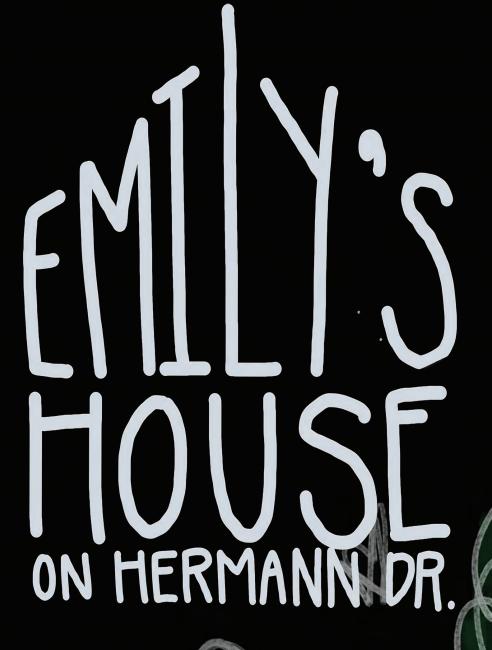
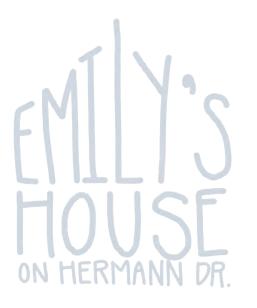
Y'S HOUSE











CLARA OHLENBUSCH

DR. RAY PENTECOST

chair

MICHAEL O'BRIEN

committee member

DR. DAVID VAUGHAN

committee member

BRIAN GIBBS

studio professor

TEXAS A&M UNIVERSITY school of architecture 03.08.2023

DEDICATION

To the children who fight every day to live, to the parents who are forced to face a reality without their children. To Emily for opening my eyes to the reality of chronic illness in pediatrics.

ACKNOWLEDGEMENTS

To my family: Thank you for showing me what it means to love fully, and without limits.

To Wyatt: Thank you for being there for me in all the highs and lows, and never letting me give up on myself.

To Professor Pentecost: Thank you for being an absolute sunshine and pushing me to be the best version of myself.

To my Committee: Thank you for constantly encouraging me and inspiring me to challenge my thinking.

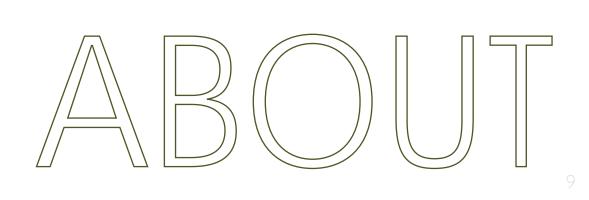
TABLE OF CONTENTS:

pout	8
esearch	16
recedents	2 2
ite analysis	3 0
rocess	3 6
ne building	44
onclusion	114

A NOTE TO THE READERS

The terms "patient" and "child" are interchangeable in this book as they are one in the same. Child is referred to in an effort to humanize the patient and remember the audience, to remember the youthfulness and age of the patient. Emily's House is not meant to be clinical and cold, but a place of love and joy. Children lose their lives every day, this was at the forefront of my mind as I designed the project. We must never forget that the patient is a child.

6 NOTE TO THE READERS



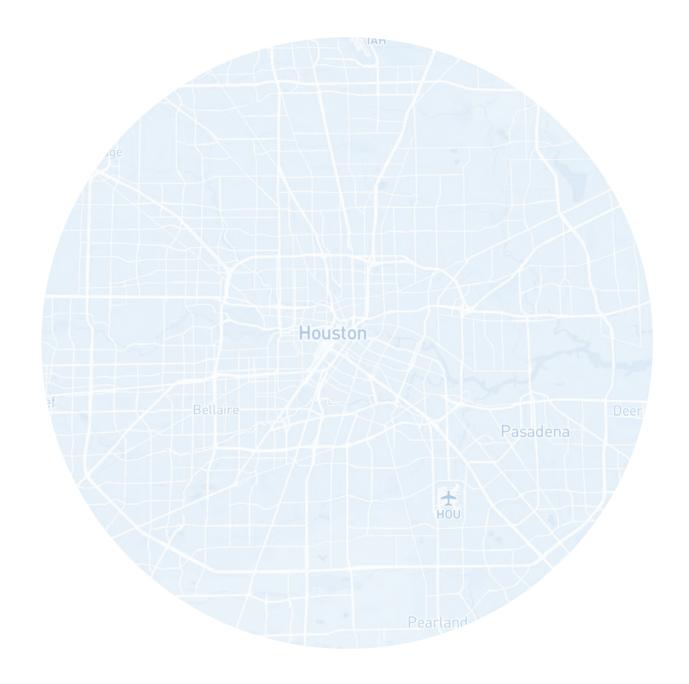


EMILY

Emily's House has been a passion up since I first met Emily in the summer through my first set of architectural studios and design classes.

been living with Cystic Fibrosis from life, I had to leave her in the hands an early age. I didn't know a lot about illnesses, but I was blown away by the would rejoin the group. The twenty camp director believed I could better her was struggling to do something I understand her situation and provide took for granted, breathe. appropriate support. Every day I carry with me the lessons I learned from

Emily. I witnessed Emily trek to the project for me, a project I have dreamed medic station at least three times a day to receive treatment. She would of 2017 (furthest left in photo). I was a walk into the medic station, strap first-year camp counselor fresh out of herself into her life-saving vest, and my first year of college, having been then be physically shaken from the vest to help drain her lungs of excess fluid and mucus. This was not only heartbreaking to watch, but due to Emily had just turned ten and had the rapid pace demanded of camp of the medics as she completed her Cystic Fibrosis or many other chronic treatment. Twenty minutes later she maturity I saw in Emily. Emily had been minutes for me was a game with the placed in my care for the week, as the campers, and the twenty minutes for



ABOUT THE PROJECT

Emily's House is an outpatient day and innovative architecture. Through this healthcare facility and hospice house for program, I have investigated a series of children with long-term illnesses. Emily's questions: House is focused on helping children find • With a program inherently their place and come to terms with their institutional, how can I use design, the illnesses, while not becoming them. The site context, and positive distraction to facility's top floor is strictly dedicated to create a place that is inviting and playful the on-site hospice units for six patients for children (and their families) with chronic and their families. I aim to challenge illness? traditional architecture for health by • How can we use space to create

- utilizing play therapy, positive distraction, edge conditions in the design of a facility?

THE HEART OF THE PROJECT

gluten intolerance, with celiac disease a place where everyone could feel as looming, always threatening my included as possible, no matter their digestive system. Although this pales in restrictions. A place where children comparison to other chronic illnesses, could bond and see other children just I always felt displaced—inconvenient. like them. I was never able to eat the same food The idea of Emily's House was already ate."

the time I could join the others, many in one's development. had almost finished their meals. As I saw Emily's House as a place of safety-feeling of being a bother was a terrible introduced to the idea of hospice. feeling. When creating Emily's House,

As a child, I grew up with a volatile I used my past experiences to design

in the lunchroom or the birthday conceived from the desire to provide treats brought in by parents. I had a place for children with chronic, to make excuses about why I wasn't and even terminal, illnesses to come participating. The most common, "I together and be children. It is a place of community, a safe space where you are no longer your illness. Emily's When I went to summer camp, my House aims to provide a safe haven mother had to call ahead, get the for children who are so desperately menu for the week I would be there in need of being a child. In desperate and spend hours creating meals to need to feel normal and act their age. "match" the other campers. We would Emily's House is an outlet. An outlet get to camp before check-in and stop for the children to be their true selves. by the kitchen with our cooler of food An outlet for parents, a place where for the week. When mealtimes came their child can play and meet children around, I would go into the walk-in they can connect to, to bond with. refrigerator, grab my meal, walk to a Finding one's sense of place while back room, and heat my food up. By feeling included is an important marker

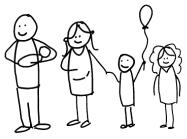
hard as I tried to fit in, I would receive as a home. While brainstorming how I stares and questions about why I was could make this project more impactful different. This simple isolation and for the community it will serve, I was

LEVELS OF CARE

When designing Emily's House, I broke the project down to serve four separate groups of individuals: the patient, the family, the staff and the community. Through this book you will be able to see and explore how each group was impacted in this design. It takes a village to raise a child, and it takes a community to recover from the loss.



THE PATIENT



THE FAMILY



THE COMMUNITY

14 about

CHRONIC ILLNESS IN CHILDREN

Emily's House aims to help all children with classes and school activities. The lack of chronic or terminal illness —as a general continuity in school attendance may cause population they are much more at risk for problems, including avoidance or refusal to other obstacles in their life (Hysing et al, attend school. This can increase the child's 2007.) According to the American Academy of loneliness and feeling of being different Child & Adolescent Psychiatry, Children with from other youngsters." (Chronic Illness, 2017) diagnosed chronic illnesses are at a greater risk
There is hope for these children, by providing for developing emotional problems. (Chronic methods and strategies to understand the Illness,2017) These problems can stem from a symptoms and complexities of their illnesses multitude of places. "Chronic illness entails which can lead to a more effective treatment frequent physician visits and medical leaves plan. (Bravoet al., 1993) requiring the child or adolescent to miss

MENTAL HEALTH ASSOCIATED WITH ILLNESS

Chronic illness in children can be a village to raise a child and at Emily's focused on the physical pain and the behavioral issues. (Garey, 2022) tangible issues. (Garey, 2022) It takes

especially detrimental as it can often House we aim to help shed light on lead to future mental health issues if the emotional damage an illness can not combated at an early age. (Chronic cause. By including psychological Illness,2017) Unfortunately, the reality services on site, we hope to make of these Chronic illness can result in help readily accessible and affordable. accidental neglect of care for the child's We hope to help combat some of the mental health because the parent, and most common results of a long-term even physician can find themselves illness such as anxiety, depression, and

PEDIATRIC HOSPICE

traditional forms of pediatric hospice positive feeling at the end other as we try to create a safe, home-like the family's journey in hospice. By environment away from the actual understanding the psychology behind home to help take some of the stress pediatric hospice patients, we can help off the family. Some studies show combat feelings of pain, isolation, and that families using pediatric hospice hopelessness by enacting strategies report negative feelings at the end that include play therapy, education, of the child's life, (Dicken, 2010.) The and group therapy (Sarwar et al., 2019.)

Emily's House is different that some same study, however, did show

AN OVERALL SUMMARY

Throughout my time here at Texas children and learned to put myself in have understood the complexities of done at Emily's House.

A&M I have had the privilege of taking their shoes. This led to incorporating many healthcare related classes and not only opportunities to learn, but have in turn applied some of that play areas of many kinds, including knowledge to this project. By applying music zones, imagination stations and overall methods of positive distraction, messy zones where they can splash I hope to provide healthy outlets and paint. We as designers have the and methods for coping with the privilege of taking experiences we harsh realities in these patients' lives. have had in life and applying them to From my time as a camp counselor, I our work, that is exactly what I have



THE KENZINGTON LEARNING SPACE

Architects: Plan Architects

Location: Krung Thep Maha Nakhon,

Thailand

Area: 4,305.56 sqft

Year: 2020

Project Type: Education

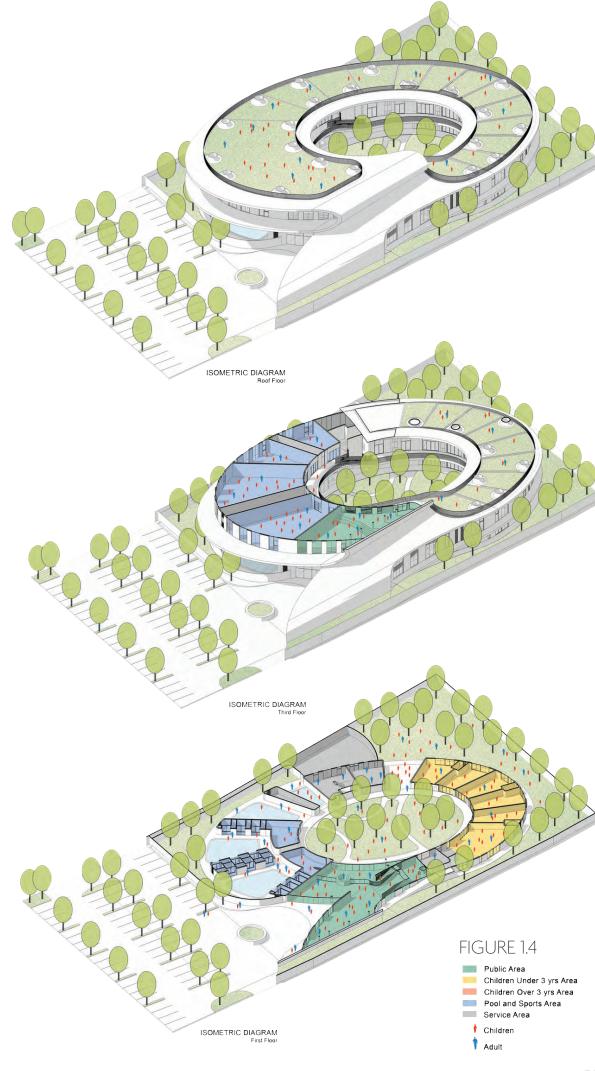
This "Out of School" learning center challenges the traditional education system. This Center aims to encourage physical skills and mental development for children 6 months to 11 years old through play and active learning. The belief that children learn best when they are engaged can be seen in all aspects of the design. This project is built on the concept of "play based learning" by providing several different play methods and styles. They emphasize structured play, open ended play, and play through exercise. Play areas are scattered throughout the entire complex.



A single drop off / pick up point provides a high level of safety, as each child is accounted for the entire time they are in the center. This concept is extremely helpful in keeping the children safe.



The second floor showcases studios for art and cooking classes as well as dance spaces among others. This promotes creativity among the kids, helping create a well-rounded student.



74 precedents





NOAH'S ARK CHILDRENS HOSPICE

Architects: Squire & Partners Location: London, UK Area: 25,000 sqft Year: 2019

Project Type: Healthcare

Noah's Ark contains six large children's bathroom gives the opportunities for muted color palette with warm lighting outside, allowing nature to be viewed at

families and patients staying there. This bedrooms with room to play. The adjoining amenity helps relieve a little stress of preparing food for oneself during one things we take for granted, such as of the hardest parts of someone's life. bathing, to be easily accessible to all. The This helps the parents remember their needs are important as well. Three family helps the center feel more like a home. suites equipped with kitchens allow a Each bedroom has direct access to the comfortable space for a family for the duration of their stay at the Ark. Keeping all times. Noah's Ark has an on-site cafe, the family together is so important during preparing fresh meals at low cost for the hard times such as the end of a life.







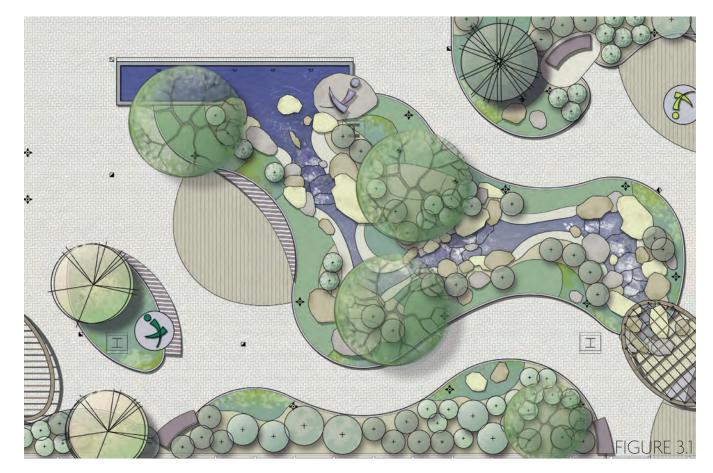


The Center's butterfly shaped plan boasts four wings. Each wing of the building has its own function, including therapy space, children's rooms, family room, and administration. The butterfly is symbolic of hospice, celebrating a brief, but beautiful, life. There are a series of rooms available to all children visiting the Ark. Sensory rooms provide a safe place



for children with developmental disabilities to comfortably play and interact. Art therapy classes support emotional processing while helping the child understand what is happening to them. A wide array of crafting supplies are used to maximize the ability to become enveloped in the creative process.





BETTY RUTH & MILTON B HOLLANDER HEALING GARDEN

Location: New Haven, CT

Year: 2013

Project Type: Garden

Landscape Architect: Shepley Bulfinch Located on Yale University's campus, the Betty Ruth & Milton B Hollander Healing Garden can be found on the roof of the Smilow Cancer Hospital. With the patients at the forefront of their mind, the garden was designed with constant input from patients, staff, and the community. Imitating a backyard, the somewhat free flowing garden provides a unique experience where patients can sit, have conversations, or even have alone time out in nature.



The paths are accessible to all within the hospital, no matter the level of mobility a patient is experiencing. A wide variety of views are an important part of this design as well. A variety of plants allows for a unique view no matter where you may be sitting.





THE MEDICAL DISTRICT

Many factors went into the decision and proposed site for Emily's House boasts a placement of Emily's House. Emily's House is short 4-minute car ride from the Houston located at 2001 Hermann Drive in Houston branch of the Ronald McDonald House, a Texas, the home of The Texas Medical proposed sponsor and inspiration for the Center. This district in Houston is world- project. Working side-by-side (ideally) with renowned for its impact on the field of the Ronald McDonald House, Emily's House medicine, bringing attention and patients aims to provide a worry-free experience for from across the globe. Patients, doctors, and the children and their families, a place where their families flock to the medical center to financial repayment is not a consideration, a receive treatment and care, research, and place where the family can feel at peace in see the heart of healthcare innovation. The times of trial.



THE SURROUNDING CONTEXT

Located to the north of the Houston Zoo, growing minds of the children who walk our close to the Museum District, Emily's House halls. This helps serve our beliefs that children is an ideal location for a wide variety of field should never stop learning, that discoveries trips and enrichment activities for the ever- and activity are important, even to the end.



THE NEIGHBORS

many advantages. The previous building, a 3.39 acres, surrounded by residential units on small medical facility, was torn down leaving all three sides with views of the park to the the site vacant and ready for construction. south. The site is fully equipped with the utilities

The site itself is unique in its design and has already wired to the site. The site consists of

THE SITE

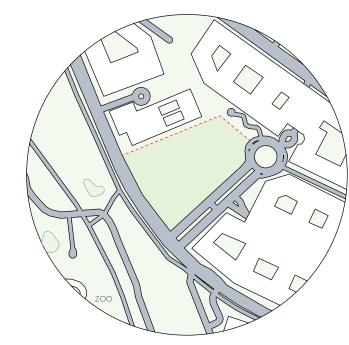


These 3.39 acres of fully bulldozed land north of the Houston Medical Center provides a convenient urban center.



THE SURROUNDINGS

High-end residential complexes on three sides provide a safe, quiet "neighborhood" feel.



THE ROADS

Hermann Drive is located at the south end of the site and allows for ease of travel, while allowing for a private entrance of a turnaround.

THE BEST VIEWS



Across Hermann Drive we have a beautiful view of the park with walking paths, allowing for a connection with the natural landscape.

THE ENTRANCE



Several opportunities to enter the site allow for separation of traffic flows and a more relaxed site entrance, away from the main road traffic.

THE SUN PATH



The sun path provides an opportunity to provide patients with light directly into their living spaces, which may help bring feelings of joy.

CONCEPT

on a series of criteria to discover what the while limiting overall site access. This best option was for the program.

The main goal of the Parti process revolved around the desire to give patients the best The third important criteria for this site was overall view of the park across the street, staff member a sense of community.

It was important to me to separate the years to come.

Each parti was evaluated and judged based flow of patients, staff, and service vehicles, concept plays into the safety of the site.

that there must be a space for a private while striving to give each child, family, and park for the patients and their family. This park was to act not only as a place of joy and play, but to be a space of flexibility in

Judgement Criterea

☐ View of the Park

☐Private, seperated site access.

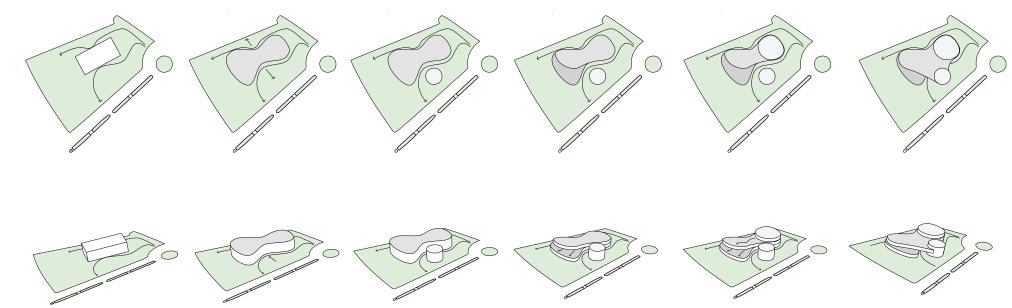
□Large Park area

☐ Room for expansion

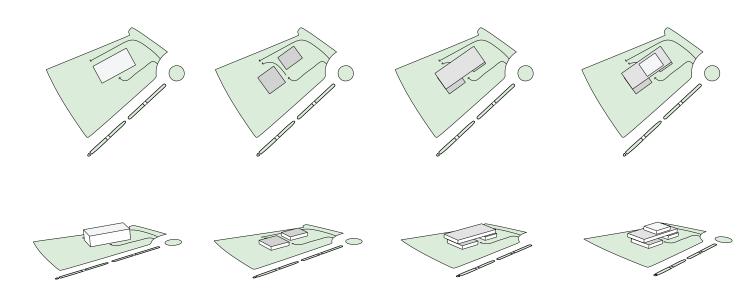
SCORE CARD

View of the Park 1/5, Seperate Traffic 5/5, Large Park 2/5, Room for expansion 1/5 -Patients came second to the form Total: 9/20

Staggered Views: Parti 1

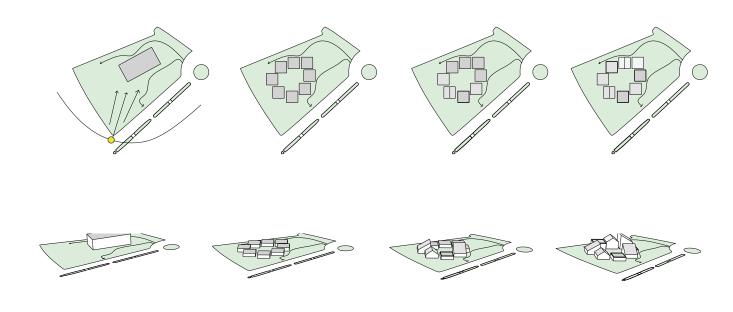


The Sandwich: Parti 2

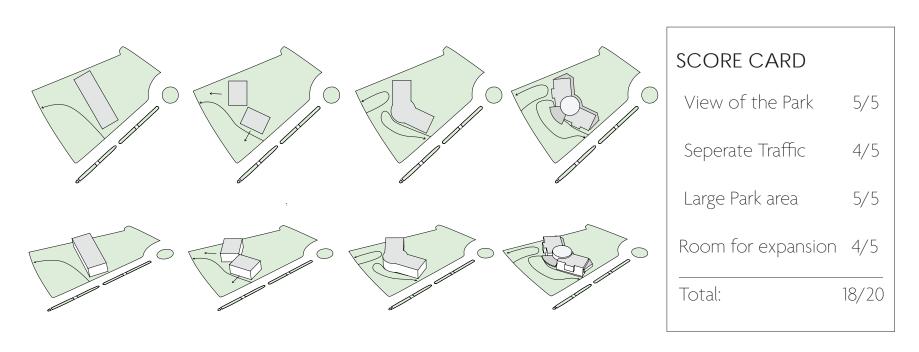


SCORE CARD	
View of the Park	1/5
Seperate Traffic	1/5
Large Park area	2/5
Room for expansion	1/5
Total: -Lacks Flexibility of Sp -No View of Park	5/20 pace

The Play Village: Parti 3



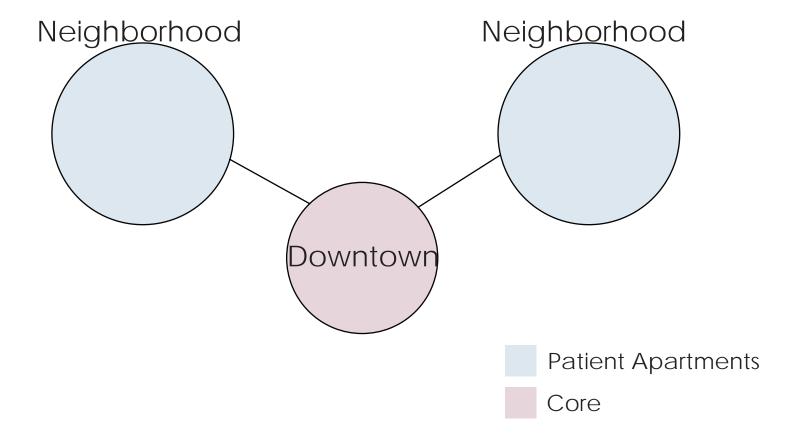
SCORE CARD	
View of the Park	2/5
Seperate Traffic	3/5
Large Park area	3/5
Room for expansion	2/5
Total: -Accessibility may be a -Hard to expand, lacks	



THE FINAL PARTI

the design, several site factors were at play. The biggest of the project was to create a safe zone of play on factor driving the design was the desire for patients site, allowing the hospice patients and their families to have a view overlooking Hermann Park. This view a dedicated place to play away from the street. This allowed patients to not only feel connected to nature, parti met each of the required aspects of the design. but created a unique opportunity to play with how

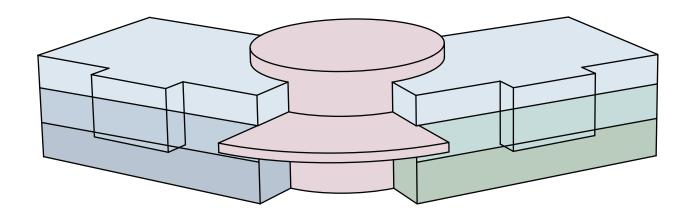
When deciding the orientation and overall shape of the room would be arranged. Another important goal



THE CONCEPT

wings with a cylindrical center, creating a sense of community within each wing a centralized core that contains a nurse's of the building. The two cul-de-sacs are station as well as the main building vertical connected by a hallway, or "highway." At circulation. The third floor, the hospice the center, or core, of the two communities floor, was designed to create an intentional we see the spaces where both wings can community, a "neighborhood." The hospice come together to share a meal, play games, suites are divided into two sets of three or relax outside. units on either wing of the building. These

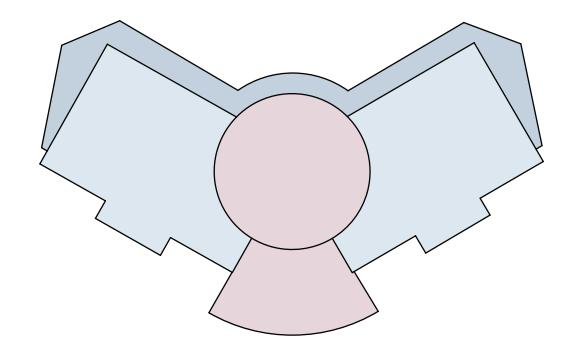
The Center is divided into two separate three units create a semi cul-de-sac creating



A SMALLER FOOTPRINT

park space but provide ample room for flows within the design.

This desire to maximize the site led future development of Emily's House. to a need for a design with multiple The final main site factor to consider in stories to minimize the footprint on creating the mass of the building, was site. By creating a smaller footprint, the flow of traffic and the need for a I was not only able to create a large protected drop-off and to separate

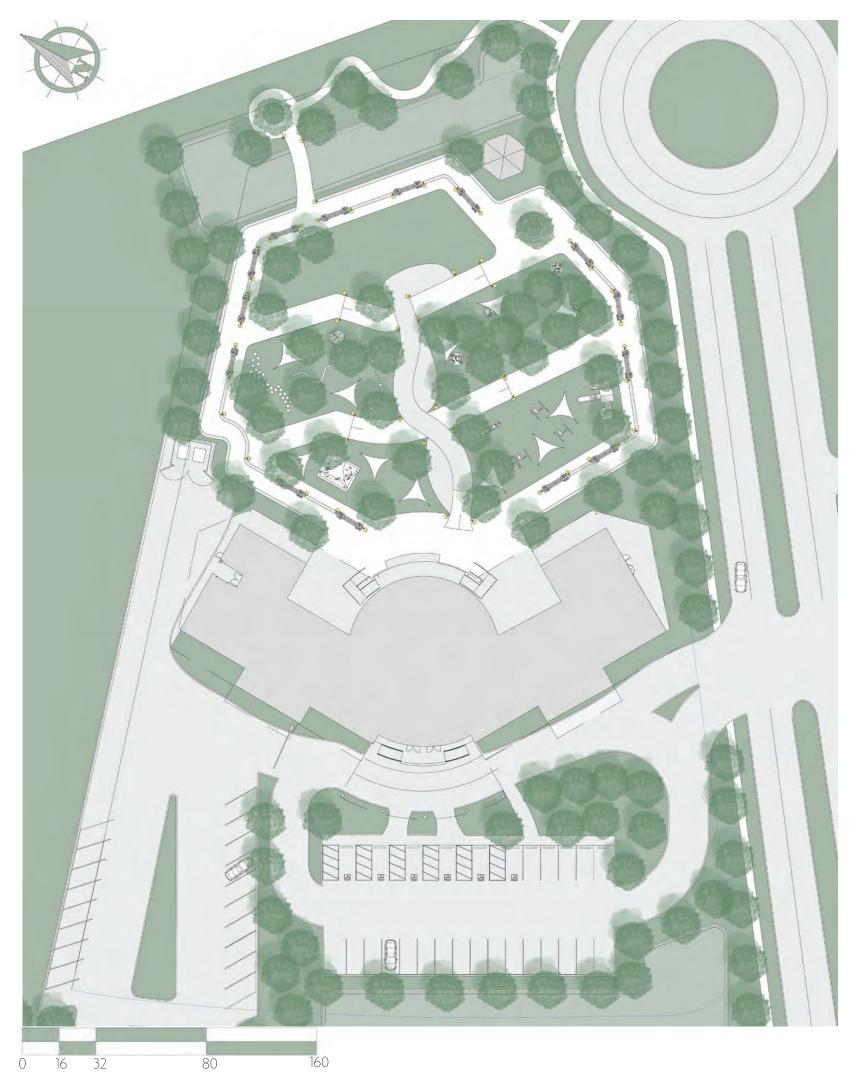


PROGRAM

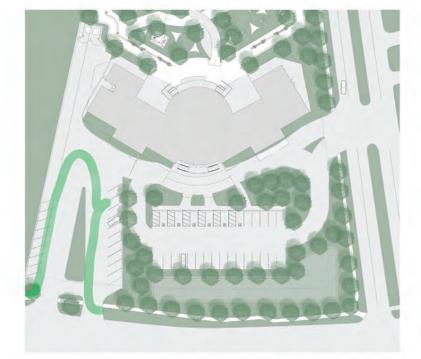
The arrangement of the program allows for each floor to be separated according to function. The top floor, the hospice floor, gets the ultimate level of privacy as it has become the home of the patients. The second floor provides services for the day center children as well as hospice families. The bottom floor is divided into public and private spaces, divided into several wings.

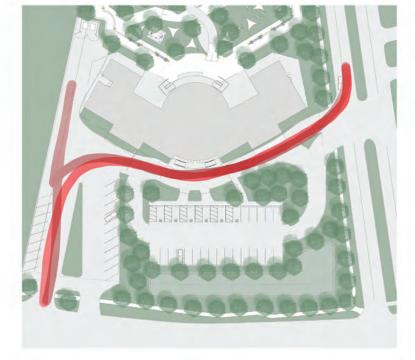
Patient Apartments Therapy Space Staff Zone Learning Environment Parents Corner Core











VISITOR TRAVEL

Considering the patient and family experience was a priority in creating Emily's House. Having a covered drop-off point was necessary in this building typology. By creating a turnaround on site, I was able to create an opportunity to pick up one's family member without needing to exit the property entirely. The entrance off the secondary road allows for traffic entering the site to remain off the busy main road, increasing the visitor's safety. A single entry and exit point allows for the security team to easily monitor who is entering the site.

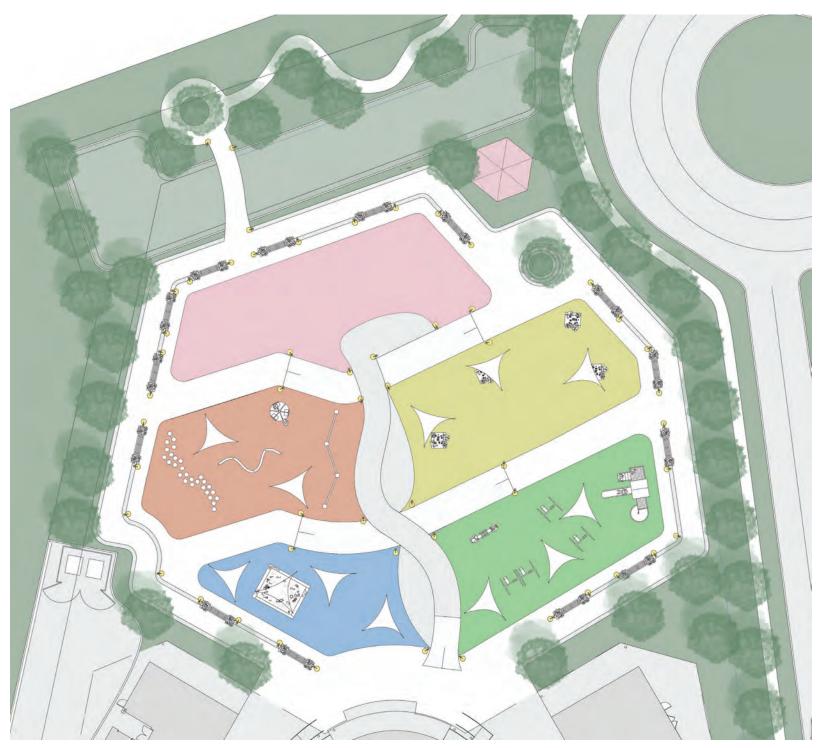
STAFF TRAVEL

It was important to me to separate the staff entrance from the main, public entrance. This separation allows staff to begin their day in the private staff corridor, only accessible by key card access. This separate site entrance allows for a private parking lot dedicated to the staff so that they never need to search for a place to park. Direct access from Hermann Drive was deemed appropriate and convenient for the staff.

EMS/SERVICE TRAVEL

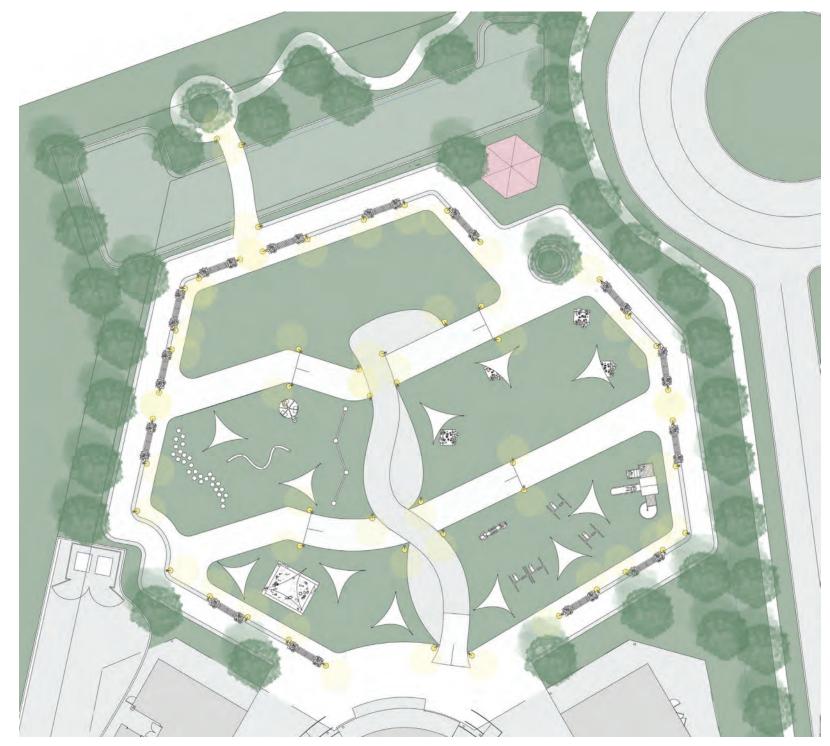
Emily's House is expected to receive many different forms of vehicular traffic, including EMS and other service vehicles such as deliveries and garbage disposal. I have created two potential paths of travel. EMS would enter in the same manner as the visitors for ease of access to the building and would exit out of the staff exit through a monitored gate. Service vehicles would be expected to travel in a similar way but would make an alternative hammerhead turn to deliver their products to the service entrance on the side of the building.

 2 building



ZONES OF PLAY

Creating an outdoor space unique to Emily's lower impact, lower intensity play areas closer to House exclusively for the patrons and their visitors the building, allowing the patients who may be in was imperative in creating a fun, safe, and healing the weakest physical condition to have the largest environment. The children's park, located on the horizon in front of them. This was not only done north side of the lot, incorporates several variations in an effort to provide a sense of inclusion, but to of play with a variety of levels of mobility. As one make it easy to interact with nature, no matter the progresses through the park they are met with a physical state one is in. higher level of play. It was important to place the



LIGHTING AND SAFETY

back park, allowing multiple paths for patients for an area for parents and patients to sit and to use, depending on their energy levels. Taking overlook the play below while having easy access a page out of the design for elderly patients, I to the play area when needed. This path connects thought creating options for paths was the best the entire park and leads back into Emily's House. way to encourage exercise, while still allowing an Using lights at the corners of the park allows for easy path "home" with many places to sit and rest easy visibility of potential obstacles. The lighting along the way. The park is separated into 5 parts design allows for park usage all day.

A large walking path, or track, surrounds the entire with a large deck or path in the middle allowing



A PARK WITH A VIEW

In the view to the left we are able to commune with nature from a safe, see what it may look like on a nice shaded space. I see this area being a day in the back play area, specifically place to celebrate or host birthdays the fairy garden eating area. It was and special events. Unique furniture important to me to include a place creates a fun, unique space that makes where the families and their visitors one feel included in nature. could go outside on a nice day and





THE EXTERIOR

The exterior of the building was designed to create a modern, relaxing space. The use of natural materials such as stucco and wood is meant to help connect the building back into nature. The wave pattern in the stucco evokes calming serenity and the hopeful nature of tomorrow.

The glass panels of the second floor are shaded and protected with a large shading structure designed to resemble a beehive. I created this beehive pattern to not only provide privacy for the children, but to symbolize the commitment and love bees have for their hive. Bees as a species are fiercely loyal, and they protect one another at all costs. Each bee is valued and plays and important role for the hive. Each child, parent, and staff member is valued at Emily's House, just like a bee to the hive. The large overhang at the front of the building was created to not only provide an outside deck with a beautiful view but a two-lane covered drop-off zone.

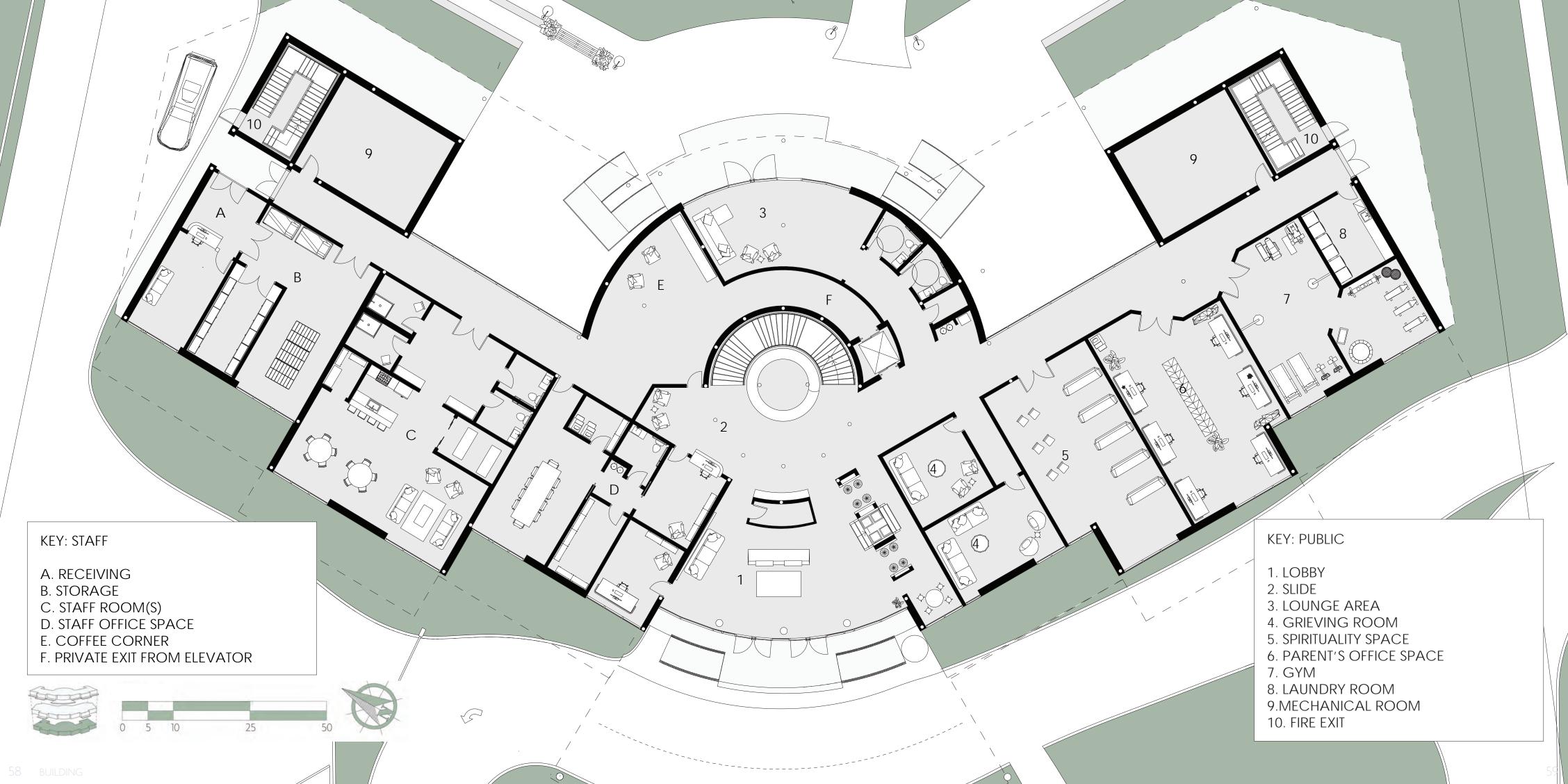




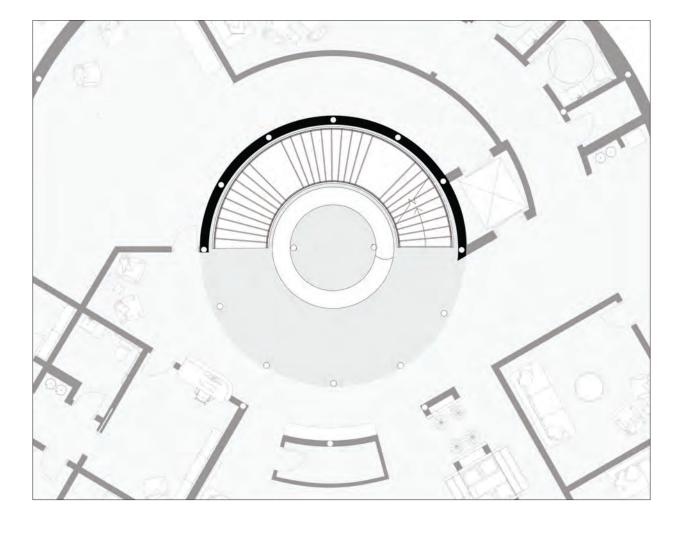
0 12 24 60 120

54 BUILDING









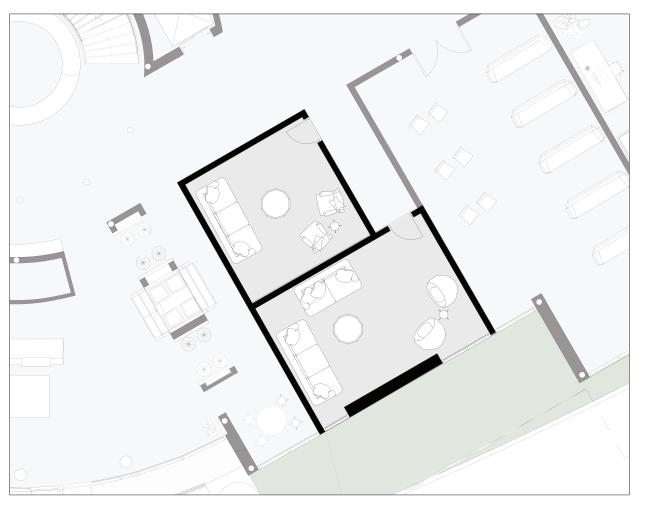
AN EXCITING EXIT

The Lobby, designed to create an met with the exit slide connecting the the facility. The lobby information joy, even when leaving the facility. desk provides a unique opportunity The addition of the slide was a child passes the entry desk, they are something to be feared.

exciting, welcoming experience, first and second floors, with Harry the provides a grand entry into the facility, Hippo waiting for his daily hug at the with close monitoring of who enters bottom. This inclusion was to create

for volunteers either interested in thoughtful choice to help decrease healthcare, or that have been impacted the child's anxiety when entering by Emily's House, to interact with the the building. The slide helps to teach community of Emily's House. Once the the children that medical care is not

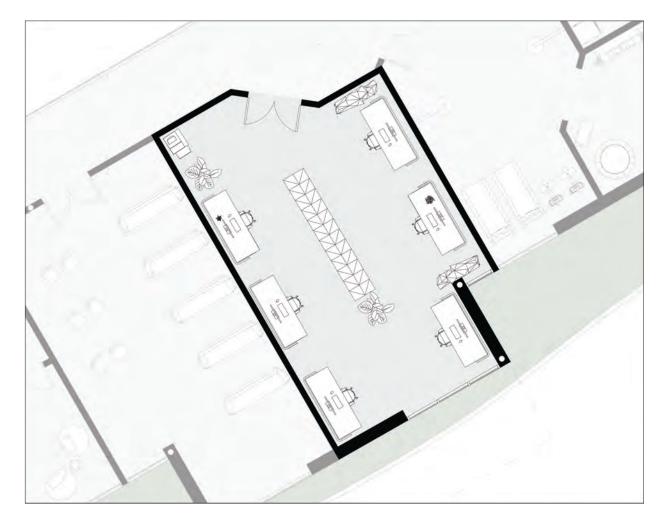




GRIEVING

The unfortunate reality of Emily's and friends can come together to House is that there will be a time when remember the lost child and reminisce a patient passes away. Located on the about the good times. These rooms first floor are two different grieving were designed to be as relaxing and rooms that can be used at any time calming as possible to help create a by the residents of Emily's House. By safe space to grieve. creating a variety of spaces, families



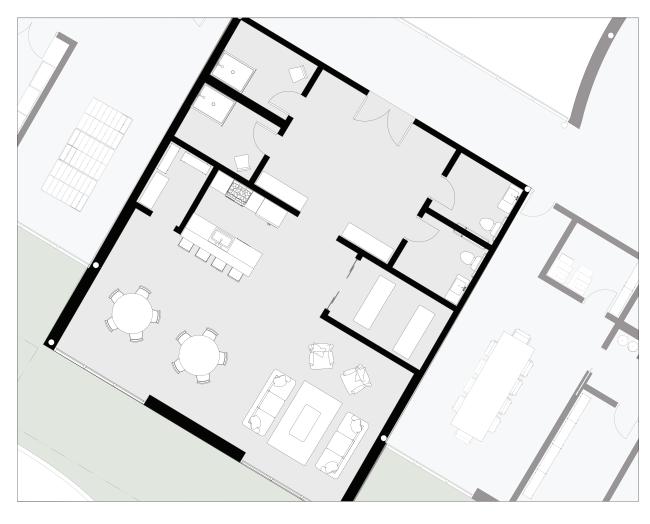


WORK FROM HOME

The first floor of the project features The office space in particular is staff and parent spaces. By including a unique because it allows the parent large laundry facility, gym, and office to continue working if that is needed. with a dedicated workspace for each When tragedy strikes sometimes unit, I have created a space for the parents are unable to take time off parents, family, and staff to escape to work and must continue working to while staying in close proximity to the support their families. child.





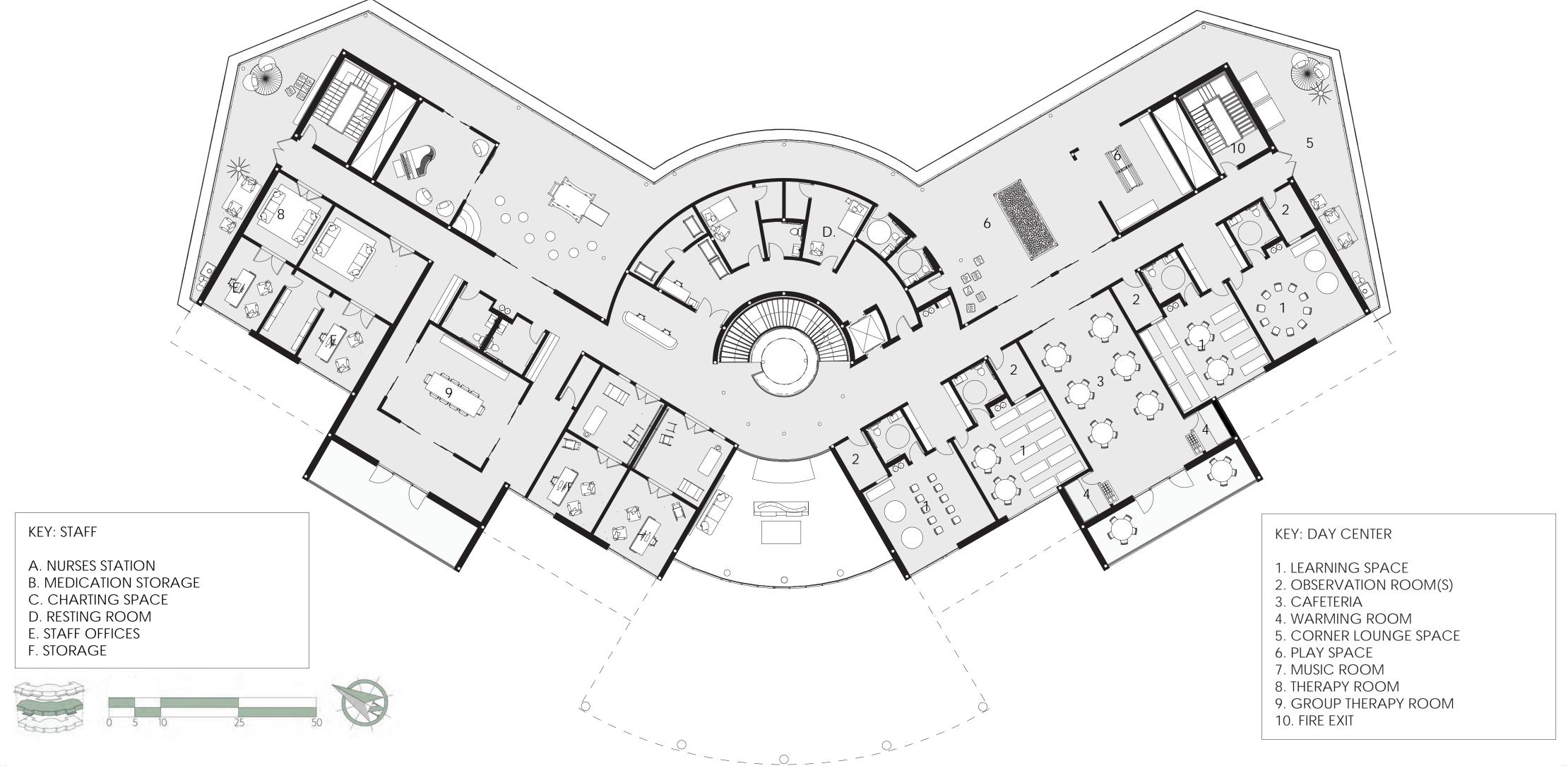


STAFF RESPITE

The first floor on the west wing of the It was important to me to create building is dedicated to the staff. In the a luxury escape for staff at Emily's images above and to the left, we see a House, as it can be emotionally taxing large staff room, showers, a conference and stressful. The staff room includes a room, and offices in this wing, shielded place to lounge, eat, and shower, and from the public eye.

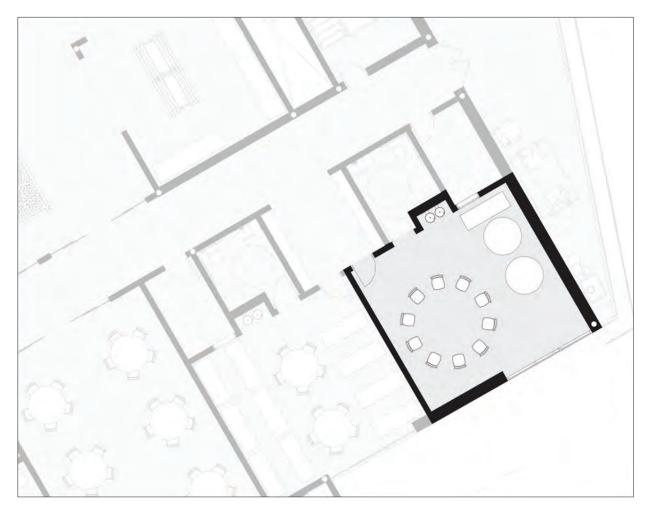
there's even a small multipurpose room to grieve or meditate.





70 building



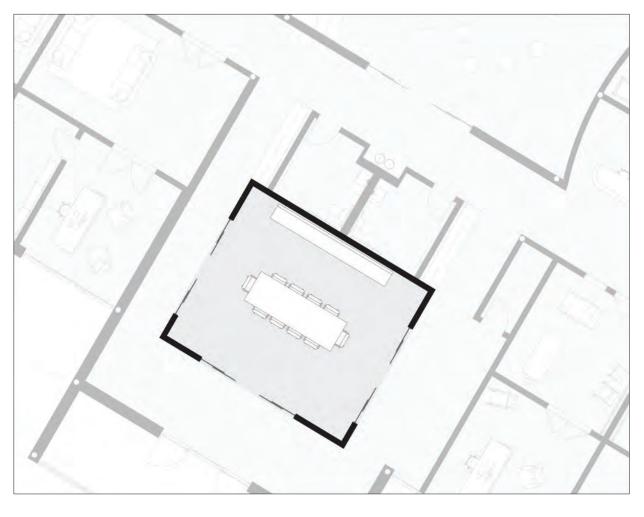


A PLACE TO LEARN

The second floor is mainly dedicated several smaller spaces that allow for to the day patients (and hospice freedom of choice. Play spaces range patients) with several areas of play, as from messy play, imagination station, well as classroom spaces. These spaces to quiet areas to get away and seek were created from the belief that respite with a book. It was important children, no matter their condition, for me to acknowledge that all children should be able to be curious. I believe are different, and each child has their that learning, asking questions, and own form of play; this also meant being curious are imperative in the creating safe spaces to escape when growth of a child. The play spaces overwhelmed. on the second floor are divided into



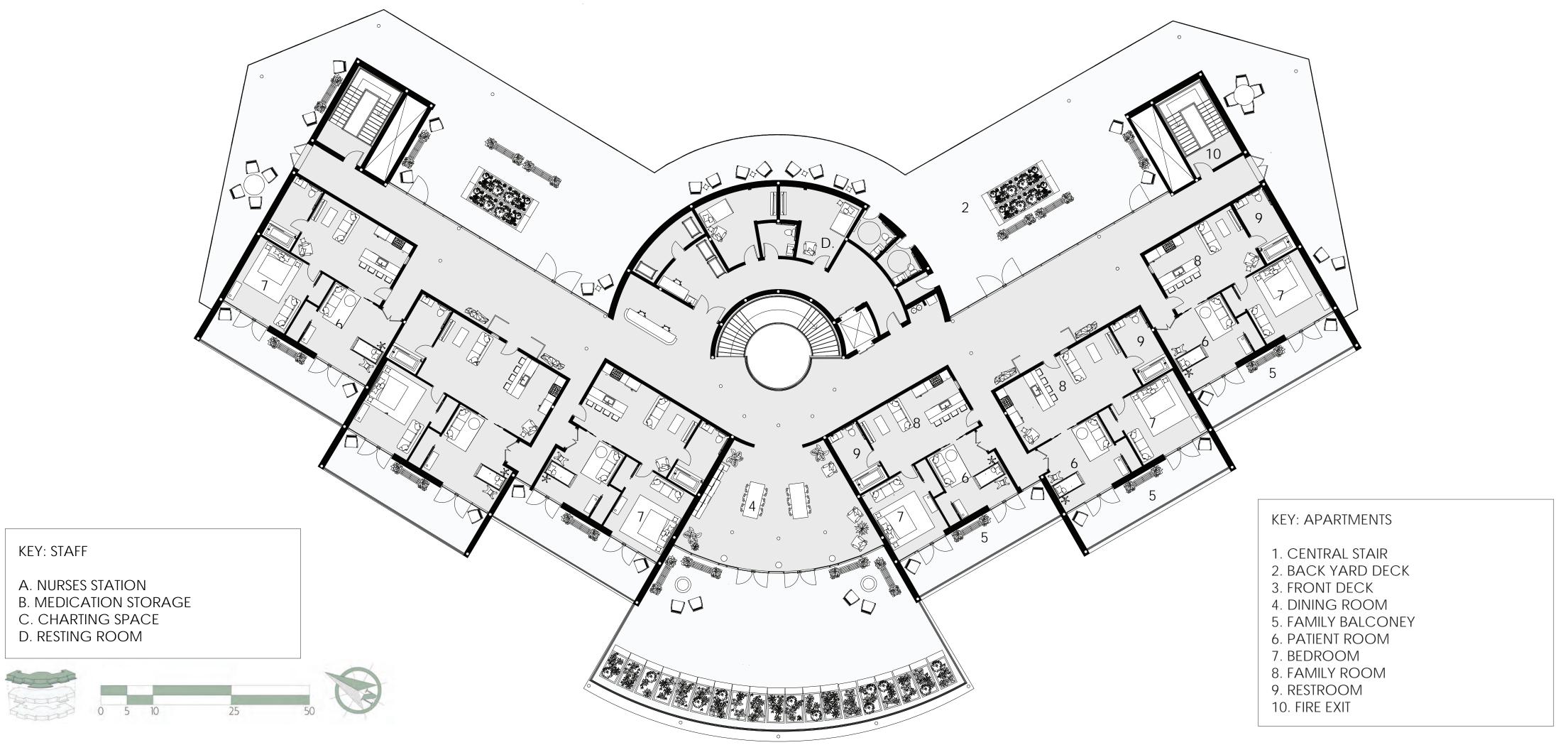




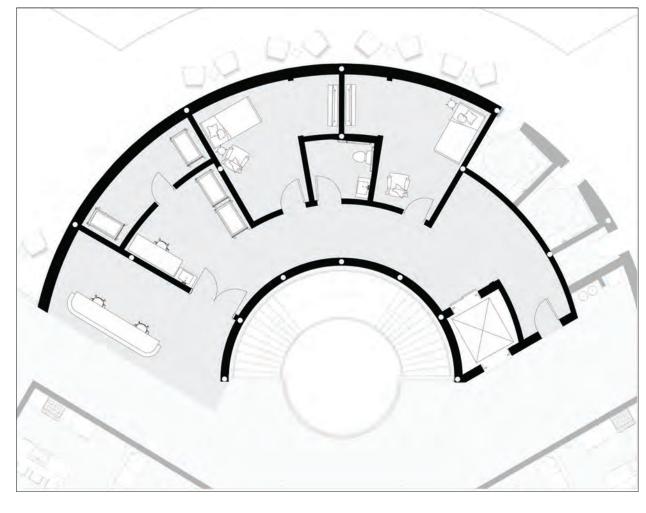
HEALING

The second floor also provides a space into the day. The space above and to for a variety of therapists and therapies the left represents a therapy room to take place, including, but not limited used for meetings, group therapy, and to, group therapy, physical therapy, small activities led by therapists. The and counseling for parents and families floorplan and image to the left show of the patients. Lack of access and a few different options of furnishings availability to mental health services and set-ups to show the flexibility of can provide obstacles for families the space. The chairs can be replaced and children suffering with mental with yoga balls to create a livelier space health issues. By providing therapy for different audiences. on site it can easily be incorporated









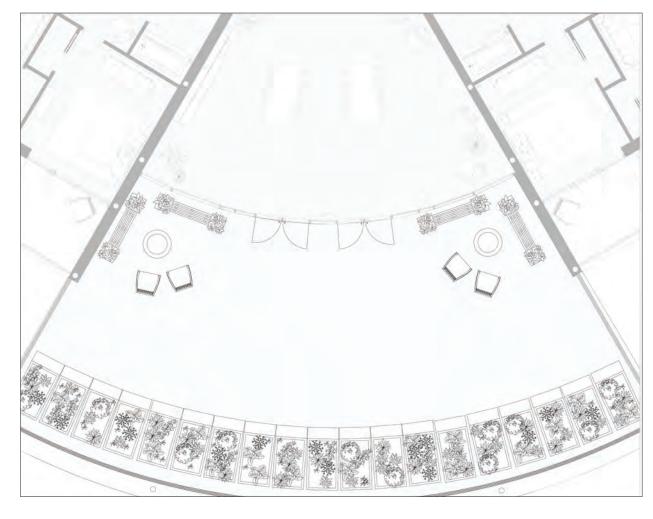
A PLACE OF CARE

between patient rooms, as well as a a close proximity to the patients. private area dedicated solely to the The station allows for a charting space, staff. A 1:3 nurse to patient ratio at the rooms for resting, medication storage, hospice level allows for two nurses and a private elevator entrance to work and rest within their given connecting all three levels of staff station. With a job so emotionally zones. taxing, like pediatric hospice nursing,

Providing a nurse's station in a central it was important to create a space of location allowed for ease of travel respite and seclusion, while maintaining







WATCHING THE WORLD

Emily's House boasts two large of mobility to get to experience the deckspaces at the front and back of sunlight and fresh air. It was important the building, allowing for nature to be to me to create a space that allowed viewed from many angles.

pictured is located at the front of see different aspects of life. This view the building, allowing for a flexible in particular allows for an excellent space that allows patients of all levels view of the Houston Medical District.

the patients and their families a place The large, shaded outdoor deck to look over Hermann Park and get to









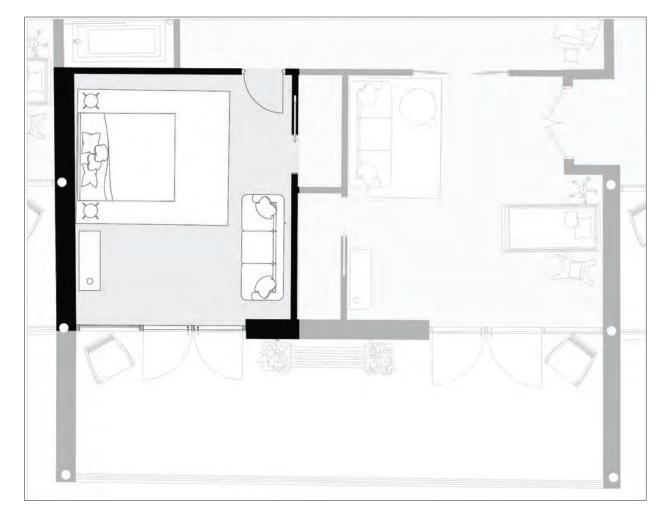
A PLACE TO LIVE

Each of the six patient units features room. This sliding glass wall allows for a two bed, one bath apartment with the child to still feel included, even a cozy living room and a kitchenette. on their worst days when they are Although each apartment comes too weak to leave the bed. Clerestory with a kitchenette, Emily's House will windows help bring light into the be connected with local services to interior of the living room. The living provide hot meals for the families in room provides a place to play and a their care. The meals will be stored place for family life to continue. until picked up in the centralized dining The patient room has a separate and a sliding glass wall to the living for the nurses.

room on the third floor. The patient entrance for staff to increase the level room, one of the two bedrooms, of privacy for the patient and their comes equipped with a bed, loveseat, family, while allowing for easy access





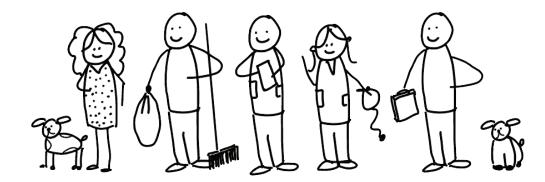


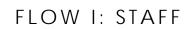
A PLACE TO SLEEP

Each of the bedrooms features their couch that, at the family's request, own access to the shared apartment could be replaced with a bunk bed balcony overlooking the park across from the storage facility on the first the street. On nice days, the patient floor, or used as a pull-out couch to bed can be placed on the balcony to house more friends and family. The allow for fresh air and a little sunlight. parents' room was designed to create Designed with family in mind, each a sense of peace and relaxation--a room has an allocated space for a place to escape to.

THE FLOWS OF DESIGN

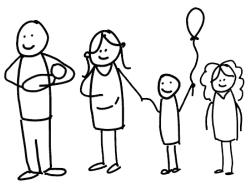
In an effort to make Emily's House a" Machine for Empathy" many aspects of daily life were considered. A system, known as the "7 Flows of Healthcare" (7 flows of Healthcare) was considered early on in the project to create an efficient and thoughtful layout. The flows are as follows, Flow of Staff, Flow of Patients, Flow of Families, Flow of Information, Flow of Medication, Flow of Supplies, and Flow of Equipment.







FLOW 2: PATIENTS



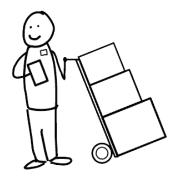
FLOW 3: FAMILY



FLOW 4: INFORMATION



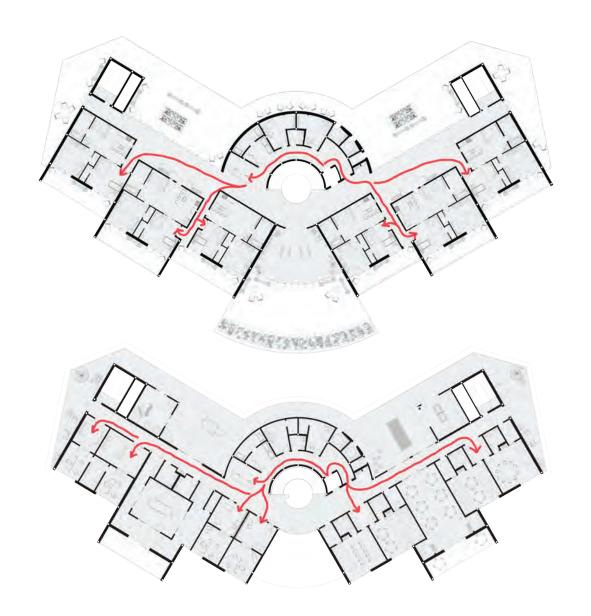
FLOW 5: MEDICATION

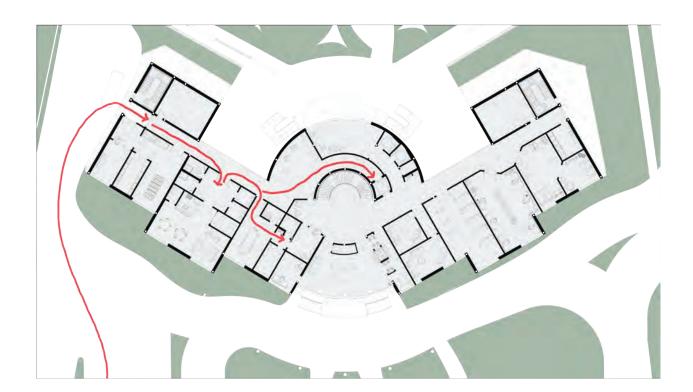


FLOW 6: SUPPLIES



FLOW 7: EQUIPMENT



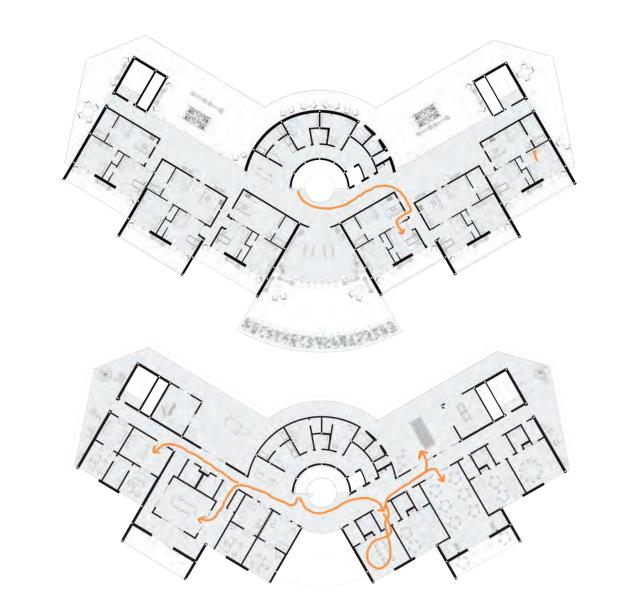


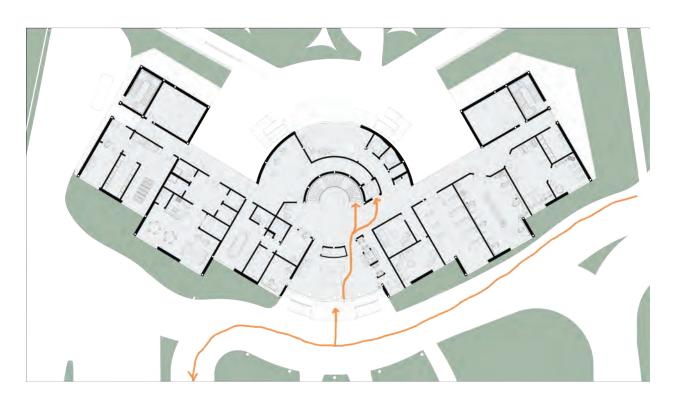
FLOW 1: STAFF

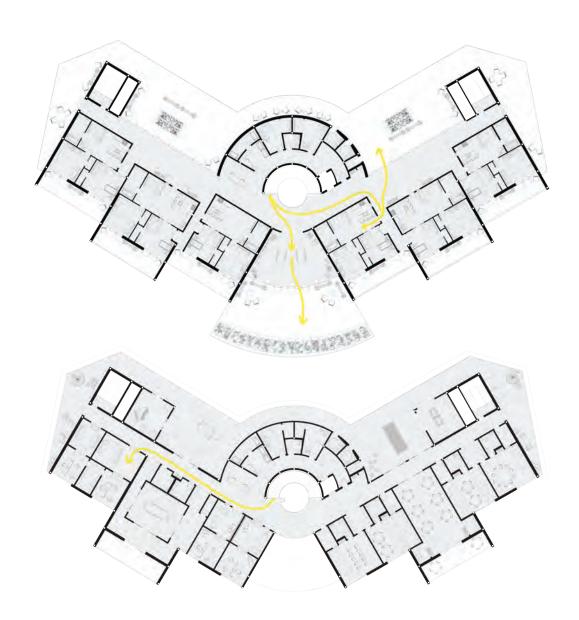
Flow of Staff was one of the first considerations, after the patient and the family, as a well-thought-out system not only increases efficiency but increases worker retention. In the high-stress, highemotion field of pediatric hospice I felt it was imperative to take extra care of the workers at Emily's House. We see this from the moment the staff member first enters the property. The staff at Emily's House enter the property through a separate, dedicated entrance. Here they are free to park among other staff and enter through the side entrance of the building. This initial separation allows the staff member to enter the private wing on the first floor, away from the general population of Emily's House. This was intentional so as to provide a place of respite and separation to allow the staff member to mentally prepare for the day. From here the staff member has full access to all three floors without needing to leave the privacy of the staff zones. Entering the elevator from the rear doors allows for a seamless integration into Emily's House. When a nurse does lose a patient, they also have the ability to enter the centralized nurse's station and travel, unseen to the staff room on the first floor to grieve or take a second to compose themselves before returning to work.

FLOW 2: PATIENTS

The second flow, Flow of Patients, although largely integrated with the Flow of Family, does have some unique experiences that set them apart. The children coming to Emily's house for the day care program enter with their loved ones in the lobby, where they are welcome to travel to the second floor to be dropped off for the day in their dedicated learning space. This learning space is connected with indoor enrichment and play spaces, dedicated to the day patients and hospice patients during the day. This area is seen as a "Kids Zone," a place where the children can connect and play. The patient, is free to play and learn with like-minded children, and children who in many ways are like them medically. At the end of the day, all children are able to exit via the secondfloor slide, meeting their families, and Harry the Hippo, at the bottom. Here the children are off in separate directions, the day care children to their respective homes and the Hospice children to travel back up to the third floor to their new homes. The ability for all children to "exit" in the same way was a thoughtful consideration that would allow the child to feel included as they get to experience the same "exit" as their friends, an attempt to fight any ostracization of the child.

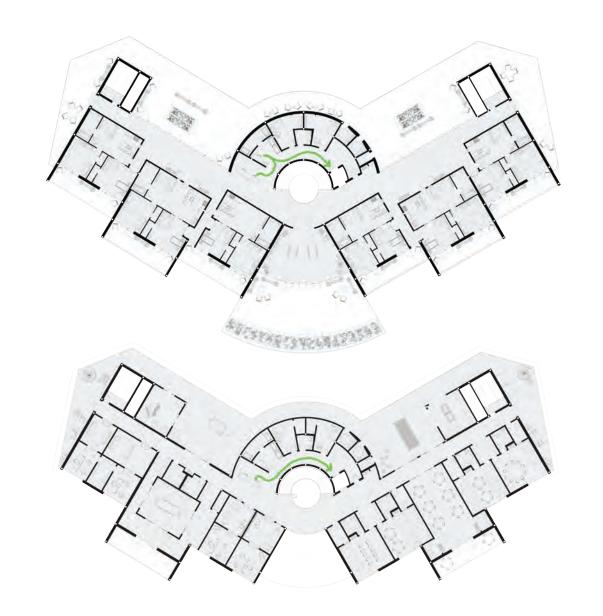






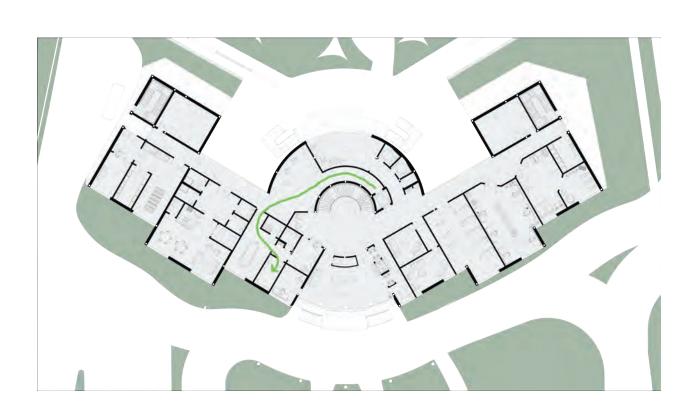
FLOW 3: FAMILY

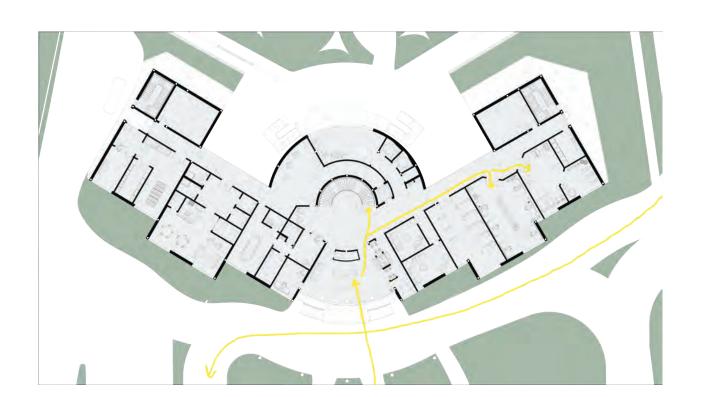
The third flow, Flow of Family, starts as soon as the family enters the lot. The family, and by extension the patients, have a separate entrance with a drop off for the day care kids as well as an attached parking lot for longer stays and visitors. The families are met with a volunteer in the lobby to welcome them to Emily's House and help direct them to where they are going. These volunteers are not able to access any private information, however, they can direct the families and provide anecdotes of their own experiences with Emily's House. The families, once checked in, can either stay on the first floor and take advantage of the community spaces, including the outdoor play area, or continue up with their child.

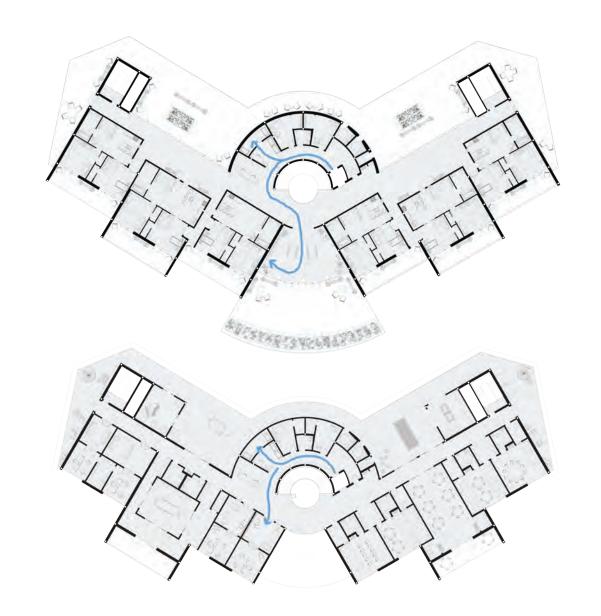


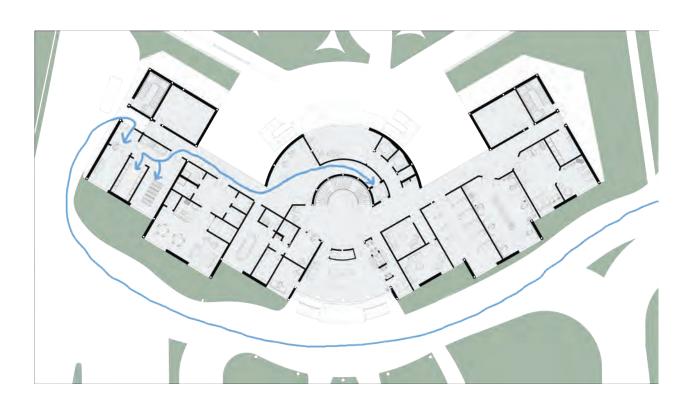


The fourth flow, Flow of Information, is done mainly through digital means, however paper copies will travel directly from the hands of the staff to the secure file room on the first floor. By utilizing the private entrance to the elevator from the central nurse's station, the information can travel securely, only accessible by staff members with the key card that lets them enter the zone.







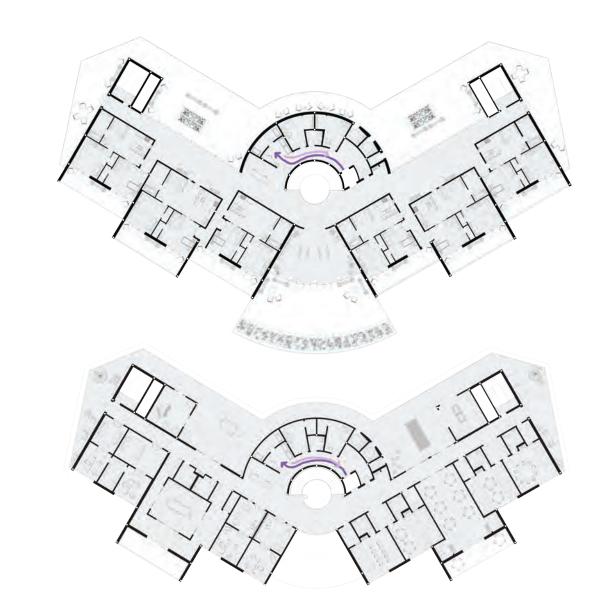


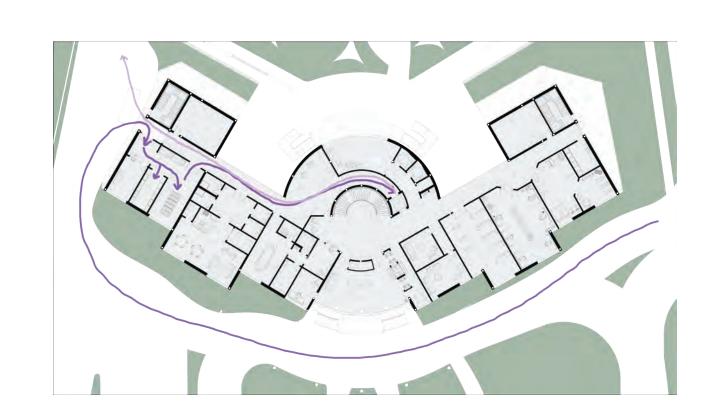
FLOW 5&6: MEDICATION & SUPPLIES

The fifth flow, Flow of Medication, is linked with the sixth flow, Flow of Supplies. Supplies and medication are delivered through the same side entrance staff enter through, and met with a delivery clerk, who is tasked with meeting and accepting all deliveries into Emily's House. Once the medications and supplies are signed for and received, the clerk can either bring them directly to the nurse's station using the private elevator entrance or they may call upon a nurse to come receive the medications. The medications are then stored in a secure room within the secured nurse's station. The medications are then distributed to the patients' rooms or to the child as required. The supplies are stored safely within the nurse's station, with excess supplies held on the first floor in a locked storage room as well. Supplies, toys, beds, books, and other items delivered to Emily's House, once received, are stored in the large storage room on the first floor. Food deliveries, although received in the same manner, are stored in different ways. The meals at Emily's House are provided by local vendors and are stored on the second and third floor warming kitchens. Each family receives dedicated meals,



The seventh flow, Flow of Equipment, is similar to the Flow of Medication. While this facility is less officially regulated than a typical hospital, equipment flow is also closely monitored through the nurse's station. At the end of a family's stay at Emily's House, the apartments are thoroughly sanitized by an outside professional cleaning crew, aware of the requirements of healthcare cleaning.







PERSONAL SPACE

important to understand the overall outdoor spaces. connection of spaces and thoughts. In the image to the left we see a variety of The second floor shows a group Here we see the addition of clerestory the staff wing.

Looking at a building in section is windows and the connection to the

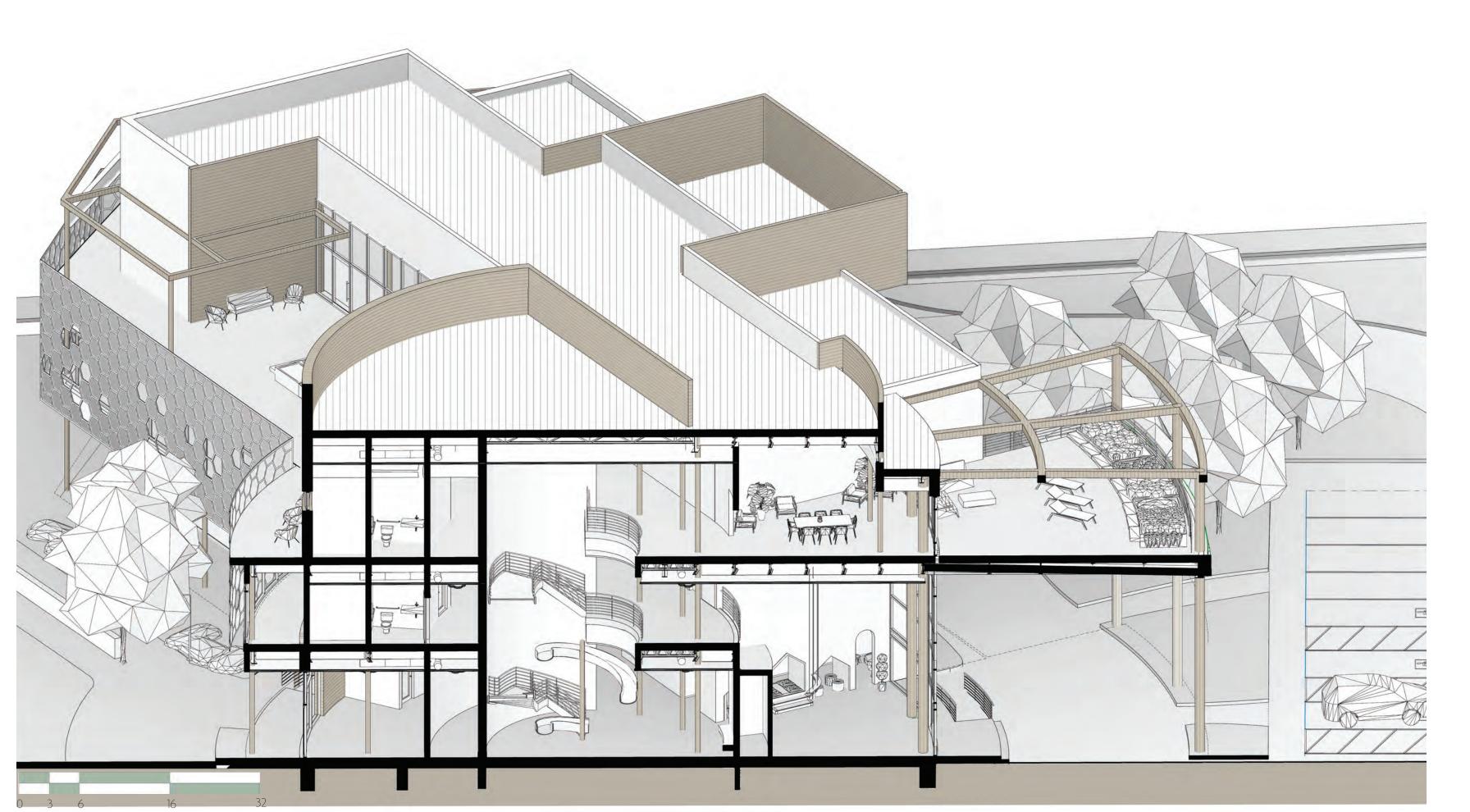
spaces, all created to bring peace or joy. therapy space and the child's play On the third floor we see the patient area. On the first floor we see the apartment and the interior "front yard" connection to the ground. We see the space connecting the apartments. staff rooms and the private corridor of

DOWN THE HALL

Connection is the theme of this left half of the section, we see the connecting the floors visually. On the about the building.

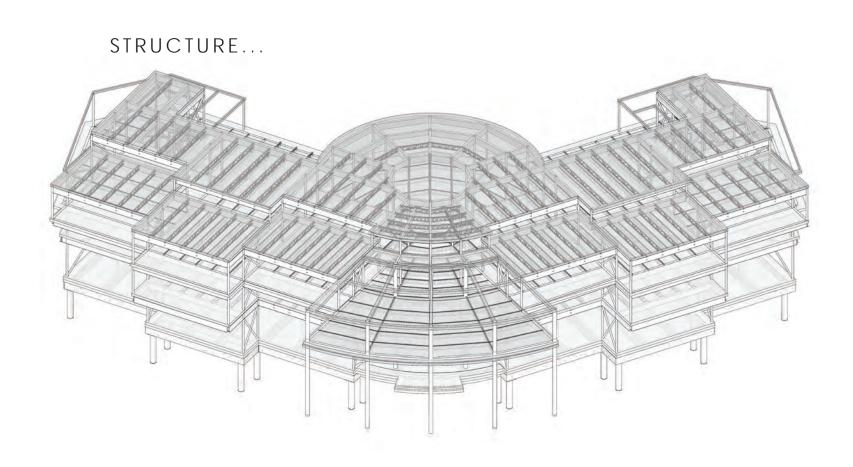
section. We see how the spaces are indoor-outdoor connection. This view connected vertically, tied together is imperative in understanding how the by the centralized staircase and exit building functions and how patients, slide. We see the multistory lobby families, and staff are meant to move

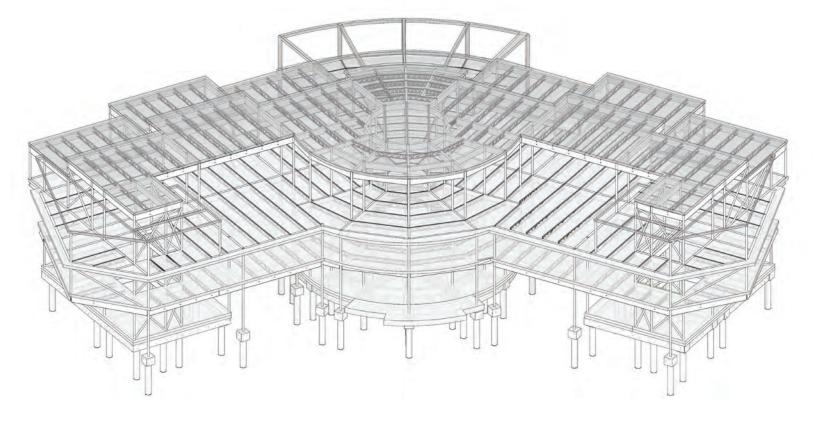




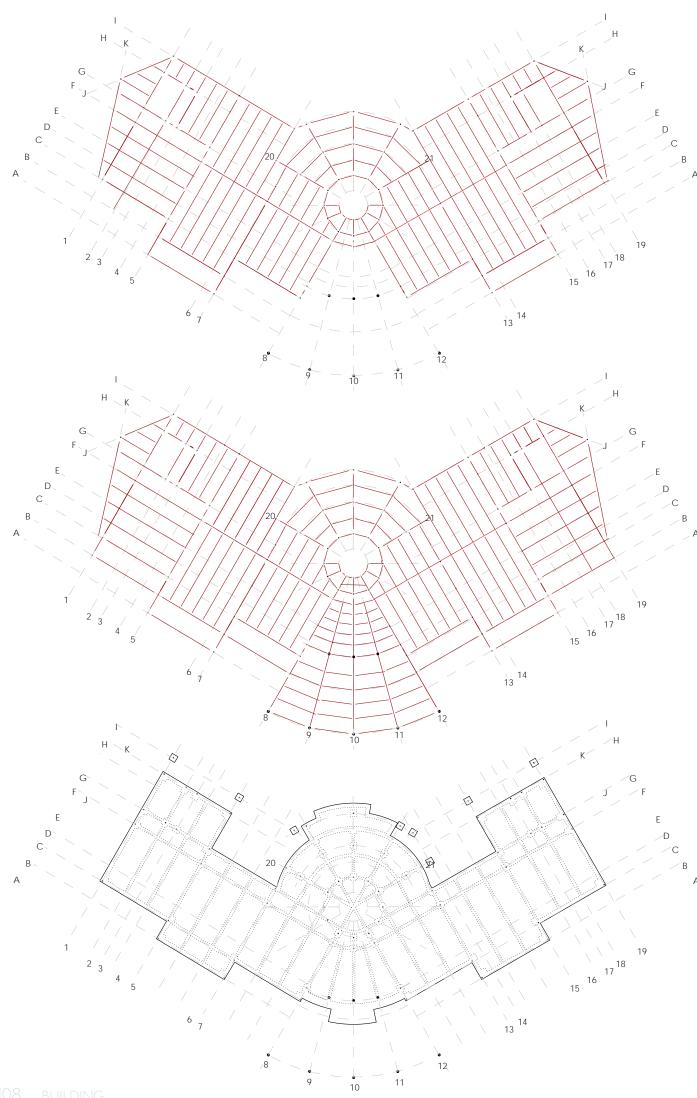
meeting in the middle

In this view we are able to focus on community aspects and meeting areas in the design. The large, centralized staircase and exit slide provide a dynamic core, bringing all three levels together. As this section highlights the core we see the lobby, nurses' station, exit to the children's park, and dining area on the fourth floor. All these spaces are connected and come together to create a welcoming atmosphere.



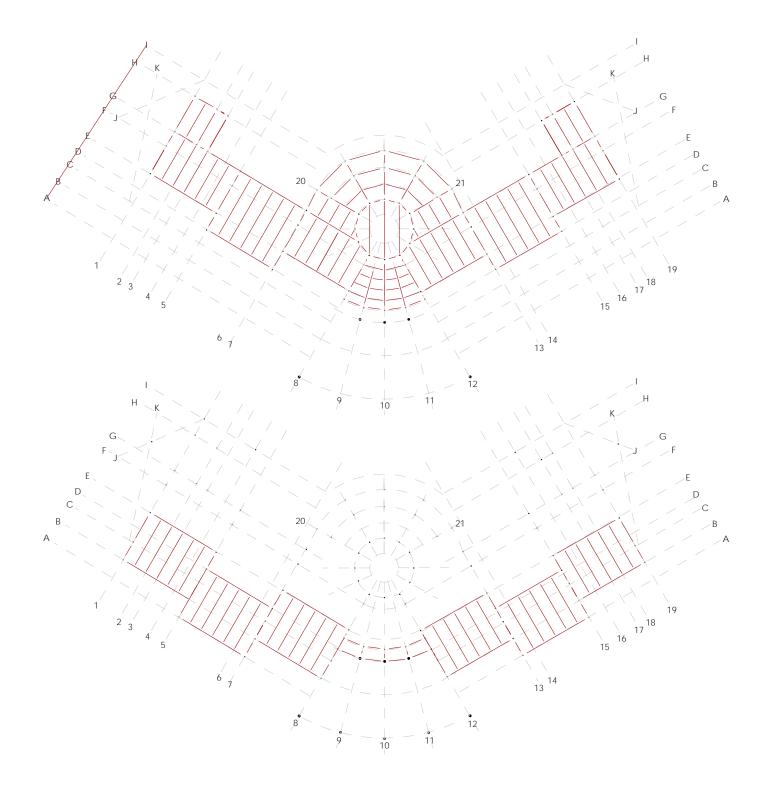


BEYOND GIRDERS AND BEAMS



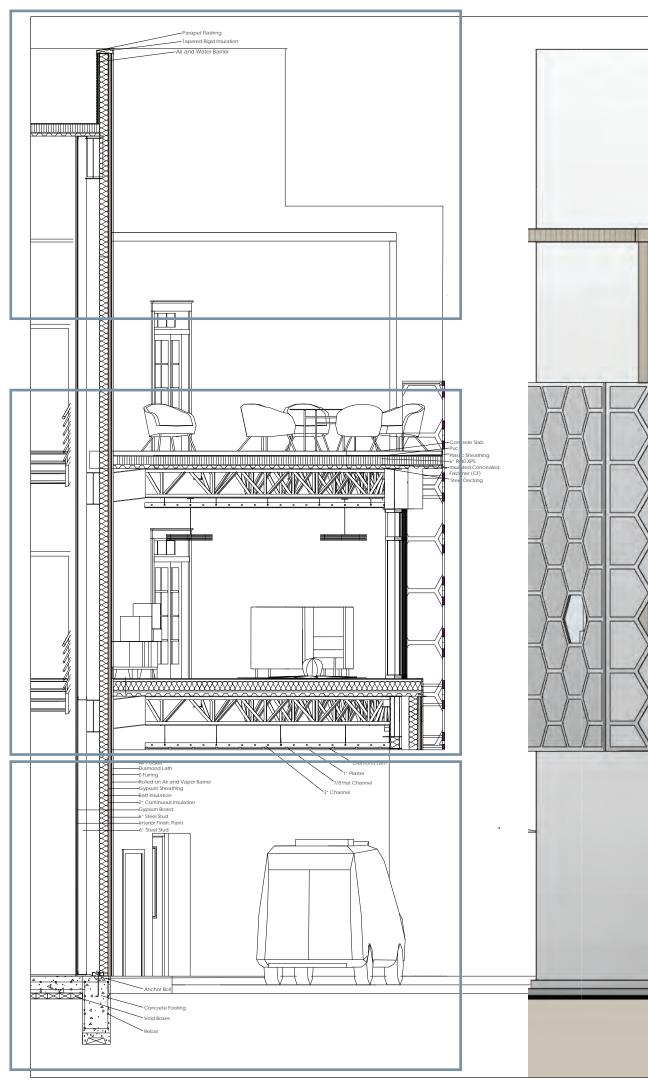
SYMMETRY

This steel system of Emily's House was designed to be a perfect reflection of symmetry. Starting at a structural level the building was designed to push and pull at spaces creating a series of indoor/outdoor spaces bringing in vast amounts of light.



LEVELS OF INTRICACY

The structural design of Emily's House the design. Understanding the connection reached several different levels of intricacy of space was key in understanding how the as it created a multi-level roofing system system could work together. used to bring light into the internal parts of

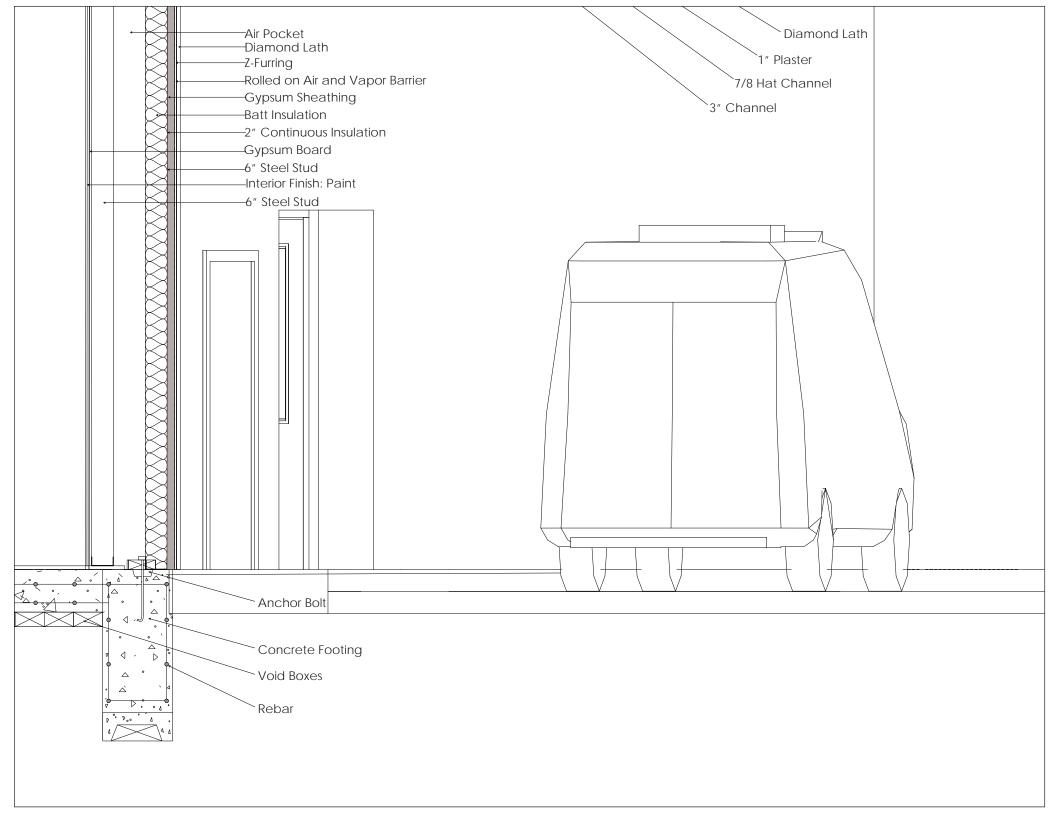


PIECES COMING TOGETHER

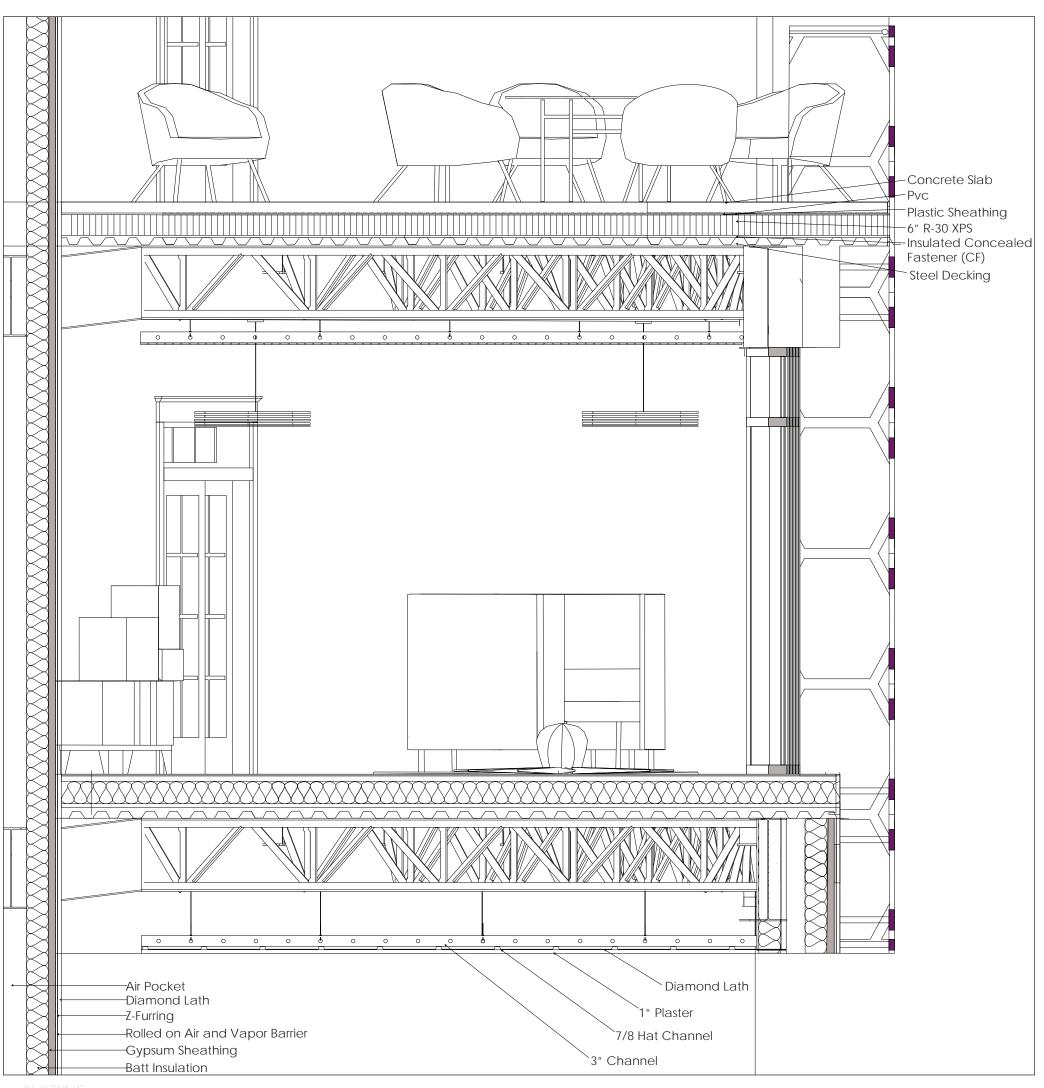
Looking at the assembly of a wall is a very interesting thing in architecture. This view in particular tells us many things about the portion of the building we are studying. This portion of the building includes a cantilevered space on the second floor which in itself has created a covered pick-up / drop-off zone for the ambulance or other service vehicles.

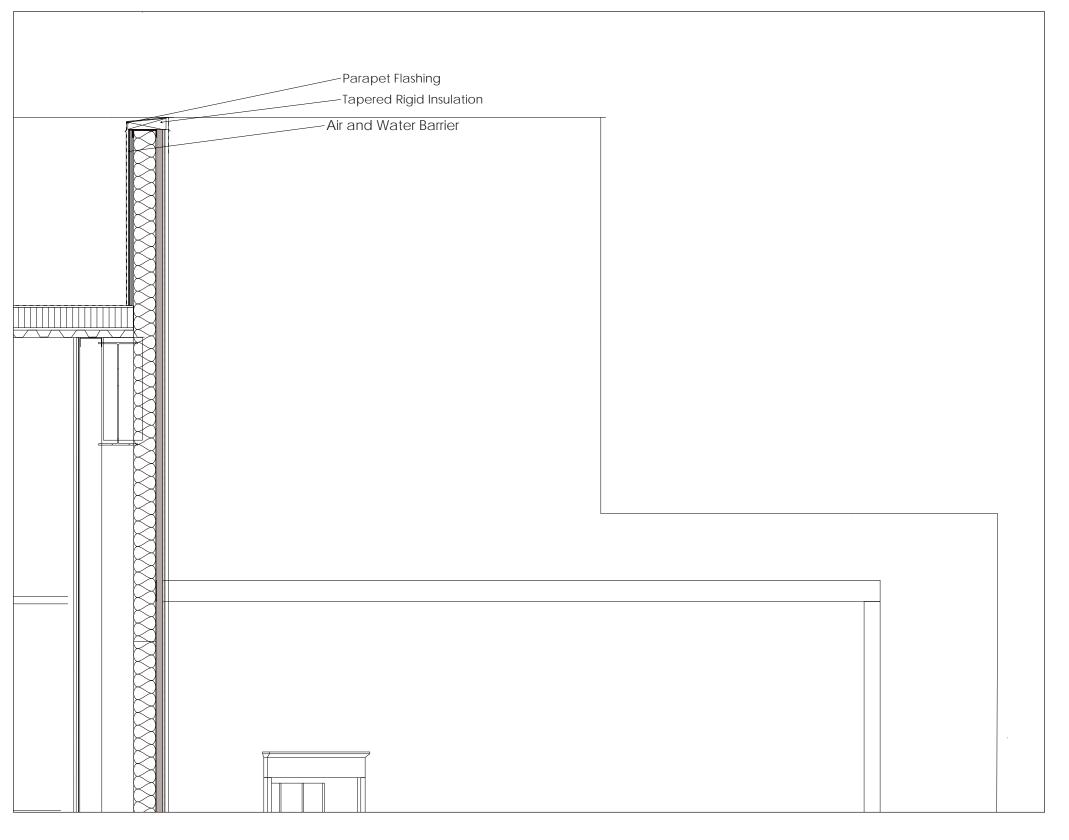
The area highlighted is the zone created for quiet play and reflection, providing the patient a place where they can sit and escape from loud play or other stressors. This is a safe place, a place of comfort.

This function tells us many things, that this wall is exterior and will need to deal with moisture in the air as the structure continues into the main section of the building. It is especially important to create a well-insulated area that provides the patients with comfort in every season.



CONNECTION WITH THE EARTH





THE IN-BETWEEN

interactions between structure and understanding of how buildings are living spaces. We see the interaction put together but the importance of of materiality and design. Exploring each and every material. the intricacies of building construction

In the image to the left we see many allows us to not only have a better

CONCLUSION

This is exactly what Emily's House for Emily.

As designers we have a unique place did for me. I have been challenged, I in society as we have the ability to have felt sadness, joy, confusion, and physically shape the fabric of people's grief. Overall, what I felt the most was lives. I think we should not take this accomplishment. Always strive to be power lightly, that we should use our the best designer you can be, to make knowledge and our skills to better the the world a little better with every world around us. We should take on design. In Emily's House, considerations projects that challenge us, that stir up for the family's happiness, safety, and emotions in an incredible way to not well-being were weaved into every only remind us to connect to humanity, aspect of the building. Emily's House is but to go beyond our comfort levels. for the patient; it is for the family; it is

BIBLIOGRAPHY

Aacap. (2017, October). Chronic Illness and Children. American Academy of Child & Descent Psychiatry. Retrieved September 30, 2022, from https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/The-Child-With-A-Long-Term-Illness-019.aspx

Bennett, S., Shafran, R., Coughtrey, A., Walker, S., & Heyman, I. (2015). Psychological interventions for mental health disorders in children with chronic physical illness: a systematic review. Archives of disease in childhood, 100(4), 308–316. https://doi.org/10.1136/archdischild-2014-307474

Bravo, L., Killela, M. K., Reyes, B. L., Santos, K. M. B., Torres, V., Huang, C. C., & Jacob, E. (2020). Self-Management, Self-Efficacy, and Health-Related Quality of Life in Children With Chronic Illness and Medical Complexity. Journal of pediatric health care: official publication of National Association of Pediatric Nurse Associates & Practitioners, 34(4), 304–314. https://doi.org/10.1016/j.pedhc.2019.11.009

Dickens D. S. (2010). Comparing pediatric deaths with and without hospice support. Pediatric blood & cancer, 54(5), 746–750. https://doi.org/10.1002/pbc.22413

Garey, J. (2022, September 12). Mental health in kids with chronic illness. Child Mind Institute. Retrieved January 26, 2023, from https://childmind.org/article/mental-health-in-children-with-chronic-illness/

Hamilton, B. E., Hoyert, D. L., Martin, J. A., Strobino, D. M., & Guyer, B. (2013). Annual summary of vital statistics: 2010-2011. Pediatrics, 131(3), 548–558. https://doi.org/10.1542/peds.2012-3769

Hysing, M., Elgen, I., Gillberg, C., Lie, S. A., & Lundervold, A. J. (2007). Chronic physical illness and mental health in children. Results from a large-scale population study. Journal of child psychology and psychiatry, and allied disciplines, 48(8), 785–792. https://doi.org/10.1111/j.1469-7610.2007.01755.x

Lindley, L. C., & Shaw, S. L. (2014). Who are the children using hospice care?. Journal for specialists in pediatric nursing: JSPN, 19(4), 308–315. https://doi.org/10.1111/jspn.12085

Sarwar, S. R., Mangewala, V., & Baron, R. (2013). Helping the angels: a review of understanding and helping dying children. Innovations in clinical neuroscience, 10(3), 31–34.

Figure 1:

Abdel, H. (2021, February 26). The Kensington Learning Space / Plan architect. ArchDaily. Retrieved April 21, 2023, from https://www.archdaily.com/957619/the-kensington-learning-space-planarchitect

7 flows of Healthcare. Nursing Institute for Healthcare Design. (n.d.). Retrieved April 21, 2023, from https://nursingihd.com/7-flows-of-healthcare

Figure 2:

The ark, Noah's Ark Children's hospice by Squire and partners. Architizer. (2020, December 13). Retrieved April 21, 2023, from https://architizer.com/projects/noahs-ark-childrens-hospice/

Figure 3:

Betty Ruth & Samp; Milton B Hollander Healing Garden/Smilow Cancer Hospital at Yale-New Haven by towers: Golde. Architizer. (2015, November 18). Retrieved April 21, 2023, from https://architizer.com/projects/betty-ruth-milton-b-hollander-healing-gardensmilow-cancer-hospital-at-yale-new-haven/

118 SECTION/INFO