm (2005), participants positively identified with shared hospital rooms as a form of support and camaraderie. However, the participants also emphasized the need for privacy when it came to sensitive conversations.

Everyone has varying levels of desired privacy that can differ depending on the scenario. Offering a choice in contact affords the opportunity for both privacy and socialization. However, in a healthcare setting, privacy is at times difficult to achieve when client observation is involved. Malcolm (2015) suggests hospitals are primarily designed for the observation of clients, acting as a limiting factor for individual privacy. In most healthcare scenarios, observation is a significant part of treatment. However, opportunities for observation can come at the cost of client privacy.

Many hospitals and clinics attempt to address privacy by implementing curtains for the division of client spaces. While this solution may seem to address choice in contact for visitors through operability, it may also have negative implications. When considering individual privacy, curtains can be problematic as they act as a visual barrier but do not consistently offer acoustic privacy. Participants in Malcolm’s study felt the use of fabric for privacy was inadequate from preventing others from overhearing conversations.

This created a sense of awareness among the participants ultimately causing distress knowing all of their conversations could be overheard (Malcolm, 2005).

In contrast, some individuals may not desire any control at all. Authors Claudia Andrade and Ann Devlin (2015) investigated the delivery of education and support to surgical patients. This type of support had positive effects on patient well-being as it increased and maintained the patients' sense of control. However, Andrade and Devlin (2015) suggest that increasing perceived control may even have adverse effects. Due to differing client needs, some may demand more medical information than others. Rather than decreasing client stress, perceived control could potentially have the reverse effect. As a result, stress can be increased in the event that the control brings undesirable requirements to the patient (Andrade and Devlin, 2015). With this side of perceived control in mind, care should be taken when designing healthcare spaces so as not to impose unfavorable demands on visitors.

Control can also be imposed through the presentation of selection by offering opportunities for choice. For example, one study found a positive recognition of control with respect to soundscape selection. The study involved giving clients the opportunity to choose their preferred nature-based sound. The findings concluded that the patient's sense of control was recognized with positive responses (Vahid Saadatmand, 2012).

Furthermore, several studies conducted in regards to patient control in healthcare environments found positive results in providing patients with control over their room. These methods allowed the clients to select art for their rooms and provided space to pin up their own decorations. While this approach is unfeasible within an out-patient type of facility, perhaps less permanent solutions can be explored. Interior architect Sally Danker (2017) suggests color-changing lights as a flexible option to manipulate the environment. This approach offers visitors a slight degree of control by providing them with the option to influence the aura of their immediate surroundings through the controllable light hues.

Another aspect that can help to provide a sense of control is the flexibility of space. Ulrich (1991) points out that bulky immobile furniture can prevent flexibility and should be avoided. The implementation of light furniture that is easy to maneuver, allows users to manipulate the space to their preferred level of comfort. For instance, movable seating in waiting spaces allows visitors to determine their preferred degree of contact by allowing them to arrange the seating themselves.

It is clear that clients value a degree of both visual and auditory privacy, as the effects of little or no privacy can be damaging to their immediate well-being. These hard settings can create feelings of vulnerability, and loss of control. However, at what point can privacy be achieved while still enabling the opportunity for staff to monitor clients, and camaraderie amongst visitors?

In this instance, it would be beneficial to provide alternative options for social contact. Offering a flexible environment would contribute to the overall sense of control for the patient by presenting them with the opportunity for both socialization and privacy. Visitors can decide for themselves how much or how little they want to interact with the surrounding environment when they have a choice in contact. Controllable amenities can also instill a sense of control. However, it is critical to help visitors understand how to use such amenities and controls in order for them to be beneficial (Andrade and Devlin, 2015).

While Ulrich promotes control as a component of patient well-being, it should be implemented in ways that visitors can understand. Visitors need to be aware of their ability to control in a given environment in order to take advantage of the benefits mentioned above. In theory, flexibility, and operable devices are an effective method in providing control. However, the efficacy of this method relies on educating the visitor of these features. When implementing controllable qualities into the design of an APE, their features should be unambiguous to ensure the usefulness of said features.

#### 2.2.4 Social Support

*“I chatted with the other people there for surgical abortions, whose stories I will not share for privacy’s sake, but they came from all walks of life.”*

(SlippingStar, 2017)

When facing personal hardships, one often turns to their friends and family for support. A support system of close people can offer consolation during these difficult times. Abortion procedures are far from enjoyable and even frightening for some, and can sometimes impose feelings of uncertainty. It comes with no surprise then, that social support is often beneficial to the well-being of clients. Seeking companionship from close friends, family, or partners can encourage positive outcomes for coping. In fact, social support is one of the most effective coping strategies for one to lessen the negative impact of stress (Kim et al., 2006).

To foster social support amongst those undergoing an abortion, the accommodation of their loved ones must be considered. Most APF’s do not allow accompaniment past the admission stage of the appointment, due mostly to privacy and security reasons. However, leaving behind their person of support is often a point of apprehension for clients. Unfortunately, these types of policies clash with the emotional needs of those undergoing an abortion, yielding a potential challenge for APF’s. That is, how can the design of such a sensitive space respect the privacy and safety of others while promoting social support?

One solution could involve the encouragement of camaraderie amongst the clients themselves who are undergoing an abortion. The clients spend a great deal of time in the waiting spaces prior to the procedure. These areas could then be configured in ways that support socialization amongst the clients to potentially fill in for the lack of personal support person.

One study conducted in two Danish hospitals examined the exchanges between oncology patients. Within the shared hospital rooms, companionship and support was observed amongst the patients (Larsen, Larsen, & Birkelund, 2013). Based on observation and questionnaires, researchers Larsen, Larsen and Birkelund (2013) found that 18 of the 20 participants preferred a shared room, with the exception of being

too ill for socialization. One client expressed the ease of bonding with others over their common illness, despite not knowing one another (Larsen, Larsen, & Birkelund, 2013). Another client recognized the benefits of companionship by “throwing [their] reservations overboard” and conversing with “a fellow sufferer” (Lene Søndergard Larsen, Birte Hedegaard Larsen, & Regner Birkelund, 2013, 398). It seems that the mutual conditions of the patient’s illnesses prompted a platform for camaraderie amongst the shared rooms. The commonality of facing similar conditions allows clients to identify with each other, despite differences in personality.

Those undergoing abortions come from diverse backgrounds and circumstances. The one clear commonality that they do share is the experience of an abortion procedure. Similar to the oncology patients, the clients can turn to each other for support when experiencing the difficulties of an abortion. While some may have support persons to accompany them during the appointment, many are alone. Taking this into account, the environment of the clinic should be designed in such a way that can foster social interaction amongst the clients themselves.

In light of this, studies have found a reduction in social interaction when waiting area seating is arranged in a row, or along the wall. Social interaction was found to be even further affected when heavy immobile furniture is used, inhibiting the opportunity for interaction among visitors (Ulrich, 1991). By simply rearranging the furniture from linear formations into more intimate groupings, social support amongst visitors can be further encouraged (Ulrich, 1991).

As discussed earlier in regard to control, light, movable furniture should be used to facilitate such groupings. Flexible and configurable seating can allow for easy adjustment, providing the opportunity to accommodate the varying needs of the visitors. With this in mind, seating should be arranged in casual and informal ways, steering away from institutional or stark configurations (Vickery, Nyberg, & Whiteaker, 2015). This strategy can help to shift the environment from formal to informal. Thus, promoting a more relaxed setting for socialization amongst visitors.



A practitioner at a Winnipeg APF recognizes the importance of social interaction. She arranges the pre-operation waiting room chairs into small groupings, despite the initial design intention for the chairs to be placed along the wall (Anonymous, 2018). This allows the clients to interact with each other in a face-to-face setting, supporting socialization and mutual support.

Another consideration for social control is the structure of the termination appointments. Perhaps the APF and respective appointments can be restructured to enable further contact with support persons. The APF could be designed in such a way that spaces could accommodate clients with their support persons, while also offering privacy when needed. This might involve two spaces; one private space for clients only, and one for those less concerned about privacy who prefer the accompaniment of their support person. In this instance, however, the price of social support comes at the cost of privacy.

An alternative solution that could also address this matter is the incorporation of private rooms. While this solution will likely have budget and space implications, it would effectively encourage private social support while also providing individual privacy. This solution could involve separate rooms apart from the waiting area, where support persons could wait with the client without impeding on the privacy of others. One consideration with this approach, though, is that client-to-client socialization will then be affected.

Abortions remain a challenging process for people to endure. The recognition of the emotional difficulties can support the well-being of clients when addressed through the planning and design of APF's. Providing a space for support persons can encourage a sense of ease for women attending termination appointments, knowing their trusted support is close by. Although, it is critical to consider the varying social needs of the users as a whole, so as not to take away from one scenario or another. By acknowledging the need for social support, APF's can support the women's emotional needs through flexible environmental interventions to encourage camaraderie amongst one another.

*“I feel like there’s a subversive culture in nursing that doesn’t really want to talk about this, that doesn’t really want to address the expert nurse’s role in abortion care.”*

(Jacobs, 2015, 35)

While clients are a large focus in the setting of an abortion provider facility, it is valuable to think about the employees as well. Healthcare environments are known as a stressful place for clients, but they can equally take a toll on staff too. When healthcare professionals experience stress it can reduce the quality of healthcare experienced, adversely affecting client wellness (Ulrich, 1991). As a result, poorly designed work environments can contribute further to the stress in which healthcare staff experience.

Ulrich emphasizes the importance of breakaway space that can allow employees to escape when needed. This can be implemented into the design of an APF by providing a space that is exclusive to the staff, which also offers a pleasant place to relax. These spaces should also consider the physiological and psychological needs of the employees. Some considerations of an employee break space should involve (a) secure storage for personal belongings, (b) comfortable furniture, (c) a quiet space to take phone calls or break away, and (d) adequate means for the preparation and consumption of meals.

Another aspect to take into consideration is productivity. Ensuring the staff members have the appropriate means to perform their duties is integral to morale. Productivity can be encouraged by providing a dedicated workspace or workstation for practitioners to avoid disruption while performing important tasks (Ulrich, 1991). In the case of an APF, practitioners will require a place where they can fill out charts or enter information into an electronic device from exams and procedures. This can be a small workstation with privacy panels or even a standing work surface in close proximity to the exam and procedure rooms.

Often times these tertiary spaces are overlooked. However, it would be advantageous to also address the needs of staff in a similar manner as those of the clients, as healthcare professionals are ultimately responsible for the well-being of the client. If the staff members are stressed out due to inadequate environmental conditions, it will reflect on the care of the client. Ensuring that the staff members have the proper accommodation to perform their duties will help in maintaining positive morale and productivity.

### 2.3 POSITIVE DISTRACTION

*“During the actual procedure, I just focused on the ceiling, counting the amount of lines or dots on it.”*

(SaltAsparagus7, 2018)

The appointment for a termination procedure is typically a lengthy process. A typical appointment for termination at an APF involves several phases before the procedure itself. These phases also involve a fair amount of waiting. An experience accounted by one client stated that “the entire first appointment last[ed] about an hour and a half, with the ultrasound taking 10 minutes or so and the counseling session maybe 20 minutes, and the rest was waiting time... [Her second] appointment was for 9 am, and [she] wasn’t even called back until about 9:45” (Throw0596away, 2018). During these prolonged appointments, clients can be dealing with unsettling emotions. In these situations, visual and mental stimulation can act as a positive distraction from those emotions and the physical pain that they may be experiencing after the procedure.

The act of distraction is having one’s thoughts or attention drawn away (Merriam-Webster Dictionary, 2018). In the case of stress and anxiety, positive distraction can be a helpful way for people to cope with their emotions in tense situations. Ulrich and Gilpin (2003) define positive distraction as an environmental

feature that elicits positive feelings, and sustains one's attention and interest without taxing or stressing the individual. With this in mind, the follow subcategories of (a) visual distraction, (b) aural distraction, and (c) physical distraction were explored.

One study conducted with laryngoscopy patients explored positive distraction as a visual component. The study found that the use of visual distraction during the procedure reduced overall discomfort, and improved patient experience. Furthermore, researchers found that the implementation of visual distraction in this instance was superior to topical anaesthetic spray (Biggs et al., 2018). Interestingly enough, this type of distraction involved the patient observing the procedure simultaneously as it was performed on a monitor.

This form of distraction, then, can be seen as a capturing of attention. While laryngoscopy procedure distraction is not well suited for an abortion procedure, the act of informing the patient could be. The study suggests that patients reported lower levels of perceived pain while monitoring their procedure. In that case, a visual approach to informing the client about the procedure may be beneficial to women undergoing an abortion. Another way that this strategy could be implemented is to have one of the nurses simply describe each step of the procedure as it happens so that the client can understand what is going on.

Familiarizing women about the process of the abortion may also help reduce anxiety. In fact, previous studies have reported decreased anxiety in women who were given informational material prior to a colposcopy procedure (a procedure in which the cervix is examined the) (Carwile et al., 2014). This type of material can be integrated into the design of the APF in subtle, yet informative ways. Playfully designed posters can be hung as a decorative element in the exam room or waiting room to inform the client, while also acting as a distraction while waiting.

In other instances, research shows that clients exposed to serene pictures while lying down had lower systolic blood pressure (Ulrich & Gilpin 2003). Correspondingly, a study based on colposcopies demonstrated a correlation between visual distraction and reported pain during the procedure. Findings show that women

### **2.3.2 Visual Distraction**

who were exposed to passive, yet pleasing imagery reported less post-procedure pain than patients who were not exposed to the imagery. The distraction in this instance included recognizable nature images on a light diffuser, which were installed within the ceiling of the examination room (Carwile et al., 2014). The restorative effects of nature prove useful in many instances within a healthcare facility, including procedure rooms.

Since the abortion procedure can be one of the most stress-inducing aspects of an abortion, it is noteworthy to consider viewpoints within the procedure room. Since the client lies down on her back for the procedure, the ceiling plane can be used as an opportunity to mitigate stress. An example of this study in practice is the Women's Health Clinic in Winnipeg, Manitoba. The procedure rooms utilize this same form of distraction through the implementation of forest scenes on the light diffusers within the procedure room. This provides a point for women to look at and focus their attention during the procedure.

According to studies conducted by Ulrich (1991), the most effective visual distractions include aspects that have been significant to humans all throughout evolution. These aspects include, (a) happy, laughing, or caring faces, (b) animals, and (c) natural elements such as trees, plants, and water. It has been theorized that these features left their mark on the human species in the form of predispositions, due to the long evolutionary development of humans in natural and social environments (Ulrich, 1991).

### **2.3.3 Nature**

It is evident that there is a desire for human connection to nature, so naturally, there is a positive response when exposed to natural elements. Nature has a common association with positive feelings and serenity, and is proven to promote wellbeing. Nature-based scenes and sounds are known for sustaining positive interest, and as a result, can function as positive distractions. These types of distractions may help block worrisome, or stressful thoughts that women in an APF may be experiencing.

The implementation of nature as a means of healing can be traced back to Ancient Greek culture, where healing temples encompassed natural settings (Dominiczak, 2014). Natural settings or qualities can

reduce exposure to undesirable environmental properties by increasing the distance of the stressors and/or their perceptual salience (Hartig et al., 2014). Natural settings also include a combination of positive physiological and emotional changes.

The theory of psycho-evolution promotes the idea that contact with nature can rapidly induce positive effects for someone experiencing acute stress. In this instance, negative thoughts or feelings are blocked, which in turn promote the reduction of physiological stimulation (Hartig et al., 2014). Studies conducted in both labs and real environments, have consistently found that viewing nature can promote substantial restoration in less than 5 minutes. Evidence for these studies was found in measurements of improved blood pressure, heart activity, muscle tension and brain electrical activity (Ulrich & Gilpin, 2003).

Nature inspired art can be beneficial to the well-being of clients, however, a misinformed selection of the art used in healthcare settings may also have a reverse effect. Natural art is most effective if it includes the following features: “calm or slowly moving water, verdant foliage, flowers, foreground spatial openness, park-like properties, and birds or other nonthreatening wildlife” (Ulrich & Gilpin, 2003).

In light of this, the display of emotionally negative or provocative subject matter should be excluded, including ambiguity or uncertainty. Similarly, art with restricted depth, claustrophobic qualities, or where animals are portrayed staring close up to the viewer should also be avoided as it can seem daunting and intimidating. Abstract art displaying closely spaced repeating edges, optically unstable forms, or movement can also have negative associations (Ulrich & Gilpin, 2003).

Patients who were exposed to pictures with water had expressed fewer signs of stress, however, abstract pictures were found to induce even more stress, than no picture at all (Ulrich & Gilpin 2003). With these factors in mind, art within a clinical setting should depict the following: (a) waterscapes, (b) landscapes, (c) vegetation, and/or (d) figurative art (Ulrich & Gilpin 2003). It is important to consider that art with respect to waterscapes should depict non-turbulent and calm water. Encouraging visual elements include

#### **2.3.4 Content**

visual depth, low-lying hills, mountains, and flowers. However, when choosing images of flowers or gardens, the flowers should be recognizable, and also appear fresh and healthy. Lastly, figurative art should depict emotionally positive facial expressions, or friendly, nurturing relationships among people (Ulrich & Gilpin 2003).

Authors of the textbook “Modern Clinic Design: Strategies for an era of Change” discuss the opportunity of using artwork created by individuals experiencing similar circumstances. The strategy of art as a positive distraction can further encourage diversion and well-being when the visitor can relate to such art. For instance, it is common for oncology treatment centres to display art created by cancer survivors (Vickery, Nyberg, & Whiteaker, 2015).

Displaying physical artwork is a more permanent solution. However, some healthcare institutions have begun capitalizing on technology instead as a means of visual distraction. Subscription or streaming services are available to showcase a series of images or live feeds, rather than one single artwork (Vickery, Nyberg, & Whiteaker, 2015). For example, the Continuous Ambient Relaxation Environment Channel (C.A.R.E.) is a 24-hour program featuring 84 hours worth of peaceful scenes and music (“The C.A.R.E. Channel - Relaxation Programming for Patients,” n.d.). Other instances of dynamic visual distractions include virtual aquariums, water features, and even virtual fireplaces (Vickery, Nyberg, & Whiteaker, 2015). Physical artwork can be used in combination with dynamic environmental features such as streaming networks and virtual fireplaces or aquariums to cater to varying levels of visitor interest within APF’s.

### **2.3.5 Aural Distraction**

While Ulrich and Gilpin focus on visual distractions, positive distraction can also include aural distractions. Positive aural distraction can come from music and other pleasing soundtracks, such as nature-based sounds. A study conducted by Vahid Staadatmand examined mechanically ventilated patients and the effects of nature-based sounds on their physiological responses that arose from anxiety. Findings concluded that nature-based sounds were, in fact, an effective method for decreasing potentially harmful

physiological responses (Vahid Saadatmand, 2012). Thus, alleviating patient anxiety and agitation through aural distraction.

When considering music that is positive and uplifting, a slow tempo and smooth melody can aid in the reduction of anxiety. Soothing instrumental melodies without lyrics are best suited in situations where anxiety is high (Vickery, Nyberg, & Whiteaker, 2015). However, not all visitors will express the same preference of music. This may even cause distress if the music then becomes bothersome.

One solution to this challenge can involve offering a selection of music. This may involve a system that visitors can connect to, allowing them to select their own music. For example, many gyms have headphone jacks on the treadmills that allow visitors to hear the channels that they are showcasing on the various televisions. In the setting of an APF perhaps some of the seating areas can also include headphones that will allow the visitors to listen to a cloud based music subscription such as Spotify. With the availability of Bluetooth technology and wireless headphones, this could even be a clinic based application of sorts that one can connect their smart phones to.

A similar solution that can be implemented for minor procedures is to allow clients to bring their own portable audio devices with them (Vickery, Nyberg, & Whiteaker, 2015). In fact, many dentists suggest this when undergoing dental procedures such as tooth extractions. These strategies give visitors the opportunity to choose entertainment based on their own preferences, while also contributing to their sense of control.

Since 90% of Canada's population owns a cellphone, it is worthwhile considering visitors' own personal devices as a form of distraction (Canadian Wireless Telecommunications Association, 2016). Today young adults are accustomed to technology, and habitually utilize it as their own distraction. With this in mind, it would be advantageous to offer a public Wi-Fi network, allowing visitors to utilize the Internet capabilities of their devices.

### **2.3.6 Physical Distraction**



Spaces can also be designed to accommodate devices such as cell phones, laptops, and tablets. This can involve surfaces to rest the devices on, as well as outlets where the devices can be charged and potentially even a selection of cords for the various brands of devices. This solution would also provide flexibility in allowing visitors to utilize their own means of distraction, and even more so connect with a support person that is not physically present.

The Washington D.C. Planned Parenthood has thought of this as well, and has allocated workspaces within their waiting area to accommodate such devices. The work surfaces are divided with privacy panels, and include places to charge your electronic device (Kashino, 2017). However, a selection of physical reading material should also be considered as an alternative option as not everyone may have their own personal devices, or even want to use it for that matter. Games are another form of distraction that can also be considered. A revolutionary New York based women's clinic has recognized the importance of positive distraction by providing a game for their waiting area. The owners of Ask Tia developed a small card based game for their facility called "Taboo Tales".

With the progression of technology, most visitors will be carrying a personal device. With this in mind, it would be advantageous to accommodate the use of technology and personal devices throughout healthcare facilities. However it is also important to consider those who may not have an electronic device or prefer not to use one. With that in mind, a selection of distractions can allow the visitors to choose between their preferred distraction, if any.

## 2.4 ENVIRONMENTAL COMFORT

*“Then she took me to another waiting room inside. I waited here for TWO HOURS. I was pretty upset by that. It was fucking cold in there. Bring warm clothes.”*

(Peachalien, 2018)

Those who are undergoing an abortion procedure may face feelings of uneasiness and discomfort. While not all aspects of comfort are controllable, some factors can be taken into consideration to improve client experience and help them feel more comfortable in their environments. As explained by Michel Cabanac (2013), environmental comfort exists within the centre space between our bodies, the environment, and beyond. Environmental constraints, on the other hand, can be a cause of discomfort individuals. As a result, the body uses behaviour as a coping mechanism to these environmental constraints (Cabanac, 2013). In the essay “Sensory Pleasure and Homeostasis”, Cabanac explores sensory pleasure in relation to environmental comfort. Cabanac (2013) alludes to the idea that the “living being” is an open system, which exchanges energy and matter with the environment.

To understand human comfort, it is important to know how comfort is achieved. In detail, the body’s central nervous system obtains information about the state of the surroundings to which behaviour is then adapted to the body’s physiological needs. This information is obtained from sensors, which when excited by stimuli, causes sensations (Cabanac, 2013).

When thinking about a healthcare space, one can observe dimensions of stimuli in many instances within the environment. These instances often involve building services such as air quality, lighting, temperature, and even views. For example, healthcare facilities typically require bright lighting with a strict colour rendering adequate for performing exams and procedures (Kitsinelis, 2015). However, this type of

### 2.4.2 Human Comfort

lighting may not be favourable for the clients. The cool colour temperature, in combination with the intensity of the light may be uncomfortable or taxing on the client's eyes. As a result, this type of lighting is not useful to the client itself, as it purely serves the needs of the staff.

Environmental stimulation has a direct effect on visitor comfort and pleasure. By knowing how stimuli can affect environmental comfort, aspects such as thermal, visual, and acoustic design strategies can be harnessed to promote a sense of comfort for clients and visitors. More importantly, knowing how to avoid displeasure through environmental stimuli, by honing in on building systems such as lighting, temperature, and acoustics can contribute to a positive client experience.

### **2.4.3 Wayfinding**

An environmental stressor commonly found in healthcare settings is poor wayfinding techniques. Thoughtful space planning and wayfinding methods allow visitors to navigate easily and quickly, thus eliminating the stress of disorientation. Wayfinding methods include spatial organization, landmarks, signage, directories, maps, colour coding, and lighting (Salmi, 2019). The wayfinding scheme of the New York Planned Parenthood uses colour as their main wayfinding technique. The design incorporates five different colours to delineate each area of the clinic. Painted accent walls delineate each space through its designated program colour, while integrated accent lighting seen outlines the walls acting as a wayfinding mechanism.

Ultimately, thoughtfully designed wayfinding schemes improve client comfort by eliminating the stress of navigation. With these factors in mind, APF design concepts should include architectural gestures such as slightly curved walls or varying ceiling planes to help visitors feel more intuitive when navigating space (Salmi, 2019). As demonstrated in the Planned Parenthood clinic, colour and lighting can also be an effective design tool to help users orient themselves. Signs that incorporate descriptive icons are also a helpful cue for those with intellectual disabilities (Salmi, 2019). Considering these aspects, the layering of different wayfinding strategies can cater to the various navigation methods used by individuals, which can promote a universal understanding of the spaces.

#### **2.4.4 Lighting**

Consistently ranked as the most important element of clinic design by clients, lighting too, affects environmental comfort (Vickery, Nyberg, & Whiteaker, 2015). As mentioned earlier, lighting in clinic environments is critical. Poorly designed lighting systems can even cause discomfort. For instance, shadows, surface glare, and low contrast values can create confusion and frustration when performing tasks (Vickery, Nyberg, & Whiteaker, 2015). Many duties of medical practitioners rely on appropriate lighting levels and colour temperatures. For example, in abortion procedure rooms, the doctor must perform a visual inspection of the tissue to ensure the abortion is complete (World Health Organization, 2014). Shadows and glare in this instance can cause confusion, and make the task more difficult for the doctor.

Considering this, appropriate illumination levels will vary depending on the application. The lighting requirements between waiting rooms and diagnostic rooms are vastly different. Common areas such as waiting rooms should be illuminated at 150 lux, and task areas around 500 lux. To create a relaxing environment for clients and visitors, Spiros Kitsinelis (2015) suggests using warm light sources similar to halogen lamps with a colour temperature of 3500 K (Kelvin) or less. Furthermore, diagnostic spaces with high visual requirements like exam rooms, will involve luminance levels of 500-1000 lux (Ong, Boon Lay, 2013). A very high CRI is also required in exam rooms to observe health indicators, such as skin colour (Kitsinelis, 2015).

Counselling rooms also have ideal luminance levels. A study based on counselling rooms showed a correlation between light levels and the participant's outlook towards the space. The results concluded that participants preferred dim lighting, and were more likely of self-disclosure (Miwa & Hanyu, 2006). As a result, dim lighting instills a sense of ease and comfort for clients. Perhaps dim lighting detracts from the institutional nature of counselling rooms.

Lighting quality can affect one's emotions, well-being, and outlook. Implementing the appropriate lighting associated with each space typology can help improve the environmental quality of the space. While critical spaces like exam and procedure rooms require specific task lighting, spaces such as waiting areas can incorporate ambient and accent lighting to improve comfort and visual interest.

#### **2.4.5 Acoustics**

In the setting of an APE, acoustic privacy is a key consideration. Oftentimes clients can be reticent about abortion, compelling a desire for privacy. In some instances, sensitive information is exchanged between the women undergoing an abortion and the healthcare professionals, proving the need for acoustic privacy. Some spaces where acoustic privacy should be considered are the counselling rooms, procedure rooms, and reception area.

An effective way to address acoustic privacy within closed spaces is by incorporating ceiling and wall treatments with sound-absorbing properties. Acoustics expert Benjamin Davenny (2010) suggests using a mineral fibre acoustic ceiling tile for spaces that require both sound absorption and isolation. This type of tile would be optimal in counselling and exam rooms as they typically have a higher CAC of approximately 30-40, greatly reducing sound transmission (Davenny, 2010). Furthermore, rugs and carpet tiles also have sound absorbing properties, and can be used where sanitation is not a factor.

Other aspects to consider are details that may negatively impact acoustic privacy. For example, back-to-back outlet placements, direct duct runs, and wall to ceiling transitions with gaps can decrease acoustic privacy (Inform Design, 2010). Specifying walls that extend to the underside of the structure will also help with sound transmission where confidentiality is desired.

In more open spaces such as the waiting room where enclosures are not feasible, sound-masking systems can be used to improve speech privacy. Sound masking systems assist in making speech indecipherable after a certain distance, via ambient background noise (Inform Design, 2010). This method can be effective in instances where private information is exchanged in open settings. For example, personal information such as health concerns, and identifying particulars might be exchanged when checking in at a clinic.

Environmental comfort begins with the immediate surroundings. Lighting, temperature, acoustics, and even wayfinding, can all affect individual comfort. However, in healthcare settings professionals needs vary from those of clients and visitors. While both preferences cannot always be addressed, recognizing these

differences can inform the design concept to accommodate both professionals and visitors where appropriate. Combining these strategies can improve staff and visitor well-being by encouraging comfort through building services.

## 2.5 SECURITY TECHNIQUES

*“There were two protesters outside ... They approached me but a very nice security guard standing at the door opened it when he saw me coming and said ‘right this way ma’am’. That small gesture meant the world to an already highly anxious girl.”*

(HUX7281, 2018)

Amongst many topics, that of abortion can be an especially controversial one. As a result, abortion providers and facilities are at high risk for security threats. According to the National Abortion Federation (2017), the most common acts of violence experienced in the past by abortion providers were trespassing and vandalism. From 2010 to 2016, there have been almost 200,000 instances of disruption amongst abortion providers in North America. This includes picketing and harassment via phone and the Internet (National Abortion Federation, 2017). Although hostility towards abortion providers is much greater in the United States, it is not to say Canada is without incident. An extreme case of violence toward abortion providers, is the shooting of Dr. Jack Fainman. On November 11, 1997, Dr. Fainman suffered a bullet wound to the shoulder as the result of a serial shooting. The shooter, also known as the “Remembrance Day Sniper”, was responsible for several other shootings towards abortion providers (Burke, 2017).

In addition to violence, APFs also face the issue of picketing. Protesting outside of the facility of an APF is quite common throughout North America. This can be a concern for security, as protesters

may choose to act violently towards patrons or participate in acts of verbal aggression and intimidation. Furthermore, this can also be a source of discomfort for clients and visitors entering the facilities. Visitors may even turn away for fear of crossing the protesters. Vickery, Nyberg, and Whiteaker, (2015) emphasize that if clients detect a lack of safety or security within first sight of the facility, they will be apprehensive about approaching, and even consider another facility entirely.

In light of this, some provinces have addressed this issue by establishing safe zones, prohibiting the act of protesting within a certain distance from the APF. However, Manitoba does not currently have any regulations in place. As a result, the Women's Hospital in Winnipeg often experiences the presence of protesters in front of their building with no recourse to send them away. The Women's Health Clinic on the other hand, has addressed this issue in a unique way. They were able to locate their clinic within a space that is mainly accessible through an indoor corridor known as the downtown Skywalk. As a private space, protesters do not have the right to loiter, thus providing a relatively hassle free entrance into the clinic away from protesters.

### **2.5.2 Security**

The most effective point to integrate a building security scheme is during the programming and design process (Randall I. Atlas, 2004). By definition, security is the freedom from danger, fear, or anxiety (Merriam-Webster Dictionary, 2018). In the article *The Social Dimension of Security: Exploring How Surveillance Systems Relate to Interior Design* (Hadjiyanni and Kwon , 2009) express the notion of security as a conceptual term. They suggest security is a state of calmness or a condition that lacks the experiences of those who are frightened or threatened.

When it comes to building security, there are three primary objectives; (a) to detect the presence of threat, (b) to deter its occurrence, and (c) to respond accordingly (Atlas, 2004). Hadjiyanni and Kwon (2009), stress that when implementing security schemes, variability is an important factor. Studies have found that the employment of multiple security responses improved outcomes in crime reduction (Casteel & Peek-

Asa 2000). A variable security scheme should involve the physical layout of the space, the design of the environment, access control, and the implementation of electronic surveillance.

One common form of security that is often implemented is surveillance. This can include physical observation such as sight lines from a vantage point, or the use of technology such as surveillance cameras. In some instances, the visibility of a surveillance camera can act as a crime deterrent in itself (Hadjiyanni and Kwon, 2009). However, in the case of an APE, the presence of cameras can create feelings of discomfort for the visitors. In fact, it has been observed that women have more negative feelings and anxiety about surveillance than men. Furthermore, women reported that they felt attacked when learning they were under surveillance (Helten & Fischer, 2004).

The goal of surveillance is to detect a threat before it happens. Open spaces with clear sight lines can optimize visibility and surveillance. Natural surveillance methods such as windows and doors with glazing can also help increase visibility. Entrance doors with glazing or sidelights provide a visual of outside activities, and also allow personnel to examine persons entering the space (Brancato, 2004). Half height walls, or perforated screens can also help to increase visibility within a space.

Taking this into account, careful consideration should be taken when implementing surveillance methods. Subtly integrating the security scheme into the design of the facility would allow for the opportunity to survey the space, while also minimizing client discomfort. When designing electronic surveillance systems, one should also consider other aspects such as the positioning, number, and type of cameras, as well as appropriate lighting (Hadjiyanni & Kwon, 2009). It is crucial for designers to consider the security scheme when designing, so that they are not working against each other. For instance, security cameras integrated in poorly lit areas will compromise the visibility of the security feed.

### **2.5.3 Surveillance**



#### **2.5.4 Access**

##### **Control**

Another security aspect to consider when designing an APF is access control. Due to the controversy from anti-abortion protesters, there is an ongoing need to secure the premises of an APF. One method involves access-controlled vestibules or person traps, which are small secured rooms connecting the entrance to the rest of the facility. Access-controlled vestibules typically contain a security camera and intercom for screening and security purposes. This allows staff to verify the identity of individuals before granting them access to the interior of the clinic. Randall Atlas (2004) suggests implementing a receptionist or concierge as a method of screening visitors. However, they should be situated between the entrance and corresponding areas, so that each individual entering can be observed. Sight lines from this point should also be considered allowing them to observe the public spaces. Furthermore, employee workstations or office space can also be situated for easy observation of visitors.

The Washington D.C. Planned Parenthood has taken a different approach to access control by implementing an identifying kiosk. When women arrive for their appointment their identification is verified when the kiosk scans their documents. Once verified, they can then proceed to reception. This method replaces the intercom/buzzer system while effectively examining personal identification. Similar to automated passport control stations in airports, these stations could eliminate initial personal contact. This method would help to increase the initial security of the staff.

#### **2.5.5 Space**

##### **Planning**

When space planning, adjacencies with respect to security should be considered. Key spaces that require protection should be located further away from public spaces and entrances. Situating the least critical functions in the highest risk areas can serve as a buffer to the more critical functions (Brancato, 2004). Buffer spaces can include facilities such as mechanical and electrical rooms, janitorial closets, or supply rooms. As discussed earlier, the spaces can also be planned to maximize visibility. Dividing the building into smaller portions can also create less intimidating spaces for visitors (Hadjiyanni & Kwon, 2009). Furthermore, alcoves and blind corners should be avoided to prevent surprises and increase personal security.

In addition to the interior, exterior security is also important. To improve access control, fences with gates or arms can be implemented with an intercom to screen visitors. Another aspect to consider is the proximity of egress in relation to parking. Hadjiyanni and Kwon (2009), suggest locating parking spaces within 300 feet of the buildings entrances and exits to minimize acts of crime, while also giving visitors a sense of ease. To promote visibility, all parking and perimeter areas should be adequately illuminated. Shrubs and fencing can also be implemented to secure the perimeter, with one single access point (Brancato, 2004).

There are several layers to security schemes. Security measures such as lighting, electronic surveillance, sight lines, and space planning, are a critical consideration when designing an APF, as security is a predominant issue. With these techniques in mind, a comprehensive security scheme can be strategized in order to maximize occupant security. Protesters and unwanted visitors can be avoided by controlling access with interior and exterior environmental features. It is also advantageous to implement security schemes early on in the design process, to develop a harmonized security and design concept. When thoughtfully planned in conjunction with design considerations, security schemes can be both effective and unintimidating.

## 2.6 CONCLUSION

The review of theories in chapter two of this practicum explored the notions of comfort, safety, and well-being to gain insight into the physical and emotional needs of those involved with APFs. With the perspectives of women who have experienced abortion as a guiding point, the aim of this theoretical review was to form a deep understanding of how the functions of (a) stress and anxiety, (b) distraction, (c) environmental comfort, and (d) environmental security, can impact a visitors experience. Within this exploration, there is overwhelming evidence that the contextual environment can greatly affect ones emotions and experience. The conclusion of the explored theories all point towards designing in a way that is responsive to the needs and preferences of the users.

Abortions are a difficult process for people to endure. Recognizing the difficulties that they may face can help to promote the well-being of the clients when addressed through the planning and design of the APF. As seen in Table 1, strategies from each topic informed the concept of the Abortion Health Centre of Winnipeg by acknowledging the need for social support in difficult situations. APF's can address these needs through flexible scenarios that can support individual preferences. With that, distractions can be implemented through environmental features to promote a reduction in visitor stress and anxiety. Positive distractions can also be used to provoke a certain moods and convey positive messages. Environmental comfort strategies, like discernible wayfinding techniques and carefully considered acoustic and lighting solutions can also help to minimize client distress while contributing to overall comfort. These aspects, in combination with a thoughtful security scheme can help to promote a positive and more comfortable APF experience.

| TOPIC                 | STRATEGY                                                                                                                                                                                                                                                                            |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control               | <b>Integration of flexibility:</b> <ul style="list-style-type: none"> <li>- Choice between privacy and socialization</li> <li>- Light/Movable furniture</li> <li>- Manipulatable controls (eg. lighting, music, etc.)</li> <li>- Provide options for furniture selection</li> </ul> |
| Social Support        | <b>Opportunities for socialization:</b> <ul style="list-style-type: none"> <li>- Arrangement of furniture in small groupings</li> <li>- Moveable space dividers such as curtains to provide patient with preferred degree of interaction</li> </ul>                                 |
| Staff Well-Being      | <b>Work environment that is conducive to productivity as well as relaxation:</b> <ul style="list-style-type: none"> <li>- Private work areas</li> <li>- Sufficient means to perform job tasks</li> <li>- Exclusive breakout space with quiet areas to relax</li> </ul>              |
| Positive Distraction  | <b>Environment that is supportive of positive distraction:</b> <ul style="list-style-type: none"> <li>- Visual distractions: Colour, Imagery, Lighting</li> <li>- Aural distractions: Music, Nature sounds</li> <li>- Physical Distraction: Technology</li> </ul>                   |
| Environmental Comfort | <b>Environment free from obstacles to comfort:</b> <ul style="list-style-type: none"> <li>- Transparent wayfinding strategies</li> <li>- Layered lighting scheme</li> <li>- Acoustic Privacy</li> <li>- Informal furniture selections</li> </ul>                                    |
| Security Schemes      | <b>Physically secure environment:</b> <ul style="list-style-type: none"> <li>- Access control techniques</li> <li>- Space plan to maximize visibility</li> <li>- Arrange critical functions away from high risk areas</li> </ul>                                                    |

Table 1: Design strategies derived from the literature review.

# 3

- 3.1 Morgentaler Clinic in Montreal  
*40*
- 3.2 Planned Parenthood in New York  
*42*  
Planned Parenthood Headquarters
- 3.3 in Washington  
*44*
- 3.4 Nationwide Children's Hospital  
*46*
- 3.5 Conclusion  
*48*

# PRECEDENT ANALYSIS

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### 3.1

## MORGENTALER CLINIC

---

Location:  
Montréal, QC,  
Canada

The Montreal based Morgentaler clinic focuses on abortion services, including curettage for miscarriages or stopped pregnancies. Their program of space includes a waiting and reception space, exam rooms, procedure rooms, and a recovery space.

This design of the Morgentaler clinic shifts away from the institutional feel of a typical outpatient clinic by embracing a sense of warmth and informality. Elements that have the least resemblance to healthcare facilities such as framed art, mirrors, potted plants, and non-institutional furniture, create a home-like environment. This strategy supports an environment in which patients can feel more comfortable and at ease without the constant reminder of the clinic environment.

The recovery spaces seen in Figure 2 include a wood framed bed and operable curtains, which gives patients the ability to control their level of privacy. The bed frame is warm in tone and resembles a bed that one may find in their own home, providing a sense of informality. Paintings and mirrors as seen in Figure 3 and 4, act as a visual distraction for the visitors, while further supporting the informal quality of the clinic.

The colour palette includes vibrant pink contrasted with neutral colours such as beige, and light blue. Natural wood tones seen in the furniture components compliment the lightness of the space while further enforcing informal qualities. The ceiling lights emit a warm glow, adding a soft quality, promoting relaxation.

By steering away from typical healthcare furnishings, the tone of the clinic changes from serious and sterile, to laid back and intimate. Vibrant accent colours in combination with wall decorations create visual distractions for the patients, detracting from the stress that may come with visiting an abortion provider. The overall aura of the clinic is warm and inviting, helping patients to remain calm in a potentially anxiety-ridden situation.



Figure 2: Post Operation Recovery (Morgentaler Clinic, n.d.)



Figure 3: Counseling Room (Morgentaler Clinic, n.d.)



Figure 4: Exam Room (Morgentaler Clinic, n.d.)



## 3.2 NATIONWIDE CHILDREN'S HOSPITAL

---

Location:  
Columbus, Ohio,  
United States

Designers:  
Cannon Design  
& Andrews  
Architects

Total Square Feet:  
750,000 sq. ft.

The Nationwide Children's Hospital in Columbus, Ohio was a redesign into a 12-storey building, which was integrated into a park-like campus setting (Cannon Design, n.d.). The hospital “celebrates the natural world” by using nature as the main design influence (Cannon Design, n.d.).

The designers implemented a nature motif as seen in Figure 5 to tie the program of spaces together, while establishing a curvilinear design language. Each unit has a dedicated colour acting as a strong way finding strategy, while also providing a mechanism to which users can orient themselves. The colour of each unit ties into the way finding strategy by reinforcing the individual identity of the units. The soft primary colours of each unit such as blue and yellow as seen in Figure 6 and 7, also serve as an accent wall behind the triage desks. Furthermore, bold unit signage provides a clear distinction of each unit. The numbering and colouring of each area also allows employees to direct visitors in a straightforward and easy to understand manner. In combination, these way finding strategies help to create ease of navigation, reducing some of the stress that may come with healthcare environments.

Apart of the nature theme, birds and cascading leaves are found in several instances of the hospital including as the walls, flooring, and desks. Shadows of falling leaves add texture and colour to the walls, while trailing leaves on the floor emphasize certain areas such as the unit desk. Curvilinear flooring changes encourage flow throughout the hallways, while softening the rigid nature of the hospital by incorporating organic forms. Furthermore, neutral flooring and wall colours create contrast between the accent colours emphasizing the unit desk. The colours in combination with the natural materiality of the warm wood veneer creates a sense of informality while also reinforcing the nature theme.



Figure 5: Waiting Area (Klein, n.d.)



Figure 6: Unit B2 Triage (Klein, n.d.)



Figure 7: Unit A1 Triage (Klein, n.d.)

### 3.3 PLANNED PARENTHOOD H.Q.

---

Location:  
Washington DC,  
United States

Designers:  
Form Architecture

Size:  
27,000 sq. ft.

The LEED Gold Planned Parenthood clinic in Washington DC, was designed with important factors such as security at the forefront (Kashino, 2017). The clinic includes six exam rooms, four procedure rooms, communal areas for outreach and education, as well as patient rest areas.

As part of their security scheme, guards are employed to secure the entrance of the clinic in addition to a kiosk at the entrance which scans visitors' identification to confirm patients' identities, as seen in Figure 8. The kiosk as an alternative to an access control vestibule or person trap, can be less stress inducing as it is much less daunting than a small enclosed room. Within the building is a private courtyard branching off of the kitchen space, which allows staff to take a break or exit the clinic securely, with peace of mind. Within the waiting area, booth like sofas seen in Figure 11 provide a semi-private space for patients catering to various preferences of privacy. The sofas have high backs with acoustic dampening material providing both visual and acoustic privacy. In contrast, the lounge seen in Figure 9, encourages socialization with low informal seating. This space is available for patient use before and after appointments acting as a neutral transition space for visitors. This area also supports the use of personal electronic devices. With electrical outlets, and informal work areas, visitors can use their devices to distract themselves from any overwhelming emotions that they may be experiencing.

The light colours of the wall materials promote brightness, while expansive windows with privacy film allow natural light to enter the space without compromising privacy. The exam rooms are animated with painted accent walls as seen in Figure 10, featuring various framed icons acting as a visual distraction, while conveying messages. The images showcase various symbols such as speech bubbles, and birth control in efforts to encourage a welcoming and judgment free space (Kashino, 2017).

The planning and design of this Planned Parenthood recognizes the security needs of both staff and visitors by establishing a solid security scheme without imposing on the users. The programming of spaces also caters to the varying preferences that each visitor may have by providing different options.



Figure 8: Reception & Lobby (Goldberg, n.d.)



Figure 10: Exam Room (Goldberg, n.d.)



Figure 9: Lounge area (Goldberg, n.d.)



Figure 11: Private seating (Goldberg, n.d.)



### 3.4 PLANNED PARENTHOOD N.Y.

---

Location:  
Queens, New  
York, United  
States

Designers:  
Stephen Yablon  
Architecture

Size:  
14,400 sq. ft

The goal of the Queens Planned Parenthood was to design a state of the art facility that focused on the visitors experience (Stephen Yablon Architecture, N.d). Jessica Schrader, Lead Environmental Graphic Designer, worked in partnership with the designers to create a straightforward way finding system, to ensure an easy visitor experience (Adona, 2016).

The program of spaces includes exam, treatment, procedure and recovery spaces, as well as counselling rooms, waiting areas, and multi-functional community spaces. The planning of the clinic creates a deliberate separation between the public facing zones from the medical service areas as seen in Figure 13 (Stephen Yablon Architecture, N.d). By separating the two zones, those who are waiting will face less exposure to potentially disturbing medical spaces.

The design concept of the this clinic uses a white canvas to which vibrant colours are contrasted as part of the way finding scheme. Bright and uplifting colours such as blue, orange, green, and pink as seen in Figure 12, define different zones within the clinic. The identity of the various spaces are reinforced through wall treatments, signage, and lighting. Each space has a sign or room number with an associated colour, which coordinates with the coloured feature wall of that space. Furthermore, lighting designer Cline Bettridge Bernstein implemented a bold lighting scheme consisting of linear accent lighting to emphasize key spaces as seen in Figure 15 and 16. Recessed lighting glows along the edges of the partition walls form a clear distinction of one space from another. As a way finding aspect this can be helpful when staff are directing patients through the space. One can simply direct visitors to follow one of the streams of colour to get to their destination. Furthermore, the colours can also help visitors orient themselves within the space.

Throughout the clinic, bubbles appear on the wall covered with encouraging words as seen in Figure 14. Recognizing that for this region, English is commonly a second spoken language, English words such as “empowerment”, “respect”, and “compassion” are surrounded in the bubble with a multitude of translations

(Adona, 2016). This small gesture extends to each individual visitor, creating a more welcoming environment.

With basic shapes, and a vibrant colour scheme, the clinic atmosphere is clean and simple, yet bright and inviting. The design of this clinic is user oriented, and eliminates confusion through its straightforward design concept. Planned Parenthood recognize the importance of community by creating an all inclusive design, and providing communal spaces.

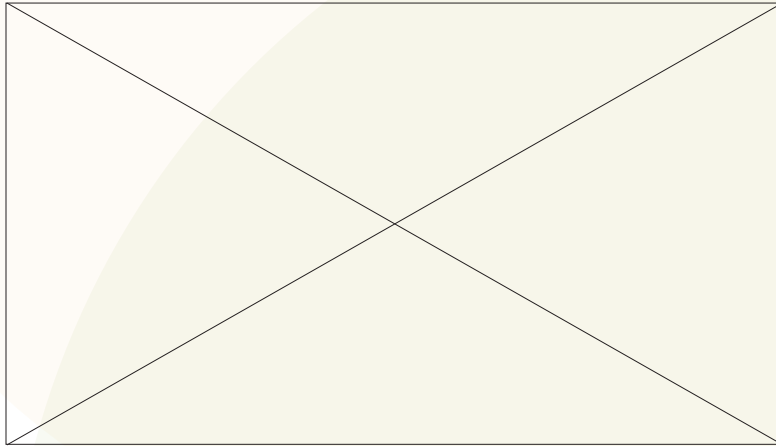


Figure 12: Space organization diagram (Stephen Yablon Architecture, n.d.)

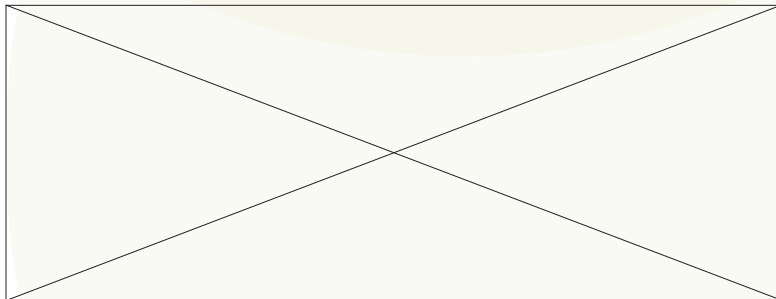


Figure 13: Public v.s. private diagram (Stephen Yablon Architecture, n.d.)

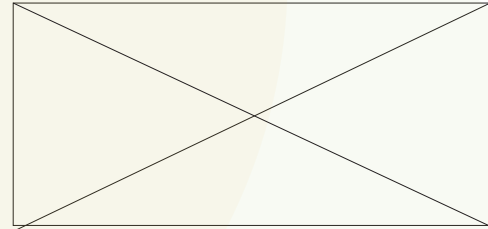


Figure 14: Stairwell (Stephen Yablon Architecture, n.d.)

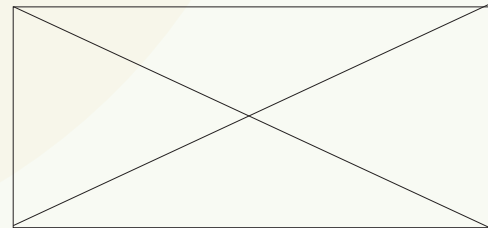


Figure 15: Hallway and Exam Room (Stephen Yablon Architecture, n.d.)

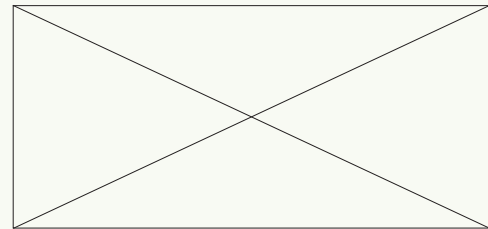


Figure 16: Hallways (Stephen Yablon Architecture, n.d.)

## 3.5 CONCLUSION

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There are several approaches to designing healthcare facilities, and depending on the intended user, they can look and feel vastly different. The commonality between the Morgentaler Clinic, Nationwide Children's Hospital, and Planned Parenthoods, is a main goal of patient well-being. Each precedent addresses patient well-being in a unique manner. As seen in Table 2, each approach helped to inform the program and design concept of the Abortion Health Centre of Winnipeg.

The Planned Parenthood headquarters created a lounge area based on the increasing use of technology, in response to the younger population. Along with vibrant colours, the facility strives to cater to the preferences of the majority of their users. The Planned Parenthood in New York recognizes the importance of way finding, and incorporated it into their design concept. Bold colours, and clear pathways help to orient the guests, and delineate each space. The Morgentaler Clinic uses informality as a break from the rigidity of APFs. The clinic embodies a residential quality with the use of furniture that resembles a home-like environment. The Nationwide Children's hospital recognizes the role of nature in recovery, and has implemented nature as a design theme. Natural elements form the design language, while also acting as a way finding technique. With each of these concepts, informed decisions were made to create an environment that is cognizant of patient comfort, and well-being.

| PRECEDENT                      | DESIGNER                           | STRATEGY                                                                        | APPLICATION                                                                                                           |
|--------------------------------|------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Morgentaler Clinic             | Unknown                            | Emphasis on relaxed, home-like qualities.                                       | Create an environment that offers minimal resemblance to a clinical environment.                                      |
| Nationwide Children's Hospital | Cannon Design & Andrews Architects | Distinct wayfinding and branding techniques with emphasis on natural qualities. | Implement visual cues and graphics to delineate programmatic spaces and impose a sense of orientation.                |
| Planned Parenthood H.Q.        | Form                               | Vibrant atmosphere, with focus on the preferences of the visitors.              | Create a design strategy that incorporates the security scheme, and ensure it does not impose on visitors.            |
| Planned Parenthood N.Y.        | Stephen Yablon Architecture        | Bold way finding techniques, with emphasis on vibrant colours.                  | Plan the space with clear paths of travel, and establish a way finding scheme to eliminate confusion and frustration. |

Table 2: Design strategies derived from the precedent studies.



# 4

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# PROGRAM- MING

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## 4.1 INTRO

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The programming for this client-focused abortion health centre was based off of a combination of the literature review, precedent studies, and existing clinics in Winnipeg Manitoba. The user profile was derived from an estimation of eight to ten procedures per day, to which a total of 11 to 13 employees would be required for the successful operation of the abortion health centre. The list of spaces and sizes were determined from the volume of users, the medical requirements of an outpatient abortion provider, as well as the visitors needs. The zoning was derived from the security needs of abortion health centre, as well as employee and client circulation.

## 4.2 CLIENT PROFILE

---



Figure 17: Client-Focused Abortion Health Centre Logo

**Client** The client for this clinic is a not for profit organization called the Abortion Health Centre of Winnipeg (AHC), as seen in Figure 17. This organization is geared toward providing safe and accessible abortions to women of all walks of life. Their funding will consist primarily of government funding and donations. AHC will employ permanent employees, as well as volunteers. The goals of AHC are to (a) Provide safe and accessible abortion options, (b) offer judgment free support, and (c) provide a comfortable and low stress experience.

**Services** AHC will offer consultation appointments for both medical and surgical abortions, surgical abortion procedures, and follow up birth control and counselling appointments.

**Operation** The facility will operate from Monday to Friday, opening at 9:00 am to 5:00 pm. Mondays, Wednesdays, and Fridays will be procedure days, and Tuesdays and Thursdays will be open for workshops group therapy, and informational appointments.

## 4.3 USER PROFILE

Table 3: User  
Profile

| USERS                                                                                                                                            | NEEDS                                                                                                                                                                                                                                                              | ACTIVITIES                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PRIMARY</b>                                                                                                                                   |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                             |
| <b>Patients</b><br>- Women of varying ages, (although not limited to) 16 to 40 years old.                                                        | - Secure place for storage of belongings<br>- Flexible Space that allows for personal control<br>- Spaces that provide safety and comfort                                                                                                                          | - Waiting<br>- Undergo medical exams, specimen testing, abortion procedure, recovery                                                                                                                                        |
| <b>Medical Staff</b><br>- Procedure/ Exam Doctor (2)<br>- Sonographer (1)<br>- Pre-Op. Nurse (2)<br>- Post-Op. Nurse (2)<br>- Abortion Doula (2) | - Space equipped with appropriate equipment for examinations and abortion procedures<br>- Space for charting<br>- Space for post-op. observation<br>- Personal quiet space to allow for resting, eating & storing belongings, that is separate from patient spaces | - Examine patients prior to procedure<br>- Perform/participate in abortion procedures<br>- Observe patients in recovery<br>- Chart information about exams/ procedures<br>- Triage phone calls for prospective appointments |
| <b>SECONDARY</b>                                                                                                                                 |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                             |
| <b>Intake Staff</b><br>- Triage person (1-2)<br>- Receptionist (1)<br>- Counselor/Support worker (1-2)                                           | - Quiet space with acoustic privacy for phone triage<br>- Workspace with computer for paperwork<br>- Private meeting area for intake and counseling                                                                                                                | - Sign patients in<br>- Counsel patients about their appointment<br>- Answering phone calls for intake and appointments                                                                                                     |
| <b>Support Staff</b><br>- Program Facilitator (1)                                                                                                | - Private office with work surface to accommodate a computer and filing                                                                                                                                                                                            | - Manage facility and respective programming                                                                                                                                                                                |
| <b>TERTIARY</b>                                                                                                                                  |                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                             |
| <b>Cleaners/Maintenance (1)</b>                                                                                                                  | - Secure place for storage of belongings                                                                                                                                                                                                                           | - Maintain a clean environment for the staff and patients                                                                                                                                                                   |
| <b>Support Persons (1 per patient)</b>                                                                                                           | - A place to wait while their friend/family member/significant other undergoes the procedure                                                                                                                                                                       | - Act as a support for the person terminating their pregnancy                                                                                                                                                               |

## 4.4 SPACE PROGRAM

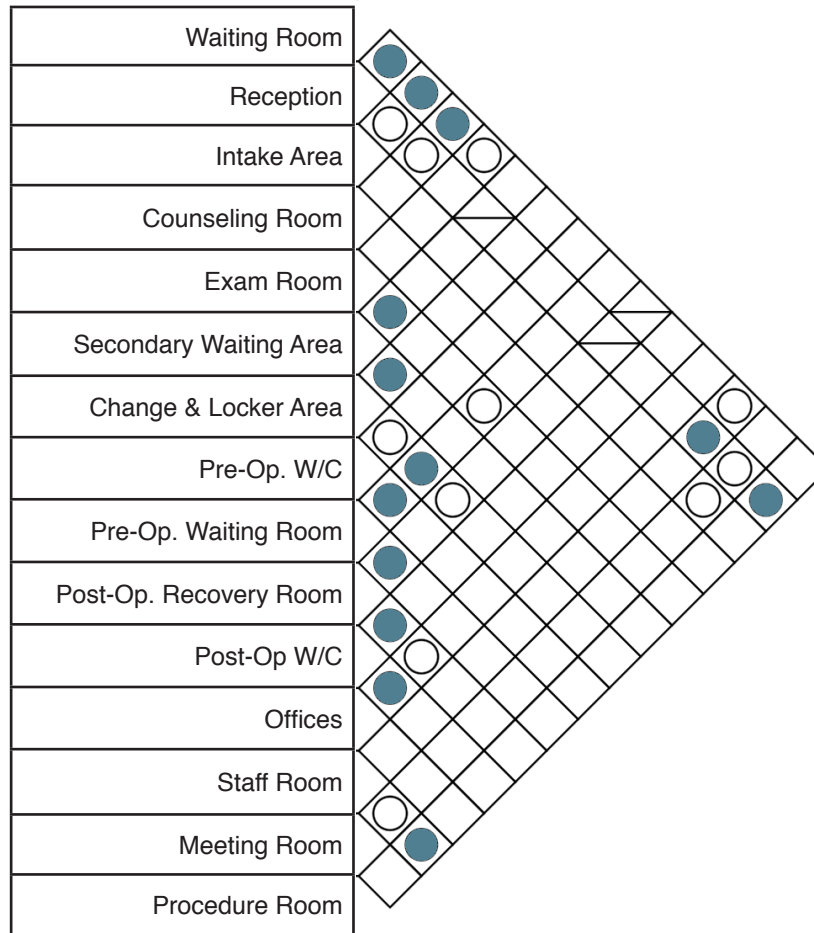
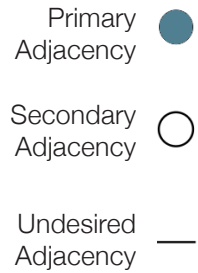
Table 4: Space Program

| SPACE                 | FUNCTION                                                                                                              | SIZE        | FIXTURES & EQUIPMENT                                                                                                              |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Main Waiting Room (1) | A comfortable space for visitors to wait, in private or with the opportunity to socialize                             | 200 Sq. Ft. | Comfortable/moveable seating for 10-12 people, including individual and private scenarios                                         |
| Reception & Copy Room | Workspace for medical office assistant to check women in, and perform clerical duties                                 | 300 Sq. Ft. | Horizontal work surfaces, copiers, printers, computer                                                                             |
| Intake Space (1)      | A private space for intake worker and patient to complete intake paper work, and/or discussion about abortion options | 50 Sq. Ft.  | Seating for three, horizontal surface, storage for brochures/literature                                                           |
| Counseling Room (2)   | A private space for counselor to have discussions with women and/or support person                                    | 100 Sq. Ft. | Seating for three, horizontal work surface, storage for brochures/literature, acoustic privacy                                    |
| Change & Locker Area  | A space for patients to change clothes and store belongings                                                           | 65 Sq. Ft.  | Lockable personal storage compartments, mirror, seat, private area for changing                                                   |
| Pre-Op W/C            | W/C for patients to use prior to procedure and to for the facilitation of specimen collection                         | 60 Sq. Ft.  | Toilet, sink, mirror, paper towel dispenser, toilet paper dispenser, grab bars, napkin disposal                                   |
| Pre-Op Waiting Room   | A space for women to await procedures after examination                                                               | 150 Sq. Ft. | Seating with private and communal options, horizontal surfaces, entertainment equipment, fixtures to accommodate personal devices |

| SPACE                 | FUNCTION                                                                                                                                     | SIZE        | FIXTURES & EQUIPMENT                                                                                                                                                                                                 |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Post-Op Recovery Room | Allows patients to recover from their procedure where nurses can monitor their recovery in a comfortable environment                         | 200 Sq. Ft. | Nurse station, comfortable seating, entertainment equipment, blanket warmer/heated blanket storage, storage for medical supplies, phone                                                                              |
| Charting Station      | Area for practitioners to do their charting before and after procedures, and exams                                                           | 20 Sq. Ft.  | Horizontal surface, seat, lockable storage for charts and writing utensils, computer for digital charts                                                                                                              |
| Offices (4)           | A quiet space, that allows staff to conduct independent work                                                                                 | 120 Sq. Ft. | Private workstations that can accommodate a computer, with lockable file storage, and phone                                                                                                                          |
| Staff Room            | A quiet space that provides a comfortable area for staff to break away from their work, to consume food, and store their belongings securely | 300 Sq. Ft. | Lockable personal storage compartments, surface and seating for food consumption, comfortable seating, cold food storage, water dispenser, coffee machine, entertainment devices, charging area for personal devices |
| Meeting Room          | A private space that accommodate multiple people, where staff and visitors can meet and have discussions, or group sessions                  | 250 Sq. Ft. | Conference table and seating to accommodate 8-10 people                                                                                                                                                              |
| Procedure Room        | A private space that provides practitioners with the required tools and fixtures to provide safe abortions                                   | 200 Sq. Ft. | Horizontal counter height surface, closed storage, large sink, vacuum aspirator, movable stool, procedure bed, operable curtain                                                                                      |

## 4.5 SPACE ADJACENCY

Table 5: Space Adjacency Matrix



## 4.6 ZONING DIAGRAM

Table 6: Zoning Diagram





# 5

|     |                   |    |
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# SITE ANALYSIS

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## 5.1 SITE OVERVIEW

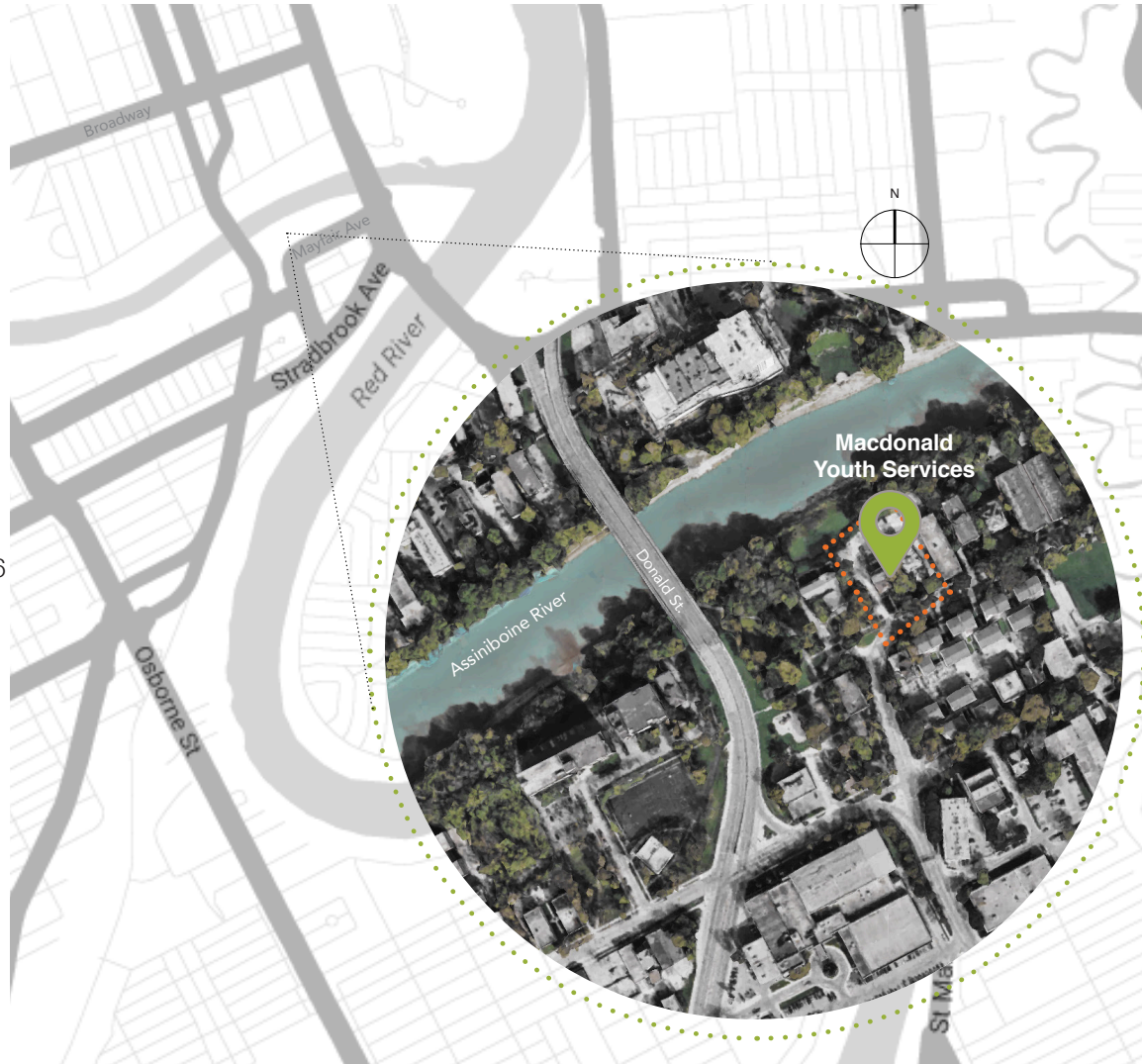
Figure 17:  
Site Context Map

### Zoning

- Zoning:  
RMF - R
- Zoning District:  
Residential - Multi  
Family
- Zoning By-Law:  
The City of Winnipeg  
Zoning By-law 200/06
- Property Class:  
Institutional

### Adjacencies

- Mayfair Park
- Assinaboine River
- South West Rapid  
Transit Corridor
- River Walk
- Bonny Castle Park
- South Point Park
- Fort Rouge Park





## 5.2 SITE PLAN

Figure 26:  
175 Mayfair Ave. Site Plan  
NTS.



## 5.3 SITE CONDITIONS

---

**Wind** As seen in figure 23, prevailing winds come predominately from the North West, and South.

**Sun** Since there are no structures immediately behind MacDonald Youth Services, the north side of the building receives a good amount of daylight in the summer and winter months. This provides ample opportunity to capitalize on natural light front the many windows on the North and South facade.

**Nature** As seen in Figure 25, the Northern side of the site opens up to the Assinaboine river, surrounded by trees on the Western side. To the left of the building is Mayfair Park, which straddles the Donald Street Midtown Bridge. These natural landscapes offer a break from the man made environments of the adjacent downtown area. The red river also provides natural viewpoints from the northern side of the building.

**Transportation** 175 Mayfair Avenue is fairly accessible as it is in close proximity to downtown, and is serviced by many bus routes as seen in Figure 26. Since the site is adjacent to one of the rapid transit terminals, there are several bus routes that come through this area making it easily accessible through public transportation.

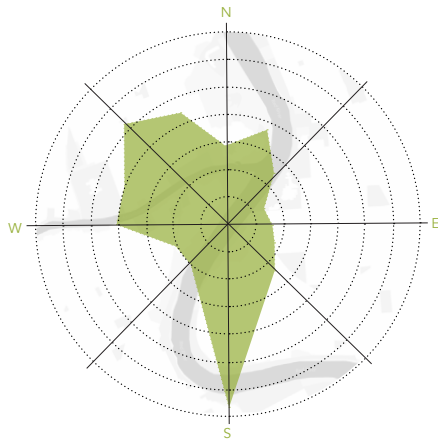


Figure 22: Wind Rose  
(Top Left)

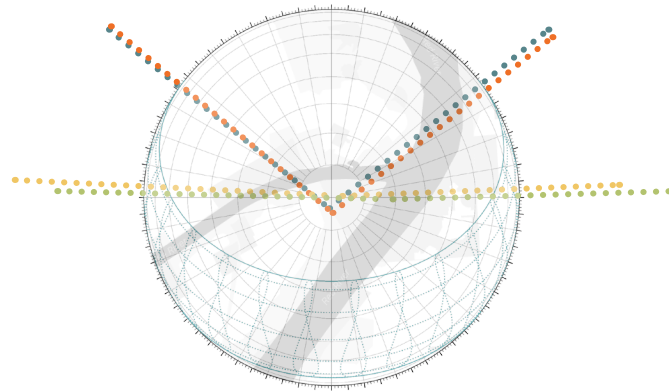


Figure 23: Sun Path  
Diagram (Top Right)

- Summer
- Spring
- Autumn
- Winter



Figure 24:  
Surrounding Natural  
Land Use (Bottom  
Left)

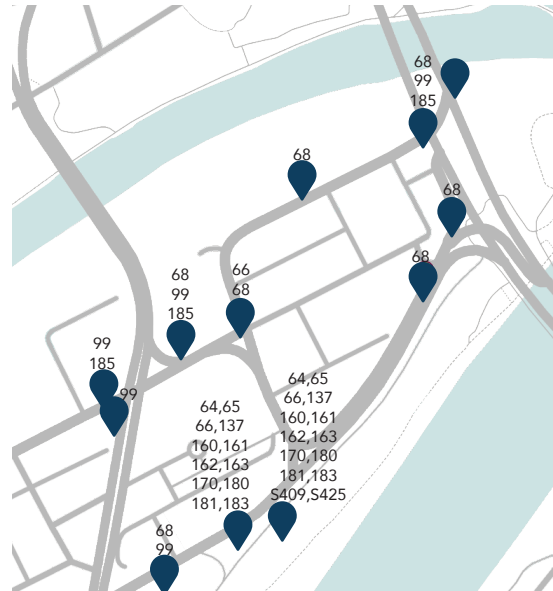


Figure 25: Transportation  
Access (Bottom Right)

- Green space
- Waterways

- Bus Stops
- Vehicle Routes
- Bus Routes

5.4  
DEMOGRAPH-  
ICS

Population

The population of the River Heights East area is 22,065 people (City of Winnipeg, 2011). As seen in Table 7, the majority of the population in River Heights East, is in the age range of 20-39 (City of Winnipeg, 2011).

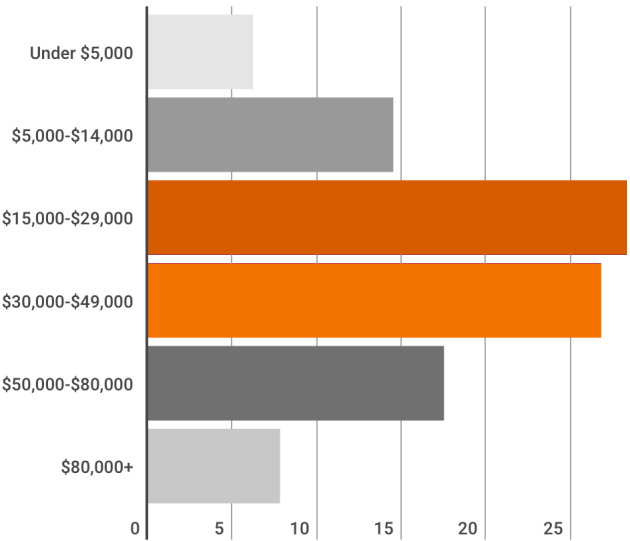
Marital Status

There is a relatively even proportion of married/common law to divorced/separated couples as seen in Table 8, with 11.9% of the population being single (City of Winnipeg, 2011).

Income

The average income for the River Heights East area residents is within the \$15,000 to \$49,000 range as seen in Table 6 (City of Winnipeg, 2011).

Table 7: Income for River Heights East



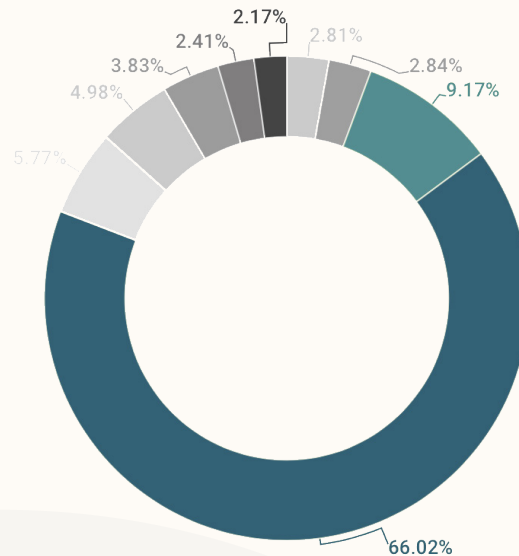


Table 8: Population By Age for River Heights East

- 0-9
- 10-19
- 20-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70-79
- 80+

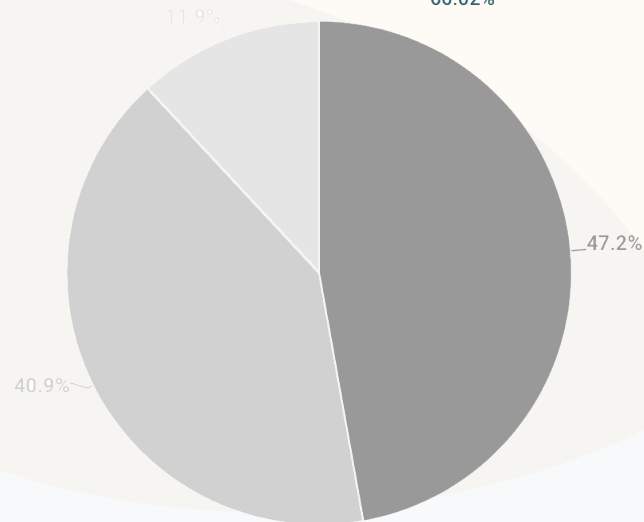


Table 9: Martial Status for River Heights East

- Married or Common Law
- Single
- Divorced or Separated



## 5.5 SITE VIEWS

Figure 18:  
North side of the  
site.

Figure 19:  
East side of the  
site.

Figure 20:  
West side of the  
site.

Figure 21:  
South side of the  
site.

NORTH



EAST



WEST



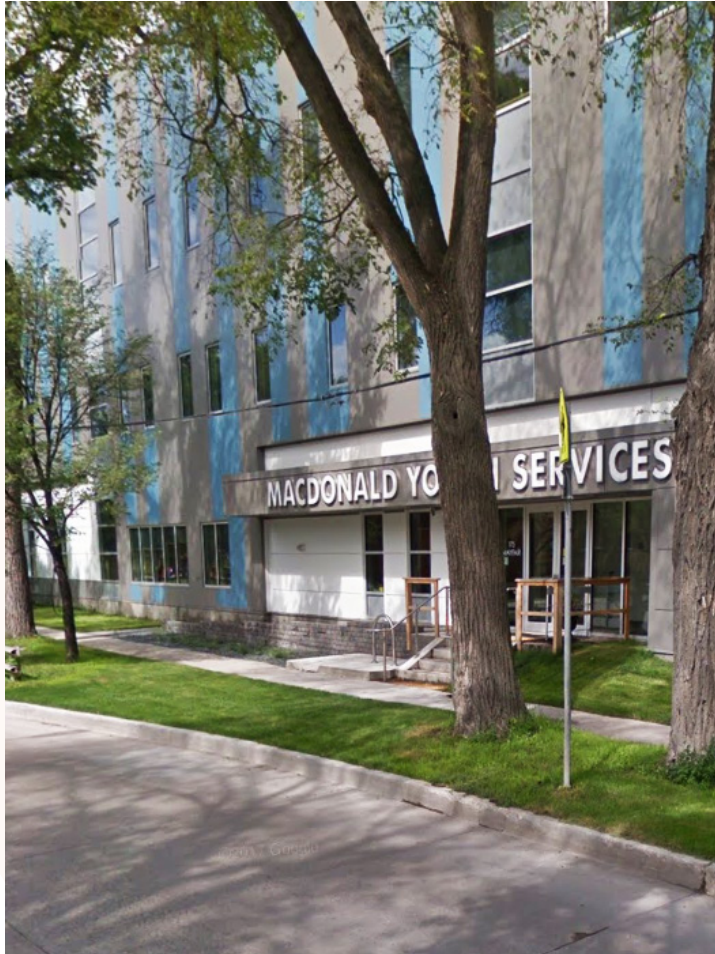
SOUTH



## 5.6 BUILDING ANALYSIS

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Figure 27: Front approach.



### **Building Features**

#### **Envelope:**

- Insulated metal panel facade.
- Multiple windows providing ample day light.
- Two entrances, one in the front and one in the back.

#### **Structure:**

- Three levels.
- Concrete Columns.
- Steel frame construction.

#### **Circulation:**

- Two fire stairs located on the East and West sides.
- One elevator adjacent to West stair shaft.
- Private parking lot behind the building.

## Opportunities

- The rear approach offers visitors the opportunity to enter the building from the parking lot.
- Multiple windows on the North and South sides provide ample daylight into the space, while also offering a scenic view of the river and surrounding greenery.
- The parking lot provides a convenient space for visitors to park, eliminating the hassle of seeking parking on the street and potentially passing protesters.

## Constraints

- Protesters can potentially loiter at the front approach on the sidewalk.
- The building will be shared amongst multiple tenants on the lower levels, this may cause conflict or confusion for visitors if not considered.
- The elevator location may provide planning challenges for entry into the space.

Figure 28: Rear parking lot and approach.  
Grandmaison, M.  
(n.d.).  
<http://www.grandmaison.mb.ca>



Figure 29: Existing  
Third Floor Plan

(MacDonald Youth  
Services, n.d.)

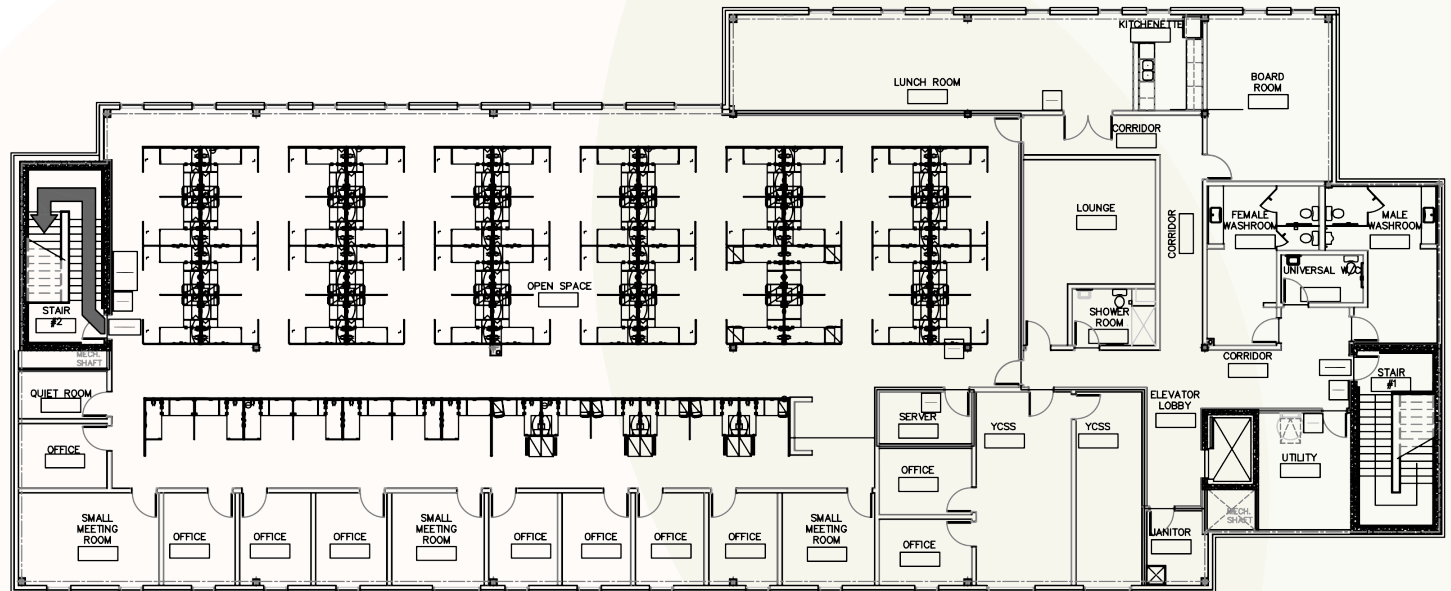








Figure 30: North view from the third floor.

# 6

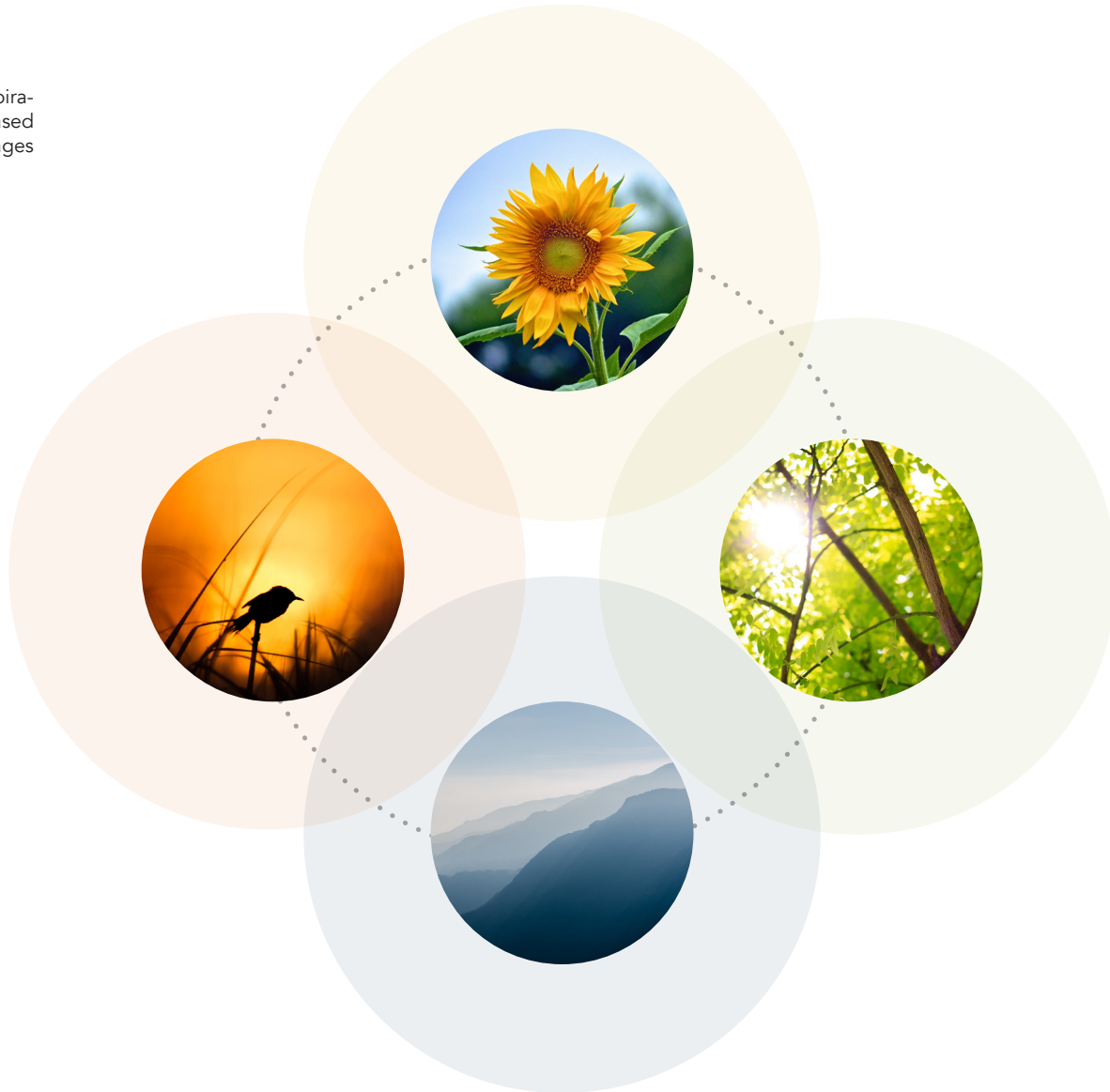
|     |                    |    |
|-----|--------------------|----|
| 6.1 | Introduction       | 75 |
| 6.2 | Design Development | 75 |
| 6.3 | Design Description | 76 |
| 6.4 | Conclusion         | 95 |

# DESIGN INTERVENTION

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Figure 31: Inspira-  
tional Nature Based  
Images



## 6.1 INTRO

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Based on the insight gained from the research in the earlier chapters, a comprehensive design intervention was developed to create an APF that is encompassing of its users' needs and well-being. Inspired by nature as a means of wellness, the design of the Abortion Health Centre of Winnipeg (AHCW) is focused around individual comfort with the goal of minimizing stress and anxiety. The theme of informality is implied as a means of softening the institutional nature of healthcare facilities by creating a more home-like environment. With an emphasis on reproductive choice, each client area of the facility offers various opportunities to encourage individual freedom of choice. The design of the facility uses a combination of positive distractions, intuitive way finding techniques, and security measures to promote a positive visit experience.

## 6.1 DESIGN DE- VELOPMENT

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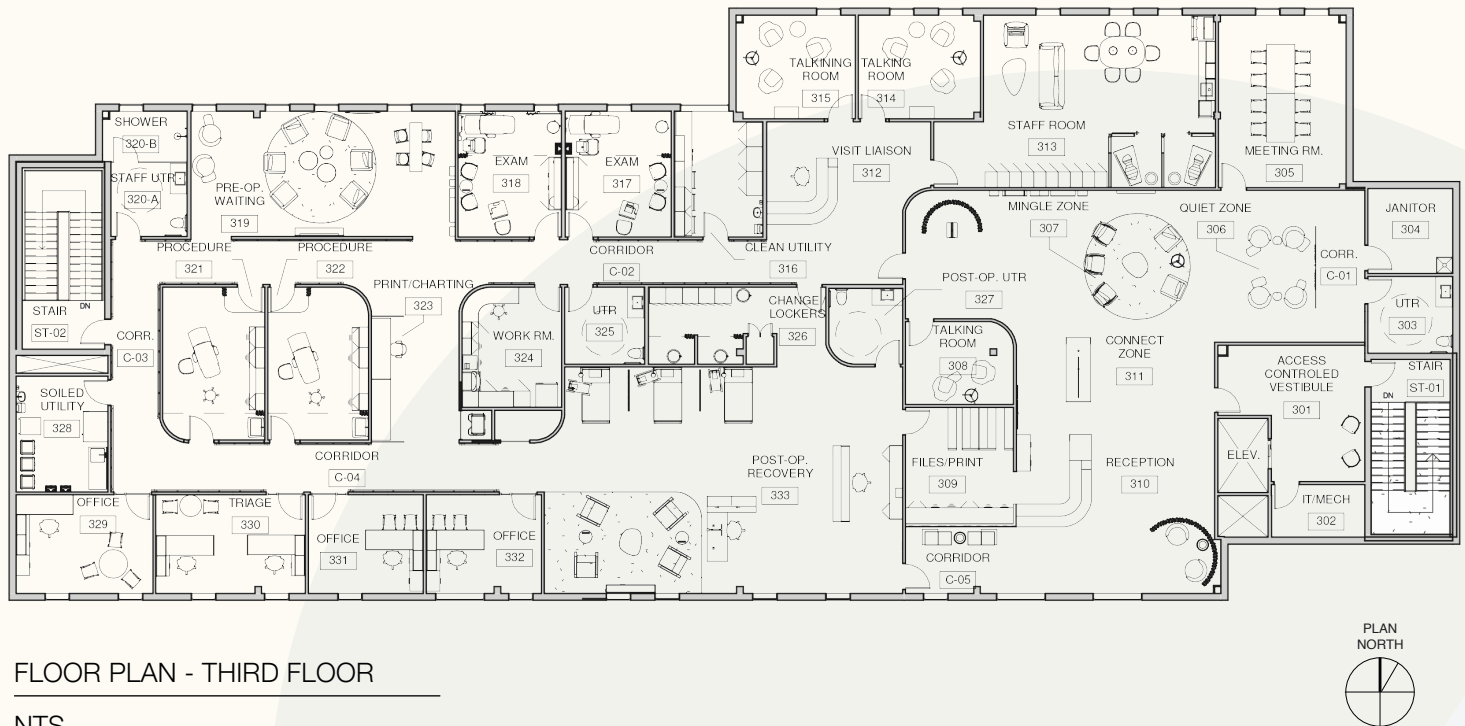
The intention with the design language was to dissolve the rigidity that often comes with healthcare facilities through the implementation of curvilinear forms. Inspired by the notion of a circle as a revolution around a common centre, circles are used to delineate space while also promoting a sense of community. On the other hand, linear ceiling planes are used to create a sense of directionality and differentiation. The colours and materials were inspired by the nature-based images seen in Figure 31, creating a set of 4 colours for each programmatic space.

## 6.3 DESIGN DESCRIPTION

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The facility itself is located on the third level of the building. Using the third level allows the facility to disconnect from the front sidewalks where protesters may be present, while also providing a connection to nature at the back with views of the trees and river from the North facing windows. The main entrance into the shared building is from the parking lot on the North side of the building (see appendix A & D for more info). Visitors can use both the elevator and the stairs to reach to the third level where they will buzz into the facility from the access controlled vestibule.

To maximize security the space was planned with the least critical functions as a bookend to the more critical functions in the middle as seen in Figure 34. Another critical influence on the spatial planing was the staff and visitor flow. The client spaces were situated to create a full circle experience as seen in Figure 33, while the staff spaces were situated to promote efficiency.



## FLOOR PLAN - THIRD FLOOR

NTS.

Figure 32: Third Floor Plan

Figure 33: Circulation  
Diagram

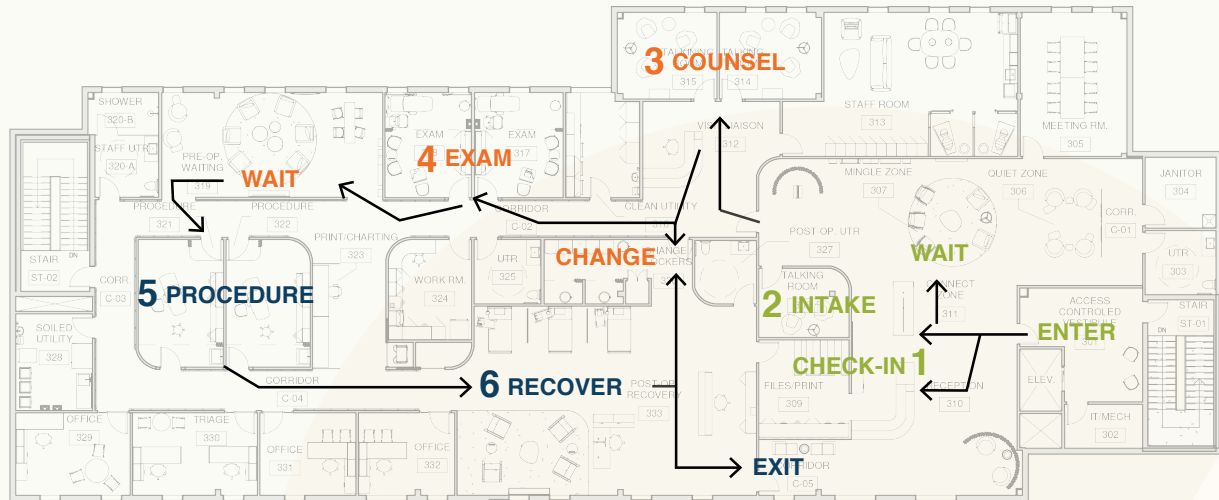
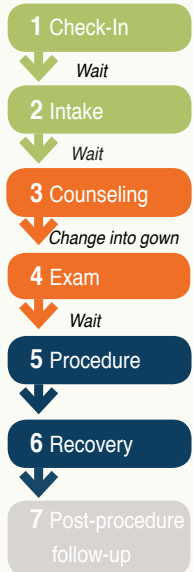
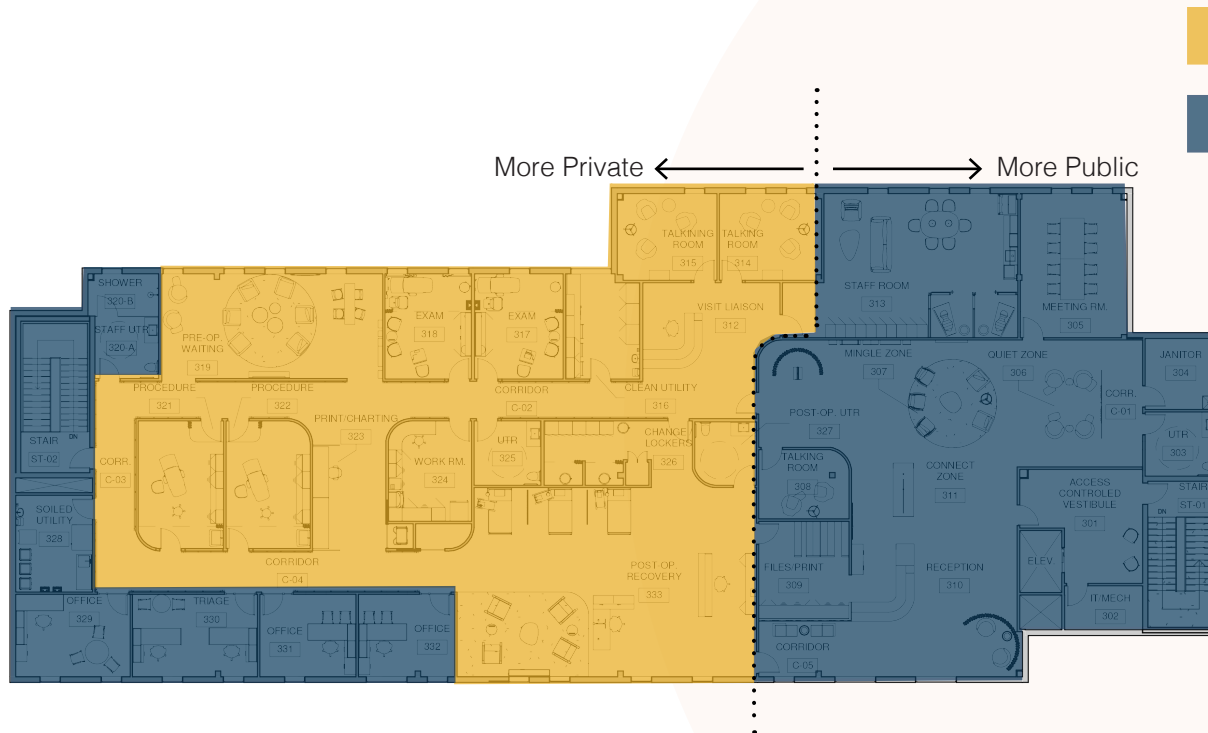


Figure 34: Critical Functions Diagram



Upon arrival visitors have the option of checking in with the receptionist or using the theoretical AHCW check-in app on the tablet devices located in the connect zone. The two check-in options offer visitors with a choice in socialization as some people may prefer face-to-face interaction, while others may feel more comfortable using the app. The connect zone is equipped with two tablets where visitors can also browse the facility's app and find information about pregnancy options, birth control options, and other related information while waiting. Electrical outlets and multi-device charging cables are also provided so that visitors can utilize their personal devices as a distraction without fear of losing battery life.

While visitors can check-in at the reception desk, it also acts as a last check-out point for clients when leaving the facility. When clients commence the appointment procedure they will enter to the right of the reception and connect zone, and when leaving they will exit past the reception desk on the left. The reception desk is situated to provide sight lines of those entering and exiting the space. Behind the reception desk glazing is used to provide transparency in order avoid a blind corner.

Past the connect zone is the VR zone. The VR zone provides insight into the procedure room as uncertainty can be a point of apprehension for some. The intention is to attempt to relieve some uncertainty about the procedure by making the space more familiar to the client prior to the procedure. Users can stand on either side of the station and use one of the two VR headsets to see a panoramic view of the facilities procedure room. Encasing the VR zone is a semi-translucent curtain with sound absorbing properties. The curtain can be drawn for privacy while still allowing staff members to see into the VR zone.



Figure 35: Reception





Figure 36: Mingle Zone

After checking in the visitors will then wait in the main waiting area where the client may chose to have a support person accompany them. While waiting for the pre-procedure counseling the client will be pulled aside from their support person into the talking room to ensure they are not being coerced into an abortion and wrap up the intake process.

The main waiting area includes two zones, a mingle zone and a quiet zone. One way that positive distraction can be implemented is by promoting camaraderie amongst the visitors. The mingle zone is arranged in a circular formation to promote face-to-face interaction, with lighter seating that can be easily maneuvered to one's preference. The framed television on the back wall is used as dynamic artwork. Rather than playing a movie or show that might not cater to everyone's preference, a series of nature base images will be showcased. Beside the television is a series of shelves where visitors can access reading material and games. In offering different elements of positive distraction visitors can have a choice about how to occupy their time while waiting. From technology to physical books, visitors have the flexibility to engage however they prefer.

In the quiet zone high back chairs provide privacy for those who prefer to keep to themselves. The chairs have a swivel base which allows the users to control which direction they face. A glazing wall with frosted film provides semi-visual privacy while the upholstery and wool pendant light provide some sound absorbency for acoustic privacy. The artwork on the adjacent wall acts as another point of distraction, and contains empowering words that reoccur throughout the facility. To create a home-like quality of space, informal style furniture is paired with elements such as floor and table lamps, area rugs, and throw pillows throughout the facility. Millwork style rubber base and oak wood tones are also used to further the sense of informality and create a warm environment. Botanic patterns in the upholsteries and wall coverings bring an element of nature into the space while also creating visual interest.





Figure 37: Quiet Zone

After the counseling session the client will change out of their clothes into a robe, where they will store their belongings in the locker area. Next, the client will go to one of the two exam rooms. As part of the wayfinding scheme, each client space has a dedicated colour. To help clients find their way, the doors are numbered in the corridors with their co-ordinating program colour. The colour also frames the door to differentiate each space, helping users orient themselves and for practitioners to provide clear directions. A wood slat ceiling draws attention to the key spaces that clients will be using such as the exam rooms while minimizing adjacent tertiary spaces such as the clean utility and work room. Maple wood style vinyl sheet flooring is used to emulate the feel of real wood flooring shifting away from the clinical aesthetic, while a neutral primary wall colour juxtaposes the programmatic accent colours.



Figure 38: Corridor C-02

The facility will function through half of the week as procedure days, and the other half will be consultation and follow up days. During the procedure days the client will have to leave their support person in the waiting area beyond the counseling session. During that time the support person can remain connected to the client through the facilities application that can send periodic updates as they progress through the appointment (See appendix D for more details). However, on consultation days where the client may still be weighing their options, the support person is welcome to remain present during the exam. The exam room will be used to conduct examinations, ultrasounds, and administer birth control.

The design of the exam room was restructured from a traditional layout to foster face-to-face interaction between the client and practitioner. Instead of a stationary work surface, the practitioner will have a mobile height adjustable table that can be shifted and maneuvered to suit the practitioners needs, while also creating a more neutral position to the client. Each practitioner will use a portable notebook computer allowing them to access charts, research databases, and other apps required for the job. The practitioner is stationed near the door in the event that they feel the need to exit an escalating situation. Two guest chairs are situated with a small side table to create an informal lounge setting while providing comfortable seating when waiting or having discussions with the practitioner.

Continuing with the home-like theme, the millwork was designed to resemble that of a residence rather than a clinic with wall mounted cabinets and a surface mounted sink. Elements such as the sharps bin and garbage disposal were integrated into the millwork to minimize the clinical feel. Linear shelving in lieu of overhead cabinets create an opportunity to display decorations to add to the informality of the space. A penny round tile serves as a back splash while also creating visual interest in conjunction with the floral wall covering and upholstery.

The exam bed is situated next to the windows to provide a view out to the adjacent river. The one way vision window film allows light to enter the space while blocking views from the outside in. Curtains above the windows allow clients to cover the windows if preferred while supporting the home-like quality as well as sound absorbtion. Above the exam bed is a light fixture emulating a skylight to offer a visual distraction while laying down. For privacy a ceiling mounted curtain divides the exam area from the client area.





Figure 39: Exam Room





Figure 41: Pre-Op. Waiting

After the exam, the clients will wait in the pre-op. waiting area. Similar to the main waiting area, this space includes several distraction elements to help the clients pass the time in a positive manner. The shelving in this space includes reading material, board games, as well as VR head sets that can be used to select a scene that clients can escape into. Beyond the shelving is a bar height table where personal devices can be charged. A cork board next to the table provides a space for clients to leave encouraging messages for each other and share their experiences to support camaraderie amongst each other.

The seating is arranged in similar fashion to that of the main waiting area to again promote socialization amongst the clients. However, if the client would prefer privacy there are two high back chairs towards the back of the space. A series of occasional tables are provided to allow clients to shift around the seating area to accommodate the various activities, whether that is playing a game with another client, or doing a puzzle by themselves. Adjacent to the seating area is another framed television that will also display nature based images, with a faux fireplace beneath it supporting the element of visual distraction while adding warmth to the space.



When ready for the procedure an abortion doula will escort the client to the procedure room where she will accompany them throughout the duration of the procedure to explain each step. The client will enter from the pre-op. waiting on the north side at Corridor C-02, and exit from the south side into Corridor C-04 leading to the post-op. recovery area. The dual doors also prevent the clean and dirty circulations from crossing paths. Encasing both doors are ceiling mounted curtain which will be drawn during the procedure for increased privacy.

Above the procedure bed is a custom screen that can display various dynamic images based on the options from the touch screen panel on the wall. The clients will also be offered a wireless headset to which they can listen to a corresponding sound track if desired. Recognizing that not everyone enjoys viewing the same things, clients can have the option to choose the imagery based on their own individual preferences.

The primary wall colour for the procedure room is a light brown to warm up the space, with a navy blue accent wall to support a home-like environment. Warm oak plastic laminate millwork is also used with white solid surface counter tops and rubber floor base to further add to the informal qualities. In keeping with the programmatic space colour, the exam bed and practitioner stool are upholstered in a blue textured vinyl to tie in the colour scheme.



Figure 42: Procedure Room

After the procedure the client will proceed to the post-op. recovery space where they will have the option of laying down in a bed or sitting in a reclining chair. The client will spend a minimum of 20 minutes here. When cleared to leave they can change back into their clothes and exit on the right side of the nurse's station.





Suspended frosted acrylic panels break up the bed area and add semi-visual privacy while still providing enough transparency for the practitioners to oversee the space. Leaf and wood grain patterns are etched into the panels to provide a sense of nature and texture. Each bed has a wall mounted lamp to which the hue can be adjusted to promote a sense of individual control over the environment. Nature based artworks with a floral wall covering are also used support a home-like environment.

In the seating area reclining chairs that can fold out into a laying position have casters so that the clients can easily maneuver the chair to the desired position. A wall unit with shelving displays decorations as well as reading materials, with a faux wall mounted fire place further promoting a sense of warmth. To emulate the feeling of a living room, side tables are placed in between the chairs with table lamps that can be turned off and on depending on the client's preference.

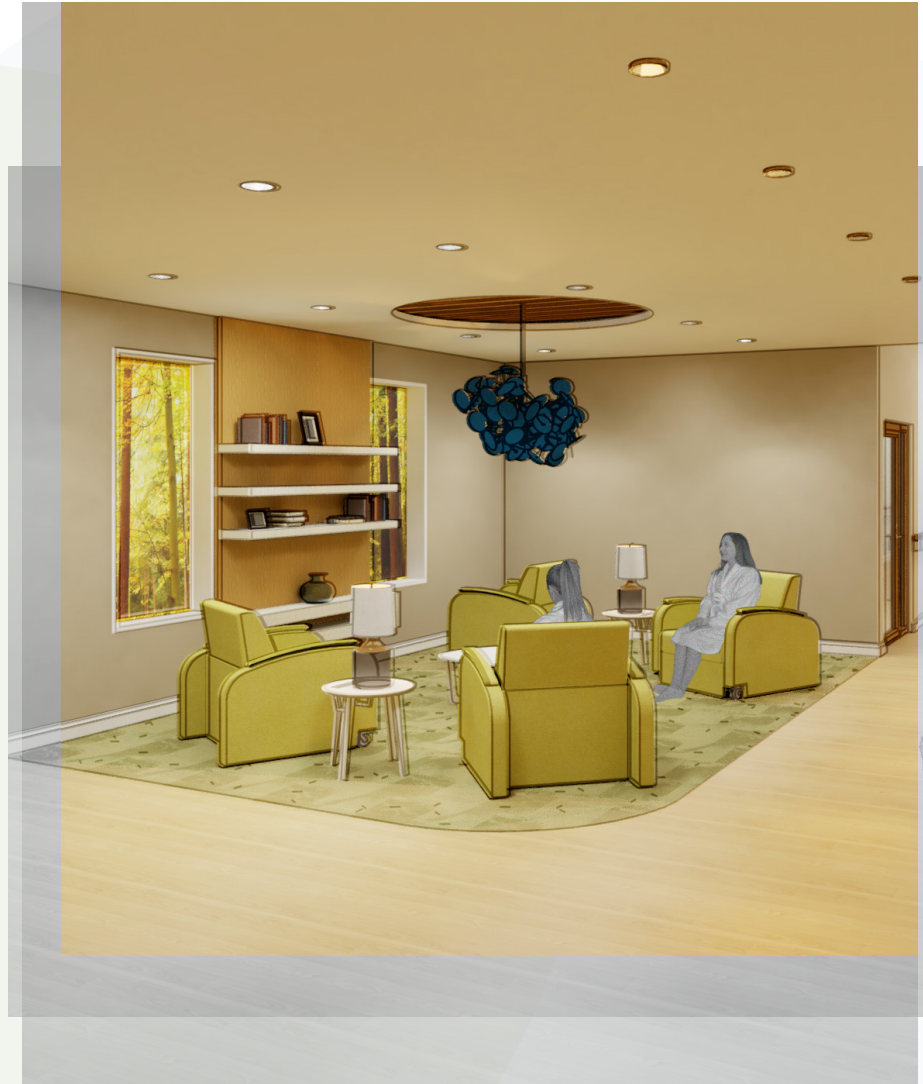


Figure 43: Post-Op. Recovery



## 6.3 CONCLUSION

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The design of the Abortion Health Centre of Winnipeg is an amalgamation of client and staff spaces that support the process of abortion. Each of the theoretical explorations from chapter two informed the design decisions of the facility from client and practitioner well-being, to security, positive distraction, and environmental comfort. The staff and client spaces work together to support efficiency, comfort, and ease for its users with the goal of minimizing stress and anxiety. The design of the Abortion Health Centre of Winnipeg celebrates reproductive choice by supporting anatomical choice within the space. It is the hope that clients can feel at home while at the facility, and gain a sense of control over their environment despite their given situation.



Figure 44: Front Building  
Perspective

# 7

## 7.0 Conclusion

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# CONCLUSION

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## 7 CONCLUSION

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Abortions can be a difficult process to endure for all of those involved. Emotions can vary from sadness, anger, and even peace. No matter the background or situation, the last thing that should bring distress to those undergoing an abortion is the environment of the APF. The purpose of this practicum was to explore how interior design can affect users' emotions and experiences. I felt that this was an important topic to explore as it seems to be an under developed area of research in design, and after some investigation I realized that there is a lack of APF's not only in Manitoba but other provinces as well. My initial investigations began by surveying an Online forum called Reddit. The "r/abortion" thread has countless posts about individuals' experiences with abortion as well as inquiries from those considering it. This initial investigation led to an understanding of common issues faced within APFs, to which I then used as a guideline for my research topics. With this information, I composed three questions that also helped guide the research process and project scope.

### **Resolution**

The first question I asked was: how can positive distraction inform the design of a comfortable and stress-free environment for women who choose to undergo an abortion? To address this I looked at what causes distress in environments such as an APF. I learned that healthcare environments can often diminish ones sense of control due to the institutional routines of such, which often contributes to client stress on top of any other personal stress the client may experience. I addressed this by providing different instances of options to promote a sense of control by giving users a selection of choice between the various controls and distractions. As a millennial my initial strategies involved technology and supporting the use of personal devices. However, I had to consider the user population as a whole and remember that picking up a book or doing a puzzle can be just as effective at creating a positive distraction. The intention of providing positive distractions was to also help visitors pass the time during what can be sometimes lengthy appointments. I then structured each waiting space with different distractions based on the average time spent in the space.

The second question was: how can security measures meet the needs of an abortion provider facility without imposing distress on clients or staff? This was a rather difficult question to answer as security measures can often trigger a negative emotional response. To address this issue I looked at ways in which security measures can be discreetly implemented. The first aspect I was interested in was the concept of the person trap or access controlled vestibule. At first, I wanted to eliminate it entirely, however, since the facility is located on a the third floor and involves an elevator, it would be difficult and costly to control who entered the space. While the concept of an access controlled vestibule was still implemented, I was able to design it in such a way that seems more like a lobby than a person trap. When planning the space I also realized that staff members can be an effective security measure in lieu of cameras. I accomplished this by creating clear sight lines, and avoiding blind corners or places where people can hide. When deliberating the security schemes I realized that mental security is just as important as physical security. It then became important to also address sight lines from inside and outside of the facility, and from the more public and private areas.

The last question I posed was: How can the design of an abortion provider facility respond to the users' emotional and physical needs? In this instance it was important to provide a platform to support camaraderie where client's could relate to each other. Although some client's emotional needs may involve privacy rather than socialization. I learned that it can be difficult to offer privacy in public spaces such as a waiting area, but providing different options for privacy and socialization can help to support the different emotional needs of the visitors.

When considering the logistics of the APF, one challenge that arose was the naming of the facility. Initially, I had chosen the name Women Now as it was a clinic visited by the protagonist contemplating abortion in one of my favorite films. However, it became apparent that not everyone with a uterus identifies as a female. At that point, my naming strategy turned to transparency as gender was no longer the important factor. In the end, I settled on the name Abortion Health Centre of Winnipeg with the idea that if one were searching for an APF, it would stand out as exactly that while remaining inclusive.

## **Consider- ations**



The most surprising thing I learned through this practicum is the importance of individuality, and that flexibility can play a key role in a supportive environment. Designing a contested space such as an APF has shown me how sensitive the energy within the built environment can be, and that the implications of interior design can greatly affect users' emotions both positively and negatively.

If I had more time I would have liked to collect data specifically about people's experiences with APFs in relation to the built environment, rather than simply reading through forums. The vast majority of the academic sources were focused on the medical side of abortion. Thus, it was difficult to compile empirical research about abortion, which is why I turned to Online forums to further support this practicum as they were upfront and personal. Collecting this type of data would have allowed me to be able to expand this area of research for future development in the field.

Design wise, one aspect I would further address is the implementation of security instruments such as cameras and access control mechanisms. One of the things that I contemplated is how often security devices such as the ones previously mentioned stand out from the built environment intentionally, or unintentionally. It would be neat to develop a design detail to incorporate security cameras in a friendly yet transparent manner that would impose less of a sense of surveillance on the visitors, especially in the access controlled vestibule. With more time, this would have been the next focus of the practicum.

In conclusion this practicum research has helped to form a better understanding of sensitive medical spaces such as an APF. With my findings I was able to discern and develop a functional APF design concept that can meet the physical needs of all of its users, while also creating an environment that is supportive of users' emotional needs. Ultimately there will always be a need for APFs weather the concept is supported or not. It is my hopes that at the end of the day this practicum will continue the conversation about the importance of abortion provider facilities.

## **Future Development**

## **Final Remarks**

# 8

8.0 References

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## 8 REFERENCES

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[ga=2.155123768.1064480198.1536180234-239330364.1536180234](http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2017/63330a-eng.php?_ga=2.155123768.1064480198.1536180234-239330364.1536180234)

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# 9

- A Building Code Analysis  
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- D Diagrams  
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# APPENDICES

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# A

## BUILDING CODE ANALYSIS

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**3.1.2.1 Major Occupancy Classification**      Group B, Division 2, Treatment Occupancy

**3.1.17.1 Occupant Load**      - According to table 3.1.17.1 the occupant load is 10 m<sup>2</sup> (107 ft<sup>2</sup>) of area per person  
 - The maximum occupancy of Women Now is 60 people  
 1C) The number of persons for which the area is designed, but not less than that determined from table 3.1.17.1. For occupancies other than those described in Clauses (a) and (b), unless it can be shown that the area will be occupied by fewer persons.

**3.2.239 Group B, Division 2, up to 3 Storeys, Sprinklered**      2) Except as permitted by Article 3.2.2.16., the building referred to in sentence (1) is shall be of noncombustible construction and,  
 A) Floor assemblies shall be fire separations with a fire resistance rating not less than 1 hour  
 B) Mezzanines shall have a fire resistance rating of no less than 1 h, and  
 C) Load bearing walls, columns and arches shall have a fire resistance rating not less than that required for the supported assembly.

**3.3.1.3 Means of Egress**      1) Access to exits within floor areas shall conform to Subsections 3.3.2. to 3.3.5., in addition to the requirements of this subsection.  
 4) At least two separate means of egress shall be provided from a roof, used or intended for an occupant load more than 60, to stair designed in conformance with the requirements regarding exit stairs stated in 3.4  
 7) Two points of egress shall be provided for a service space referred to in Sentence 3.2.1.1 if  
 a) The area is more than 200 m<sup>2</sup>, or

b) The travel distance measured from any point in the service space to a point of egress is more than 25m  
8) Except as permitted by sentences 3.3.4.4 5 and 6 each suite in a floor area that contains more than one suite shall have

a) An exterior doorway or,

b) A doorway

i) Into a public corridor, or

ii) To an exterior passageway

9) Except as permitted by this section and by sentences 34.2.1. 2 at the point where the doorway referred to in sentence 8 opens onto a public corridor or exterior passageway, it shall be possible to go in opposite directions to each of 2 separate exits

- Maximum area of spaces other than sleeping rooms 100 m<sup>2</sup>

**Table 3.3.1.5.B**  
**Egress in Floor**  
**Area Sprinklered**  
**Throughout**

1) Except as provided by sentence 2, a corridor used by the public or serving patient's/resident's sleeping rooms shall have no dead end portion

2) Corridors are permitted to have a dead-portion where

a) The area served by the dead end portion has a second and separate means of egress or

b) The corridor serves a suite of care occupancy and the dead-end portion does not exceed 6 m.

3) Corridors shall be not less than

a) 2400 mm wide in building of treatment occupancy where the corridors may be used to move patients or residents in bed

**3.3.3.3 Corridors**



**3.3.3.5**  
**Compartments**  
**and Fire**  
**Separations**

- 1) Floor areas containing patients' or residents' sleeping rooms in a care or treatment occupancy where overnight sleeping accommodations are being provided for more than a total of 10 patients or resident's shall conform to sentences 2/14
- 2) Except as permitted by sentence 3, a floor area described in sentence 1 shall be divided into not than 2 fire compartments, each not more than 1000 m squared
- 4) Except as permitted by sentence 5, fire separations separating compartments in sentence 2 shall have a fire-resistance rating of not less than 1 hour
- 6) A closure in a fire separation between fire compartments referred to in Sentence 2 shall be weather-stripped or otherwise designed and installed to retard the passage of smoke
- 7) The travelling distance from any point within each fire compartment referred to in sentence 2 to a door to an adjoining fire compartment shall be not more than 45 m
- 8) Each fire compartment referred to in sentence 2 shall be capable of accommodating, in addition to it's own occupants, the occupants of the largest adjacent fire compartment based on a clear floor space of 2.5m<sup>2</sup> per patient I the adjacent fire compartment
- 9) Except as provided in sentences 10-14, walls between patients' or residents' sleeping rooms and the remainder of the floor area shall be constructed as fire separations but re not required to have a fire-resistance rating unless one is required by other provisions in this part
- 10) 9 does not apply to walls within a group of intercommunicating patients' or residents' sleeping rooms, provided the group of rooms does not
  - a) Contain more than 5 patients or residents, or
  - b) Include storage, bathing/toilet facilities serving persons not occupying the group of rooms

**3.4.2.1 Minimum**  
**Number of Exits**

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

- 1) Except as permitted by sentences 2 and 3.3.2.5 6, if more than one exit is required from a floor area, the exits shall be located so that the travel distance to at least one exit shall be not more than
  - c) 45m in a floor area that contains an occupancy other than a high hazard industrial occupancy provided it is sprinklered throughout
- 2) Except for high hazard industrial occupancy, sentence 1 need not apply if exits are placed along the perimeter of the floor area and are not more than 60 m apart, measure along the perimeter, provided each main aisle in the floor area leads directly to an exit
- 3) Exits shall be located and arranged so that they are clearly visible or their locations are clearly indicated and they are accessible at all times

### **3.4.25 Locations of Exits**

- 1) Except as provided in sentence 2, the least distance between to exits from one floor area shall be
  - a) One half the maximum diagonal dimension of the floor area, but need not be ore than 9m for a floor area having a public corridor, or
  - b) One half the maximum diagonal dimension of the floor area, but not less than 9m for all other floor areas

### **3.4.2.3 Distance Between Exits**

- 9) The number of water closets required for a treatment or detention occupancy shall be determined on the basis of the special needs of the occupancy.

### **3.7.2.2 Water Closets**

- 1) Except as required elsewhere in this part or as permitted by article 3.8.3.3 pertaining to doorways, the unobstructed with of a barrier free path of travel shall
  - a) Have no openings that will permit the passage of a sphere more than 13mm diameter
  - b) Have nay elongated opening oriented approximately perpendicular to the direction of travel
  - c) Be stable, firm, an slip resistant
  - d) Be beveled at a maximum slope of 1-2 at changed in level not more than 13mm and
  - e) Be provided with sloped floors or ramps at changes in level more than 13mm
- 2) A barrier free path of travel is permitted to include ramps, passenger elevators, or other

### **3.8.1.3 Barrier Free Path of Travel**

platform-equipped passenger elevating devices to overcome differences in level

3) The width of the barrier free path of travel that is more than 30m long shall be increased to not less than 1500mm for a length of 1500mm at intervals not exceeding 30m

**3.8.2.1 Areas  
Requiring a  
Barrier Free  
Path of Travel**

1) Except as permitted by sentence 2 a barrier free path of travel from the entrances required by sentences 3.8.1.2 1 and 2 to be barrier free shall be provided throughout the entrance storey and within all other normally occupied floor areas served by a passenger elevator, escalator, inclined moving walk, or other platforms-equipped passenger elevating device.

2) A barrier free path of travel for persons in wheelchairs is no required

a) To service rooms

b) To elevator machines

c) To janitors room

d) To service spaces

e) To crawl space

f) To attic or roof spaces

g) To floor levels not served by a passenger elevator, a platform-equipped passenger elevating device, an escalator, or an inclined moving walk

**3.8.3.1  
Accessibility  
Signs**

1) Signs incorporating the international symbol of accessibility for persons with physical disabilities shall be installed to indicate the location of a barrier free entrance

2) A washroom, shower, elevator, or parking space designed to be barrier free shall be identified by a sign consisting of the international symbol of accessibility for persons with physical disabilities and by appropriate graphic or written directions to indicate clearly the type of facility available

3) If a washroom is not designed to accommodate persons with physical disabilities in a storey to which a barrier free path of travel is required, signs shall be provided to indicate the location of barrier free facilities

4) Signs incorporating the symbol of accessibilities for persons with hearing disabilities shall be installed to indicate the location of facilities for person with hearing disabilities

**3.8.3.3  
Doorways and  
Doors**

1) Every doorway that is located in a barrier free path of travel shall have a clear width not less than 800mm when the door is in the open position

2) Doorways in a path of traveling to at least on bathroom within a suite of residential occupancy

shall have clear width not less than 800mm when the doors are open

3) Doors operating devices shall be of a design, which does not require tight grasping and twisting of the wrist as the only means of operation

4) A threshold for a doorway referred to in sentence 1 or 2 shall be not more than 13mm higher than the finished floor surface and shall be beveled to facilitate the passage of wheelchair

1) A universal toilet room shall

a) Be served by a barrier free path of travel

b) Have a door capable of being locked from the inside and released from the outside in case of emergency and having

i) A latch operating mechanism that is operable with a closed fist, located not less than 900mm and not more than 1000mm above the floor.

ii) If it is an outward swinging door, a door pull not less than 140mm long located on the inside so that its midpoint is not less than 200mm and not more than 300mm from the hinged side of the door and not less than 900mm and not more than 1000mm above the floor (see A-3.8.3.8)

iii) If it is an outward swinging door, a door closer, spring hinges or gravity hinges, so that the door closes automatically

c) Have on lavatory conforming to article 3.8.3.9

d) Have on water closet conforming to the requirements of article 3.8.3.9 that has a clearance to the walls of

i) Not less than 285mm and not more than 305mm on one side and

ii) Not less than 875mm on the other side

e) Have grab bars conforming to clause 3.8.3.8. 1/d

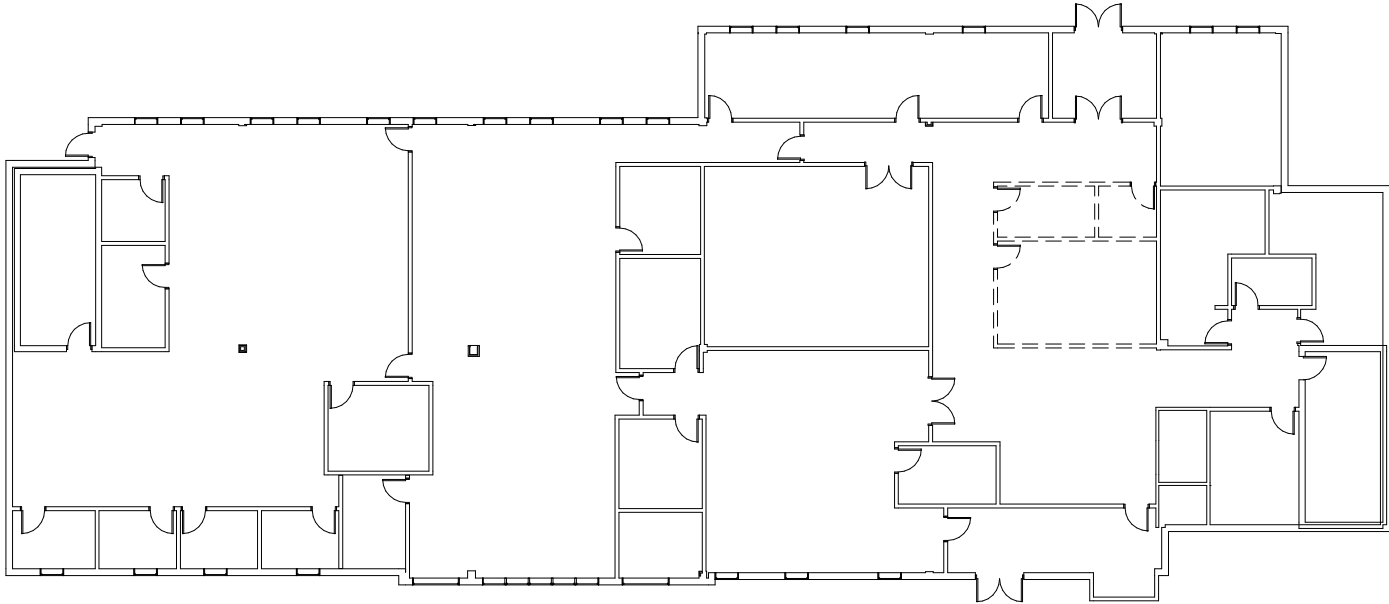
f) Have not internal dimension between the walls that is less than 1700mm

g) Have a coat hook conforming to clause 3.8.3.8 1/e and a shelf located not more than 1200mm above the floor

h) Be designed to permit a wheelchair to back in alongside the water closet in the space referred to in sub clause (d, ii and i) Be designed to permit a wheelchair to turn in an open space not less than 1500mm in diameter

### **3.8.3.12 Universal Washrooms**

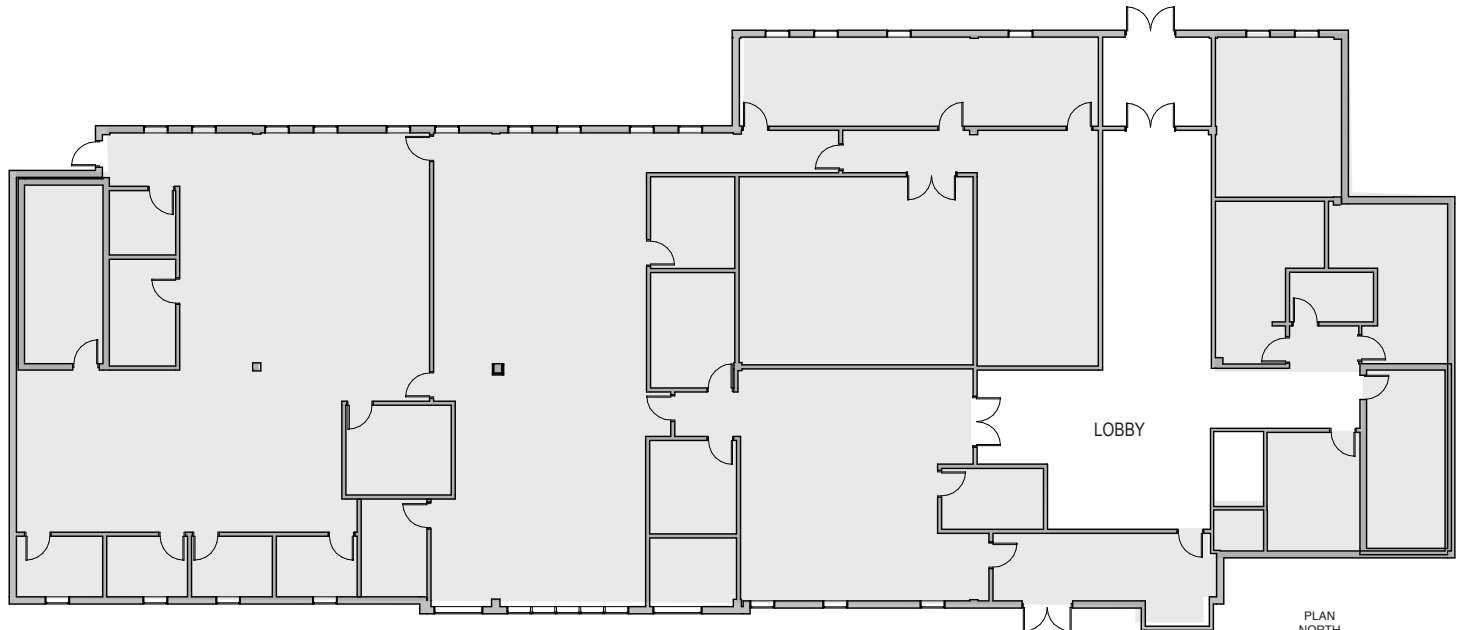
## B TECHNICAL DRAWINGS



### DEMO PLAN - FIRST FLOOR

NTS.

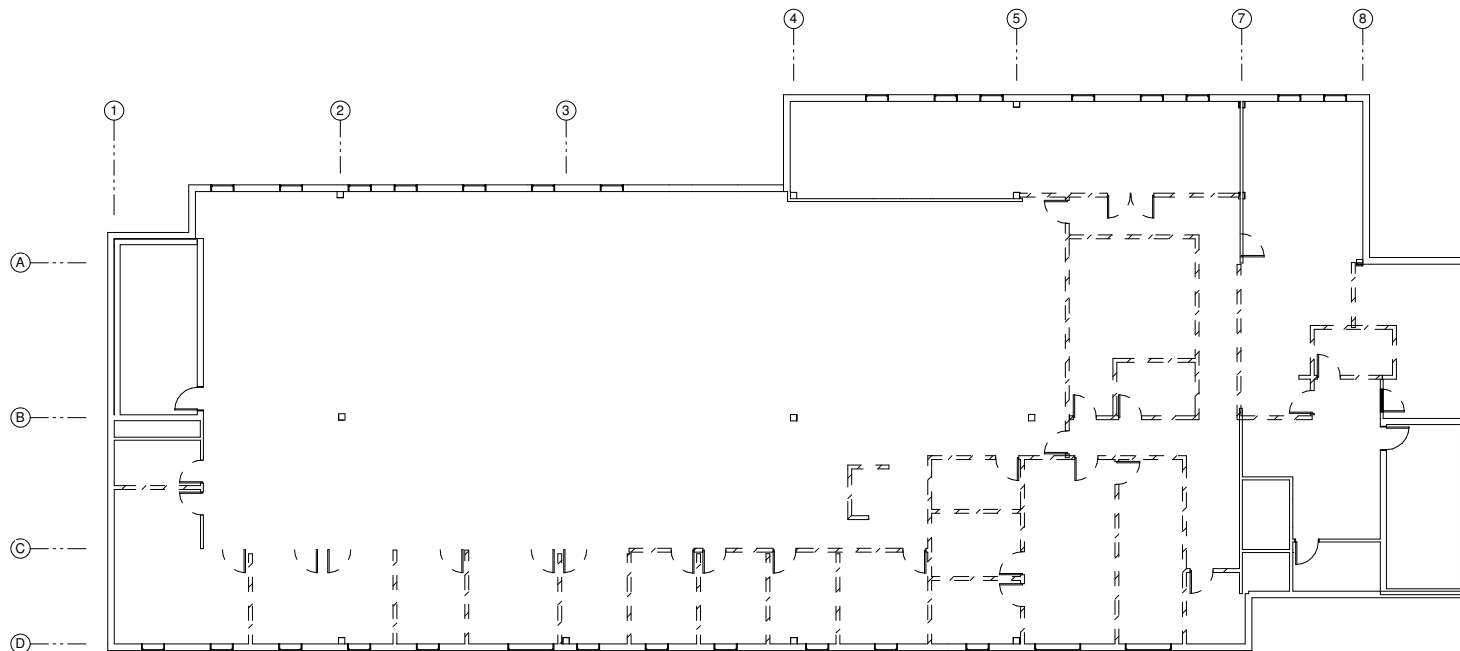
Figure 46: Demo Plan - First Floor



## PARITION PLAN - FIRST FLOOR

NTS.

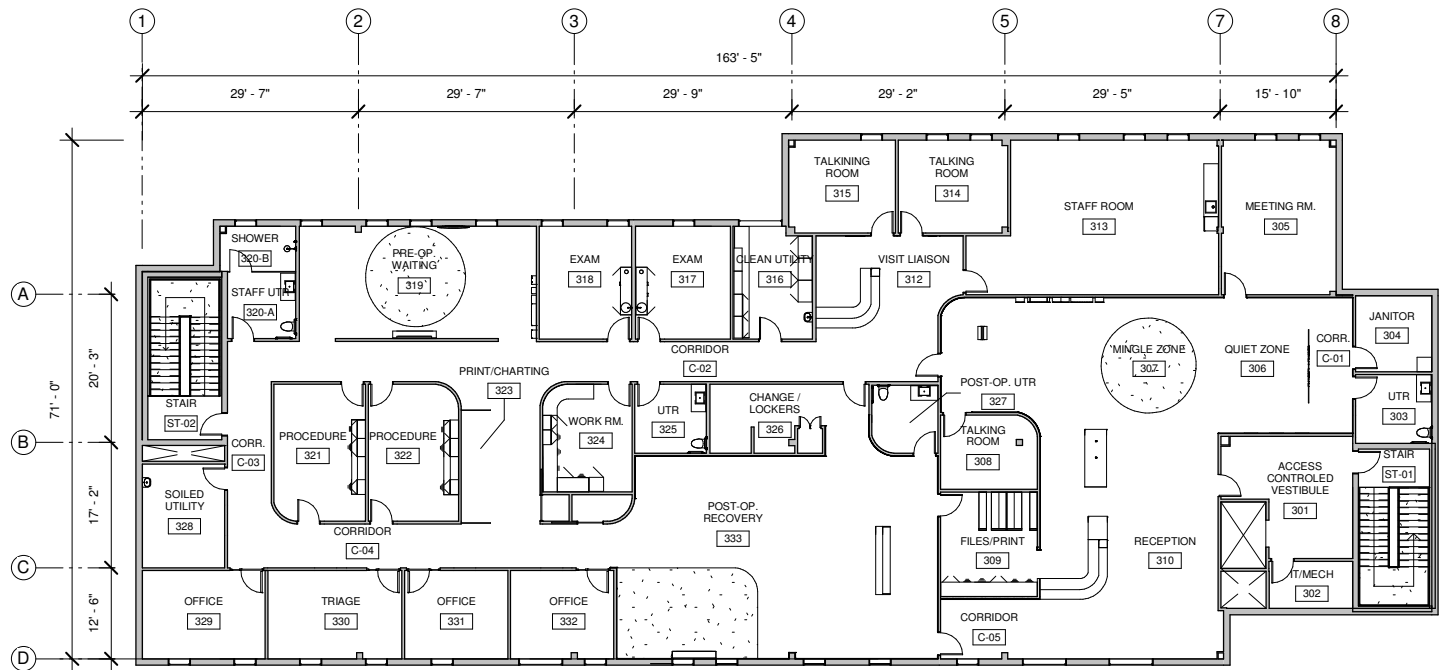
Figure 47: Floor Plan - First Floor



## DEMO PLAN - THIRD FLOOR

Scale  $\frac{3}{64}'' = 1' - 0''$

Figure 48: Demo Plan - Third Floor

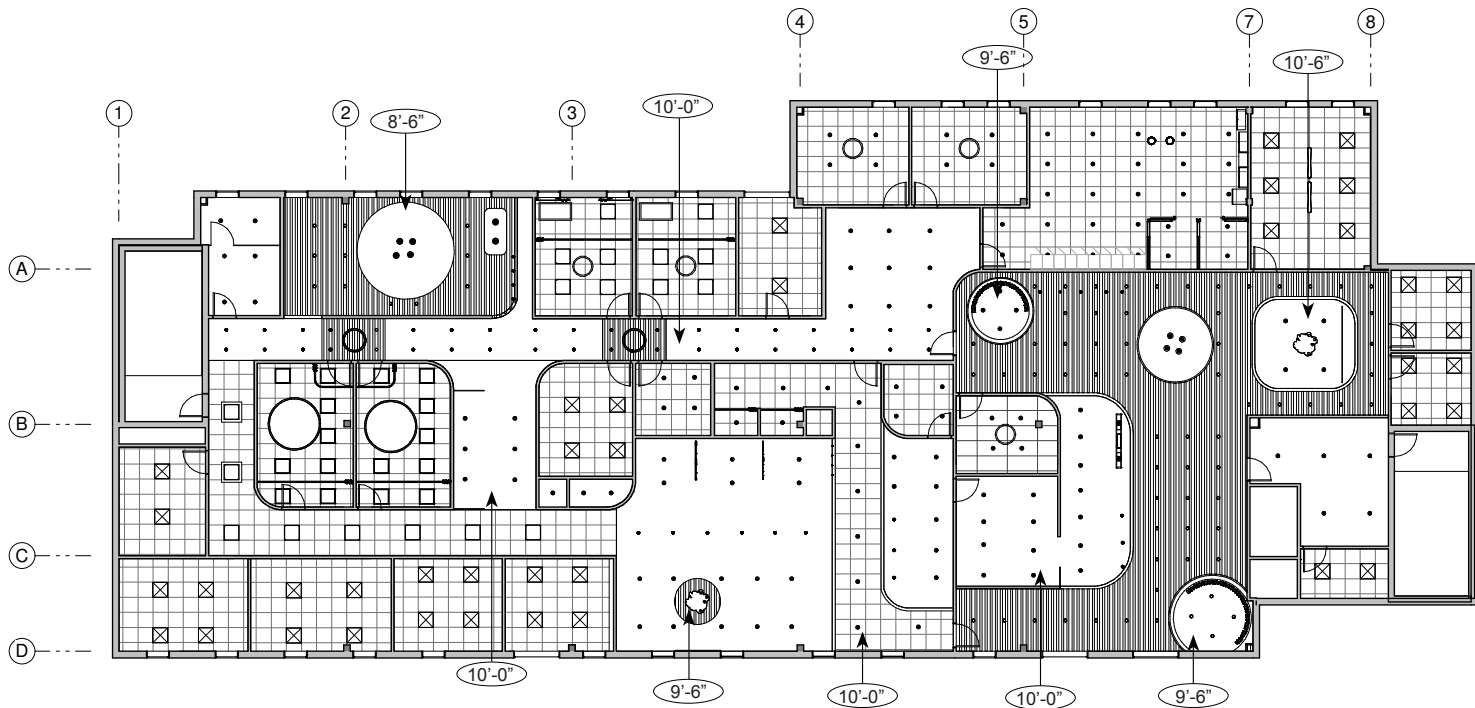


## PARTITION PLAN - THIRD FLOOR

Scale 3/64" = 1' - 0"

Figure 49: Partition Plan - Third Floor





## REFLECTED CEILING PLAN

Scale 3/64" = 1' - 0"

Figure 50: Reflected Ceiling Plan

- Pendant Light
- Pendant Light
- Suspended Light
- Recessed Down Light
- Recessed Down Light
- Pendant Light
- ⌋ Suspended Down Light
- ⌋ Suspended Down Light
- ⌋ Wall Mounted Light
- ⊠ 2x2 Troffer Light
- 2x2 Troffer Light

### Notes:

- All ceiling heights to be 9'-0" unless otherwise indicated



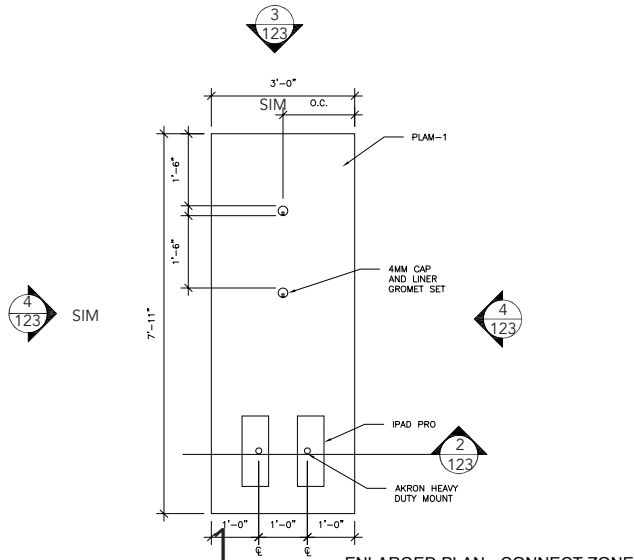


Figure 51: Enlarged Plan - Connect Zone

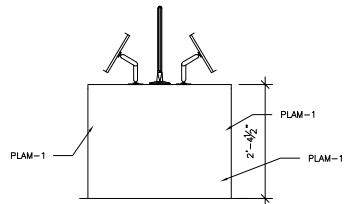
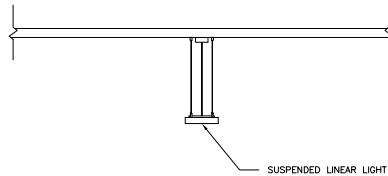


Figure 53: Connect Zone - North

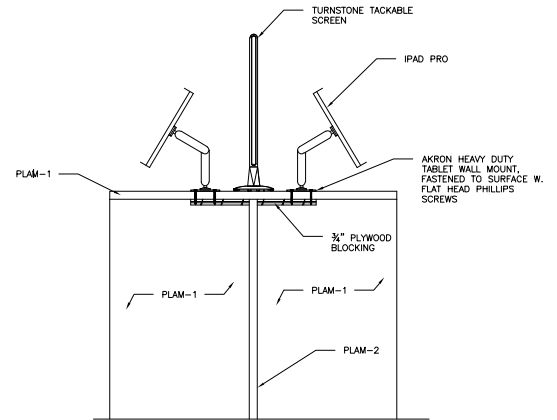


Figure 52: Detail Section - Connect Zone

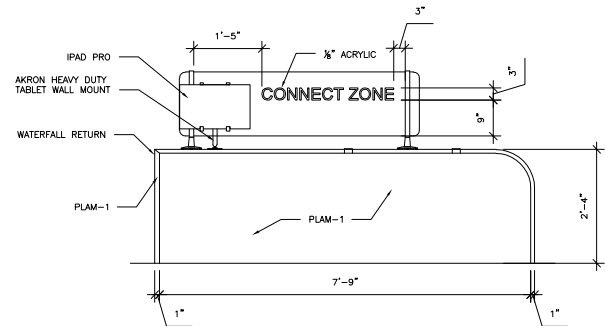
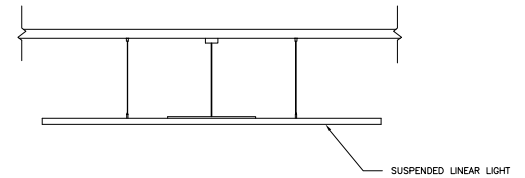


Figure 54: Connect Zone - East



Figure 55: Enlarged Plan - VR Zone

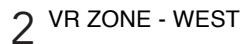


Figure 56: VR Zone - West

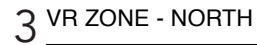
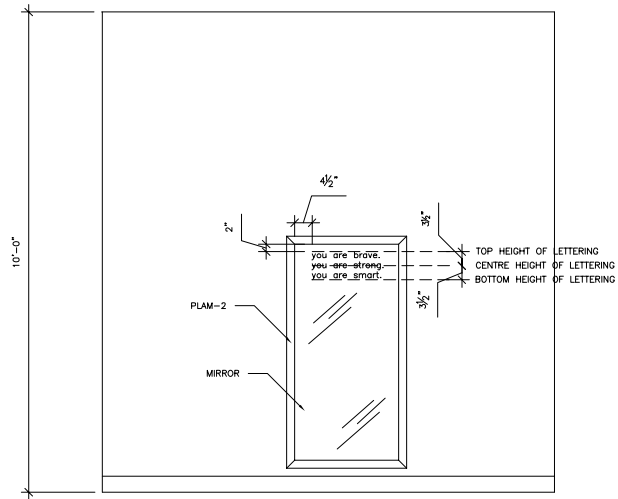


Figure 57: VR Zone - North



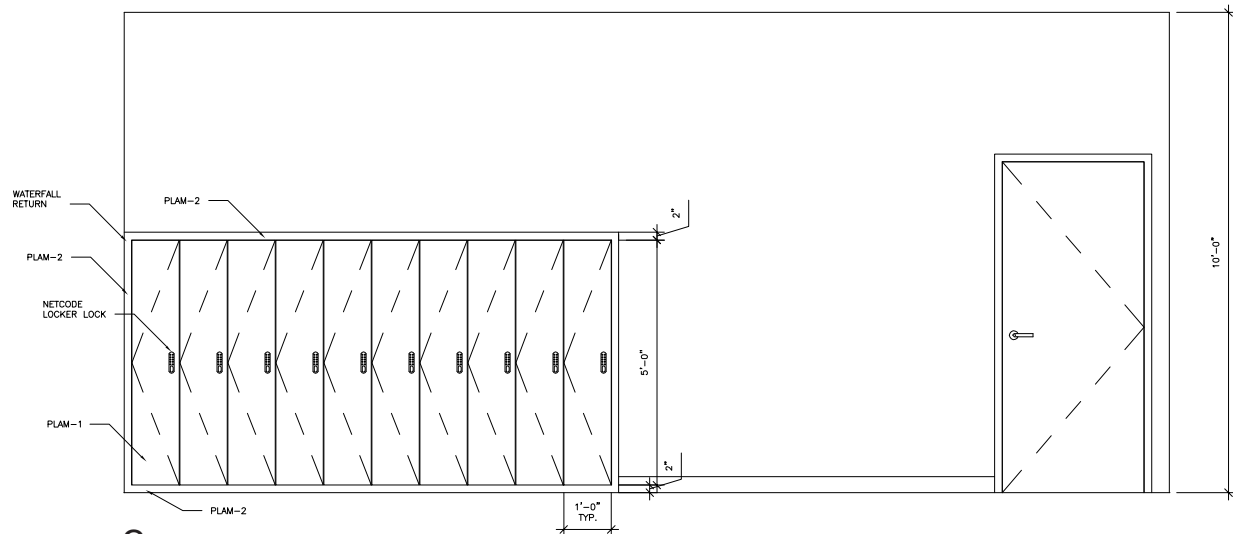
Figure 58: Detail Section - VR Zone



## 1 LOCKERS - WEST

Scale  $1/4" = 1' - 0"$

Figure 59: Lockers - West

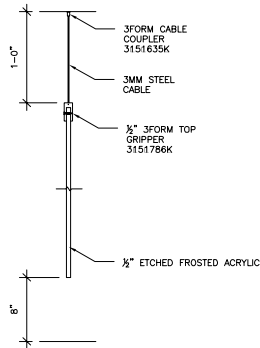


## 2 LOCKERS - NORTH

Scale 1/4" = 1' - 0"

Figure 60: Lockers - North

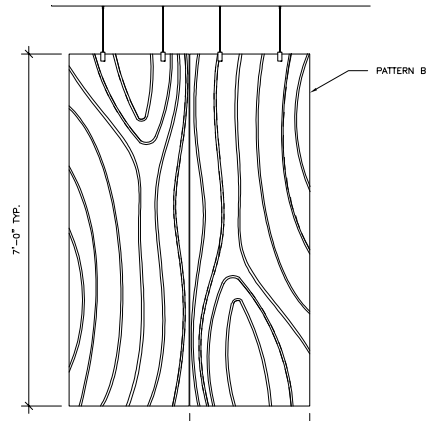




# 1 DETAIL SECTION - SUSPENDED PANELS

Scale 1/2" = 1' - 0"

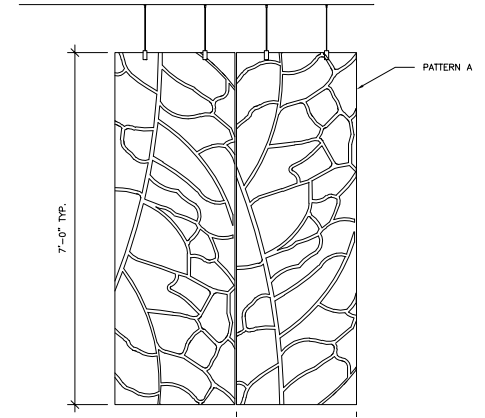
Figure 61: Detail Section - Suspended Panels



# 2 SUSPENDED PANEL - PATTERN A

Scale 1/4" = 1' - 0"

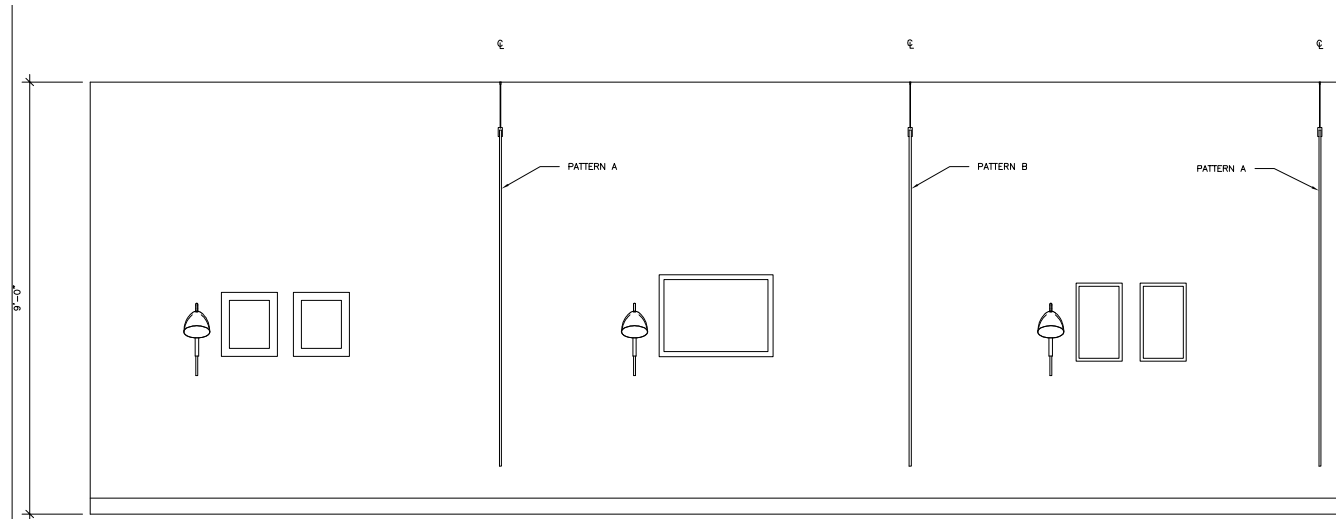
Figure 62: Suspended Panels - Pattern A



# 3 SUSPENDED PANEL - PATTERN B

Scale 1/4" = 1' - 0"

Figure 63: Suspended Panels - Pattern B



# 4 POST-OP. RECOVERY - NORTH

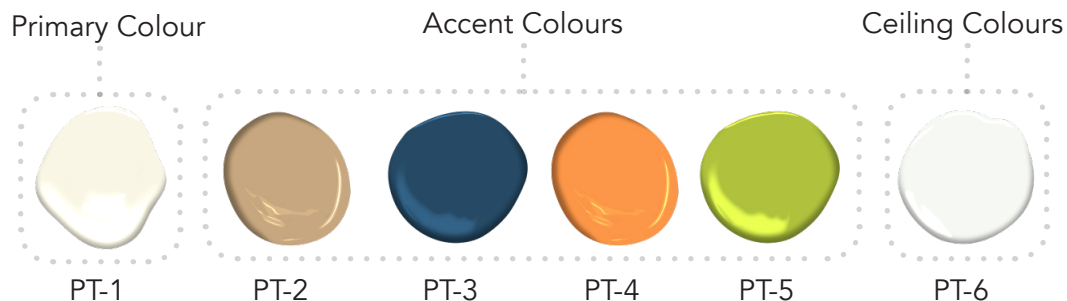
Scale 1/4" = 1' - 0"

Figure 64: Post-Op. Recovery - North

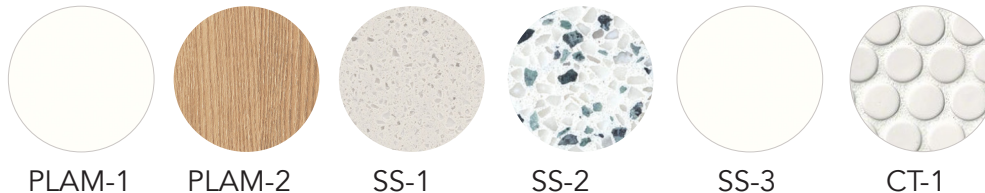
## C FINISHES

### PAINT

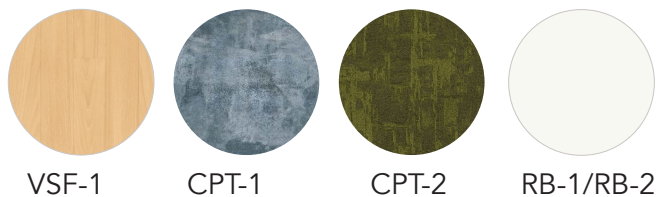
Figure 65: Finishes



### FINISHES



### FLOORING





## FABRIC

### ABBREVIATIONS

CPT - CARPET TILE

CT - CERAMIC TILE

FAB - FABRIC

PLAM - PLASTIC LAMINATE

PT - PAINT

SS - SOLID SURFACE

RB - RUBBER BASE

VSF - VINYL SHEET FLOORING



| SPEC. SECTION | MATERIAL CODE | DESCRIPTION      | MANUFACTURER    | PRODUCT CODE    | COLOUR           |
|---------------|---------------|------------------|-----------------|-----------------|------------------|
| 06 40 00      | PLAM-1        | Plastic Laminate | Arborite        | W-449 EEV       | Rift Natural Oak |
| 06 40 00      | PLAM-2        | Plastic Laminate | Arborite        | S-550           | Elegant White    |
| 06 40 00      | SS-1          | Solid Surface    | Trend           |                 | 1625             |
| 06 40 00      | SS-2          | Solid Surface    | Diesheker & Co. |                 | TE007            |
| 06 40 00      | SS-3          | Solid Surface    | Corian          |                 | Rice Paper       |
| 06 40 00      | FAB-1         | Upholstery       | Maharam         | Scape           | 003 Verbena      |
| 06 40 00      | FAB-2         | Upholstery       | Carnegie        | Quartz          | 6434             |
| 06 40 00      | FAB-3         | Upholstery       | Maharam         | Dot Ring        | 001 Gold         |
| 06 40 00      | FAB-4         | Upholstery       | Loom Source     | Smitten         | Snowy Peak       |
| 06 40 00      | FAB-5         | Upholstery       | Camira          | Era             | Lifetime CSE03   |
| 06 40 00      | FAB-6         | Curtain          | Vescom          | Carmen 03       | 8024.02          |
| 06 40 00      | FAB-7         | Upholstery       | Design Tex      | Friendly Faux   | Kerry Blue       |
| 06 40 00      | FAB-8         | Upholstery       | Maharam         | Entwine         | 001 Quench       |
| 06 40 00      | FAB-9         | Upholstery       | Maharam         | Bluff           | 013 Supernova    |
| 06 40 00      | FAB-10        | Upholstery       | Maharam         | Sacpe           | 006 Moonshine    |
| 06 40 00      | FAB-11        | Upholstery       | Maharam         | Compound        | 008 Mandarin     |
| 06 40 00      | FAB-12        | Upholstery       | Maharam         | Memory          | 473              |
| 06 40 00      | FAB-13        | Upholstery       | Design Tex      | Aster           | Solar            |
| 06 40 00      | FAB-14        | Upholstery       | Arc Com         | Solitude        | Avocado          |
| 06 40 00      | FAB-15        | Upholstery       | Design Tex      | Brushed Flannel | Snap Pea         |
| 06 40 00      | FAB-16        | Upholstery       | Design Tex      | Luster          | Glow             |

Table 10: Material Schedule

| SPEC. SECTION | MATERIAL CODE | DESCRIPTION             | MANUFACTURER   | PRODUCT CODE                        | COLOUR                                       |
|---------------|---------------|-------------------------|----------------|-------------------------------------|----------------------------------------------|
| 09 51 13      | ACT-1         | Acoustic Ceiling Tile   | Rockfon        | Medical Plus<br>2x2, SQ lay in grid | White                                        |
| 09 51 13      | ACT-2         | Acoustic Ceiling Tile   | Rockfon        | Medical Air<br>2x2, SQ lay in grid  | White                                        |
| 09 65 00      | VSF-1         | Vinyl Sheet<br>Flooring | Tarkett        | Perfoma                             | New Maple                                    |
| 09 65 00      | RB-1          | Rubber Base             | Tarkett        | Inflection                          | Icicle                                       |
| 09 65 00      | RB-2          | Rubber Cove Base        | Tarkett        | Duracove                            | Icicle                                       |
| 09 68 16      | CPT-1         | Carpet Tile             | Milliken       | Lapidus                             | Litho                                        |
| 09 68 16      | CPT-2         | Carpet Tile             | Milliken       | Arctic Survey                       | Expedition                                   |
| 09 72 16      | WC-1          | Wall Covering           | Simple Shapes  | Peony                               | Mint Blue                                    |
| 09 72 16      | WC-2          | Wall Covering           | Simple Shapes  | Peony                               | Yellow                                       |
| 09 72 16      | WC-3          | Wall Covering           | Simple Shapes  | Peony                               | Lime Green                                   |
| 09 91 23      | PT-1          | Primary Wall Colour     | Benjamin Moore | 2510-70                             | Easter Lilly                                 |
| 09 91 23      | PT-2          | Accent Wall Colour      | Benjamin Moore | 2162-40                             | Peanut Shell                                 |
| 09 91 23      | PT-3          | Accent Wall Colour      | Benjamin Moore | 2059-10                             | Marine Blue                                  |
| 09 91 23      | PT-4          | Accent Wall Colour      | Benjamin Moore | 2015-30                             | Calypso Orange                               |
| 09 91 23      | PT-5          | Accent Wall Colour      | Benjamin Moore | 2028-30                             | Tequila Lime                                 |
| 09 91 23      | PT-6          | Ceiling Colour          | Benjamin Moore | CC-10                               | Ultra White                                  |
| 10 90 00      | CG-1          | Corner Guard            | Wall Protex    | WX-12                               | Painted with<br>corresponding wall<br>colour |

Table 11: Room Finish  
Schedule

| ROOM<br>NUMBER | ROOM NAME                   | FLOOR | WALLS |           |       |           | CEILING  |
|----------------|-----------------------------|-------|-------|-----------|-------|-----------|----------|
|                |                             |       | NORTH | EAST      | SOUTH | WEST      |          |
| 301            | Access Controlled Vestibule | VSF-1 | PT-2  | PT-1      | PT-1  | PT-1      | GWB/PT-6 |
| 302            | Mechanical                  | SD-1  | PT-1  | PT-1      | PT-1  | PT-1      | ACT-1    |
| 303            | UTR                         | VSF-1 | PT-1  | PT-2      | PT-1  | PT-1      | ACT-1    |
| 304            | Janitor                     | VSF-1 | PT-1  | PT-1      | PT-1  | PT-1      | ACT-1    |
| 305            | Meeting Room                | CPT-1 | PT-1  | PT-3      | PT-1  | PT-1      | ACT-1    |
| 306            | Quiet Zone                  | VSF-1 | PT-1  | GL-1      | WC-2  | -         | GWB/PT-6 |
| 307            | Mingle Zone                 | CPT-1 | PT-1  | -         | -     | -         | GWB/PT-6 |
| 308            | Talking Room                | CPT-1 | PT-1  | PT-1      | PT-1  | PT-2      | ACT-1    |
| 309            | Files/Print                 | VSF-1 | PT-1  | PT-1      | PT-1  | PT-1      | ACT-1    |
| 310            | Reception                   | VSF-1 | -     | -         | -     | GL-1/WC-2 | GWB/PT-6 |
| 311            | Connect Zone                | VSF-1 | -     | -         | -     | GL-1/WC-2 | GWB/PT-6 |
| 312            | Visit Liason                | VSF-1 | PT-1  | PT-2      | -     | -         | GWB/PT-6 |
| 313            | Staff Room                  | CPT-1 | PT-3  | PT-1      | PT-1  | PT-1      | ACT-1    |
| 314            | Talking Room                | CPT-1 | PT-1  | PT-1      | PT-1  | PT-2      | ACT-1    |
| 315            | Talking Room                | CPT-1 | PT-1  | PT-1      | PT-1  | PT-2      | ACT-1    |
| 316            | Clean Utility               | VSF-1 | PT-1  | PT-1      | PT-1  | PT-1      | ACT-1    |
| 317            | Exam                        | VSF-1 | PT-1  | PT-1/CT-1 | PT-1  | WC-1      | ACT-1    |
| 318            | Exam                        | VSF-1 | WC-1  | PT-1      | PT-1  | PT-1/CT-1 | ACT-1    |
| 319            | Pre-Op. Waiting             | VSF-1 | PT-1  | PT-2      | PT-1  | PT-4      | Slats    |
| 320-A          | Staff UTR                   | VSF-1 | GL-2  | PT-1      | PT-1  | PT-1      | GWB/PT-6 |

| ROOM NUMBER | ROOM NAME         | FLOOR                | WALLS     |           |           |           | CEILING                    |
|-------------|-------------------|----------------------|-----------|-----------|-----------|-----------|----------------------------|
|             |                   |                      | NORTH     | EAST      | SOUTH     | WEST      |                            |
| 320-B       | Staff Shower      | CT-2                 | PT-1      | PT-1      | PT-1      | GL-2      | GWB/PT-6                   |
| 321         | Procedure         | VSF-1                | PT-2      | PT-2      | PT-2      | PT-3      | ACT-2                      |
| 322         | Procedure         | VSF-1                | PT-2      | PT-2      | PT-2      | PT-3      | ACT-2                      |
| 323         | Charting          | VSF-1                | -         | PT-3      | -         | PT-1      | GWB/PT-6                   |
| 324         | Work Room         | VSF-1                | PT-1      | PT-1      | PT-1      | PT-1      | ACT-1                      |
| 325         | UTR               | VSF-1                | PT-1      | CT-1      | PT-1      | PT-1      | ACT-1                      |
| 326         | Lockers           | VSF-1                | PT-2      | PT-1      | PT-1      | PT-1      | ACT-1                      |
| 327         | Post-Op. UTR      | VSF-1                | CT-1      | PT-1      | PT-1      | PT-1      | ACT-1                      |
| 328         | Soiled Utility    | VSF-1                | PT-1      | PT-1      | PT-1      | PT-1      | ACT-1                      |
| 329         | Office            |                      | PT-1      | PT-2      | PT-1      | PT-1      | ACT-1                      |
| 330         | Triage            |                      | PT-1      | PT-2      | PT-1      | PT-1      | ACT-1                      |
| 331         | Office            |                      | PT-1      | PT-2      | PT-1      | PT-1      | ACT-1                      |
| 332         | Office            |                      | PT-1      | PT-2      | PT-1      | PT-1      | ACT-1                      |
| 333         | Post-Op. Recovery | VSF-1/CPT-2<br>VSF-1 | PT-1      | PT-1/PT-5 | PT-1/PT-2 | PT-1/PT-2 | ACT-1/ GWB/<br>PT-6/ Slats |
| C-01        | Corridor          | VSF-1                | PT-1      | PT-1      | PT-1      | GL-1      | GWB/PT-6                   |
| C-02        | Corridor          | VSF-1                | PT-1      | PT-2      | PT-1      | PT-1      | GWB/PT-6                   |
| C-03        | Corridor          | VSF-1                | PT-1      | PT-1      | PT-1      | PT-1      | GWB/PT-6                   |
| C-04        | Corridor          | VSF-1                | PT-1      | PT-1      | PT-1      | PT-1      | GWB/PT-6                   |
| C-05        | Corridor          | VSF-1                | PT-1/GL-2 | PT-1      | PT-1      | PT-1      | GWB/PT-6                   |

## D DIAGRAMS

Figure 66: Functions  
Diagram

- Client Functions
- Staff Functions
- Client + Staff Functions





Figure 67: Safe Zone Diagram

- Safe Zone
- Public Zone With Potential Protesters

Mayfair Ave.

Figure 68: Security Features Diagram

- ★ Security Glass
- Finger Print Access Doors
- One Way Privacy Film
- Graphic Film



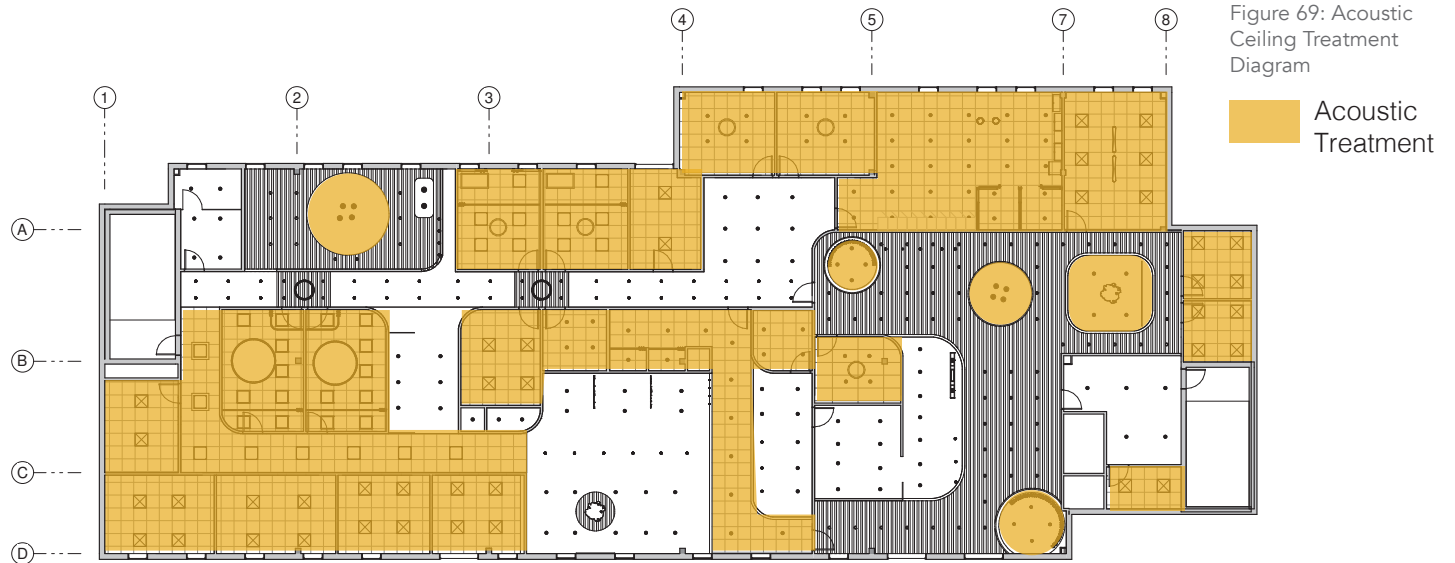






Figure 70: Theoretical  
AHCW Visit App

