OE CONSTRUCTION DIGS in with CONNECTED TECHNOLOGY

Since its inception in 2006, OE Construction has been an earthwork and site development company with a technology edge. While a then 19-year-old Chris Olson, founder of the company, started with just a skid steer and a mini excavator, he knew that he could make a difference in the dirt moving business with a good team, a strong work ethic and a little help from technology.

Early on, he began evaluating the benefits of Trimble technology to improve productivity on the job, provide better quality to the customer and to help expand into underground infrastructure and site utilities. He initially invested in Trimble TSC2 Controllers, receivers and base stations, as well as the Trimble GCS900 3D Grade Control System for multiple machines.

The company grew revenue from $150,000 the first year to $20 million in the first six years, working on a range of earthwork projects as well as expansion into utilities. That sixth year proved to be a milestone year for the company.

Enter 3D Site Prep

In 2012, Trimble initiated the first phase of construction of it new Rockies campus in Westminster, which included a 125,000-square-foot, four-story building. OE Construction was all in as part of the civil/site preparation contract.

Olson recalled, "We needed to make use of 100 percent machine control along with all of the Trimble behind the scenes technology and tools. In 2012, machine control and 3D site prep was very new to most of the industry."

Working closely with the regional Caterpillar dealer, Wagner Equipment Co. and the Trimble dealer SITECH Rocky Mountain, OE Construction fully adopted 3D grade control as well as Trimble Connected Community and Trimble Business Center office software. With these solutions, Olson was able to cut the excavation schedule on the project by more than 30 percent. "With such tight margins, anytime we can cut our schedule and move more dirt faster, we have a chance to make money on a project," he said. "That's an ROI worth making."

Happy with the productivity gains enabled by Trimble technology, the OE Construction team fully adopted 3D project design and management for all future work and made more investments in surveying and machine control technology. Those investments would pay off again and again for years to come.

Quality Results

With help from technology, OE Construction has moved from a small player in the local Denver market to an innovative leader in the underground utility and earthwork market segments.

The company has continued to advance its fleet with technology-enabled solutions, most recently with the addition of the Trimble Earthworks Grade Control Platform, Trimble's next generation machine control system with dual GNSS receivers for high accuracy, stability and performance of the blade in 3D.

The 3D Trimble Earthworks solution was particularly valuable on a recently-completed two year, multi-million dollar massive redevelopment and adaptive reuse project of the former University of Colorado Health Sciences Center in Denver. Responsible for all underground utilities and earthwork on the project, OE Construction relied on Caterpillar 349 Excavators with Trimble Earthworks 3D and automatics, and a Volvo EC750 Excavator with Trimble Earthworks 3D indicate.

"The value of Trimble Earthworks on a project such as the Health Sciences Center is better efficiency and measurement of the soil volumes while excavating, loading and ultimately moving the material at the site – volumes that are important to the client, the engineer and OE," said Olson. "With Trimble Earthworks, we have real-time accurate data that is available on a moment's notice to everyone involved in the project."

The Trimble Earthworks-enabled excavators are also helping the company expand services beyond oil and gas and commercial developments to landfills.

Currently, the OE Construction crews are using the Trimble Earthworks-equipped excavators for landfill site excavation on multiple job sites around Colorado and other nearby sites. A typical landfill project requires the movement of from 200,000 to 600,000 cubic yards of soil. The excavators are combined with articulated haul trucks to facilitate the movement of material from one location to another.

"We've seen huge value of the technology in landfill expansions and new builds because the job requires the movement of hundreds of thousands of cubic yards of material," explained Olson. "There is certainly more risk on these jobs. Accuracy is essential, as is delivering a product to engineering specifications. We could do these jobs without technology, but our costs would go way up and we would need more equipment and manpower."

On average, Olson said he sees 10 to 20 percent improvement with technology. When asked what's next for OE Construction, Olson is quick to say, "We'll continue to embrace technology to improve our processes on the job and in the office. We firmly believe that technology is the key to success today and in the future."