GIS at ATC

ATC GIS Team

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AMERICAN TRANSMISSION COMPANY
THE ENERGY ACCESS COMPANY

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What is GIS?

- Geospatial (Geographic) Information Systems
- Location based
  - Geographic coordinates + geometry + unique identifier
- Database + file based storage
  - 1.5 TB Oracle data storage
- Client tools used to add "map layers" to create useable map documents
- Balance of technology and "art" to create optimal map output
  - Is map message clear?
  - Too much information/too little information for map size
  - Bandwidth issues for client map tools
  - Appropriate use of various data sources

What kind of mapping do we do?

- Public Service Commission of Wisconsin
- Project Specific Field Mapping
- Patrol Area Map Books
- One Line Reference Maps
- U.P. Plat Maps/Structure Maps
- ATC System/Zone Maps
- Citrix Viewer
- Powerline Mapping Tools

Where does our data come from?

- 50+ WI Counties
  - LIOs, Planning and Zoning, Property Listers, Surveying Offices, Parks
- Cities and Villages
- Regional Planning Commissions
- State Agencies
  - WDNR, WDOT, WDOA, WISHARD
- Federal Agencies
  - FEMA, USDA/NRCS
- Commercial Sources
  - Aerial Photography, LIDAR, Satellite Imagery
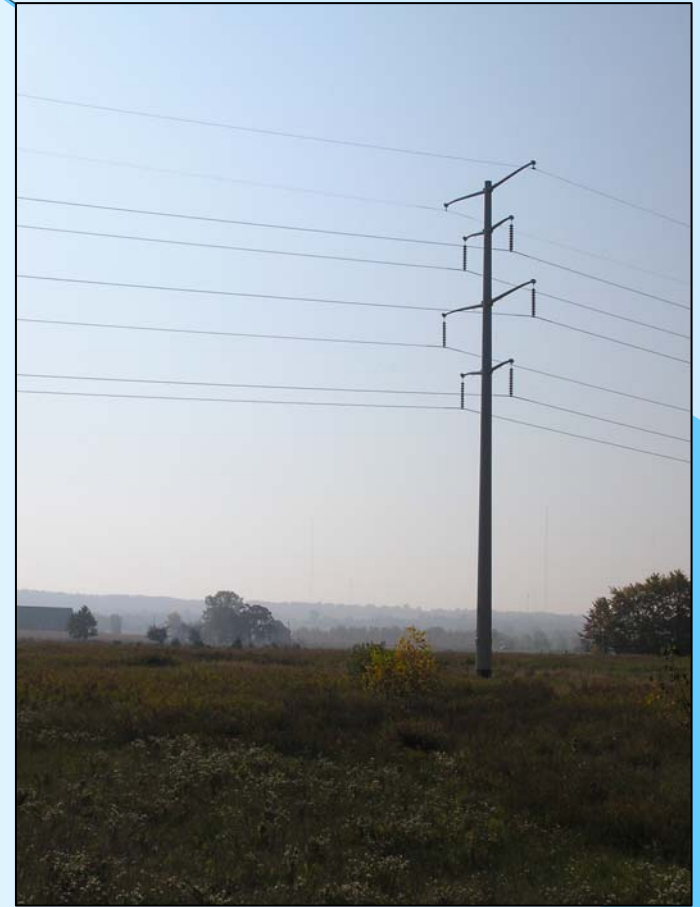
ATC GIS Departmental Support
Regulatory

- Pre-Application

- Application
  - Project area, zoning, landuse, tax parcels, orthophotography, wetlands, floodplains, topography

- Post-Application
  - Minor Route Adjustments (MRAs)

Routing and Siting Process

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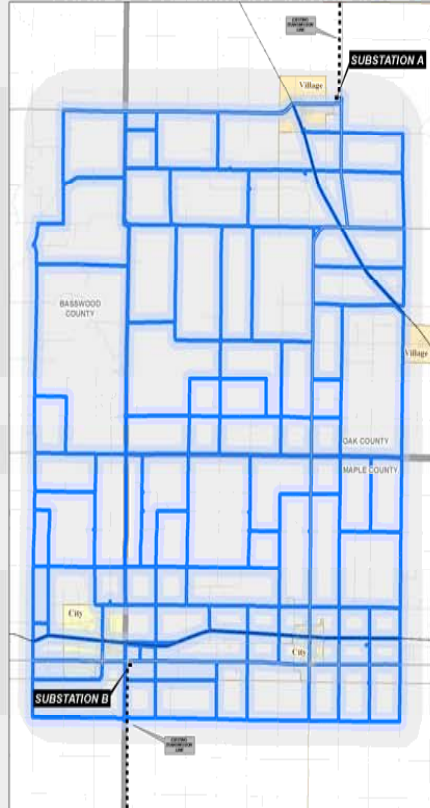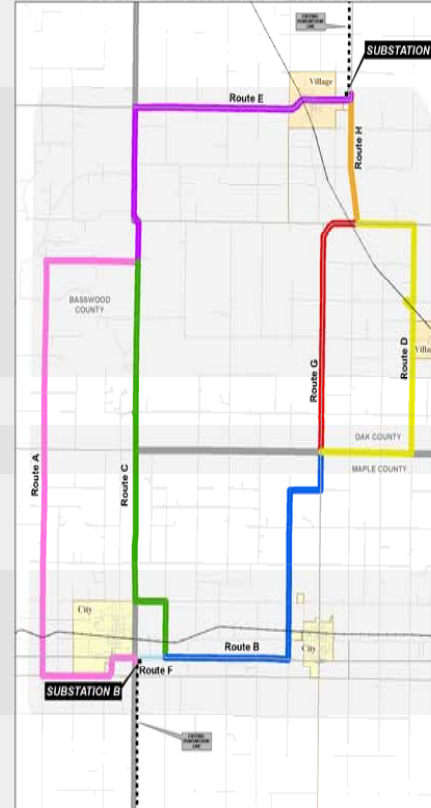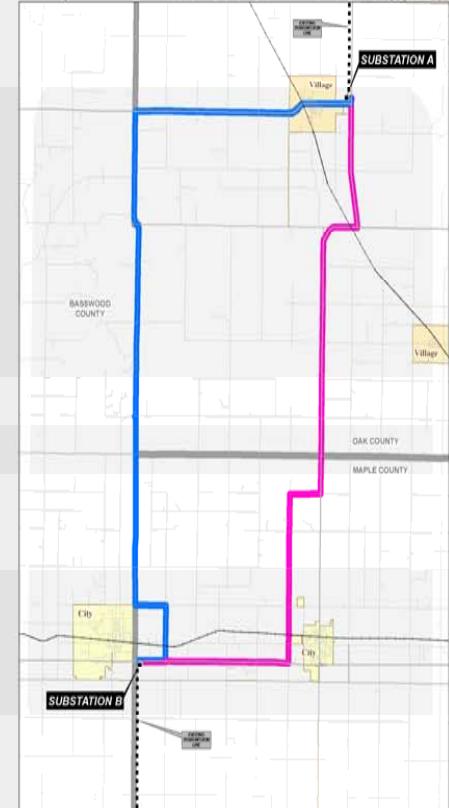
PSCW – Application Maps

MRA Mapping
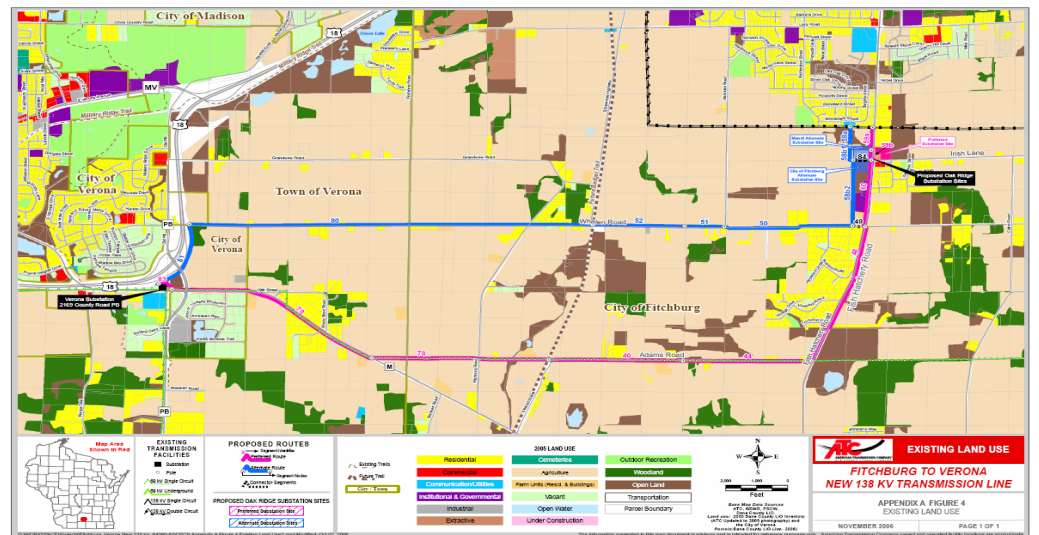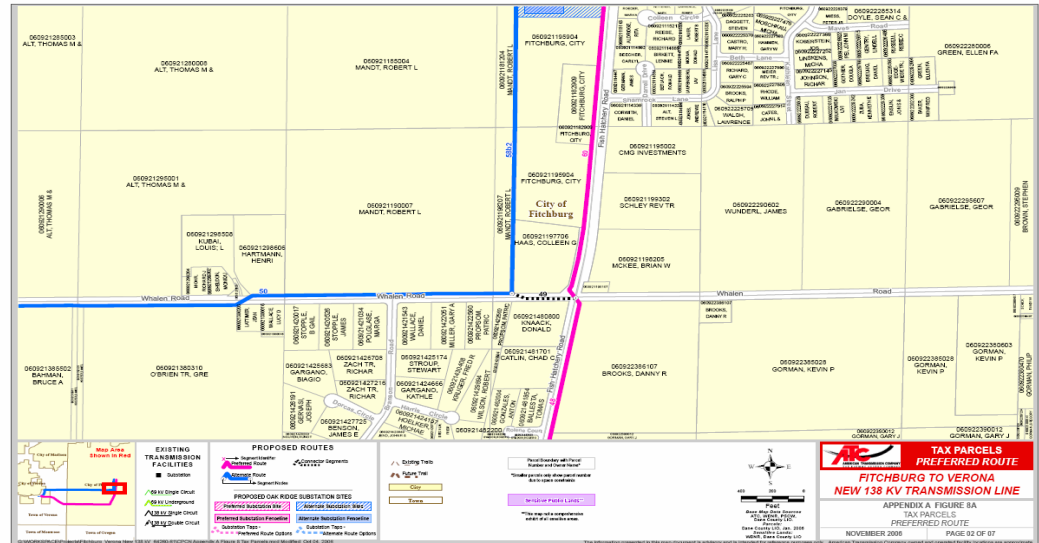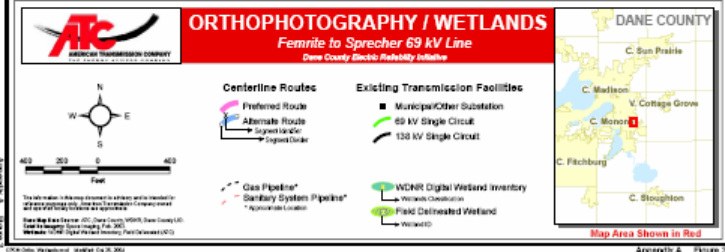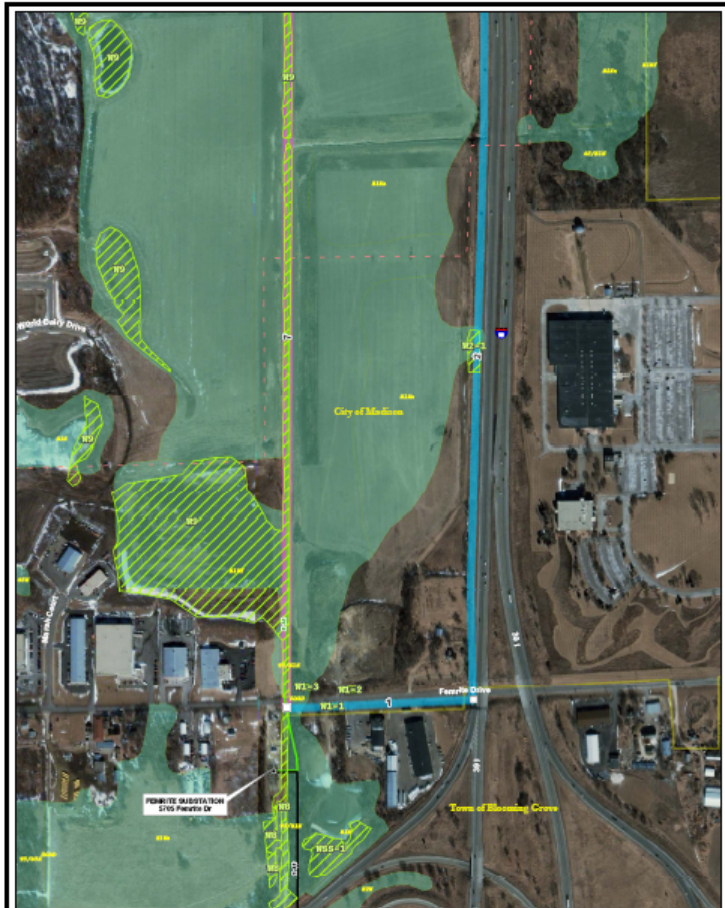
ATC GIS Departmental Support
Local Relations

- Mailing List Generation
- Maps for Stakeholder Mailings
- Open House Support
  - Map Books
  - Onsite property mapping
- Newsletter and Pamphlet Maps
- Public Official Support/Maps

ATC GIS Departmental Support
Environmental

- Green Tier (WDNR T&E Data)
- Environmental-only GIS data access
- Coordinate external environmental mapping support
- Data Set Creation
  - Lead paint poles, Karner Blue Butterfly
- Sensitivity mapping support
- Conservation easement ID
- Construction access plan maps
- CA/CPCN application data table calculations

ATC GIS Departmental Support
Engineering, Maintenance & Construction

- Single circuit map series
- Patrol area map books
- CASCADE data integration
- Distribution underbuild and crossings
- EMF mapping support
- DSD overview maps
- CAD Plan & Profile data conversion and mapping support
- Mobile GIS Mapping/GPS

Single Circuit Map Series
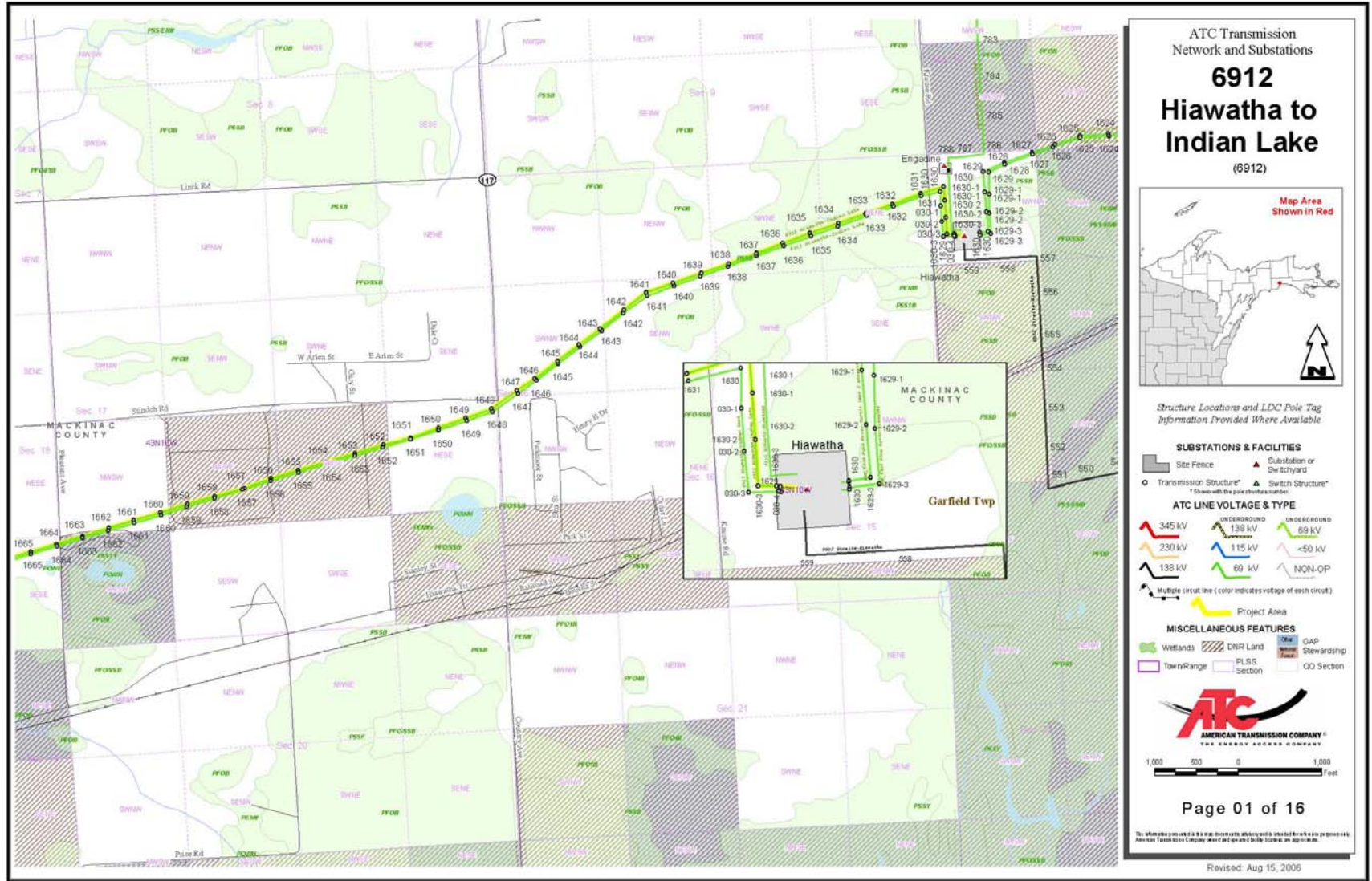
Patrol Area Mapbooks
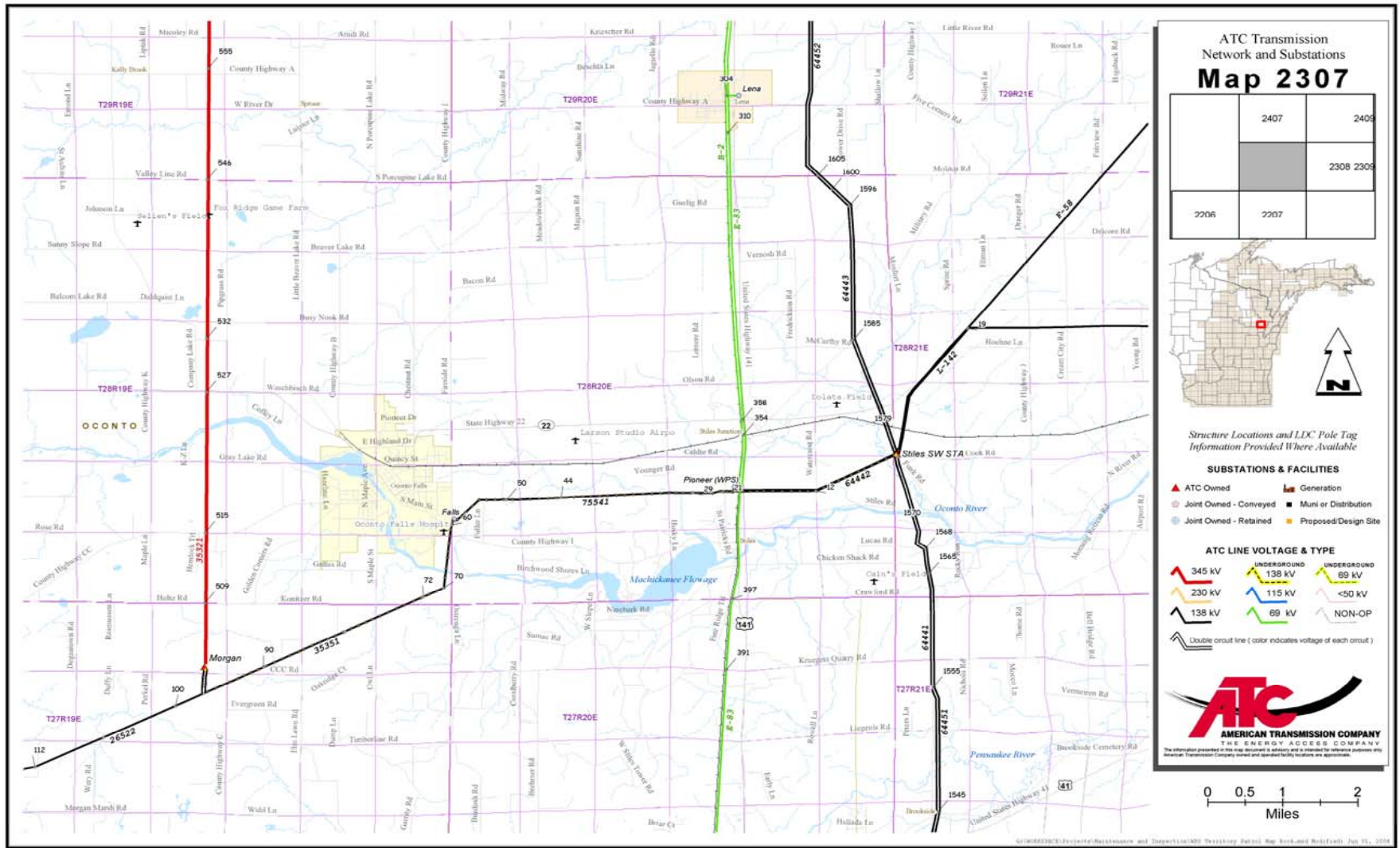
ATC GIS Departmental Support
Real Estate

- BASIS integration
- Lay-down area and site mapping
- Parcel mapping
- Mailing lists
- Aerial mapping and surveying support
- Diggers hotline
- WDOT mapping support
- Tracking Tool for Real Estate ROW Acquisition Progress

Real Estate Tracking Tool

ATC GIS Departmental Support
Various Other Departments

- Legal

- Planning and Operations

- Project Management

- Corporate Communications

- Customer Relations

System / Zone Maps

ATC ArcReader System Viewer

PDF Map Maker (IMS)

SERT System

- Stakeholder listing
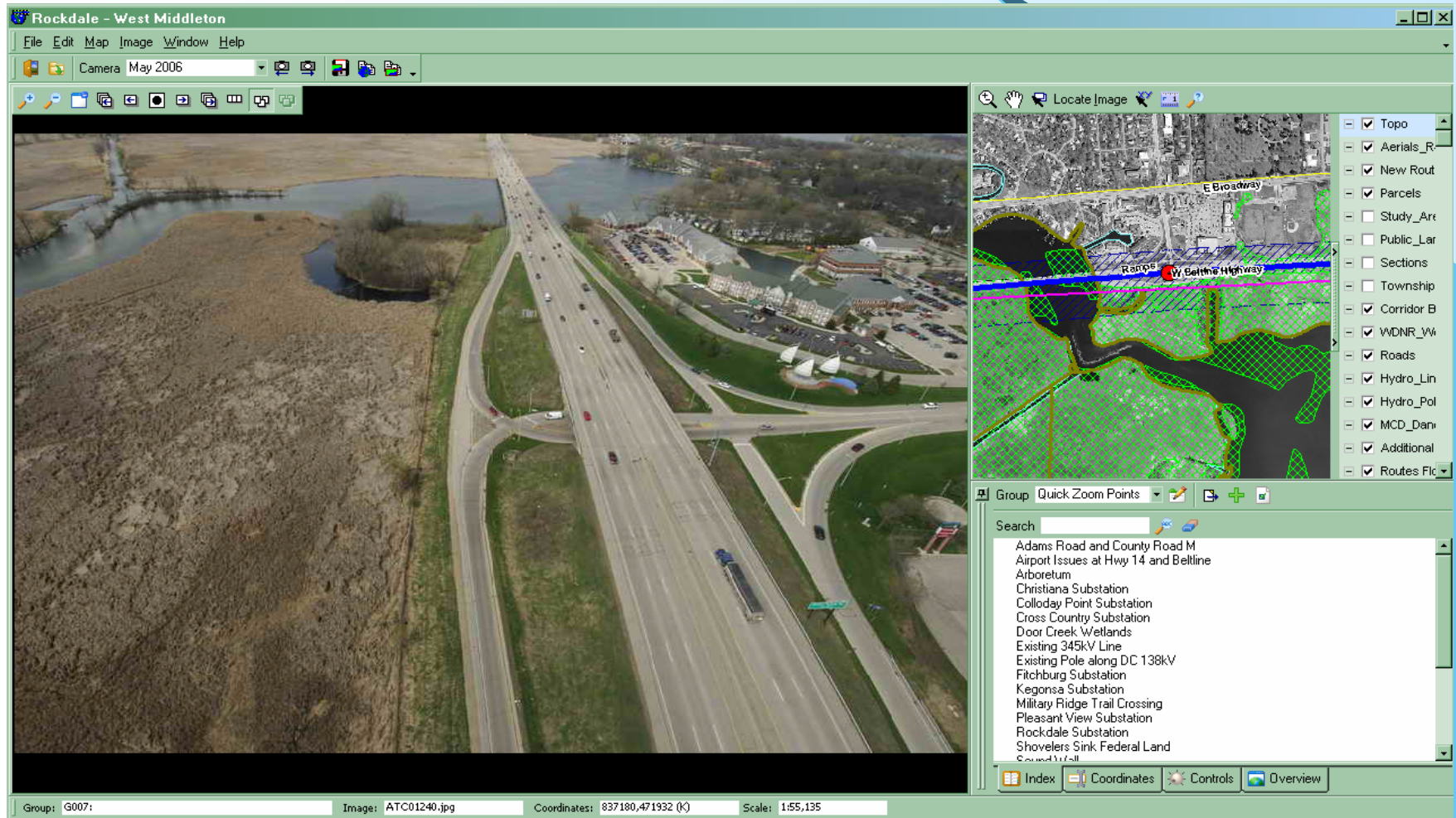- Cross referenced by location and project(s)

SERT System
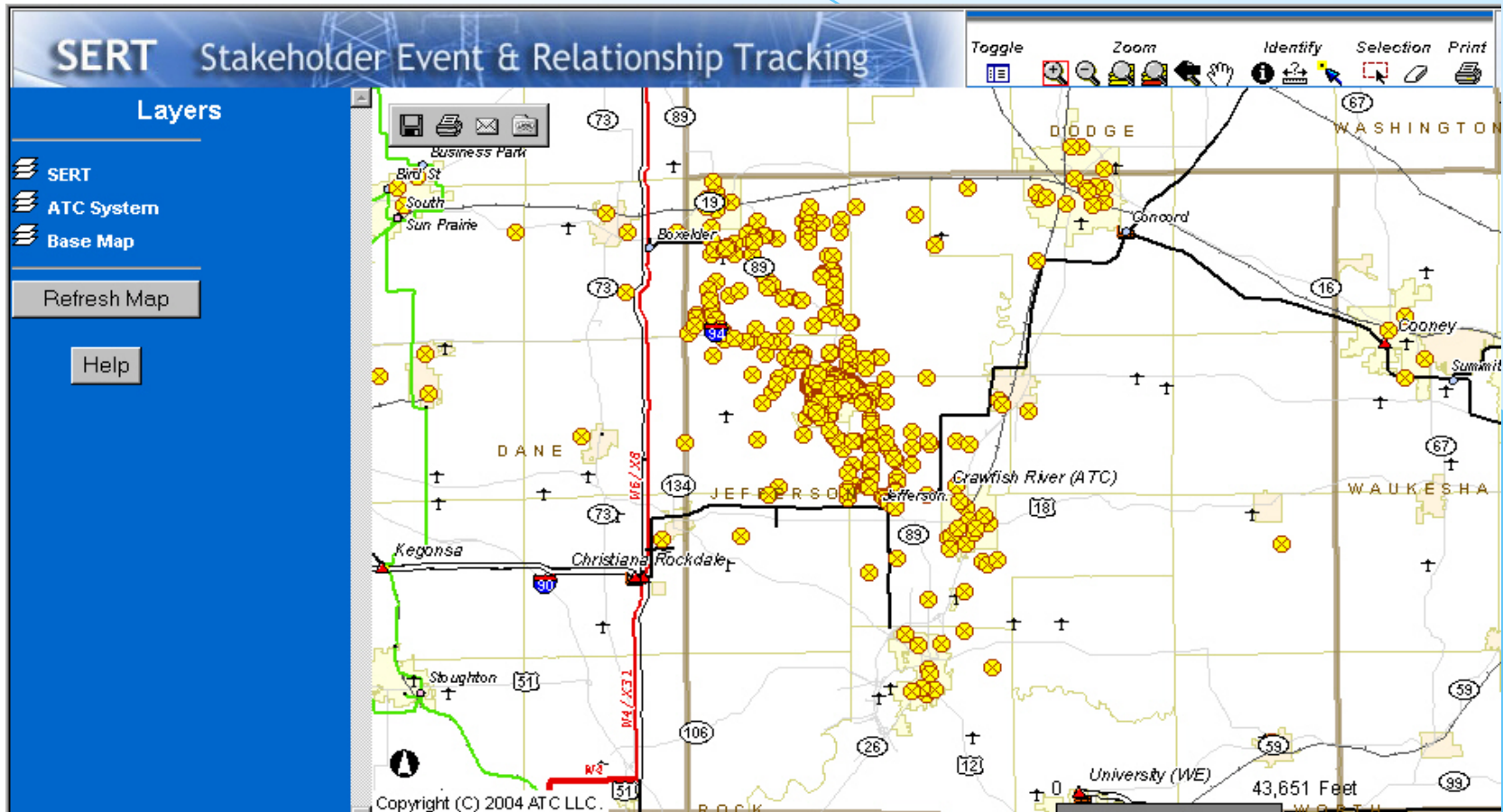
- ArcIMS site mapping stakeholder locations

SnapMap – Major Projects

- Invaluable tool that integrates high resolution oblique photos with aerial photos and other GIS data
- Allows detailed field review without leaving the office

Project IMS site with SnapMap

Corporate GIS Initiatives

- SERT integrated project sites
- SALL and SELD system reconciliation
- LiveLink (BASIS) real estate records
- SnapMap integrated project sites

OUR GOAL: **Integrate and align our geospatial data with all other asset management systems in the company**

SnapMap Demo

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