



map news



Sidwell technician calculates soil type acreages.

SOIL COMPUTATION PROGRAM STARTED

St. Clair County, Illinois, will soon be receiving a comprehensive soil productivity report listing the acreage of individual soil types for each rural property in the county.

The computer report, prepared by Sidwell as part of a new service to counties, will be used to establish assessed valuation figures based on soil productivity for farm properties.

St. Clair County, like many counties in the Midwest, consists primarily of agricultural land. Steadily rising land values have made the job of appraising this land a difficult one for assessment officials. To solve this problem, legislation has been passed in many states allowing farm assessments to be based on the productivity of the farm land.

The reasoning is that a certain soil type can be expected, under average management conditions, to yield a predicted size corn crop. The corn crop, having a certain dollar value, then becomes the "index value" for that soil type. By measuring the area of each soil type on the farm, it's possible to establish an assessed valuation figure.

One of the keys to this assessment method is having a complete soil survey of the county. Most counties either have an existing survey or are under contract with the U.S. Soil Conservation Service to prepare new county soil maps.

It's also important to have accurate tax maps so the soil type information can be related to individual property owners.

In the case of St. Clair County, they

had both types of maps available. Sidwell delivered a complete aerial based tax mapping and parcel numbering program several years ago with rural maps accurately drawn at a scale of 1"=400'.

The soil computation program for St. Clair County began by obtaining the county's soil maps and enlarging them to fit the rural tax map base. A composite print was made of the two maps together so that the soil information and property line information overlapped.

Next, the individual soil types were measured using a digital planimeter to accurately measure the area of each soil type within a parcel. The special planimeter used by Sidwell allows the parcel number, soil type code and other information to be entered before the parcel is measured.

The planimeter is connected to a teletype and punches a computer tape containing all the entered and measured data. The tape is then fed into Sidwell's computer where adjustments and editing take place. The edited acreage information for St. Clair County will be printed by computer in tabular form by parcel number.

Although St. Clair County officials will handle the remaining assessment computations themselves, the Sidwell program can be used to figure the assessed value.

With more and more rural assessments being based on soil productivity ratings, the Sidwell program will provide county officials with an important cost-saving service.



AERIAL PHOTOGRAPHY RECORD

The recently completed spring aerial photography season was the busiest ever recorded at Sidwell.

Although it seemed the snow would never melt, the season got under way on April 1 and was a seven-day-a-week project for the next forty days. During this period, five photographic aircraft and crews worked throughout the Midwest taking photographs at scales of 1" = 200' up to 1" = 3,000'. Precision Zeiss aerial cameras with focal lengths of 3½", 6" and 12" were used to take the photographs.

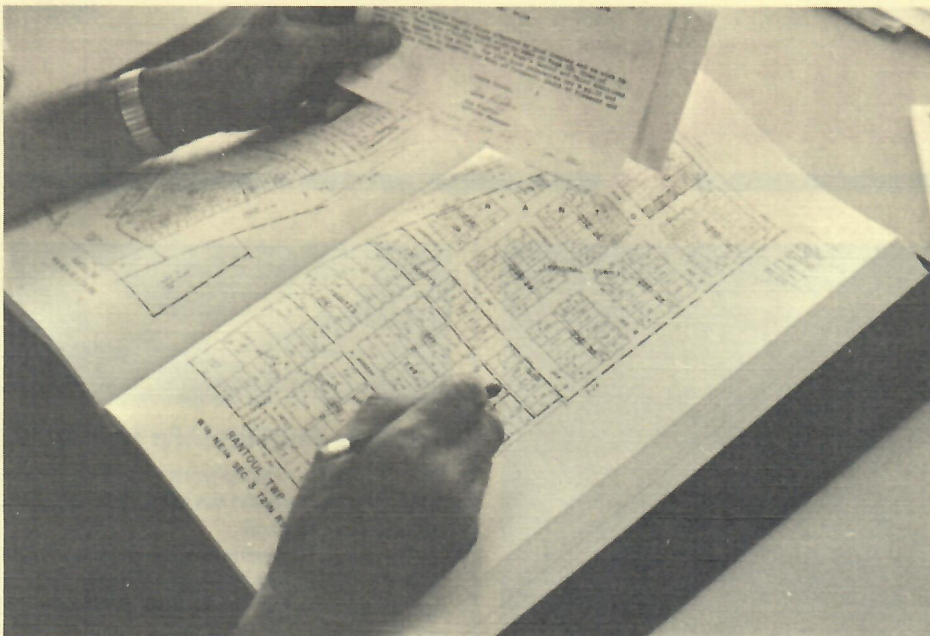
The start of every photo mission begins by checking weather conditions at the photo site. Cloud cover, high winds and haze can result in poor images and unacceptable film. Armed with detailed flight maps, the flight crew flies across the project site in a series of parallel flight lines and at a predetermined altitude. In addition to holding an exact heading and altitude, the effects of turbulence must be controlled to keep the airplane as level as possible. The photographer checks the progress of each flight line by viewing the ground through a device known as an intervalometer. Similar to bombsight, the device tells the photographer if corrections are necessary to stay on the flight line. Working together as a team, the aerial photographer and pilot make constant corrections to make sure the photos are accurate.

If all of this spring's exposed film were laid end to end, it would stretch more than seven and one-half miles. This meant a big job for our photo lab who had to develop and check the more than 45,000, 9" X 9" exposures taken.

The photography taken this spring will become the starting point for a wide variety of mapping projects at Sidwell. These include county tax maps and topographic mapping for engineering work.

Since mapping photography is taken when the trees are foliage free, the next big photo "season" will begin in late fall.





NEW ATLAS AVAILABLE FOR CHAMPAIGN COUNTY, ILLINOIS

Reduced size copies of the official Champaign County tax maps are now available for the first time to realtors, lenders, lawyers and others needing current property information.

The maps are printed at scales of 1" = 200' covering the urban areas and 1" = 800' covering the rural areas, and are contained in two 11" X 17" bound volumes covering the entire county.

Complete property information is shown and includes dimensions, street

names, subdivision names and lot numbers, acreage and permanent parcel numbers.

Sidwell will also be publishing new atlases for Kane, McLean and Sangamon Counties, Illinois this year.

Atlases are also available for Cook, St. Clair and DuPage Counties, Illinois and Kent County, Michigan.

For further information on any Sidwell atlas, contact our Map Order Department at 231-8200.

ROTARY HEARS DAVE WILL



Business and community leaders from Richmond, Illinois, were given a presentation on Sidwell's aerial photography and topographic mapping services at the Rotary Club's May 30 meeting.

Sidwell representative, Dave Will, used a color filmstrip program to outline the many steps in the topographic mapping process and to explain the development of aerial photography.



NEW PHOTOS AVAILABLE

Precision aerial photography covering two large Midwest areas is now available from Sidwell.

The first area includes 25 square miles in the Green Bay, Wisconsin vicinity. The photography was taken with a precision calibrated Zeiss camera and can be used for detailed photo enlargements or topographic mapping containing one or two-foot contour intervals.

The second site includes more than 300 square miles of the Quad Cities (Davenport and Bettendorf, Iowa, and Rock Island and Moline, Illinois). This precision photography is ideal for making 1" = 200' scale photo enlargements for a variety of engineering and planning uses.

All Photography was taken during the spring of 1978 season.

For further information on areas covered, prices and formats, contact Mike O'Rourke at 231-0206.

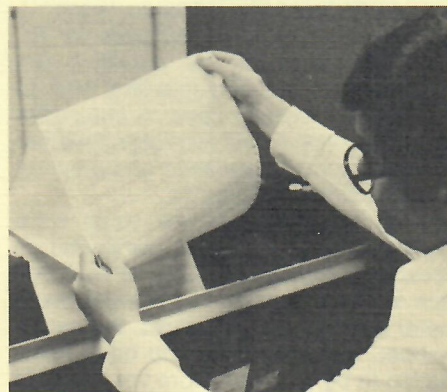
HIGH SPEED COMPUTER PRINTER INSTALLED

According to Dudley Sidwell, Supervisor of Data Processing, the slowest part of computer processing is getting information into and out of the computer.

This condition will be corrected at Sidwell by the installation of a high speed printer from Data Printer Corporation.

The new unit uses what is known as the "chain-train" process which prints entire lines of information rather than individual characters. Data can be output at the rate of 600 lines per minute.

CRT video screens are also used at Sidwell to display and edit material prior to processing.



SURVEYING MUSEUM AIDED

The nation's first museum and park dedicated to the land surveying profession will be helped along by a contribution from The Sidwell Company.

The museum will be built at the site of Michigan's "Initial Survey Points" located on a line between Jackson and Ingham Counties.

UPCOMING CONFERENCES

Sidwell mapping services will again be featured at various state and national conventions. These include the Indiana Township Assessors Association meeting, the Ohio Commissioners and Engineers Conference and the National Association of Counties Conference in Atlanta, Georgia.

We hope to see you there.

NEW PROJECTS

The following new projects have recently been awarded to Sidwell:

- * Bremer County, Iowa (tax mapping)
- * Grundy County, Illinois (tax mapping)
- * Lake County, Indiana (tax mapping)
- * Freeman-United Coal Co. (topo mapping)
- * City of Elmhurst (topo mapping)
- * Village of Gurnee (Topo-Plan)



THE SIDWELL COMPANY

FOR FURTHER INFORMATION ON ANY SIDWELL MAPPING SERVICES . . .

write The Sidwell Co., 28W240 North Avenue, West Chicago, IL 60185 . . . or phone (312) 231-0206.