

GIS SOLUTIONS FOR ENCROACHMENTS

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GIS?

- Software
- Functionalities
- Potential
- Development

What GIS Needs To Succeed

- Inputs (Data)
- Communication
- Collaboration

Companies

- Internal Standards
- Willingness to share

Organizations

- Promoting
- Learning

Government

- Regulations
- Enforcement

The Basics

- Standards
 - Required information
 - Feature Class Setup
 - Specs
 - Processes
- Planning
- Updating Databases
- Lessons Learned
- Goal vs Reality

Viewer

The screenshot displays a GIS application interface. At the top left, there is a search bar labeled 'Esri World Geocoder' and several navigation icons. The main area is a map of West Chicago, Illinois, overlaid with a grid of colored cells (red, green, blue). The grid covers a central portion of the city, including areas like Wheaton, Glen Ellyn, and parts of West Chicago. The map shows streets, parks, and other geographical features. On the right side, there is a 'Layer List' panel with a title bar containing an up arrow and a close 'X' icon. The panel lists various layers under the heading 'Operational Layers'. Each layer has a checkbox and a dropdown arrow. The layers listed are: Construction (checked), Construction (checked), Bare Steel (checked), Cast Iron (checked), Trailer Park (unchecked), Business Surveys (checked), Atmospheric Surveys (checked), Area Surveys (checked), Overdue Surveys (checked), Over Compliance Date Surveys (checked), All Surveys (unchecked), Bar Hole (checked), Dimensions (checked), Gas Leak (checked), Identified Issue (checked), GasDistributionNetwork (unchecked), LeakSurveyType (checked), and LeakSurveyReports (unchecked).

Layer Name	Checked
Construction	Yes
Construction	Yes
Bare Steel	Yes
Cast Iron	Yes
Trailer Park	No
Business Surveys	Yes
Atmospheric Surveys	Yes
Area Surveys	Yes
Overdue Surveys	Yes
Over Compliance Date Surveys	Yes
All Surveys	No
Bar Hole	Yes
Dimensions	Yes
Gas Leak	Yes
Identified Issue	Yes
GasDistributionNetwork	No
LeakSurveyType	Yes
LeakSurveyReports	No

Solutions

- Preventive Measures
 - Why do we have encroachments?
 - Establishing Guidelines
 - Monitoring Results
 - Recording Historical Data

Solutions

- Real Time Data
 - Live Reporting
 - From the field
 - Active Monitoring
 - From the system

Solutions

- **Advanced Satellite Technology**
 - **Multispectral/Hyperspectral Images**
 - Proprietary Algorithms
 - Predetermined Monitoring Schedule
 - Accurate Reporting
 - Automated Alerts

Solutions

- Big Data Analytics
 - Predictive Analysis
 - Future Planning
 - Improved Best Practices

Solutions

- Centralized Server
 - Automatic Updates
 - Advanced Queries
 - Customized Metrics
 - Multi-department

Return on Investment?

Questions?

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