Field Data Collection and GIS Mapping

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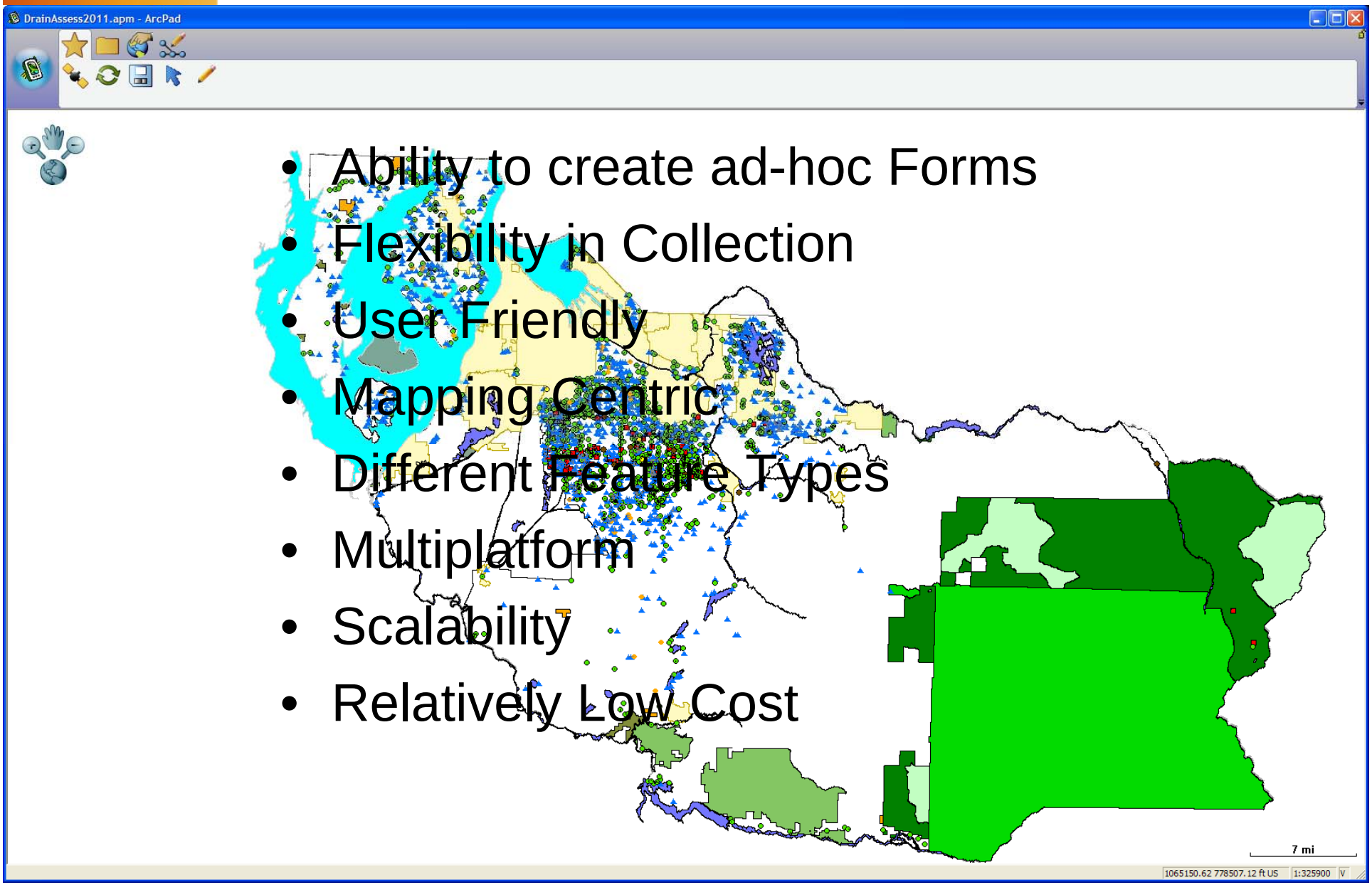
Public Works & Utilities

Road Operations

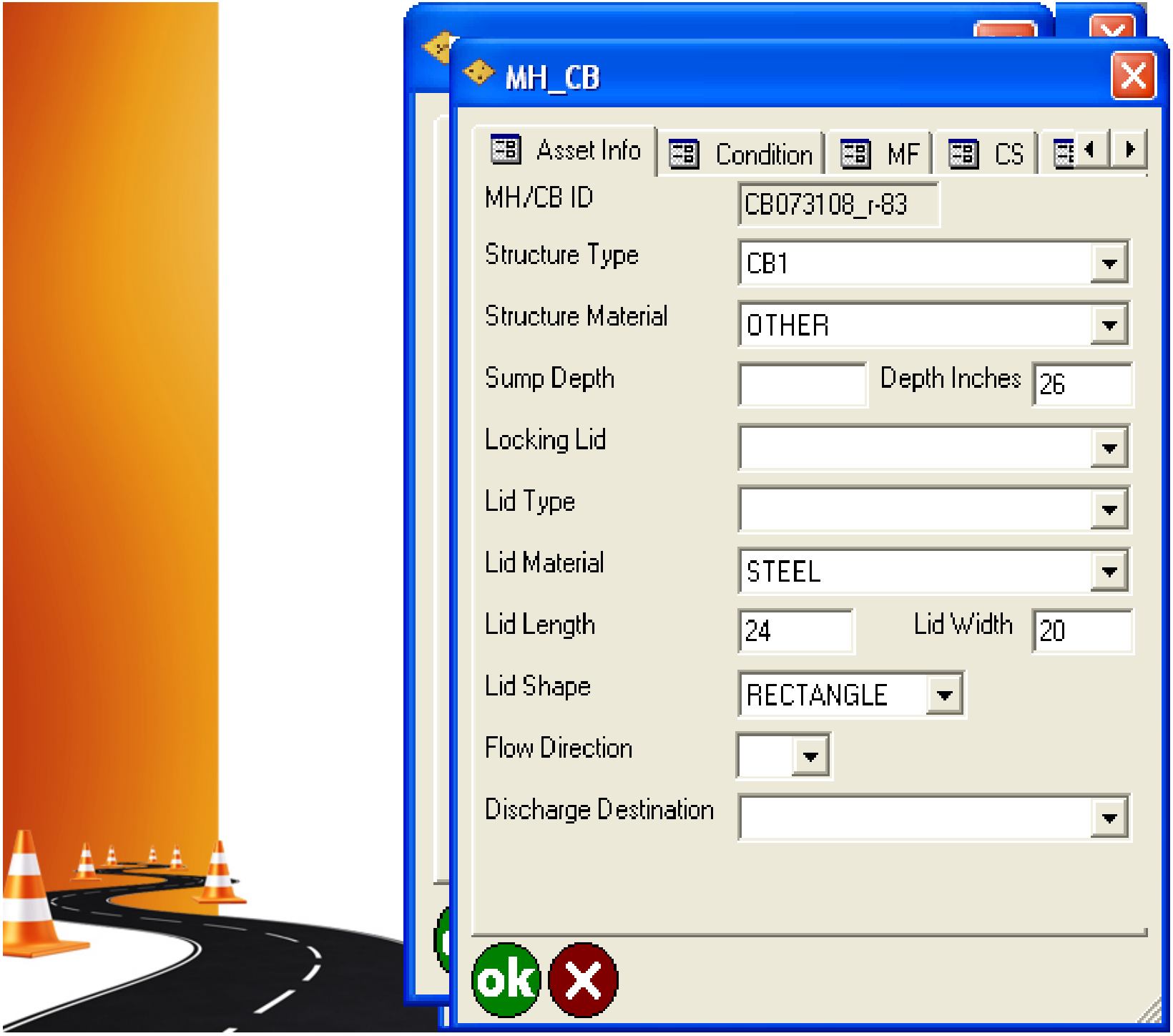
Why We Choose ArcPad for Field Collection



- Ability to create ad-hoc Forms
- Flexibility in Collection
- User Friendly
- Mapping Centric
- Different Feature Types
- Multiplatform
- Scalability
- Relatively Low Cost

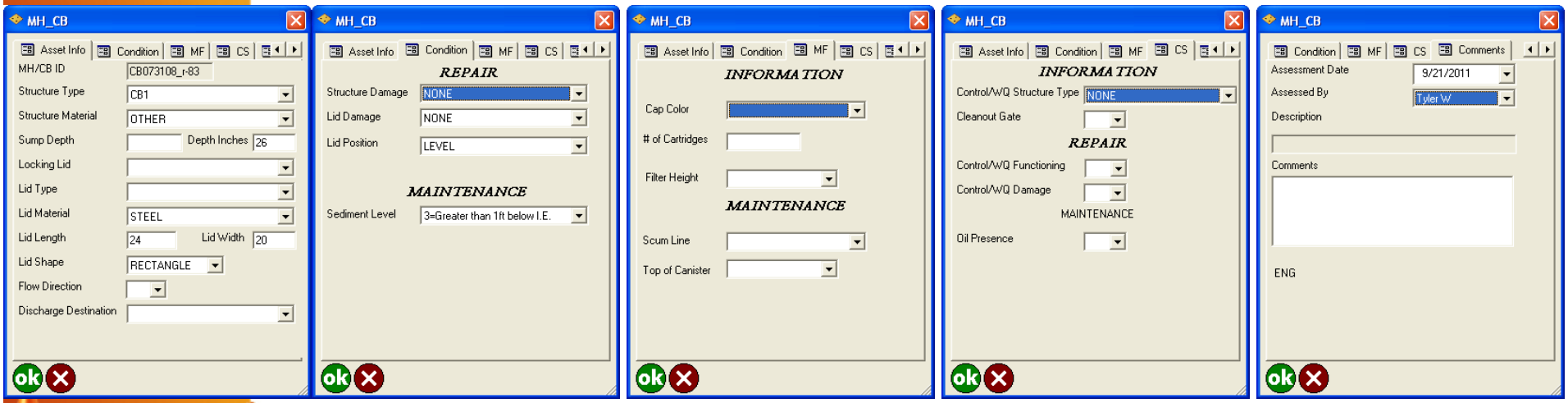
Types of Uses

- Traffic Islands
- Storm Drainage
- Pavements
- Fences
- Walls
- Gates
- Sidewalk
- Shoulders
- Vegetation
- Outfall Reconnaissance Inspection
- Drywell Retrofit – Site Evaluation

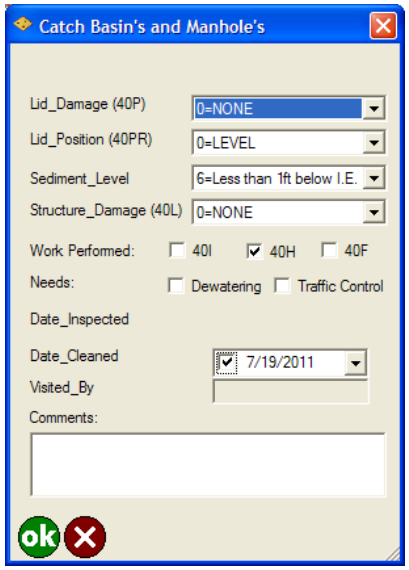

MH_CB
Asset Info
Condition
MF
CS
MH/CB ID
CB073108_r-83
Structure Type
CB1
Structure Material
OTHER
Sump Depth
Depth Inches
26
Locking Lid
Lid Type
Lid Material
STEEL
Lid Length
24
Lid Width
20
Lid Shape
RECTANGLE
Flow Direction
Discharge Destination
ok

Users

- 2 Different Types of Field Collection
  - **Assessment**
    - More Detailed
    - More Time Spent Training



Users



- **Maintenance/Repair Performed**
  - Less Detailed
  - Less Time Spent Training

Data Consistency

- **Reduce Typing by User.**
  - Drop Down
  - List Boxes
  - Check Boxes
  - Comment Codes
- **Correct Data Types**
  - Numbers use numeric types
  - Validates Data
- **Implement Business Rules**
  - prevents data entry that isn’t possible

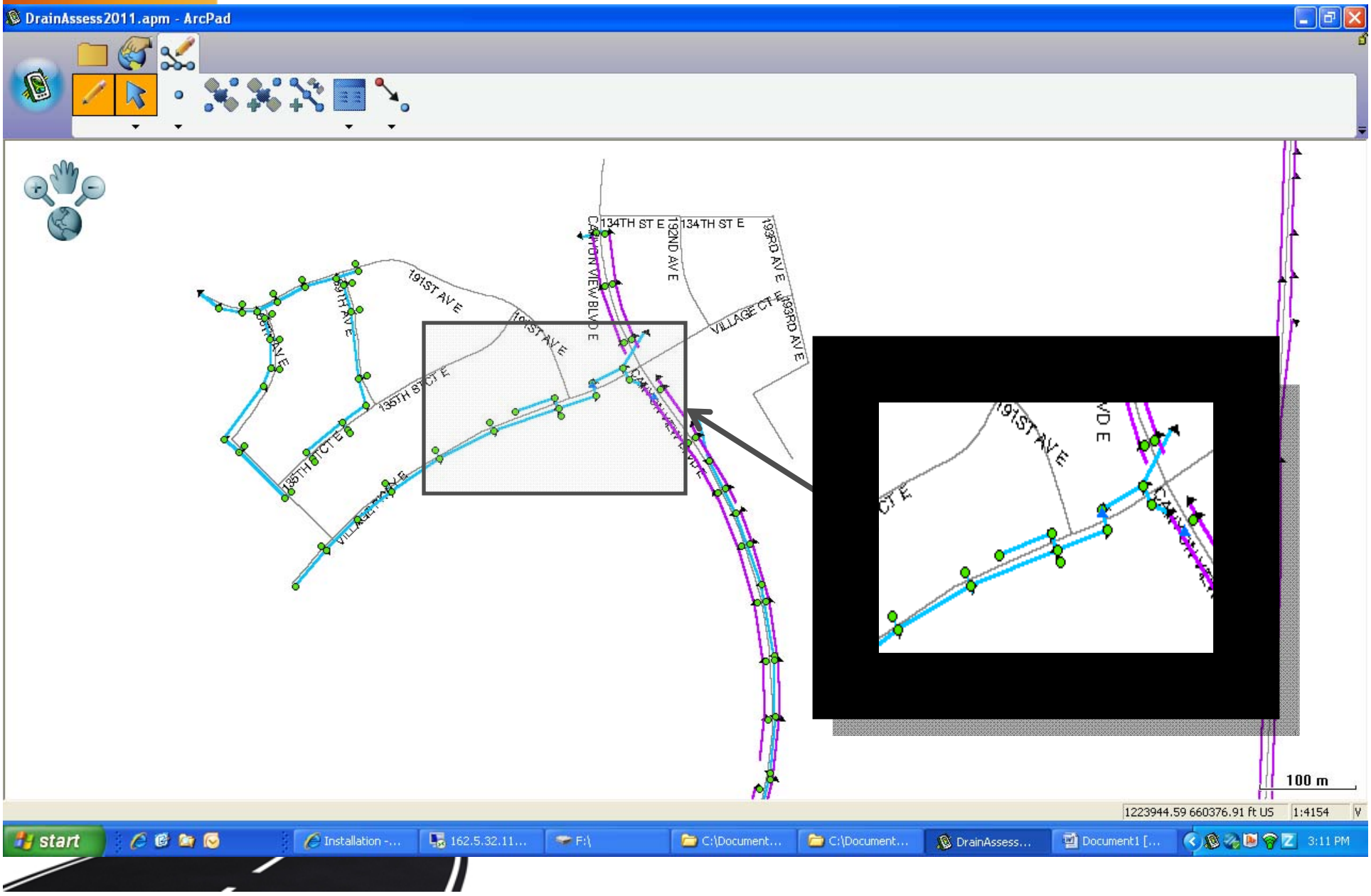
Data Consistency

- Utilize consistent repeatable measurements
  - Good, Fair, Poor
  - 0-9 Scale
  - 0-100
  - Physical Measurement (in., survey ft., cm)
    - Identify tools necessary to measure

Layout

- Organize fields in logical order
- Tabbing Order
  - Increases the speed of data collection
- Map Display
  - Users want to be able to see where they have been.
  - Provide Relevant Information
    - Cities Boundaries
    - Roads
    - Water bodies

Before Inspection



Keep it Simple

- Identify the most important elements
- Determine the correct amount of Detail
- Use Common Vernacular
- Some Information can be inferred

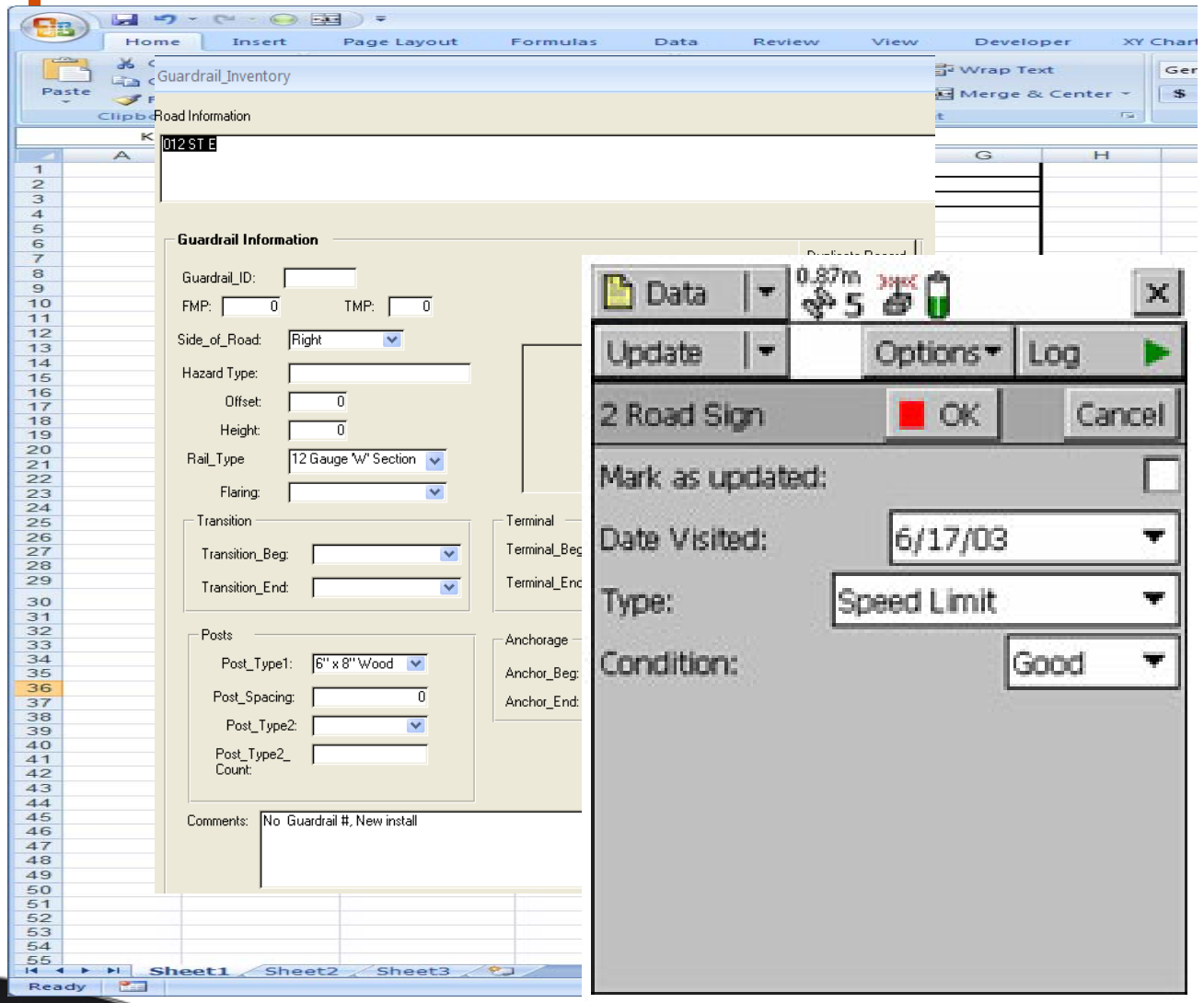
Process Flow of Collected Data

- Field inspections
- Retrieve data from laptops
- Check-in data to database
- Check-out data from database
- Load data to laptops

Benefits

- Targeted Approach
- Dropped the per unit cost $24.00
- 16,500 amount of inspections to date
- 7,200 amount of cleaning
- Increased productivity.

Other Field Data Collection Options

- 

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