COMPANY
Maser Consulting, P.A.

LOCATION
Red Bank, New Jersey, Corporate Headquarters

SOFTWARE
Autodesk® Infrastructure Design Suite Premium
Autodesk® AutoCAD® Civil 3D®
Autodesk® Vault Professional

Opening design data management

Maser Consulting relies on Autodesk Vault for cross-discipline collaboration of its distributed workforce

With Vault, we have the best of both worlds—centralized control of our project documents and the speed of decentralized file storage. In the past, users sometimes had to wait four or five minutes for the files to download. With Vault, that has shrunk to less than 20 seconds.

—**Robert Colantuoni**
Director of Information Technology/
Principal Associate
Maser Consulting, P.A.

Neptune Midtown Community Elementary School, Neptune, Monmouth County, NJ
Image courtesy of Maser Consulting.

The firm

Maser Consulting P.A. is a full-service civil engineering consulting firm that specializes in all aspects of infrastructure design—from landscape design and civil engineering to environmental engineering and brownfield restoration. In 2011, the company standardized on the Autodesk® Infrastructure Design Suite Premium, including AutoCAD® Civil 3D® software, for its infrastructure design. To help maximize the benefits of the tools in the Infrastructure Design Suite, Maser Consulting simultaneously adopted Autodesk® Vault Professional data management software.

The challenge

Before adopting the Vault, Maser had extensive experience with various data management solutions. "Since data management always existed, and has been engrained in the culture, the option to not use a document management solution was never even on the table," says Joseph Gaffney – Corporate CADD Manager.

"We have 22 disciplines spread across 16 offices in the United States," says Joseph Gaffney, Corporate CADD Manager "Most of our projects

require close collaboration between these disciplines and offices. Our data management system must accommodate transparent, controlled sharing of data and files—without wasting time waiting for information to transfer from office to office." The system also has to provide centralized storage. "We used to have a decentralized document management system, so sharing work between the offices was cumbersome at best," says Robert Colantuoni, Director of Information Technology/Principal Associate. "We had to move files out of the system, send them to the people in other offices, and then move them back into the system when they were done. This manual process sometimes resulted in loss of data tracking and consistency."

The solution

Maser Consulting now uses Vault Professional to support project collaboration and file sharing of all types of project data between all its offices. The company's distributed Vault implementation supports the replication of files from a central storage server to the other offices, where users can quickly access project information without having to spend time downloading large files

A AUTODESK®

Reduce file access time from four or five minutes down to 20 seconds

across a Wide Area Network (WAN). This replication is automatically managed and controlled by the Vault software. "With Vault, we have the best of both worlds—centralized control of our project documents and the speed of decentralized file storage," says Robert. "In the past, users sometimes had to wait four or five minutes for the files to download. With Vault, that has shrunk to less than 20 seconds."

Maser Consulting has approximately 130 people using Vault every day, in different offices on different projects at different stages. These users access and save all kinds of project data—from survey data and earthworks, to profiles and alignments, to PDFs and office documents. "The centralized Vault storage helps prevent the possibility of users working on the same files at the same time," says Joseph. "Moreover, it helps prevent the release of a wrong deliverable to a client."

"The ability of the Vault to manage the Civil 3D data utilizing Vault Data References is also a tremendous advantage over using Civil 3d's clumsy Data Shortcuts. The VDR's save users massive hours throughout the life of a project, along with the added benefit of automatically backing up those Civil3D data objects as well," says Joseph.

Simple steps

"The initial deployment of the software was challenging for us," admits Robert, "Users were bogged down trying to open and save files, and

move them through a project workflow." Initially, the company had all its users trying to open files from the central Vault across a WAN. In addition, after working with all the different discipline groups to understand their project workflows and lifecycles—capturing who could access what, how documents were signed off, and what underlying data was needed to support the next step in the design process—the company tried to customize the Vault software to match. But this level of detail was too complex for its data management needs. "Vault is a very customizable solution, but without the right expertize you can overdo it," says Joseph.

After struggling with the new software, Maser Consulting began fine-tuning its implementation and (with the help of Autodesk Consulting and their best-practice expertise) developed a configuration that was optimized for the company's environment and workflows. An obvious change was a distributed Vault implementation. In addition, the company completely reworked its lifecycle definitions and streamlined access to project files. "For example, one discipline used 17 steps to move files from work-in-progress to submitted," says Joseph. "We reduced that to just 2 steps."

The result

Currently, Maser Consulting has been using Vault for over two years on well over 500 different projects. "Our users love the new system," says Robert. "Now, our project information is easily accessible and up-to-date.

> Regardless of physical location, when a user works on a file, no one else can inadvertently modify it. We see this one of the biggest returns on our investment— saving us thousands of man-hours over the course of a year. We have complete confidence in the consistency and reliability of the project data stored in Vault.
>
> —**Joseph Gaffney**
> Corporate CADD Manager
> Maser Consulting, P.A.

"Regardless of physical location, when a user works on a file, no one else can inadvertently modify it. We see this one of the biggest returns on our investment—saving us thousands of man-hours over the course of a year," says Joseph. "We have complete confidence in the consistency and reliability of the project data stored in Vault."

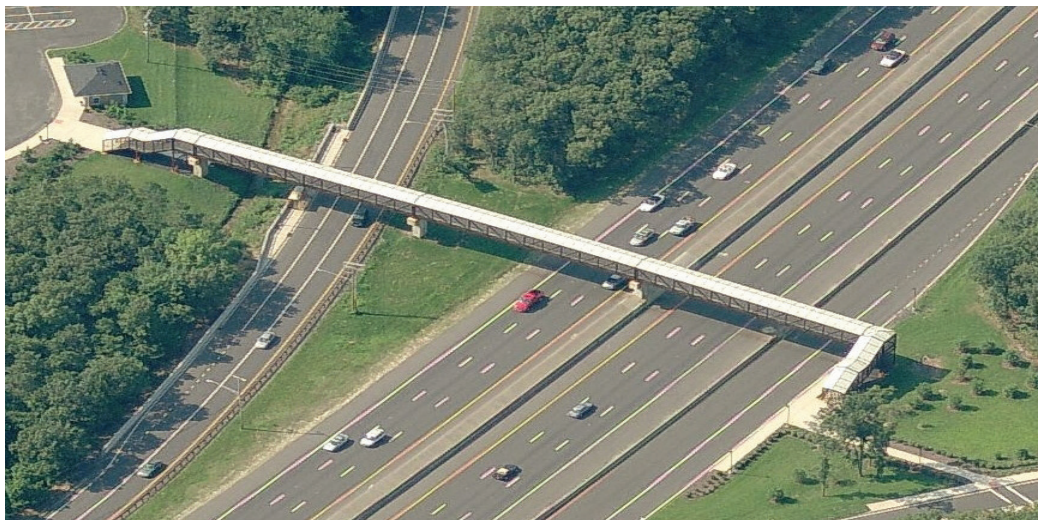For more information, visit www.autodesk.com/vault.

Image left: Pedestrian Bridge Interchange 91, Brick-Ocean, NJ. Image right: Children's Specialized Hospital, New Brunswick, Middlesex County, NJ
Image courtesy of Maser Consulting.

AUTODESK.