Oklahoma State University

Creating Community

A Project for a Community Center

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Community is an interesting concept. Defined as "a unified body of individuals" a community is where someone finds somewhere that they belong, whether that be with family, friends, members of a club, or any other of a myriad of specifications. It does not matter how a person finds their community, what matters is that they belong, that somewhere out there is a group of other individuals that have relevant experiences and understand what they are going through. While often a community is a group chosen by the person, there are times when a group they have always been a part of, such as biological family, can no longer fit the definition, often through no fault of the person's own. This is difficult for any person, regardless of age, but the loss or lack of a community structure is worse for youth and young adults, especially those that are entering junior high and high school. Being a teenager is, regardless of situation, not the easiest of times. Not only are adults unsure of how to treat them, they also are navigating situations and issues they never have before. Inspired by this need, non-profit organizations were created to help bridge the gap between child and adult, and to help create a sense of community for those who may no longer have one. One such organization, located in Oklahoma City, is called Pivot. Pivot helps youth in difficult situations by providing them with necessities like food, clothing, sometimes housing, and the all-important group of individuals that understand each youth that comes to Pivot, giving them the stable community that they desperately need.

While a community is composed of people, organizations like Pivot need a location to house their created community and all that it offers. While they currently are housed in a structure that has served them for years, it only provides the bare minimum of what Pivot needs in a center—it has enough spaces, yes, but none of them are ideal. The vast majority of spaces at the current Pivot community center are connected via a series of narrow, dark gray hallways that make someone feel like they have stepped into a maze with no way out, not always an ideal space to assist those who may be dealing with past traumas. In addition, a large number of these interior spaces have no access or connection to the outside, making them seem even darker. Pivot must have a facility that reflects all they do as an organization, while still

 $^{^{\}rm 1}$ Merriam-Webster, s.v. "community," Accessed May 10, 2020. https://www.merriam-webster.com/dictionary/community

providing them with the spaces they need to function. The project for a new Community Center for Pivot strove to enhance Pivot's strengths and facilitate functions that relate to their mission to advocate, educate, intervene, and counsel youths in need..

Architecture plays an important role in creating a sense of community where the youth that come to Pivot could feel secure, welcome, and open themselves up to people that understand what they are going through, fostering a sense of community within the architecture. While the initial design went through several iterations, the eventual form that emerged was that of a centralized lobby space that attached to two wings, one containing the private, client-oriented functions, with the other containing more public spaces. (*image one*) Another major decision made early on was the use of a small building footprint, meeting a secondary goal of sustainability. A solid wall perimeter creates a sense of security by protecting both interior and enclosed exterior spaces from the world beyond. The configuration of the two wings and the central entry created an interior, wedge-shaped courtyard that provided the vast majority of the programming with either direct physical or direct visual access to the outdoors, something that was lacking in Pivot's current facility. (*image two*)

The three-part plan diagram went through several revisions before it was decided to angle the public wing (to the west of the entry space, henceforth called the west wing) towards the rest of the neighborhood around the Pivot campus, not only reinforcing the idea of it being the public-oriented side of the Community Center, but also to help show part of Pivot's mission: to gently teach and guide youth back towards being outstanding members of the greater community. Changing the angle of the west wing also created a contrast with the lobby and the private, client-focused wing (to the east of the entry space, henceforth called the east wing), as these two components remained perpendicular to each other to reinforce Pivot's focus on helping youth. (*image three*) Angling the West wing created a minor structural problem; this was solved with the addition of an expansion joint within the centralized entry, turning the community center into three separate structures, which helped to further influence the form.

After placing the plan diagram on the Pivot Site so that the central entry was accessible from the south (street) and north (the rest of Pivot's existing campus), the focus became better representing Pivot

in three dimensions. The decision to make the entry the tallest portion of the community center gave it hierarchy over the east and west wings, making it the most visible portion of the three-part plan. As three-dimensional conceptual forms emerged, it became clear that the entry (or lobby) should glow, further reinforcing Pivot's role as a beacon of hope within both the greater community and the youth who utilize the organization and its facilities. The image of a glowing, semitransparent entry stayed the same through the end of Design Development as it was integral to the community center's design. (*image four*)

Following issues with fitting the programming into the compact overall plan, a floor was added to the east wing while leaving the west wing the same, adding further importance to the client-focused spaces of the community center. The top two floors of the east wing extend outward towards the interior courtyard to create more interior space, generating a covered walkway along the edge of the courtyard on the ground floor. The central lobby grew as well, making the center quite tall in comparison to the buildings in adjacent lots; this emphasized Pivot's importance. While adding the third floor was an improvement, it created unforeseen issues, mainly with fire stairs, and went through several plan revisions in order to maintain the simple overall form. In the end, the east and west wings were extended slightly in both directions, creating the room needed for additional fire stairs, and also solved issues with the location of HVAC and mechanical rooms. The changes meant the form became less a u-shape in plan and more an h-shape with one angled leg. (image five)

Another important tenet of the community center's concept was the use of large amounts of glass on the sides of the building facing the interior courtyard. Not only did this help to add natural light and views towards the courtyard in almost every space within the building, but it also represented the youth opening up and allowing themselves to be helped by, and become part of, Pivot's community. The glass facades on the east wing had the greatest problems, and after running calculations via CoveTool and seeing the results, a horizontal wood shading screen was added, which cut down the glare considerably without sacrificing the views and daylight created. The glass on the west wing was largely unaffected by an excess amount of light and glare by being shorter than the east wing, which blocked direct sunlight from reaching the glass. This enabled dynamic structural decisions, leading to the creation of angled

columns that support the roof over the west wing, especially in the multipurpose space, adding additional emphasis on its differences from the lobby and east wing. The angled columns eventually inspired the design of the interior courtyard, which became a zig-zag stitched path connecting the column lines on the now disparate wings of the community center together. The path then continues through the lobby and outward towards the street. The path helped unify and tie together the three-part plan into one cohesive community center. (*image five*) The angled columns on the west wing were also extended through the lobby and outward towards the south, street-side edge of the building, helping to further connect the lobby and the west wing despite their different structures.

By the end of Schematic Design, the community center's design had accomplished all of its goals, while still leaving room for individual improvement during Design Development. The Schematic Design presentation brought up previously unforeseen issues that needed to be fixed, providing a jumping-off point for the next design phase. The greatest of these issues was the bathroom in the west wing on the first floor, as it was deemed too open towards the multipurpose space and lobby. The location of the bathroom and fixing other perceived plan issues became the first steps taken by the designer during Design Development, a phase that would last until the final week of the semester. (*image six*)

The gender-neutral first-floor bathroom was fixed by shifting it and the adjacent multipurpose space storage from the middle of the west wing towards the exterior side; this eliminated one of the multipurpose space entrances but created a more private bathroom. While gender-neutral spaces were important during both Schematic Design and Design Development, it was noted during the Schematic Design presentation that not everyone may feel comfortable with the idea of sharing a restroom with others, so a single stall family restroom was added to the east wing on the first floor. Another plan change on the first floor was the deletion of walls between the two clothing pantries. Merging them into one large open space created better sightlines towards the lobby and allowed for flexibility in the arrangement of clothing racks and shelves. It also eliminated the need for a hallway. (*image seven*)

The second and third floors also had minimal plan changes, mainly by eliminating walls and creating an open-office concept for the general Pivot staff. Creating open office areas also shortened the

double-loaded corridors present on both floors. In addition to wall removal, the remaining walls in the east wing on these two floors were realigned with the existing structural grid, and the structure itself was reworked to be evenly spaced along the grid, creating office spaces that each had one timber girder running along the center of the ceiling. The exposed structure in the office mimicked the structural openness present in the lobby and west wing, helping to further tie the three parts together on the interior. The bathrooms on the second and third floors were further enclosed with the addition of a wall to block views from the hallway and stairs, fixing another issue raised during the Schematic Design presentation. (image eight)

The west wing on the second floor was also rearranged by deleting an exterior balcony that ran along the street-facing façade, creating larger interior spaces. The lounge on the second floor was connected to the multipurpose space by changing a wall to a railing, enabling visual access from the second floor to the first floor. This railing would eventually become a detail design item. The structure on the west wing of the community center was left largely intact, though a column line was shifted slightly to better align with the walls. The structure on the west wing was also sized as part of an assignment, creating a more accurate model of the community center. The roof girders, in particular, were found to be quite massive, though being made of timber and spanning around fifty feet meant that the size was not unrealistic.

After the majority of the plan changes, the community center was checked for code compliance, where it was found that an emergency egress stair that had been added to the west wing was no longer needed. In addition, after concerns were raised about the central, multistory lobby of the community center, it was definitively proven that it could meet code with no additional changes or enclosures, provided that fire protection needs were met.

While problems that needed to be tackled were expected as part of design development, an unforeseen obstacle was the switch to online school in the wake of the COVID-19 pandemic. Suddenly easy access to the community created within the design studio had been taken away as the semester was frantically re-worked to accommodate the changes required. The lack of easy access to a chosen

community helped to further drive home the importance of Pivot to youth whose lives have been turned upside down in far greater ways than the designer's.

With plan changes made, a focus space was chosen as part of the design phase. The multipurpose space was chosen to detail and develop further since it impacts both the clients of Pivot and the greater community. This development ranged from the size and placement of HVAC ducts to the detailing of wall panels as interim assignments were created and turned in.

A major decision made early on in the detailing of the multipurpose space was the addition of wood acoustic panels along the solid exterior wall. These panels helped to absorb excess sound within the cavernous space, and their general design of evenly spaced horizontal wood slats attached to a wood backing mimicked the louvers on the east wing, helping to tie the multipurpose space with the rest of the community center through detailing. The panels helped to cover up the lateral bracing that had been added to the wall while still allowing for views of the structure at the top and bottom of the wall, maintaining the concept of structural openness present in other locations in the community center. By being made of wood, the panels were also reminiscent of the exposed timber structure and cross-laminated timber decking on the ceiling, creating a space that was almost entirely different textures of wood.

After further iterations of the community center were run through CoveTool, it was discovered that the glare within the multipurpose space was greater than what was wanted, so horizontal louvers similar to those present on the east wing were added. While originally the same as the ones on the east wing, the louvers in the multipurpose space eventually became a series of horizontals that changed in spacing along the vertical distance of the curtain wall. The louvers were also placed on the interior side of the curtain wall to prevent any disruption of views towards the angled columns from the exterior. After the spacing change, the louvers became more lively by changing them to angle towards and away from the interior of the multipurpose space, mimicking the angles present in other parts of the community center. As the louvers were also made of wood, they added another texture to the space.

Since it was composed entirely of different textures of wood, the multipurpose space was given an accent to break up the wood tones in the form of the wall separating the space from its storage; this was left as drywall and painted the same shade of blue that Pivot uses for their logo. The railing that separates the multipurpose space from the lounge on the second floor also had blue accents as part of its design. Composed of steel verticals and wood horizontals that matched the spacing of the interior louvers, the railing was also representative of the overall structure of the community center and helped tie the louvers to the rest of the west wing.

Lighting within the multipurpose space raised the issue of providing enough illumination to reach the floor from the ceiling without creating too much brightness. The lights also needed to highlight the exposed structure on the ceiling. With these problems in mind, long rectangular direct/indirect pendant light fixtures were chosen, evenly spaced between the roof beams, and suspended at a height that allowed the light from each fixture to reach the floor. In addition to the ceiling lights, fixtures were added along the exterior edges of the space under a built-in bench adding a perimeter glow, while also providing additional illumination for the floor. (*image nine*)

Aside fromthe changes made on the interior, during design development, further refinements were made to the exterior elevations of the building. After research, different materials were chosen for all three parts of the community center to emphasize their different functions. Standing seam metal panels were selected for the west wing, as a nod to the industrial area where Pivot is located and as a reminder of their original building, while dark-colored brick was chosen for the east wing since it was a familiar and durable material. To add further interest to what would have otherwise been a three-story brick wall, two soldier courses were added at the elevations of levels two and three, helping break up the façade while adding hints to the structure underneath. The central lobby was composed of semitransparent panels, though these were changed from the polycarbonate in Schematic Design to semitransparent glazing after issues were raised about its safety during the schematic design presentation. (image ten)

By the end of Design Development, the Community Center's design had addressed all the changes and issues brought up during the Schematic Design presentation, while also continuing to develop the multipurpose space and the exterior elevations. After turning in a presentation representing the total sum of work done during that phase of the semester, thoughts were turned toward better representing the community center through Construction Documents, something the designer had never done before. The Construction Documents generated for the community center, while by no means complete, made the project more tangible—it could potentially be constructed someday. While this is what architecture is about, the process of designing buildings to be constructed and used, the Comprehensive Design Studio was the first time that process was fully realized, even within the short time frame involved. The Construction Documents, coupled with the Design Development presentation, helped to put everything that had been learned throughout the semester into perspective. Even with all of the obstacles presented before everyone, from issues brought up during previous presentations to the ultimate curveball of an online semester, the year still ended with the creation of a product to be proud of.

While it is important to acknowledge the lessons and skills gained during the semester, it is more important to not lose sight of what it was all for—the creation of a center for those who have lost their community. Through the new facility, Pivot can continue to help the youth that come to the Community Center become the adults they were meant to become, give them back the hope that they desperately need, and find them a place to *belong* after losing one. A community center is so much more than just a building, but the building provides a space for great achievements.

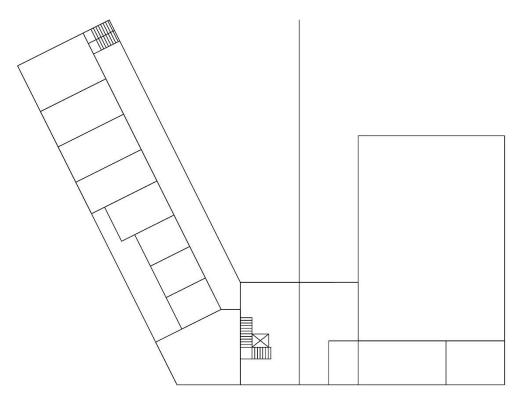


Image one. An early version of the three-part plan.

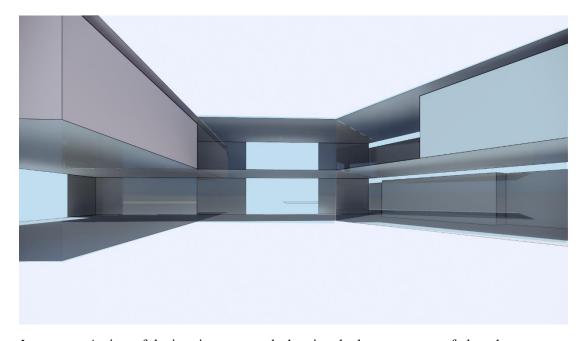


Image two. A view of the interior courtyard, showing the large amounts of glass that were present from an early stage of development.

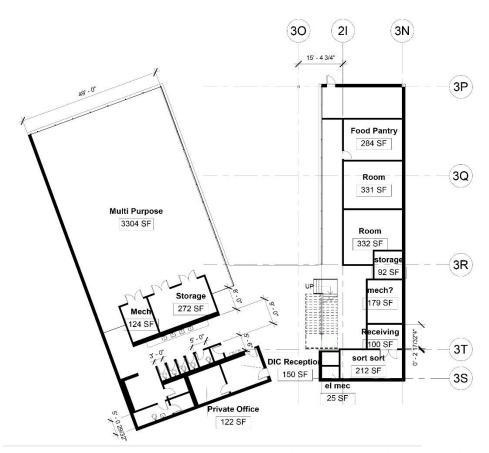


Image three. A more recent plan with the west wing angled, creating a larger interior courtyard and reinforcing the public-oriented nature of the wing.

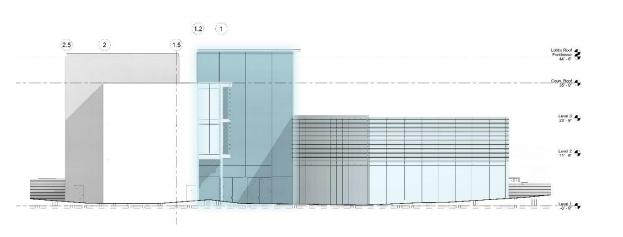


Image four. The central, glowing lobby became a major component through to the end of design development.

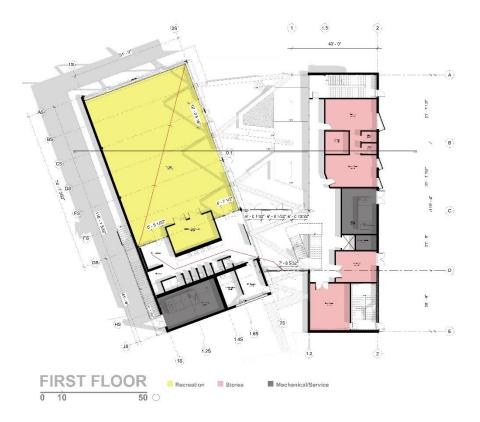


Image five. A view of the plan showing the additional stairs that were added to meet code, and the interior courtyard that ties the parts of the building together.



Image six. The interior courtyard at the end of schematic design. Image from the first page of the schematic design presentation.

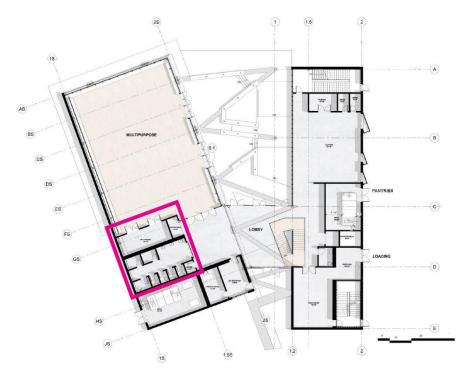


Image seven. The first floor at the end of Design Development, with the bathroom changes circled in pink.

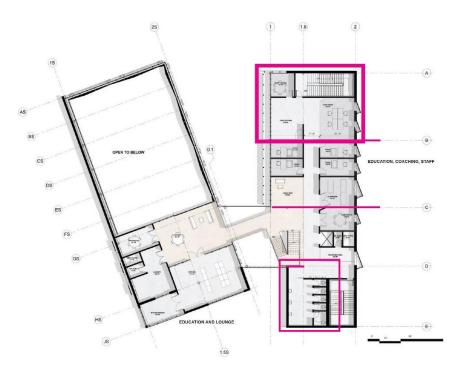


Image eight. The second floor at the end of Design Development, with changes shown in pink. As the second and third floors have similar edits, only the second floor is shown here.

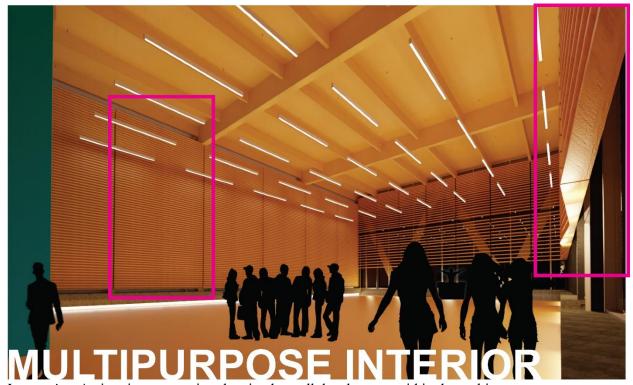


Image nine. An interior perspective showing how all the elements within the multipurpose space come

together to create one cohesive unit. The acoustic panels and interior louvers are circled in pink.



Image ten. The courtyard and street-side elevations at the end of Design Development, showing the materials used on the exterior.