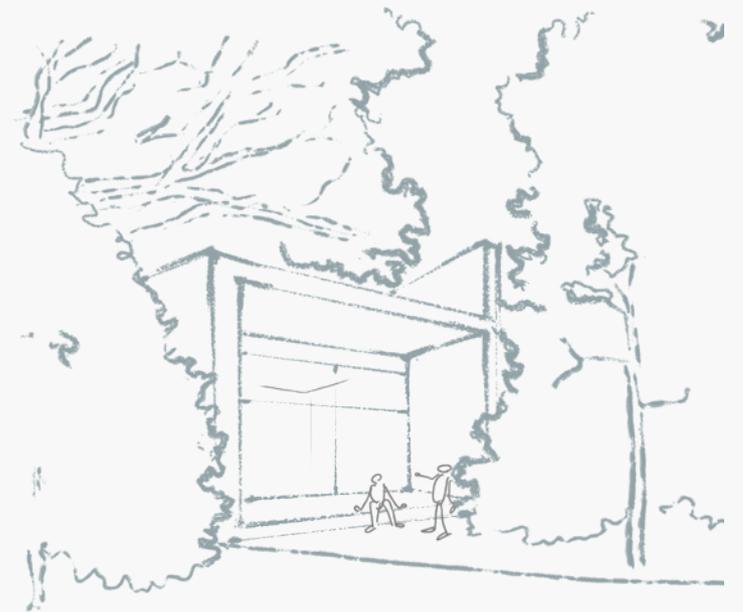


Neha Rampuria



an architecture of

restoration

In loving memory of my Grandma...
(1925 - 2021)



What is architecture meant for ?

What is the significance of an architect in our communities today? Is it just about providing a comfortable, aesthetically pleasing, enclosed space? Or is there a bigger, more meaningful purpose we can aim for?

ECHO CANCER CARE CENTER

is a project that will give architects an opportunity to design for the greater good and retrieve their relevance in an increasingly commercialized profession.

This project provides enhanced care and a therapeutic and supportive environment for its patients, while spreading cancer awareness within the general public. It's a transition between the urbanized clinical settings and nature-rich surroundings.



A RESTORATIVE ARCHITECTURE

ACKNOWLEDGEMENTS

The success and final outcome of this project could not have been possible without the guidance, assistance, and support from many people.

I owe my deep gratitude to my Committee Chair Prof. Aubrey Pentecost and his amazing ability to uplift and make you believe in yourself during the hardest times.

I am grateful to my Committee members Prof. Xuemei and Prof. Chanam Lee for their constructive feedback throughout this process to make it a strong and wholesome project in all aspects of design.

I wouldn't forget to mention my studio Prof. Ray Holliday to push us beyond our limits and constantly encourage and appreciate us when necessary. Thanks a lot for being so patient and understanding.

Lastly, I couldn't have accomplished this without the support of my classmates, my family and friends, near and far.

Thank you!



INSPIRATION & DEDICATION

The idea for this project came into existence because of my mom and her strong inclination towards natural treatments and understanding of the body - to be able to cure a disease to its root cause rather than just alleviating the pain temporarily through some medicines. This got me interested in these natural treatments and concepts and I started to learn more about them.

I found out, a lot of the natural therapy centers in India are being visited by people from around the world. These people stay in these facilities for a short period of time in order to *detoxify their bodies and create mindfulness in all areas of life.*

Moreover, I also was able to interact with one of these people, Jean, who is now an Ayurvedic counsellor in Australia, who was suffering from breast cancer. She went to a facility in Mysore in India for a week and started her journey through Panchkarma which is the process of detoxification of the body according to the Ayurveda.

And here's what she said – *'I was successful at recalibrating the endocrine system so that when the cancer came, I had a foundation'*. And today, she is well and healthy and counselling other people to restore mindfulness.

Hence, this book is dedicated to my mom, Jean and all those people who want to do everything in their power to help themselves and their doctors to fight the disease and live a happy life.

"A cancer diagnosis brings an awareness of the preciousness of life, and mindfulness can help us to experience that precious life with greater clarity, balance, and gratitude, one moment at a time", says Micki Fine, M.Ed, L.P.C., a psychotherapist and certified mindfulness teacher.

"It's hard to express how much it throws you, the emotions the diagnosis releases, the fear – for the boys, the family and everything", says Moira, a cancer patient.

"Give yourself leniency. You have to give yourself that room to grow into a new you", says Mark who survived Hodgkin Lymphoma.

"Being proactive in your health is the most important thing", says Charity who was diagnosed with Breast Cancer at age 27.

"It was the moment when the diagnosis, the treatment, the road behind, the road ahead, all converged. Somewhere from within, we find a strength that helps us to overcome. Cancer did not win," says Carletta, who survived breast cancer.

Like all other living beings in the world, humans also have a powerful instinct of survival. It is only 'the will to live' within us that makes us do what we do to survive, especially when our lives are threatened. The 'will to live' reflects our positive attitude towards life.

But, why is it that people develop fear and start losing this willingness to live, the optimism towards life, when hit by an illness? Chronic diseases like Cancer can really put people in this dark hole of grief and not only affect their physical health but also their emotional and mental wellness. They withdraw themselves from the world and wait for the end.

We've all understood this over years, that mind, body and health are correlated. As was said once by the famous Athenian philosopher, Plato :

Reality is created by mind. We can change our reality by changing our minds.

Our health is a balance of the physical and environmental state of our body, and psychological and emotional wellness of our mind. Our habits define our well-being. Many individual cancer cases relate to positive attitudes and optimism for their success in fighting the disease. A common link between these people who are able to rise above their problems, is their conscious *decision to not just survive, but live a happy life.*

A patient can only strengthen the will to live by getting involved as an active participant in this fight against their disease, sharing their experience with others, and nurturing hope within themselves.

The will to live

The sense of self-preservation, usually coupled to a 'future sense' – i.e., dreams, aspirations, and expectations for future improvement in one's state in life.

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COMMITTEE

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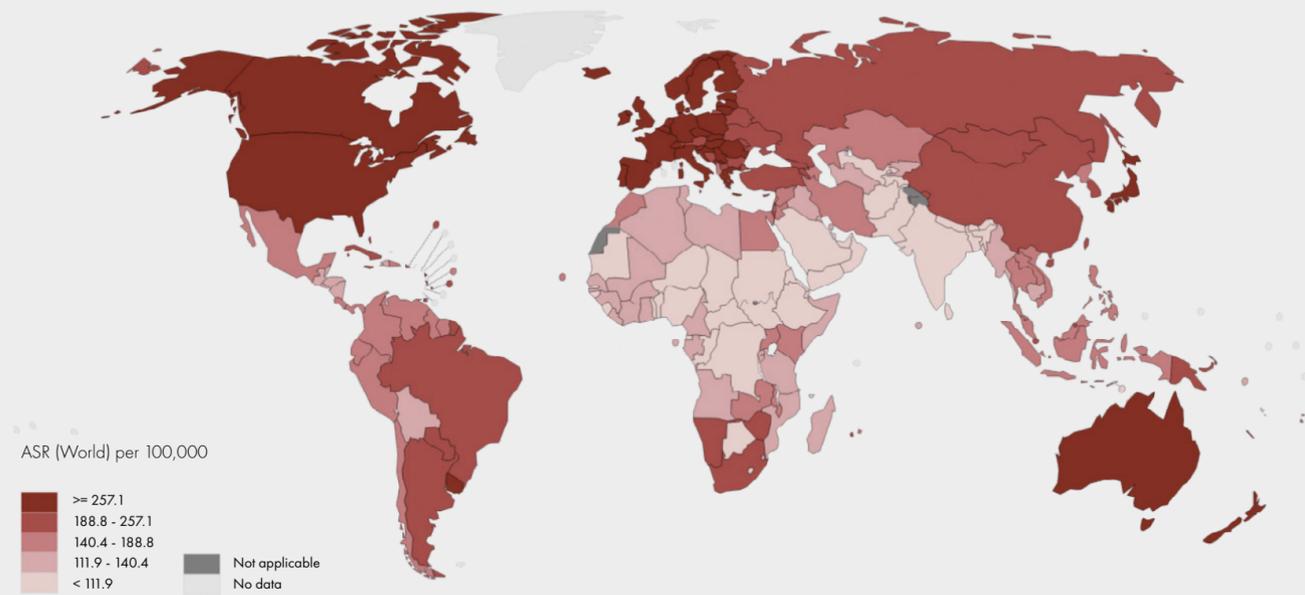
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at present...

About Cancer

Cancer is a disease showing the uncontrolled growth and spread of abnormal cells.

If this spread is not contained, it starts advancing over various other parts of the body and can lead to serious issues with functioning of the body, sometimes causing death. Cancer can start almost anywhere in our bodies. The process of replacement of old or damaged cells with new cells, breaks down when the cancer starts developing. As the cells become more abnormal, the old or damaged cells survive, while formation of new cells continue even when they are not needed. These extra cells keep dividing and form growth called tumors. These tumors are malignant and can spread into nearby tissues. Moreover, as they grow, they might break-off and travel to distant places, away from the original, affecting other areas in the body.

Cancer is a genetic disease that is caused by changes in our genes that control the way our cells function. These mutations can be inherited

or can be caused due to other errors which can cause damage to DNA.

Cancer has had a major impact on our society all around the world. According to a report by the Center of Disease Control in December 2020, the leading cause of death after heart disease is Cancer. According to American Cancer Society, at least 42% of the newly diagnosed cancers in the US - about 797,000 in 2021, are potentially avoidable, including the 19% caused by smoking, 18% due to excess body weight, alcohol consumption, poor nutrition and physical inactivity. Almost 1.9 million new cases are being expected to be diagnosed, while 608,570 Americans are expected to die of cancer in 2021.

More than 16.9 million Americans survived, as of January 1, 2019, who had a history of invasive Cancer, diagnosed several years ago. So, there are high chances of survival.

Figure: (Right) Estimated age-standardized incidence rates (World) in 2020, all cancers, both sexes, all ages (Source: World Health Organization)



what's missing?

The Gap

Cancer causes a high level of pain. This pain can be *acute* (lasts for a short time) or *chronic* (continues long after injury or treatment). It is mostly caused by the tumor pressing on the bones, nerves or other organs of the body. Sometimes, even the treatments, amidst healing, can cause immense pain. For example, various chemotherapy drugs cause numbness and tingling in your hands, might have a burning sensation at the spot of injection. At times when cancer spreads into bones, the pain is caused by bone tissue damage. Similarly, there are various other kinds of pain that a cancer patient can feel.

When you're in pain, it's always on your mind. Chronic pain makes you feel helpless and limits your everyday activities. This can also take a toll on one's mental and emotional well-being and becomes the root cause of stress in people. And in return, stress makes the pain worse. People who experience high psychological stress start developing more health problems (mental or physical). This kind of distress can immensely reduce a cancer patients' quality of life.

To mitigate this, doctors are practicing various methods around the world. While we see the *Standard model of care* in the west, which includes chemotherapy, radiation therapy, surgery and more, the eastern world practices traditional medicines and concepts of natural healing. There have been studies that show both are highly beneficial when practiced together, complimenting each other.

Complementary therapies such as acupuncture, acupressure, aromatherapy and many others are recommended to be used along with standard medical treatments to relieve pain. In the US, currently, these natural therapies are a small part within the hospitals, in an enclosed environment.

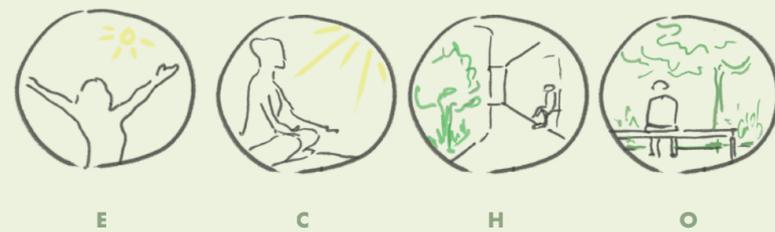
This leads one to question the spatial experience of the user. Should we detach these types of activities from the clinical environment, but still keep it close to hospitals such that they compliment each other ?

Figure: (Right page) Shows a diagram of different therapies practiced around the world and what happens if they're brought together within the same setting ?

here's an idea !

A Proposal

This project defines the idea to bring the Standard and Complimentary treatments together in one setting, surrounding each with the right kind of environment, so they support each other. Hence, along with an existing cancer hospital, ECHO Cancer Care Center aims to provide *a coherent environment for a truly holistic patient experience.*



Hence, the name ECHO

It is a place that helps the user to **Embrace** their lives with a positive mindset, take **Control** of their disease, imbibe in themselves a **Hope** to heal and survive, and help the caregivers to **Offer** an environment that support these goals.

some evidence...

The Research

Various studies done by known professionals, showed the health benefits of providing different complementary therapies, benefits of restorative effects of nature and how they can help increase a sense of control over treatment by enlarging the array of available options.

Healing therapies and ways of integrating them into occupational health nursing practice helped nurses increase effectiveness and satisfaction with their practice. It may also help people undergoing the necessary conventional treatment improve general health and manage side effects. Acupressure may be effective with headaches, common within cancer patients. Acupuncture is helpful in management of chronic pain from cancer or treatment. The National Institute of Health released a consensus statement which reports there is 'clear evidence that needle acupuncture treatment is effective for postoperative and chemotherapy nausea and vomiting'.

Healthcare environments can support dealing with stress if designed to foster: A sense of control with respect to physical-social surroundings, access to social support and access to positive distractions.

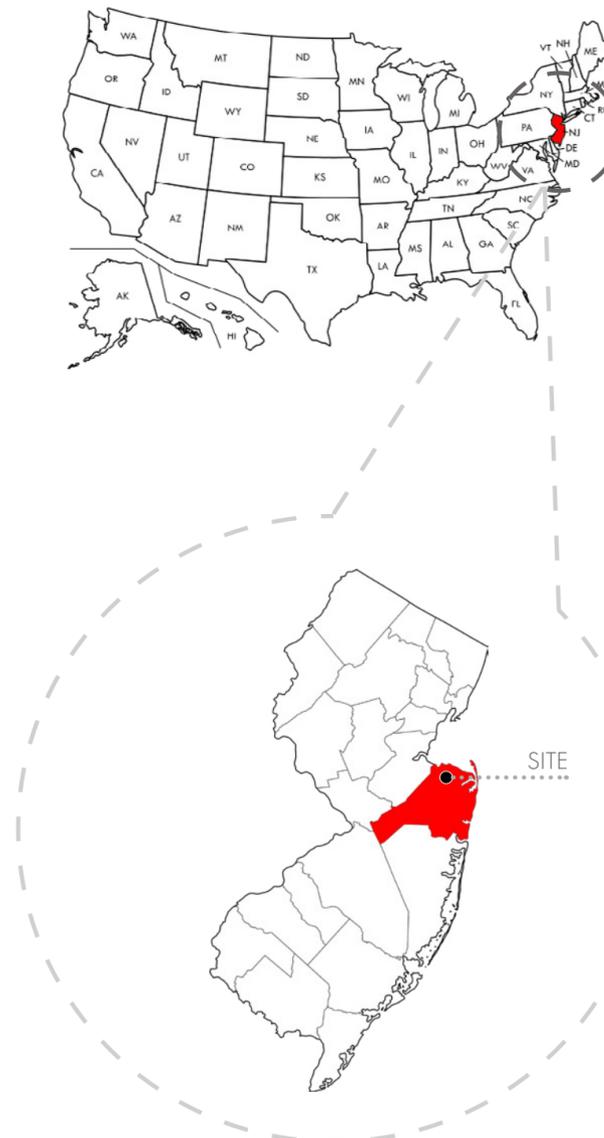
Physical activity acts at a sensory discriminatory level, appears to reduce both stress and anxiety and improve depressions as shown in elderly populations. Exercise including community-based exercise, strength or resistance training, walking, cycling has shown improved overall psychological, social, behavioral and physical conditions.

Massage therapy was beneficial for patients receiving chemo and was beneficial in reducing pain, inducing physical relaxation and improving mood disturbances and fatigue. Yoga awareness programs including CBT elements and meditation and breathing exercises improved joint pain in breast cancer survivors. Qi gong and Tai chi studies have reported positive findings for both physical and psychological functions including reducing non-cancer pain and perceived stress.

Supportive-expressive group therapy, Hypnosis, Guided imagery, Music therapy, Mindfulness meditation etc – help in pain management.

where?

The Site



ECHO Cancer Care Center is a design prototype. This means it is a proposed solution which can be used to validate and test the ideas, design assumptions and other aspects of the initial concept. The intention of this project is to bring forward the idea of intertwining the western and eastern models of holistic care in one setting. Therefore, any location and site can be explored, if it follows these predetermined conditions :

- 1) It should be within the same campus/ site as an Oncology/Ambulatory/Comprehensive Cancer center. A closer proximity to these Cancer hospitals will make ECHO easily accessible to people, especially the cancer patients.
- 2) It is recommended that the site is located in a nature-rich surrounding and away from the urban chaos. Although, if it's a busy context, the spatial design can accommodate those criterias such that indoor spaces are connected to natural environments and detached from other disturbances. This will help create a calm and serene environment for the users.

Figure: (Top) New Jersey, United States;
(Bottom) Site location in Monmouth county, NJ



For this particular model, the site is located next to an outpatient treatment facility - Memorial Sloan Kettering Ambulatory Care Center in Monmouth County, New Jersey. This sub-urban location of the site provides care to patients closer to their homes. It is accessed from two locations by the Red Hill (secondary) Road in the north and sits parallel to the Garden State Parkway (primary road) on the east. The existing hospital, earlier, a 1980's office building, sits in the center of the site. It was re-imagined by the design team of Perkins+Will through remarkable alterations. By following biophilic design concepts, they transformed the facility into a peaceful healing experience.

Once you enter the site from the Red Hill road, one road leads to the main entrance of the existing center and the other goes down slope towards the entrance for this center's radiology and oncology patients, leading into the open parking lot. ECHO Cancer Care Center sits on this existing parking lot, in the south-west corner of the site.

Climatic Conditions : The maximum temperature goes upto 90F while the minimum reaches 5F. There are strong winds from North west direction, though we also see NE and west winds in March and june respectively. This region receives maximum ~4.4 inches of rainfall and 25 inches snowfall every year.

Figure:
 (First from top) Entrance to the site from Red Hill Road
 (Second) Roads leading to different entrances of the existing hospital. The one on right goes down the slope towards the site.
 (Third) View of MSK Center from south-west end. (Fourth) View of site (parking) from the MSK Center. (Left page) Regional view of the site (Zoom) Close-up view of the site.



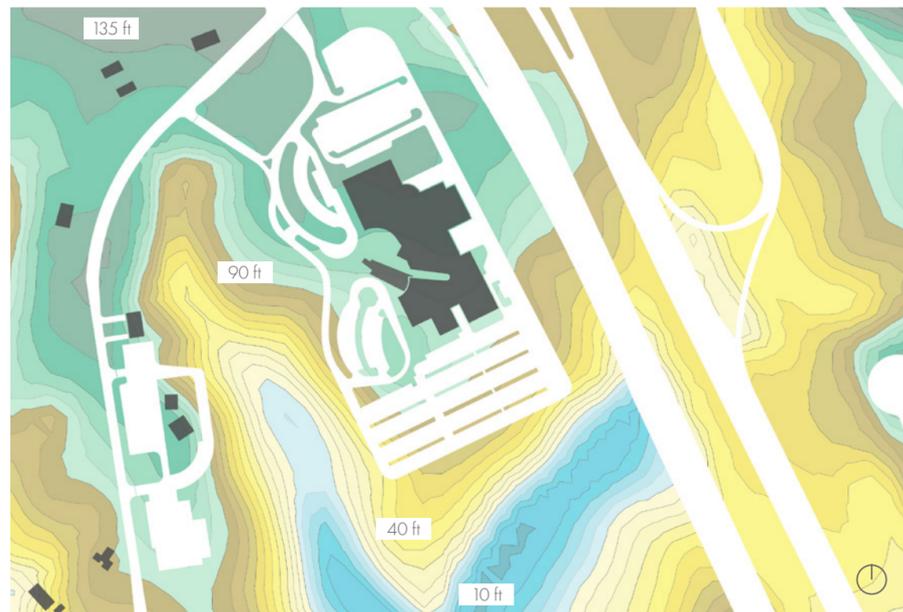
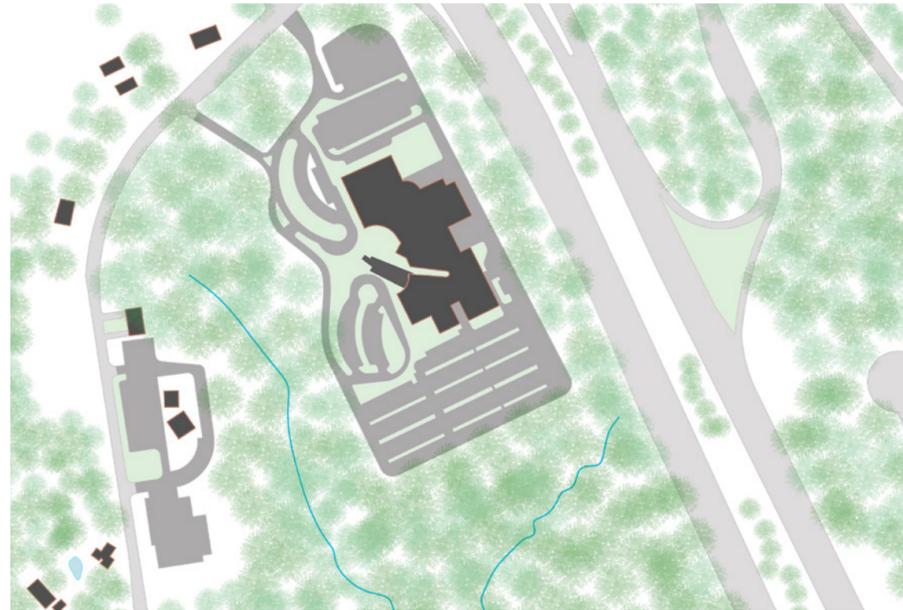


Figure (Top) The site is surrounded by numerous trees like American Elm Tree, Eastern white Pine, Larch trees, Birch trees, Spruce trees and more.

(Bottom) The topography shows a difference of 50ft height but the project is being constructed on the existing parking area which means its being designed on a flat piece of land.

New Jersey at a glance			
Estimated new cases, 2021	Estimated deaths, 2021	Incident rates, 2013-2017	Death rates, 2014-2018
56,360	15,870	485.9	148.4
		Average annual rate per 100,000, age adjusted to the 2000 US standard population	Average annual rate per 100,000, age adjusted to the 2000 US standard population. Rates for PR are for 2012-2016

Facts according to MSK Cancer Center's Statistical Profile from 2019:

- approximately 25,600 patients were admitted in 2019 (96% bed occupancy rate).
- Total outpatient visits were 839,000.
- Diagnostic & interventional procedures were approximately 631,100.
- Various types of staff members at MSK include attending staff, registered nurses, administrative and support staff, volunteers, research fellows, scholars, research associates, students, physical therapy students and many more.
- Various services offered other than standard treatments include CancerSmart Lectures, Counseling Center – outpatient psychiatric & behavioral health services, Finance Assistance Program, Free Cancer Screenings, Health fairs, Integrative therapies and more.

This data helps in determining the program and footprint for the project.

Figure: (Top) According to American Cancer Society, the table shows the increased estimated cancer cases and deaths in New Jersey for 2021.



	GOALS	FACTS
FUNCTION People Activities Relationships	To enhance Cancer care, psychosocial support and provide an uplifting experience for the users	Patients are unable to receive personal care and attention from the doctors due to time restrictions
FORM Site Environment Quality	To provide access to nature while feeling safe and secure	Exposure to natural environment reduces stress and anxiety and improves health
ECONOMY Initial Operational Life cycle Cost	To promote measures to mitigate everyday costs	70-85% building and operating cost can be influenced during the design stage
TIME Past Present Future	To preserve maximum existing ecosystem and landscape at site	The site is densely surrounded by forest trees (pine, oak, larch) and is close to a swamp

what ?

Programmatic Matrix - Highlights

CONCEPTS	NEEDS	PROBLEM STATEMENT
To provide professional help within a domestic environment for people to feel comfortable and relaxed	Informal gathering spaces, kitchen & dining spaces, counselling rooms	Maintaining domestic scale and hierarchy of privacy will help people feel cared for and supported
To provide maximum outdoor views and connectivity of all spaces with the surrounding landscape	Large window views, courtyards, patios	Biophobic aspects needs to be tackled to allow people to enjoy nature
To use natural and renewable sources of energy to reduce operational costs	Skylights, courtyards, operable windows for ventilation	Users/staff need to be informed and educated to minimize energy use
To identify the historical trees on site. Sustainable construction strategies needs to be applied	Site survey data	Accuracy of site data

William Pena's matrix defines a process which leads to the statement of an architectural problem and the requirements to be met in the proposed solution.

Case Studies

The case studies helped in understanding visual and non-visual connection with nature, how to blur the boundaries between indoors and outdoors, use of natural materials, creating a sense of prospect and refuge, and designing a therapeutic architecture.

Windhover Contemplative Center serves as a spiritual retreat for students, faculty and staff of Stanford University. It is designed to promote personal restoration and well being through a combination of art, landscape and architecture.

The Maggie's Centre, located in Manchester, provides a welcoming environment and a place of refuge for people affected by cancer who can find emotional and practical support. This design aims to establish a domestic atmosphere in a garden-like setting.

Navyas, a naturopathy center located in India, is surrounded by a busy context. A screen wraps around the building as a buffer from outdoor disturbance. At the same time, it includes variation of light in different spaces (bright/soft ambience) and a layer of curated medicinal plants that help in achieving therapeutic purposes.



(Top) Reflective pool at Windhover Contemplative Center (Middle) Common space at Maggie's Center in Manchester (Bottom) Patient room in Navyas Center.

The Program

The program is divided into four zones in terms of their function :

Knowledge zone is a place where the people can get better informed and oriented about their or their close one's disease or gain information about cancer in general. At the same time, the goal is to get them empowered by the display of survivor's stories in the Gallery space.

Hope zone is a place for people and their families who are dealing with cancer. They get support from other people who have gone through or are going through similar conditions. They can share their experiences, do their own research about their condition and can also get advised from professionals.

Control zone includes a wellness/therapy center where people get a chance to take control over their diseases and become an active participant for their own wellbeing and healing.

Life zone depicts the outdoor activities which closely/sensuously connects people with nature through intimate spaces and serene surroundings.

KNOWLEDGE ZONE (INFORMATION CENTER)	
1.0 ADMINISTRATION AREA	4,770 sqft
Reception + Waiting Area	
Staff Area	
Office for Advisors and Consultants	
Head Office	
Meeting Rooms	
Conference Room	
Volunteer's Room	
Staff Pantry + Break Room	
2.0 PUBLIC AREA	6,955 sqft
Reception +Waiting	
Gallery Space	
Seminar Space	
Book Store	
Cafe + Kitchen	
HOPE CENTER	
3.0 COMMON SPACES	4,045 sqft
Chapel	
Living, Kitchen, Dining	
Counselling Rooms	
Group Rooms	
Group work space	
Tele consult room	
Toilets	
4.0 QUIET/PRIVATE SPACES	800 sqft
Library	
Quiet rooms	
CONTROL ZONE (THERAPY CENTER)	
5.0 THERAPIES	6,005 sqft
Waiting Area	
Pharmacy	
Consultation Rooms	
Art Therapy	
Meditation rooms	
Massage/Aroma therapy rooms	
Physiotherapy rooms	
Sun Therapy (deck)	
Needle Acupuncture/Acupressure rooms	
Yoga Therapy	
Staff breakout space	
Service Areas for all zones	3,380 sqft
LIFE ZONE (Outdoor Activities)	
Therapeutic maze, Reflective pool, seating spaces etc.	
Total Net area	25,955 sqft
Total BGSF (1.30 multiplier)	~43,865 sqft

how?

PROJECT GOALS

Vision

To enhance cancer care, provide psychosocial support and an uplifting experience to people with cancer, their family and friends and spread awareness amongst the community for their good health & well-being.

Mission

To encourage patients to become an active participant in their treatment and take control of the restorative process; To bring people together in place which can help people find comfort in the experiences of others and receive structured information and professional support.

Architectural goals

To create a design that helps in smooth transition of experience from an urban to natural environment; To explore the restorative experience of spaces with nature and light and design spaces that supports the idea of active living; To explore the material palette/spaces/form that can support the feeling of relaxation, calm, warm, peaceful and healing.



concept

Initial Ideas

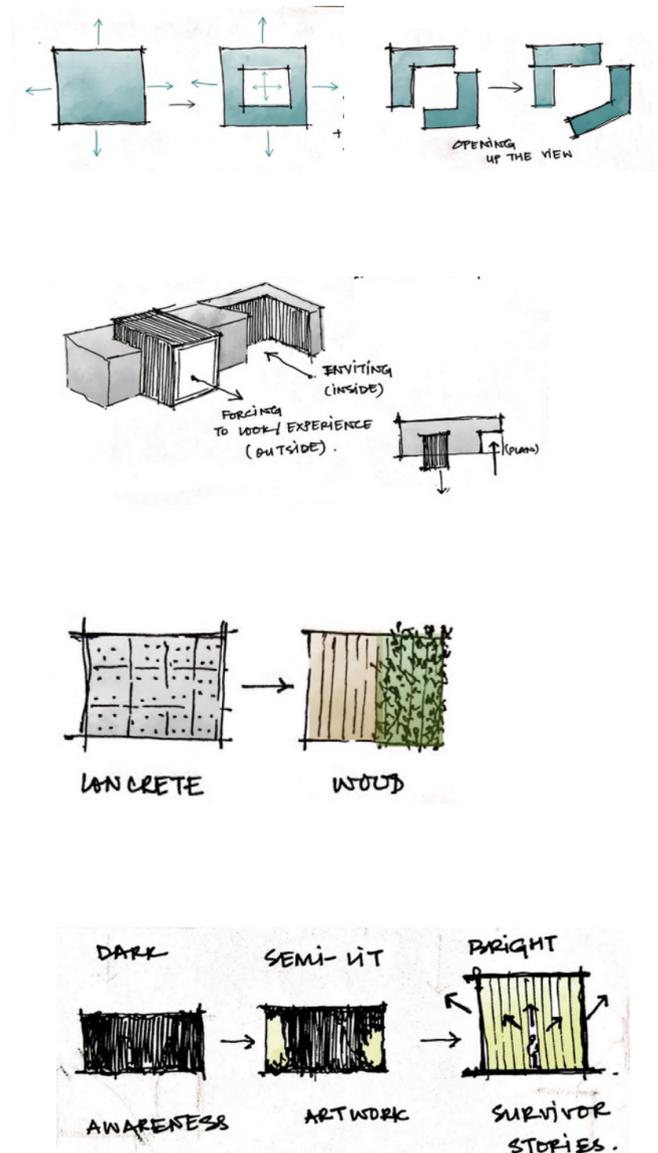


Working with various design ideas at an initial stage allows to exploration of different possibilities and experiences that can be created with the design, without getting into the details. Evaluation of these options helps in making an informed decision about the choice of concept and developing it further as a good design.

Images above, represent exploration of these distinct initial ideas. First one representing a central axis leading to a focal point. The second, a central courtyard which represents a common

'goal' for the surrounding four buildings. And the third explores the possibility of interweaving landscape and the built environment.

Although, all options had one thing in common - the idea of connecting indoor and outdoor spaces and creating a sense of mystery as the users experience the building. Finally, an analysis and evaluation of all three based on aspects like experience, structure, circulation, connectivity on site, helped in determining the best option (second scheme in this case).



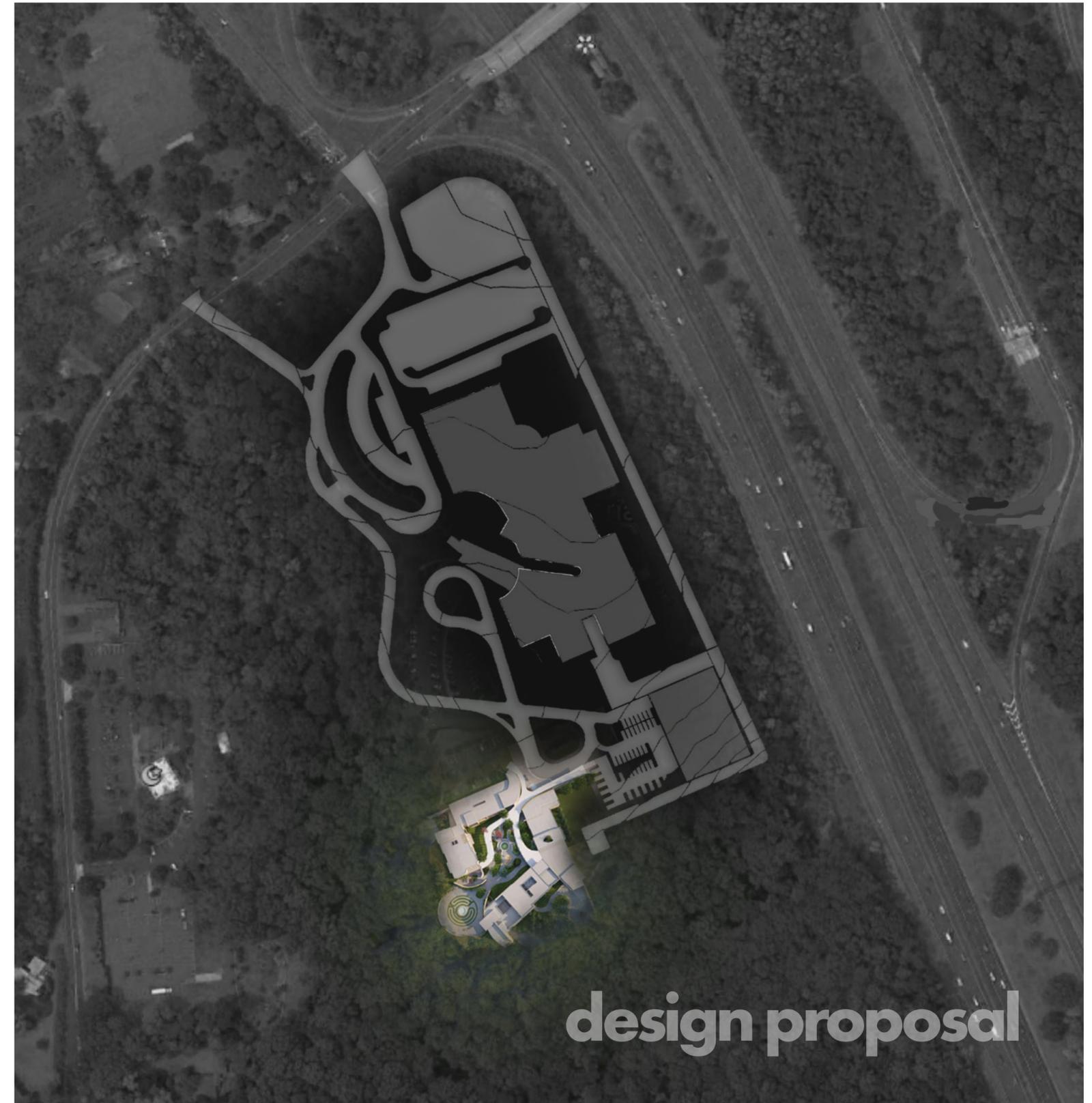
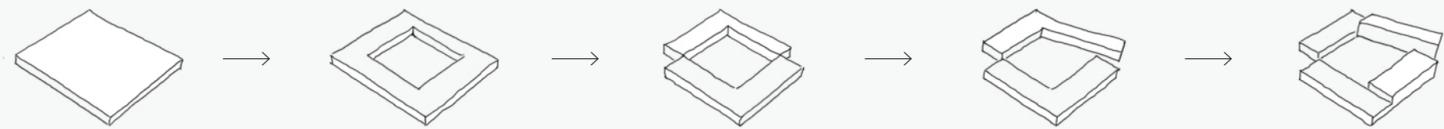
FINAL CONCEPT

Since the site will be part of an urban space on one side and is surrounded by dense forest (nature) on the other, creating a courtyard allowed in smooth transition between the two. It also gives twice the number of surfaces that can be exposed to the outdoor environment.

Further, the mass was developed keeping in mind the idea to open up to nature, creating sensing spaces as the user experiences the building and discovers the destination - therapeutic maze and reflective pool surrounded by forest while all the urban chaos is left behind.

Other sketches show various ideas for the kind of spaces that one wants to create to provide certain experiences for the users, whether staff, patient or general public.

Figure: (Top) Development of massing; (Second) Creating a sense of invitation and direction; (Third) Transition in design depicted through materials; (Fourth) Experience of spaces through light based on their functionality.





SITE LAYOUT

As you reach down to the secondary road from the Red Hill road, you could either take a left towards the radiology and oncology patients' entrance for the hospital or turn right towards the drop off for ECHO center. Moving forward, one could either park in the parking lot or the garage, although the hospital also provides valet options for its users. Finally, walking towards the entrance leads you to the internal courtyard and the surrounding forest.

The image below shows the view of entrance to ECHO Cancer Care Center's complex. The sense of mystery and curiosity that these curved walls create, attracts the visitors inside. These curves also makes the movement subtle for the eye.

Figure: (Right page) Site Plan showing building's orientation and various circulation on site (Bottom) Entrance area for ECHO Cancer Care Center.



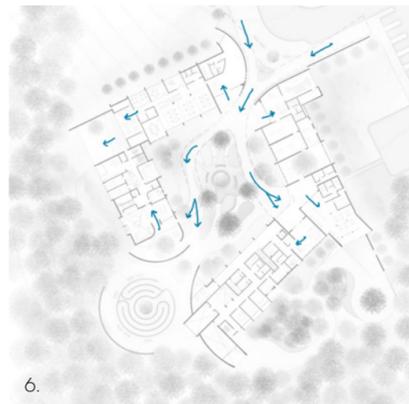
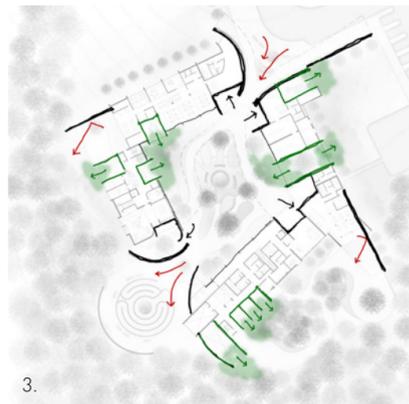
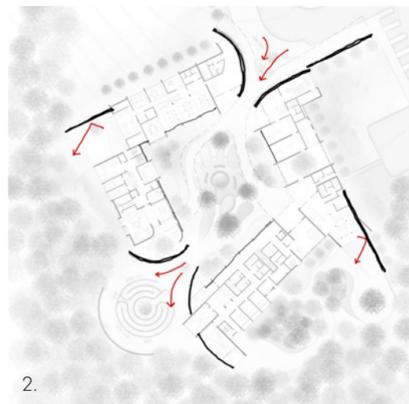
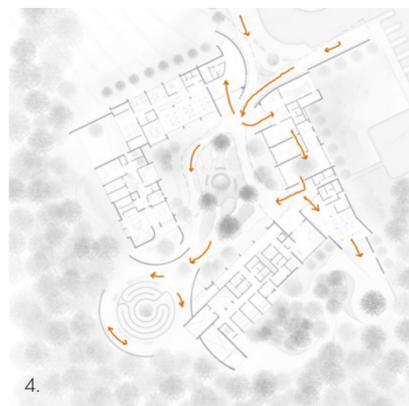
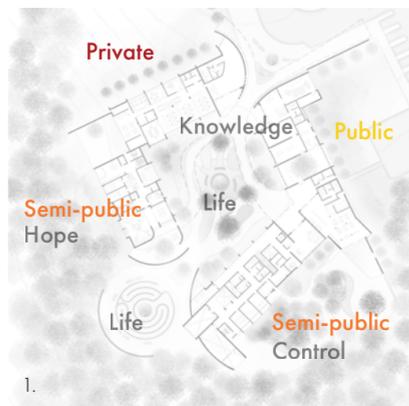


Figure: 1. Site Zoning;

2. Design of curved walls aims to attracts people inside, the other free standing long walls helps in distracting them or shielding them from the urban disturbance;

3. Pushed-pulled surfaces to create sense of direction and focus points and design of dense landscape in these focused regions;

Circulation of various users like general public(4), patients(5) and staff(6).

(Right page) Design of the therapeutic central courtyard and connection of indoor-outdoor spaces.

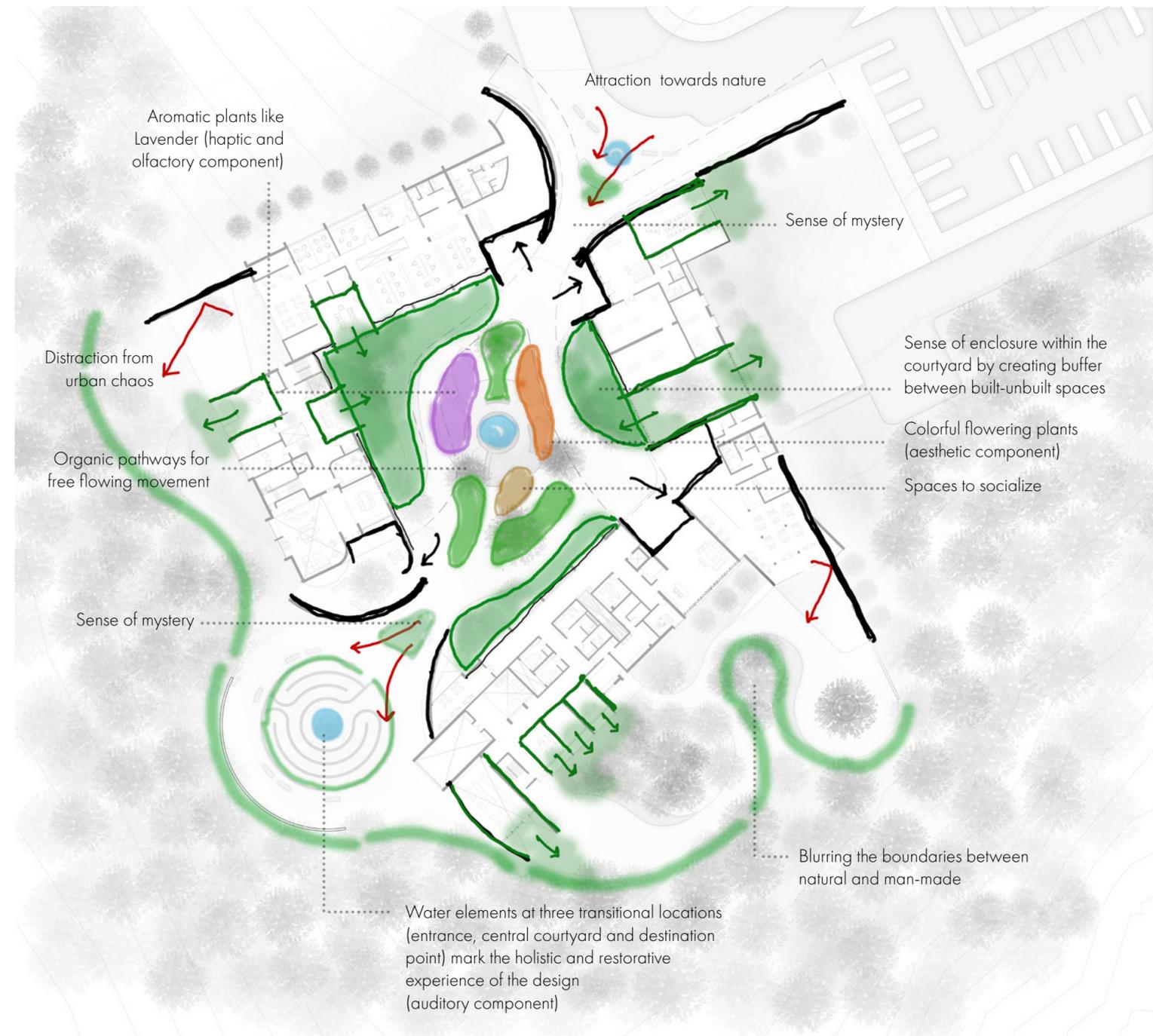
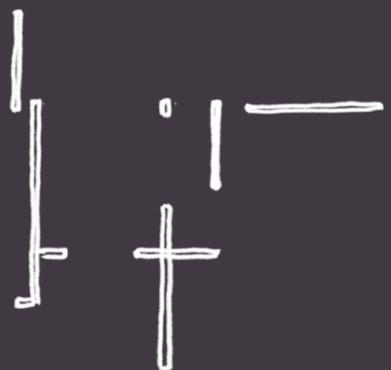




Figure : (Right page, top) Closer view of Site entrance showing the curved walls and the canopy to attract the visitors inside ; (Right page, bottom) View from the entrance showing the convenience in locating individual building entrances; (Top) Design of courtyard, a meditative experience, allowing the visitors to get nurtured by nature.



taking a closer look



ART GALLERY

The Gallery area aims to put a new perspective and make people aware about the journey from research to treatment of Cancer.

It consists of a conference room for the hospital to conduct lectures, seminars and other gatherings. There are three gallery spaces which help the general public to know the disease. The Awareness gallery, as the name suggests, gives background information about cancer. This is an artificially lit but dark space. The Art gallery depicts

various forms of the disease through art and ultimately leads you into Survivor's gallery - a daylight, naturally ventilated and transparent space – displaying survivor's stories. This is a space where people could sit, take a moment and get empowered. This journey ends towards a café area where the outdoor seating spaces lets you experience nature.

Figure: (Bottom) View of different galleries from central courtyard showing the connectivity of indoor and outdoor spaces

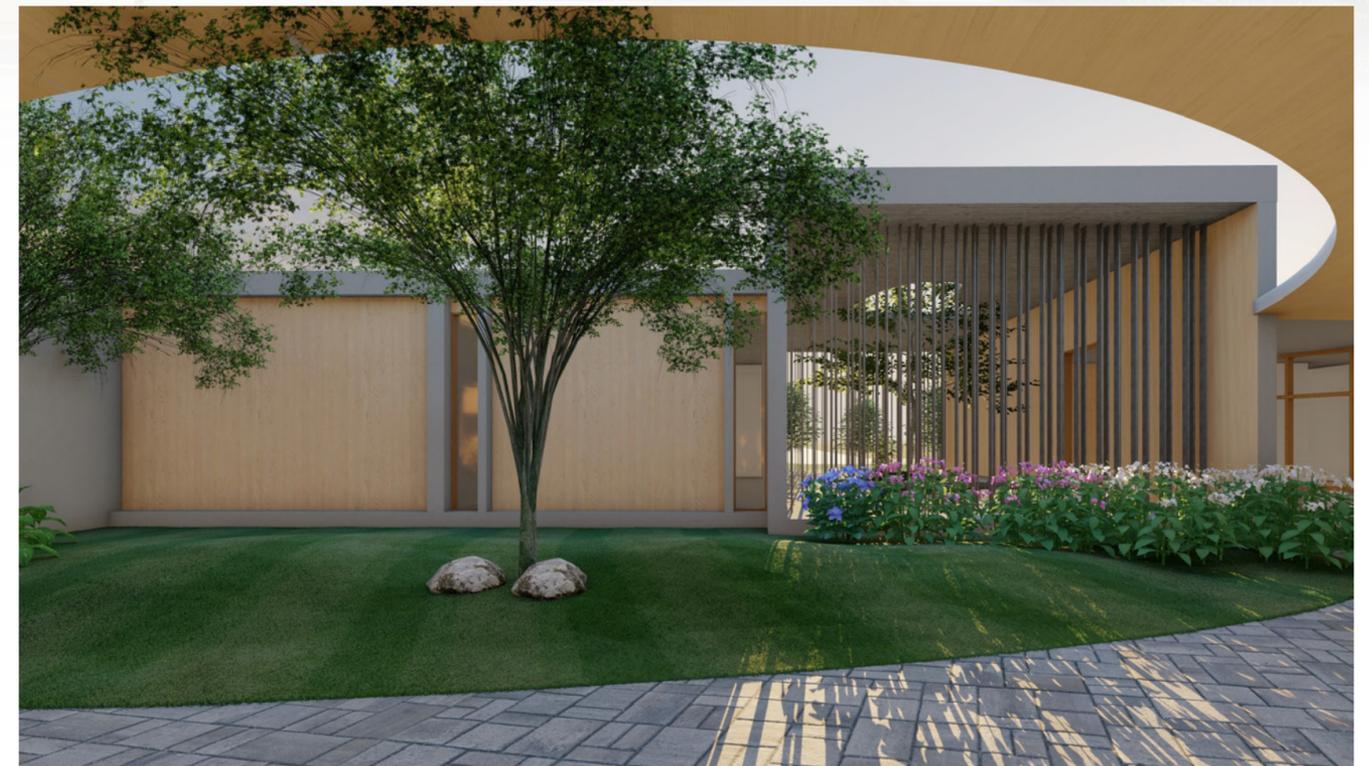




Figure: (Bottom) This outdoor environment acts as a spill over space for the café; (Right) View of Survivor's stories gallery



“and here they are living despite it all ...”

Key plan

HOPE CENTER

ART GALLERY

LEGEND :

- 1. Reception + Waiting
- 2. Counselling rooms
- 3. Linen service room
- 4. Preparation room
- 5. Meditation rooms
- 6. Acupuncture/Acupressure rooms
- 7. Staff break room
- 8. Lounge area
- 9. Art Therapy room
- 10. Yoga hall

LEVEL 1 PLAN



The Therapy center at ECHO aims to achieve optimal health and wellness by treating all parts of a person - mind, body, spirit and emotions. It attempts to treat a part by treating the whole.

The spaces are designed such that the user is constantly connected to

nature whether you are in the waiting area or in the middle of a therapy. The center comprises various individual or group activities like acupuncture, acupressure, meditation and more. This center is not only beneficial for cancer patients, but for anyone who aspires for wellness.

**THERAPY
CENTER**

Key plan

LEGEND :

- 11. Mechanical room
- 12. Sun therapy (deck)
- 13. Massage/Aromatherapy rooms
- 14. Physiotherapy rooms
- 15. Terrace

LEVEL 2 PLAN



Figure: (All) Represent the visual and non-visual connection between the built environment and nature. These meditation rooms provide a calm and serene environment for the user to reflect within.

Key plan

LEGEND :

- 1. Enclosed Courtyard
- 2. Living, Kitchen & Dining
- 3. Group work room
- 4. Tele-consult room
- 5. Service room
- 6. Counselling rooms
- 7. Group conversation room
- 8. Library

LEVEL 1 PLAN

ADMIN

LEGEND :

- 9. Lounge area
- 10. Group room
- 11. Meditation room
- 12. Quiet room
- 13. Group work space
- 14. Balcony

LEVEL 2 PLAN



HOPE CENTER

Hope Center is sort of a 'home away from home'. It's a place where people affected by cancer can find social and professional support. This design aims to provide a domestic environment where all spaces are connected to nature whether its a space for a group or an individual.

The entrance to the center is through an enclosed courtyard where the cancer patients can take a moment, and make a decision on entering the facility because that would mean accepting their condition. It can be the most difficult moment of their lives. Moreover, transparency to indoor spaces allows them to see and get comfortable before they enter the building. Smooth corners allows a free movement within the space making the experience more organic in nature.

The building comprises various spaces like open living, kitchen and dining area, group work spaces, a small library, counselling rooms and tele-consult room, meditation room, quiet rooms for individuals and more flexible gathering spaces.

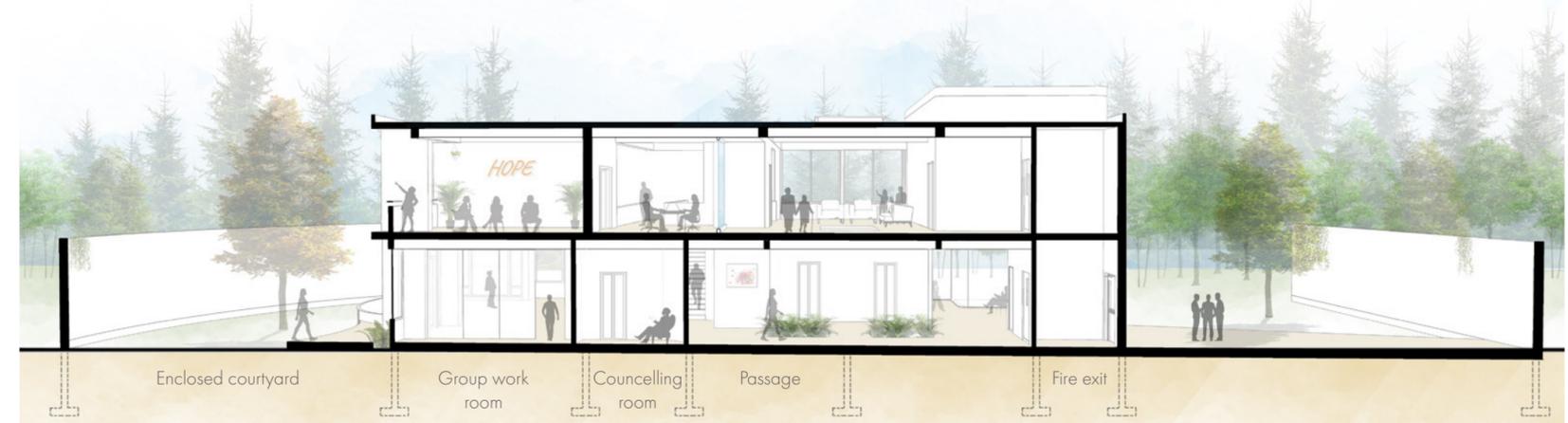
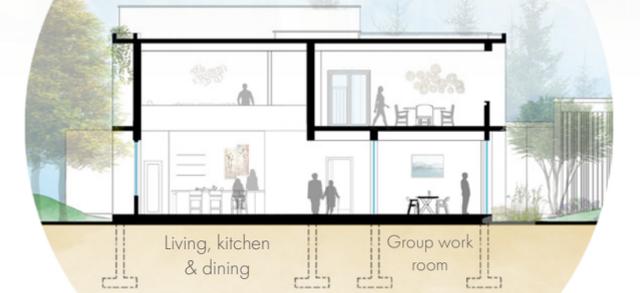


Figure: (Top) Transverse Section; (Bottom) Longitudinal Section



Figure : Right page: (Top left) Comfortable nooks for people to sit and relax; (Top right) A wider and brighter passage area in front of the counselling rooms. This variation helps in creating dramatic spatial experiences within the building; (Bottom) Entrance courtyard; (Left page) Night view fo Hope center.

ADMINISTRATION AREA

The Administration area proposes an open and flexible workspace with continuous connection to nature from all spaces.

It includes the information center, staff workspaces, meeting and conference rooms, spaces for volunteers and break out area which also opens to a porch looking into the forest. A link with nature is encouraged to achieve a healthy work environment as it positively influences employee's work efficiency and mental health.

Figure: (Bottom) Site section through the center showing connection of indoor and outdoor spaces with nature - visually and non-visually - while maintaining required privacy.

Key plan

LEGEND :

1. Reception + waiting
2. Staff area +
Office for advisors & consultants
3. Director's office
4. Volunteer's room
5. Convertible meeting room
6. Locker and pantry rooms
7. Mechanical room
8. Staff break area
9. Outdoor seating space

LEVEL 1 PLAN

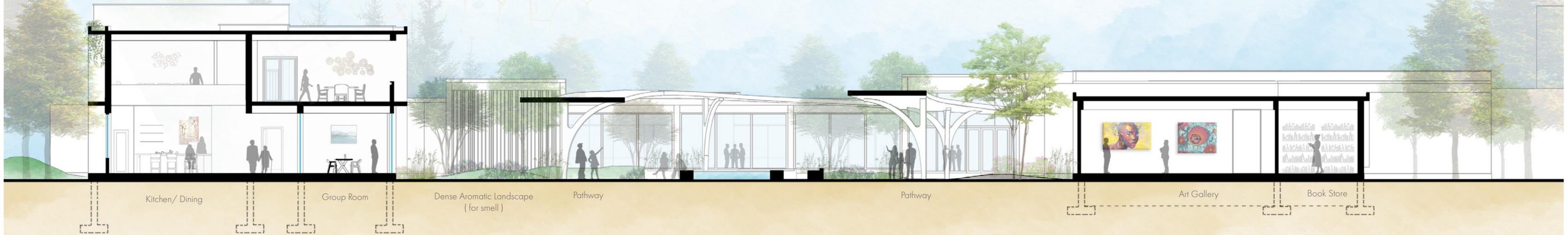
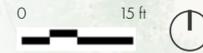




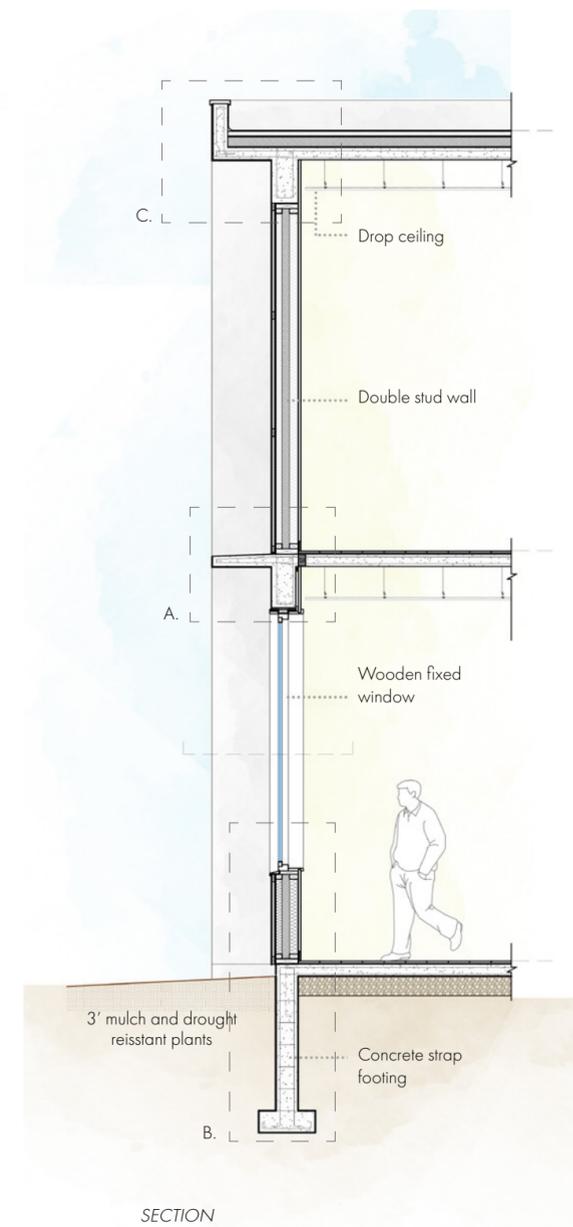
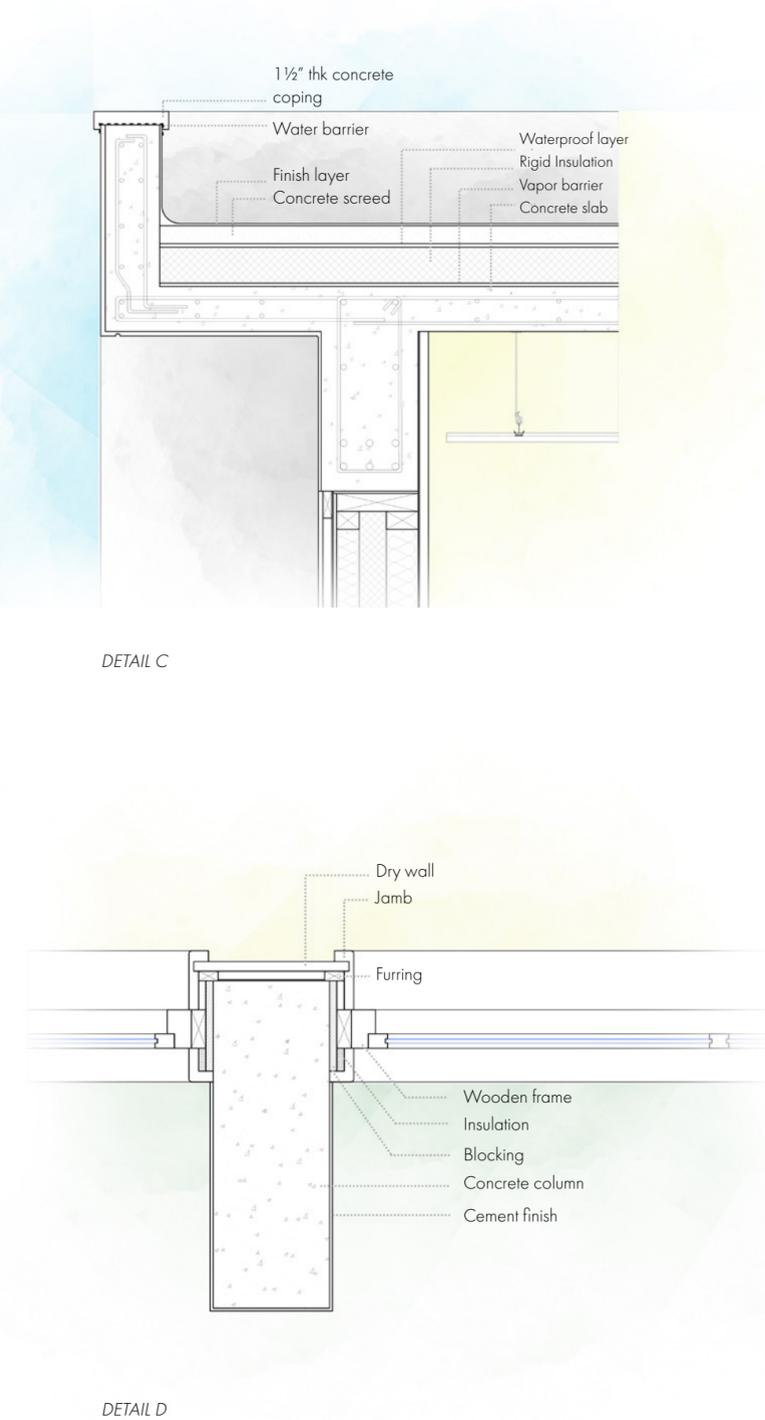
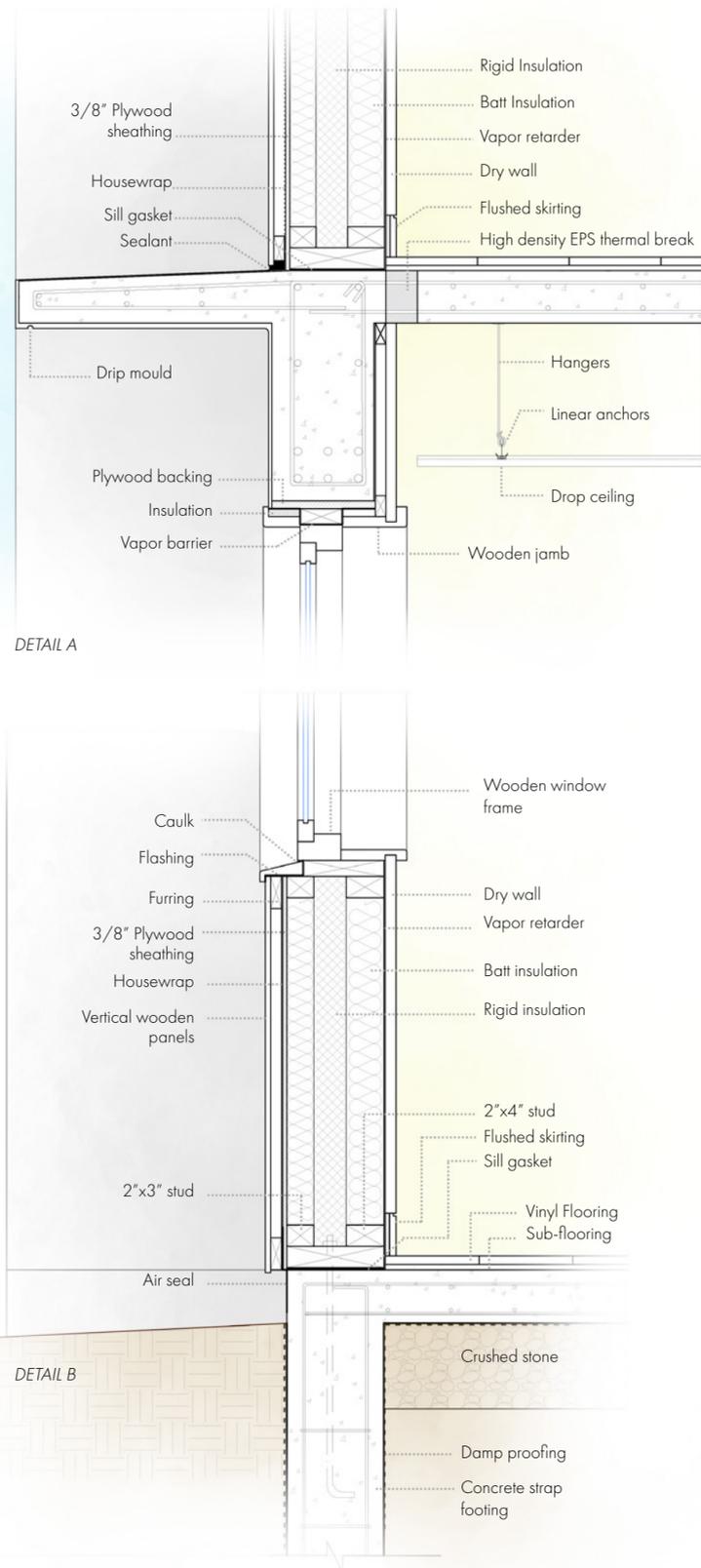
Figure: Spill over space from Breakout room for staff to enjoy the outdoor environment;



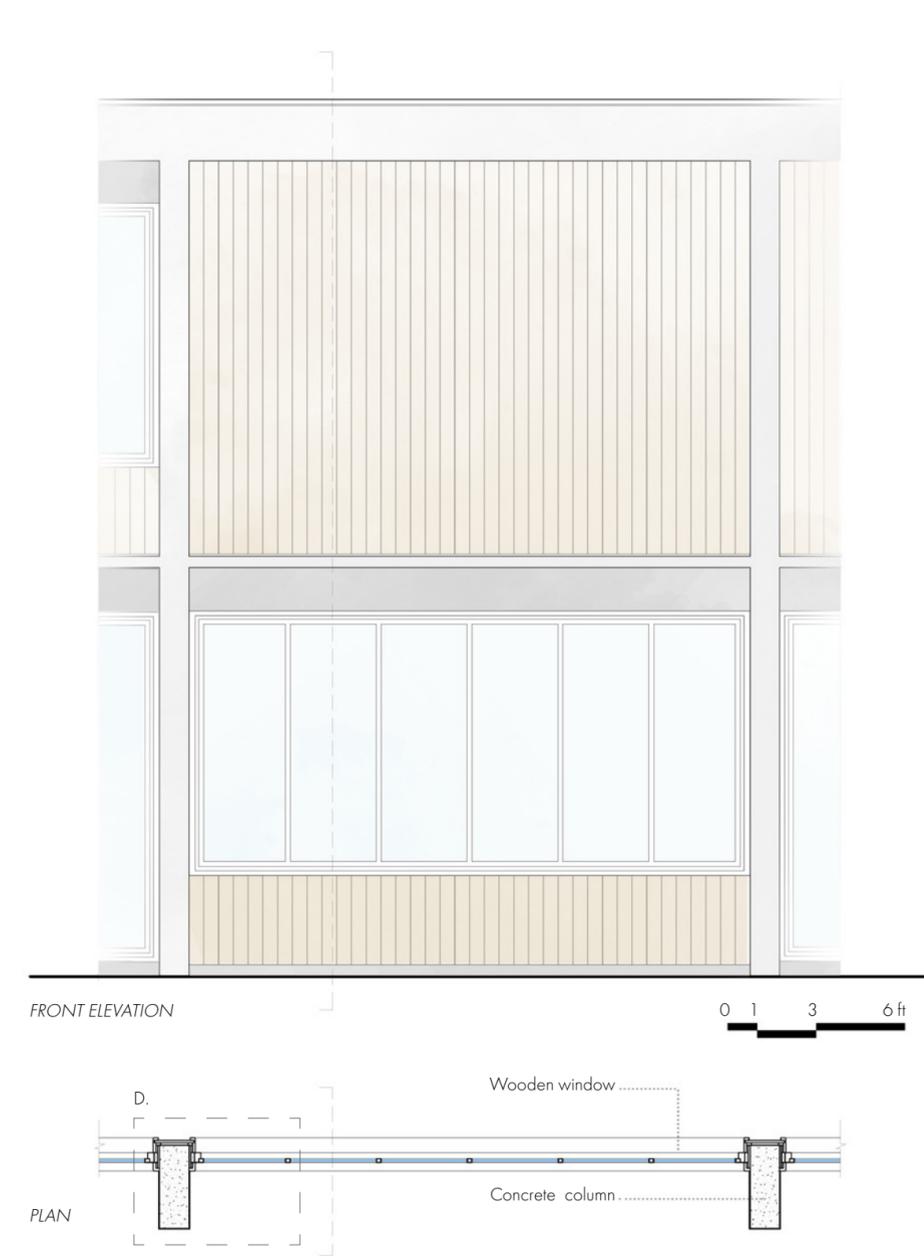
Figure: Conference room is day lit and connected to outdoors and can also hold presentations with the flexibility of using curtains when required.



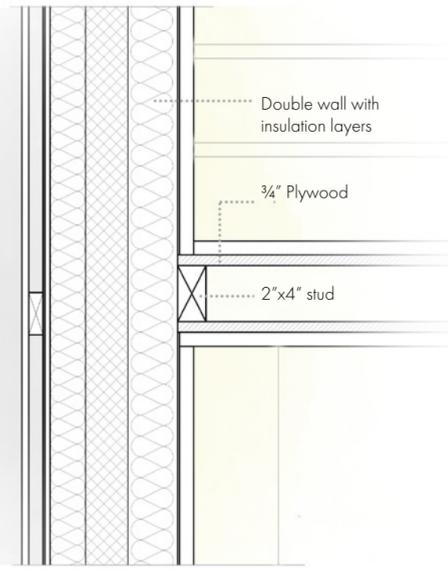
understanding as a whole



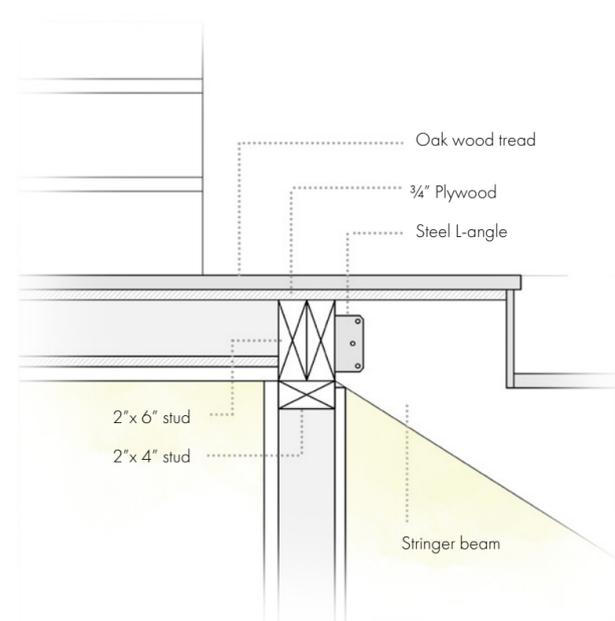
- Double stud wall with proper layers of insulation materials helps in keeping the indoor space thermally insulated in snowy regions.
 - High density polystyrene (EPS) thermal break is provided as it has minimal water absorption value and prevents any transfer of vapor from the cantilevered part of concrete on the outside towards the indoor environment.
 Figure: Zoomed details of the wall section



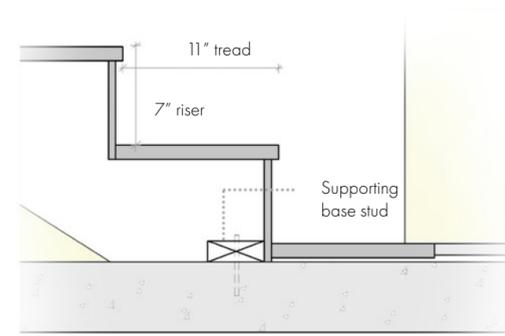
TYPICAL WALL ASSEMBLY



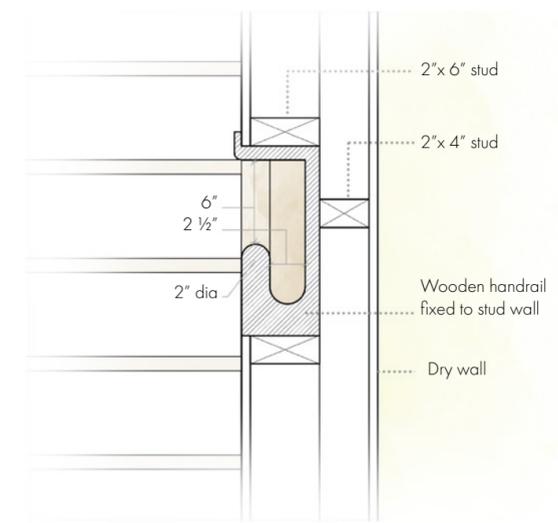
DETAIL A - Mid-landing and wall intersection



DETAIL C - Mid-landing and stringer beam intersection



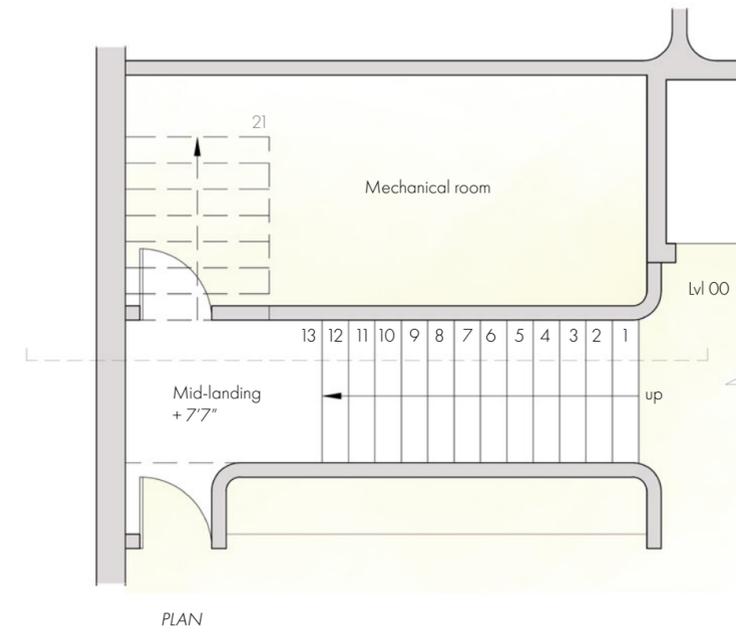
DETAIL B - Floor slab and stringer beam connection



DETAIL D - Handrail detail

STAIRCASE at HOPE CENTER

The design of staircase corresponds to the minimalist, modern and home-like environment of the hope center. Situated next to the elevator, it is easily visible and accessible for its users



PLAN

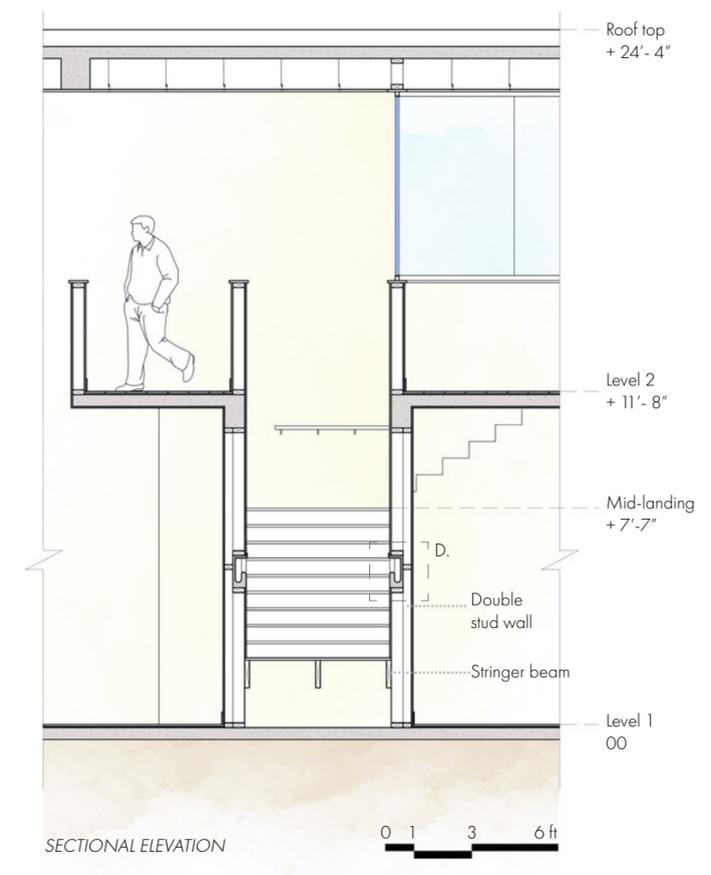
This 5' wide staircase with a mid-landing at 7'7" level allows one to access the service areas of the building through the space under soffit.

A recessed handrail was designed to keep a clean aesthetic view, which will mainly be used by either staff members or comparatively healthier individuals. Others would mostly use the elevator.

The structure comprises of stringer beams, and other stud and steel angle connections as seen in the drawings.

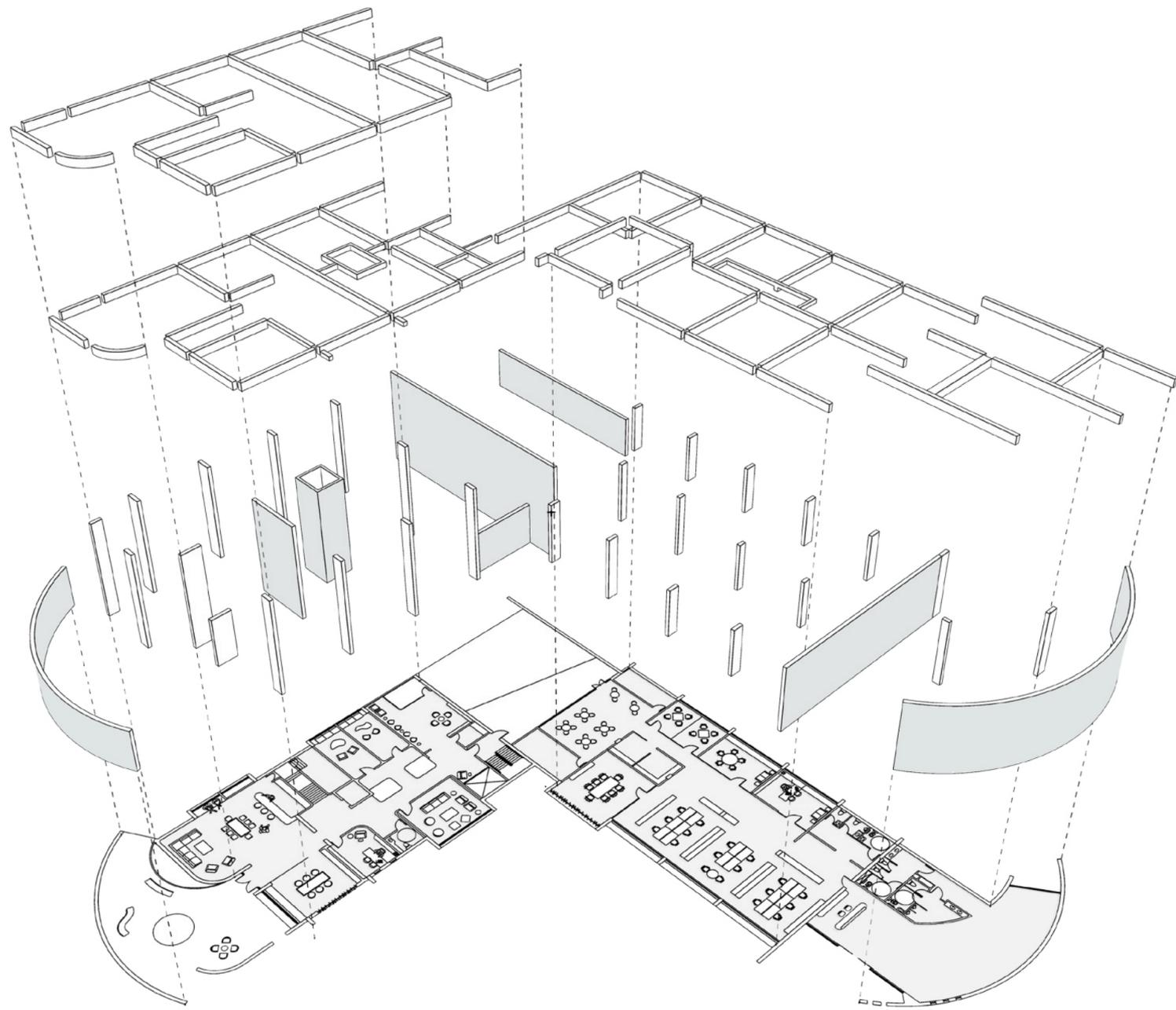


SECTIONAL ELEVATION



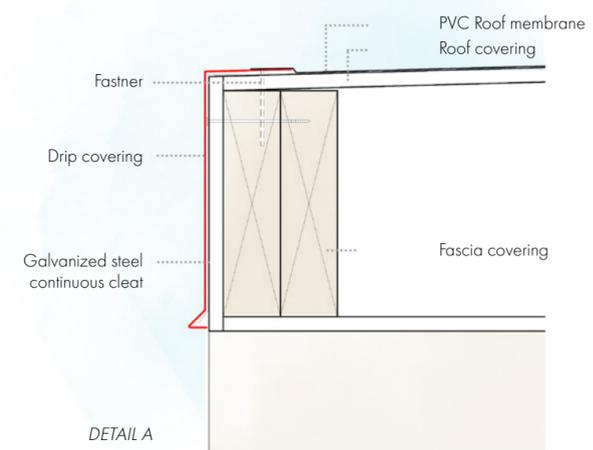
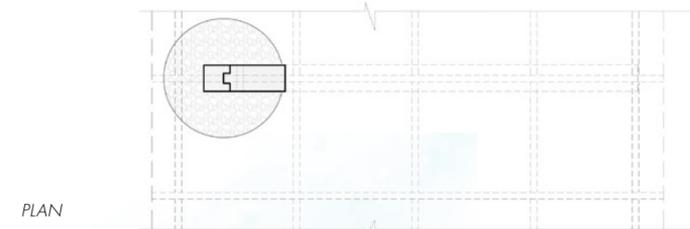
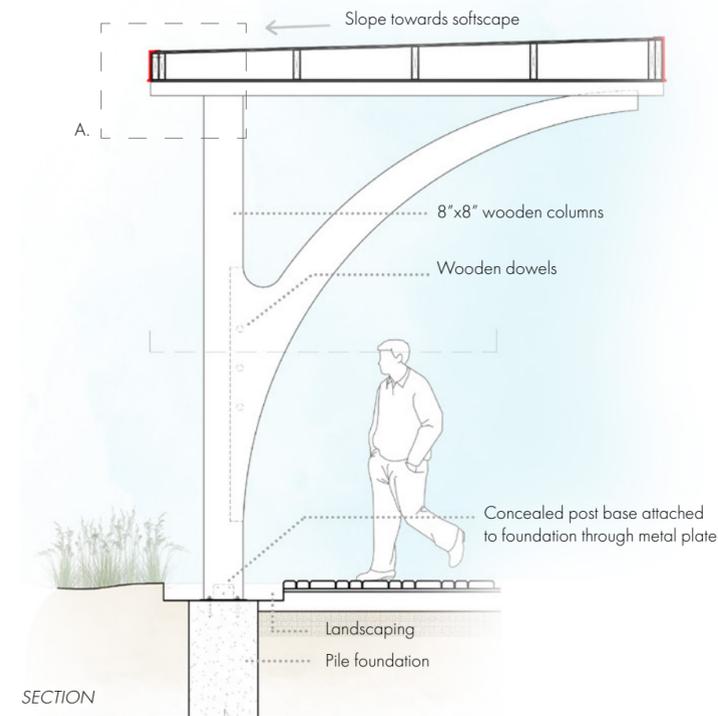
SECTIONAL ELEVATION

0 1 3 6 ft

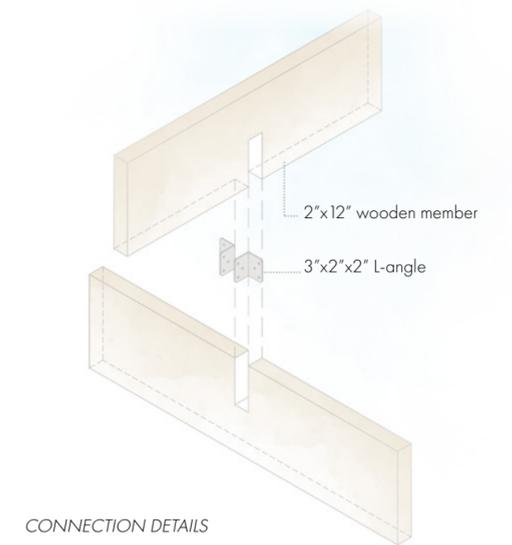
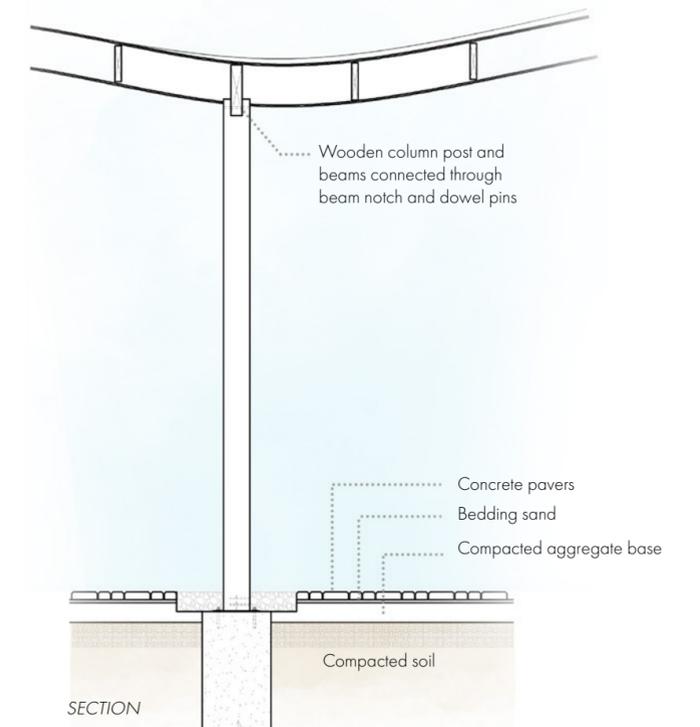


STRUCTURAL SYSTEM

Assembly of concrete load bearing walls, columns and beams



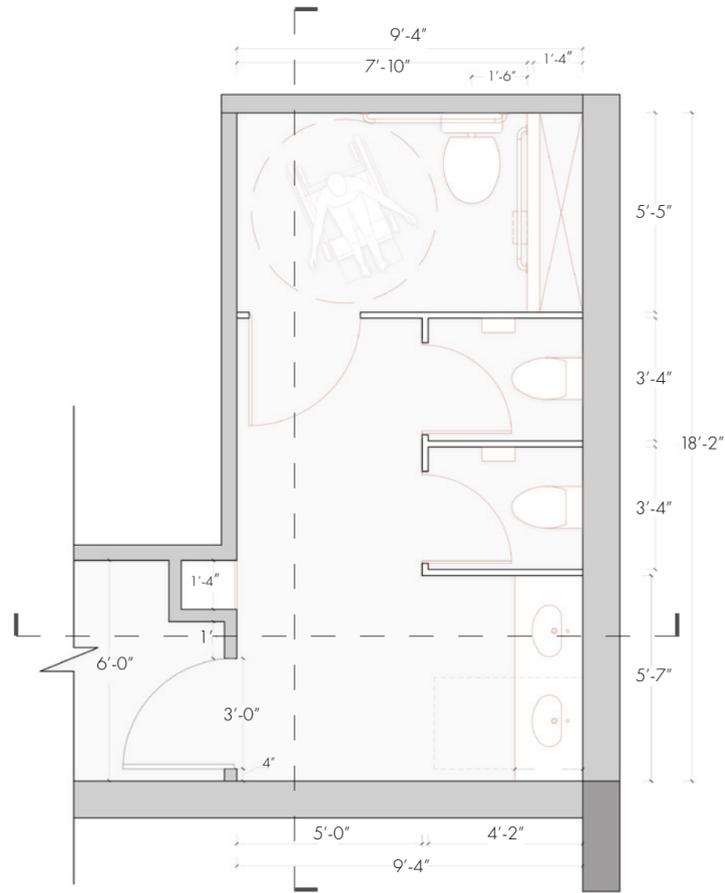
DETAIL A



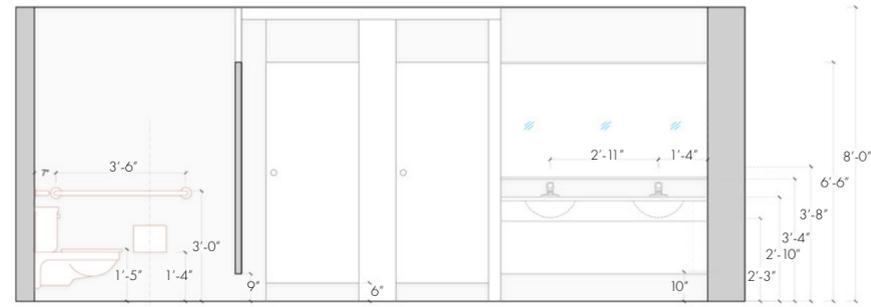
CONNECTION DETAILS

OUTDOOR COLUMN DESIGN

The canopy column is assembled in two pieces, notched together and plugged through wooden dowels. The parametric roof structure is designed like a waffle where members connect with each other as shown in the isometric view and steel angle helps in making the connection stronger.



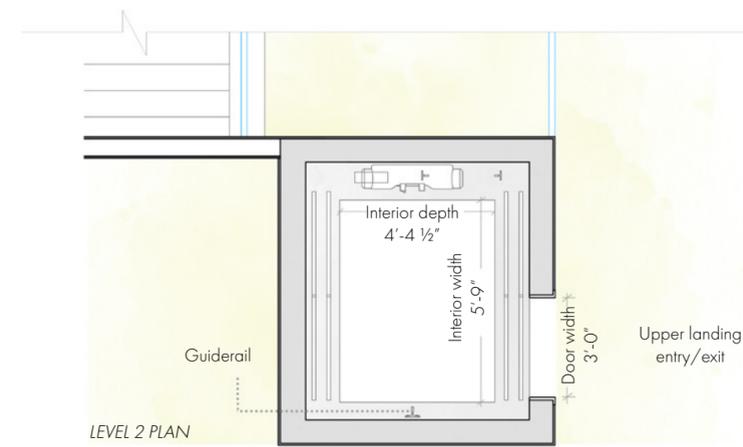
TOILET LAYOUT PLAN (Female)



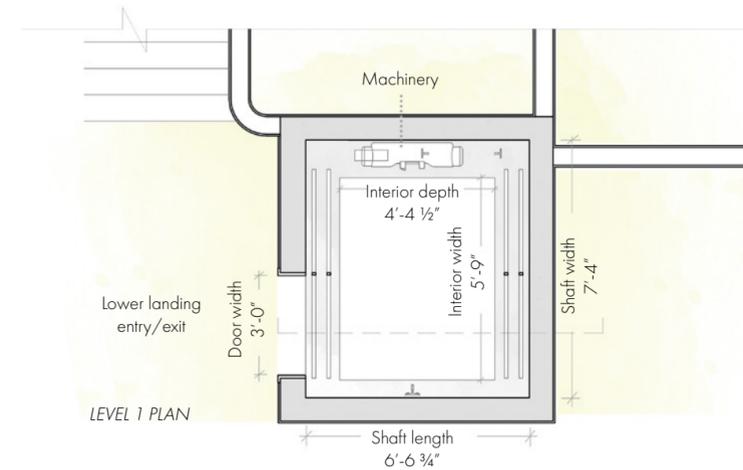
LONGITUDINAL SECTION



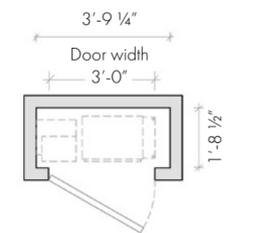
TRANSVERSE SECTION



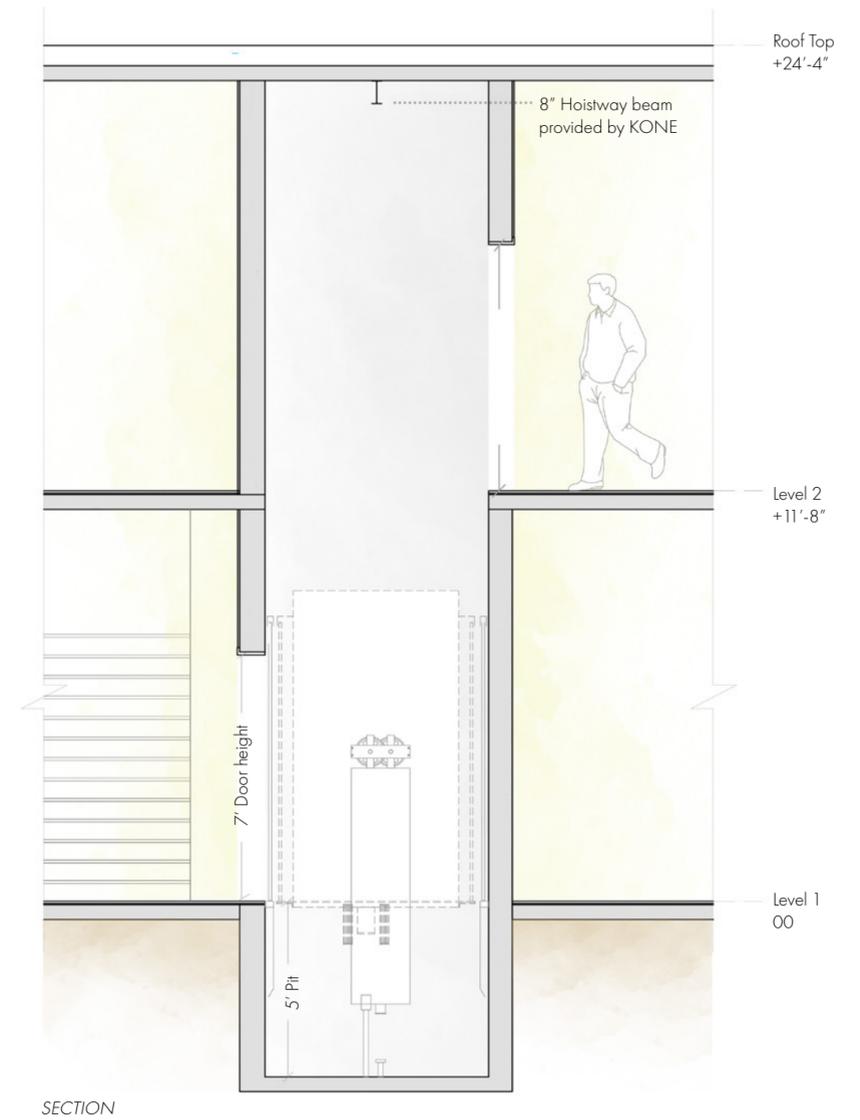
LEVEL 2 PLAN



LEVEL 1 PLAN



REMOTE CLOSET FOR CONTROL



SECTION

UNIVERSAL DESIGN (ADA RESTROOM)

The restrooms are designed to adapt to the ADA standards of design making them universally accessible.

ELEVATOR DETAILS (KONE)

The elevator opens on one side at the lower landing and lets people exit on the other side on the upper level as required by the design and can take four people at a time.



All these elements - the building, the landscape, the details..
come together to make this architecture plausible ..



This project is simply intended to provide a tranquil space to find
comfort in grief and shape the healing experience. The hospitals, even
though they provide the best care, are too 'urbanized'. The goal is to
create an architecture which not only supports these activities but is
also healing by itself (as a built environment).

A beautiful dawn, amidst the quiet,
brightened the heart of the site.
Slowly and steadily, travelled the light,
started the journey of a meditative fight...

They'll all come with a heavy heart,
If only, a difference we make through our art ?
Amidst all the stress and pain,
If only, a ray of hope they gain ?

While architecture gives a safe space,
mother nature has her own grace...
Together with the green and blues,
here I provide - an experience to embrace...

"A tranquil space ... for solace"

- Neha Rampuria



Appendix

Ayurveda - A natural system of medicine; The term is derived from the Sanskrit words ayur (life) and veda (science or knowledge). Thus, Ayurveda translates to knowledge of life.

Cancer - It is a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body.

Chronic Disease - Chronic diseases are defined broadly as conditions that last 1 year or more and require ongoing medical attention or limit activities of daily living or both.

Complementary therapy - These are used alongside conventional medicines and treatments.

Coherent - logically or aesthetically ordered or integrated.

Detoxification - The process of removing toxic substances or qualities.

Holistic healing - Holistic medicine is a form of healing that considers the whole person -- body, mind, spirit, and emotions -- in the quest for optimal health and wellness.

Mindfulness - a mental state achieved by focusing one's awareness on the present moment, while calmly acknowledging and accepting one's feelings, thoughts, and bodily sensations, used as a therapeutic technique.

Natural treatments - Substances of claimed medical value derived directly from plants or other natural sources.

Oncology - The study and treatment of tumors.

Panchakarma - Ayurvedic Panchakarma or PK is a detoxing programme with long-lasting health benefits.

Patient experience - It encompasses the range of interactions that patients have with the health care system, including their care from health plans, and from doctors, nurses, and staff in hospitals, physician practices, and other health care facilities.

Prototype - a first, typical or preliminary model of something, especially a machine, from which other forms are developed or copied.

Restorative - having the ability to restore health, strength, or a feeling of well-being.

Survivor - a person who survives, especially a person remaining alive after an event in which others have died.

Therapeutic - relating to the healing of disease.

Wellness - The state of being in good health, especially as an actively pursued goal.

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All Maps were retrieved from Google Maps, contour data from ArcGIS Web Map, Climate data from www.bestplaces.net.

