

# Montgomery High School Baseball Clubhouse Expansion

**Armando Ramirez, BS**  
California Polytechnic State University  
San Luis Obispo, California

After graduating from Montgomery High School (MOH) in 2013, I knew that I wanted to give back when the opportunity was given. More specifically, I hoped to help the baseball team. Throughout my years playing baseball at MOH, the coaches and players constantly expressed interest in expanding the clubhouse as it was deemed too small and uncomfortable. After the first meeting with the owner, Coach Hermosillo, a budget was established and preliminary design ideas were brought up. It was important for him to implement the feedback given from the current players. After several meetings and different iterations of the expanded clubhouse, a design that pleased the owner was agreed upon and within the budget. Through this project based senior project, significant preconstruction services were provided which include: architectural drawings, estimates and schedule.

**Key Words:** Project Based, Baseball, Construction, Remodeling, Clubhouse

## Background

Montgomery High School (MOH) is located in south San Diego, about 3 miles north of the Mexico border. It is in a predominantly low to middle-income Latino community. School funding for sports is very limited. Therefore, teams rely heavily on fundraisers and donations. MOH is primarily known for their successful baseball team that is led by head coach Manuel Hermosillo. The second most winningest coach in San Diego has built quite a reputation for himself after winning multiple coach of the year awards. He first began coaching in the early 90's after graduating from San Diego State University. Shortly after becoming head coach of the team, the school was able to fund the construction of a new clubhouse in 1994. It is approximately 1,035 square feet that includes two storage areas, a coach's room, one large locker room for the Varsity team, and a wide hallway that was converted into the Junior Varsity locker room in later years. (see Figure 1)



*Figure 1: Current Baseball Clubhouse*

## *How the Project Came About*

While playing baseball at MOH all four years, there was constant talk about expanding the clubhouse. The current clubhouse gets too hot and develops a bad odor due to the lack of air circulation. During my senior year in high school, the coaches were seriously considering tearing down the current clubhouse, moving the entire field, and constructing a new clubhouse. After obtaining a rough estimate from a local contractor, they deemed the project too expensive. When I was first introduced to the idea of a project based senior project, I knew I wanted to do something with the baseball team from MOH. I contacted Coach Hermosillo early 2017 to hear his thoughts on an appropriate project for me to be of assistance. The first thing he mentioned was that they had just received a substantial donation and he was planning to use it for the clubhouse. It was then when we agreed that I would help him with the design, estimate and schedule.

## **Design Process**

My first meeting with the coaching staff was at the beginning of spring break. It was crucial for me to get as much design done as possible while being in San Diego over the two-week break. This is because the staff wanted to see the model and plans in person. In addition, having as much face-to-face interaction as possible during the design phase was important because there were certain ideas that could only be expressed in person.

During those two weeks, I met with the staff four times. The first meeting was to set the budget and begin brainstorming ideas on how to go about this project. The budget was set at \$12,000 with the idea that the labor would be provided by the coaching staff, players, parents and alumni. It was made clear from the beginning by Coach Hermosillo that the current clubhouse should stay. I started by hand drawing plans of the current clubhouse and just building around it. There were certain ideas that the coaching staff liked so we began to build off those. They wanted a larger coach's room and no more hallway lockers. At the end of the meeting with the coaching staff, I met with the current players to get their perspective on the project. Their primary concern was the air circulation. The players do not enjoy being in the clubhouse since it gets so hot when all of them are in there. After hearing from both group, I developed a preliminary Revit model a couple days later.

I returned for a second and third meeting with my laptop for the coaching staff to see the progress. Changes were made in order to please the staff and players. The fourth meeting consisted of value engineering. This included: changing the door sizes, reducing the number of power outlets and removing the carpet. I ran a preliminary budget and found the project to be under the budget by about four thousand dollars.

At this point I had to come back to San Luis Obispo and continue working on the project from Cal Poly. I consulted my senior project advisor on the air circulation issue. She suggested that the least expensive way to go about it is by having roof exhaust fans and louvered doors. This was the final aspect that had to be implemented into the model before it was finished.

## **New Knowledge Gained**

Through the design process, I became much more proficient at Revit modeling. I had only used Revit once before. It was to remake a model that was created by a professor. I designed this project, so it was difficult to get started on Revit. I also learned that there is a vast amount of people on the internet that create models of everything and anything. I was able to obtain models for the lockers, benches and chain-link fence. I also now know the average prices of certain doors, CMU, lighting fixtures and outlets.

## **Deliverables**

Architectural plans, estimate and schedule.

## **Lessons Learned**

Pleasing everyone is very difficult. Some of the players wanted a bigger lounge compared to their locker room; others preferred it the other way around. They also wanted to have televisions, gaming systems and couches. They were all disappointed when I told them that those luxuries would put the project over budget. Secondly, the coaching staff ranges in age from 30 years old to 67 years old. The younger coaches wanted certain things and the older ones wanted other things. At the end of the day, I primarily listened to Coach Hermosillo since it is his baseball program and he has been there for so long. Another lesson learned was that BIM is not for me. It is interesting to me to see a model and use it out in the field as a superintendent. After this project, I have confirmed that I am not a computer person. I also learned that Home Depot is not always the least expensive option. Other stores specialize in certain products that have cheaper prices. Lastly, I learned how to work with an "old school" client. Coach Hermosillo did not like seeing the model; he wanted to see plans and preferred things to be hand drawn. While it was inefficient to do so, I still did a few hand drawings in order to please the client.

## **Applying New Knowledge to the Construction Industry**

I will be entering the construction industry in the next couple of months. I will apply the tips and tricks I learned for using Revit in the project I will be put on. I will also apply the people skills learned from working with multiple clients on this project in the future. The way I went about my pricing research got better as the estimate went on. I will apply this to my future job in order to be as efficient as possible.