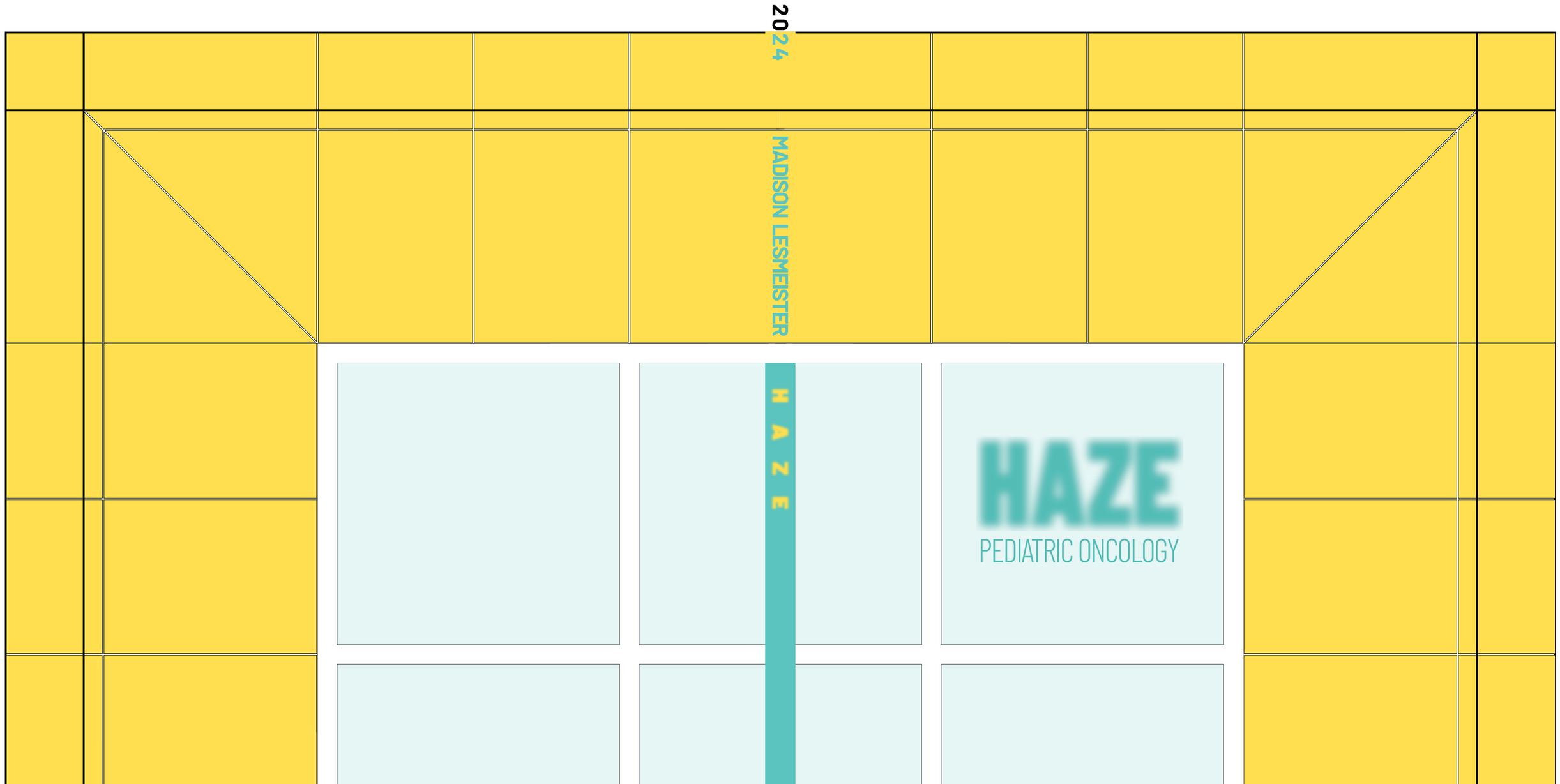

2024
MADISON LESMEISTER
HAZE
HAZE
PEDIATRIC ONCOLOGY

PEDIATRIC ONCOLOGY

To the courageous and remarkable children battling cancer and the communities steadfastly seeking a haven of hope, respite, and refuge. Like architects of compassion, you construct bridges of support and shelters of solace amidst life's storms. May this project stand as a blueprint for resilience, offering glimpses of beauty and strength in every chapter. With each page turned, may you find inspiration in the enduring power of design to uplift spirits and create spaces where healing can flourish. This dedication is a tribute to your unwavering bravery, indomitable spirit, and the boundless capacity of community to create sanctuaries of love and comfort.

RAY PENTECOST
COMMITTEE CHAIR

ROSALEEN BLOOM
COMMITTEE MEMBER

MICHAEL O'BRIEN
COMMITTEE MEMBER

MARCEL ERMINY
STUDIO PROFESSOR

CONTENTS

HAZE
PEDIATRIC ONCOLOGY

01

PROJECT BRIEF

Architecture is not a cure for cancer. However, the design of a healthcare facility or the physical-social environment of a treatment center can affect the quality of life and recovery of patients experiencing chronic illnesses. Individuals with cancer are frequently hospitalized after receiving a diagnosis and throughout their treatment, whether inpatient or outpatient; health facilities need to provide spaces that support the endeavors of these individuals. The design of healthcare environments is crucial for patient well-being and recovery. Natural environments and social spaces play significant roles in healthcare design, influencing the physical and emotional well-being of patients and healthcare providers. Therefore, this design project, Haze Pediatric Oncology, and research initiative aim to critically analyze the role of our built environment in shaping our social experiences and opportunities for connection and healing, especially as it relates to pediatric cancer patients. Moreover, this project explores how incorporating natural environments and social spaces into healthcare design can improve the overall patient experience, enhance the quality of care, and contribute to better health outcomes. The strategic design of Haze Pediatric Oncology continually investigates whether architecture - "place" - can "help in the fight against cancer and become a non-pharmacological intervenor, a passive member of the care team, and a constant friend to the patient? (07)"

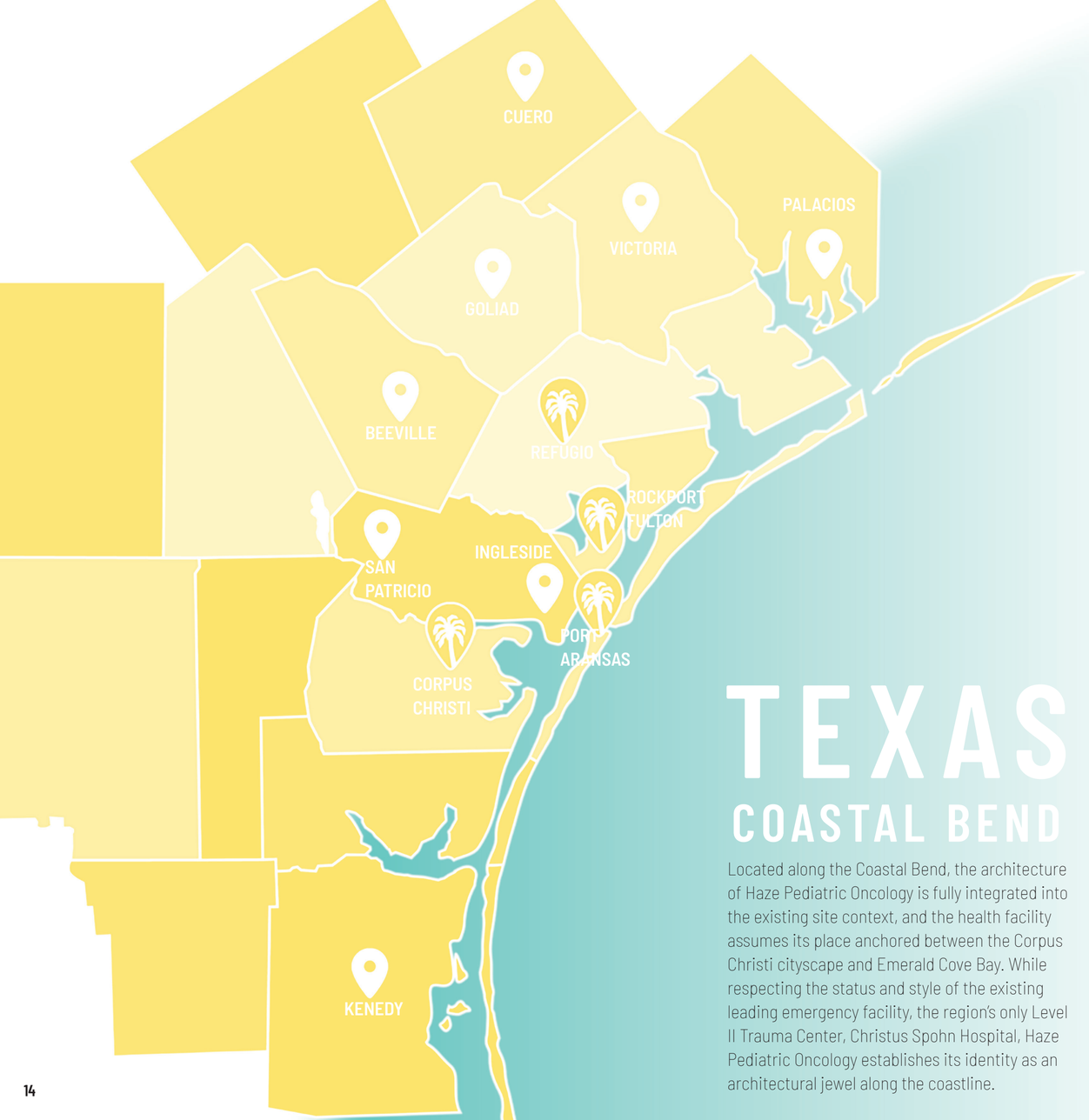
02

THE CONCEPT

Transcending traditional cancer center design involves reimaging the space and functionality of such health facilities to better meet the needs of patients and healthcare providers. Thus, Haze Pediatric Oncology leans into the notion of "third places," a concept derived by sociologist Ray Oldenburg, reminding us that human connections and an individual's intrinsic sense of place need curating and nurturing, especially within healthcare settings. Third places are "places unlike the private, informal home and public, formal workplace, being both informal and public; these are places where people gather and socialize deliberately or casually (09)." Drawing on Oldenburg's third-place and informal gathering philosophy as a conceptual framework and subsequent design approach, Haze Pediatric Oncology argues that cancer centers ought to be designed to "permit people living with cancer to enjoy a temporary respite from the disease by temporarily escaping their homes (the first place) and medical locales (the work-related second place) and entering a world of sociability that is free from stigma and encourages light-hearted banter, despite the reality of the disease (01)." Serving as an enabling place which fosters social connection and promotes recovery, Haze Pediatric Oncology allows patients, family members, and caregivers alike to "meet, relax, play, and just be, with minimal cost to themselves (09)."

03

THE SITE



TEXAS

COASTAL BEND

Located along the Coastal Bend, the architecture of Haze Pediatric Oncology is fully integrated into the existing site context, and the health facility assumes its place anchored between the Corpus Christi cityscape and Emerald Cove Bay. While respecting the status and style of the existing leading emergency facility, the region's only Level II Trauma Center, Christus Spohn Hospital, Haze Pediatric Oncology establishes its identity as an architectural jewel along the coastline.

>50,000 SURVIVORS

The current population of childhood cancer survivors in the United States is "estimated to be over half a million (10)."

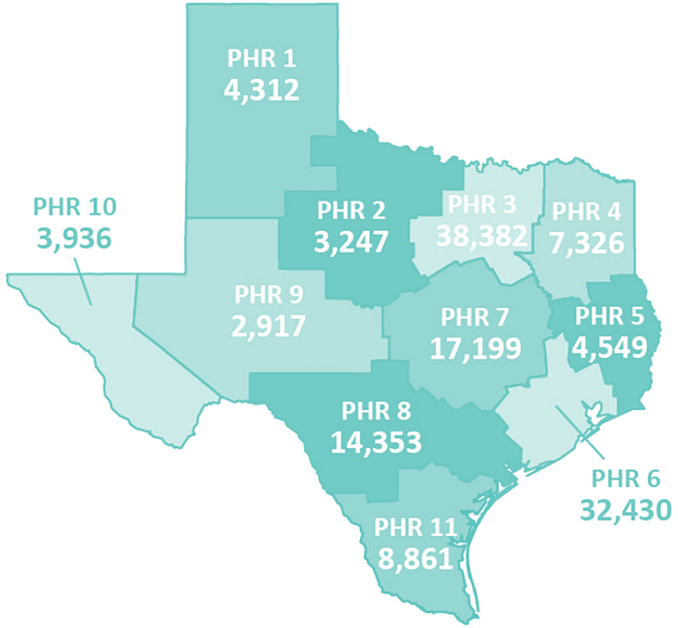
>1,800 CHILDREN

In Texas, more than "1,800 children under age 20 are diagnosed with cancer and almost 200 children with cancer die annually (10)."

1,936 NEW CASES

An estimated "1,316 new cancer cases will be diagnosed in children (ages 0 to 14 years)" and an additonal "620 new cases are estimated in adolescents (ages 15 to 19 years) (06)."

Estimated New Cancer Cases by Public Health Region, 2022



"Texas is the "second most populous state in the US. South TX, the 38-county area encompassing a large portion of Texas-Mexico border counties, has a population of more than 4 million and includes 69% Hispanics, primarily of Mexican ancestry, and 25% non-Hispanic Whites (NHW). The population of South TX is largely medically underserved and understudied, having a lower per capita personal income, higher unemployment and poverty rates, higher higher number of people with little to no formal schooling, higher percentage of uninsured residents, less access to health care services, and a higher prevalence of obesity (30% vs. 23%) compared to the nation as a whole; these characteristics may all uniquely impact cancer patients' prognosis and survival and suggest significant but potentially modifiable disparities (10)."

REGIONAL MASTER PLAN

SITE MASTER PLAN

ARCHITECTURAL JEWEL

EMERALD COVE
CORPUS CHRISTI BAY

EMERALD BEACH
HOTEL

OCEAN DRIVE

MORGAN AVE - SH 286

CHRISTUS
SPOHN HOSPITAL

ELIZABETH ST

MARINA DEL SOL

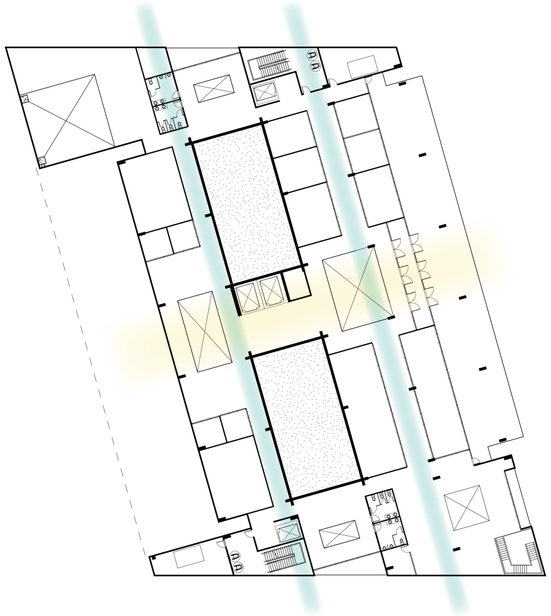
OCEAN DRIVE

COLE
PARK

04

THE PROJECT

LEVEL 02



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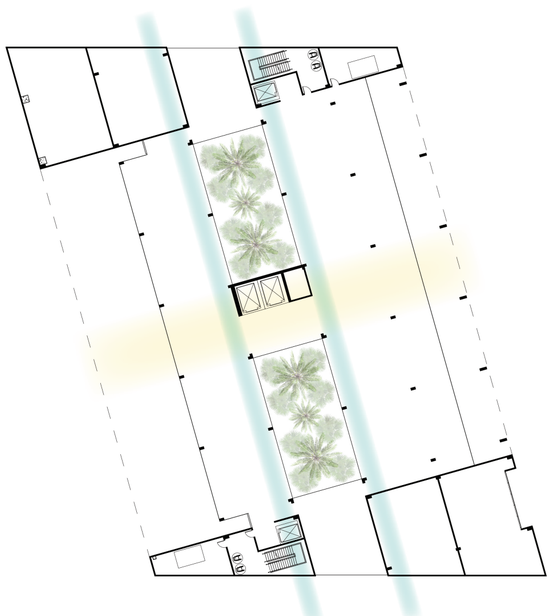
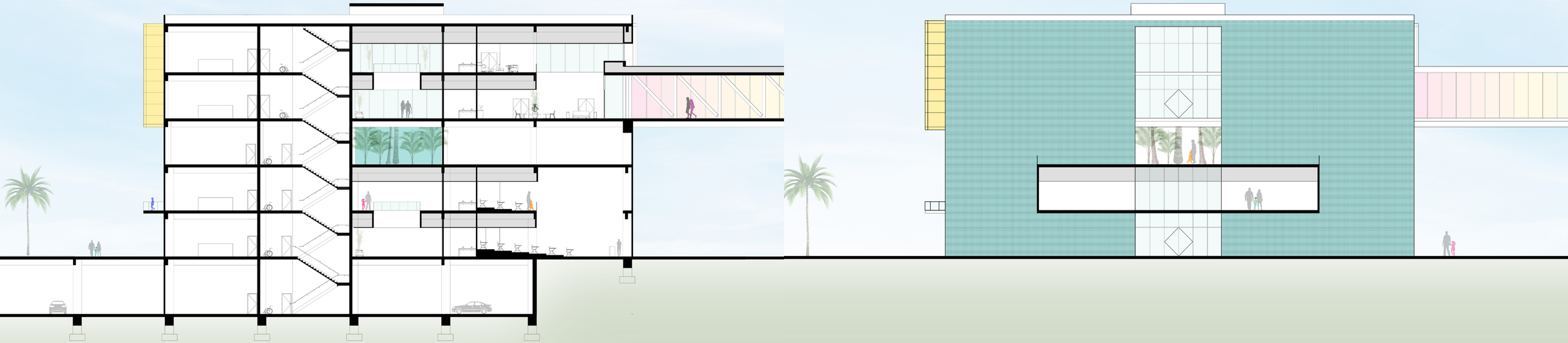


LEVEL 04

LEVEL 05



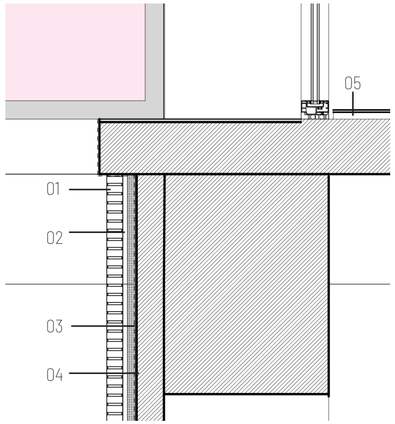
05

THE BRIDGE

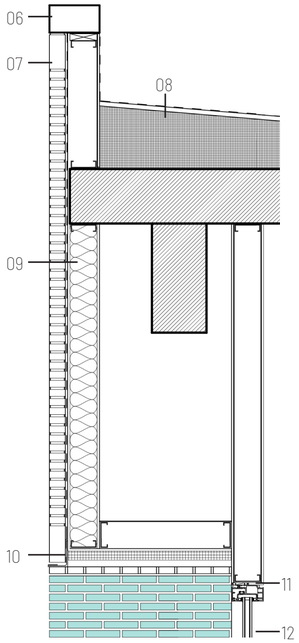
As an invaluable link, the bridge represents a journey, transition, or connection between two entities, conveying a sense of continuity and flow and aligning with the metaphorical significance of a bridge in fostering social interaction and the informal connection of people or places.

Connecting the two specialized functions, a Pediatric Oncology Center and the Coastal Bend's only Level II Trauma Center, Christus Spohn Hospital, through a bridge has been not only a functional but also a structural challenge and a rare architectural opportunity. Creating an organic and integrated impression, the designed bridge contains a gentle curve in direct response to the existing structure of Christus Spohn Hospital and the proposed orientation of Haze Pediatric Oncology, spanning 200 feet above the scenic and walkable Ocean Drive.

DETAIL 1

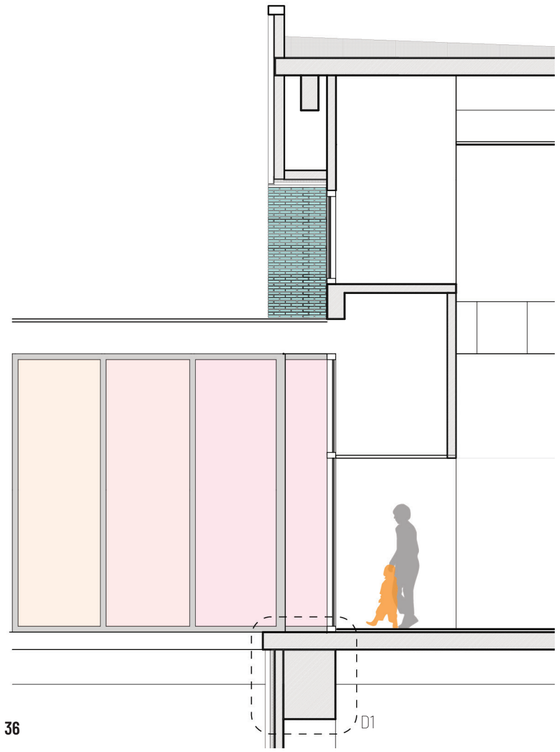


DETAIL 2

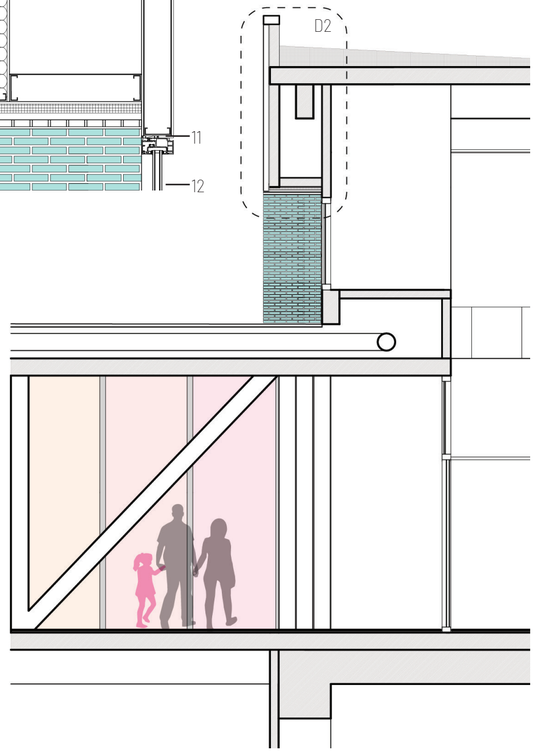


01 | Brick
02 | Air Cavity
03 | Weather Barrier
04 | Exterior Sheathing
05 | Sub Floor and Floor Finish
06 | Cast Stone
07 | Brick Soldier Course
08 | Insulation
Protection Board
09 | Metal Stud Framing
10 | Steel Angle
Flexible Flashing
11 | Sealant and Backer Rod
12 | Glazing System

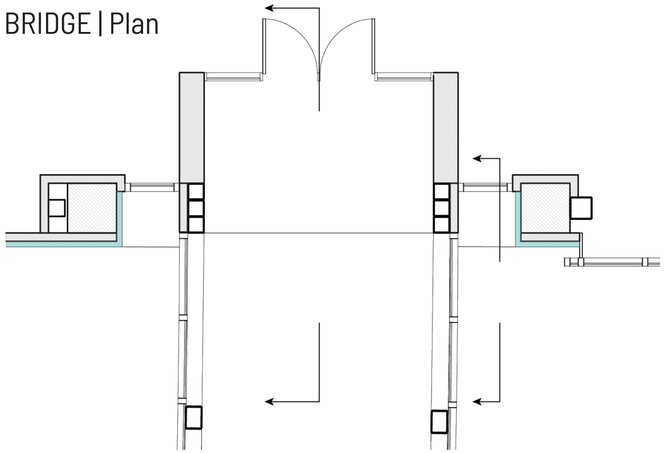
SECTION A



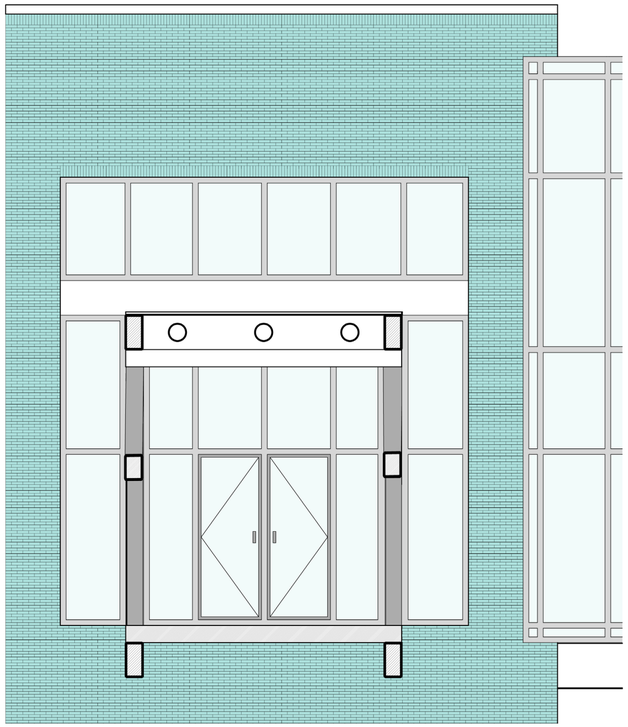
SECTION B



BRIDGE | Plan



BRIDGE | Elevation



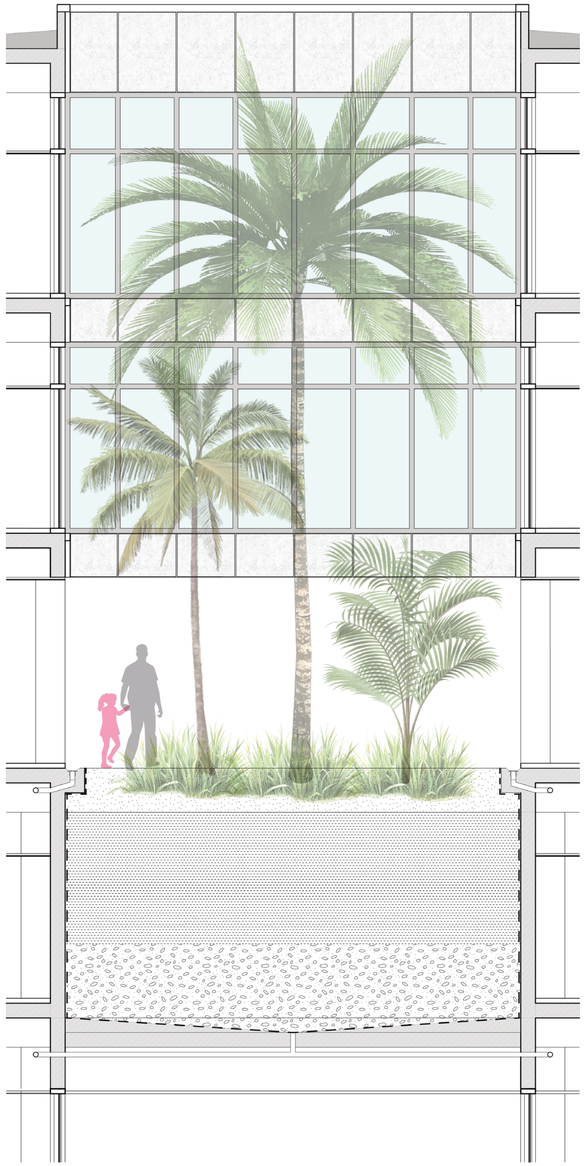
06

THE ATRIUM

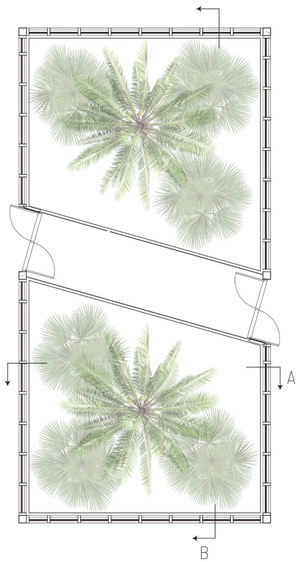
The thoughtfully designed and carefully located open atriums become an architectural focal point, adding character to Haze Pediatric Oncology. Intentionally, the centrally located atriums have been designed to allow for the penetration of natural light and ventilation deep into the interior spaces of the cancer center. Natural light and ventilation are essential considerations in the design of Haze Pediatric Oncology, as access to natural light and the outdoors contributes to the physical, psychological, and emotional well-being of patients and their families. Additionally, the strategic use of atriums to bisect clinical functions within Haze Pediatric Oncology provides a central hub for spatial integration and visual connectivity, fostering a sense of community at the heart of the building through organic social interaction.

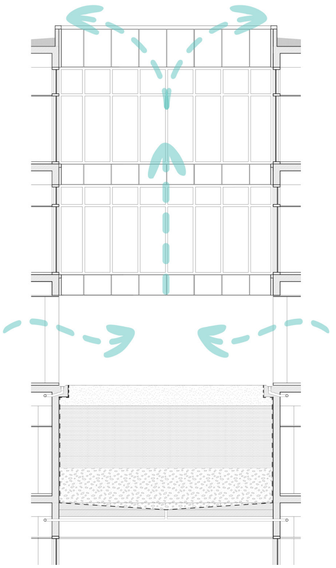
Amid medical treatments and hospital settings, the presence of palm trees and coastal vegetation brings a touch of nature into the lives of pediatric cancer patients. It offers a connection to the outdoors, providing a sense of freedom, rejuvenation, and renewal amidst the healthcare facility. The palm trees, with their resilience and ability to thrive even in challenging conditions, symbolize hope and strength. They serve as a reminder to patients, families, and caregivers that despite the difficulties they may face, there is always hope for healing and recovery.

ATRIUM | Section A

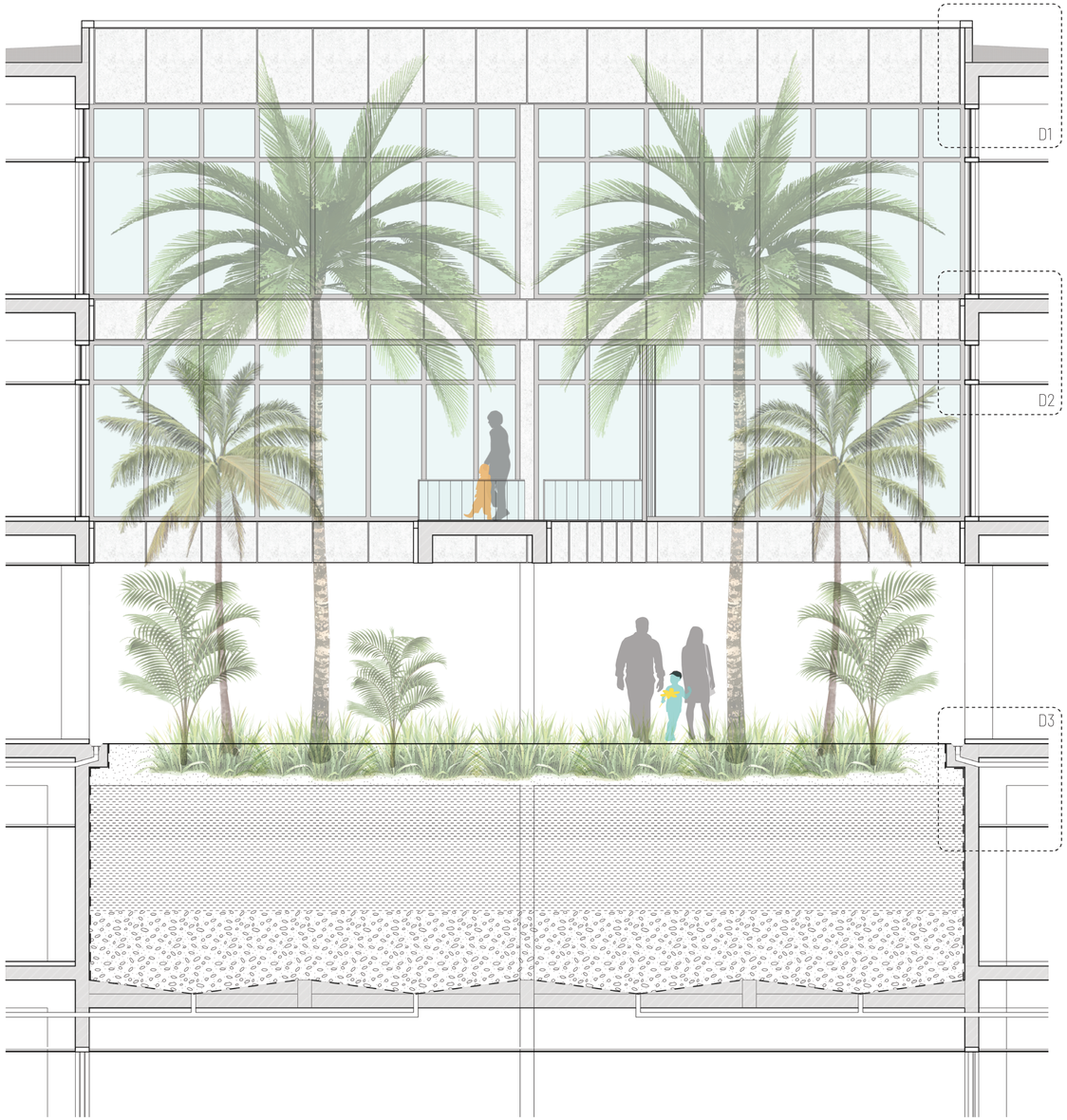


ATRIUM | Plan

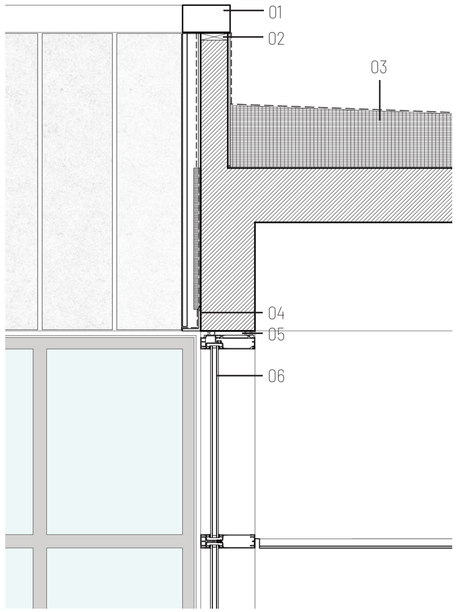




ATRIUM | Section B



DETAIL 1



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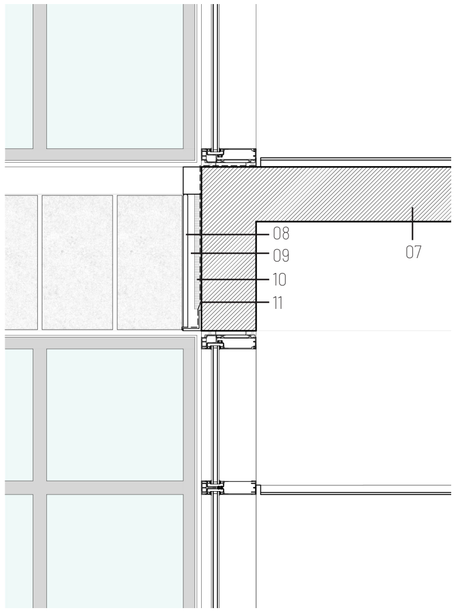
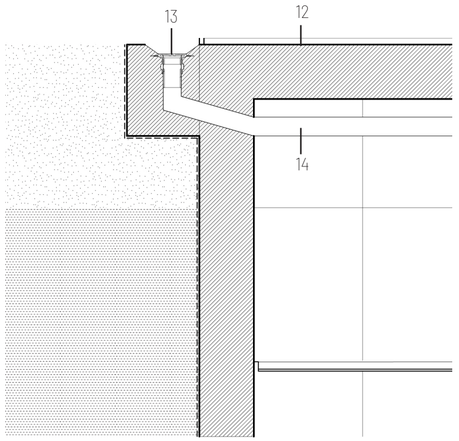


DETAIL 3



01 | Cast Stone
02 | Wood Blocking
03 | Insulation
Protection Board
04 | Steel Angle
Flexible Flashing
05 | Wood Shim and Sealant
06 | Glazing System
07 | Concrete Slab
08 | Coral Stone
09 | Air Cavity
10 | Exterior Sheathing
Cavity Drainage Material
11 | Weather Barrier
12 | Sub Floor and Floor Finish
13 | Channel Drain
14 | Pipe

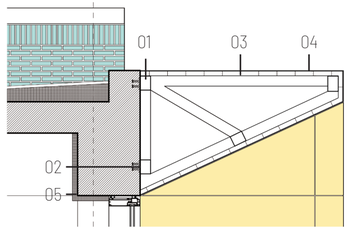
The open atrium becomes a sanctuary where patients can find solace, comfort, and peace during their cancer journey. Surrounded by the greenery of palm trees and coastal vegetation, it provides a calming and supportive environment conducive to healing and emotional well-being. Furthermore, the tranquil ambiance of the atrium encourages moments of reflection and contemplation for patients, their families, and the care providers. It offers a space for quiet introspection, prayer, or simply being present in the moment, fostering emotional resilience and spiritual strength. The creation of such a meaningful space reflects the unwavering dedication and empathy of the healthcare professionals, volunteers, donors, and supporters who strive to make a difference in the lives of pediatric cancer patients, leaving a lasting legacy of love, compassion, and hope for generations to come.

07

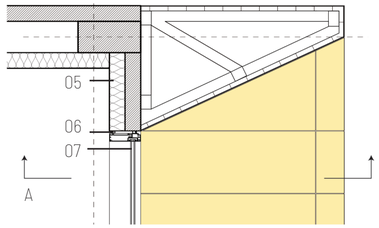
THE FRAME

The wedge-like structures anchoring the north and south of the cancer center respond to the existing buildings and site conditions; these colorful structures are closely linked to Haze Pediatric Oncology with its interior organization and functions, influencing individual unique aspects of the architectural resolution and design. With its teal glazed brick facade and sheer mass, the wedge-like structures of Haze Pediatric Oncology effortlessly emphasize the delicate window frame spanning along the eastern facade. Like a picture, the window frame, finished with a yellow metal paneling cladding system, captures the scenic beauty of the Corpus Christi Bay for all building occupants to enjoy. The expansive window allows abundant natural light to flood into the minor medical procedure and infusion suite, creating a bright and uplifting atmosphere. Furthermore, the bayside view provides patients, their family members, and care providers with a calming and serene backdrop, offering a source of beauty and inspiration. It can also serve as a reminder of the vastness and strength of nature, providing hope and encouragement during the treatment process.

DETAIL 1



FRAME | Plan



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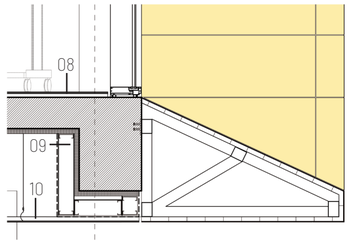
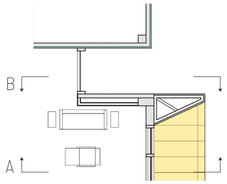
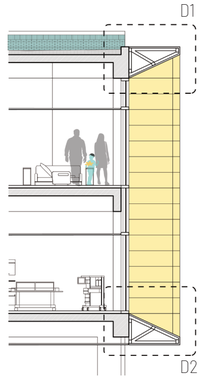


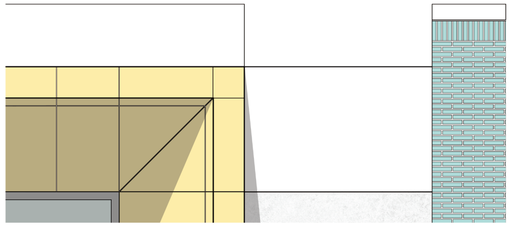
SECTION A



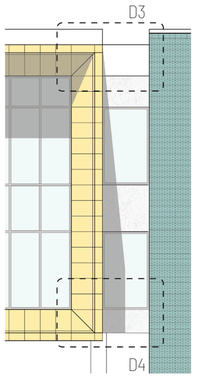


01 | Prefabricated Metal Tubing (2" x 4")
02 | Steel Embed
03 | Z Channel (16" oc)
04 | Metal Panel Cladding System (yellow)
05 | Insulation
06 | Sealant with Backer Rod
07 | Mullion and Glazing System
08 | Sub Floor and Floor Finish
09 | Gypsum Wallboard
Metal Stud Framing (6")
Weather Barrier
10 | Hanger Wire and Ceiling System

DETAIL 3



ELEVATION



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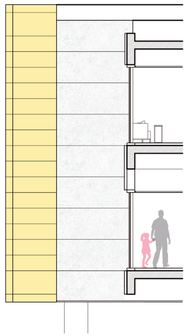

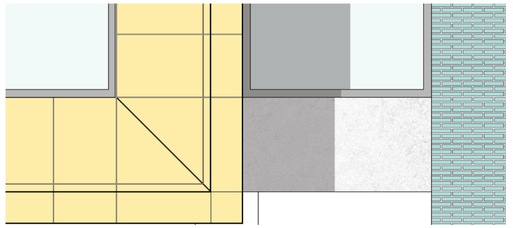

DETAIL 4

"Children with cancer are like candles in the wind who accept the possibility that they are in danger of being extinguished by a gust of wind from nowhere and yet, as they flicker and dance to remain alive, their brilliance challenges the darkness and dazzle those of us who watch their light."

-Unknown

08

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"This is not a hospital.

It is a public building in the middle of the city, where a hospital is hidden.

People who stay here turn a corner, and discover something new."

-Frans Jasper, MD

PEDIATRIC ONCOLOGY