

COMPANY  
**Carlson Software**

LOCATION  
**Maysville, Kentucky, USA**

SOFTWARE  
**Takeoff OEM**

SOFTWARE DEVELOPMENT PLATFORM  
**AutoCAD OEM**

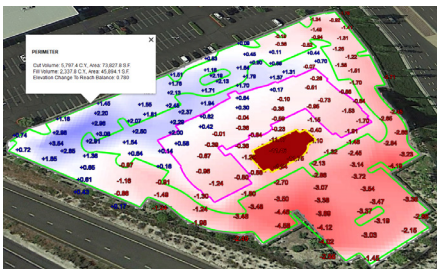
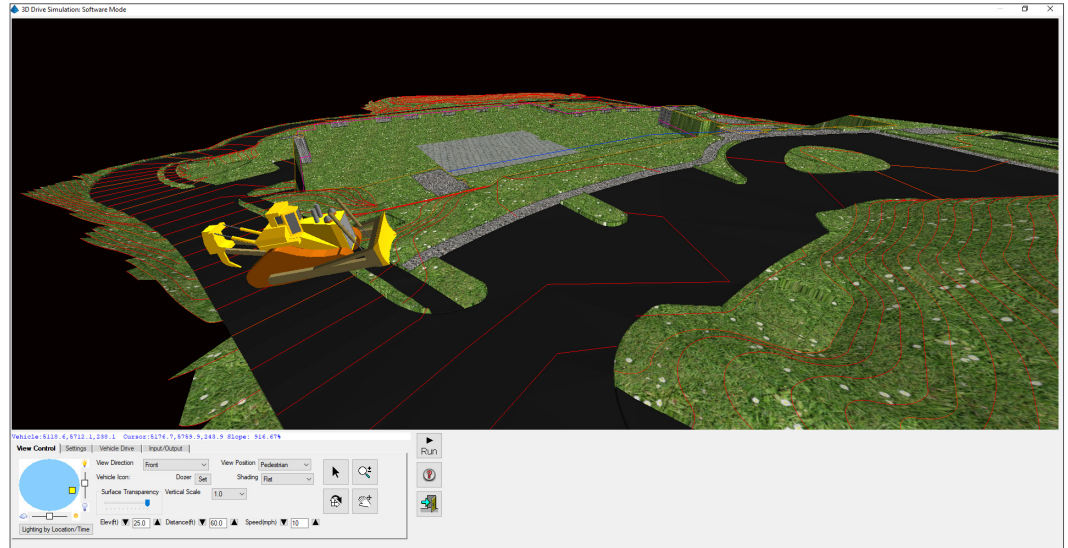
COMPANY WEBSITE  
[www.carlsonsw.com](http://www.carlsonsw.com)

# Tech Soft 3D Partner Success Story: Carlson Software

## Carlson Software Uses AutoCAD OEM to Build an Innovative Product that Eliminates Rework for Site Contractors

“The larger civil engineering firms and the government agencies tend to feel more secure using the AutoCAD engine, versus other CAD offerings. They prefer to take as little risk as possible, and one way of doing that is to use an industry standard like AutoCAD.”

- **Bruce Carlson, President, Carlson Software**



### The Challenge

Founded in 1983, Carlson Software specializes in CAD design software, field data collection, and machine control products for the land surveying, civil engineering, construction, and mining industries worldwide, providing one-source technology solutions from data collection to design to construction.

In its construction portfolio, the company offers Carlson Takeoff, which helps earth-moving professionals calculate site cut and fill volumes, set amounts for topsoil removal and replacement, accurately determine subgrade quantities, and otherwise better estimate large commercial, subdivision, and heavy highway construction projects for bidding purposes. The product is available in two configurations: Takeoff OEM and Takeoff Suite.

“Takeoff OEM is geared towards creating a digital terrain model (DTM) – a 3D

representation of the terrain’s surface – based on the information provided in a 2D drawing supplied by the designer,” explained Bruce Carlson, president of Carlson Software. “These drawings are rarely accompanied by a DTM file during the handoff – so, contractors have to make their own DTM to estimate the job or for use in downstream applications. I’d estimate that happens in close to 90% of the handoffs from designers to contractors.”

This inefficiency – which has persisted into the digital age – creates significant extra work for construction firms of all sizes.

“Contractors are left to fend for themselves,” said Carlson. “They have to extract information from the .pdf, .dwg or .dgn source drawing to try to create the DTM. It’s really a tragedy of inefficiency, and it’s why we developed Takeoff.”

