

# SUBSURFACE UTILITY SERVICES

# Site wise

## Presentation for Equipment



# Introductions

Site  
wise

Mark Hargrave

Engineering Locate Manager

Over 15 years of experience managing the locating and protection of many facility owners infrastructure

Manages the process from first call for services all the way to the final delivery of an updated CAD map to the NREL Team

# Introductions

- Sean Brown
  - CAD Department Manager
  - Over 15 years of experience with AutoCAD and mapping technologies
  - Constantly looking for latest equipment and technologies on the market to provide a better service

# NREL Future with SiteWise

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- Working toward a bright future with Safety and Zero Tolerance for utility damage as the main driving force

# Equipment

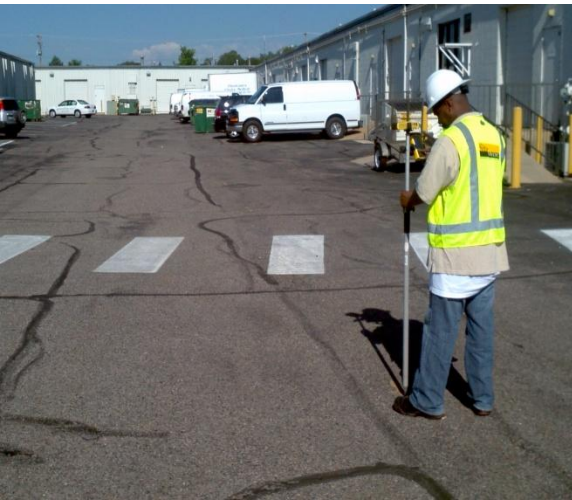
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- **Trimble GeoXT6000**
- **Terrasync 5.1**
- **Trimble GPS Pathfinder Office**
- **AutoCAD Civil 3D**
- **AutoCAD WS**

# Trimble GeoXT6000

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- Survey Data Collection
- Very Useful and extremely accurate
- Ability to self-level and auto correct to compensate for movement
- Multiple satellite pick up including signals from FAA satellites and Russian Satellites
- Internal barometer for atmospheric pressure



# Trimble GeoXT6000 continued...

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- Bluetooth wireless technology
- Ability to attach photos
- Submeter accuracy to obtain x, y, and z coordinates
- Trimble Floodlight Satellite Shadow Reduction Technology
  - Obstructions from buildings, trees, and other landscape features
- Elevations of exposed new pipes, existing utilities, marker balls, pothole locations, and boundaries



# Utility Locating Services

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# Utility Locating Services

Site  
wise



# Utility Locating Services

Site  
wise



# Terrasync 5.1

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- Software that is used on the Field Unit to collect data
- Main use is for collecting and updating existing GIS Data
- Great for technicians navigating in the field



# Trimble GPS Pathfinder Office

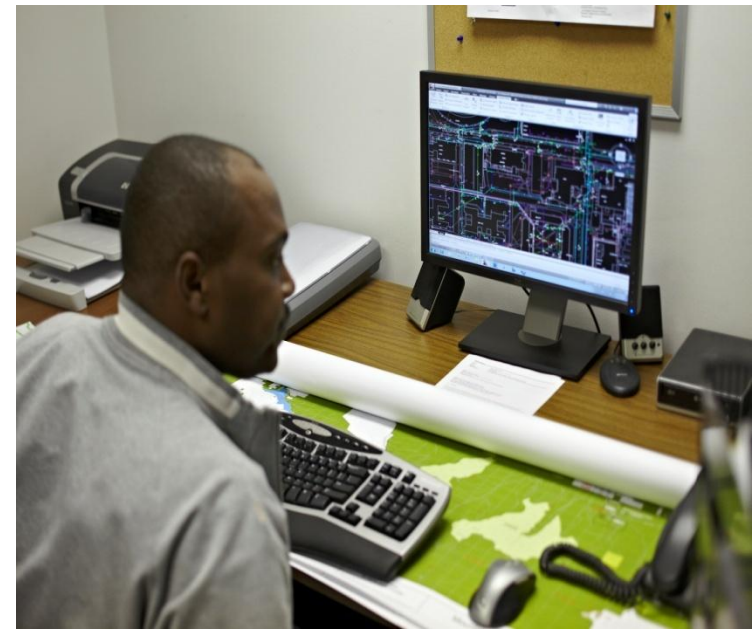
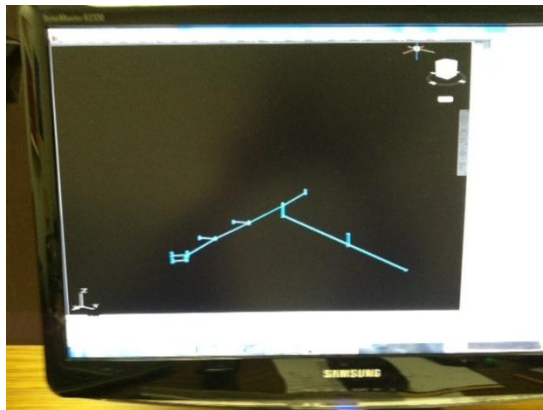
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- All information from field imported into this system for office use
- Post Processing of Raw Data
- Differential Corrections to improve quality of GNSS
- Used to import and export into a variety of GIS or CAD formats
- Data Dictionary editor for consistency

# AutoCAD Civil 3D

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- Current system we use to Import our data to
- Detailed topographic maps
- Create and Prepare plan and profile of existing utilities
- More clear depiction of data
- Ability to upload drawings to AutoCAD work station instantaneously or a secured FTP site



# AutoCAD WS

Site wise

AutoCADWS

Autodesk

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## AutoCAD<sup>®</sup> WS

Mobile Application

The AutoCAD<sup>®</sup> WS web and mobile app lets you view, edit, and share DWG™ drawings through a web browser or mobile device. Choose your mobile device platform to continue:



**iPhone & iPad App**  
Available on the App Store



**Android App**  
Available on the Android Market

**Spread the Word** Tell your friends about AutoCAD WS  

#### About AutoCAD WS

The AutoCAD<sup>®</sup> WS web and mobile app lets you view, edit, and share DWG™ drawings through a web browser or mobile device. Store AutoCAD drawings and project files in an easy-to-access online workspace. Share and collaborate easily with others.

#### Blog

**When do you use AutoCAD WS? - Post**  
July 28, 2011

**AutoCAD WS and 123D Integration**  
July 14, 2011

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@FlorinBorars - glad you like #AutoCADWS! More features coming soon - check out this sneak peak video:  
<http://autode.sk/qz2wLJ>  
about 2 hours 31 minutes ago

@Timbo\_UK - hmmm...that shouldn't happen. Can you send the files and what you were doing to  
[feedback@autocadws.com](mailto:feedback@autocadws.com)

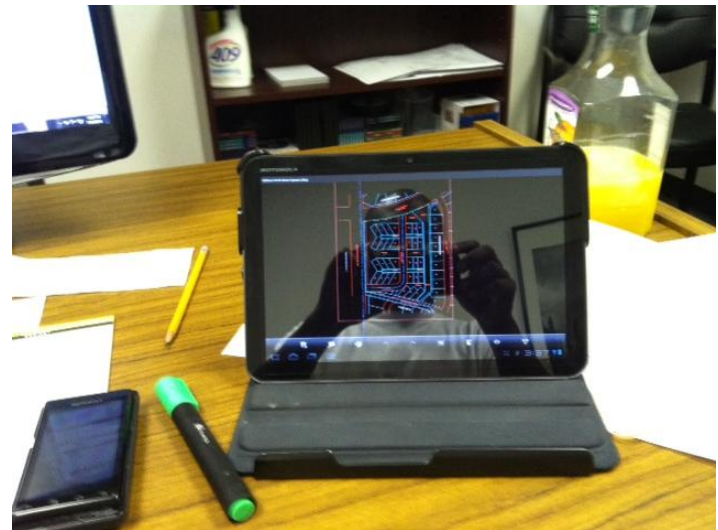
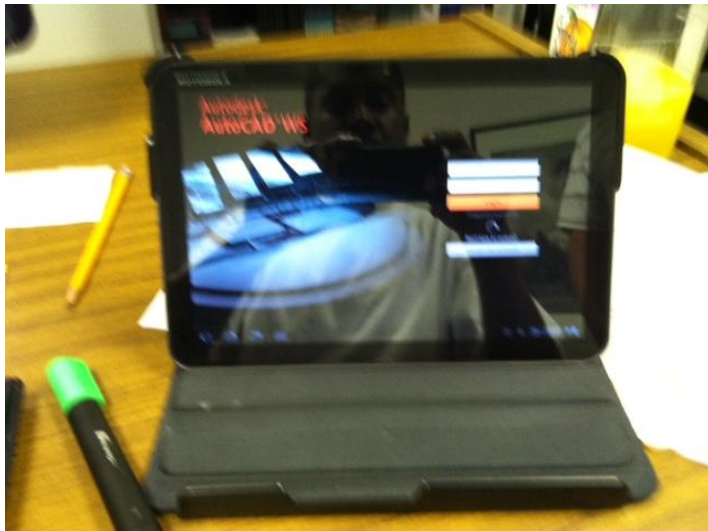
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# Questions and Discussion

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