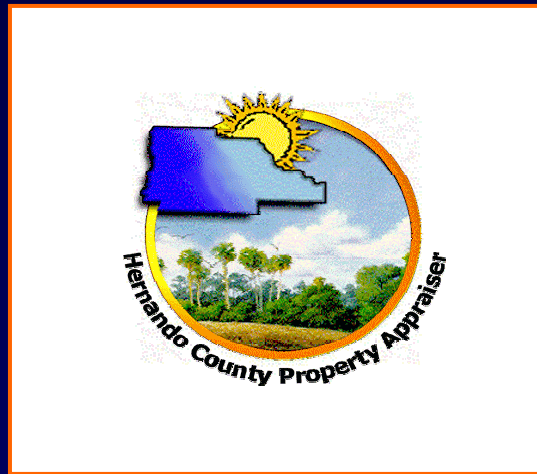


Addressing the Addressing Issue With GIS in Hernando County, Florida

Hernando County Property Appraiser
Alvin R. Mazourek, CFA



Neil F. "Nick" Nikkinen, CFE
Manuel J. Padrón

Hernando County, Florida

Statistics:

- **2004 Population:**
 - approximately 150,000+
- **2004 Real Property Parcels**
 - 108,659
- **2004 TPP Parcels**
 - 8,580
- **Approximate # of current Addresses**
 - 121,400



Hernando County Property Appraiser, Hernando County, Florida

Addressing History

- Approximately two years ago the Hernando County Property Appraiser's office assembled a group of GIS stakeholders consisting of county, municipal and state government offices and agencies.
- The purpose was to advise the attendees of the Property Appraiser's base map and to discuss the future of the GIS system in Hernando County. The greatest common factor affecting everyone was the county's addressing system.
- The existing addressing system had not kept pace with technological advances and was not a centrally maintained system allowing departments and agencies to access the system electronically.

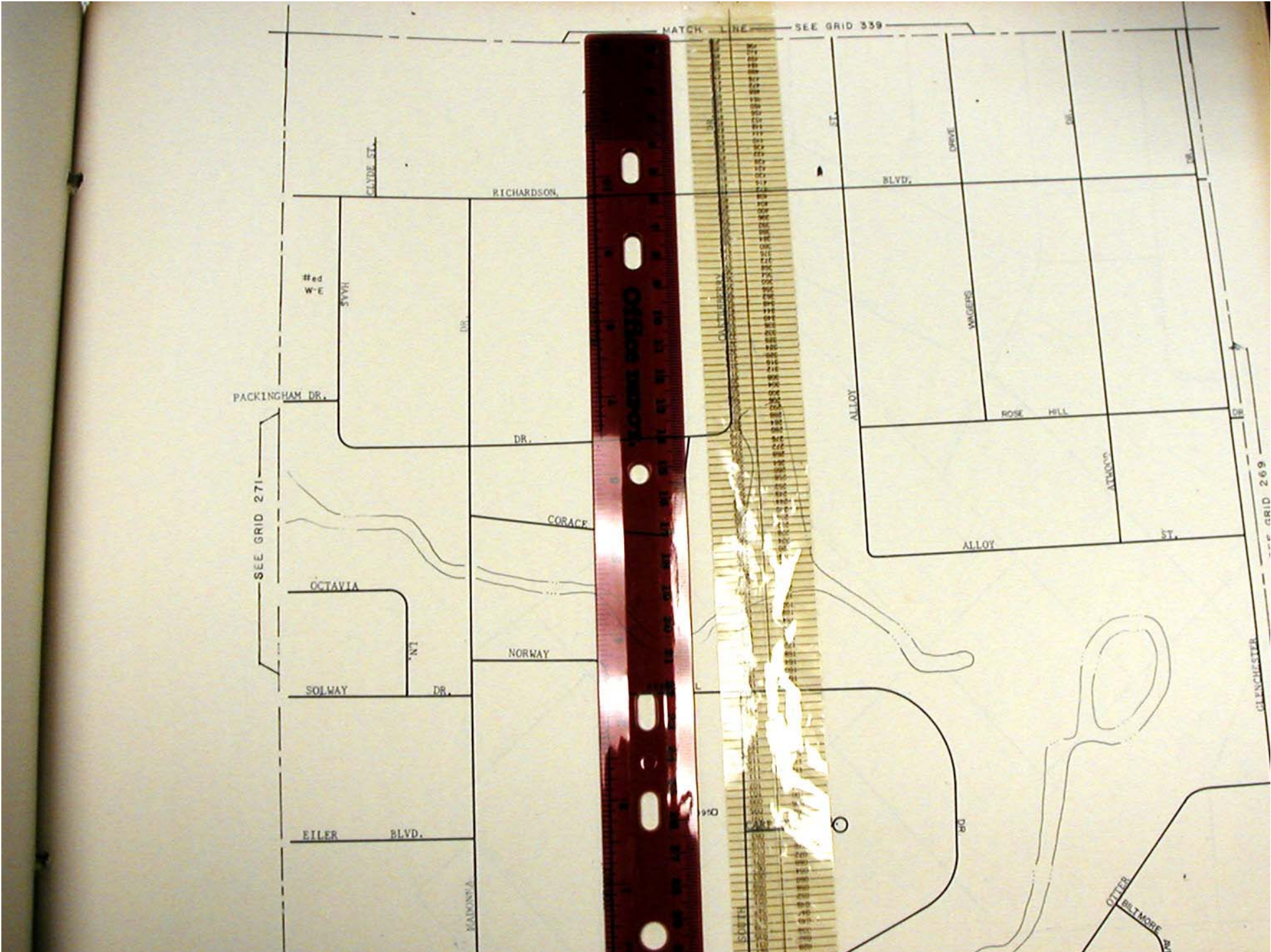


Hernando County Property Appraiser, Hernando County, Florida

Addressing History cont.

- The previous addressing department used hardcopy maps as a source for addressing the county.
- A translucent device similar to a ruler, called a fly tape, was used to calculate address numbers.
- The fly tape had predetermined distances to assign addresses. This poses a problem since the tape does not easily bend around corners.
- Information stored in hard copy format limited distribution or sharing of information.





MATCH LINE SEE GRID 339

SEE GRID 271

CLYDE ST.

RICHARDSON BLVD.

#ed W-E

SVVH

DR.

PACKINGHAM DR.

DR.

CORACE DR.

OCTAVIA DR.

NT

NORWAY

SOLWAY DR.

EILER BLVD.

RAHONSA

ST.

BLVD.

DRIVE

DR.

ALLOY

ROSE HILL DR.

ALLOY

DR.

ALLOY

ST.

SEE GRID 269

GLENCHESIER

OTTER BILTMORE BL.

Addressing Timeline

- **June 13, 2002:** Hernando County Property Appraiser hires company to develop an addressing design plan.
- **July 16, 2002:** Hernando County Property Appraiser conducts a stakeholders meeting to establish existing addressing workflow.
- **October 15, 2003:** New addressing system installed and Phase I testing started.
- **November 24, 2003:** Phase II delivered.
- **February 17, 2004:** Hernando County Addressing Department on line.



Hernando County Property Appraiser, Hernando County, Florida

Why is addressing so important?

“Every Second Counts in Emergency Response!”

Many people, including those in public safety, view enhanced 9-1-1 as a great emergency response tool; however, without accurate and consistent address information it can not always be counted on to help speed-up emergency response. Of the total parts that comprise the enhanced 9-1-1, addressing can be considered one of the most vital.



Hernando County Property Appraiser, Hernando County, Florida

Addressing Review

Purpose:

Developing, maintaining and enforcing roadway naming and addressing standards is for the best interest of public health, safety and general welfare of the citizens and inhabitants of Hernando County.

Responsibility:

The responsibility of the addressing department is to function with the Sheriff's Office (E-911), US Post Office and other city and county government organizations to accomplish all addressing requirements.



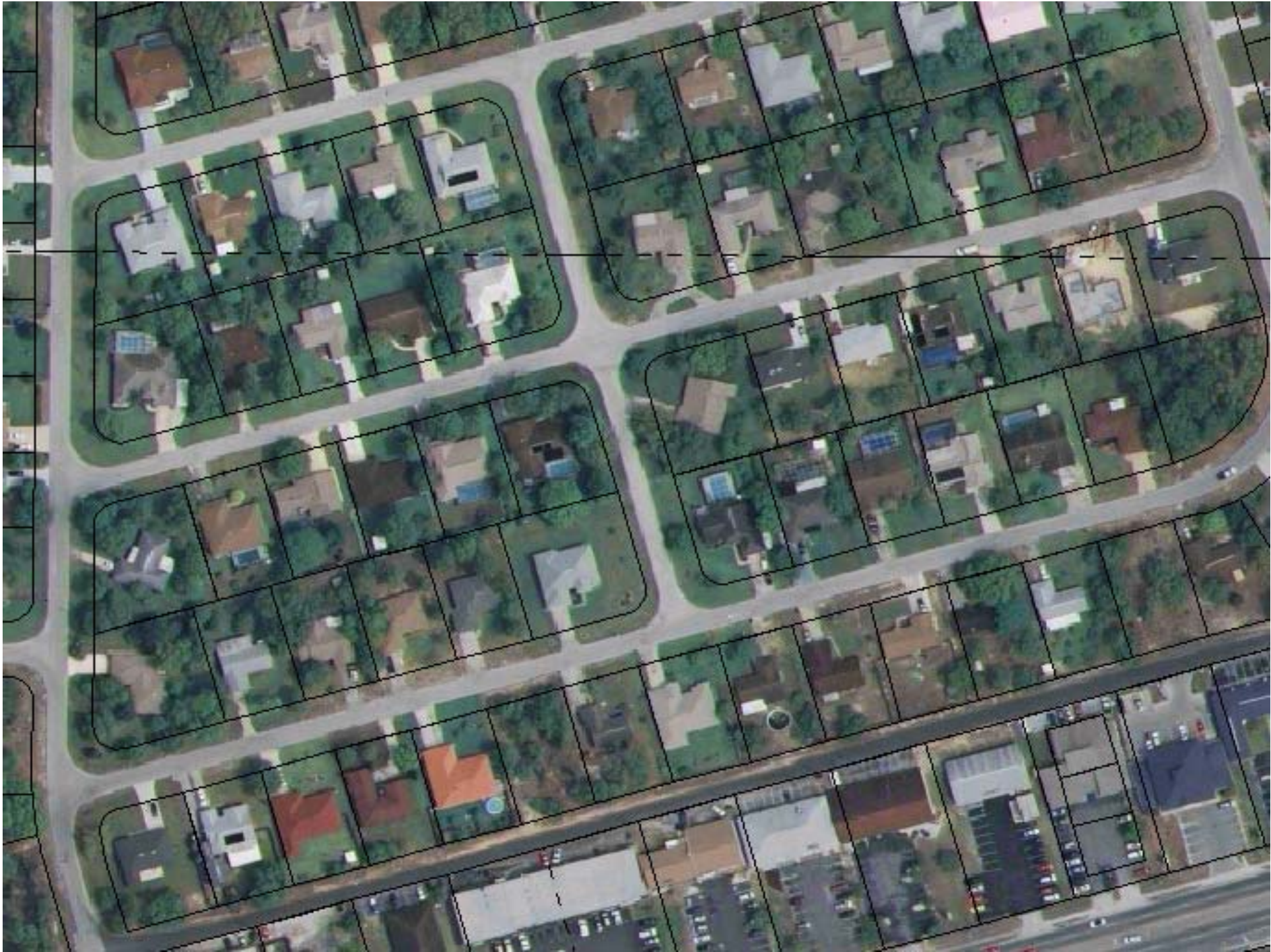
Hernando County Property Appraiser, Hernando County, Florida

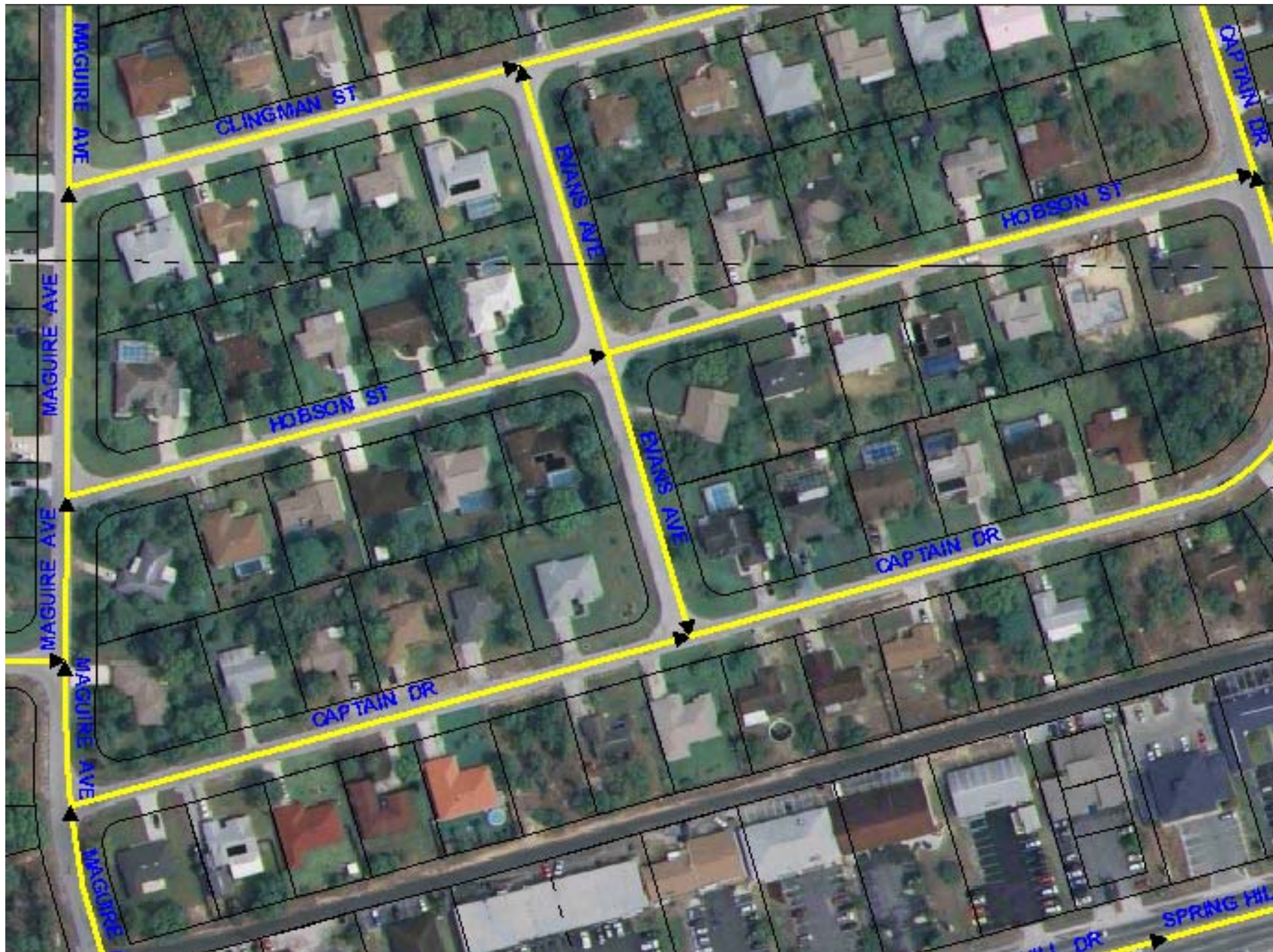
System Design

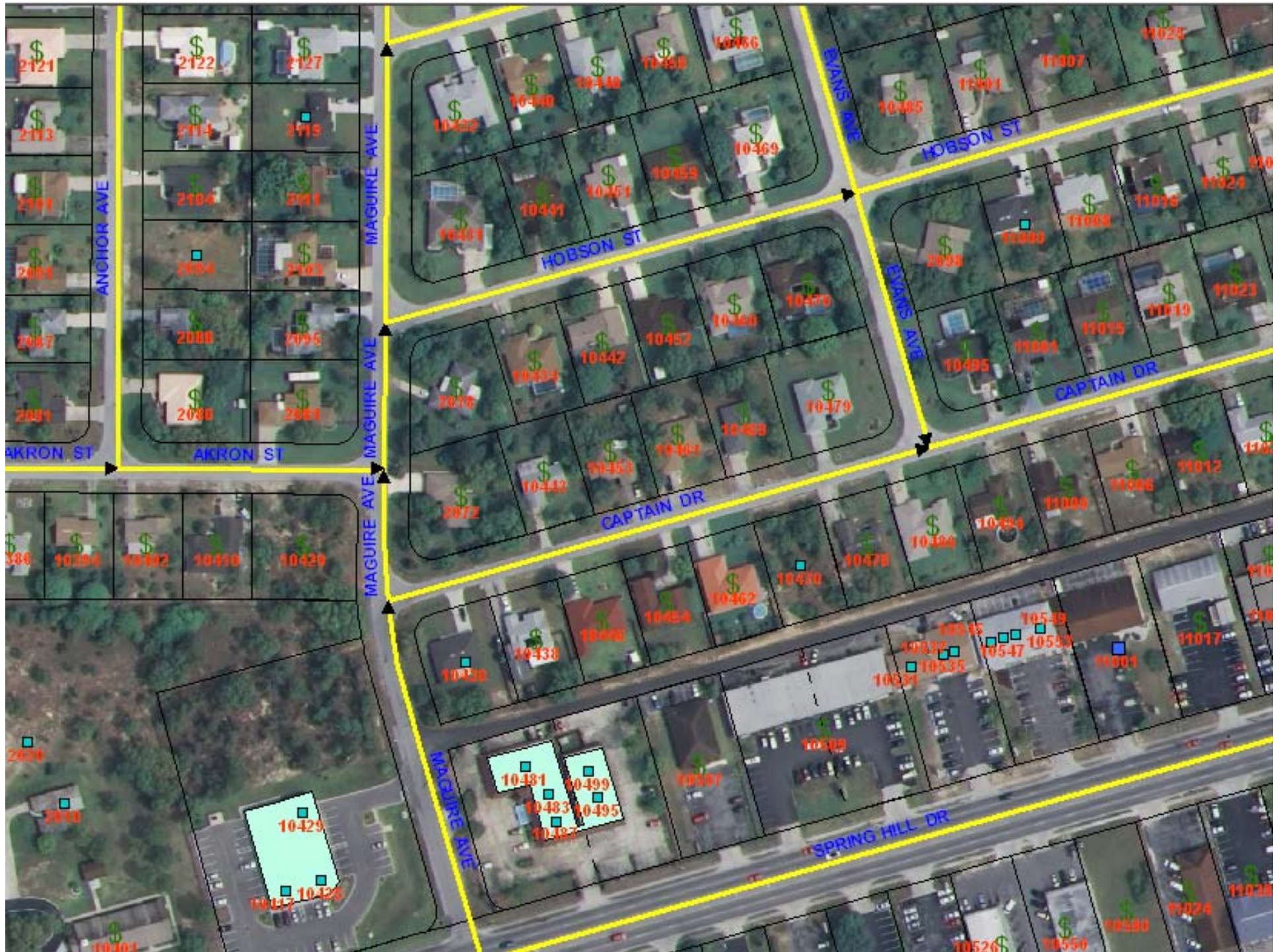
- Establish Requirements
- Point Data Creation
- Legacy Data Migration
- Database Design
- Addressing Standards
- Structure > Segment Assignment
- Establish Line Directionality
- Creating Ranges



Hernando County Property Appraiser, Hernando County, Florida







ArcReader

The screenshot displays the ArcReader application window titled "Hernando - ArcReader". The interface includes a menu bar (File, Edit, View, Tools, Window, Help), a toolbar with navigation and search tools, and a scale of 1:8,128. On the left, a "Layers" panel lists various map layers, with "Address Search", "Parcel Search", "Roadway Search", "Subdivision Search", and "Building FootPrint" checked. The main map area shows a grid of parcels with various numbers (e.g., 1.2, 1.11, 10, 10.3, 10.1, 10.2, 4.1, 4.2, 4.5, 7, 13.3, 11.21, 11.25, 3, 3.1, 11.22, 13.1, 11.23) and red diamond markers with associated IDs (e.g., 18139, 18035, 18041, 18085, 18117, 18102, 18030, 18100, 18122, 18140, 18220, 18226, 17495, 18125, 18224). A road labeled "BENES ROUSH RD" and a driveway labeled "DRIVEWAY" are visible. An "Identify Features on the Map" dialog box is open, showing the "Address Search" layer selected. The "Identify from" dropdown is set to "<Top-most layer>". The "Location" field contains the coordinates "82°25'39\"W / 28°26'3\"N". The "Identified 1 feature" section displays the following data:

Field	Value
ADDID	92535
ADDRESS	18224 BE
BUILDING_TYPE	7
CASS_CITY	
CASS_DATE	

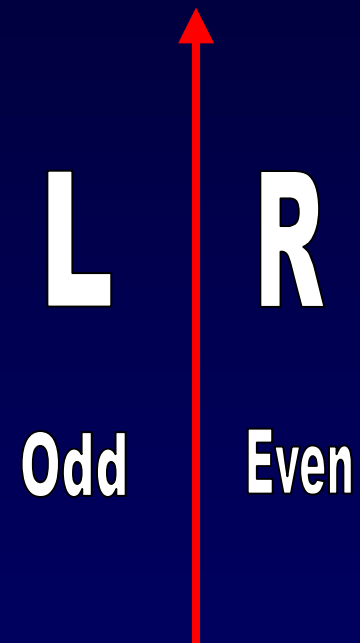
The status bar at the bottom of the window shows the coordinates "82°26'6.87\"W 28°26'1.24\"N".



Hernando County Property Appraiser, Hernando County, Florida

Why Is Line Directionality Important?

- It defines the left and the right side of the roadway.
- It minimizes address number conflicts by establishing even number and odd number addressing.
- In an emergency response having defined addresses reduces the possibility of any confusions.



HCPA Addressing Standards

- Hernando County Roadway Naming and Addressing Ordinance
- Addressing Department Standard Operating Procedures(SOP)
- National Emergency Number Association Standards (NENA)
- United States Postal Addressing Standards, Publication 28



Hernando County Property Appraiser, Hernando County, Florida

Addressing Ordinance

ORDINANCE.: 2004 - 2

AN ORDINANCE AMENDING PROVISIONS OF ARTICLE V OF CHAPTER 23, HERNANDO COUNTY CODE OF ORDINANCES, RELATING TO ROADWAY NAMING AND ADDRESSING; PROVIDING FOR A CHANGE IN THE NAME OF THE CODE SOURCE ORDINANCE; PROVIDING FOR REFERENCE TO A NATIONAL ADDRESSING STANDARD; PROVIDING FOR DEFINITIONS; PROVIDING FOR ADMINISTERING OFFICE RESPONSIBILITIES; PROVIDING FOR ADDRESSING STANDARDS; PROVIDING FOR CHANGING OF ADDRESS NUMBERS AND ROADWAY NAMES; PROVIDING FOR ROADWAY NAMES FOR NEW SUBDIVISIONS AND FOR MUNICIPAL CONTRACTION; PROVIDING FOR SEVERABILITY AND INCLUSION IN THE CODE; AND PROVIDING FOR AN EFFECTIVE DATE.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF HERNANDO COUNTY, FLORIDA:

SECTION 1. Amending Section 23-176, Hernando County Code of Ordinances, to read as follows, underlined matter added and struck-through matter deleted:

Sec. 23-176. Short title and authority.

The ordinance from which this article derives shall be known as the "Hernando County Street and Road Roadway Naming and Addressing Ordinance."



Hernando County Property Appraiser, Hernando County, Florida

Interlocal Agreement

ADDRESSING INTERLOCAL AGREEMENT

Between the CITY OF BROOKSVILLE and HERNANDO COUNTY
PROPERTY APPRAISER.

Work agreement for the Naming of Streets and Numbering of
Properties in the CITY OF BROOKSVILLE
and HERNANDO COUNTY

THIS AGREEMENT made and entered into this ____ day of _____, 2004, by and between the CITY OF BROOKSVILLE, a municipal corporation under the laws of the State of Florida, hereinafter called "CITY", and the HERNANDO COUNTY PROPERTY APPRAISER'S OFFICE, along with the ADDRESSING DEPARTMENT, hereinafter called "DEPT", being a part of the Hernando County Property Appraiser's Office, located in Hernando County, hereinafter called "COUNTY", in the State of Florida, each of whom understand and agree as follows:

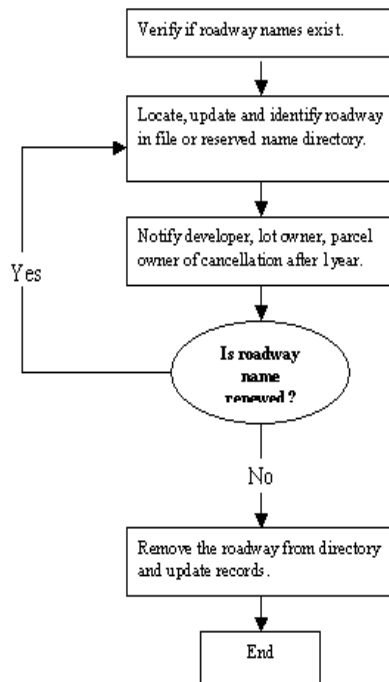
WHEREAS, the CITY and DEPT hereto have the common power to assign street names and property numbers within their geographic jurisdictions; and



Hernando County Property Appraiser, Hernando County, Florida

Standard Operating Procedures (SOP)

PROCEDURES FOR CANCELING OR UPDATING ROADWAY NAME FLOWCHART



PROCEDURES FOR ROADWAY NAME CHANGE

The following describes the steps involved in changing current roadway names. The guidance is outlined in the Hernando County Roadway Naming and Addressing Ordinance (No. 94-03) pertaining to roadway names/changes.

Step 1: The Petition for Roadway Name Change may be submitted by any property owner abutting the roadway involved or an adversely affected citizen of Hernando County. The property owner must complete the "PETITION FOR ROADWAY NAME CHANGE" form.

Step 2: When the petition form is completed, and all documentation is provided as per PETITION FOR ROADWAY NAME CHANGE, collect the fees for roadway name change listed in Addressing Fees. **Start a file on current petition.**

Step 3: Review current list of roadways and ensure that requested name is available for use.

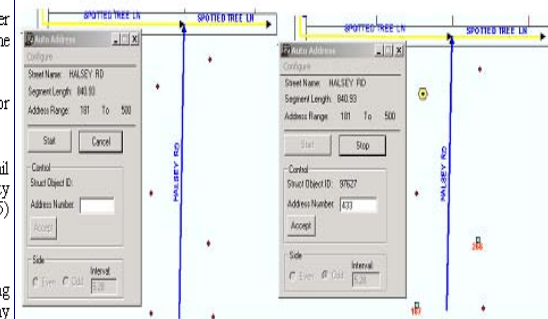
Step 4: After determining availability of the new roadway name, send via certified mail the "NOTICE OF INTENT TO CHANGE ROADWAY NAME" to all property owners abutting the roadway involved. The property owners will be given fifteen (15) days to send their response to the Addressing Department.

Step 5: No opposition - If there is no opposition or no response, the Addressing Department will consider the roadway name change petition and approve the roadway name.

Opposition - Should there be opposition to the roadway name change petition and alternate names are considered, the Addressing Department may schedule a public hearing with the Board of County Commissioners. Should a hearing be necessary, a notice will be mailed at least ten (10) days before the hearing to all property owners abutting the roadway, and shall be published at least once in a newspaper of general circulation within the County no less than ten (10) days prior to the hearing. Those in favor or against the petition will have a chance to testify before the Board of County Commissioners. The Board will approve or deny the request for the roadway name change.

To delete a point: Select the Street segment, then click on the structure **Delete** button. A box will appear alerting, "system ready to delete a point, do you want to continue?". Click OK. The mouse pointer will change to an edit arrow. Select the point you would like to delete. If it is already addressed, another box appears asking if you would like to continue to delete. Click OK. The structure point is now removed. Continue this process until all required points are removed.

Step 8: Click on the **Street** button in the Structures form. In the drop down box select **Auto Address**. Auto address is used to address a point using a set of calculations. Select the street segment and click the **Start** command. Select the structure to be auto-addressed. The address number edit box will display the calculated address. If desired, edit the calculated address then click the **Accept** command button. The address will be added to the database for the structure.



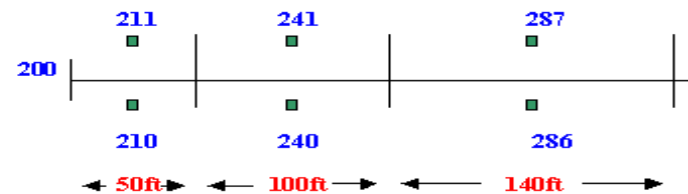
Note: The purpose for the address number edit box is to allow you to edit a number that is not logically sound for that structure (e.g., a cul-de-sac will have structures that are spatially past the end of the street). All structures that are past the end of the street will receive the highest address, odd or even number, based on the range of the street.



NENA Standard

- National Emergency Number Association (NENA), established in 1982 as a non-profit corporation in order to further the goal of “One Nation...One Number.”
- The protection of human life, the preservation of property, and the maintenance of general community security are among NENA’s objectives.

FRONTAGE INTERVAL ADDRESSING SYSTEM



Hernando County Property Appraiser, Hernando County, Florida

Addressing Standards

- The Addressing Department Standard Operating Procedures (SOP) establishes specific guidelines on how this division shall conduct its administrative requirements.
- The Prefix, Suffix, and Type fields are verified against USPS standards to ensure that data can be converted to a standardized format.
 - ▶ *Example:*
 - *Alley, Ally, Aly, etc. are all standardized to Aly*



Hernando County Property Appraiser, Hernando County, Florida

Reviewing Officials

- Hernando County Property Appraiser's Office, Addressing Department
- Hernando County Sheriff's Office (E-911)
- United States Post Office
- Development Department
- Code Enforcement



Hernando County Property Appraiser, Hernando County, Florida

Frontage Interval Methodology

- A specified incremental distance determines possible new addresses.
 - ▶ i.e. interval 5.28'
 - Provides 2,000 (1,000 per side) addresses for every one mile of road frontage.
 - This example will allow for up to 287 address for a segment



Name Street Segment

Interval: 5.28

Street Length: 494.9423

Range Low: 100

Range High: 15405

Compute

Select Street

Type in first letters of street name:

pe

N PELICAN DR -5448

Ok Cancel



Application Menus

The screenshot displays three overlapping application windows from a property appraisal software. The background window, titled "Structures-1/26/2...", has a menu bar with "File", "Search", "Notes", and "Street". It shows "Using Street: N PELICAN DR" and "Address Range: 100 to 287". Below these are input fields for "Address Number:", "Secondary Locator:", and "Key Number:", followed by "Add" and "Quit" buttons. A section for "Current Address(es) for this Structure" includes a "Convert" button and a list area with "Edit" and "Delete" buttons. At the bottom, there are "Structure Type:" and "Structure:" sections, each with an "Edit" button and "New" and "Delete" buttons respectively.

The middle window, titled "Address Search", contains an "Address Number:" input field with the instruction "(Leave blank for Street Search)", a "Type in first letters of street name:" input field, a dropdown menu, and "Find" and "Cancel" buttons.

The foreground window, titled "Auto Address", has a "Configure" section with "Street Name: N PELICAN DR", "Segment Length: 494.94", and "Address Range: 100 To 287". It includes "Start" and "Cancel" buttons. Below is a "Control" section with "Struct Object ID:" and "Address Number:" input fields, and an "Accept" button. The "Side" section has radio buttons for "Even" and "Odd", and an "Interval:" input field with the value "5.28".



Hernando County Property Appraiser, Hernando County, Florida

REMEMBER

“EVERY SECOND COUNTS IN
EMERGENCY RESPONSE!”



Hernando County Property Appraiser, Hernando County, Florida

ANY QUESTIONS?



Hernando County Property Appraiser, Hernando County, Florida