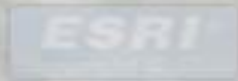


Land Use

Eric Amundsen
Panhandle Energy



On ROW

- Permanent structures, significant grade changes, large landscaping not acceptable
- Need to be able to inspect, operate and maintain the pipeline safely & effectively
- A clearly defined corridor blending with surroundings helps neighbors, residents and excavators manage activities



Adjacent to ROW

- Generally no restrictions beyond ROW or easement
- Possible exceptions – Activities impacting the pipeline
 - Contouring or terracing
 - Blasting
- Work with operator to maintain safety



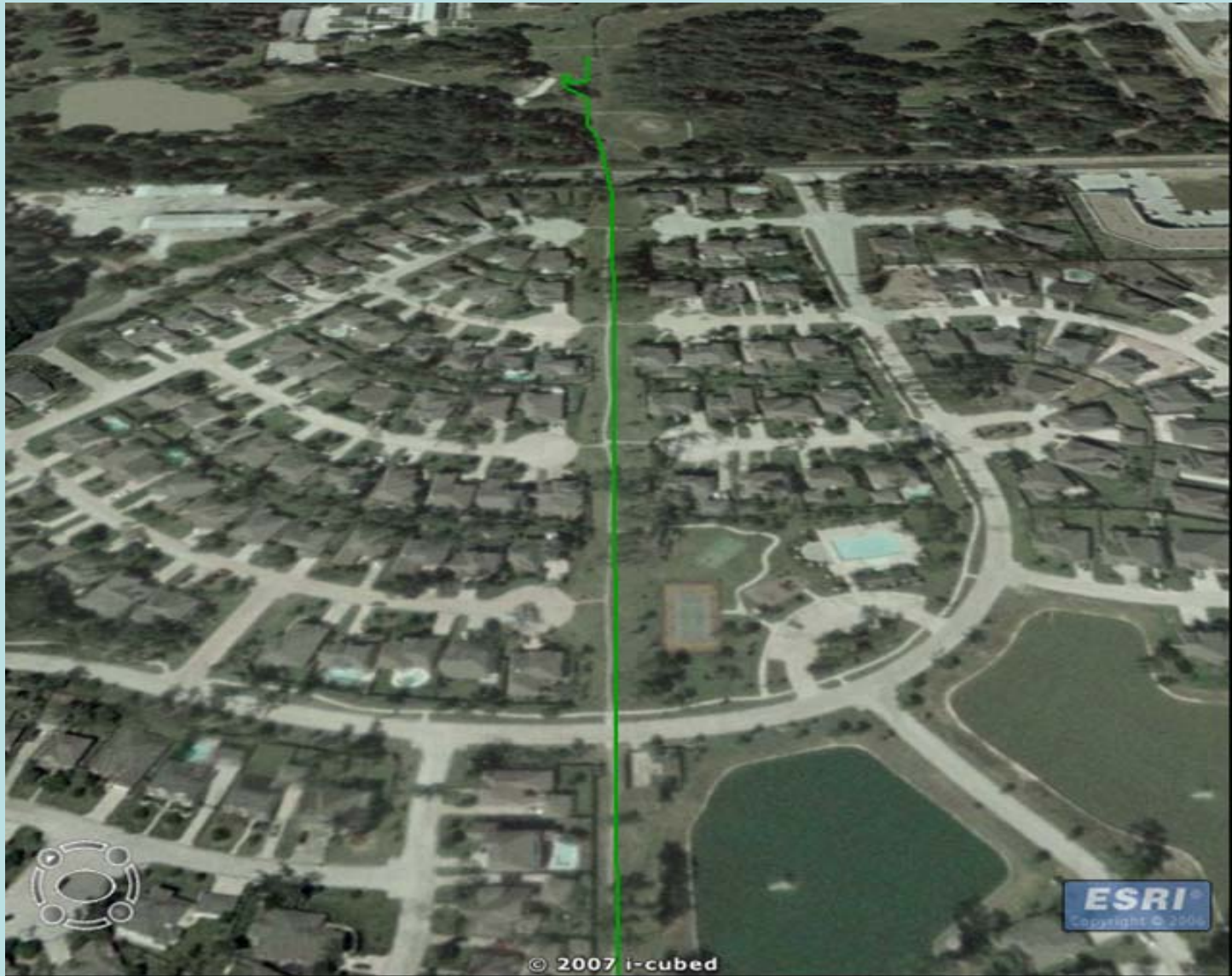
Solutions to Encroaching Developments

Business and Residential

- Land use planning, restrictions, zoning, disclosures – community issues
- Must consider the rights and safety of all affected parties
- PIPA
 - Pipelines and Informed Planning Alliance



Northlake Forest, Cypress, Texas



Northlake Forest

- Development built around 1999
- Homes average 3000 – 4000 sq. ft.
- Values typically \$200k - \$350k
- Worked with developer to incorporate the pipeline ROW as green space and common area



Northlake Forest



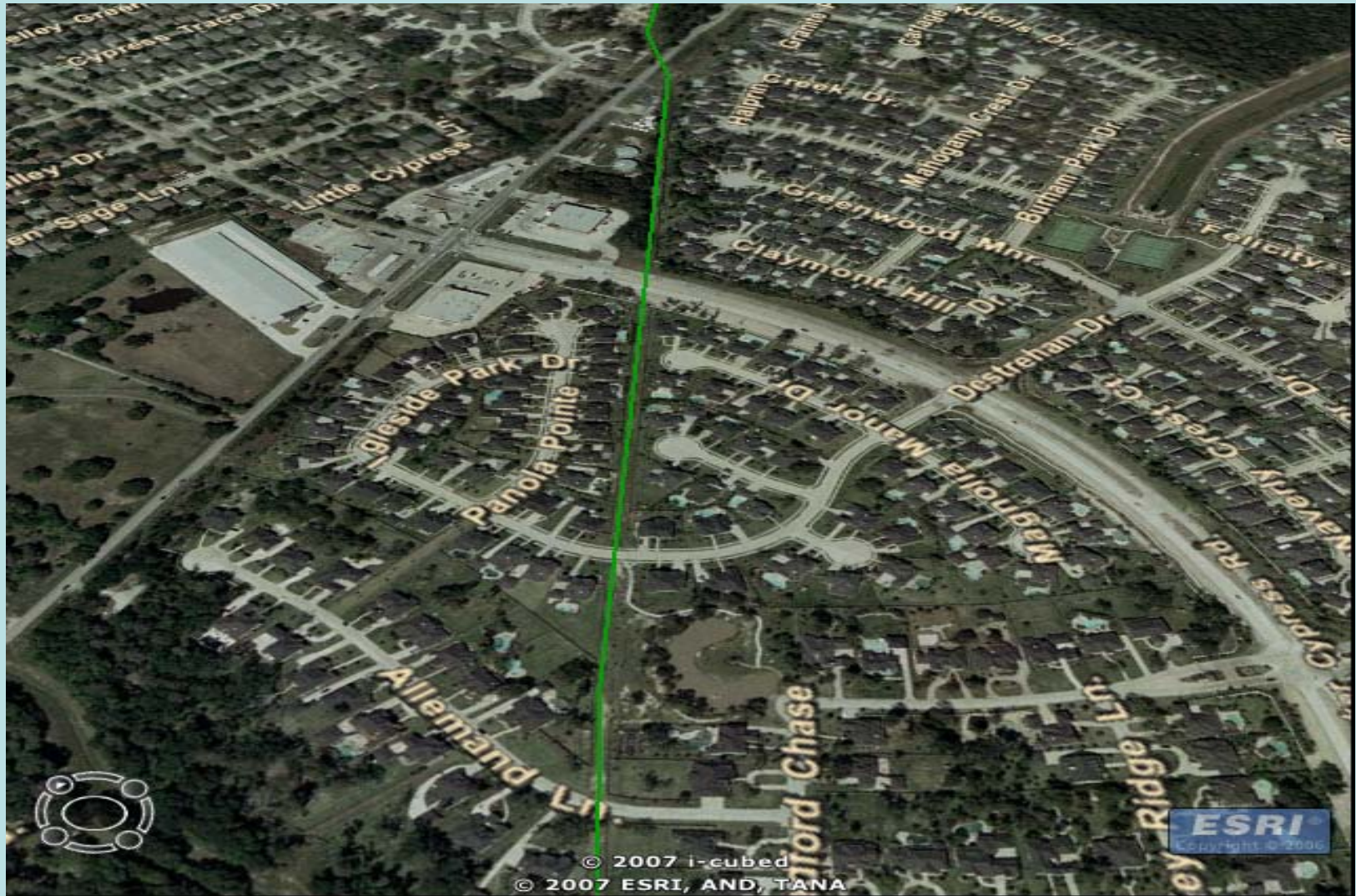
Northlake Forest



Northlake Forest



Coles Crossing, Cypress, Texas



Coles Crossing

- Development built around 2002
- Homes average 3400 – 4400 sq. ft.
- Values typically \$300k - \$400k
- Worked with developer to incorporate the pipeline ROW as green space



Coles Crossing



Coles Crossing



Coles Crossing



Coles Crossing



Improvement Opportunity

- Collaborate with developers early in the planning phase
 - Understand pipe class change impacts and schedule
 - Incorporate ROW as green space and common area
 - Allow walkways, benches and other non-intrusive amenities
 - Establish effective pipeline marking strategy
 - Will help keep markings in place
 - Don't disguise the pipeline R/W, the public and space users need to know it's there
- Collaborate with developers and emergency responders
 - Consider incident and emergency response
 - What if scenarios
 - Public escape routes
 - Emergency responder access and situation control
 - Product characteristics - where will it go?
 - Environmental impact
- Collaborate with homeowners associations and public
 - Develop communication strategy and plan
 - Establish common goals
 - Help them help you the operator achieve damage prevention goals
 - Consider turn-over and communication/disclosure for new owners

Benefits

- Developers
 - Complete pipeline construction work prior to housing development
 - Green space may add value or at least does not detract from value
 - Shared R/W maintenance costs
- Emergency responders
 - Eliminate or minimize undesirable access and control situations
 - Improve liaison with pipeline operators
- Homeowners associations
 - Become an “Owner “ of damage prevention measures
 - Reduce risk and minimize the negative value impact
- Pipeline Operators
 - Simplifies R/W encroachment enforcement – interface with Developer and minimize the number of landowner issues
 - Improved resource planning and minimized construction costs for class change projects
 - Local homeowners become eyes and ears for operator
 - Shared R/W maintenance costs
 - Achieve needed work space for maintenance, patrolling, expansion, etc.