

Gage Strom

Comprehensive Design Studio Honors Thesis

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### **Pivot Community Center**

Advocate, educate, intervene, and counsel. As goes the Mission Statement for Pivot, a non-profit that serves youth and families in the Oklahoma City Area. This thesis aims to highlight the process of developing a new community center for Pivot, and the celebration of the client's journey through a process of healing.

#### **Research, Site Visit, Analysis**

The beginning of the design process involved a visit to Pivot's campus in OKC, where we met with the leadership and staff, and discussed the nuances of both the architectural and organizational programming. My team's research component was the programming elements, so we were able to break down those elements and sizes immediately as the semester began. We understood immediately how important the lobby element was, and our visit to the site is where we found our inspiration for the organization.

While at the Pivot campus, we talked to the director about their clients. She told us the stories of several of her clients, and their resultant homelessness. She then emphasized the process that the clients go through at Pivot, and their continued journey towards healing and a stable life. It was in this conversation that our concept initially formed: the journey of the client through Pivot.

We next toured the facilities, and talked to the staff about the program. We found that many of the workers were not concerned with the layout as much as we would have thought, but we also decided that to people new to the building, it is an unnavigable maze. Two aspects that were reflected throughout the staff was the importance of natural light, and wanting an age-appropriate, bright look to their spaces. Consistently, they put the wants of their clients above their own, which highlighted their passion for the work they do.

Resulting from our meetings and our site tour, we altered the original program to better match the needs of Pivot. We omitted several storage components, added several offices and sub-offices, and added an entire component to the project: the drop-in-center. We knew from our meetings that the drop-in center had several special requirements like privacy and security, and these aspects began to limit our organizational relationships.

Before we began the design process, we analyzed a precedent individually. I studied the Volunteers of America Homeless Teen center in Salt Lake City. The building was incredibly inward focused, and featured simple formal moves to give character in an affordable way. A few key takeaways were the variety of security levels from density of furniture to provide the most comfortable space for each client, the use of the second floor as a buffer to more intimate zones, and the use of durable materials that are easily clean to both promote longevity and reduce maintenance costs. Additionally, they featured queer iconography in their front window to let prospective clients know they are

safe. This idea was further reflected by the sociologist who spoke later in the semester, who commented on the importance of simple iconography in speaking to these clients.

### **Site Analysis and Takeaways**

The context of the Pivot campus is in northern OKC, in an industrial neighborhood. This decision was made due to the sociological phenomenon of NIMBYism, or “not in my back yard”, in which residents of neighborhoods fight the development of housing (often low income, but sometimes only dense) due to it negatively affecting their property value. These have historically been successful or expensive in stopping public housing or shelters in the past, and one way to get around this is to build within industrial areas where there are no residents to complain. These worries are obviously classist and often racist, but the need for Pivot and other organizations still prevails. Within the site, there are a collection of tiny homes and an accompanying master plan to be developed. These homes and the larger shelter to the north of our project boundary need to be considered for privacy, as well as the outdoor spaces to their south. The main street to the south of the lot sits above the site, and as such the south facade was the most prominent to both vehicular and pedestrian traffic onto the site.

The utilities and services entrances are located on the west side, which started to shape the service areas of the project like the electrical rooms, HVAC equipment, and loading. Additionally, we wanted to match the surrounding context with familiar materials

like brick, or metal. The warmth of brick and the locality of the material became our selection from very early in the process.

## **Conceptual Development**

Initially my group separated and came up with several concepts for this project. I came up with the idea of an inwardly focused space, that was very modest on the outside and focused on the inside to benefit their clients the most. This was created through my discussion with the staff and their continued focus towards their clients. Rony and Heather, however, came up with the concept of an embracing entrance to welcome the client, and a scheme about the journey of the client. We combined aspects of all three, and had an inwardly focused scheme with an embracing and central lobby, and a journey through the program that reflects the client's own journey.

But how is one guided through the journey? Initially, we had thought about nature and light. We were thinking of intermediate interior courtyards, or even full height windows. As our form became more linear to reflect this journey, however, the room for large interior courtyards was erased. The motif of light, however, prevailed, and moments of light and a repetition of structure were the guiding forces of our journey. Light is often seen as therapeutic, and associated with higher levels of happiness and productivity. This motif would serve to guide the clients upon their healing journey.

## **Schematic Design**

### Form and Organization

When we first tackled the form of this journey, we broke apart the program into two sections: the Pivot programmatic areas such as the offices, counselors, and coaches, and the areas geared more closely to the client, the Multi-Purpose space, the Lounge areas, and the Laundry. These were initially seen as two distinct forms, representing the playful recreation of the clients and the structured healing of Pivot's programs. This idea eventually formed into one more subtle, but the underlying tone still prevails.

Additionally, the formation of two distinct axes reflected both the conceptual journey of the client, and acted as the basis of organization for the client. The north-south entrance axis, which embraces the client into a large light-filled space, and the east-west healing axis, which is more subtly scaled, well lit, and aimed towards healing and growth. The journey begins at the lobby when one enters the building, and finishes above the multipurpose space. This culmination represents the autonomy that Pivot fosters into their clients through their mission and healing.

Along this healing axis, the spaces were laid out sequentially as the client would experience them through Pivot. The food and clothing stores are immediately adjacent to the reception, as Pivot prioritizes food and clothing as immediate needs to all their clients. From here, the administration offices are located, so any onboarding can take place, and provides a close proximity to the entrance for administrators and staff. Next, the clients ascended to the second floor, where a skylight above illuminated the hallway. Coaching and counseling face each other from across the hall, and have more private and lower scaled rooms for the intimate process of addressing past trauma. Next, the

teaching kitchen and classroom offer students practical learning skills to take away, and hold larger gatherings than in the offices. Finally, the journey culminates with the lounge areas and the multi-purpose space, which are highly flexible areas for gathering, art, exercise, and expression.

Throughout the journey, the user is guided by light. This is achieved by skylights on the second floor, and slab openings to below to allow light to penetrate the first floor. Additionally, hallways end in a large window, allowing the plane of light to pull users through the space. In conjunction with light is structure. The use of exposed mass timber structure acts as a warm material for the space and reflects the sustainability of mass timber within the project. Additionally, the repetition of columns provides a rhythm through the space.

#### Development of Form and Organization

Our initial journey ended overlooking the MP from the side, and required a trip down the central staircase and through the lobby to reach the multipurpose. This was adjusted to have a mezzanine walkway the size of the spine (7.5') and a stair down the eastmost side. Before DD began, the spine was widened to 15', and the lobby spaces were incorporated into the spine areas. This change resulted in the elimination of the lounge room and the small balcony for safety reasons.

#### Sustainability

From the beginning sustainability was made a priority. As such, the windows for the facade were minimized, and brick was finalized as a local material. Passive systems were also explored. A PV system was explored for the roof of the project, but the

resultant form was barn-like and was not accepted as our desired aesthetic. A passive cooling system was implemented in the Multi-purpose space, and calculations done with the help of Dr. Mansy and climate consultant estimated its use for 12% of the year with a 150sf cross sectioned vent stack. This early decision called for the use of two AHUs, one for the multipurpose, and one for everything else. This allows for the multi-purpose AHU to be shut off when the passive cooling system is in use. Further additions into DD include the use of a ground-source heat pump system for both heating and cooling, and the use of lighting within the space minimizes the need for artificial lighting.

## **Design Development**

With DD came a change in the attitude of the building. The jurors and professors commented on the lack of clarity of that healing axis outside of the conceptual phase. It was both too small in plan, and invisible from any experiential level. This resulted in the changing of focus conceptually. What was once an internally focused space now needed a street presence and clear signifier of the healing axis. Additionally, the need for queer iconography was once again brought up from the sociologist who spoke to the class. The need for a colorful material that would distinguish this axis was needed, and a focus on light for guidance was desired. This led to the exploration and selection of colored glass blocks for the statement material.

Glass block worked with both what I wanted to accomplish experientially, and conceptually with its lighting properties. However, it also came with its challenges, mainly its energy efficiency, and its lack of use in broader contexts. After extensive

research, a glass block comes with an energy efficient option that fills the interior cavity with gas, which provides much better thermal properties than the baseline numbers (which are significantly worse than code-compliant glass). These options are obviously extremely expensive, but the use of the material was selected nonetheless for its conceptual and iconographic presence within the project.

### Focus Space

The selection of my focus space was torn between the spine on the whole, and the lobby. The spine is the highlight of the project, but the lobby acts as an individual necessity for the success of the project. The entrance and central hub for all traffic in the building, the lobby both includes the spine, and leads those clients through. With the help of Dr. Mansy, the systems for the project were selected to reflect the linearity of the spine. Wooden louvres acted as a drop ceiling on the first floor, and acoustic blades on the second made of tectum composed the drop ceiling on the second floor. In addition, linear light fixtures and linear slot diffusers were selected to highlight this movement as well.

### Detail Design

The selection of the glass block to window connection as my detail to design was important for both the structural integrity and the formal relationship with the rest of the building. The glass block wall, although capable of supporting its own weight, needed additional reinforcement to support the inserted windows, and allowed for a proportional connection to the rest of the building. This was achieved through the use of brick reveals, and through the proportional sizing of windows throughout the north and south



facade. The C-sections used created a break within the module of glass block and added a line of shadow to be cast on the facade and the second floor beyond, emphasizing the linearity of the spine with a direct relationship with the sun.

## **Conclusion**

Overall, the development of this project over the past several months has revealed much about the architecture process, and has allowed an extremely deep dive into the conceptual base for Pivot, and brought to light the process of applying concepts to extremely detailed design decisions. Pivot's clients are on their individual journeys of healing, and this project aims to emphasize, support, and celebrate that journey for the clients, staff, and surrounding community.