Vector Geomatics provides a wide range of geomatics, transportation, land development, and municipal services to clients throughout Northern British Columbia. Founded in 2006, the company now has full service Geomatics offices in Fort St. John and Kelowna, British Columbia as well as Calgary, Alberta. Vector Geomatics offers UAV surveying, drafting design services, LiDAR based design services, oil and gas surveying, civil and municipal surveying, and mapping and GIS services.

The Challenge: Manual Processes Equal Slower Progress on Pipeline Projects

Vector Geomatics does considerable drafting work for pipeline projects. Provincial guidelines mandate that areas must be calculated to demonstrate areas of existing clearing, areas of new cut, and the total area. To conform to these rules, the drafting team had to manually calculate and label the new cut and existing areas for each proposed area of the job.

Repetitive tasks are prone to human error. Time spent measuring regions and manually adding up new cuts across a pipeline project could be put to more effective use. In an ideal world, the team wanted AutoCAD Civil 3D to insert labels and automatically add up the area associated with new cuts across a pipeline project.

The Drafting Manager at Vector Geomatics, Ryan O’Connell, was asked to spearhead a project to develop the Civil 3D annotation tools needed to streamline the pipeline project work. “Initially, we thought about developing the software in-house, but we realized that programming isn’t our strength and it made sense to get outside help,” said O’Connell.

The Solution: Custom AutoCAD Civil 3D Tools from IMAGINiT Software Development

One of O’Connell’s colleagues worked with IMAGINiT before and found the firm to be responsive and cost-effective. As a result, O’Connell reached out to them to help with the Civil 3D tools. “I contacted IMAGINiT and explained what we wanted to accomplish and shared drawing examples with the team,” said O’Connell.

Vector Geomatics found it easy to work with IMAGINiT. The software development team picked up industry specific terminology and requirements quickly and created an initial build for consideration. After the statement of work was accepted, the IMAGINiT team began coding. According to O’Connell, “It was definitely an iterative process. We sent builds back and forth, as we refined requirements and identified issues.”

The resulting tools available to the Vector Geomatics team in Civil 3D can:

- Label all proposed areas with accurate dimensions, coordinates, new cut area and existing clearing area
- Create an area report that is calculated by selecting various polygons within a user-defined area. The report calculates the new cut area, existing clearing area, and the total area.
- Provide error checking confirming whether all polygons within the user-defined area have been labeled or not.

“By automating some of our drafting processes, we can get jobs done sooner and reduce human error at the same time. It’s good for our clients and for our company.”

—Ryan O’Connell, Drafting Manager
Vector Geomatics

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CUSTOMER SUCCESS STORY
Vector Geomatics Streamlines Pipeline Projects and Delivers Greater Customer Value with Customized Software for Civil 3D
The Result: Faster Project Turnaround with Fewer Errors

Vector Geomatics is pleased with the way the custom Civil 3D tools transformed the firm’s pipeline projects. “We are always trying to work faster and more efficiently. By automating some of our drafting processes, we can get jobs done sooner and reduce human error at the same time. It’s good for our clients and for our company,” said O’Connell.

The team has already started a list of new software they’d like to develop and hope to leverage IMAGINiT in the next engagement. O’Connell noted, “We highly recommend IMAGINiT. They listened to what we needed, made the process easy, and turned the work around quickly. Everyone at Vector Geomatics has been impressed with the relationship—the company is very fair and a pleasure to deal with.”

About IMAGINiT Technologies

IMAGINiT Technologies, a Rand Worldwide Company, is the world’s largest provider of enterprise solutions to the engineering community, including the building, manufacturing, civil and mapping industries. With over 25 years of experience, and 45 offices throughout North America, we provide the expertise, training and support to help companies realize the full power of design technology, maximize ROI and gain competitive advantage.