

AcceLERATING TECHNOLOGY

Jay Capristo



PRODUCTIVITY PRODUCTS AND SERVICES, INC.

7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 ● (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com

New Technologies

- **AutoCAD Civil 3D**

- 3D Software for Civil Engineers

- **Bentley – Bridge Information Modeling (BrIM)**

- 3D Software for Bridge Building

- **SiteLINK 3D Software**

- Advanced Communications System for 3D Grade Control Products

- **Tierra**

- Remote Asset Management

- **RTP-300**

- Portable and Lightweight Real Time Profiler

- **Magnet**

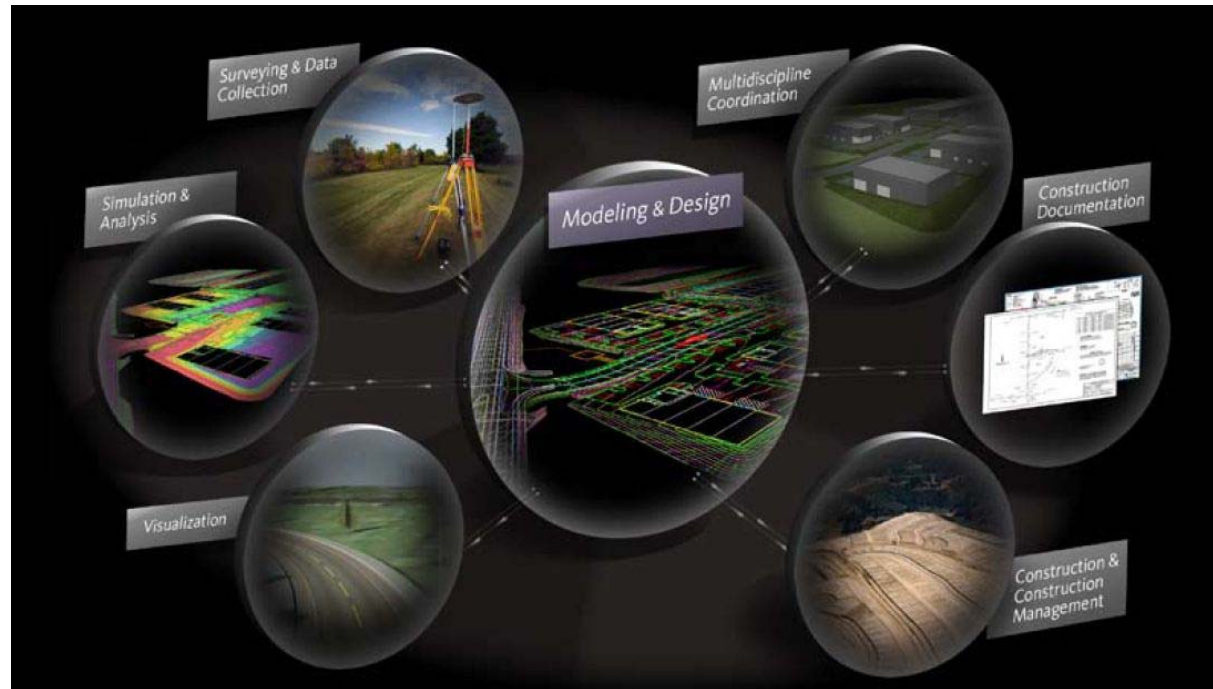
- Cloud Based Software for Real-Time Collaboration

AutoCAD[®]

Civil 3D[®]



AutoCAD Civil 3D



- Is a Powerful Building Information Modeling Solution for Civil Engineering
- Uses an integrated process built on a coordinated, consistent, digital model for design, analysis, visualization, documentation and construction
- Offers a better way of designing, analyzing, and documenting civil engineering projects
- Delivers more consistent construction documentation that remains synchronized even as changes are made
- Explore more what-if scenarios earlier in the design process





Advantages

- Safer, better engineered bridges
- Excellence in data reuse across the lifecycle
- Faster total process-planning to rehabilitation
- Concurrent workflows for easier meeting of tight schedules
- More-for-the-money design and construction
- Reduce risk with fewer claims and litigation
- Optimize processes to save time and money

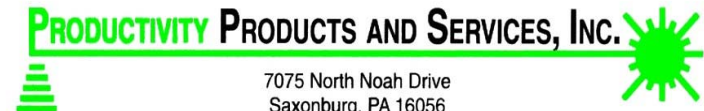
The bridge information model can be built-to-purpose for a broad set of processes undertaken by the owner, the public, the engineering consultants and contractors, even financiers and operators.





7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 • (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com





7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 • (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com

SiteLink 3D Basic

SiteLink 3D Advanced



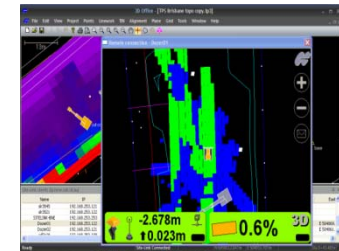
File Transfer



**Visibility/
Tracking**



Reporting



**As-built
Mapping**



**Remote Access
& Support**



**Text
Messaging**



Alarms

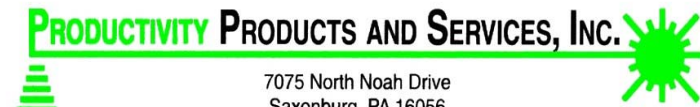


**RTK
Corrections**

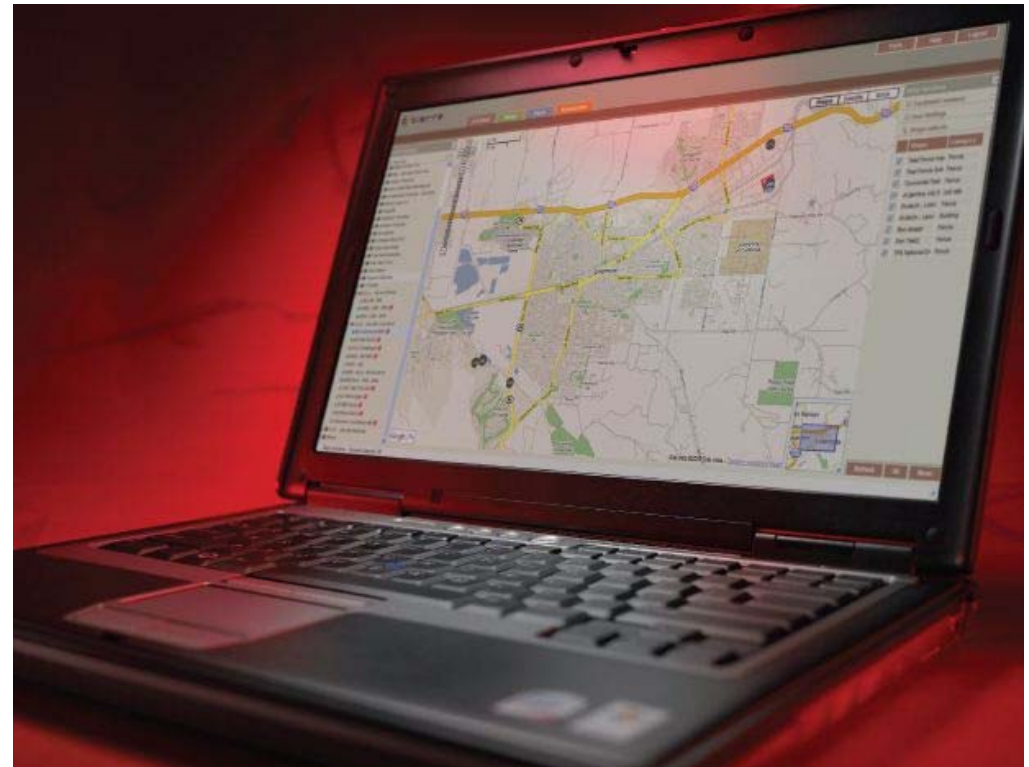


7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 • (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com





7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 • (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com

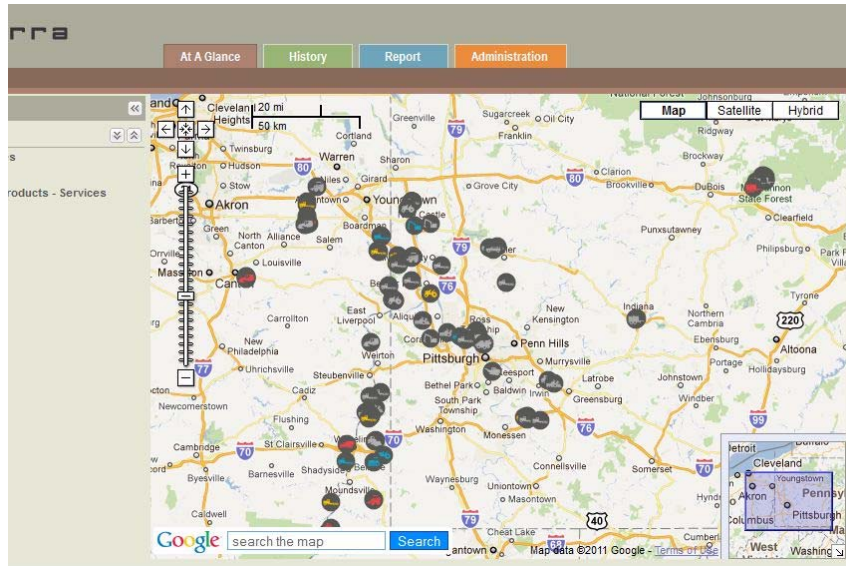


Benefits of the Tierra Solution

- Security
- Maintenance
- Utilization
- Job Costing
- Productivity

The Tierra Solution has 3 components.

- Tierra Hardware – communication device
- The Tierra Subscription Plan
- Tierra Web – internet based user interface



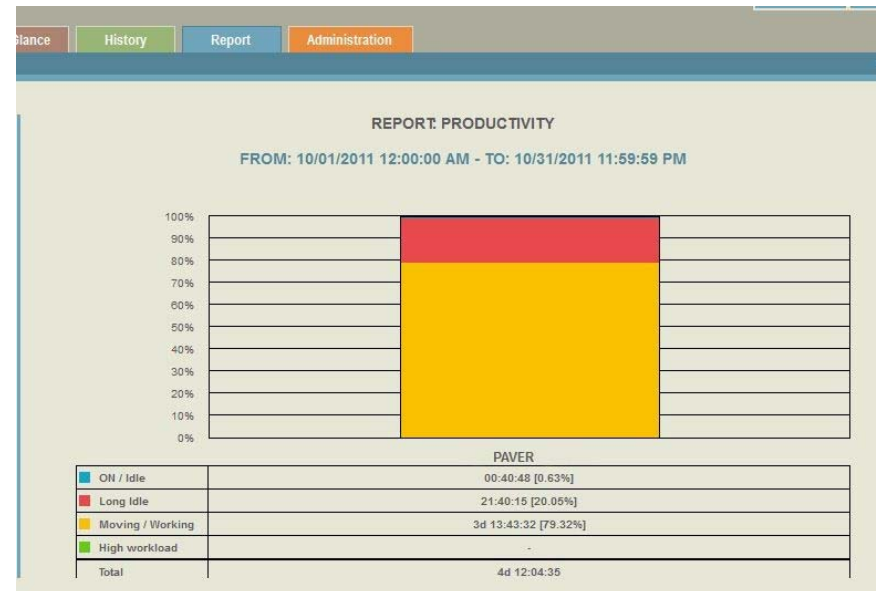
Reports

Tierra™ goes well beyond gathering large amounts of raw machine data. Tierra™ sifts through all of that data and provides immediate and useful reports. Our web reports may be exported to Excel or in PDF format.

- Activity
- Alarms
- CAN bus data
- Engine Hours
- Engine On/Off
- Equipment Utilization
- Filters
- Fuel Consumption
- Input/Output
- Job Costing
- Maintenance
- Maintenance Notes & History
- Overspeed
- Productivity
- User Access
- Work vs. Idle

Some of Tierra's Features include:

- Intuitive, easy to use web-based application
- User defined home page & settings
- User Privilege & Profile management
- SMS & email alerts notification
- New release notification
- Help screens and tutorials
- Multi-language support
- Data protected in our secure network & archived to preserve access to historical records

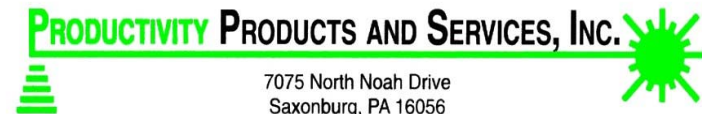




PRODUCTIVITY PRODUCTS AND SERVICES, INC. 

7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 • (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com





7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 • (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com



Features:

- Real Time Mapping of Road Surface
- High Speed Surface Profiling
- Fast and Easy to Install
- Superior Accuracy and Repeatability
- Portable
- Creates High Resolution Surface Profile



RTP-300 (Real Time Profiler) is a High Speed Profiling System

- Measures and calculates road smoothness.
- Produces industry standard smoothness reports (IRI, PRI etc.).
- Provides on screen and printable smoothness index reports.
- Generates defect reports for both bumps and dips.

RTP-300 is a High Speed Surveying System

- Safe road survey at highway speeds.
- Accurate survey data at 1" intervals.
- GPS RTK position, export point data into any design system.
- Exports Lat / Lon / Ht for import into project localization.

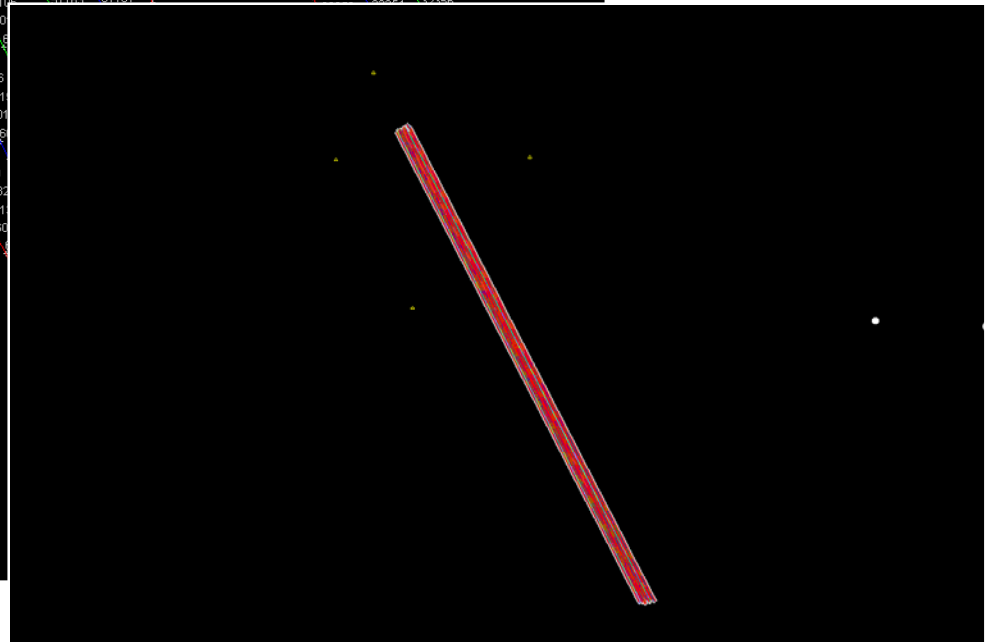
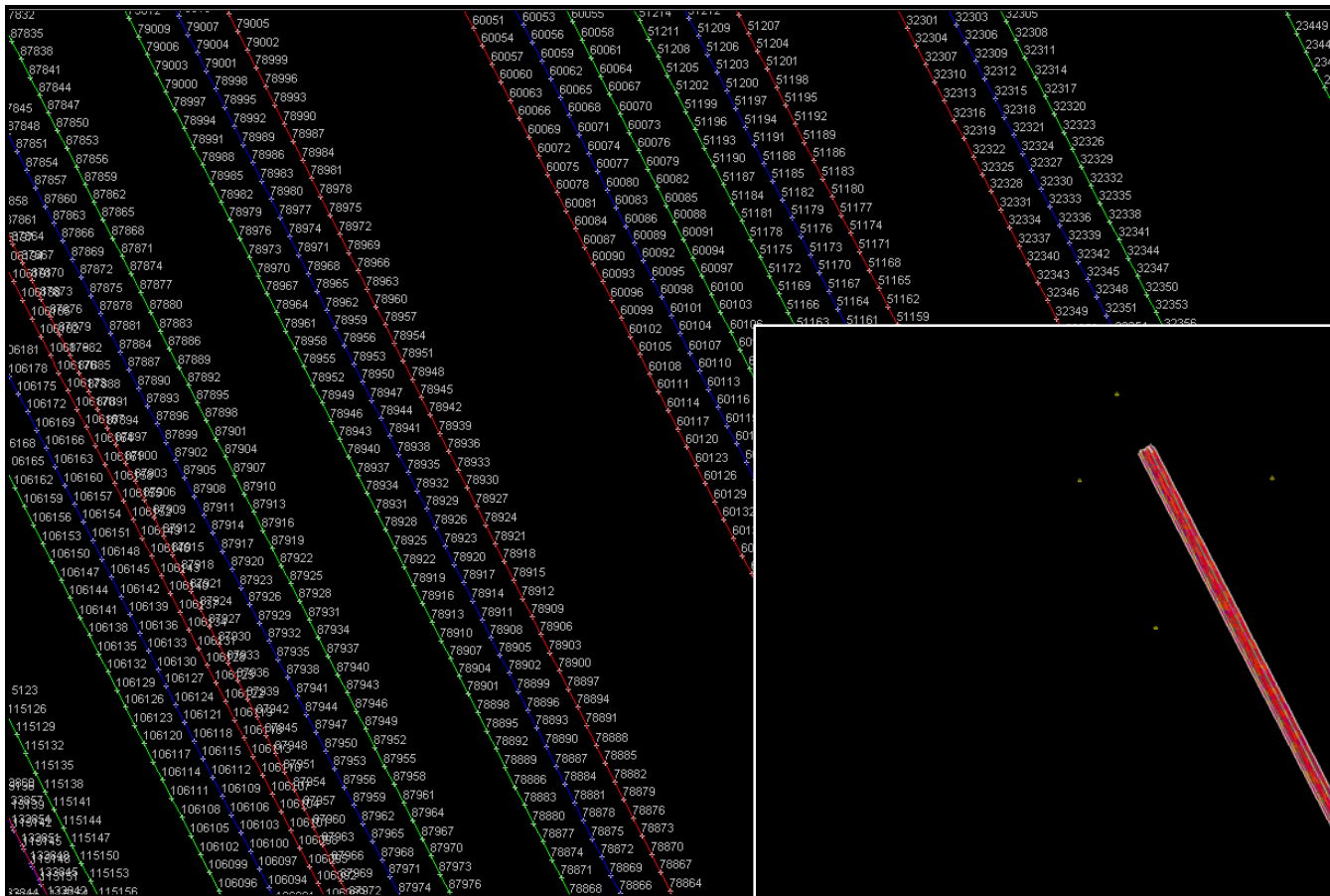


TOPCON



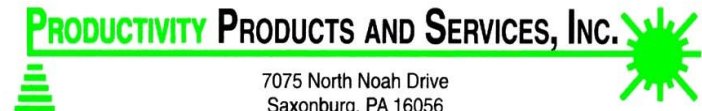
7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 • (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com

Example GPS Data



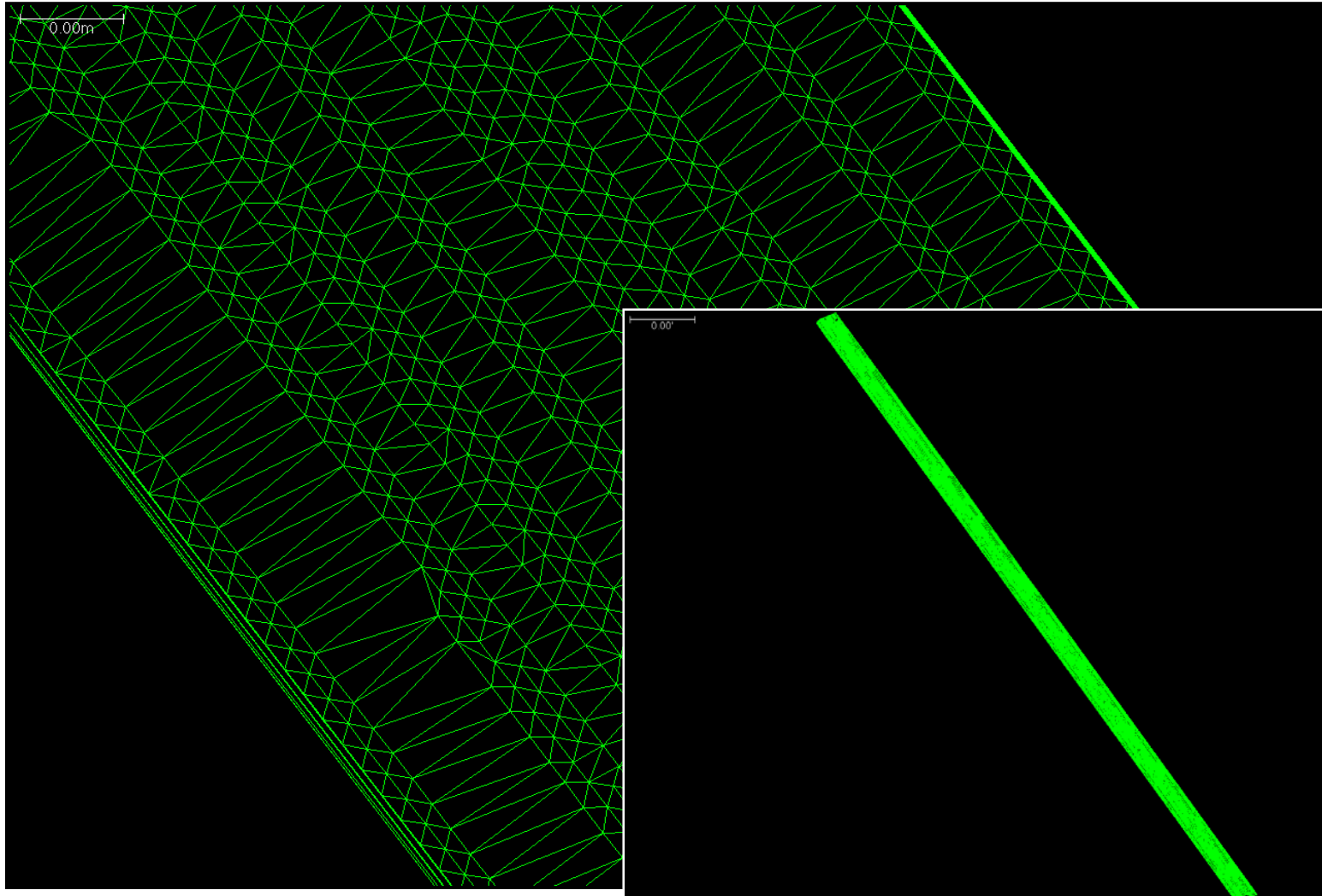


TOPCON



7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 • (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com

Example GPS Data

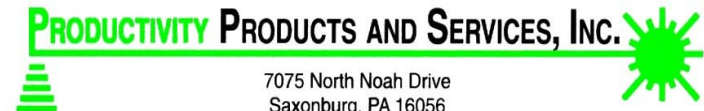




7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 • (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com

Google Maps Overlay





7075 North Noah Drive
 Saxonburg, PA 16056
 (724) 352-5400 • (800) 443-6780
 Fax (724) 352-5450
 www.ppsincweb.com



Survey Costs:

Survey Costs: = **\$4,600**

Road Closure Estimates:

Crash Trucks: \$100 / hour x 12 = \$1,200

Cone Trucks: \$100 / hour x 12 = \$1,200

Police Escorts: \$100 / hour x 12 = \$1,200

Traffic Engineer = \$5,000

= **\$8,600**

Total: = **\$13,200**

2 miles of road = \$26,400

5 miles of road = \$66,000

10 miles of road = \$132,000

RTP-300 Costs:

RTP-300 Costs: = **\$1,240**

Road Closure Estimates:

Crash Trucks: \$100 / hour x 12 = \$0

Cone Trucks: \$100 / hour x 12 = \$0

Police Escorts: \$100 / hour x 12 = \$0

Traffic Engineer = \$0

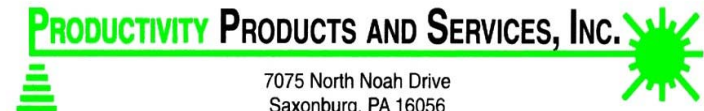
= **\$0**

Total: = **\$1,240**

2 miles of road = \$2,480

5 miles of road = \$6,200

10 miles of road = \$12,400



7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 • (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com

MAGNET

Cloud Based Software



7075 North Noah Drive
Saxonburg, PA 16056
(724) 352-5400 • (800) 443-6780
Fax (724) 352-5450
www.ppsincweb.com

A screenshot of the MAGNET web application interface. The top right corner features a login section with fields for "Username" and "Password" and a "Members login" button. The main content area displays a 3D rendering of a control room with multiple monitors showing maps and data. To the right of this rendering, the text reads "Welcome to..." followed by "MAGNET™" in large, bold letters, and "All your precise positioning applications, support, services, and data in one place." Below this is a horizontal row of eight icons, each with a label underneath: "Storage" (blue folder), "Assets" (yellow surveying instrument), "Real-Time" (blue figure with a clock), "Networks" (purple globe with nodes), "Projects" (blue globe with a surveying instrument), "Exchange" (white document with green and orange arrows), "Chat" (blue and green speech bubbles), and "News" (blue megaphone).