

HOOSIER SURVEYOR



QUARTERLY PUBLICATION OF THE
INDIANA SOCIETY OF
PROFESSIONAL LAND SURVEYORS, INC.

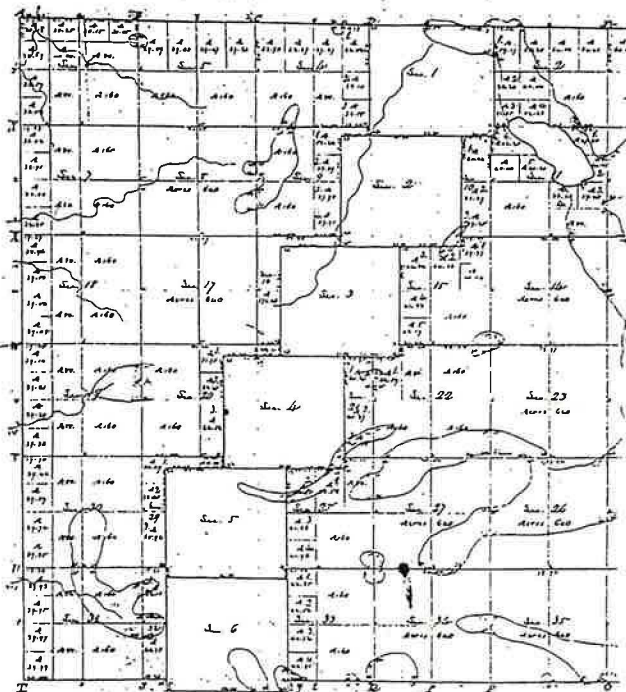
VOLUME 28
NUMBER 4
SPRING 2002



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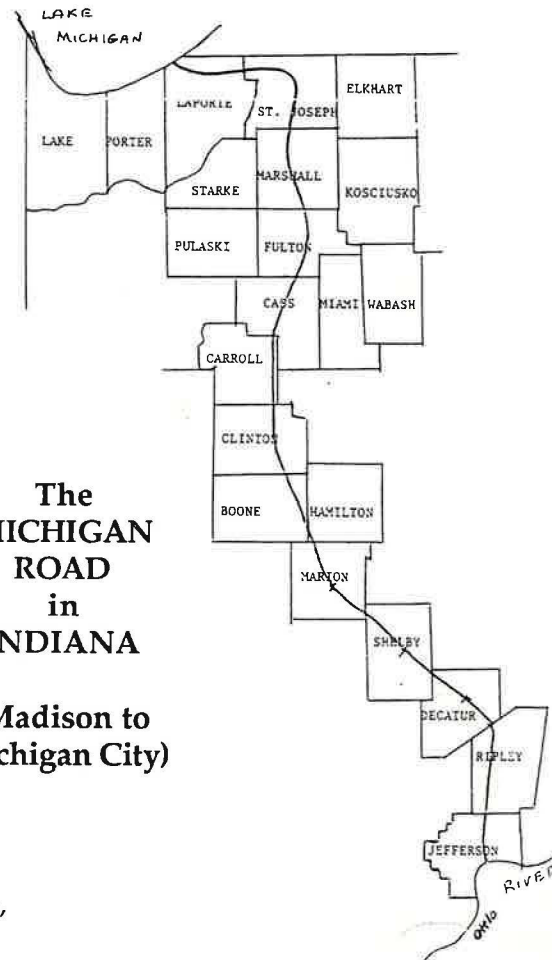


Township 17°35'N. Range 21°E 2nd Mer. 1



Surveyed in 1836 by David Bell, Deputy Surveyor
in 1870 by William Feltus, C.E.S.

I certify that the above is a
Correct copy of the original
Survey and is true to the
Original Survey Office
Dated Nov. 1, 1899



The
MICHIGAN
ROAD
in
INDIANA

(Madison to
Michigan City)

Plat showing several exceptions to the Public Land Surveys attributed to the Michigan Road survey sections in St. Joseph, Marshall, Fulton, and Cass counties. A total of 45 sections were created prior to government surveys in the area.

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HOOSIER SURVEYOR

VOLUME 28 NUMBER 4 SPRING 2002

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EDITORS NOTE

Deadlines for copy for various planned issues of the Hoosier Surveyor are as follows: Winter - December 31; Spring - March 31; Summer - June 30; Fall - September 30.

The Hoosier Surveyor is published quarterly by the Indiana Society of Professional Land Surveyors, to inform land surveyors and related professions, government officials, educational institutions, libraries, contractors, suppliers and associated businesses and industries about land surveying affairs.

Articles and columns appearing in this publication do not necessarily reflect the viewpoints of ISPLS or the Hoosier Surveyor staff, but are published as a service to its members, the general public and for the betterment of the surveying profession. No responsibility is assumed for errors, misquotes or deletions as to its contents.

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ISPLS BOARD OF DIRECTORS (2002)

Front row, first row, John Updike, Fort Wayne; Rich Hudson, Valparaiso; Bradley Ott, Franklin; John McNamara, South Bend; Don Bengel, Valparaiso; Frank Ballintyn, New Albany; second row, Perry Cloyd, Edinburgh; Ted Darnall, Edinburgh; Anthony Gregory, Hobart; Richard Miller, Indianapolis; William Clark, Vincennes; Absent from picture was Greg Garrison, Boggstown.

PRESIDENT'S THOUGHTS

by William Clark, PLS, -Vincennes Indiana



It's Sunday, April 14; a gloomy day, the yard needs mowed, there's a stack of drawings to grade, the Sunday news shows have been filled with the tragic goings on in the Middle East and Dianne has given me an April 15, 2002 deadline; so I put on some Beatles (or Johnny Cash)

turn on NASCAR, see that Tony Stewart and Jeff Gordon are racing for the lead (both with Indiana racing roots), see that the Cleveland Indians won again and the Pacers are still in the playoff hunt, simple men need simple pleasures. Here's what we've been doing since the last column.

On April 5th and 6th, SIT and LS Exam Reviews were held at Vincennes University. These were the first such reviews sponsored by the ISPLS in several years. At the Friday SIT review, 8 attendees were instructed by Greg Garrison, Glen Boren and Dick Vermillion. The review lasted 8 hours and followed the NCEES breakdown on the content of the exam. On Saturday, the LS review was presented in four two-hour sessions and was attended by 15 prospective land surveyors. Session One was Tiffin's Instructions and Unwritten Rights presented by Ed Sweetland, Session 2 covered Boundary Law by Kevin Rowland; Session 3 covered Stormwater Drainage, Subdivision Design and Ten State Standards and was presented by Dennis Helms and the final session covered the registration act and rules 10 and 12 and was presented by Darren Helms. The sessions were well received and the licensing exam review committee has already scheduled their next meeting to plan this fall's review. If you would like to participate as a speaker or attendee, please contact Ed Sweetland or myself. I would like to thank Vincennes University's Interim Dean of Technology Art Haase, for allowing the free use of the auditorium, and also the Vincennes University Surveying Department for providing the morning and afternoon refreshments. Special thanks to all the speakers who came through on such short notice. You all should be commended for your commitment to the profession and to the ISPLS. Who knows, someday one of the attendees may approach you and tell you that something you said made the difference in their passing the exam.

Trig Star chairman Jeff Gustke has sent out packets of information and instructions for each of the chapter representatives. Making this program as successful as possible takes a lot of personal time. These efforts are needed to provide an avenue to introduce the profession of surveying to high schoolers who may become a part of our professions future. I am asking for chapters to develop a network of school contacts and for chapter members to dedicate the time to administer the exam. In addition to Trig Star, try to attend career days for high schools. The public information and marketing committee will be developing handout material for such events. This

committee will also be given the charge of preparing a power point presentation suitable for high school career days, civic groups or government offices. Copies of the video, when completed will be kept at the ISPLS HQ's for distribution as needed.

By the time this issue arrives, the spring ISPLS sponsored Mandatory Continuing Education Seminars will be completed. Upcoming seminars include Dr. Van Gelder's "GPS I and GPS II," two four-hour seminars to be held at Turkey Run State Park on 6/28. Also the NW chapter will be hosting Knud Hermanson, 7/26 at Valparaiso University, the topics relate to Research/Liability and Expert Witness. Keep checking our web site for future seminars (ISPLS.org). Remember, you are required to have completed 21 continuing education hours, with 6 hours being mandatory category hours by August 1, 2002.

The scholarship committee met at HQ on April 13 and interviewed 4 candidates from Vincennes University for the Peggy Archer Scholarship and one candidate from IUPUI for the David Best Scholarship.

Committee assignments and charges will be completed this week (4/30) and should be part of this issue. I have asked the three regional chairs of the Professional Practice Committee (John McNamara – north, Pat Cunningham – central, Tom Boofter – south) to examine and refine the complaint process. Once this has been completed, an article explaining the procedures and remedies for complaints to the ISPLS will be published. Peer/Mentoring Committees are being developed in the North- Les Weber, Central – Bob Gross, South-Darren Helms, their charges will be subject to the report from the Professional Practice Committee. The HARN/GIS/Monumentation Committee will have a busy year. Chairman Tom Mahon has charges that include: assisting in the monumentation of the Michigan-Indiana line, providing elevations on the NGS benchmarks in Northeastern IN, establishing a calibration baseline, conduct a study for a state-wide control base for GIS and prepare a position paper for ISPLS on the role Professional Surveyor must have in GIS developments. The Foundation Committee, chaired by Brad Ott, will commit itself to continue the outstanding projects such as the "Surveying the Past, Mapping the Future" video. Each chapter should have a complementary copy of this video and personal copies are available through ISPLS.

If you haven't yet seen the video, let me give a two thumbs up review. In the video several of our most distinguished senior surveyors relate a few of their professional experiences. The video lasts close to an hour and is very enjoyable to watch. I was particularly fascinated with Mr. Bob Vollmer, a man who was influential in my career choice, and someone I've known since I was 6 years old. I expect most of you will have a similar experience viewing this video.

There are three surveying magazines I always read. POB, Professional Surveyor and the Hoosier Surveyor. Until becoming the

State Board of Registration for Land Surveyors proposes Title 865 rule changes

by Rick Miller, PLS – Indianapolis
ISPLS Government Affairs Chairman

The State Board of Registration has published notice of intent to adopt or amend certain rules under Title 865. The notice appeared in the March 1, 2002 edition of the Indiana Register and is the first step of the rule making process as prescribed by state law.

The following are the highlights of the proposed rule changes that the board will be working on over the next few months:

- To increase the number of examination attempts for applicants applying for certification as a land surveyor-in-training. Currently a LSIT applicant has two (2) chances to pass the exam. The board intends to increase this to three (3) chances which would make it comparable to the three chances that PLS applicants are now given.
- To modify the standards for surveyor location reports to remove the requirement to show found monuments on the SLR drawing.
- To establish distance learning continuing education requirements and procedures for land surveyors, and the requirements and procedures for distance learning continuing education providers. This rule is being drafted to comply with the law adopted by the State General Assembly in 2001.
- To allow licensees to submit continuing education course material (from non-approved continuing education courses) for credit within six (6) months after taking the

course. Currently you must submit this material and a request for approval to the board within three months of taking a non-approved course.

To revise the fees charged and collected by the board. This is a result of the state's budget problems. The Governor has requested that all professional licensing boards increase their fees. The board intends to raise the biennial license renewal fee from \$70 to \$100. This would put the renewal fee back to where it was a few years ago when the former Governor promoted legislation to lower fees charged by the state.

The process that follows the notice of intent to adopt a rule of course includes the work that the board must do to actually draft the proposed rule. The board must then publish the actual draft language of the proposed rule in the Indiana Register along with a notice of public hearing on the matter. After the public hearing the board will return the proposed rule to the Legislative Services Agency who will forward it to the Attorney General for review and then its on the Governor for signature and then to the Secretary of State for final publication. Depending on how complicated the proposed rule is the whole process could take anywhere from four to twelve months to complete. However, with the exception of the proposed distance learning rule for continuing education all of the above mentioned proposed rule changes are very easy to draft and I would expect that they will make it through the process very quickly. You may even see the fee increase on your next license renewal notice.

Speaking of license renewal notices, your license will expire on August 1st, 2002. If you have moved within the past few years and you did not notify the Professional Licensing Agency of your change of address you should contact them as soon as possible to do so. Every two years there are literally dozens of land surveyors who are in jeopardy of permanently losing their professional license because they did not renew it as required by law. If you let your license expire and you are lapsed for two consecutive renewal periods (four years) it is permanently gone. You must then reapply to the board for a new license and you must meet the current minimum education requirements. It is your responsibility to notify the licensing agency of your change of address. By law, the licensing agency mails your renewal notice to the last address you gave them. The agency is not required to track you down when they get a returned notice marked "No forwarding address." If you don't get your renewal notice by July 1st you should contact the PLA at (317) 232-2980 to determine what the problem may be.

Comments concerning the above proposed rules may be directed to: Indiana Professional Licensing Agency, Attention: Staff Counsel, 302 West Washington Street, Room E034, Indianapolis, Indiana 46204-2700.

PRESIDENT'S MESSAGE

...Continued Page

ISPLS President I never considered the effort it takes to present a publication as excellent as the Hoosier Surveyor. From conversations with Dianne, I know she works hard to organize and meet the deadlines, and she does an excellent job, but in addition to Dianne's efforts I would like to take the time and space to thank Mr. Ken Curtis, the Hoosier Surveyor Editor. Mr. Curtis has given many years of outstanding service and hopefully will continue as editor for many more years. Mr. Curtis, I know from the before mentioned video you were instrumental in forming the ISPLS, thank you so much for helping keep us informed thorough the years.

Well, it's cleared off. Time to mow. Gordon nor Stewart won. Cleveland was rained out. Pacers won. I'm about at the end of Abbey Road and Johnny Cash has done walked the line. Still got wings to grade and if you read this Art, I will be up to at least midnight grading them. If anybody wants to discuss anything with me, give me a call- day at school 812-888-5865 and home 812-882-8239.



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ISPLS BOARD OF DIRECTORS MEETING HIGHLIGHTS

by Dianne Bennett, Executive Director

January 23, 2002

The ISPLS Board of Directors held a meeting on Wednesday, January 23rd at the ISPLS Convention. President Gregory called the meeting to order at 1:00 p.m. The minutes and treasurer's reports were reviewed and approved with corrections.

Staff Activity Report - Dianne reported that Frank Ballintyn had sent a letter to the ISPLS board thanking them for their support of the ISPLS picnic. Next year the picnic will be on September 28th at Clifty Falls.

A letter was also received from PS Business Consultants asking for additional information regarding the Pre-Paid Legal program.

By-Laws - Don Bengel, Chairman, reported that he received only one call on the proposed rule change. Other board members reported they also had received calls in regards to the proposed changes.

Business Management - The quarterly Wallington Asset report was presented and reviewed by the board.

Chapters - Northeast - John Updike, reported that the Rule 12 seminar had 50 attendees which resulted in proceeds of \$4284.43 after expenses. He also reported that a scholarship of \$500 will be presented at the convention.

St. Joe - John McNamara reported that their chapter had a meeting last Thursday and had 17 members in attendance.

Tecumseh - Dan Pusey reported that the chapter is looking for new officers. Their Sec./Treasurer has moved out of the area and no meetings were held the past year. The Margaret Cunningham scholarship will be presented during the banquet. The spouses of the chapter members will also be having a silent auction of baskets again this year. Ron Wharry also presented the financial statement from the October 13th seminar co-sponsored with the Purdue Student Chapter resulting in proceeds of \$1118.74 after expenses.

Southwest - Steve Sherwood, chapter president, reported they will be giving two scholarships this year. Their last seminar presented by Perry Cloyd on Rule 12 generated \$9000 with 135 attendees. Bill Clark stated that the Peggy Archer scholarship will be presented at the banquet.

Central Indiana Chapter - Vince Barr, chapter president, reported that Ed Sweetland will be their new president for 2002.

Northwest - Rich Hudson reported that they held their Christmas meeting the second Thursday in December. The chapter will give out three (3) scholarships this year. The 2002 president for the chapter will be Glen Boren.

Wabash Valley - Brad Rayl, chapter president, reported that they held a seminar in December with E. R. Gray as speaker. They had 85 in attendance with proceeds of \$4812.63 after expenses. Their new chapter president will be Daniel Minor, Wyatt Johnson, Vice President, and Larry Manship as Sec./Treasurer.

Convention Coordination - Doug Herendeen reported that we have 611 attendees at this convention.

Education - Bill Clark reported that he received the materials for the "Title Insurance for Surveyors" workshop being held at the convention. A motion made and approved to recommend 6 elective hours for the seminar and forward the request on to the board of registration for their approval. There were also speaker changes for the vendor workshops going on at the convention, these too will

need to be submitted to the board of registration again for approval. The certificates for these workshops will be mailed out to the attendees when the board of registration approves these classes.

Next years workshop schedules are being put together and the education committee will need to send the material to the Board of Registration for approval. A June 28th seminar is being planned at Turkey Run State Park on GPS. The workshops in April will be in Anderson and Warsaw. Brad Cramer will chair the education committee in 2002. The Fall locations will be on different Fridays in October located in Warsaw, Lebanon and Evansville. Pat Cunningham will be doing a two day Storm Water Site Drainage seminar at Vincennes near the end of October. Dates will be posted on our web site.

Government Affairs - Rick Miller reported on two bills up for consideration. Budgets and funding will be the big issues during this session. Don Bengel reported that Porter County office holders and department heads have been told that maybe during March and April County Government would be shut down with only minimum services being provided because of money shortfalls. John Stephens reported on the County Surveyors bills with Wetlands and Regulated drain issues.

Hoosier Surveyor - Articles need to be in by next week..

Membership - The following applications were reviewed and approved: Student - Hesham Khalil and Richard Brown; Affiliate - Thomas Winemiller, David Winemiller, Christopher Coffey, Scott Zacharias, James Kovas and Ryan Taylor; Associate - Brian Jacquay, Rod Rudd, Mark Deardorf, Rob Seig, Michael Milhon, Grant Niemeyer, Jason Sanford, William Hogstrum, Calvin Cash III, Jonathan Hause, Harry Leonard, Joseph Gude, Mark Sarver, Jeffrey Knarr, Jonathan Lange, Dagmar Zatecky, Jeremy Fireline, Jessica Stapleton, K. Nathan Althouse, Nicoles Wonnell, and Jimmy Garza; Professional Member - Mark Chamnes, John Meyer Jr., Phillip Burress, Jack Jordan, Gary Loftus, Paul Maurer, David Mostrom, Mark Weston, Shawn Pappenheim, Robert McClintock, William Bivins, Voorhees Dalton, Michael Fink, Chester Brown, Robert Weaver, Stephan Kuhn, and William Gibson; Firm - Deckard Engineering Services, Inc.

ISPLS membership is as follows: 497 Professional Member, 177 Associate, 30 Affiliate, 36 Students, 28 Firms, 5 Honorary and 40 Life members.

Dianne reported on a letter received from Agency Associates about our insurance plan for individual family member policies.

Nominations - The newly elected directors are Perry Cloyd, Brad Ott, and Frank Ballintyn. A motion was made and passed to destroy the ballots.

University Cooperation - Tony Gregory stated that due to inactivity, the board may want to dissolve the committee. A motion was made and passed to dissolve the committee.

Board of Registration - The Board of Registration will be advertising the rule changes that are being considered.

This will also be the last year John Schneider will be on the board. He will be teaching two classes at IUPUI so the degree program can be reinstated next fall.

National Society of Professional Surveyors - Don Bengel re-

...continued Page 7

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MINUTES

continued from page 5

ported that the next meeting of American Congress on Surveying and Mapping will be April 19-26 in Washington, D.C. in conjunction with the International Federation of Surveyors 2002. Restructuring issues will be the topic for discussion during that week.

National Geodetic Survey - A letter was received from Gary Kent asking if ISPLS or any school would be interested in completing a leveling project started by NGS from Michigan into Indiana. Michigan did the work in their state but the benchmarks in Indiana do not have the elevations established. Bill Clark will assign it to a committee.

Old Business - A motion was made and passed to allow \$100 for a new state ISPLS banner.

New Business: Brad Ott stated that he has 50 copies of the new video tape on "Old Time Surveyors". A motion was made and passed to sell the tapes for \$20 per tape and to send a copy to each ISPLS chapter and each school in the state.

March 2, 2002

The ISPLS Board of Directors held a meeting on Saturday, March 2, 2002 at ISPLS headquarters. President Bill Clark called the meeting to order at 10:15 a.m. The minutes were reviewed and approved after revisions. The treasurer's report was reviewed and approved.

Staff Activity Report - A written report was submitted for board review. The report is stated under individual topics listed below.

A list of board meeting dates and board member names, addresses and emails was handed out for review.

Officers' Activity Reports - John McNamara reported on his trip to the Michigan convention. A letter and agenda was submitted.

Rich Hudson and Tony Gregory went to the Illinois convention. Illinois is attempting to have mandatory continuing education in 2003. They are proposing 20 hours every 2 years. They are not proposing to require mandatory topics like Indiana. Illinois's convention seminar lengths were 1 1/2 hours long.

Perry Cloyd attended the Kentucky and Ohio convention.

Group Committee Reports:

Membership - The following membership applications were reviewed and approved. Professional Member - Timothy Warner, Philip Going, William Richter, Jerry Netherlain; Associate - William Caldwell.

Publications - Manual #3 update is progressing very quickly.

Hoosier Surveyor - The next issue is at the printer.

Bill Edwards, 2001 PLSO (Professional Land Surveyors of Ohio) President, proposed a communication avenue between PLSO and ISPLS. He has suggested that each society submit an article to be published in each's newsletter. Tony Gregory will be ISPLS's contact and will submit articles to the PLSO's newsletter.

Web Page - A request was received from Maptech MapServer for Surveyors, asking to be a resource on our web site.

Education - Dianne reported that the 2002 convention had 430 full time, 99 1-day, 43 students, 32 spouse and 5 complimentary in attendance. The SW Chapter President, Steve Sherwood sent ISPLS letter congratulating us on the convention. A thank you was also received from Marlow McGowan, NSPS (National Society of Professional Surveyors) Area Director and from Bill Edwards, PLSO's President.

ISPLS Spring Workshop Approval - The committee approved the 3 spring workshops and submitted them to the Board of Registration for approval at their last meeting. They were approved for 6 CEH (Mandatory). The committee would like approval for these three workshops from the ISPLS board. A motion was made and passed to approve the March 29th, April 12th, and April 19th Spring workshops.

The committee is also working on the ISPLS June 28th seminar on GPS I and GPS II to be presented by Boudewijn van Gelder at Turkey Run State Park. When all the information is available it will be submitted to Bill Clark who will poll the board of directors for approval so the information can be forwarded on to the Board of Registration for approval.

A hearing impaired individual called headquarters with concerns about being able to hear the speakers at workshops. Rick Miller will look into this matter.

A letter was received from an attendee at the convention who was requesting the board to issue him his CEH's or partial credit for a seminar he attended. He had arrived 20 minutes late because of traffic problems. After discussion a motion was made and passed to deny him the CEH's or partial credit on the basis that our policy is that an attendee can not be more than 10 minutes late. A letter will be mailed to the attendees stating the board's decision. A suggestion was made that when we send out the confirmation notice to the attendees that we have ISPLS's policy printed on the notice, that way the attendees would be aware of the 10-minute late policy.

Trig-Star - Jeff Gustke is putting together an information packet for chapter representatives.

County Surveyors - A written report was received from John Stephens. Rick Miller updated the board on H.B. 1138 - which authorizes a county other than Marion county to establish a department of storm water management. This would permit counties to establish drainage fees, which could be used to finance the mandatory Phase II implementation. A motion was made and passed to show our support on House Bill 1138 and the County Surveyors Association.

Standards - Discussion was held on non-licensed individuals practicing surveying.

Chapters - Bill Clark drafted a letter and sent it to member and non member areas of the state that are not represented by chapters in the southeast part of the state and the west part of the state.

There was discussion on the P.U. Student Chapter's request for a donation for the ACSM Convention. A motion was made and passed to donate \$200.

Chapter Reports - Northwest Chapter - Don Bengel reported that the chapter met one week ago. The speaker was from the town of Merrillville Planning Department.

St. Joe Chapter - Don Bengel gave a 20 minute talk at their meeting on the Trig-Star program. Their next meeting is April 28th.

Northeast Chapter - Todd Bauer reported that they held a business meeting on Feb. 28th. At the meeting the chapter awarded a \$500 scholarship to Christopher Lewark. He also reported that there was an hour and 45 minutes of positive discussion about two fictitious survey samples representing the typical issues reviewed by the Chapter's Standards Review Committee.

...continued page 9

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COMPLETED CAREER

Brother Benjamin Austin Barry
Manhattan College Professor and Author

Brother Barry, a professor of surveying and civil engineering at Manhattan College in Bronx, NY died August 2, 2001. He served as a teacher of surveying from 1944 until his recent passing and was a leader among his surveying teacher colleagues across the country. He was active in several national societies - ASCE, SAME, ASPRS - but was most active in American Congress on Surveying and Mapping where he served as president in 1961-62. Over the years he received many awards recognizing his contribution to civil engineering, surveying, and teaching. He had an intense passion for developing the whole person. Brother Barry insisted on proper etiquette, posture, speech, writing skills, and penmanship. Quoting from the Empire State Surveyor, he was "noted for his dry sense of humor, and tremendous energies. Brother Barry will be missed by the surveying community, but long remembered". These are the same sentiments as that of your Hoosier Surveyor editor who has worked with Brother Barry at the national level for over 50 years.

MINUTES

...continued from Page 7

Wabash Chapter - Dan Minor reported that they had a meeting with introduction of new officers and discussion on by-laws and to set meeting dates. Their next meeting is March 13th in Kokomo.

Initial Point Chapter - Tom Boofter reported that they held a meeting last Wednesday. After dinner the film on "Old Timers" was shown. Their next meeting is March 27th.

Southwest Chapter - Steve Sherwood reported that they had an informal meeting at the convention and discussed how to handle Trig-Star. They will meet the 2nd Tuesday of March.

Old Business - Don Bengel reported that the St. Joe Chapter had some confusion as to their ID number. The NE Chapter had the same problem and got in touch with the ISPLS accountant and 2 hours later they had a number.

It was agreed that ISPLS would buy a state license for Trig-Star. ISPLS will also provide a \$1000 savings bond to the state winner again this year.

Rick Miller reported that the banner for the Michigan Land Surveyors Museum has been completed. If any chapters wants to have one made the cost is \$130.

New Business - Frank Ballintyn presented a letter from Randy Miller regarding a grant proposal. There was discussion that the Grant Committee has been dissolved and how to proceed for grant approval. Also mentioned in the letter was a By-Laws revision. A motion was made and passed to table this issue until next month when a full board of directors would be present.

It was discussed that if you know you are bringing any new business to the table to please submit the information early so the board members can preview it before the meeting.

NEW REGISTERED LAND SURVEYORS IN INDIANA

The Indiana State Board of Registration for Land Surveyors held the certificate presentation for new professional land surveyors on Friday, May 17, 2002. The ceremonies were held at 1:30 p.m. at the Government Center South Auditorium, Indianapolis. The following land surveyors were awarded certificates. Not all were present.

NAME	CITY	LS#
Randolph L. Compton	Indianapolis, IN	20100072
Archie A. Crouch	Rising Sun, IN	20100073
Lisa M. Dobrowski	Merrillville, IN	20100077
Daniel S. Farber	Decatur, IN	20200004
Jeffrey J. Franciski	Fishers, IN	20100074
Diane B. Hadley	Hazleton, IN	20100078
Timothy D. Higbie	Danville, IN	20100067
Brian W. Jacquay	Fort Wayne, IN	20100090
Steven A. Jones	Hammond, IN	20200010
Jeffrey D. Knarr	Waldron, IN	20100069
Jeffrey J. Kondy	Indianapolis, IN	20100068
Kevin A. Krull	Hobart, IN	20100075
David K. Lynch	Evansville, IN	20100079
Roger David Meyer	Rankin, IL	20200006
George Stephen Minges	Harrison, OH	20200003
Jerry A. Netherlain	Farmersburg, IN	20200005
Claude M. Quillen	Elwood, IN	20200002
Brian K. Rayl	Anderson, IN	20100070
James W. Roth	E Saint Louis, IL	20200008
Robert G. Seig	Sunman, IN	20200007
Bret Alan Sermersheim	Evansville, IN	20200009
Donna Jo Smithers	Trafalgar, IN	20100076
Gregory D. Williams	Cloverdale, IN	20100071
Gary L. Witty	Evansville, IN	20100066
Michael A. Young	Hobart, IN	20100088

FEMA

In its efforts to familiarize all stakeholders in the National Flood Insurance Program (NFIP) with proper use of forms and procedures, the Federal Emergency Management Agency (FEMA) has created a series of on-line tutorials.

<http://trainingnfipstat.com/portal/default.htm>

These interactive programs allow users to check definitions of various terms, gain detailed information, and view annotated diagrams closely. Presently, there are tutorials ranging from the very basic "How to Read a Flood Insurance Rate Map" to the more technical "GIS and Advanced Mapping Technology." Future programs will detail applications for Letters of Map Amendment and Letters of Map Revision.

The Building of the Michigan Road

by John McNamara PE-PLS, St. Joseph County Surveyor, South Bend, Indiana

Editor's Note: Much of this article is an abbreviation of portions of the text of Prather's paper, cited in the references, and was prepared for presentation at a class session of the Wabash Area Lifetime Learning Association, West Lafayette, IN October 31, 2001. The eight session course covered "Historic American Roads"
Ken Curtis, editor

Introduction

Of all the historic highways of the old Northwest none has a more interesting history than the old Michigan Road. With only a few minor changes in routing, this road, over a century old, still curves up across Indiana from Madison in the southeast to Michigan City in the northwest corner of the state. It follows the route now marked as State Highway 421 from Madison to Frankfort; as Highway 29 from Frankfort to Logansport; as Highway 25 from Logansport to Rochester; as Highway 31 from Rochester to South Bend; and as Highway 20 from South Bend to its northwestern terminus at Michigan City a total of 265 miles. Until the railroads were built, this most famous of Indiana's state highways was used more than any other route of travel in the state, with the exception of the Gateway route, the Old National Road. Half of the pioneers of northwestern Indiana reached their homes over this road. It passed through fourteen counties and was used by the inhabitants of thirty-five counties in going to the capital. The road was built in the decade of 1830-1840 and is still serving as one of the state's main thoroughfares, its career to date might be summed up in the phrase – a decade to build, a century of use.

The Michigan Road derived its name from the Lake not the state of Michigan. The immigrants to southern Michigan entered principally by way of the Erie Canal, the Great Lakes and the old Chicago Turnpike which followed the location of the earlier Sauk Indian trail leading southwest from Detroit.

The track of the Michigan Road was passable during the eight months of the year when the weather was favorable, but throughout the winter season, it was a meandering stream of mud practically useless for travel. In the central portion of the State, the Michigan Road crossed a level plain covered with woods so dense that the rays of the summer sun penetrated rarely to the forest floor.

The Michigan Road was second only to the National Road as an overland route leading into Indiana. Emigrants from Pennsylvania, New England and other eastern states floated in flatboats and barges down the Ohio River to Madison. Settlers journeying northward from the southern states of Kentucky, Tennessee, Virginia, and the Carolinas, crossed the Ohio River from Milton to Madison. They then journeyed north on the Michigan Road.

It is difficult to imagine the isolation that existed before the 1850s in Indiana and other parts of the west. In 1825 there were routes of travel, but no railroad, no canal, and no turnpike. When the state records were moved from Corydon to Indianapolis in the fall of 1824 by Treasurer Samuel Merrill, two weeks were required to make the journey of about 160 miles, with eleven mules as the best day's travel.

Indiana was then and for many years afterward purely an agricultural state and her greatest need was means of transportation. The need for markets was becoming vital. The fact that the National Road was to pass through Indianapolis increased the desire for a good north-south route to the capital. The immigrant needed a way to reach the lands opened in central Indiana by the New Purchase of 1818. After he had settled, cleared, and started

producing, he needed a means of disposing of his surplus; in fact, the prospects of disposing of his surplus generally determined the place of settlement. The new territory as well as the older sections needed more and better connections with the central part of the state and with the capital, which had been transferred to Indianapolis in 1824. The Michigan Road was the first to reach upward into the great north central section of Indiana. Those who looked ahead to the time when not only the New Purchase but also the remainder of northern Indiana would be settled felt that an outlet to Lake Michigan would aid in solving their market problem.

By crossing the National Road in Indianapolis, the north-south road would open sections of northern Indiana to points east. The argument of military necessity for the road was useful in Congress in securing the necessary appropriation to make a treaty with the Indians.

In the early days of Indiana a candidate for office hardly dared announce himself unless he favored internal improvements. Every chief executive of the state made it a special point in his messages to the legislature to urge the adoption of measures for the construction of highways and canals.

Governor James Ray, Governor of Indiana from 1825 to 1831, in his first annual message, December 1825, called attention to the great need of a market for Indiana's surplus produce if she wished to realize the advantages of her resources. While we have evidence Governor Ray did not originate the idea of a road connecting Lake Michigan with the Ohio, he undoubtedly deserves most of the credit for the road grant.

Ray served as one of the three commissioners in making the Indian treaty in 1826; and due to a charge of misconduct in so doing, he secured letters from the other two commissioners which bear out the fact that he deserved and desired to have credit for securing the grant. He made the project one of his chief hobbies for a time, and he might well be called the father of the Michigan Road.

In a sense the Michigan Road stands as a monument to the white man's shrewdness in his dealings with the Indians. In 1826 the Potawatomi still claimed a large part of northern Indiana; the first step in building a road to give central and northern Indiana an outlet to Lake Michigan was to induce the Indians to cede more lands.

One of the chief instructions from the national government to the territorial governors was to lose no opportunity to acquire Indian lands by purchase.

Three commissioners were appointed by President John Quincy Adams to make a treaty. Governor Ray, no doubt at his own request, was made one of the commissioners; the other two members, Lewis Cass and John Tipton, were veteran Indian negotiators. Governor Ray and General Tipton traveled through the Indian country to select the site and invite the Indians to the council.

By Article One of the Treaty, the Indians ceded a strip of land, which averaged about ten miles in width, lying on the north side of the Wabash and Maumee rivers and extending eastward from the Tippecanoe to the Ohio state line. Also they ceded a ten mile strip along the northern boundary of Indiana, between Lake Michigan and

the St. Joseph River, in order to allow suitable harbor facilities at the terminus of the Michigan Road.

It was Article Two, however, which provided for the Michigan Road. As evidence of the attachment which the Pottawtomie tribe feel toward the American people, and particularly to the soil of Indiana, and with a view to demonstrate their liberality, and benefit themselves for traveling and increasing the value of their remaining country, the said tribe do hereby cede to the United States a strip of land, commencing at Lake Michigan, and running thence to the Wabash River, one hundred feet wide, for a road; and also one section of good land contiguous to the said road, for each mile of the same, and also for each mile of a road from the termination thereof, through Indianapolis, to some convenient point on the Ohio River. And the General Assembly of the State of Indiana shall have the right to locate the said road, and to apply the said sections or the proceeds thereof, to the making of the same, or any part thereof; and the said grant shall be at their sole disposal.

The United States, in return for the cessions made, agreed, in Article Three, to pay each year to the Potawatomi tribe \$2,000; 160 bushels of salt; and, as long as Congress saw fit, \$2,000 for education. This article also stated that a blacksmith and a mill were to be provided for the Indians at some convenient point.

With the treaty concluded, Governor Ray wished to speed further action on his project. His message to the Assembly in December 1826, showed him in good form on his favorite subject, devoting more space to the need of internal improvements than to any other public problem, and painting a rosy picture for the state, now that the Wabash Canal and Michigan Road projects were ready to be launched.

It is of special interest to note this statement at the conclusion of Governor Ray's eulogy of this Michigan Road project: "The grant severs the remaining Indian possessions; and when the land granted for this purpose is settled, it will weaken the attachment of the Potawatomi to his country." The attachment of the Potawatomi to his country was weakened sufficiently by 1838, and the tribe was marched out of Indiana into the Indian country west of the Mississippi during the late summer of that year. So many of the Indians died along the trail that the route they followed has been called the "Trail of Death."

On February 7, 1827, the United States Senate ratified the Potawatomi Treaty. The Senate, however, struck out of Article Two the clause giving to the state sole right of disposal of the grant, on the ground that the grant of treaty making power to the commissioners did not confer the right to dispose of public lands. This was the power of Congress. But this authority was given back to the state by the act of March 2, approved by President Adams, confirming the treaty grant. The act authorized the state legislature to locate and build the road from Lake Michigan by way of Indianapolis to some convenient point on the Ohio River, agreeable to the second article of the treaty; and the General Assembly was authorized to apply the said strip and sections of land to making of the road; and the grant was to be at their sole disposal. With the land grant thus approved by Congress, the 1827-1828 session of the legislature could proceed with plans for the road.

At the same time that Congress approved the road grant, it also approved the Wabash and Erie Canal land grant. Within the space of fifteen months, public lands estimated by the governor to worth

\$1,250,000 had been acquired by the state.

Selecting The Route

During the 1827-1828 session of the General Assembly, the Michigan Road was made first business, and there began a two-year contention over the location of the southern terminus. The phrase "to some convenient point on the Ohio River," used in the Indian treaty, was handed down through the Act of Congress confirming the grant and incorporated in the bill in the state legislature. On the settlement of this point developed one of the bitterest and longest controversies ever waged in the state Assembly.

After the indirect route had been determined for the Wabash to Lake Michigan section, the discretion of the legislators, perhaps, induced them to favor a shorter route for the Indianapolis to the Ohio River section. The suggestion of the secretary of war that the Potawatomi were to be consulted about the location of the terminus, as they would have to agree to the amount of land to be given, may also have influenced the choice of the shorter route.

The bill to locate the southern point was laid on the table for what may have been a record number of times. At the end of the session it was indefinitely postponed; but in spite of the stalemate of the location of the southern terminus, not all the action toward the project was lost. On January 24 a bill was approved providing for the appointment of commissioners to survey a route from Indianapolis to Lake Michigan.

The law of January 24, 1828, named as commissioners John McDonald of Daviess County, Chester Elliott of Warrick County, and John Neely of Gibson County. Starting at Lake Michigan they were to examine bays, inlets, and estuaries of rivers, in order to establish the best harbor possible on the shore of the lake; they were to make an accurate survey of the most eligible route to Indianapolis and file a plat of their survey in the office of the secretary of state, who was to lay the same before the General Assembly at its next session. They were authorized to employ any necessary assistants.

KankakeeSwampland Unacceptable

Governor Ray called a meeting of the commissioners in Indianapolis on the second Monday in May 1828, on which date they met and ran a random line from the court house to Lake Michigan, leaving the Miami reservation on the east. John K. Graham, of Floyd County, whom they hired as surveyor, became ill when they reached the Wabash; and they employed John G. McDonald to continue the work. By July they had completed the first survey directly from the Wabash across the Kankakee swamps to the lake. They reported great exposure and fatigue in working through the long wilderness, a distance they found to total 140 miles. The men often had to wade from knee to waist-deep and lead their horses, then lie down wet at night in low, unwholesome ground.

Not finding a natural harbor on Lake Michigan, the commissioners temporarily located a point at the mouth of Trail Creek as the most eligible. The creek was five miles west of the Michigan territory line and was about eighty feet wide at the mouth and from seven to ten feet deep for the first half mile. The land at this point, one-half mile from the mouth, was of second quality but suitable for a town location. Michigan City was located here in 1832.

From the mouth of Trail Creek they ran a line to Indianapolis, to the west of the Miami reservation. The tendency of early Indiana roads to follow the Indian trails was true of this survey, as it followed

...continued Page 12

MICHIGANROAD
...continued from Page 11

closely the old Indian trail from the lake to the Wabash. They gave a detailed report of the land along the route. That from the lake to the vicinity of the Wabash was described as mostly poor, with a few good but small areas. North of the Kankakee for eighteen miles the country was barren and destitute of any materials for road construction and was not suitable for settlement. The Kankakee was crossed at the western edge of English Lake and was about 748 yards wide, with a deep and sluggish current. Their horses stuck several times a day in the swampy prairies and marshes between the Kankakee and the Wabash. This route struck the Wabash seventy-three miles from the lake and approximately twelve miles west of the mouth of the Eel River. The remainder of the land along the route to Indianapolis was well timbered and rich.

The commissioners, convinced of the impracticability of this direct route across the swamps and through the poor land, determined to do a further examination; but due to the extreme fatigue of the party they postponed the further survey until October. They began the October survey on the upper Wabash, marking a route from the mouth of the Eel River almost directly north to the south bend of the St. Joseph River, thence westward to the mouth of Trail Creek. At the southern bend of the St. Joseph, they reported in their notes, was a beautiful site for a town. This point was fifty-five miles from the lake by the river and thirty-five by the road. A fur trading post had been located here since 1823. Three years later, March 28, 1831, a town was laid out here, later named South Bend.

On February 24, 1828, a few days after the first act was passed, Governor Ray corresponded with Secretary of War James Barbour, to find how the land was to be surveyed and how the state was to take possession. The Secretary informed Governor Ray that the land should be taken possession of by surveys. He assumed that lands granted by the treaty were to be laid off along the line of the road, where the land was of good quality, but not necessarily where such sections were poor. Selections of land made under this assumption, however, were later rejected by the General Land Office, which insisted that lands chosen for the part of the road within the Indian country lie contiguous to the center line of the road.

Southern Terminus Debated

The 1828 Assembly, after first accepting the Wabash and Erie Canal report, on December 22 began again to contend for different points on the Ohio. Madison, the Falls of the Ohio, Jeffersonville, Lawrenceburg, Mauckport, and New Albany were the chief competing cities. At times they agreed on a terminus, but the way points blocked passage of the bill. Other times, after one house passed the bill the other made amendments which led to its downfall between the houses.

Madison was the largest business point on the river in 1829; but each representative adhered to the point most favorable to his constituents, claiming it to do the most business between the mouths of the Miami and the Wabash Rivers.

The only act passed with reference to the road was an appropriation to pay the commissioners for the Lake Michigan to Indianapolis survey, and the legislature adjourned on January 24 with the Michigan Road bill a subject of disagreement between the two houses. Thus, with nothing accomplished in the legislature, no work could start on the road during 1829, although emigrants still continued to

move into the Wabash country on the prospect of the road and the canal construction. As many as twenty to fifty wagons moved through Indianapolis daily.

In his message to the 1829 Assembly, Governor Ray stated that Congress had appropriated \$60,000 for building twenty eight miles of the National Road (sixteen miles east and twelve miles west of Indianapolis) in Indiana in 1830.

After reviewing the reports of the commissioners on the two routes surveyed between Indianapolis and Lake Michigan, Ray expressed the opinion that the longer route via the southern bend of the St. Joseph was unjustified and that the extra length of thirty miles would cause the road to lose much of its utility. The marshy lands, he thought, would make a better graded turnpike than rich soil; and the St. Joseph could not be relied upon for navigation. To end the political and legislative tangle on the choice of the southern point, he suggested authorizing the Executive to appoint commissioners for that duty.

On the question of disposition of the lands, he recommended that either the lands be used as a direct payment to contractors or that a loan be made on the land. He further proposed the practical plan of dividing the road into three sections, one to be built each year; the first, from the Ohio to Indianapolis; the second, from Indianapolis to the Wabash; and the third, from the Wabash to Lake Michigan. Thus the most needed section could be completed first, the financial problem simplified, confidence inspired, and the value of the remaining lands increased. Upon the supposition that the total distance would be 230 miles, he estimated the lands, at two dollars an acre, to be worth \$300,000, or \$1,280 per mile, which should make a good clay turnpike with strong wooden bridges, since the National Road had been costing only \$220 per mile.

During half the session history repeated itself so far as the decision on the southern terminus was concerned. As late as January 4, the House spent all afternoon voting on almost every point on the Ohio. They sent the Senate a bill which made Evansville the terminus, but the Senate refused to agree. On December 31, by a vote of twelve to eleven, it again passed and sent to the House a bill making Madison the point. The House agreed to the Madison-Greensburg route on January 6. The bill was presented to the Governor on January 11; and although it did not carry out many of his suggestions, he approved it on January 13, 1830.

Route Selected

The Act of January 13, 1830, authorized by the treaty of 1826 and the act of Congress of 1827, not only located the southern terminus but also established the longer route from Indianapolis to Lake Michigan section of the road according to the second survey. It named commissioners and prescribed their duties in connection with the survey of the Madison to Greensburg section and again directed the Governor to find from the federal government when and how the lands were to be surveyed.

There was some controversy over the adoption of the more indirect survey around the Kankakee ponds via the St. Joseph, contrary to Governor Ray's recommendation; but most first-hand observers of the region confirmed the choice of the longer route as more practicable. One traveler stated that he had read about heard of these ponds but really had had no conception of them until he tried to pass through them.

An Act of Feb. 4, 1831 appointed Noah Noble as Contract

Commissioner to award contracts, and William Polke as surveyor to replace the three commissioners appointed in 1828.

William Polke was born in Virginia. He was the first white settler in Fulton County in 1830. He built the first frame house north of the Wabash River. That house was moved to the grounds of the Fulton County Museum in 1993 to be saved and restored.

Trouble with the Indians developed in a number of instances. One such incident occurred when William Polke began choosing sections north of the Kankakee River. According to the "History of Michigan City" some members of the Potawatomi tribe aggressively stopped the surveyors as they chose noncontiguous lands. The surveyors withdrew, partly to avoid conflict, partly because they had not received approval from the federal government for sections that they had already chosen, and also partly because even in 1831 they anticipated the total removal of the Indians from Indiana.

Eventually 170,580.24 acres of land were surveyed and granted for the building of the Michigan Road, actually a few more than the section per mile called for.

REFERENCES

1. Prather, Geneal, The Struggle for the Michigan Road, *Indiana Magazine of History*, Volume 39, March 1943.
2. Prather, Geneal, The Construction of the Michigan Road, 1830-40, *Indiana Magazine of History*, Volume 40, September 1944.
3. Montgomery, Ethel L., The Building of the Michigan Road, a thesis presented to Purdue University, June 1902.
4. Hunter, Juanita, The Indians and the Michigan Road, *Indiana Magazine of History*, Volume 83, September 1987.

Michigan Road
Financial Statement

	Expenditures	Receipts
S.J. 14th Sess. P.81.Dec. 1829	\$ 1,828.64	
Acts of 1831.P.199.Dec 10, 1830	1,204.50	
H.J. 16th Sess. Apd. A. Dec. 1831	49,368.19	\$ 48,563.33
H.J. 17th Sess. P.59. Dec. 7, 1832	33,955.47	35,527.96
H.J. 18th Sess. Apd. A. Dec. 7, 1833	54,472.73	56,765.37
H.J. 19th Sess. P.89. Dec. 6, 1834	42,184.19	42,184.19
D.J. 1835; 9P.2. Dec. 16, 1835	11,279.23	10,876.86
D.J. 1836 3; P2. Dec. 13, 1836	37,809.05	38,031.17
D.J. 1837; 9P.2. Dec. 5, 1837	4,819.19	4,346.17
D.J. 1838; 12. P. No. 75. Nov. 30, 1838	4,500.00	4,500.00
D.J. 1839; P.2. No. 3. Nov. 1, 1839	486.85	536.85
D.J. 1840; Part 1. No. 3. Oct. 31, 1840	100.00	
Gross Amount	\$ 242,008.04	\$ 241,331.89



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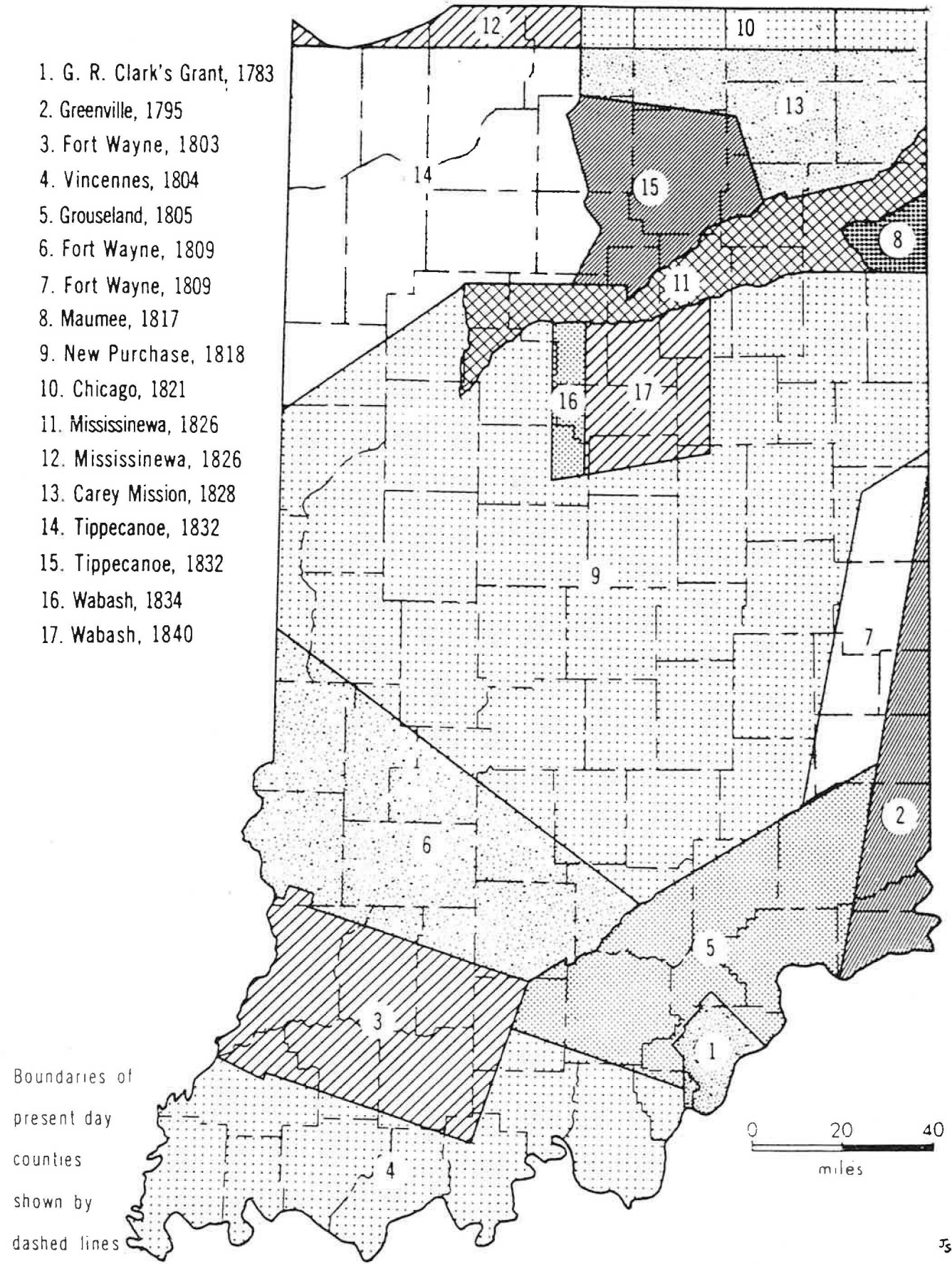
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Hand-held Radios (\$189.00 ea) (2)	378.00		10.88
CST Optima Single Tilting Prism	115.00		3.31
8ft Prism Rod, Quik-Lok™ or Tru-Lock™	79.00		2.27
Total	\$6,864.00		\$197.66

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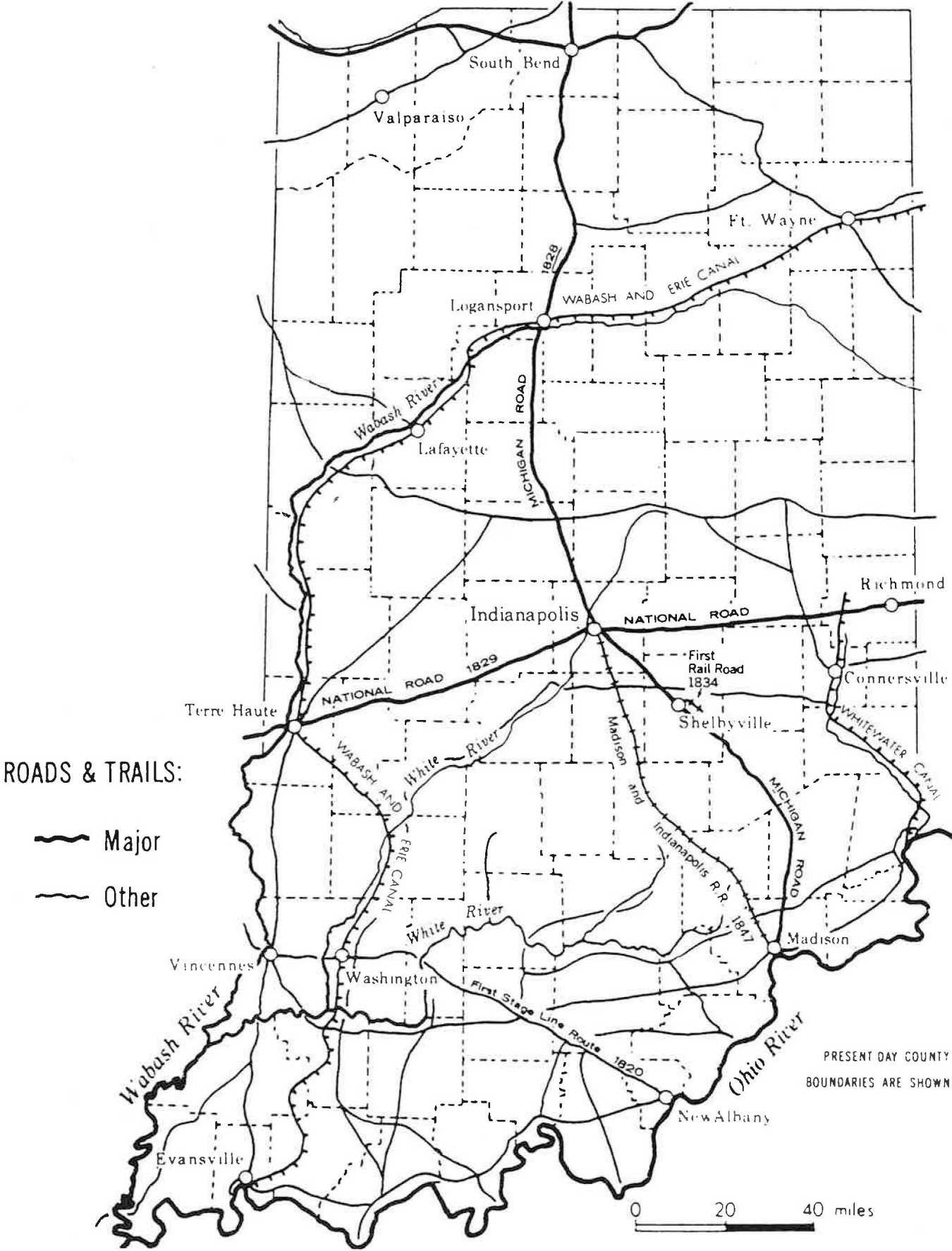
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Indian Treaties



SOURCE: Robert C. Kingsbury, *An Atlas of Indiana* (Bloomington, 1970), 7

Early Routes of Transportation

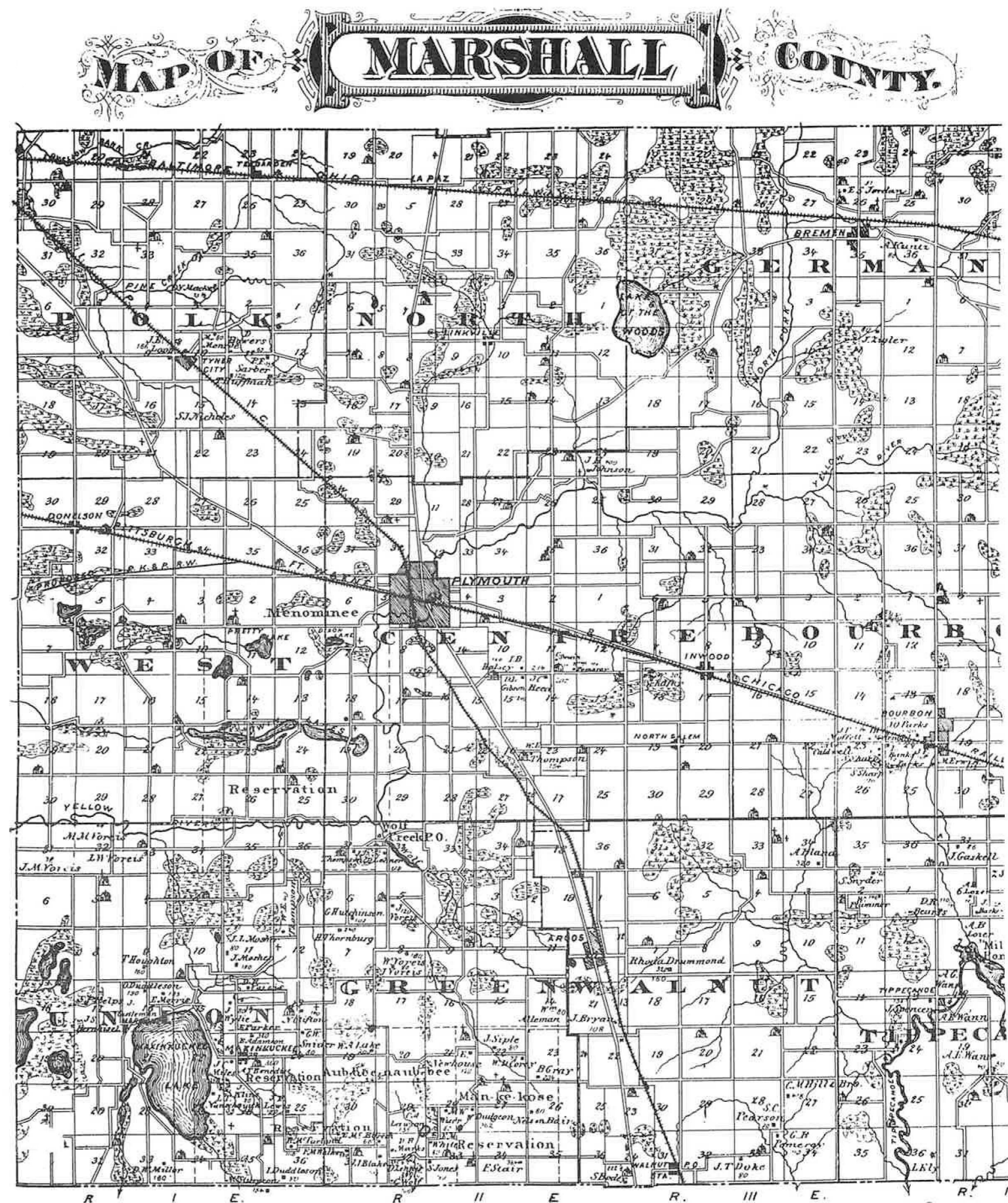


SOURCE: Robert C. Kingsbury, *An Atlas of Indiana* (Bloomington, 1970), 74



1876 Atlas Map of portions of Fulton and Marshall Counties, Indiana showing Michigan Road sections. (Can you find them?)

Editor's note: Surveyor members who have worked in the area of the Michigan Road sections north of the Wabash River are encouraged to describe their experiences by sending letters to the editor which we may share in future newsletters.



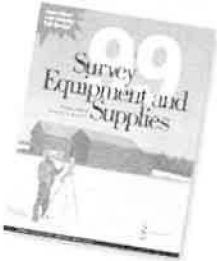
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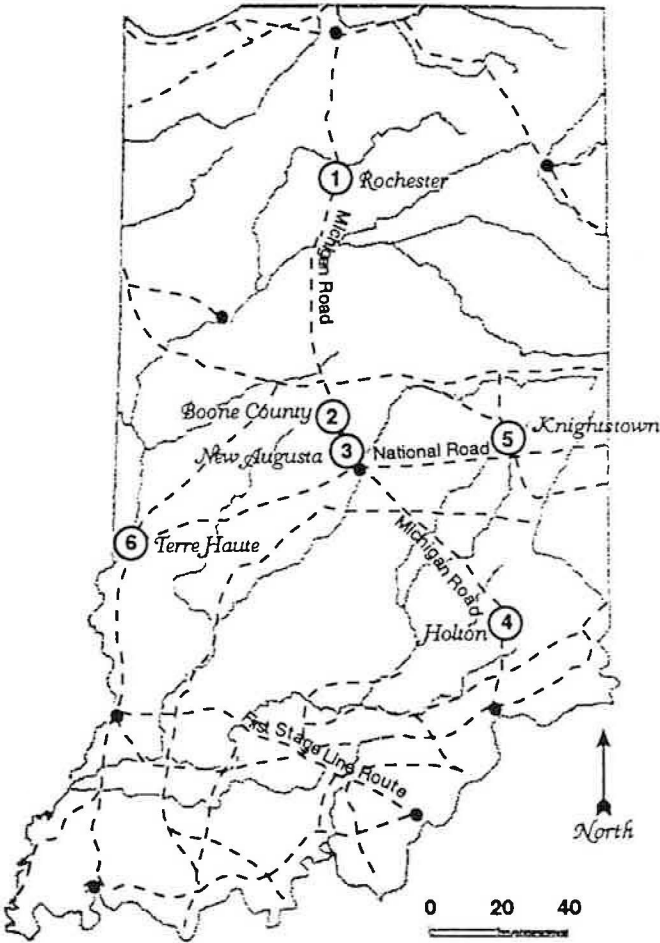
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Roadside Review



The map above has been adapted from Kingsbury, *An Atlas of Indiana*.

1

MICHIGAN ROAD

Extending from Michigan City to the Ohio River at Madison. Begun by the state in 1832 with funds obtained from sale of land granted by the Potawatomi Indians. Opened northern part of state to settlers.

2

MICHIGAN ROAD

With proceeds from the sale of 170,580 acres of Indian land granted by the Federal Government, Indiana built its first north-south road. Surveyed 1829, passable by 1834, "completed" in 1837, its cost was \$242,000.00.

3

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MICHIGAN ROAD

First major state road, built in the 1830's, from the Ohio River to Lake Michigan.

6

"CROSSROADS OF AMERICA"

U.S. Highway 40, the old National Road which opened the West for settlement, and U.S. Highway 41, a major north-south route, were designated part of the original federal highway system in 1926. Their intersection in Terre Haute as Wabash Avenue and Seventh Street became the "Crossroads of America."

5

NATIONAL ROAD

Extended from Cumberland, Md. to St. Louis. Begun with Federal funds, 1806, the Indiana portion was built 1829-34. Over this road many settlers passed to their new homes in the Old Northwest.

4

MICHIGAN ROAD

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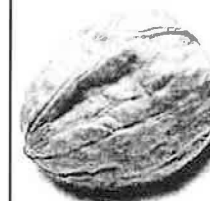
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THE SURVEYOR'S IMAGE

by Wray Childers, PLS, Dubuque, Iowa

Occasionally we surveyors lament about the public's perception of the surveying profession's image as being something less than we think it should be or want it to be. We say to ourselves, and others, things like "Why doesn't the public give us the respect we deserve?" "Why is it so hard to justify our fees in the eyes of some clients?" "Why don't some of our clients recognize the value of our services?"

Does the reader of this article feel the image of the surveying profession is adequate? If your answer is yes, then don't read on and head back to your island. If you think our image can be enhanced, read on.

Webster's New Riverside University Dictionary defines "Image" in part as: "the character projected by someone or something to the public: Reputation", "to symbolize or typify", "to picture mentally".

How can we enhance our image? There are many ways. Some are complicated and expensive to implement such as marketing and promotion strategies; others are relatively simple and inexpensive. This article will broach the latter. Let's ask ourselves some questions so we can gain a better understanding of some of the items that may affect our "image" through the public's eyes.

Do you or your staff dress appropriately? At the office? In the field? At public meetings? At client meetings? At the attorney's office? How do other professionals dress in similar situations? Do you stack up?

Do your field personnel dress appropriately? Do they look like they are going to a beach party or a jobsite where your client is paying \$100/hour? Are they the only workers on a construction site without hardhats? Are they the only workers on a construction site wearing tennis shoes? Do they work on public roads without safety vests, signs, cones or other appropriate safety equipment? Do they track chunks of mud into public buildings? Do they trespass? Are they courteous to the public? Do they have a good work ethic through the eyes of your clients?

What impressions do you leave with people who visit your office? Is it clean, organized and comfortable? Is your staff courteous, respectful and professional? Does your office environment project the image of a successful, modern, professional firm or that of a behind-the-times, disorganized service provider?

Are your vehicles and survey equipment clean, organized and in good working condition? Bad muffler? Rusty chain? Is duct tape holding anything together? Are survey monuments and construction stakes plumb and legibly marked?

Are your plats and other deliverables professional looking? Do they meet the applicable minimum standards? Do they satisfy the project requirements? Are they correct? Do you file numerous affidavits to correct simple mistakes in your work? Have you filed an affidavit to correct an affidavit to correct a simple mistake?

Are your letters, reports and other correspondence professional looking? Are they in the proper format? Do they have correct grammar, spelling and content? Do you keep your clients educated and informed on the project? Do you use the appropriate medium to communicate with your clients and the public? Do you make a phone call when a letter is more appropriate? Do you complete

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- * Other duties as directed by the Program Coordinator.

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- * Minimum of an AS Degree in Surveying is required. A BS and/or MS Degree is preferred.
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- * GIS/GPS experience as well as the applicant's professional SIT/LS will be reviewed and credentialing being considered an asset.

Persons who wish to be considered must submit a letter of intent, college transcripts, and resume to: Gazella A. Summitt, Director of Human Resources, Vincennes University, 1002 North First Street, Vincennes, Indiana 47591. Applications will be accepted until the position is filled. Interviews may be held concurrently with the advertising period.

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work under a verbal contract when a written contract is more appropriate? Do you expend the appropriate level of effort when estimating fees and submitting proposals or do you "wing it" too often, resulting in client dissatisfaction?

There are many more questions each one of us can ask ourselves to help identify "the simple" items that affect our image and to implement ways to enhance our image accordingly. It is up to each one of us to do our part for the good of the surveying profession.

...reprinted from Random Lines (Iowa), October 2001

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Notes from the Field

by Ronald E. Koons, RoSaKo Enterprises
Safety consultants, Middletown, Indiana

Over the past few weeks I have had the opportunity to be out with field crews on several occasions. When we provide a Written Safety Program, that is always part of the process. It seems like I am always surprised at the level of mis-information that is out there on many safety items. I thought that if we take a few of these items and pass along both the misconceptions and the correct information everyone might have a better understanding.

Entering Manholes, Storm Basins, and Lift Stations - The entire concept of entering a Confined Space has been discussed in this column many times over the past few years. I still find field crews that are entering these areas and defend their actions with what they think is sound logic. "There is no inflow to the sewer, so there can't be any danger" or "this is just a storm sewer so we don't have to worry about any gas problems". While visiting a crew at a new subdivision recently they commented that they had been entering manholes and storm basins for years without any problems and didn't see why there would suddenly be a problem. Even though we associate many of the Confined Space hazards with sanitary sewers, most of the same hazards can also be present in storm sewers. Methane gas occurs in many locations and can enter underground drainage pipe systems. Lack of oxygen and carbon monoxide are just two of the hazards that can also be found in both storm and sanitary sewers. As far as never having any problems...I have been driving since I was 16 and have never been involved in an accident that was my fault, but I am certainly not going to tempt fate. Not obeying the OSHA Regulations on Confined Space entry can not only lead to a violation...it can lead to a trip to the funeral home.

Four or five traffic cones is all that we really need. - I try to ask crews on a regular basis how many traffic cones they should have in their vehicle. Anywhere from 4 to six is the normal answer. Those of you who attended our Roadway Safety seminar in January know that in most cases 18 cones is just about the minimum you need in each vehicle to meet MUTCD (Manual on Uniform Traffic Control Devices) guidelines. There are other situations that may require more cones, and of course some that may require less than 18. Space is certainly at a premium in all field vehicles, but there are creative ways to keep cones without taking up valuable storage space. Some have made a small rack in the back of their vehicle so the cones can lay on their side. Others have added the cone storage racks to their front bumpers. One thing for certain...if your crews don't have the proper number of cones they can't use them.

Two signs should be enough - I also inquire about warning signs. I very seldom get anyone to think more than two signs will be needed. In fact, two signs is the minimum that any vehicle should carry, but I recommend at least four signs. If you are only surveying

in low speed residential neighborhoods and never in an intersection, then the two signs would be adequate. However, if you ever need to work in an intersection, encounter multi-lane roadways, or have roadway entrances within the required signage distance then additional signs would be needed. Just about the minimum for an intersection job would be 4 signs. If you work on interstate or other divided highways then you may need as many as eight signs. Keeping four signs in each vehicle and then having the availability of additional signs when needed should meet most of your needs. If you need either additional signs or cones they can be rented for short term projects. The easiest type to carry are the nylon roll-up signs that fit on folding metal bases. The bases are so light that one person can carry four bases without a lot of effort. If you do a lot of interstate work high speed bases that will withstand winds to 70 mph are also available.

Poison ivy, oak, etc. is just part of surveying. - I agree that these poisonous plants are part of surveying, but there are now easy means to protect employees. There are salves, sprays, and towelettes that can be applied to exposed skin before going into the field. I personally can vouch that some of these products work. I used to get poison ivy whenever I came near it in our yard. I now use a product to coat my hands and also wear a long sleeve shirt. I have not gotten poison ivy in over 9 years! When reviewing injury and illness data at surveying companies this is one of the most common illnesses that I find...and it can be prevented for far less investment than it costs to treat the ailment.

A bright colored shirt is adequate when working in traffic. - There seems to be a number of companies who purchased bright orange, red, and other colored tee shirts for their employees. They quite often had the company logo. While these shirts may be good for advertising and certainly might help when in fields, they do not meet requirements for visibility on roadways under the 1999 ANSI standards. The standards require surveyors to wear Class III vests in most situations. The shirts alone don't even meet Class I requirements. Most vests that are purchased at a local home improvement or hardware store will not meet the requirements for visibility and reflectivity. While there are some current problems in getting a Class III rating in any size under Large, Class II vests can be purchased in any size.

Since quite a few of you who read this article are not in the field on a regular basis, why not make certain that all of your field crew personnel read this? It may go a long way toward making safety a priority at your company and eliminating some of the misconceptions.

CALENDAR

June 28, 2002

Speaker: Boudewijn van Gelder

"GPS Workshop I", (morning) 4 CEH (E) **Pending Approval**

"GPS Workshop II", (afternoon) 4 CEH (E) **Pending Approval**,

Turkey Run State Park, Marshall, Indiana

July 26, 2002

Speaker: Knud Hermanson

"Research and Liability", 4 CEH (E) **Pending Approval**,

Valparaiso University, Valparaiso, Indiana

"Expert Witness", 4 CEH (E) **Pending Approval**,

Valparaiso University, Valparaiso, Indiana

January 8-10, 2003

ISPLS Annual Convention, Marriott Downtown Hotel, Indianapolis, Indiana, Host: Northwest Chapter ISPLS

NOTICE:

Your license will expire on August 1st, 2002.

If you have moved within the past few years and you did not notify the Professional Licensing Agency of your change of address you should contact them as soon as possible to do so. Every two years there are literally dozens of land surveyors who are in jeopardy of permanently losing their professional license because they did not renew it as required by law. If you let your license expire and you are lapsed for two consecutive renew periods (four years) it is permanently gone. You must then reapply to the board for a new license and you must meet the current minimum education requirements. It is your responsibility to notify the licensing agency of your change of address. By law, the licensing agency mails your renewal notice to the last address you gave them. The agency is not required to track you down when they get a returned notice marked "No forwarding address." If you don't get your renewal notice by July 1st you should contact the PLA at (317) 232-2980 to determine what the problem may be.

Seiler Instrument Announces New Service Repair Technician

Indianapolis, IN - Seiler Instrument is proud to announce that Richard Manthei has joined our team. Richard brings 33 years of survey equipment repair knowledge to our company. For 30 of those years Richard was with Hickerson's Instrument Company, Inc. until they were bought out by Sokia in 1999. He then managed the Measuring Systems Department for 3 years. Now, he joins Seiler Instrument and is eager to serve you. You can contact Richard at our Indianapolis Office:

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E-mail: rmanthei@seilerinst.com

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