

Project Case Study Parcel Ownership Geo-database
Creation of Parcel Ownership Geo-database



Figure 1. Tax map of the township area



Figure 2. Ortho photo of the township area



Figure 3. Parcel map of the township area corrected to the ortho

| | |
|-------------|------------------|
| Shape | Polygon |
| Block | 1103 |
| Lot | 1 |
| Muni_name | Delanco TWP. |
| Muni_state | NJ |
| Full_name | Mrs. Y Sciacca |
| Last_name | Sciacca |
| First_name | Y |
| Suffix | |
| Middle_name | Sciacca |
| Mail_addr | 218 Union Avenue |
| City | Delanco |
| Mail_state | NJ |
| Zip | 08030 |
| Prop_addr | 218 Union Ave |
| Block | 1103 |
| Lot | 1 |
| Land_desc | 100'x200' |
| Length | 200 |
| Width | 100 |
| Build_area | 20000 |
| Area | 20000 |
| Volume | 0 |
| Acres | 0.4591 |
| Legal | 0 |
| Updated | 02/23/03 |
| Created | 01/18/03 |
| Created_by | 018 |
| Number | 018 |
| Created | 01/18/03 |

Figure 4. Owner ship data of parcel of the township area

Client:

A Township Authority of N.J., USA

Business Need:

The client wanted to have the parcel ownership geo-database with the parcels representing the real ground dimensions obtained from the parcel re-alignment to the latest ortho-photo of the area. This will give the recorded area of the parcel Vs. actual area of the parcel.

Area Covered:

Area of the township consisting of 12,000 land parcels and 10,000 plus house holds.

Inputs Used:

Scanned Taxmaps – 85 Maps
 Ortho photo –High Resolution Orthophotography
 Scale 1:2400 (1"=200')
 Resolution 1 foot pixel
 No. of Images - 35 ortho photos
 Owner ship data- Extracted from access database

Business Solution:

Taxmaps were geo-referenced with reference to the High Resolution Ortho-photography. The parcel geometry of the area was analyzed and Right of way is constructed with reference to visible street center lines of ortho. The parcels were constructed with the dimensions given in the taxmap and the differences in dimensions were proportionately distributed with in the set of parcels to match the shape of the parcel to the ortho.

A unique ID for each parcel is created by combining the Parcel Number and sub-division number. The ownership data from the supplied access data base is then joined to the parcel geo-database using this unique ID.

The result is the accurate parcel ownership geo-database.

Project Shipment:

- The following shipments were made-
- i) Geo-referenced Taxmap image in tiff format
 - ii) Ownership geo-database of the township

Software Used:

- The following software were used-
- i) AutoCAD Map
 - ii) Arc GIS 8.2
 - iii) MS-Access