

# Map News

 THE SIDWELL COMPANY

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## Third Annual Users' of Sidwell Systems Conference



Mildred Orrick (above), McLean County, IL Supervisor of Assessments and Dondaleen McCaleb (below), Benton County, IA Assessor's Office spoke about "The County's Role in Maintaining a Mapping System that is in Place"



The third annual Users' of Sidwell Systems Conferences were held in Des Moines, Iowa on January 16, 1985 and in Normal, Illinois on February 5, 1985.

The meetings, coordinated by Customer Engineer Manager, David Squires, and various members of Sidwell's technical staff, are designed to address property-related issues and problems. Guest speakers contributed with topical subjects from each state. Participants were auditors, assessors, members from local farmland committees, county clerks offices, zoning and planning, and others who are involved with Sidwell Mapping Systems.

Dave Squires served as moderator at both conferences. The following presentations were given by Sidwell staff members:

- Mapping Services Manager, Martha Nunley, discussed

soil mapping and the computation of soil types. A video tape showing the process, including the use of the electronic planimeter, augmented the presentation.

- SIGNET® Manager, Timothy Hopkins, spoke about the design and structure of an electronic geographic data base at the Iowa meeting, while Timothy Torres of the SIGNET® department spoke at the Illinois meeting. Both speakers demonstrated how land-data based information management capabilities could be vastly improved and expanded on a computer graphics system.
- Customer Engineer, Louis Coulombe, led a discussion on deeds and other documents, what they are, and how they are generally applied.

The following guest speakers

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Willard Carroll (left), Henry County, IL Supervisor of Assessments and Ronald Richman (right), Lee County, IA Assessor of Ft. Madison discussed "Soils Mapping in the Tax Cycle, a County's View"

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gave presentations at the Iowa and Illinois Conferences:

- Lee County Assessor of Ft. Madison, Iowa, Ronald Richman, spoke about soils mapping in the tax cycle from a county's perspective at the Iowa meeting, as did Willard Carroll, Henry County Supervisor of Assessments from Cambridge, Illinois at

the Illinois meeting.

- Dondaleen McCaleb and Ann Aschenbrenner, representatives from the Benton County Auditor's Office in Vinton, Iowa discussed the county's role in maintaining an existing mapping system. Mildred Orrick, McLean County Supervisor of Assessments from Bloomington, Illinois, spoke on the

same subject at the Illinois meeting.

A question and answer session was held after each presentation, allowing special issues or problems of participants to be addressed. According to attendee responses, the meetings were very beneficial. The Sidwell Company wishes to thank all who participated, with a special thanks to guest speakers.

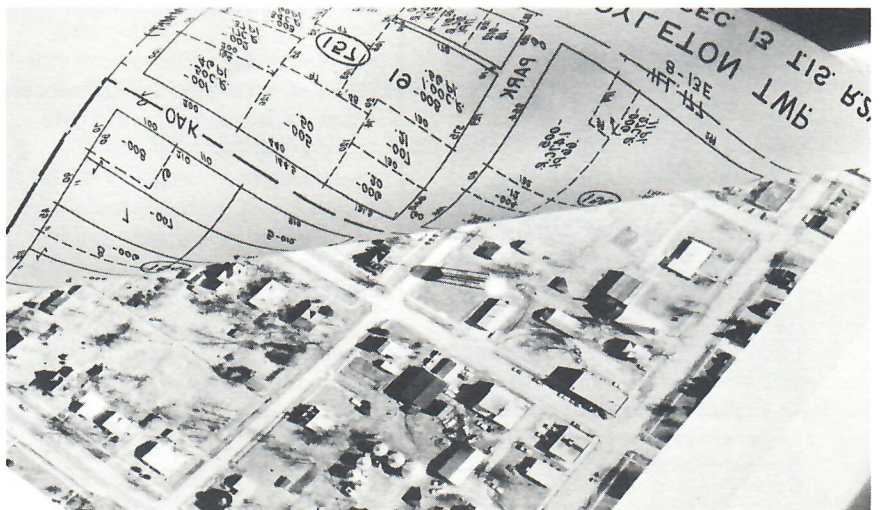


## Varied Uses of Property Mapping Systems

The fact that property mapping systems are used for a variety of purposes is sometimes overlooked. For example, many types of graphic information can be overlaid on stable-based polyester and registered to the property map base, whether using a conventional mapping system or an electronic geographic data base, like SIGNET®.

The zoning department uses overlays on a property mapping base to indicate land use and zoning classifications. Library, mosquito abatement, fire, police, and school districts, which often zig-zag around single parcels, are each shown clearly as separate overlays on the tax map base. Election district outlines overlaying township street maps are reproduced for use in precincts. Soil maps matched to individual property boundaries are used to accurately determine acreage and soil productivity of rural parcels.

Flood control and drainage studies are performed using aerial based property maps, as well as land use analysis.



*The property mapping information is registered to the aerial base. Both can be reproduced separately, or together as a composite print. Just as property mapping information is registered to the aerial base, a series of separate overlays containing a variety of information can be registered to the property map, the aerial base, or both.*

Planning departments, and park and forestry departments use the maps to manage long-term developments and plan site locations. The maps also provide an excellent engineering base for indicating water and sewer lines.

These are just a few examples of how users' of Sidwell Mapping Systems are expanding the application of their aerial based property maps

for other projects and uses, helping to justify the initial investment. Departments and organizations outside the assessment office can become important contributors of revenue to a mapping project. If you are interested in organizing a flexible, multi-user mapping system, or expanding your present system, call a Sidwell representative today at 312/231-0206.

## Sidwell's Soil Computation Service

Many states require, by law, that some type of soil productivity analysis be conducted on rural parcels to ensure equitable assessments. The most acceptable method of determining productivity depends on soil type calculations. Unfortunately, many jurisdictions do not have the staff or facilities to perform the time consuming task of calculating soil types.

Why is soil type calculation used over other methods of determining productivity? Although it is true that soil productivity depends on several factors, including the weather and land management expertise, soil type is a consistent factor which can be measured. By matching individual soil types to grain yield, soil productivity indexes are derived. The indexes specify productivity in relative units, so that rural tracts can be compared.

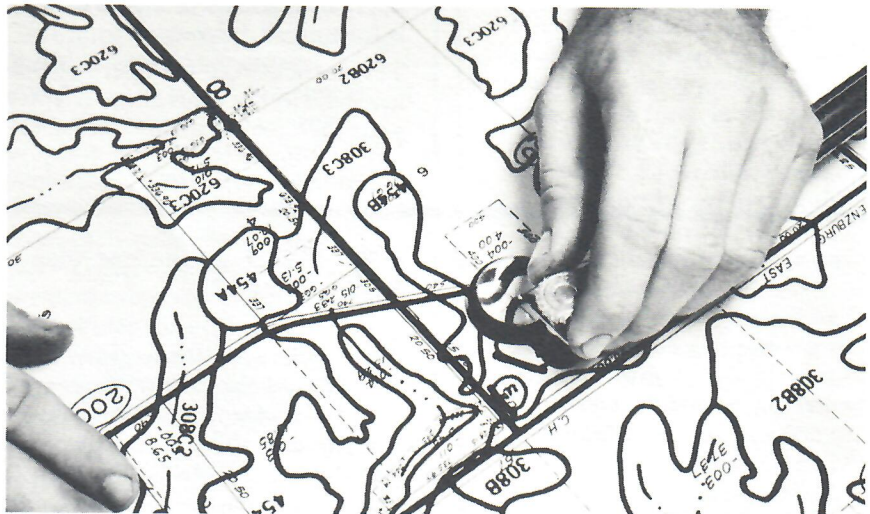
In order to determine individual soil types on properties, Sidwell enlarges and rectifies detailed soil surveys (obtained from the State Soil Conservation Service) to overlay existing aerial based property maps. The soil surveys indicate soil types and boundaries while the property maps provide a visual inventory of parcel boundaries. Because the maps are indexed with the permanent parcel

number, all soils information for an individual parcel is keyed to the number. The aerial photo base is used to determine actual land use.

Once the soil surveys are scaled to the property maps, composite prints are made and parcels requiring calculation are indicated and redrafted if necessary. An electronic digital planimeter is then used to measure each soil type on every rural parcel indicated. The parcel number, assessed and planimeted acreages, and individual soil types contained on the property are eventually entered into the computer where special programs adjust and edit the data. However, the

data is carefully checked and edited many times before the adjustment process. The result of the adjusting process is a final print-out bound in a book in parcel number sequence, ready for use in the valuation process.

As you can see, the soil computation process is time consuming, requires a highly trained technical staff, and employs the use of sophisticated equipment. The Sidwell Company has developed a soils program designed to meet the individual needs of your jurisdiction. If you are interested in having the service performed, please call a representative at 312/231-0206.



*A technician uses the electronic planimeter to measure the area of a soil type. The soil survey, which indicates individual soil boundaries and soil types, has been enlarged and scaled to overlay the property map base. The property map serves as a graphic representation of parcel boundaries and acreages.*

## UPCOMING EVENTS

Look for Sidwell representatives at the following conventions and meetings:

**April 15-17**

Illinois County Officials  
Springfield, IL

**June 12**

Illinois Board of Review Meeting  
Springfield, IL

**June 19-21**

North Central Regional Association of  
Assessing Officers  
Omaha, NB

**June 23-27**

International Association of Clerks, Recorders,  
Election Officials and Treasurers  
Atlantic City, NJ

**July 8-10**

Indiana Assessors Association  
Merrillville, IN

**July 8-10**

Michigan Association of Equalization  
Alpena, MI

## Sidwell Participates in Illinois Property Assessment Workshop

The Sidwell Company was pleased to participate in the 27th Annual Workshop for Illinois Property Assessing Officers. The workshop was held March 3-6 in Peoria, Illinois, and sponsored by the Illinois Property Assessment Institute. Many courses covering assessment-related topics were offered at the workshop. Technical representatives from Sidwell were involved in Course #8, an "Assessment Potpourri." Tax Mapping Use and Design was the subject of the seven hour seminar.

Customer Engineer Manager, David Squires, began the session with a history of cadastral mapping. He discussed the use and development of mapping, and the evolution of the Sectional Survey System.

Following the historical perspective, Dave stepped through the various phases involved in putting together a mapping project, including research, the gathering of data, data compilation, parceling, drafting, and lettering. Customer Engineer, Louis Coulombe, explained the significance of deeds and other documents and their relevance to the mapping process. Mapping Services Manager, Martha Nunley, demonstrated the preparation of succinct, yet complete, tax descriptions. This was followed by Louis Coloumbe's presentation on determining square footage and acreage calculations.

Dave Squires completed the formal portion of the seminar by discussing the use of computer graphics in the mapping process. He also spoke about how an aerial based tax mapping system can be used for many other applications, such as a base for zoning, planning, soils, and election district information.

The participating members of Sidwell's technical staff enjoyed being involved in the workshop. If you are interested in a similar seminar for your group or institute, please call David Squires at 312/231-0206.

## Questions & Answers

Direct questions to:

**Kim Penton**  
Promotional Coordinator  
c/o The Sidwell Company

**Q.** What are the ingredients of an equitable property assessment system?

**A.** Because the assessment process of taking inventory, locating, and appraising property is a continuous one, the assessor must have appropriate technical staff support. Staff size depends on the amount of work to be processed, and varies a great deal from jurisdiction to jurisdiction. The assessor needs up-to-date property maps which clearly indicate location, size, and shape of land parcels in relationship to surrounding parcels. Aerial based maps provide a visual inventory of every square inch of real property. Through their use, parcels and improvements which have been omitted from the assessment role over the years are uncovered. The result is a more equalized tax base.

The assessor also needs current property descriptions, sales information, and records of the names and addresses of property owners. All deeds, transfer documents, and building permits should be routinely supplied to the assessor to insure appraisals are accurately performed and records are kept up-to-date. The assessor's activities should be maintained by adequate data processing support, and the assessor should use acceptable methods of appraisal. Finally, the assessor must check the accuracy of his or her work program by conducting assessment ratio studies in which the assessor's property appraisals are compared to the actual sales prices of the same properties.

The assessment process is complex and involved. Having the proper tools, facilities, and support greatly increases the assessor's ability to establish and maintain an equitable system.



**THE SIDWELL COMPANY**

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**FOR FURTHER INFORMATION ON SIDWELL SERVICES, INCLUDING SIGNET®**