PCI RESIDENTIAL HIGH-RISE PROJECT

CIELO APARTMENT HIGH-RISE PROJECT

Seattle, Washington

CHALLENGES:

- *Dense floor plan*
- *Aggressive schedule*
- *Project budget constraints*

SOLUTIONS:

- *Just-in-time installation*
- *BIM modeling*
- *BIM clash detection*
- *Early cost development*
- *Target value budgeting*
- *Value engineering*

The Cielo Apartment Community is a 31-story, luxury residential high-rise located in Seattle's historic First Hill neighborhood near downtown. The 469,000-square-foot tower consists of 335 striking and modern apartment units, three elevators, and two levels of common residential amenities.

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THE SITUATION

The plan for the Cielo Apartment Community was ambitious — the proposed residential high-rise was poised to completely change the skyline of Seattle's First Hill neighborhood.

However, the project faced two significant challenges in the pre-construction phase. First, the schedule called for the project to be built using a one week per floor completion cycle for all trades. Considering the dense floor plan, a solution would be needed that would allow trades to work simultaneously without compromising safety, production or schedule. Second, due to budget constraints, the project would need a cost optimization plan prior to launch to ensure successful project completion.

Known for its experience and efficient solutions to such challenges, PCI was called upon early on to help tackle the issues and move the project forward.

THE SOLUTION

PCI's pre-construction team worked closely with the owner and GC for more than a year and a half to address scheduling and budgetary issues prior to the start of construction.

Carefully analyzing the schedule and the space required for each trade in the dense work area, PCI suggested putting the project into a just-in-time installation format, where each trade would work sequentially, not simultaneously, in order to minimize congestion and stacking. This project approach allowed trades to finish their work without creating pinch points, thus avoiding schedule delays.

PCI also evaluated Value Engineering (VE) options to identify cost-saving opportunities that wouldn't compromise the owner's design criteria. Through the BIM modeling and clash detection process, PCI was able to eliminate or minimize many potential issues that could negatively affect the project during the construction process.

THE SUCCESS

By implementing a smart and efficient work flow process to manage activities among all trades on site, the client's schedule was successfully maintained, and the project was delivered safely and on time. Through early and effective use of the BIM modeling and clash detection process, **PCI's pre-construction team helped remove potential hurdles and roadblocks that might present significant downstream project conflicts, thus maximizing overall cost savings.**

Today, the 31-story Cielo Apartment Community is a striking, ultra-modern piece of Seattle's skyline. The 469,000-square-foot tower consists of 335 modern apartment units, three elevators, and two levels of common residential amenities.