Construction Verification

PROBLEM STATEMENT



- Tape-and-notebook field measurements are slow, limited to the points someone thought to measure, and prone to error.
- When existing conditions don't match the drawings, fabricated parts don't fit, crews wait, and work gets redone.
- Field markups also sit on paper until someone gets back to the office, so problems surface days later.

BENEFITS



- Higher-quality measurements that capture the whole structure, not a handful of points.
- Measure again later from the data without remobilizing to the site.
- Components fabricated to verified dimensions fit the first time.
- Field questions and drawing comments validated the same day, not days later.
- Accurate as-built drawings delivered quickly, so the engineer's design is built and recorded as intended.

TECHNOLOGY SOLUTION



- Drone photogrammetry and handheld SLAM lidar to capture existing conditions and completed work as full 3D point clouds.
- Field markups on iPads in Bluebeam and OneNote, synced in real time with CAD technicians in the office.
- As-built data checked against design geometry before fabrication and before closeout.

GRAPHIC

