

Professional Land Surveyors of Ohio

**2009
ANNUAL CONFERENCE**

GIS Activities and Initiatives In the State of Ohio



Professional Land Surveyors of Ohio

2009 ANNUAL CONFERENCE

Surveyor's Use of Geographic Information Systems

***Dean Ringle, P.E., P.S.
Franklin County Engineer***

OGRIP GIS Activities and Initiatives

***Stu Davis & Jeff Smith
Ohio Geographically Referenced Information Program***

ODOT GIS Data and Use

***Dave Blackstone
Ohio Department of Transportation***

OSIP Specification, Equipment and Technology

***Bob Brinkman, CP, PLS, Project Director
Woolpert, Inc***

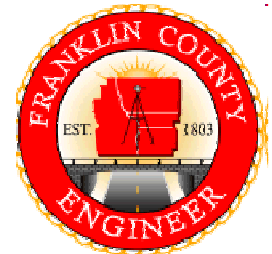


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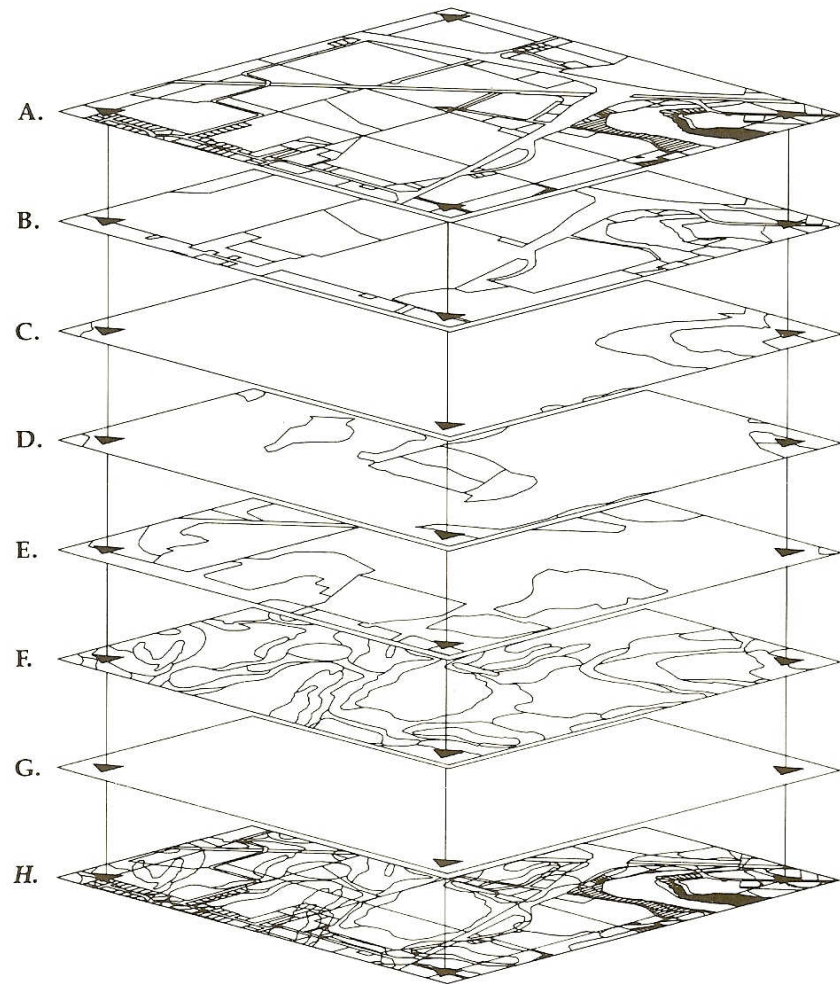
Surveyor's Use of Geographic Information Systems

What Information is Available?

What Accuracy?

Can it meet your need?

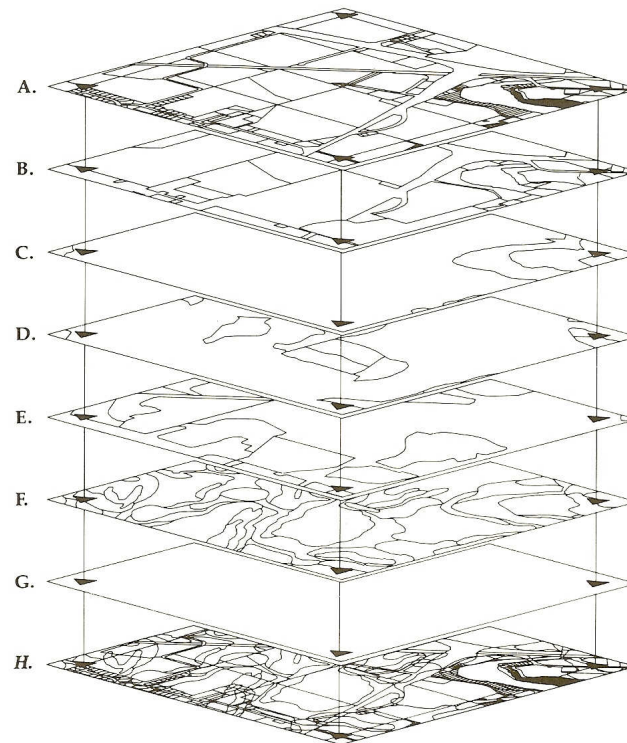




**Concept for a
Multipurpose Land Information System**

Survey Control

(Horizontal & Vertical Control, PLSS Corners)

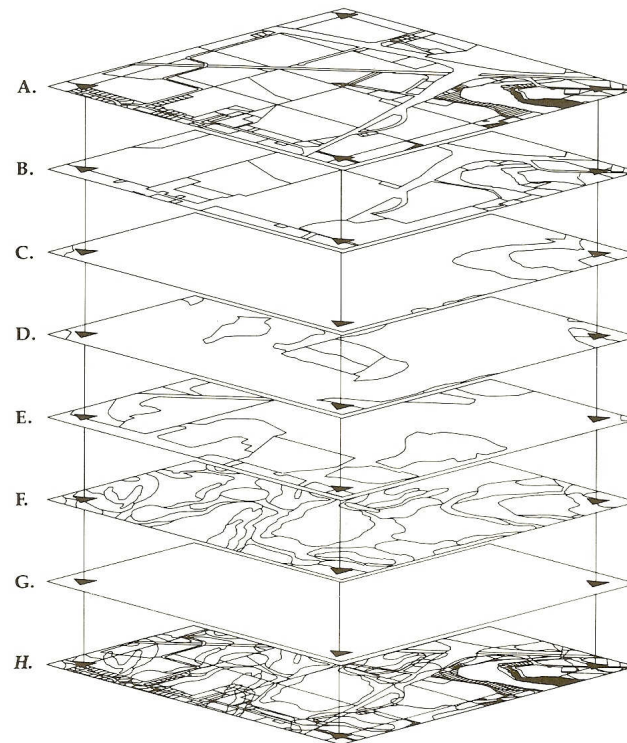


Survey Control

**Concept for a
Multipurpose Land Information System**

Topography

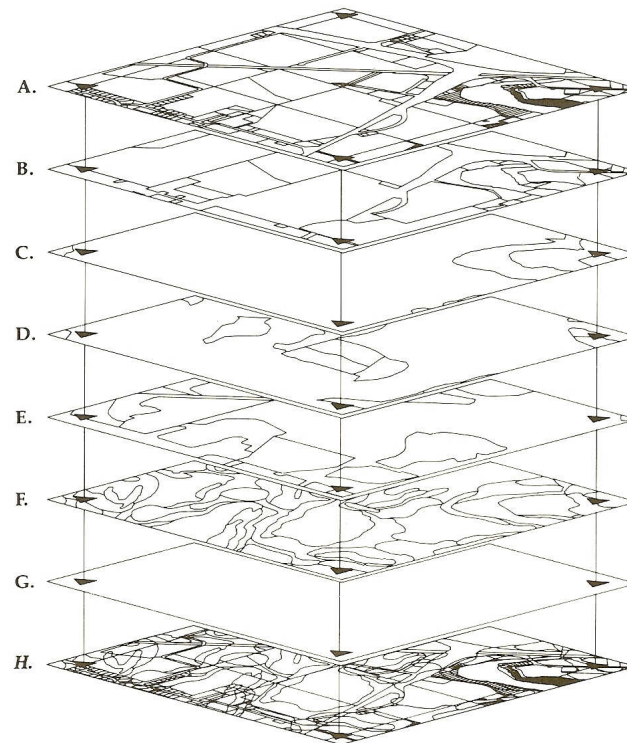
(Land Features, buildings, pavement, driveways, etc)



Topography

**Concept for a
Multipurpose Land Information System**

Contours

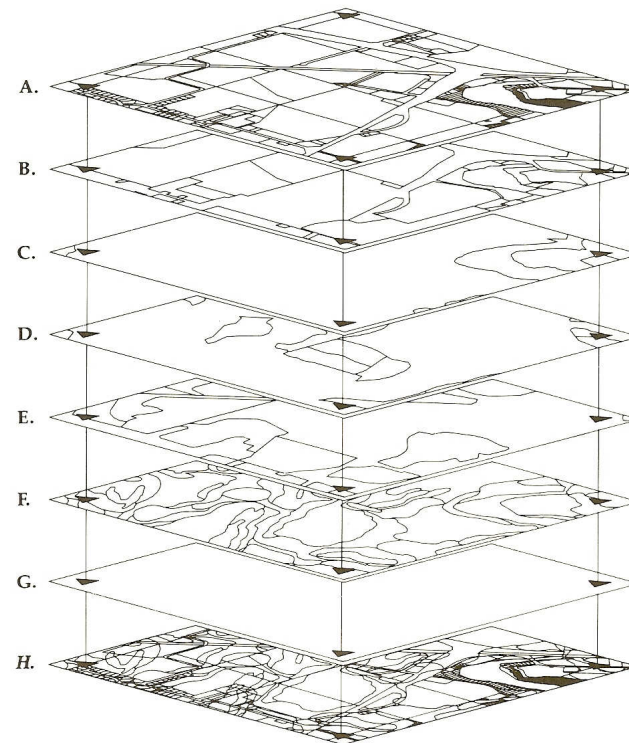


Contours

**Concept for a
Multipurpose Land Information System**

Soils

Soils

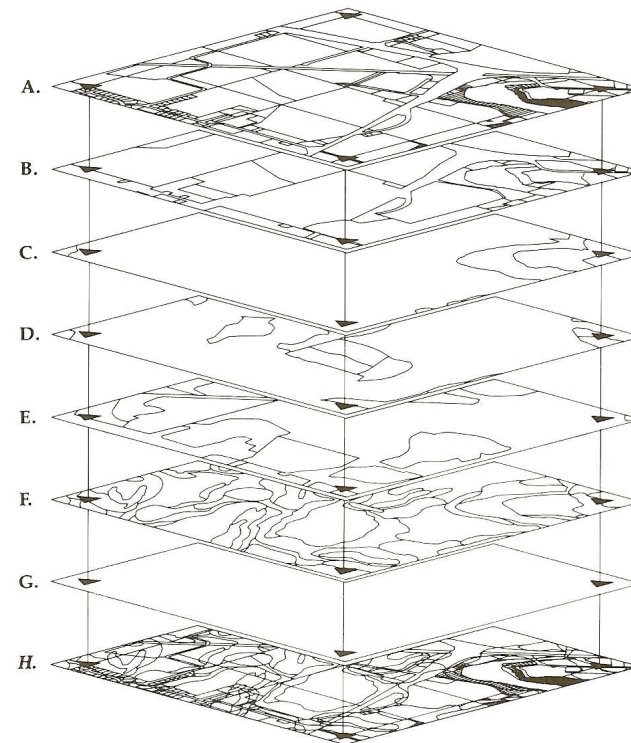


**Concept for a
Multipurpose Land Information System**

Drainage

(Waterways, Floodplains, Floodways, Wetlands)

Drainage

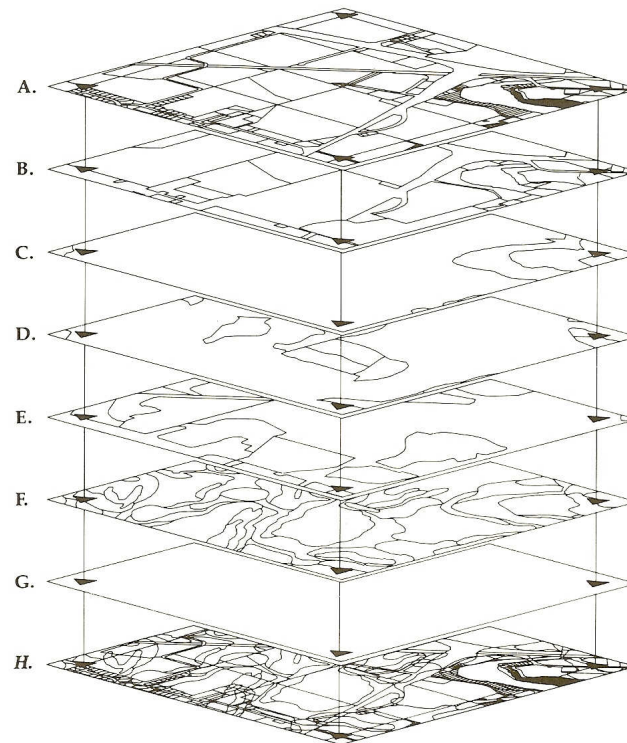


**Concept for a
Multipurpose Land Information System**

Zoning Overlays

(Zoning, Taxing Districts, School Districts, Annexations)

Zoning

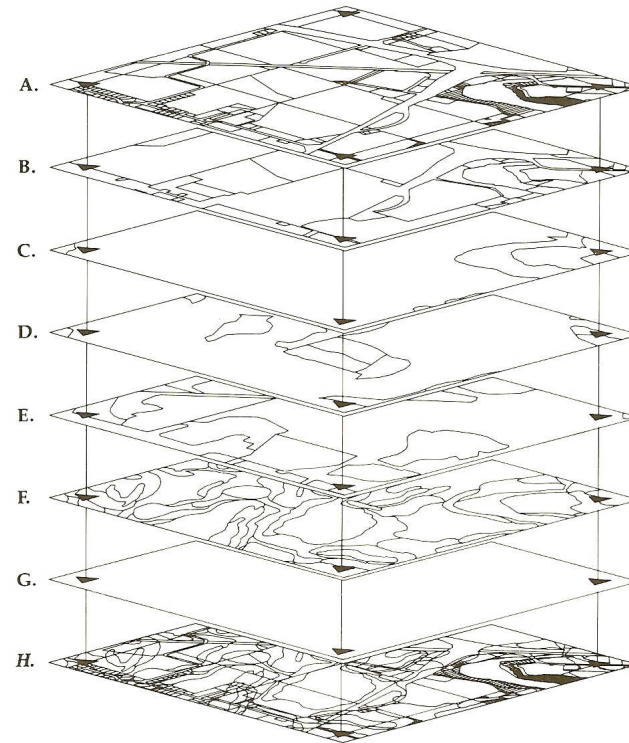


**Concept for a
Multipurpose Land Information System**

Parcel Information

(Property Lines, Road Centerlines, Easements, Rights-of-Ways)

Parcels

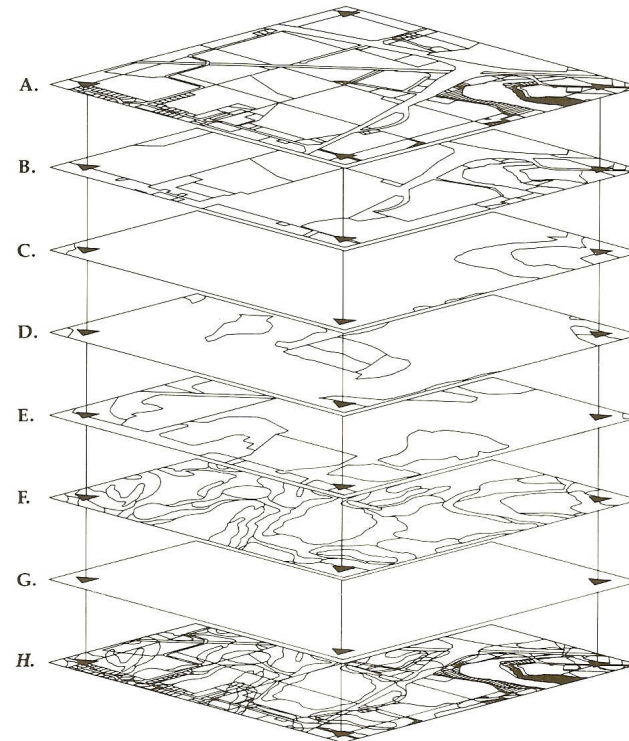


**Concept for a
Multipurpose Land Information System**

Composite Overlay

(Combination of Layers)

Parcels
Zoning
Drainage
Soils
Contours
Topography
Survey Control
Composite Overlay

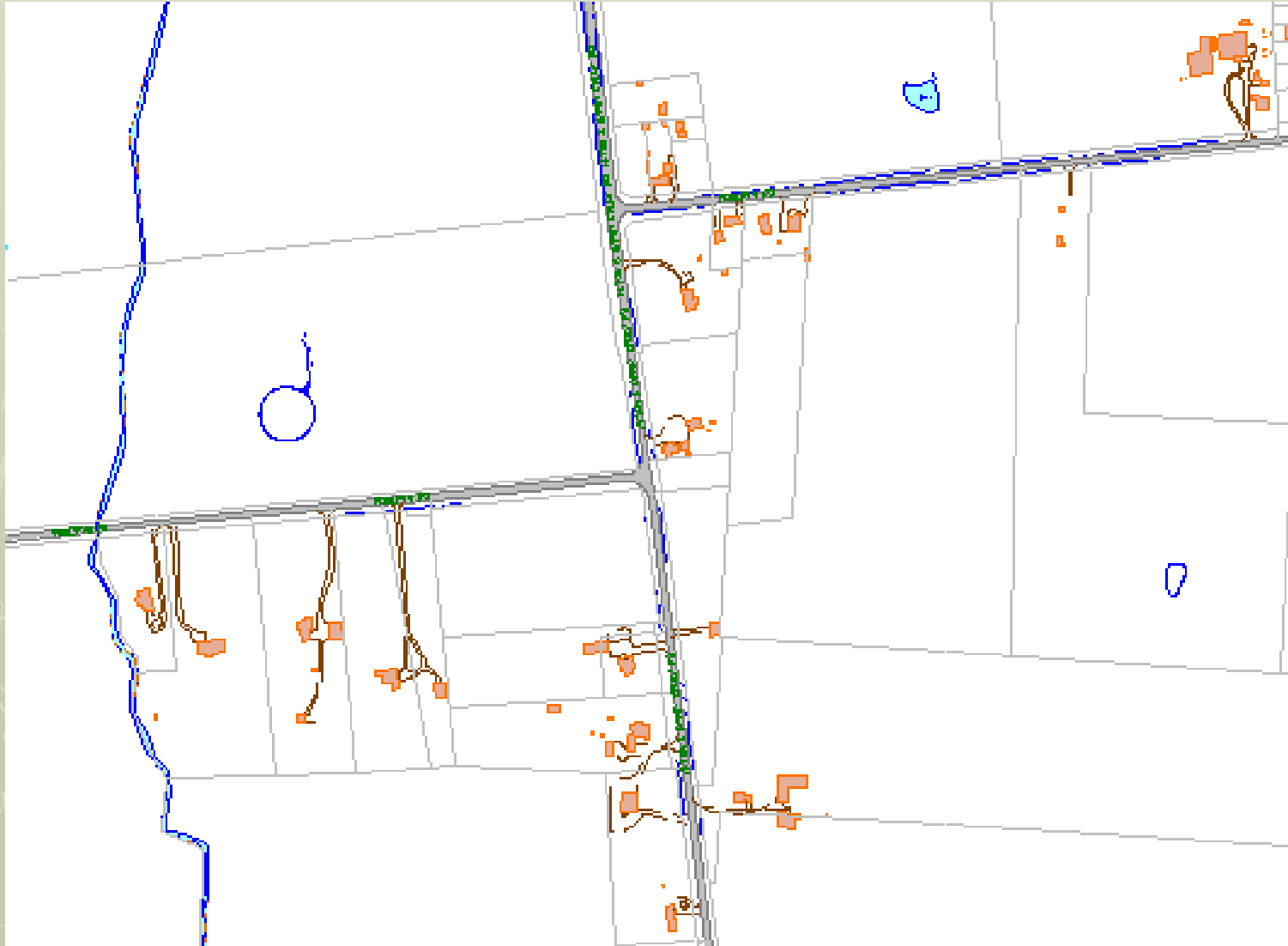


**Concept for a
Multipurpose Land Information System**

Other Items

- ▶ Utilities
 - Above and below ground
- ▶ Aerial Photos
- ▶ Historical Data
- ▶ Non-graphical Data
 - Survey Data
 - Tax/Property Data
 - Recorder's Data
 - ▶ Deed records
- ▶ Other Non-graphical Data

Preliminary Planning



Aerial Photo added as Background



Aerial Photos



- ▶ Survey Planning
 - Wooded, lay of land, drainage, floodplains
 - Prep for field recon of property corners
- ▶ Court Appearances
- ▶ Property Owners Like Aerial Photos!

Adding Contour Layer



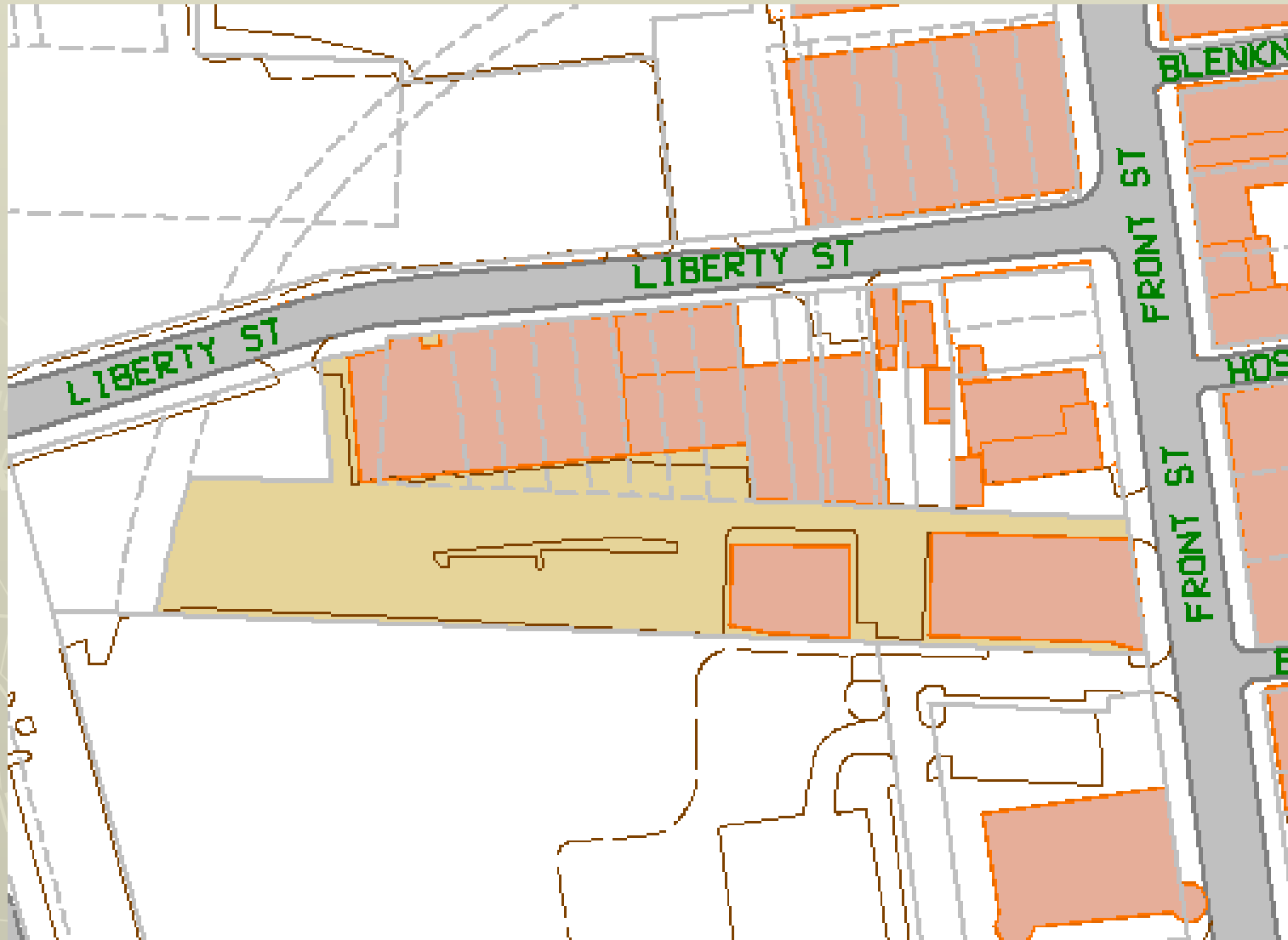
Photo of Structures

(Non-Graphical Data)



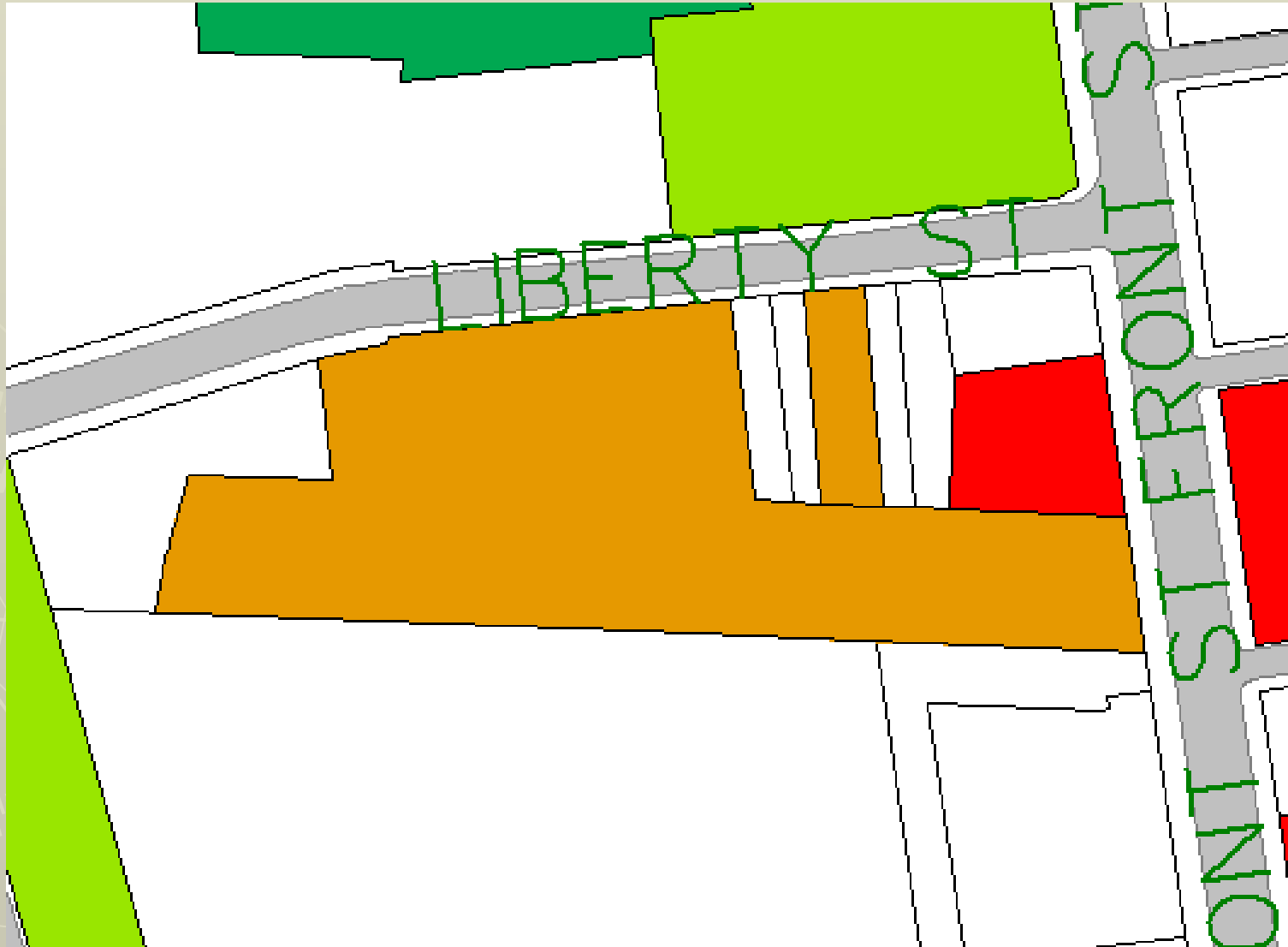
010-022710-00 06/01/2004

Parcel Mapping



Thematic Mapping

(Improvement dates, Appraised Values)



Other Uses

- ▶ Infrastructure Inventory
- ▶ Forensics/Crime Analysis
- ▶ FEMA/Elevation Information
- ▶ Jurisdictional Areas
 - Annexations
 - School boundaries



Look at GIS as Data Warehouse!

