

Jacobsen Construction & Touchplan

Constructing Utah's Tallest Building



A master class in precision construction planning

Rising above the Salt Lake City skyline, the stunning Astra Tower, a quarter-billion-dollar, 40-story, 375-unit luxury apartment building, is Utah's tallest building and one of Salt Lake City's most prestigious residential addresses. The building features multiple apartment floor plans, underground parking, and over 40,000 square feet of amenities, including an 8th floor "urban park", a 20th floor swimming pool, and rooftop terrace with 360-degree views of the historic downtown below. Located in the heart of the city, Astra Tower is a project leading Salt Lake City's urban construction renaissance.

Quoted in [Multifamily Dive](#), "Astra Tower will show what Salt Lake City is going to become in the future," KIC CEO Ed Lewis said during the groundbreaking. "This building will be remarkable for much more than its height. Its completion will set a new benchmark for upscale downtown living."

As the project nears completion, Layne Hess, Corporate Director of Planning and Scheduling for Jacobsen Construction, said, "Urban construction is never easy, but this time, it was an especially complex project with a very tight schedule, and, of course, there were supply chain and labor availability issues to deal with, as well. High precision, real-time planning was paramount."

On the Astra Tower project, Hess and his Jacobsen team employed a planning regimen that they have developed and refined over five years of successful projects in which they seamlessly synchronize the critical path method-based contract schedule in Oracle's Primavera P6 software with the Last Planner System-based digital production plan in Touchplan® from MOCA Systems, Inc.

Operating the two systems in this way enables them to capture and share detailed, timely as-built data from the Astra Tower jobsite needed by master planners and schedulers to assure that the contract schedule is accurate and up to date. And, communicating critical details about supply chain deliveries, workforce allocation, and other elements in the master plan to the production planners on jobsite enabled continuous reduction of schedule, budget, and safety risks on the project. As a result, the Jacobsen team was able to double the number of units available for rent in the first phase of the development with no change to the schedule.

Hess is a 41-year construction veteran who typically manages 50-70 projects at a time across a wide range of industry sectors, including hospitality, education, healthcare, government, and more. After six years of optimizing over 240 projects using Touchplan, Hess and his team have developed a reliable, repeatable recipe for planning success that they are now happy to share with trade partners, and even competing GCs, for a simple reason.

As Hess puts it: “When everyone does planning this way, the whole industry gets better together.”

In what follows here, Hess takes us through his approach to synchronous construction planning and how it benefited the Astra Tower project.

Planning Precision: How Process Paves the Way for Success

Initial Breakdown: When starting the project, Hess instructs his superintendents to break down the long-duration tasks into manageable components using Touchplan. They are tasked with studying Touchplan data alongside trade partners to create realistic and accurate schedules.

“It’s important that field teams stop and study their plans in Touchplan,” says Hess. “Superintendents need to sit with all their trade partners, think through the details, and make sure they are accurate. If it’s not right, I’ll have a meeting with them to make sure they make the necessary adjustments to get it right in Touchplan first because it’s so easy to use. Then, once the right information loads into Touchplan, it is easy to integrate it into the P6 format.”

Validation and Import: Once the Touchplan schedule is finalized by the superintendents, Hess reviews it for accuracy. He then holds meetings to import the schedules into P6, ensuring all logic and dependencies are correctly placed. The robust capabilities of P6 allow Hess to efficiently scale the plan, replicating detailed planning across 40 stories within two hours while maintaining accuracy.

“I bring the superintendent back, compare Touchplan on one screen and P6 on another, and walk through the schedule together,” says Hess “This process refines the plan through multiple phases, ensuring accuracy and alignment”

Continuous Updates: Hess performs bi-weekly meetings to update the master schedule. The detailed Touchplan data allows for quick and precise updates, minimizing guesswork and ensuring alignment with on-the-ground realities.

“That’s how I make one brain out of two systems,” he concludes, underscoring the synergy between Touchplan and P6 in delivering successful construction projects.

The Last Planner System® is the Critical Path to the Master Schedule

The Critical Path Method (CPM) and the Last Planner System (LPS) are often viewed as disparate planning methodologies. CPM is typically seen as a broad, top-down approach to planning where schedulers use tools like P6 to determine the shortest possible project duration. In contrast, LPS is seen as a field-level, action-oriented approach that offers a detailed, bottom-up view of project planning.

While many workflows involve creating the high-level critical path before digging down into the detailed production plans, Hess’s approach creates a unified system by using Touchplan to pull in the knowledge from those who will be doing the work (the Last Planners) to create the critical path **before** it enters P6.

“When you have the bottom-up knowledge base and collaboration, you get the intelligence of the professionals doing the work,” says Hess. “I have to have the people in the field involved with creating the critical path and calibrate it in the right direction. They know what’s really going on, and their insights help us refine the schedule.”

This bottom-up approach to scheduling results in a more reliable and refined master schedule as it integrates the expertise and real-time feedback of those executing the work. This ultimately aligns daily operations with the overall project timeline. By engaging the field teams early in the process and leveraging the collaborative fundamentals of LPS, the Touchplan-P6 synchronization ensures that on-the-ground insights shape the master schedule.

“Touchplan is the critical path to the master schedule,” says Hess. “If you don’t get the critical path right on the daily work, you don’t have a master schedule that’s right.”

Manage Scope Changes and Constraints:

The Astra Tower project faced its share of scope changes and constraints. Initially contracted for Jacobsen to complete the first 10 floors by August 2024 to be available to renters, the scope was expanded at the client’s request to deliver 20 floors by the same deadline. Using Touchplan, Hess and his team adjusted their plans to meet the new requirements.

“When the client asked in March if we could deliver 20 floors instead of 10, we went back into Touchplan to figure out what adjustments could be made to meet the request and re-tooled ourselves,” said Hess. “By collaboratively working with the superintendents to re-work our plans on a platform that’s flexible and easy to use, we’re now turning over 20 floors in August instead of 10.”

In addition to managing changes in scope, constraints such as design changes or permit delays are flagged by the real-time data in Touchplan and managed by creating fragments in P6. This ability ensures contractual entitlements and schedule adjustments are accurately reflected in the contractual schedule.

“I have the people in the field tell me the story of what’s really going on and I’ve got to have the real-time information from Touchplan to do that,” says Hess. “When I get notifications from the daily plan that changes have occurred that are out of our control, I interpolate that into fragments in the P6 and get contractual entitlement for the dates moving out.”

By leveraging synchronous digital planning with Touchplan and P6, Hess and his team successfully adapted to an incredible scope change calling for doubling the early rental revenue available to Astra Towers owner, Kensington Investment Co., by constructing 20 stories in the time the schedule had called for 10, an amazing accomplishment.

Conclusion: Jacobsen Construction - Precision Planning and Scheduling Pioneer

The Astra Tower project stands as a testament to the power of precise and integrated construction planning. By synchronizing the Critical Path Method with the Last Planner System through Touchplan and P6, Jacobsen Construction successfully navigated the complexities of constructing the tallest building in Utah with remarkable efficiency, delivering a landmark structure that redefines upscale urban living.

The success of the Astra Tower project highlights the importance of real-time data, collaboration, and rigorous planning in achieving construction excellence. This approach not only sets a new standard for the industry but also exemplifies how innovative planning methodologies can drive successful project outcomes and contribute to the urban renaissance of a city.

