The “New You” Inventory It, Map It and Manage It

SUE, GIS and EAM Combine into a Powerful Result

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Issues

- Emergency Preparedness
- Emergency Response
- Security
- Facilities Maintenance
- Regulatory Compliance
Understanding Your Needs

Master Planning

Asset Inventory

Prioritize Projects/Timing

CIP and Cash Flow Analysis

Level of Service Goals

Integrated Asset Management Plan

Information Technology

Planning

Operations & Maintenance

Administration

Engineering

Finance

Condition Assessment
The Problem

Unreliable Asset Information
Inventory It
Subsurface Utility Engineering

A sub-discipline of Civil Engineering that combines technologies and design methodologies to deal with the problems of underground utilities on civil, environmental, and other related construction projects.
What is SUE?

Designation

Using geophysical prospecting techniques to determine the existence and horizontal position of underground utilities.
What is SUE?

Locating

Using non-destructive digging equipment, such as vacuum excavation, at critical points along a subsurface utility’s path to determine the precise horizontal and vertical position of the underground utility line, to plan for proper protection, eliminate potential damage to underground utilities during construction and avoid unnecessary relocations.
What is SUE?

Data Management

Surveying utility information obtained by designating and locating and entering it into the geographic information system (GIS), which allows designers to examine project options and plan ahead to eliminate utility conflicts.
Why Use SUE?

- Accurate Underground Inventory
- Make Informed Design Decisions
- Improved Maintenance and Operations
- Safety and Security
- Avoid Costly Conflicts and Relocations
- Cost-Effective
Map It
What is GIS?

**Geographic Information Systems**
Maps + Databases = Digital Model of the Earth

- Real Estate
- Streets
- Railways
- Utility Lines
- Waterways
- Buildings
- Wharfs
- *etc...*
SUE / GIS Services

Contractor
Client
Third Party (Surveyor, Designer)
Benefits

Areas to be investigated and mapped determined according to priorities

“Paint Marks” / Test Holes by SUE Crew
Field Data collected by Survey Crew (GIS-compatible format)

Field Data compiled and “Field Sketch” generated using GPS, laptop, GIS
Data processed and QA/QC’d by Surveyor

SUE Crew field data and Survey data reconciled

CADD Utility Maps (.dgn/.dwg) generated, QA/QC’d, submitted to client

3D Conflict Analysis rendering (Requires proposed facilities data)
Utility data populates Client’s EAM and GIS
Utility data populates “Utility Relocation Tracker”

Utility Maps and Conflict Analysis incorporated into Design Process

Current data readily available to design team

Effective Asset Management (Planning, Maintenance, Cap. Improvements, GASB 34 Compliance)

Safer, Lower Cost, On-time Construction

New field data collected using GPS, laptops (ongoing)

Client’s EAM and GIS
Manage It
Step by Step Process to Minimize Risks and Costs

Asset Management Process

1. Strategic Vision
2. Asset Inventory
3. Asset Assessments
4. Asset Valuations
5. O&M/ CIP Integration
6. Strategic Decision Analysis
7. Implementation

- Existing Asset Assessment
- Future Facilities Planning

Risks/ Costs
Benefits

- Improve Emergency Response Time
- Better Security
- Avoid Unexpected Infrastructure Failures
- Satisfy Regulations
- Produce Accurate and Timely CIPs and Budgets
- Integrate Departments
- Improved Allocation of Funds and Resources
- Eliminate Redundancy
- **Save Money**
Keys to Your Success

- Inventory It
- Map It
- Manage It
Question and Answer Session
Thank You