



How Joeris leveraged PlanGrid and Lean Construction to meet a tight project timeline

Joeris General Contractors had a problem. The Texas-based company had won a bid to build a 78,000-square-foot building for Austin Achieve, a charter school in Austin, Texas. The schedule called for completion in eleven months, which is standard for a project about that size. Great, thought the Joeris's team. This is doable!

Then began the permitting process with the city of Austin. It slowly crept along, with no signs of wrapping up. By then, two months had already gone by.

Before they knew it, Joeris was looking at only nine months to build out the school instead of eleven. The tighter schedule meant finding efficiencies in the construction process without cutting any corners.

This is when the company decided to employ Lean Construction principles as a project management tool. That was where PlanGrid could help.



Leveraging Lean

Joeris was early into their deployment of Lean and had never utilized technology or computer programs to aid in this process. The Austin Achieve project was the pilot project for the company to pair technology and Lean, which only added to the pressure.

Once the Lean effort was rolled out on the project, a major obstacle was quickly identified. Subcontractors were not buying into the Lean deployment and were hesitant to embrace the technology.

"Not all of the subcontractors saw the value in doing it this way," says Herbert Foster, one of the veteran superintendents on the Joeris team. "They [subcontractors] had to scope out drawings before they started work. They thought that would be too time-consuming. It took them a while to see the values and benefits. But first, we had to get them on board and excited about it."

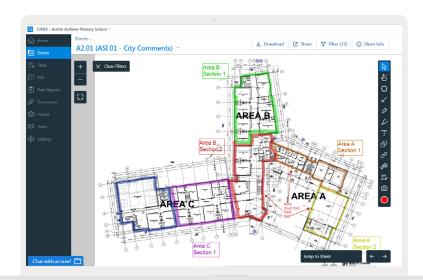
Part of that process involved bringing the subcontractors in for presentations on the benefits of Lean. When they did, Joeris would introduce them to pull planning and the technology they'd be using on the project, which included PlanGrid. Many of the subcontractors had already used PlanGrid on other Joeris projects and were excited to leverage it again.

During the pull planning session, Herbert and team used PlanGrid to provide a visual aid. They would markup the drawings in PlanGrid to illustrate the project phasing to ensure all subcontractors understood the project flow and were on the same page. From there, the Joeris team built the schedule through the use of pull planning, a Lean concept that requires managers to work backward from a stated goal.

"You break down the flow of the project into bite-size pieces," Foster explains. "You say, this is the area we're going to plan out, these are the milestones we're aiming for. Then you go back to identify every task that's going to be required to hit those milestones. This forces each subcontractor to communicate with each other and the general contractor. Everyone is on the same page as to what is going on with each task.

As part of the pull planning sessions, Joeris used PlanGrid to divide the project up into different areas. From there, the subcontractors created tickets for their work in a given area. Joeris would then sequence those tickets in the project schedule, giving everyone involved a clear picture of when all team members could expect a goal to be met. Foster explains, "This process forces conversations. These conversations help us work better as a team."

"With Lean, there are no hard, physical numbers," says Foster. "You can't tell a subcontractor how many man-hours are going to be required. What you've got is a breakdown of one-week activities. This allows you to be more specific about the expectations, and in turn, they can be more specific about their commitments."



True Visibility with PlanGrid and Pull Planning

One of the principles of Lean is having project managers order only the amount of material necessary to complete a job. This cuts down on costs and saves time with getting those materials delivered. For Callie Willett-Ussery, an Assistant Project Manager with Joeris, this made the breakdowns of milestones and scheduling that emerged from pull planning sessions invaluable.

"I could get real-time updates on the project and the schedule without going out to the job site," she explains. "All of that was in the pull plan schedule and PlanGrid. I'd pull up progress reports in the office and know what materials to order next and what job phase to be ready for. Since the subcontractors were more involved in building out the schedule, it was a lot easier to plan ahead."

It was especially helpful to Willett-Ussery when trying to schedule inspections with the city. With the compressed timeframe of the project, getting city sign-off promptly was important. But the process also ran up against delays that can be common in cities.

"Like many cities, the permitting and inspection process can be challenging," says Foster. "The City if Austin is juggling so many projects that inspection dates often change. They'll tell you they're coming out one day and then have to move it a few days later. Through this process, we could schedule inspections early to reduce delays that sometimes occur due to the city inspectors current workload."

In other words, leveraging Lean Construction with PlanGrid couldn't change the city inspector's workload, but it did help the Joeris team find a workaround and reduce delays.



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The Results of Going Lean with PlanGrid

Ultimately, using Lean on the Austin Achieve project worked out for Joeris. The project came in on time, despite the accelerated 9-month schedule.

In fact, Joeris executives were so happy that they have now decided to deploy Lean Construction paired with PlanGrid on all their projects going forward. After seeing what worked on Austin Achieve, the company created a set of standard operating procedures that teams in all their offices can use to get every job up and running.

"We've got a very diverse group of staff members, young folks who are comfortable with the technology of PlanGrid as well as old-school guys who aren't usually open to doing things in a new way," says Foster. "So now we are bringing it into all the people who are going to use it correctly."

Part of his job now is traveling to Joeris's other offices to share what he learned on Austin Achieve and help the company's employees deploy Lean.

In the Austin office, Joeris now has seven current projects being delivered using Lean, with two more starting soon. It may take some extra planning to get each subcontractor on board with using PlanGrid's software in support of Lean, but Joeris knows that it is worth it.



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Herbert FosterSuperintendent

Collaboration Stats

- 120,000 sheets uploaded to PlanGrid
- 87,000 photos created in PlanGrid
- 600+ projects run on PlanGrid

