



Blue Mountain Mechanical Leverages A Model-Based Estimating Workflow For Major Growth

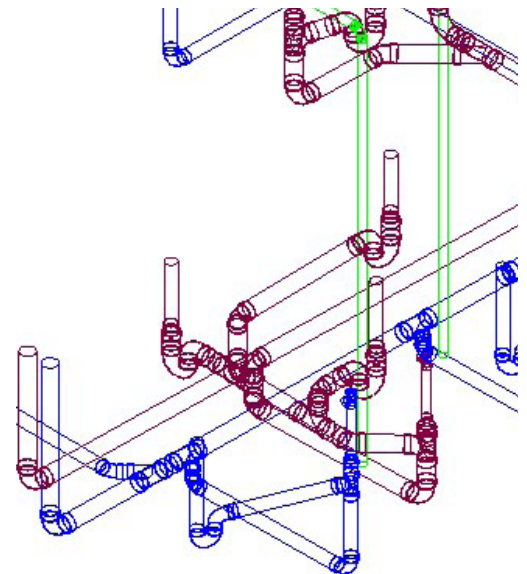
In an industry pressed by consistent market pressures, Blue Mountain Mechanical eliminates all estimating guesswork, achieving unsurpassed expediency and accuracy for competitive advantage.

Challenge:

The MEP industry exists under consistent and dynamic market pressures that make the likelihood for profitability and on-time completion razor thin, and mistakes can sink projects with uncanny speed.

Solution:

By leveraging a model-based estimating workflow- using the integration between Trimble SysQue and Estimation MEP- Blue Mountain is able to estimate twice as quickly as before, and with more accuracy.



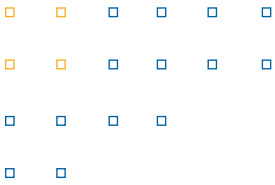
A modeled sanitary system using Trimble SysQue.

25%

A jump from 10% to 25% win rate using model-based estimating.

Results:

- Create LOD 400 MEP models using content from world's largest library of managed, manufacturer-specific BIM content
- Complete confidence in estimates, including up-to date pricing and parameters
- Speed! What used to take 3-5 days to estimate, now takes 1-2 and with more accuracy
- Increased win rate from 10 to 25%
- External recognition and a reputational jump



Blue Mountain Mechanical Leverages A Model-Based Estimating Workflow For Major Growth

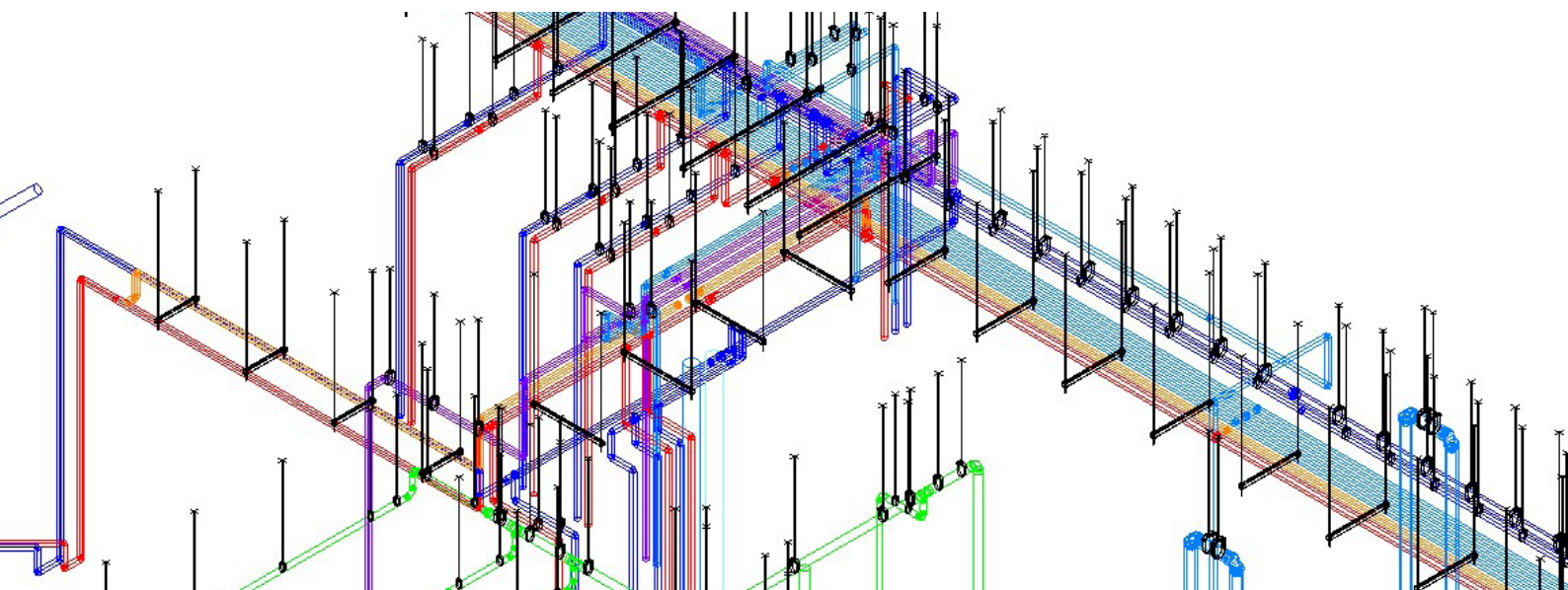
When Matt Burke left a long-time position to start Blue Mountain Mechanical, a plumbing services and construction company based in Parker, Colorado, he knew that he was taking a big risk. The MEP industry was (and remains) under consistent and dynamic market pressures that include a scarcity of skilled labor, cost pressures, strict regulations, and supply chain disruptions that lead to some of the lowest average profit margins in the construction industry. The likelihood for profitability and on-time completion is razor thin, and mistakes can sink projects with uncanny speed.

What, then, would give Blue Mountain Mechanical an advantage? Efficient and accurate estimating, which aligns directly with profitability. By leveraging BIM and Revit in Blue Mountain's estimating process, Burke hypothesized, redundant efforts throughout a project's lifecycle would be removed, and the model itself could be used for more than quantification and accuracy- it could also be

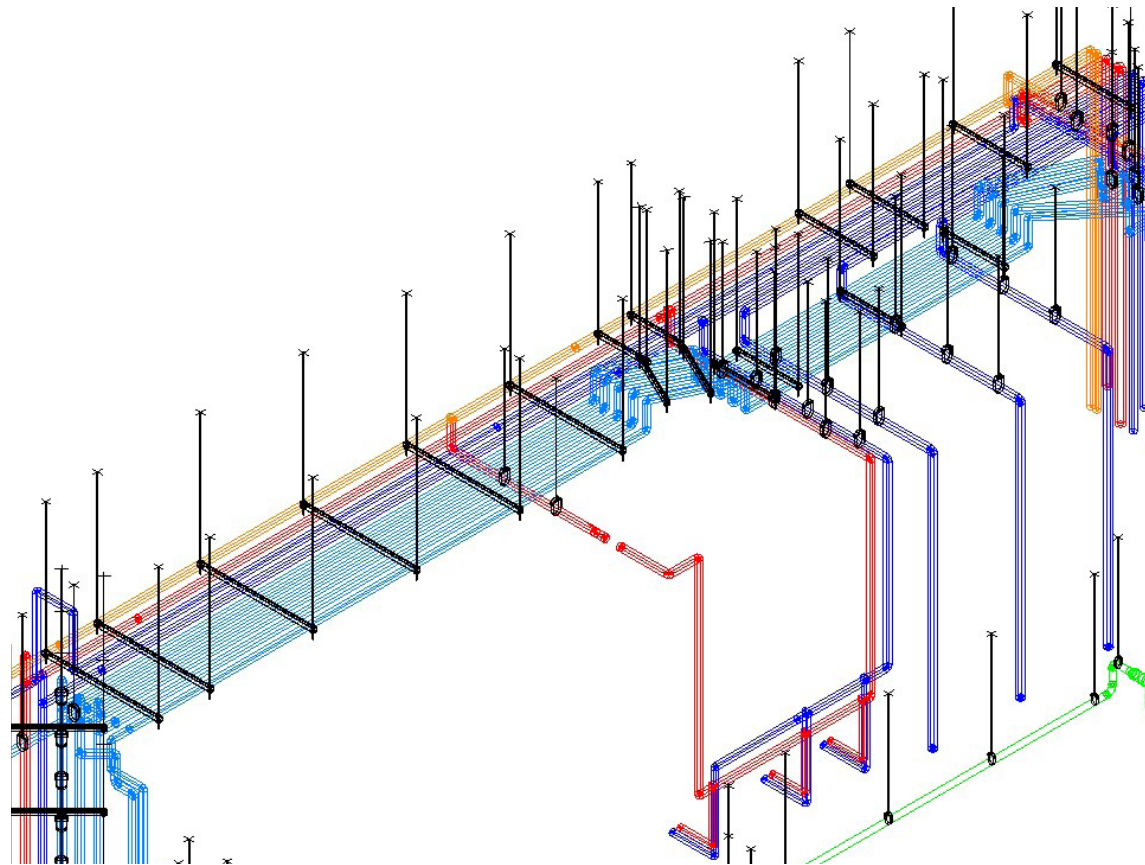
immediately rolled into fabrication when a job was awarded. Ultimately, the truth is this:

The more uncertainty in an estimate, the greater the contingency you'll add to offset risk, which raises your price and increases the chance that you won't win the work. By contrast, when you can eliminate all or most of your estimating guesswork, you can increase bid competitiveness, optimize profits, and improve your company's financial stability overall.

But how do you make that work? Enter Dyllon Briggs. With a long career in MEP detailing, estimating, and execution, as well as a deep knowledge of software options that support MEP contractors' success, Burke tasked Briggs with one specific assignment: Determine the best method to eliminate all or most of Blue Mountain's estimating guesswork and tedium in order to increase bid speed and competitiveness, optimize profits, and improve project outcomes.



Domestic water systems modeled in 3D using Trimble SysQue.

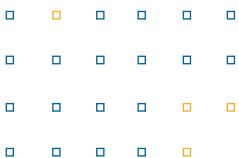


Domestic water system modeled in Trimble SysQue

BIM For The Win

As most contractors know, the foundation of an accurate estimate is good data. In Blue Mountain's case, the data of value is manufacturer-specific content that consists of the essential information needed by MEP contractors: technical, visual, dynamic, and geometric parameters that form the characteristics of the items they'd include in their bids, all loaded with manufacturer catalog numbers and managed labor and pricing values. Without such detail, Briggs could not be sure of the accuracy of his estimates.

But where does this type of data live? Immediately, Briggs thought of Building Information Modeling (BIM), a process involving the generation and management of digital representations of the physical and functional characteristics of projects. When using the right software tools, a BIM model becomes a data-rich resource that can offer the unparalleled level of detail required to help deliver projects as envisioned, on budget, and with teams collaborating efficiently. If Briggs could begin his estimating process by building a model of the project at hand, he could then leverage all of the data included to build his estimate.





With Good Data Comes Good Decisions

Immediately, Briggs knew that estimating from a model would require one thing he didn't have: up-to-date BIM content, and lots of it. The details within a content database would ensure the virtual line items in his estimates would be exactly what is necessary to build in the real world. The problem? Creating and maintaining a database that would allow him to estimate at the pace and with the accuracy Blue Mountain required was a full-time job in and of itself.

Briggs didn't have the time or the know-how to manage a vast content library, but he did know of a solution that did: Trimble SysQue. An MEP-focused add-on to Revit, SysQue includes the world's largest library

of managed content. The database includes content from 630 manufacturers and millions of brand and part-specific MEP objects, a number that grows consistently.

By modeling in Revit using SysQue, Briggs could be certain that every single item in his projects would include up-to-date pricing and parameters. The detail from his coordinated models, then, could ensure Blue Mountain's estimates were accurate in real-time. Final quantities, materials, and manufacturer information for buyouts could all be found within one single source of truth: The BIM model. Could leveraging a model in this way allow Blue Mountain to rise above its competition?

"I said, 'Matt, the only way we can estimate from Revit is if we get SysQue. It's going to be so much easier and more accurate.' Every fitting in the world is in there, including some that we didn't know existed!"

How Do You Make It Look So Easy?

Fortunately for Briggs, Burke, and Blue Mountain Mechanical, SysQue offers more than just an extensive content library. SysQue is also directly integrated with Estimation MEP, a web-based estimating and takeoff solution from Trimble, to enable a model-based estimating workflow. Using SysQue to design fabricable models, and then pushing the model data to Estimation MEP with a click of a button, Briggs produces estimates with relative ease, and with confidence in his accuracy which means he does not have to build in a large buffer for error.

"Burke was spending between three and five days on a project and he wasn't getting as accurate. And I'm spending between one and three days on a project, and I'm more accurate."

The results of such accuracy speak for themselves:

"I'm landing something like 25% of the bids and we were only hoping for 10%."

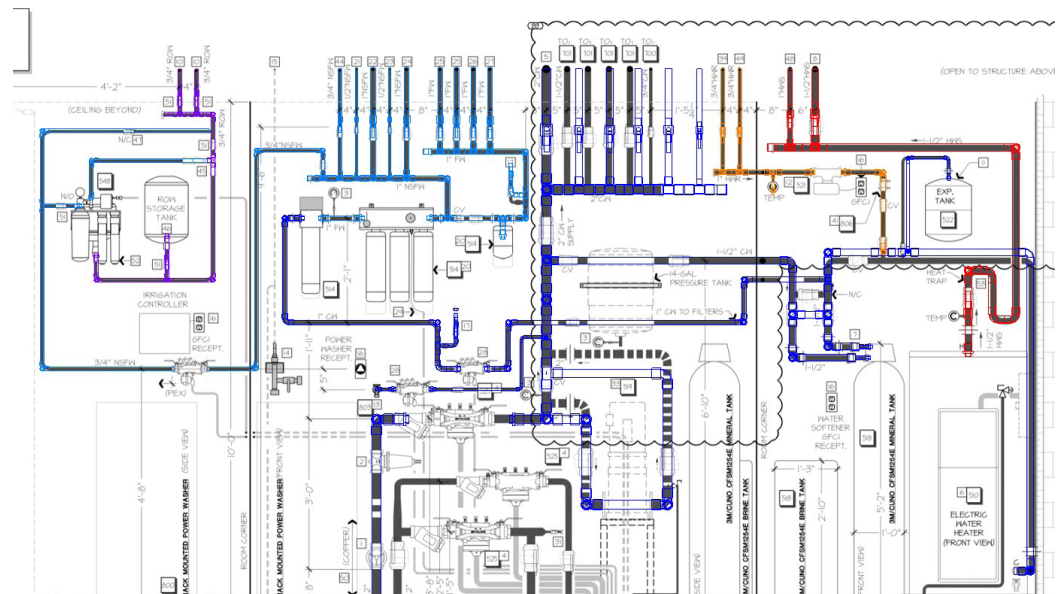


We Don't Have Problems, Just More Work To Do.

A jump from a 10% to 25% win rate, while estimating twice as fast as before, has left Blue Mountain Mechanical with a very good problem on its hands: Too much business. A series of wins—each with considerable profit—has meant that Matt Burke is hiring fast and marketing less while he catches up.

“The model-based estimating workflow has been a game changer for us,” said Briggs. “It’s more accurate, which is the big key. I’ve done this for seven years: coordinating in the field

or model-based coordination. So when I’m looking at these buildings, I’m drawing it like I would install it. [With SysQue and Estimation MEP] I’m getting more accurate footage, more accurate fittings, and just much more accuracy in general. And rather than what Burke would do, which would be to take Blue Beam, trace it, pull linear footage, add some extra numbers to it, I’m actually drawing it whole, and easily, with my estimate pretty much creating itself.”



View of a mechanical room in Trimble SysQue.

To learn more about Trimble SysQue and Estimation MEP, please visit mep.trimble.com.