



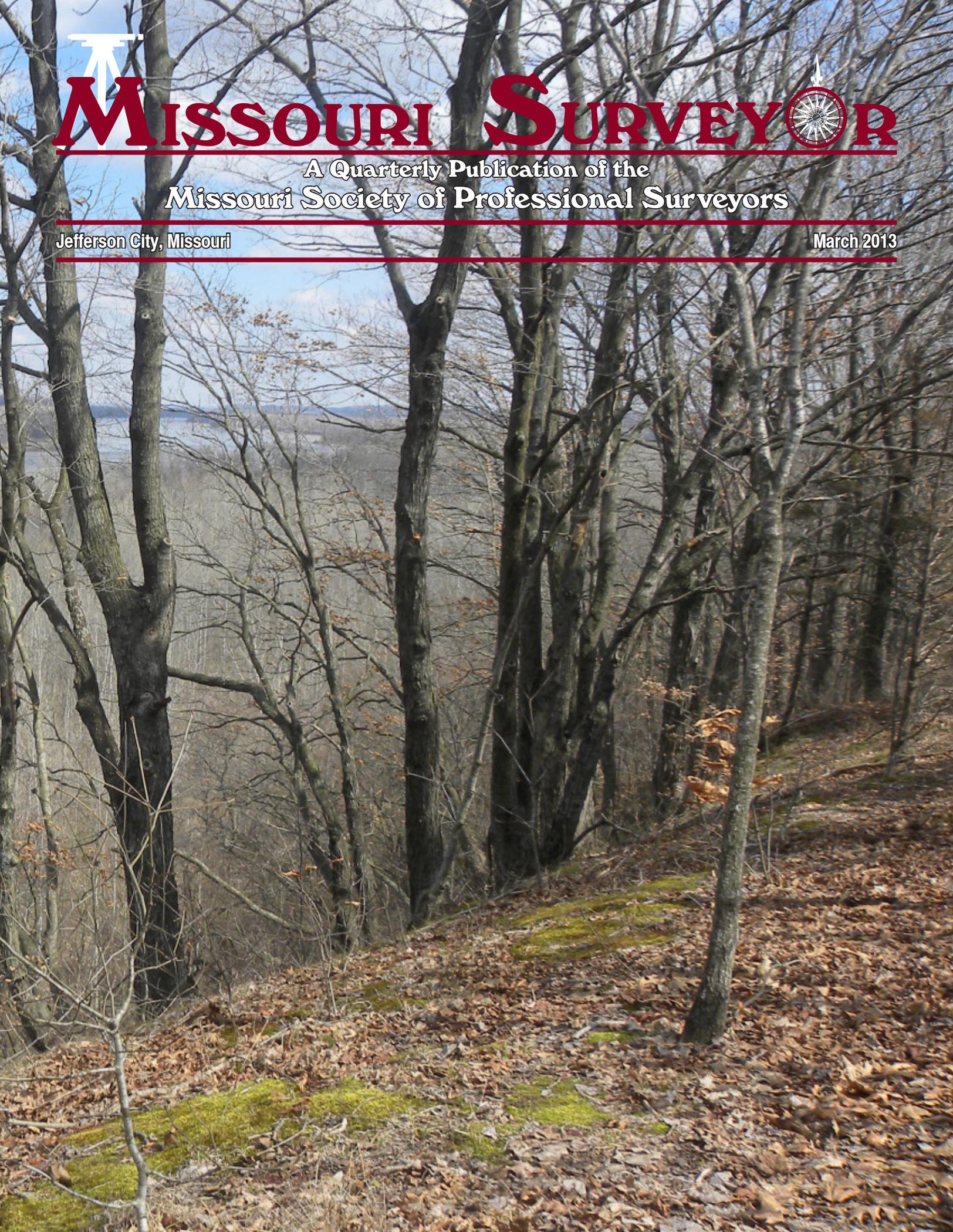
# MISSOURI SURVEYOR



A Quarterly Publication of the  
Missouri Society of Professional Surveyors

Jefferson City, Missouri

March 2013



## CALENDAR OF EVENTS

2013-2015

### May 9-11, 2013

Board Meeting and  
Spring Workshop  
Lodge of Four Seasons  
Lake Ozark, MO

### July 12-13, 2013

Board Meeting and  
Pac Fundraiser Golf  
Tournament  
Minimum Standards Workshop  
Capitol Plaza Hotel  
Jefferson City, MO

### August 28-30, 2013

Review Course  
Best Western Capital Inn  
Jefferson City

### October 10-12, 2013

56th Annual Meeting and  
Convention  
Tan-Tar-A Resort Golf Club  
Marina and Indoor Waterpark  
Osage Beach, MO

### December 2013

Board Meeting  
MSPS Office  
Jefferson City, MO

### May 8-10, 2014

Board Meeting and  
Spring Workshop  
Lodge of Four Seasons  
Lake Ozark, MO

### October 23-25, 2014

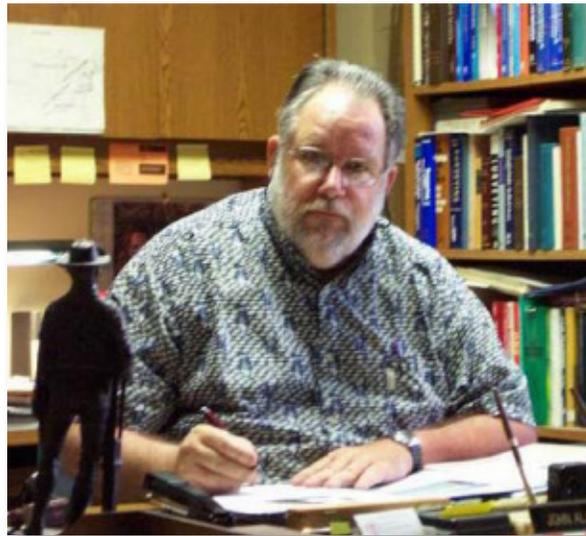
57th Annual Meeting and  
Convention  
Joint Meeting with the Kansas  
Society of Land Surveyors  
Sheraton Overland Park Hotel,  
Overland Park, KS

John Alan Holleck, Editor



## Notes from the Editor's Desk

John Alan Holleck



Daylight savings snuck up on me this year and caught me totally unprepared. I finally got all my clocks changed over by Tuesday—I have a lot of clocks. Enough said about time and clocks on to more exciting topics such as the following. Like what happened on 2 February? Did Phil see his shadow? What is really troubling is that I do not know the answer to that question. On the other hand, it is not an earth shaking question. I would like to apologize to our faithful readers with another

late issue. Once again, it is my fault as I am having trouble focusing on the problem at hand, something I did well during my survey career. Well, enough said about my frailties, we will move on to the contents of this month's issue.

As usual, the Missouri Surveyor opens with my "Notes" and Sharon's "President Message." This issue features the writings of Knud Hermansen, "Deeds: A Primer for Surveyors." Up next, Mark Wiley shares his memories in "Who Remembers the Golden Age of Surveys?" Like many of you, I share many of his memories. Our favorite Doctor, Dick Elgin, offers a little history in "A 1884 Bill to Create a Board to License Surveyor's and Engineers in Missouri." As Dick, points out it took the State 73 years to enact the legislation proposed by the group. That closes out the front half of the March issue.

The back half with a controversial article about a recent court case, Jeffery Lucas writes "A Second-class Profession: Land Surveyors are Second Class Professionals by their own choosing. The Title 'profession' is largely achieved through self-proclamation." Ray Mathe, California Land Surveyor, follows with "The BPELSG Chronicles: That Old Client Could Cost You Your License." Next comes Rob Squires, University of Minnesota survey historian offers "A Geography of the Public Land Surveys In the United States: Part 1 – The Beginnings." The final article is "Brokering of Survey Services" by William McGrath, a New Jersey surveyor.

Hope you enjoy the new issue and please make comments on what you like or dislike to either myself or Sandy at the MSPS office. As always, it is a pleasure to serve as your editor for the past several years. Actually, I can not remember not being the editor of the Missouri Surveyor. 🇺🇸

John

# THE MISSOURI SURVEYOR

Published quarterly by the  
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## EDITOR

John Alan Holleck  
8510 E. 59th St.  
Kansas City, MO 64129  
Phone or Fax (816) 353-1782  
E-mail: editor@missourisurveyor.org

## PUBLISHER

Sandra Boeckman  
P.O. Box 1342  
Jefferson City, MO 65102  
(573) 635-9446 FAX (573) 635-7823  
E-mail: msps@missourisurveyor.org

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## President's Message

Sharon Herman, PLS



On February 20<sup>th</sup> the MSPS Board and Members from all across Missouri descended on Jefferson City for the MSPS Capitol Day. This annual event is designed to give MSPS members the opportunity to have some face to face contact with their State Representatives and Senators. This year MSPS hosted a breakfast for the Legislators, which was well attended and a big hit. We have three bills of special interest to surveyors filed this session and were given a chance to share the importance of each with our legislators. HB 650 designates the Land Survey Program building as the "Robert E. Myers" building. HB 651 would transfer the Land Survey Program from DNR to the Dept. of Agriculture and caps allocation percentages; and HB 652 is our education bill.

The Handbook Committee has completed the updates to the Surveyors Handbook. I am pleased to announce that the 6<sup>th</sup> Edition is now available for purchase by members. A very big Thank You goes out to Sandy Boeckman and the Chair of this Committee, Norman Ellerbrock. Without their dedication and perseverance, this project would not have been completed. The handbook will be available for purchase at the Spring Workshop or thru the MSPS office by contacting Sandy Boeckman. The purchase price for a bound paper copy of the Handbook is \$100. An electronic version on a thumb drive can be purchased for \$50.

I would like to take this opportunity to invite everyone to attend the Spring Workshop. It is being held May 9 -11 at the Lodge of Four Seasons in Lake of the Ozarks. The Education Committee has once again put together an interesting and informative seminar to address the ever changing surveying profession. Along with earning PDUs this is a great opportunity to network with fellow surveyors from across the state.

Recently, I have been contacted by a number of MSPS Members questioning the status of expanding the recording laws. As many of you may recall, a recording act was introduced a few years back but was dropped due to some strong opinions that the proposal was too all consuming. This subject was discussed at our last Board of Directors Meeting and it was decided that a task force should be created for the purpose of exploring a course of action to strengthening the recording laws.

*(continued on page 6)*

*Front Cover: Clark's Hill/Norton State Historic Site, just north of Osage City – Clark climbed this hill on June 2nd, 1804 and enjoyed the view of the countryside while the Expedition camped at the mouth of the Osage River.*

*"I assended the hill in the point 80 ps. From the pt. Found it about 100 foot high, on the top of 2 graves or mouns, a Delightful prospect from this hill which Comds. Both rivers ... the Missouries up & down, also the Osage R. up" WILLIAM CLARK, June 2, 1804.*

# Deeds: A Primer for Surveyors

by Knud E. Hermansen†, PLS, PE, PhD, Esq

During the course of searching the records, surveyors will review numerous deeds. I've often had surveyors ask about the difference between the various types of deeds. This article is an overview of the common forms of deeds used to convey title to property.

Most current deeds fall into one of four categories: 1) General Warranty, 2) Special Warranty, 3) Quit Claim deed, and 4) Bargain and Sale deed.

**General Warranty Deed** — The General Warranty deed is often referred to simply as a warranty deed. It is a deed conveying title where the seller (grantor) makes six covenants or promises to the buyer (grantee) as part of the conveyance. (Some states have limited or eliminated one or more covenants in a warranty deed by statute.) The six covenants that are part of a warranty deed are further divided into present and future covenants. The three present covenants are the following;

- 1) Covenant of Seisin - The grantor covenants to the grantee that the grantor has title and possession of the property. If a grantor conveys property burdened by a valid and current lease, the grantor would breach this covenant because they grantor had the title to the property but not the possession.
- 2) Covenant of Right to Convey - The grantor covenants that the grantor can validly grant or convey both title and possession. A life tenant that delivers a warranty deed to the grantee is in violation of this covenant. The life tenant had the right to convey the possession but not the right to convey the title to the property.
- 3) Covenant Against Encumbrances – The grantor covenants that there are no encumbrances against the title. Encumbrances could include easements, mortgages, trusts, and limitations on the title. A landowner that conveys property where the neighbor has secured an easement across the property by prescription is in violation of this covenant.

The three future covenants are the following:

- 4) Covenant of Warranty – The grantor covenants that the grantor will protect and defend the buyer against anyone who comes and claims a superior title to the property. Under this covenant, the grantor will have to defend any claim against the title of the grantee if and when a person comes forward with a claim



to the title to the property the grantor conveyed by warranty deed.

- 5) Covenant of Quiet Enjoyment – The grantor covenants to the grantee that the grantee will have unimpaired use and unrestricted enjoyment of the property. For example, this covenant would be breached if someone obstructed the easement that provides access to the property (based on a claim of right).
- 6) Covenant of Further Assurances – The grantor covenants to the grantee that the grantor will take actions reasonably necessary to perfect the grantee's title if found defective. For example, if a grantor delivered a deed to the grantee where the acknowledgement was found to be defective (e.g., notary commission expired), the grantor would be required to take the steps necessary to deliver a deed with a valid and effective acknowledgment.

The distinction that often arises between present and future covenants involves when the breach of a covenant occurred and when the statute of limitations begins to run. A breach of the present covenants will occur, if at all, at the time of conveyance. If a breach occurred, the time period of a relevant statute of limitation will commence at that time. On the other hand, the breach of a future covenant will occur after the time of conveyance, perhaps decades later.

The grantor may limit any of the warranties within the deed by express wording in the deed. For example, a grantor may state within the deed that the property is

subject to an easement. Because the grantee is put on notice of the easement, the covenant against encumbrances would not apply to the easement cited in the deed.

The warranties that are included in a warranty deed extend back in time to the inception of title. The warranties made by earlier grantors also extend to future owners of the property. For example, assume a title defect occurred in 2001 when Ames owned the property. Ames conveys the property to Betty by quit claim deed. Betty conveys the property to Chad by special warranty deed. Chad conveys the property to Diane by warranty deed. Diane conveys the property to Edgar by quit claim deed. In 2013, Edgar discovers the 2001 title defect. Edgar can sue Chad for breach of warranty for the title defect occurring in 2001. Edgar can sue Chad even though Chad was not Edgar's grantor. The title defect that Chad had warranted occurred before Chad owned the property. Because of the long reach of the warranties back in time and future predecessors in title,<sup>1</sup> warranty deeds are losing popularity in favor of title insurance to protect the grantee. Warranty deeds may now be rare in certain states.

The title found at the top of the deed is not determinative if the deed is a warranty deed unless the state has a *Short Forms Deed Act* that allows for abbreviated wording in the deed to determine the covenants present in the deed.

Under the common law, a deed had to state the following or similar words in the habendum clause in order for the deed to be a warranty deed and the six covenants to be present:

*To Have and to Hold, the premises hereby conveyed, ... and the Grantor(s) do for themselves, their heirs, successors and assigns covenant with the Grantee, their heirs, and assigns that the Grantor(s) are well seized of the premises as a good indefeasible estate in fee simple; and have good right to grant and convey the same ... and the same are free from all encumbrances whatsoever ... and the Grantors do by these presents bind themselves and their heirs, successors and assigns forever to warrant and defend the premises hereby conveyed to the Grantee and its assigns against all claims and demands whatsoever...*

**Special Warranty Deed** — The category of special warranty deed is similar to a general warranty deed with one important difference. The covenants in the special warranty deed only extend to any breaches in title that

were caused by the grantor or occurred during the time the grantor owned the property. In other words, the grantor in a special warranty deed only warrants the title against the grantor's own actions or omissions.

The habendum clause for a special warranty deed would have wording the same or similar to the following:

*To Have and to Hold, the premises hereby conveyed, ... and the Grantor(s) will warrant specially the property thereby conveyed, ... and that he, his heirs and personal representatives, would forever specially warrant and defend the property unto the grantee, his heirs, personal representatives and assigns, against the claims and demands of the grantor and all persons claiming by, through, or under him.*

Because of the phrase “specially warrant” and other words found in the special warranty deed, an uninformed grantee tends to believe “specially warrant” is better than “generally warrant.” Some states have eliminated special warranty deeds or changed the name or language in the deed to prevent heightened and mistaken expectations by the grantee. For example, Maine law has changed the name of a special warranty deed to a quit claim deed with covenants of warranty. Many states have also limited the number of covenants that arise in favor of the grantee by a special warranty deed.

**Quit Claim Deed** — A quit claim deed is also known as a “release” deed. As the name states, a quit claim deed does not actually state or claim that title is being conveyed. Rather, the grantor is quitting or releasing any claim they have in the title to the property against any present claims made or that can be made by the grantee for the title against their grantor.

In theory, if Sally had title to the property and quit any claim she had in the property to Sam, Sam would not have gained title to the property. However, Sally who does have title would be estopped from denying that Sam doesn't have title after delivery of the quit claim. Sally has by delivery of her deed to Sam asserted that she would not claim title to the property against Sam, his heirs, or assigns. Because Sally is merely quitting her claim she is making no covenants to Sam that she in fact actually has title.

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## Deeds: A Primer for Surveyors (continued)

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Most states, as a practical matter, do view a quit claim deed as the conveyance of title. There are no warranties in the quit claim deed other than what a state law mandates. The quit claim deed is usually recognized by the use of the words “quit claim” or “release” rather than words such as “grant,” “convey,” “give,” or similar words found in warranty deeds. There is usually no habendum clause in a quit claim deed. A “Sheriff’s Deed” or a “Tax Deed” are categorized in most states as a form of quit claim deed.

The quit claim deed is often used where the grantor does not want to be held to warranties and the grantee is in no position to demand warranties from the grantor. This is usually the case when the property is being conveyed for less than the fair market value or the grantee is faced with a “take it or leave it” situation.

For example, assume a spouse dies without a will leaving a surviving spouse and two adult children sharing the title to the decedent’s property. It is not uncommon for the adult children to quit claim their interest in the estate to their surviving parent so the surviving parent will have full use and control of the property. The generous nature of the children toward their surviving parent would not go so far as to include warranties that the children may be called upon later in their lives to defend to a successor-in-interest to the surviving parent (i.e., later owner of the property).

A quit claim deed is often used to affirm a boundary line agreement. The owner on each side of the agreed boundary is willing to quit any claim to the owner on the other side of the agreed boundary. Given the uncertainty in the boundary location, the owner is not willing to warrant the conveyance made to the neighbor.

**Bargain and Sale Deed** — A bargain and sale deed does not usually warrant against any encumbrances. The bargain and sale deed does mean that the grantor claims to have title to the property. This type of deed has often been supplanted by the quit claim deed in many jurisdictions. The bargain and sale deed was used frequently in tax sales and for foreclosure actions. Other covenants may be made a part of a bargain and sale deed if the covenants are specifically stated.

This review should help surveyors understand the common forms of deed they will encounter as part of their practice. The form of deed is seldom critical in providing surveying services. The form may be an indication of a problem related to a boundary and provides some fodder for thought. ■

† Knud Hermansen is a licensed surveyor, engineer, and attorney at law. He teaches in the Surveying Engineering Technology program at the University of Maine and offers consulting services in boundary retracement, surveyor liability, roads & easements, boundary litigation, and alternate dispute resolution.

<sup>1</sup> Of course the obligations of the grantor imposed by warranties ends with the death of the grantor and probate of the grantor’s estate.

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## President’s Message (continued)

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In a poll of the membership done several years ago, the majority of the respondents supported expanding the current recording requirements. The challenge of this task force is going to be to determine when and why a survey plat should be filed in the public records. As our surveyors creed states, our foremost obligation is to “place the public welfare above all others” and “to do our utmost to raise the standards of the land surveying profession”. Expanding on and better defining the requirements for the Recordation of Surveys would go a long way in adhering to our Surveyors Creed.

I would like for this task force to be made up of a large cross-section of surveyors from throughout Missouri. We would welcome all MSPS members that have an interest in being a part of this project. You need only contact Sandy at the MSPS office or me, to get added to the list of participants.

I look forward to seeing all of you at the Spring Workshop and always enjoy hearing from my fellow surveyors. ■

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# MO Colleges/Universities Where Land Surveying Coursework is Available

The following list will be updated quarterly as new information becomes available.

## Longview Community College — Lee's Summit, Missouri

Contact: David Gann, PLS, Program Coordinator/Instructor —  
Land Surveying MCC — Longview, MEP Division  
Longview Community College  
Science and Technology Bldg.  
500 SW Longview Road  
Lee's Summit, Missouri 64081-2105  
816-672-2336; Fax 816-672-2034; Cell 816-803-9179

## Florissant Valley Community College — St. Louis, Missouri

Contact: Richard Unger  
Florissant Valley Community College  
3400 Pershall Road  
St. Louis, Missouri 63135  
314-513-4319

## Missouri State University — Springfield, Missouri

Contact: Thomas G. Plymate  
Southwest Missouri State University  
901 So. National  
Springfield, Missouri 65804-0089  
417-836-5800

## Mineral Area College — Flat River, Missouri

Contact: Jim Hrouda  
Mineral Area College  
P.O. Box 1000  
Park Hills, Missouri 63601  
573-431-4593, ext. 309

## Missouri Western State University — St. Joseph, Missouri

Contact: Department of Engineering Technology  
Missouri Western State University  
Wilson Hall 193  
4525 Downs Drive  
St. Joseph, MO 64507  
816-271-5820  
[www.missouriwestern.edu/EngTech/](http://www.missouriwestern.edu/EngTech/)

## St. Louis Community College at Florissant Valley

Contact: Norman R. Brown  
St. Louis Community College at Florissant Valley  
3400 Pershall Road  
St. Louis, Missouri 63135-1499  
314-595-4306

## Three Rivers Community College — Poplar Bluff, Missouri

Contact: Larry Kimbrow, Associate Dean  
Ron Rains, Faculty  
Three Rivers Community College  
2080 Three Rivers Blvd.  
Poplar Bluff, Missouri 63901  
573-840-9689 or -9683  
877-TRY-TRCC (toll free)

## Missouri University of Science and Technology — Rolla, Missouri

Contact: Dr. Richard L. Elgin, PLS, PE  
Adjunct Professor  
Department of Civil Engineering  
1401 North Pine Street  
211 Butler-Carlton Hall  
Rolla, Missouri 65409-0030  
573-364-6362  
[elgin@mst.edu](mailto:elgin@mst.edu)

## University of Missouri-Columbia, Missouri

Contact: Lois Tolson  
University of Missouri-Columbia  
W1025 Engineering Bldg. East  
Columbia, Missouri 65211  
573-882-4377

## Missouri Southern State College — Joplin, Missouri

Contact: Dr. Tia Strait  
School of Technology  
3950 E. Newman Rd.  
Joplin, MO 64801-1595  
1-800-606-MSSC or 1-417-782-MSSC

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# Who Remembers the Golden Age of Surveying?

by Mark Wiley, PLS

## A Look at Recording from a Different Angle

I think everybody has heard stories about how things use to be. The preverbal uphill both ways in the snow story comes to mind and of course sometimes we listen to stories about out houses and plucking your own chickens and are told these were the good old days. I don't disagree right away but the idea of getting dressed and going out into the night as many times as I get up anymore is not something that sounds like a wonderful memory but is a nightmare I'm thankful not to have. I have a number of memories from my past that I thought I would share with you today.

As a young feller, let us say pre High School by a bit, I can remember my weekends much like this. Get up early, go to the living room and turn on the TV. Search for cartoons on the three black and white channels we had and just about the time I found one Dad would get up and tell me we were going to do a Survey today, go get dressed. I will leave the incessant whining and fussing out of this telling because Dad didn't want to hear it then so I doubt you want to hear it now.

After getting dressed either in too few or too many clothes we would pile all of the survey equipment into the trunk of the family sedan. A quick note for the younger folk, trunks then much like toilet facilities weren't what they are now. You could get a tripod (you only needed one) shovel, pick, steel tape and some assortment of both temporary and permanent monuments in the trunk of a 1972 Plymouth. Back then you did not have, so you could not load things like a Bipod, Prisms, EDM, Schonstadt locators.

The transit was set in the floor board behind the passenger seat. In some ways you got the feeling it was more precious than life itself all nestled there between the seats the door and what was forever known when I was a kid as "the hump", that large hill like thing that ran from the front to the back of the car. I wonder what else cars have lost besides "the hump" and a trunk you could get three buddies in when you went to the Drive -In movie. The instrument always looked safe sitting there in the floor board as you slid from one side of the vehicle to the other on the large back seat. There were no seat belt laws as we knew them back then. The way it went was kind of as fast as the driver could go and hang onto the wheel. I still remember my last ride in that car before a speed limit was established. I was late for a Boy Scout meeting and Mom said she couldn't drive this way tomorrow. Honestly I wish she couldn't have driven that way then.

Once you got to the job we had this thing that is still performed today called "getting started." Back in the day (more on that term some other time) we did not get our Bipod out and screw our Rover unit on top and turn the wireless receiver on.

Seriously if this is how you start a Boundary Survey you may want to go back and consult the Missouri Minimum Standards because I have not seen that described in any version of them. You would get out a sketch Dad or Mom might have made from their Deed Research and then the hunt was on. With shovel in hand we would start scratching at post and rail.



Taking compass bearings and rough taping up and down the street we would dig around anything that might have been a witness to the monument called out on a deed. Heading to the rear of the parcels we were looking for and trying to find anything that looked like it might have defined possession and no opportunity was overlooked.

A personal note being, I can remember when we got our Dip Needle, young folks should go see one in a museum I was never impressed but when we got a Schonstadt locator this thing Dad was doing, this survey stuff, started to show some promise.

To a young guy it always seemed like we were on an Easter Egg Hunt with a twist. The eggs were buried. From most of the deed information you never knew what kind of egg you were looking for. Did the Original Surveyor set a stone or stake. Was it a pipe or pin we were in searching of? It seemed like we would never know until our wandering had disturbed enough dogs to get somebody's attention. In my mind they were always watching the cartoons that I had been forced to abandon.

This person annoyed with the constant barking would come out and with or without expletives ask what we were doing on such a fine Saturday morning. It took me awhile to figure out the reason why most folks thought Saturdays were fine was because they weren't working. A short explanation would ensue and sometimes not always but generally some place in our search area somebody would have had a survey done. At first I thought that meant we could go home but what I came to find out was this parchment, sometimes traced on the hood of the car became the key that opened a new door. These old treasure maps were

*(continued on next page)*

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## Who Remembers the Golden Age of Surveying? (continued)

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a window into the past. I will admit that they normally came along with a hand wave explanation of where to look. There is a hickory tree over there and about six feet south was a rock the last guy said was important. With that scrap of information and a hand drawn copy of the early guys survey we would be off and running.

Things seem to fall in line when we had an old survey and with the advent of the locator it did become easier to search a larger area for metallic corners but the sad fact is, we are still at the mercy of the owner who with his knowledge hiding in the cupboard holds that mystery map. So what do we do about the mystery map?

Some will say that this document created for the owner is the owner's personal property and that they have a right to keep it private. It seems logical to me that the corners marked in the field and paid for by that same person are not private, a survey line denotes where private starts and stops between owners. Shouldn't the information used to establish those lines be part of the Public Record? Adding to this debate I ask a simple question, why are Surveyors not liable for trespass? Isn't it because Surveyors lobbied for the ability to have access to all of the monuments in any location within this state? I think the answer to that question is yes and if we have a professional right to access the corners why don't we have a right to the documents that define how they were established? Everyone I have ever talked to has said if you are having a problem just ask and we will tell you what we know. Sharing information after someone has had a problem is not what the debate over filing plats is about. The intent is to keep surveyors out of trouble in the first place. We have enough issues in this Profession practicing our craft and trying to make a living.

The idea that one doctor would keep information about a patient in a private file and if the next physician had an issue the original Doctor would share it is asinine. Much like a person's health the property lines are dependent on more than what initially meets the eye. When we look at sequential conveyances this becomes very critical. If you have to move the original parcel or the senior deed in a chain of events it can have consequences on all of the parcels in the chain.

Doesn't every person who lives in a neighborhood (how ever you define it) have the right to hire a professional of their choice and have access to the building blocks that created and define the various parcels, tracts, lots and blocks that make up this fine State?

It is important to note that when a count is made of those States that have recording requirements Missouri is considered to have this type of legislation. The question to ask ourselves becomes "is it adequate"? I admit it is better than nothing. Filing a plat

when a new parcel is surveyed at least shows us how these parcels were created and what existed when the work was done. So why do we hear stories about folks who believe it is OK to write a boundary description and have it incorporated into a deed that they will survey later? Have you not diligently gone out of your way to circumvent the Law and haven't you broken it anyway? As Land Surveyors who establish the lines that define Fee Simple Title in our State are we permitted to write a description on whatever we want to? The answer to that question is No. We are charged to survey and then write not vice versa. I believe as with any rule there are exceptions, Preliminary Plats are one example. If a City or County is trying to get something through zoning it is different than cutting three acres out of your buddy's family farm so his son can build a home on it.

This behavior should be no more acceptable than a philosophy that says when you get in trouble ask, we will help you out. Both of these ways of practicing surveying should be unacceptable, why? It's the money, I've heard that the reason we should keep our plats, circumventing the existing law in some cases is to make money. Some might wonder how keeping a data base of Mystery Maps can be profitable and while I've heard the theory I can't agree with the practice. The idea that you have the easy or profitable way to reestablish an existing property line does not add up. Yes you have set the corner monuments before but how do you verify that they are still in the same place you left them? You will measure them like everybody else. So what does keeping the plat in the cupboard do really? It sets both the new and old surveyor up for trouble. The new guy we understand, but how does it affect the original guy? We all have liability. This includes the folks who brag that their records reach back over a hundred years. I'm aware of a number of younger surveyors who, being true to the original way of doing business, have been forced by the courts to pay for their predecessor's errors.

It is important to understand that nobody through this recording debate has thought that anybody should start recording their archives. So what are we talking about? I think the answer is, that depends.

It depends on what you ask. It depends on what the profession thinks is reasonable. The truth is what I think works and what you think works are going to be different in a number of cases. So how do we get the right answer? with *your* input. The Missouri Society of Professional Land Surveyors has commissioned a subcommittee to dig into the topic of recording surveys. With Representative Robert Ross securing the financial future of the Land Survey Program in Rolla the idea of what is the right way to keep our surveys is now in front of us again. The sad thing about the last surveys that were taken relative to what folks think about recording was the number of participants. Less than a third of the surveyors licensed in this state participated.

*(continued on page 12)*

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## Who Remembers the Golden Age of Surveying? (continued)

Of the third that participated two thirds want to add legislation to require more surveys be recorded. Two thirds of a third does not a majority make. For every person who will get a copy of this magazine there are two who will not. So the real question becomes what are you going to do? Write a letter, send an email? Might I suggest that the first thing you do is pick up the phone and call a colleague. Let them know what is going on and encourage them to get involved. Send in a letter or email and let those trying to guide the future of our profession know your opinion.

We are not looking at the topic as right or wrong. The debate relative to what is and is not legal should not be part of the discussion. This is a simple question. Do we still use a Dip Needle to find Iron Pipes and Pins? When was the last time you heard of a survey crew setting a stone for a corner? How long ago did we get out our transit and actually turn the angle at a parcels corner? Certain practices have become obsolete. Kids are not hauled in the backseat without a seat belt anymore because it was a bad practice.

So why are we still following the practice of hiding our light under a bushel basket? Starting our research by going to the field in search of caps with license numbers we can read so we can then track down the surveyors that set them, where ever they may be in the state, is neither cost effective nor prudent.

We have all complained about the kind of money we make for surveys and have compared it to so many other professions and trades making me wonder. How can we expect to make better wages when some of us are busy hiding the evidence and the others are wandering around like lost pups searching is beyond me. We can and will start making better fees for what we do when we put the public's interest first and quit annoying folks on a beautiful Saturday morning.

Give us your input or like voting keep quiet, while the contractor tears up all the corners along main street to pour a new sidewalk. 🇺🇸

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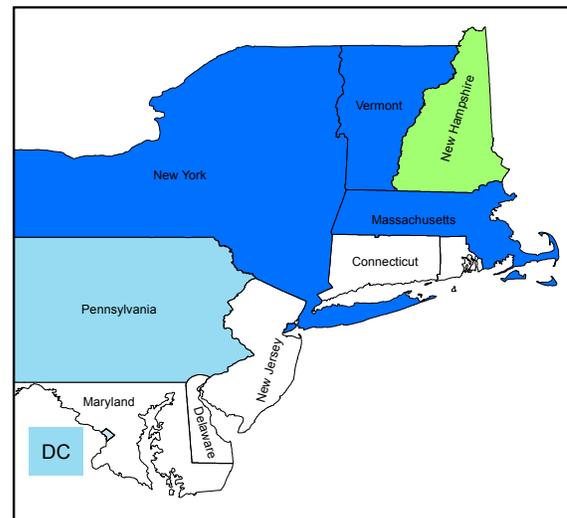
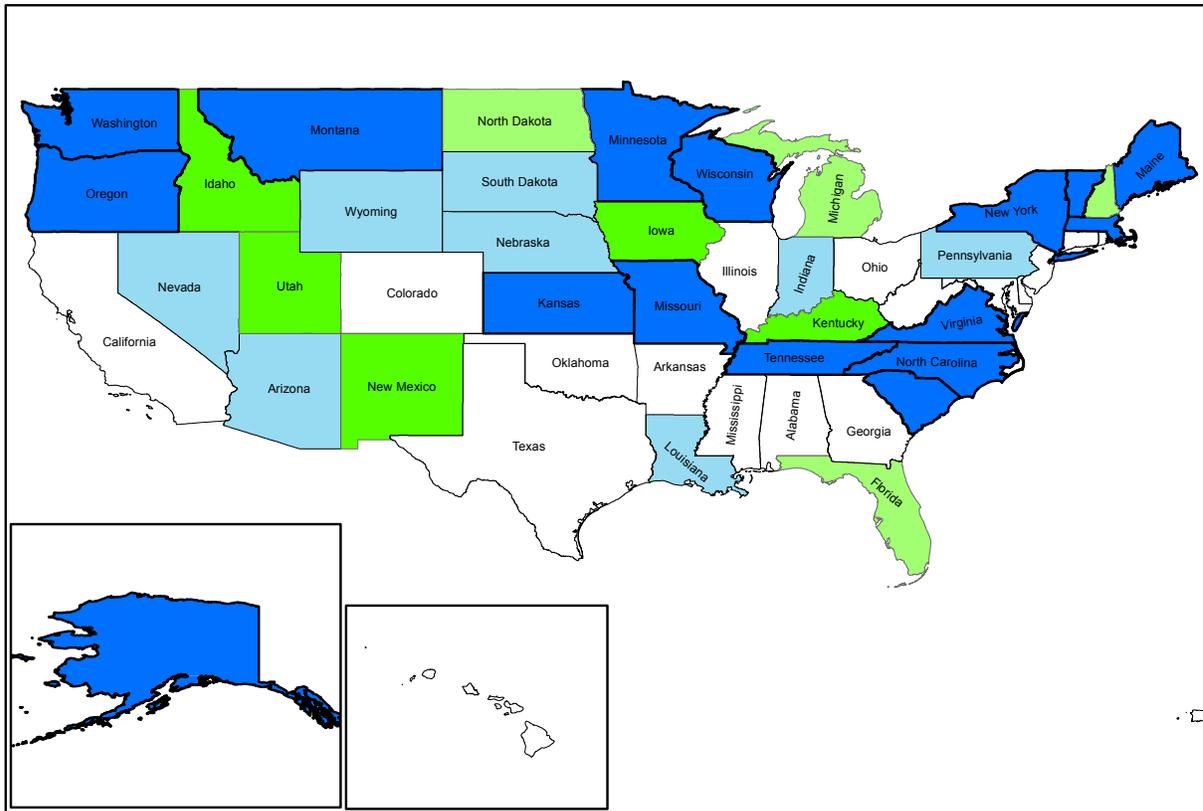
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# NSPS 100% Membership Participation



## Legend

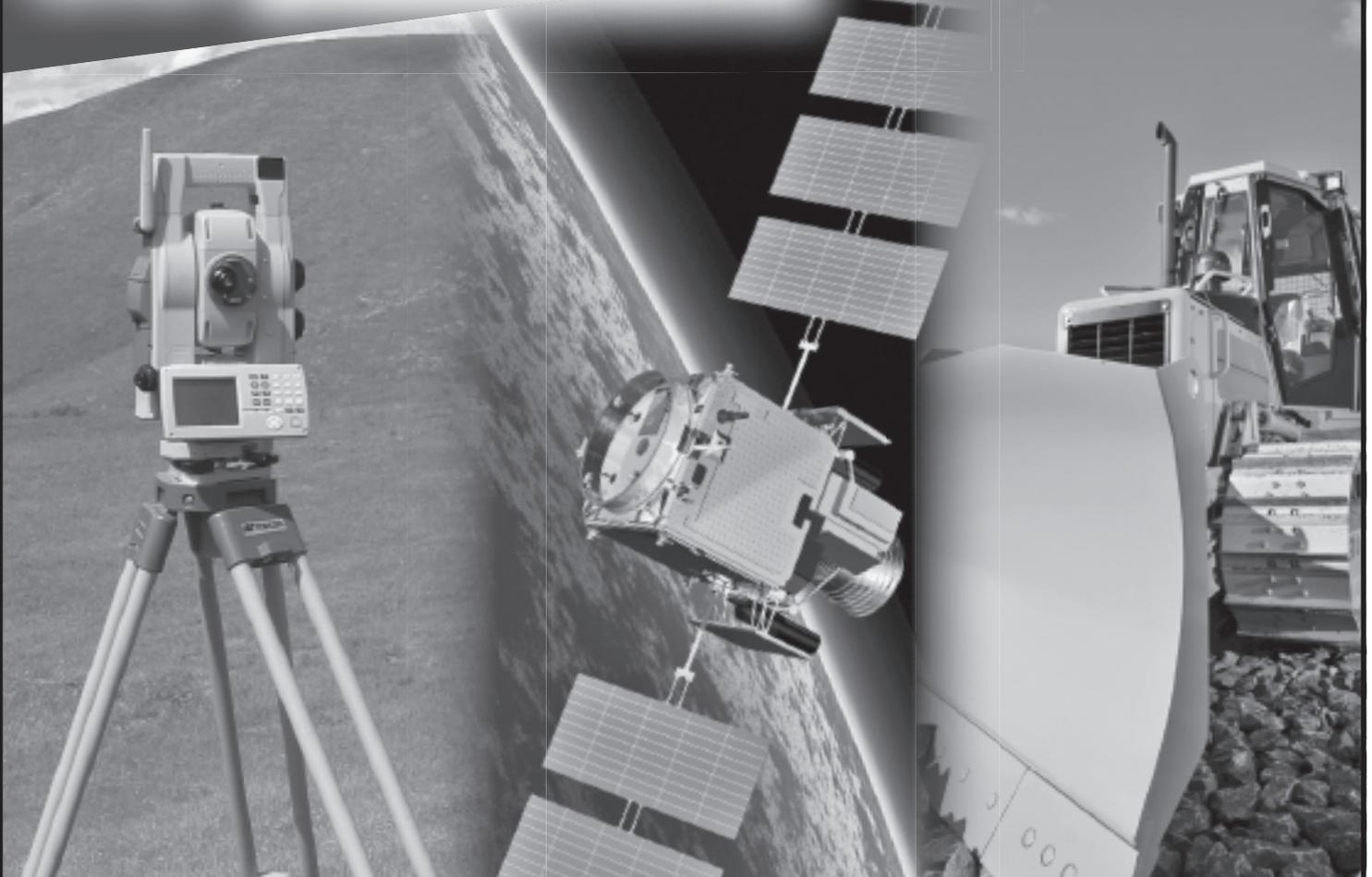
- Signed MOU
- Membership Approved
- Board Approved
- Positive Response
- Rejected
- Negative Response
- No Reponse

Date: 2/9/2013

Note: The process for a state society to approve the NSPS 100% Membership Participation Plan varies. Some states only need board approval, while other states need membership approval. The categories for this map reflect the current status of the state society as reported.



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# An 1884 Bill to Create a Board to License Surveyors and Engineers in Missouri

by Dr. Dick Elgin, LS, PE, Archer-Elgin Surveying & Engineering, Rolla, MO

## The Meeting

In June, 1884 a distinguished group of engineers and surveyors gathered in the “rooms of the Engineering School of the State University at Columbia” for the Fourth Annual Meeting of the Missouri Association of Surveyors and Civil Engineers. The list of the Association members is a veritable who’s who of period professionals, who, in those days mostly were both civil engineers and surveyors. The list of presentations from the proceedings of this fourth annual meeting is impressive. These men (no women names appear in the membership list) addressed the apparently pressing issues of the day. Some of the titles of subjects discussed, presented and published include: Relocating lost corners by testimony. Design of Howe Truss highway bridge to 120-foot span. “Iron Bridges.” The duties of the county road and bridge commissioner. “A Uniform System of Recording Surveys.” “Sewers for Towns.” “Establishing Blank Quarter Corners.” Preliminary and locating surveys for a railroad. “Registered Surveyors vs. County Surveyors.” “Foundations for Highway Bridge Piers.” “Old Corners of the County Surveyor, What Weight Shall Attach to Them,” “Boundary Lines, Fixed by Agreement.” Some of these titles could come from the last convention of the Missouri Society of Professional Surveyors. (Some of the vexing questions of 1884 are still being discussed today.) And, William Gurley (Founder of W. & L.E. Gurley) addressed the Association and “described in detail the Light Mountain Transit with solar, as an instrument by which the true meridian may be accurately determined....”

Along with technical issues, the Association apparently had politics in mind as well. It unanimously adopted a resolution which gave thanks to Dr. S.S. Laws and the Honorable James S. Rollins, President of the Board of Curators (and, considered the founder of the University), both of whom had addressed the meeting. The resolution read: “That the thanks of this Association are due to Hon. J.S. Rollins and Dr. S.S. Laws for their kindly interest and engagement shown this Association, and their able addresses. That Dr. S.S. Laws and Hon. J.S. Rollins be enrolled as Honorary members of this Association.”

The Association had lots of which to be thankful. In President of the Board of Curators, James S. Rollins’ address he had lauded the Association and said he wanted to “establish a social, sympathetic and cordial relation between the University and the Surveyors and Engineers of the State.” Here, here! He went on to say that the Curators had “at my insistence” unanimously passed the following resolution:

“RESOLVED, That hereafter any County Surveyor duly elected, in this state, and who may desire to prosecute further any branch of scientific study, shall be allowed to do so, in any department of the State University, including the School of Mines and Metallurgy at Rolla, free and without the payment of the usual tuition fees; and that the Curators will co-operate with them, in carrying out this resolution.”

The resolution ended by stating that “all the newspapers of the State be requested to publish” the resolution. Wow! For any County Surveyor, a degree in any branch of scientific study in any department of the University including Rolla...for free! I wonder if that resolution was ever cancelled.

## Legislative Initiatives

At the meeting two different bills were proposed relative to “registered surveyors” and “registered engineers.” Both these bills established a “Board of Examiners,” stated requirements for those appointed to the Board by the Governor, set an examination policy and passing requirements, set fees, established bond requirements, established scope of duties and set civil penalties for failure to carry out those duties. Both these proposed acts are very well written, are complete and read like any bill which comes out of Legislative Research today. The genesis of these acts is unknown, but they must have been taken from or adopted from some other, existent, legislation or proposed legislation. These acts incorporate many of the same ideas that Chapter 327 RSMO contains today and addresses many of the same issues. Throughout these acts one can easily detect efforts to protect the public from poor practice by those not “registered” by the Board.

One proposed act concerns only surveyors, the second both surveyors and engineers. Their provisions are summarized below.

“An Act to create a board of Examiners for Registered Surveyors, and prescribing their duties and penalties, for the purpose of establishing uniformity in surveying and recording surveys....”

1. No person except registered surveyor can be elected as County Surveyor. Only registered surveyor or County Surveyor can execute any surveys, mark dividing lines, and reestablish lines and monuments. (Not until 1983 were RSMO changed to require County Surveyor to be registered surveyor.)

2. Governor to appoint three “competent surveyors” to become “Board of Examiners for Registered Surveyors.”
3. Board can make by-laws, regulations, create auxiliary boards, etc. under the act “without expense to the State.”
4. Board to keep book of names and places of residence of all persons issued certificates.
5. Board shall examine every person who applies by a “schedule of questions” or orally. Majority of Board must agree to be registered. Graduates of Missouri University “as surveyors or civil engineers” entitled to have their names “registered by Board without examination.”
6. Establishes \$2.00 fee for those registered without exam and \$5.00 fee for those examined orally or by “schedule of questions.” In case he not be registered, can be reexamined within 12 months with no charge for reexamination.
7. Fine for seeking registration under false representation.
8. Bonding of registered surveyor.
9. Registered surveyors must “file for record with County Surveyor” plat of survey, certifying “in accordance with correct principles.”
10. Registered surveyor liable for errors in survey.
11. Registered surveyor liable for “palpable neglect and want of thorough investigation of the records and researches in the field,” but not liable for circumstances which “becomes a question of great doubt, and properly to be adjudicated by the courts.” (This is a very well written section and could just about be used today, verbatim, as a statement of surveyor’s liability. It is very succinct.)
12. Fine for not filing survey with County Surveyor.
13. through 20. Deals with election of County Surveyor, bonding, duties, records of the office.
21. and 22. Technical and platting requirements, records accessibility of County Surveyor’s surveys.
23. Admissibility of surveys in court, County Surveyor or registered surveyor. (Not until 1993 did RSMO address this issue.)
24. and 25. Duties of County Surveyor.
- 26., 27. and 28. Provision for County Road and Bridge Commissioner and how they affect County Surveyor.
29. County Surveyor may have deputies.
- 30., 31. and 32. County Surveyor and County Road and Bridge Commissioner fees.
- 33., 34. and 35. Relate to adopting the proposed legislation.

A large part of this 1884 proposed statute pertains to the County Surveyor. The office was established by the Missouri Territorial Legislature in 1814, before Missouri became a state. This bill would have strengthened the office.

The second bill proposed is not as specific as the first and provides for becoming a registered surveyor or registered engineer. Below is a summary of each section.

“An act to create a Board of Engineers”

1. Misdemeanor if survey not made by registered engineer or registered surveyor.
2. Governor to appoint three “competent civil engineers” to become “Board of Engineers.”
3. Board shall examine those who apply by “schedule of questions” or orally “every surveyor or civil engineer who shall desire to become registered surveyor or registered engineer.” Majority of Board must agree.
4. Applicants as registered surveyors “shall pass an examination on the principles of land surveying and shall show a familiarity with the laws and regulations of the State and the United States governing the location and restoration of lost or obliterated corners...” (The Board today has this exact requirement.)
5. Applicants as registered engineer shall pass the requirements of Section 4 (above), and “in addition thereto shall show that they understand the principles of road making, bridge building, and such other subjects, as will satisfy at least a majority of the members.” Graduates having a diploma from college of engineering may be registered without examination. (Note: to be a registered engineer one must pass the exam required to be a registered surveyor.)
6. Establishes \$2.00 fee for those registered without exam and \$5.00 fee for those examined orally or by “schedule of questions.” In case he not be registered, can be reexamined within 12 months with no charge for reexamination.
7. Must be registered surveyor or registered engineer to be County Surveyor. Must be registered engineer to be County Bridge Commissioner.
8. Relates to bonding.
- 9.,10. Relates to requirements of being County Surveyor.
11. Relates to adopting the act.

The proceedings are surprising in several respects: The engineers and surveyors in attendance and their very close relationship with the University. The quality and topics discussed and published in the proceedings. And, the two pieces of legislation proposed. All in 1884. The only surprising part is that it took Missouri until 1957, to enact legislation to establish a licensing Board for engineers and surveyors, an idea that had been around for 73 years! 🇺🇸



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## Legislative Activities

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### Capitol Visits on February 20



*Left to right: Jim Anderson, Robert Ubben, Rich Barr, Adam Teale, Sharon Herman (MSPS President), Ray Riggs, Shane Terhune, Rep. Robert Ross, Rich Howard, Mark Wiley, Dan Govero, Troy Hayes, Chris Wickern, Zach Winters and Monnie Sears.*

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### Surveyor Ross Makes News



*Freshman representative Robert Ross during opening session with Speaker of the House Tim Jones as seen in the St. Joseph News Press.*



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## Thursday, May 9, 2013

12:30 pm Golf Tournament  
6:00 - 8:00 pm Exhibitor Set-Up



## Friday, May 10, 2013

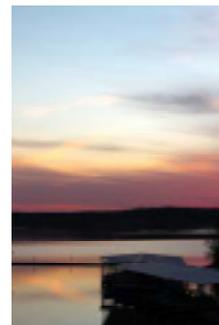
7:00 am Registration, Continental Breakfast and View Exhibits  
8:00 - 9:30 pm **New Data From US National Special Reference System**  
*Speaker: Michael Dennis, RLS, PE, Geodesist (National Geodetic Survey)*  
9:30 - 10:00 am Break to View Exhibits  
10:00 - 12:00 pm **New Data From US National Special Reference System continued**  
12:00 - 1:00 pm Lunch and View Exhibits  
1:00 - 3:00 pm **The Four Corners Legacy: Monuments, Not Math, Make Property (and 1,001 Reasons Why Surveyors Plant Pin Gardens Anyway)**  
*Speaker: Warren Ward, PLS*  
3:00 - 3:30 pm Break to View Exhibits  
3:30 - 5:30 pm **The Four Corners Legacy Abstract continued**  
5:30 pm Reception with Exhibitors

## Saturday, May 11, 2013

7:00 am Continental Breakfast and View Exhibits  
8:00 - 9:30 am **Risk Drivers: Understanding the Dynamics of Risk in the A/E Industry**  
Gain an understanding of the nature of risk, both external and internal risk. Examine the challenges in today's marketplace. Review discipline-specific claims statistics. Learn to apply the insights of what you've learned.  
*Speaker: Kim DeMarino, Holmes, Murphy & Associates*  
9:30 - 10:00 am Break to View Exhibits  
10:00 - 12:00 pm **Panel Discussion with Architects, Engineers and Land Surveyors-Information Exchange and Discussion on Information (BIM)**  
*Speaker: Britt Smith, Engineer; Fermin Gasper, Land Surveyor; Kurtis R. Krueger, Architect*  
12:00 - 1:00 pm Lunch  
1:00 - 3:00 pm **Scanners, Robotic Total Station and Laser Totals**  
*Speaker: Greg Schneider, High Definition Surveying (HDS) Division of Leica Geosystems and manufacturers representative for Surveyor's Materials; Pat Stack, RLS, Seiler Instruments; Bradley Burgess, Topcon*  
3:00 - 3:15 pm Break  
3:15 - 5:15 pm **Scanners, Robotic Total Stations and Laser Totals continued**

## Registration Information:

Registration fee is \$175 for MSPS Members and \$300 for Non-Members. Deadline for registration is April 25, 2013. After this date, a 10% processing fee will be added to registration fees. The fee includes instructional materials, refreshment breaks, luncheon on both days, cocktail reception and two continental breakfasts. To register, complete the attached form and mail it with your check to MSPS, 722 E. Capitol Avenue, PO Box 1342, Jefferson City, MO 65102. For more information on this course, call Sandra Boeckman at 573-635-9446.



## Special Rate for Technicians:

A special rate of \$150 is available for non-licensed technicians (Associate Members of MSPS). Registration fee plus 2013 Associate Membership is \$185. Call MSPS for details at 573-635-9446.

## Golf Tournament (Scholarship Fundraiser):

Register to play in the Golf Tournament Fundraiser for the MSPS Scholarship Fund to be held at The Cove Golf Course, The Lodge of Four Seasons beginning at 12:30 p.m. The cost is \$85 per person which includes two mulligan's per player.

## Location and Lodging:

The Lodge of Four Seasons in Lake Ozark is the location for the 2013 Spring Workshop. A block of rooms has been reserved at the Lodge at a rate of \$102.00 for single or double occupancy. Deadline for reservation is April 9, 2013. Make your reservation by calling the Lodge of Four Seasons at 888-265-5500.

## Cancellation Policy:

MSPS reserves the right to cancel the program and return all fees in the event of insufficient registration. A participant may cancel a registration up to two weeks before the course date and receive a full refund.

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<input type="checkbox"/> Golf (per person)	\$85.00

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**Registration Deadline is April 26, 2013**



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**722 E. Capitol Avenue, PO Box 1342**  
**Jefferson City, MO 65102**

## About the Speakers

**Kim DeMarino** is a graduate of the University of Illinois and Chicago-Kent College of Law. Kim is an experienced litigator having tried more than 20 cases to a jury verdict. She is a certified mediator and trained arbitrator having served to resolve disputes for the City of Chicago, Cook County court system, and Equal Employment Opportunity Commission. She has lectured internationally about the US legal system. Kim spent the last 10 years handling professional liability claims. She joined XI Design Professional Insurance in 2012.

**Michael L. Dennis**, RLS, PE, is a geodesist at NOAA's National Geodetic Survey (NGS) where his duties include analysis of geometric ("horizontal") and vertical datums; evaluation of data processing and survey network adjustment procedures; development and promotion of standards and guidelines; integration of NGS products and services with GIS; and public outreach. Mr. Dennis is also a registered professional engineer and surveyor with private sector experience, including ownership of a consulting and surveying firm. Mr. Dennis is an officer of the American Association for Geodetic Surveying (AAGS), an American Congress on Surveying and Mapping (ACSM) Fellow, and a member of the Arizona Professional Land Surveyors Association and the Geomatics Division of the American Society of Civil Engineers.

**Fermin Glasper** is CEO & President of Glasper Professional Services, a technology driven civil engineering and surveying firm. Beginning his career 24 years ago, he graduated from National-Louis University with a Bachelors of Science in Management. Fermin's career began with the US Army, then for the US Army Reserves, and since 1999 he serves the US Navy Reserves. He has supervised teams of surveyors and served as an instructor. He also supervised construction design and quality control/materials testing. His private sector career began with Pickett Ray & Silver where he reached the level of Survey Project Manager, next as Global Positioning Systems Manager for The Sterling Company, which he was employed for three years before moving to Sabur, Inc. as Director of Surveying. During this period of time, Fermin obtained degrees in Construction Technology, from Coastline College and Computer Aided Drafting Design at ITT Technical Institute. In 2010, Glasper Professional Services was formed. As CEO of GPS, he is tasked with aligning the vision of the firm, strategic planning and positioning, and with the overall operations. Fermin is an Adjunct Instructor for the Civil/Construction & Surveying Technology program, of St. Louis Community College. He holds registrations as a Professional Land Surveyor in the State of Missouri and Illinois and is a St. Louis County MLD Special Inspector. He serves as a Committee Chairman for PLTW, Project Lead the Way. Fermin served as Co-chair of the Certified Survey Technician Committee for the Missouri Society of Professional Land Surveyors, and also served as President of the St. Louis Chapter of MSPS. He is a member of the National Society of Professional Surveyors, American Association of Geodetic Surveying, and the Graphic and Land Information Society.

**Gregory S. Schneider** is employed by the High Definition Surveying (HDS) Division of Leica Geosystems and a manufacturers representative for Surveyor's Materials. Greg has worked in the Surveying and Engineering Industry since 1982, Starting as a Rod Person, he has grown his experience as a measurement professional through a combination of hands on and education classes that has spanned most every discipline of the surveying industry. After obtaining 20 years of practical experience, Greg joined Leica Geosystems in 2003 as an Applications Engineer focusing solely on laser scanning hardware and software solutions. Greg is a certified HDS trainer and has provided project support services on over 200 laser scanning projects throughout the US.

**Britt E. Smith**, P.E., NSPE, received a bachelor of science degree in engineering from the University of Missouri - Rolla. He began his career with MECO Engineering as a civil engineer and project manager. Later, he continued his work as a staff engineer for both the City of Jefferson and the Missouri Department of Conservation. Currently, Britt is the director of operations for the Department of Public Works in Jefferson City where he oversees the operations of the street, parking, central maintenance, facilities, and airport divisions of the department. Britt is an active member of the Missouri Society of Professional Engineers and has held various positions including that of state president.

**Pat Stack** has over fourteen years experience with Seiler Instrument Company. Pat has become the go-to person for his knowledge and expertise in the use of Trimble® Mapping and Scanning equipment along with Real Works and Autodesk Software. Pat has attended and successfully completed several Trimble 3D Laser training seminars at Trimble Navigation headquartered in Westminster Colorado. Additionally, Pat Stack has presented over the years at several regional Land Survey Conferences such as Missouri Society of Professional Land Surveyors, Illinois Professional Land Surveyors as well as Professional Surveyors Association of Nebraska. Pat specializes in integrating field data into Autodesk products to streamline the processes and guiding users in the most efficient use of their equipment and software. Prior to joining Seiler, Pat had over ten years in civil engineering drafting experience utilizing AutoCAD, Softdesk and Land Desktop. Pat has assisted in numerous onsite 3D Scanning analyses with several local and regional firms such as Fred Weber, Thouvenot Wade and Moerchen, Woolpert, David Mason and Associates, and MoDOT.

**Warren Ward** began working on a survey crew in 1972. He has worked full time in either the private or county sector as a land surveyor since 1984. He is currently the Grand County, Colorado, elected county surveyor. He is the NSPS Governor of Colorado. He is a past president of National Association of County Surveyors and Professional Land Surveyors of Colorado.

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## National Society of Professional Surveyors

5119 Pegasus Court, Suite Q, Frederick, MD 21704

Phone: 240-439-4615 \* Fax: 240-439-4952

[www.nsps.us.com](http://www.nsps.us.com)

### **PRESS RELEASE for immediate distribution**

#### **National Surveyors Week - March 17-23, 2013**

National Surveyors Week will be celebrated nationwide March 17-23, according to the National Society of Professional Surveyors (NSPS).

Hundreds of surveyors nationwide are planning activities, such as talks to school groups, contacts with their local news media about the importance of the nation's surveying profession, booths at popular community locations to describe the importance of the work and role of surveyors and their contributions to society. These activities will enable citizens to look back at the historic contributions of surveying and look ahead to the exciting new technologies that are constantly modernizing this honored and learned profession.

The always popular GPS Day is being held in conjunction with National Surveyors Week, and will be held on March 16 as a lead-in to our week.

The message to be spread, according to NSPS, which serves as the voice of surveyors nationwide, is that the role of the surveyor has been, and remains, of vital importance in the development of the United States.

"As long as property ownership remains one of the pillars of life in America, the role of surveyors will remain vital," said Curt Sumner, executive director of NSPS. "To this day, owning land, America's greatest asset, remains the American dream. Without the knowledge, abilities and guidance of a professional surveyor to determine boundaries this dream largely disappears."

NSPS has petitioned The White House to proclaim this week National Surveyors Week. In addition, a number of state surveying societies have petitioned their state legislatures to do the same at the state level.

In his request to The White House to declare this week National Surveyors Week, Sumner outlined how "since the colonial days of this nation, surveyors have been leaders in the community, statesmen, influential citizens, and shapers of cultural standards. Former surveyors include Presidents George Washington, Thomas Jefferson, and Abraham Lincoln. "

"Today," Sumner noted, "there are over 45,000 professional surveyors in the United States. The value of their work remains vital to the future economic growth of our nation." For example:

- Hydrographic surveys are important to the use of all our bodies of water;
- Engineering surveys are utilized in the study and selection of engineering construction;
- Geodetic surveys determine precise global positioning for such activities as aircraft and missile navigation;
- Cartographic surveys are used for mapping and charting, as well as photogrammetry, the science of using aerial photographs for measurement and map production.

The establishment of the week of March following the third Sunday as National Surveyors Week is designed to be a tribute to all surveyors.

For more information about National Surveyors Week log onto [www.nsps.us.com](http://www.nsps.us.com)

For more information about GPS Day log onto [www.gpsday.com](http://www.gpsday.com)

# A Second-Class Profession

Land surveyors are second-class professionals by their own choosing. The title “professional” is largely achieved through self-proclamation.

by Jeffery N. Lucas, PLS, Esq, Reprinted with permission from *Point of Beginning*, August 2012

At least half, if not more, of our professional organizations have incorporated the word “professional” into their official names, and even more of the state boards have done the same. Curtis Brown spoke on this issue in 1961 in an article titled “The Professional Status of Land Surveyors,” which appeared in ACSM’s “Surveying and Mapping” publication:

Without superior knowledge, we have an Inferior profession ... One of the reasons for giving surveyors the exclusive privilege of marking boundaries is to prevent the unskilled from monumenting lines that encroach on the bona fide rights of others ... The major deterrent to our becoming a learned profession is our low requirements for the right to practice. So long as we have low admission requirements, we will have low standards of practice and low public opinion ... Differences between surveyors are a cause of degradation. We prove by our own survey monuments that we are incompetent, since we cannot all arrive at the same location using the same deed ... Professional stature is not gained by self proclamation. Professional stature must be earned and can only be measured by what others think of us ... If you want to be a professional man, earn that right.<sup>1</sup>

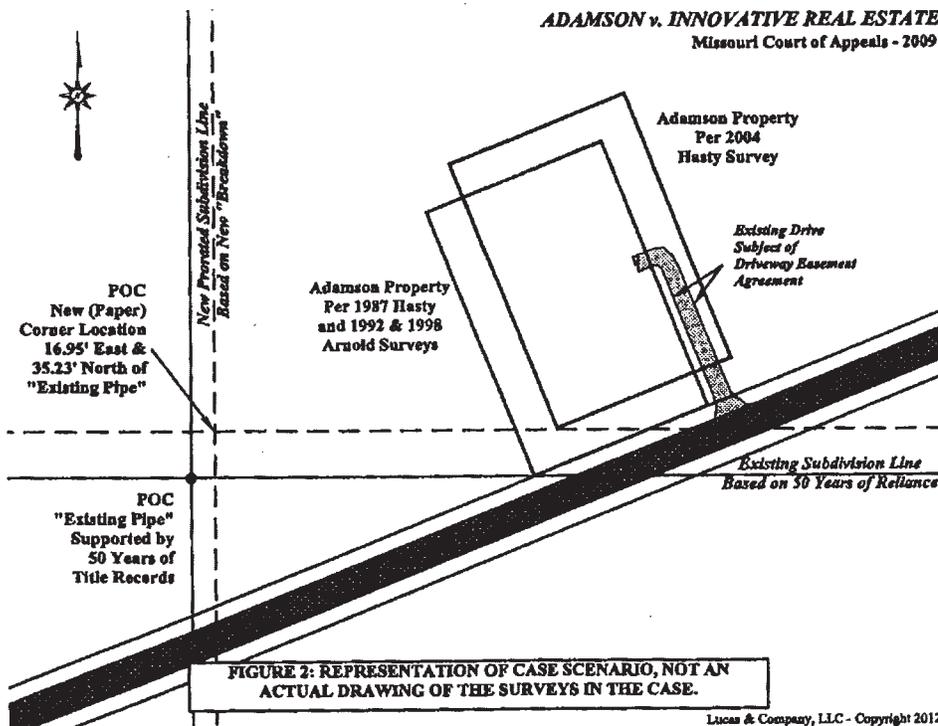
It is the low standards of practice due to our low requirements for the right to practice that I want to address. We have strapped ourselves into permanent second-class status by the so-called “standards” of practice<sup>2</sup> that have been promulgated and thrust upon us through various lobbying, legislative and rulemaking efforts. A common theme of all of these standards is that there is no distinction between good practice and bad practice. In other words, completely invalid results can be achieved, and there are no repercussions under the standards. As I said in my April column in an analogy with the medical profession, the wrong leg can be amputated, but as long as the operation was performed correctly, it passes muster under the standards.

Missouri brings us our latest example in the form of a court case over the supposed requirements of the “Missouri Minimum Standards for Property Boundary Surveys.”<sup>3</sup> I have placed emphasis on the word “property.” The case is *Adamson v. Innovative Real Estate*,<sup>4</sup> a fairly recent case involving a protracted Public Land Survey System (PLSS) subdivision corner.

The corner in question is the northwest corner of government Lot 1, in the southwest quarter of Section 19, Township 38 north, Range 16 west, 5th Principal Meridian. This corner was not physically set on the ground by the government surveyors when the township was originally laid out, circa 1845. Keep in mind that that was 167 years ago; as the saying goes, stuff has happened in the meantime.

The plaintiff/appellant in our case, Adamson, bought a parcel of undeveloped land in 1998. Adamson’s adjoiner to the east is one of the defendants/respondents in the case, Innovative Real Estate. In order to facilitate the purchase and improvements to the property, Adamson hired [REDACTED], also a defendant/respondent in the case, to provide a survey of the property. The legal description of the property was by metes and bounds, and was tied to our

(continued on next page)



## A Second-Class Profession (continued)

corner in question with a call for an “existing pipe” at the corner. Also, keep in mind this is a called-for monument that has been in the chain of title for this and surrounding properties for “over fifty years.”<sup>5</sup> Upon purchasing the land, Adamson immediately made the planned improvements.

At the time of the survey, there was an existing drive on Innovative’s property that was immediately next to where Adamson wanted his building constructed. Adamson and Innovative entered into a “Driveway Easement” agreement allowing Adamson to utilize the existing drive. The location of the easement was a function of the location of Adamson’s eastern boundary, which in turn was a function of the location of the corner in question—at least as far as the measurements in the metes and bounds description are concerned, all other evidence to the contrary notwithstanding. For reasons that are irrelevant to the present discussion, Adamson and Innovative got into a quarrel over the easement agreement and went to court twice, with Innovative finally extinguishing the easement through a court decree.

Shortly after losing the easement in the second case, Adamson hired another licensed Missouri land surveyor to “perform a boundary survey of the Adamson *property*.”<sup>6</sup> [Emphasis added] This surveyor rejected the “existing pipe” as marking the true government corner, which he “determined to actually be located approximately 16.95 feet east and 35.23 feet north of the ‘existing pipe’” (Id.) We are not told how he made this determination, but there is only one way to reject an existing monument that has stood as the true corner for more than 50 years within the PLSS—with new prorated calculations based on new measurements and a new paper subdivision of the section<sup>7</sup> In other words, course and distance are elevated above existing and called-for monumentation.

**New corners are only established** as part of an original survey; basic surveying retracement doctrine requires finding where the lines have already been established on the ground, not correcting them. The cases on this subject, in all jurisdictions, are legion.<sup>8</sup> In the present case, the Missouri court agrees: “[I]t is one of the *settled rules of the law of boundaries* that calls for courses and distances, quantity, etc., will, in case of a conflict, be controlled by, *and yield to*, one for a natural object or landmark or permanent artificial monument.”<sup>9</sup> [Emphasis added.] The supposed reason for rejecting the “existing pipe,” and the point of this column, is that the Missouri standards required the surveyor to do so.

But the case even went beyond that. ██████ was charged with negligence for not complying with the standards and for producing an “inaccurate” survey. Let’s remember that when it comes to results of a “Property Boundary Survey,” which the

Missouri standards are supposedly the minimum “guideline for adequate performance”<sup>10</sup> of such a survey, accuracy in this context means correct results.<sup>11</sup> The true and correct corners and boundary lines of the property being surveyed have been retraced. The other surveyor “testified that ██████ failed to meet the Minimum Standards in preparing his survey of the Adamson property and that, had he done so, the common boundary line would have shifted ... [he] determined that if ██████ had surveyed the Adamson property in accordance with the Minimum Standards, the eastern boundary of the Adamson property would have been located fifteen feet farther to the east” (See the illustration on page 27.)

All of this in light of the fact that the “existing pipe” was a called-for monument in the chain of title for the Adamson property and other surrounding properties for more than 50 years; that the other surveyor had used the same “existing pipe” in his 1987 survey of the same property; and that ██████ was actually retracing that same surveyor when ██████ first surveyed the property in 1992 and then later in 1998 with, as the court noted, “results that were nearly identical.”

Cited as the code sections being violated were CSR 2030-16.010 thru 16-030. Specifically, the other surveyor “testified that the existing pipe was not located on the government lot line and was not a monument properly tied to a government corner.” Let me translate this for you; I’ve been to Missouri, and I know the orthodox view on this very point. This means that ██████ didn’t mathematically “break down” the section to derive the “true” government corner (see Footnote 7). Of course, this begs a few questions. How many times does a section need to be subdivided? How many times has this process been done in that particular section over its 167 years of existence? How many more times will it need to be done in the future? Is the other surveyor’s new breakdown the final one or, if fault is later found, will it need to be done again? Do landowners have a say in this, or are they just supposed to lie back and allow the wrong leg to be amputated, over and over again, if necessary?

**While Appellants argue that the Minimum Standards required ██████ to commence his survey from an actual government corner,<sup>13</sup> rather than relying on the language found in over fifty years of deeds that each referred to the “existing pipe” as being the government corner, we cannot find, and Appellants do not point out to us, any such absolute requirement in the Minimum Standards.<sup>14</sup>**

This is what the courts do; they interpret the law, statutes and code sections. There is no requirement that a section be mathematically broken down into its theoretical aliquot parts in the Missouri standards, in Missouri statutes,<sup>15</sup> in the BLM Manual<sup>16</sup> or by federal statute.<sup>17</sup>

Neither the author nor POB intend this column to be a source of legal advice for surveyors or their clients. The law changes and differs in important respects for different jurisdictions. If you have a specific legal problem, the best source of advice is an attorney admitted to the bar in your jurisdiction.

Certainly the standards for property boundary surveys will answer our questions, not only for the practicing land surveyor, but also for the affected landowners. Certainly the standards will comport with the law of the situs jurisdiction when articulating a “realistic guideline for adequate survey performance” Certainly adequate performance means the correct leg is amputated. Well, they fail on all counts. It is very likely that both surveys in this case pass muster under the standards. It is even possible that ██████ may be subject to disciplinary action under the standards even though his survey was accurate (correct results were obtained). We don’t distinguish between good practice and bad, and this is why we remain a second-class profession. Hopefully one of these days, maybe before it’s too late, we will decide the landowning citizens of this country deserve better. 🇺🇸

#### REFERENCES

1. Brown, Curtis M., “The Professional Status of Land Surveyors,” 1961, “Surveying and Mapping.” Vol. XXI, No. 1, at 63-71.
2. Commonly referred to as “standards of practice,” “practice standards,” “minimum technical standards,” or simply “technical standards.”
3. Missouri Code of State Regulations, Division 2030 (CSR 2030). Available online at: [www.sos.mo.gov/adrules/csr/current/20csr/20csr.asp#20-2030](http://www.sos.mo.gov/adrules/csr/current/20csr/20csr.asp#20-2030)
4. *Adamson v. Innovative Real Estate, ██████ and ██████*, 284 S.W.3d 721 (Mo.App.2009).
5. *Adamson v. Innovative*, at 733.
6. *Id.* at 726.
7. In common parlance, this is also referred to as a “breakdown” or “sizing” of the section based on other monuments deemed worthy of holding or a completely paper “theoretical” section.
8. To name just a few, many of which we have gone over in this column in the past: *Riley v. Griffin*, 16 Ga. 141 (Ga.1854); *Ayers v. Watson*, 137 U.S. 584 (U.S. Supreme Court 1891); *Myrick v. Peet*, 180 P. 574 (Mont. 1919); *Tyson v. Edwards*, 433 So.2d 549 (Ra.App.1983); *Wood v. Starke*, 197 S.W.3d 255 (Tenn.App. 2006); *TH Investments v. Kirby*, 218 S.W.3d 173 (Tex. App.2007); *Gilbert v. Geiger*, 747 N.W.2d 188 (Wise.2008); *Chebro v. Audette*, 2010 Conn. Super LEXIS 2449 (Conn. Super.2010); *Northrop v. Opperman*, 2011 WI 5, (Wisc.2011). Even the BLM Manual is in agreement. See Sec. 6-7, 1973 Manual and Sec. 5-14, 2009 Manual.
9. *Adamson*, at 733, quoting *Ollison v. Village of Climax Springs*, 916 S.W.2d 198, 206 (Mo. Banc 1996).
10. CSR 2030-16.101 Application of Standards, Purpose.
11. For a complete discussion on the difference between accuracy and precision relative to boundary location, see “Missing the Mark,” POB, May 2009. Also see “The Pincushion Effect,” Chapter 9, Sec. 9.02, Lucas, Jeffery N., 2011, Lucas & Company, LLC, Birmingham, AL.
12. *Adamson*, at 727.
13. We can safely assume this is code-speak for a new “breakdown” of the section every time a survey is performed.
14. *Adamson*, at 732-733.
15. See § 327.272. Practice as professional land sureyor defined, Missouri Revised Statutes
16. See “It was a Simple Plan,” PO8, August 2010 and “Requiem for the First Surveyor Concept.” POB, September 2010.
17. See *Dykes v. ██████*, 129 P.3d 257 (ore. App.2006). “We know of no legal authority—and plaintiffs cite none—that holds that a mere reference to ‘the center’ of a section compels the conclusion, as a matter of law, that the parties intended to be governed by the mathematical center as it might be located in the future, rather than as it had been located. What sparse case law can find is, instead, to the contrary.” See also *First Beat v. ECC*, 962 So.2d 266 (Ala.App.2007).

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# The BPELSG Chronicles

## That Old Client Could Cost You Your License

by Ray Mathe, PLS, BPELSG Staff Land Surveyor, Reprinted from *California Surveyors*, Fall 2012

Beware, there is a trap that could affect your practice as a Land Surveyor! What I am talking about is Section § 8765(c) of the Professional Land Surveyors Act (PLS Act).

Do you remember that project you started three, four or maybe ten years ago, when you went out and did a preliminary survey for a land development project? I mean, let's face it, for those of us that were working in the arena where your client cared more about scope and schedule than the nice fee you were charging them ... it was an incredible season where engineering and surveying companies took in record profits. Seems like a hundred years ago, doesn't it?

There are hundreds of projects that just stopped one day. Topographic maps, approved tentative maps, construction staking files, improvement plans - all sitting on the shelf collecting dust. Many times our clients are no longer there. Bankrupt, restructured or sitting somewhere under another LLP waiting to get back into the land development game.

Those projects you never completed because your client wasn't going to throw away another dime because the economy was failing under the weight of inflated home prices and predatory loans. At the time you performed those field surveys, you were not required to file a Record of Survey if your survey, disclosed any of the criteria detailed in Section § 8762(b)(1-5) of the PLS Act since Section § 8765(c) afforded an exemption as you were going to record your map in accordance with the Subdivision Map Act.

Well, not only are those documents collecting dust on your shelf, many of the tentative maps have long since expired, and there are no extensions available for them. Now it is pay day someday, your exemption under § 8765 expired with those tentative maps, and you are on the hook to file a Record of Survey or at the very least, a Corner Record for each of the defunct projects. Oh, and it doesn't matter that your client, contract, and maybe the old company you worked for, are expired too!

That's right, a contract or a client to pay the bill doesn't relieve you from the responsibility to comply with the law. However, depending on the contract in place at the time, your former employer could possibly have some shared responsibility as well. Although, your relief might come from the civil courts - don't get your hopes too high, administrative law regulates our practice. If you choose to stick your head in the sand and pretend there isn't a problem, your issues could become insurmountable for your license. You could face administrative fines in the amount of \$5,000 per violation or worse.

In situations where you have not met the filing requirements, the Board's primary concern is compliance. But, if there is negligence and/or incompetence as a result of too many projects, or refusal to meet your obligations, you could find yourself in the middle of the formal disciplinary action process. Administrative fines or formal discipline, either way you will be required to file your Record of Survey.



The solution for you right now is to identify your old projects that require filing and submit an acceptable record to the county surveyor. Here is the silver lining: you don't need to bring the surveys up to date. You do, however, need to clearly represent the survey you performed at the time you were working on your project. Simply put, identify on the face of your map that the survey performed represents a survey in (insert date) and represents the conditions that existed at that time. Keep in mind the PLS Act filing requirements are there so that other professionals and the public know the basis for your work and a record of the evidence you found (and left) at the time of your survey.

Now is the time to look through those old dusty files and deal with those surveys you started a long, long, time ago. Don't get caught in the denial trap, the industry and the public need good surveyors - you might as well be one of those surveyors. While it may cost you some money to complete these projects, it is always a good time to do the right thing. 🇺🇸



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# A Geography of the Public Land Surveys in the United States: Part 1 – The Beginnings

by Rob Squires, University of Minnesota

## Introduction

On May 18, 1796, President George Washington signed, “An Act providing for the Sale of the lands of the United States, in the territory northwest of the river Ohio, and above the mouth of the Kentucky River.”<sup>1</sup> Called “a milestone in any history of the public land surveys,” the legislation incorporated, without reference, the principles and practices adopted by the Continental Congress in the Land Ordinance of 1785.<sup>2</sup> Importantly, the act created the office of Surveyor General of the Northwest, giving the officeholder, who was to be appointed by the president, power to,

*engage a sufficient number of skillful surveyors, as his deputies, whom he shall cause, without delay to survey and mark the unascertained outlines of the lands lying northwest of the river Ohio, and above the mouth of the Kentucky, in which the titles of the Indian tribes have been extinguished, and to divide the same in the manner hereafter directed; he shall have authority to frame regulations and instructions for the government of his deputies; to administer the necessary oaths, upon their appointments; and to remove them for negligence or misconduct in office.*<sup>3</sup>

The Act described what lands should be subdivided, and how the deputy surveyors were to proceed in the work. The administrative framework established by this statute, a surveyor general responsible for managing all surveying activities in a surveying district - possessing the power to hire individuals who would carry out the surveys - would last throughout the nineteenth century and was a major reason that the surveys could simultaneously spread across geographically disparate areas. The statute was merely the first step in creating a lasting administrative structure, however. Although providing guidance about how the land should be subdivided, how corners should be referenced, what deputies should record in their field notes, and specifying that making three plats was one of the surveyor general’s duties, it provided no real guidance to the surveyor general about his duties in general, in particular how he was to hire deputies and frame regulations to govern their duties.

In this article are reproduced the published correspondence between Oliver Wolcott, the Secretary of the Treasury, and Rufus Putnam, appointed as Surveyor General of the Northwest on November 5, 1796, from January until September 1797, which addressed some of the specifics of Putnam’s job.<sup>4</sup> These letters are interesting because they show Putnam’s concerns about his duties that had been inadequately addressed in the legislation. Wolcott’s response to Putnam’s queries read suspiciously like instructions.<sup>5</sup>

## The Letters

On January 25, 1797 Putnam, then in Marietta, OH, wrote to Wolcott,

*Having been appointed Surveyor General by the president of the United States, on the Fifth of November, I wrote the Secretary of State, requesting to be informed in several matters which I conceived material, relating to prosecuting the Surveys, in answer to which he informed me that, “conceiving the business to pertain property to the Department of the Treasury he had sent my letter to you;” I have waited more than a month expecting to be honoured (sic) with your commands, but receiving no information from you, & apprehending that my letter, above mentioned, may be misplaced or forgotten - I take the liberty to repeat to you the substance of that letter, as it respects the executing of the Surveys, (Viz’) - that I am ready to enter on the business as soon as the necessary arrangements can be made; - But before I proceed to engage with any Deputy Surveyor I expect to be instructed in regard to the compensation to be allowed to assistance Surveyors, Chain Carriers & Axe Men agreeably to the 10<sup>th</sup> Section of the act intituled (sic) “An Act providing for the sale of lands & C. “I wish” also to know when and in what manner they are to be paid; whether there is any appropriation of monies for defraying the expence (sic) & if there is, in what manner it is to be drawn out - also whether Government will make any advances for the purpose of laying in provisions in the proper season of procuring them (to be furnished to the Surveyors who execute the work to be accounted for by them as part pay for their services). I wish also to know what number of Townships or Miles a Deputy Surveyor shall be obliged to run before he shall have a right to claim payment for his services - These circumstances I not only wish, but conceive it is necessary I should be ascertained of, that I may not be liable to enter into contracts, which the Survey of all the vacant unappropriated Lands lying North West of the River Ohio, and above the mouth of the River Kentucky in which the title of the Indian Tribes have been extinguished, I beg leave to suggest, that in my opinion it will be proper to have the boundary lines between these lands & the present Indian claims ascertained as soon as may be, to prevent all danger of our encroaching on the Indian lands in running the several tracts into Townships & because any location near them before the boundary lines are surveyed would probably occasion jealousies in the minds of the Indians which might prove of very bad consequences - I also wish to know if it is the expectation of Government that the running these boundary lines is to be under my directions or whether a special Commission is to be issued to some person or persons, for that purpose; If it is to be under my superintendency, as the first section of the act providing for the sale of the lands &c &c appears to express, I wish to know if any special*

(continued on page 34)



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## Part 1 – The Beginnings (continued)

*provision is made for defraying the expence, (sic) if not I pray whether such provision ought not to be made, because I conceive in order to give satisfaction, it will be proper to invite a number of Indian Chiefs to be present, & because that in my opinion these lines ought to be made very conspicuous by opening a Vestige of some feet in width which would be attended with considerable additional expence, (sic) beyond the Survey of any other lines, & cannot be executed at the common allowance p<sup>r</sup> Mile - I also wish to be informed what part of the other survey, it is the wish of Government should be first attended to. I hope Sir, you will be so good as to resolve me in these several queries as soon as may be, as the Season is fast approaching when the Surveys ought to commence, and I must repeat the observation, that I cannot with propriety enter into any Contract for executing the business, until an appropriation of money is made by Government for paying the expence, (sic) which I do not find to be the case, by any act of Congress that has come to my knowledge, and besides, unless that some special provision is made for the expence, (sic) of ascertaining, the boundary lines between the present Indian Claims & the lands in which the Indian title is extinguished I much doubt if any Surveyor can be found to undertake the business.*

*PS. I will thank you to forward me a copy of the ordinance of Congress of the third of September 1788, refered (sic) to in the fifth Section of the act entitled “An Act regulating the grants of land appropriated for Military services, and for the Society of the United Brethren for propagating the Gospel amongst the heathen.”<sup>6</sup>*

Secretary Wolcott answered this letter on march 14, 1797, first describing which lands he should survey, and then provided more details about his duties regarding township plats, instruments, necessary oaths, paper for plats and field notes, and additional help in his office. He wrote,

*Your Letter of January 25<sup>th</sup> was seasonably received, but as no measures could be taken by the Executive until an appropriation of money had been made, and as this measure was not adopted by congress until the 3<sup>rd</sup> instant, it has been out of my power to answer your enquiries (sic) before this time.*

*1<sup>st</sup> The President of the United States directs, that it be submitted to your discretion to contract for the compensation to be allowed to the Assistant Surveyors, Chain Carriers & Axe men, on the best terms which may be practicable; provided that the whole expence (sic) of surveying & marking the lines do not exceed three dollars p<sup>r</sup> Mile for every Mile that shall be actually run & marked.*

*2<sup>nd</sup> The purchase of provisions on Public account for the use of the Surveyors and their Assistants, does not appear to be expedient; as this Measure would tend to complicate the accounts of your Department - reasonable advances of money will however be made directly to yourself from the Treasury, for which you will be held accountable; these monies may at your discretion be expended,*

*in purchasing, provisions for the Surveyors to be accounted for by them in part payment for their services: but no credits will be allowed to you, except for services performed according to the Law - when advances are made, it will therefore be proper & necessary that you should be satisfied with the security therefore and that the same will be duly accounted for.*

*3<sup>rd</sup> Your accounts are to be rendered to the Treasury for settlement, Quarter yearly, closed to the last days of March, June, September & December. In these accounts all monies advanced from the Treasury to you, will be credited - the debits will consist of your Salary, & charges for services performed by the Surveyors & their Assistants pursuant to Contracts to be made with you - If monies are advanced on account, a list thereof is to be transmitted, and the amount thereof is to be stated as a component part of the balance to be accounted for by you in a subsequent settlement*

*4<sup>th</sup> Copies of all contracts made by you with the Assistant Surveyors or other persons, are from time to time to be transmitted to this Department, as soon as the same are completed.*

*5<sup>th</sup> The unascertained outlines of the Lands lying North West of the River Ohio, & above the mouth of the River Kentucky, in which the titles of the Indian Tribes have been extinguished by the Treaty with General Wayne on the 3<sup>rd</sup> of August 1795, are to be run under your direction - You will inform General Wilkinson when & where you are ready to commence running the line, who will have orders from the Secretary of War, to furnish an escort, & who will take measures for convening such number of Indians as shall be thought proper; the expences (sic) of the escort & Indians will be defrayed by the Department of War. Unless special inconveniences & extra expence (sic) render the measure inexpedient, you will in the first place ascertain and mark the North boundary of the Tract appropriated for satisfying Military Warrants, lying between the Scioto and the Tuscororas branch of the Muskingum River*

*6<sup>th</sup> Your special attention to the completion of the surveys of the Lands appropriated for satisfying military Warrants by the Act of June 1<sup>st</sup> 1796, is requested.*

*7<sup>th</sup> You will be pleased to take measures for the survey of the three Tracts, of Shoenbrun, Gnaden hutten & Salem appropriated for the Society of the United Brethren by a Resolution of the late Congress, and an act of congress of the 1<sup>st</sup> of June 1796. The Agents of the Society will proceed from Bethlehem in about three Weeks.*

*8<sup>th</sup> You will make arrangements for completing as soon as may be, the surveys of seven Ranges of Townships, below the Great Miami of the Ohio & above the mouth of the Kentucky River, also between the Scioto River & the lands purchased by the Ohio Company. Also*

between the Southern boundary of the Connecticut Claims & the seven Ranges of Townships, which were surveyed in pursuance of an Ordinance of Congress under the late confederation, passed on the 20<sup>th</sup> of May 1785 - In commencing surveys within one or all of the several Tracts abovementioned, you will be governed by considerations having reference to economy, the natural course of settlement, the comparative fertility of the different Tracts, and the probability of speedy sales on account of the United States: of the measures which you may adopt & your reasons, therefore you will be pleased to keep me duly advised.

The secretary of War will direct that that the escort which may attend the running of the Indian boundary shall assist in marking the line in a proper manner - With this aid, I have no doubt, that an allowance of three dollars per Mile will be found sufficient.<sup>7</sup>

**(A Geography of the Public Land Surveys in the US**

9<sup>th</sup> Plats of each Township are to be neatly & accurately protracted according to law on durable paper, by a scale of two inches to a mile which are to be recorded in books to be kept in your Office - Copies of the plats & field notes are to be made out on good paper of uniform size & with such margin as will admit of being bound in durable books to remain in the Treasury.

10<sup>th</sup> Yo[u] will observe that the Law requires that the Surveyor General, the Assistant Surveyors & Chain Carriers, should before entering on their several duties take an Oath or Affirmation faithfully to perform the same - Though not specifically enjoined, it appears to be proper, that transcripts of the Oaths or Affirmations so taken, should be transmitted to this Department.

11<sup>th</sup> You are authorized (sic) to draw from time to time, such a sum not exceeding four thousand Dollars, as shall be necessary to enable you to execute the duties before mentioned, observing that your drafts are to be of the form, hereto annexed; Of all drafts you will advise me by the Post.

12<sup>th</sup> You will be pleased to correspond with this Department stating the progress of the business committed to your management, and any points upon which further instruction shag appear necessary

I have given directions to have a standard Chain prepared, by which to regulate the Chains of the Surveyors, which will be transmitted as soon as possible. In the meantime however your arrangements need not be suspended.

As it may be difficult for you to procure suitable Stationary (sic), the Register will by my direction transmit a few blank books, suitable for the records of the field notes and a quantity of paper on which the plats of Townships are to be protracted.

The Act of Congress makes no provision for Clerkship in your Office, although it is certain that the service of a Clerk will be necessary. Though I have no authority to stipulate for the United States on this subject, yet I do not hesitate to advise you to keep your accounts & records in perfect order, in confidence that Congress will hereafter authorize (sic) any necessary and reasonable expence. (sic)

In an addendum, Wolcott gave Putnam the form he should use to send his bills to the Treasurer of the United States.

*Exchange for Dollars, 1,000, Territory North West of Ohio 1797.*

*Ten days after sight pay to A. B. or order, one thousand Dollars, on account of expences (sic) incident to the Act entitled "An Act providing for the sale of the Lands of the Unites States in the Territory North West of the River Ohio, and above the Mouth of Kentucky River."*

*And for which sum I am to be charged and held Accountable.*

*I am &*

*To Samuel Meridith Esqr*

*Treasurer of the United States*

He also sent Putnam a sketch showing how a township plat should be divided into sections (Figure 1).

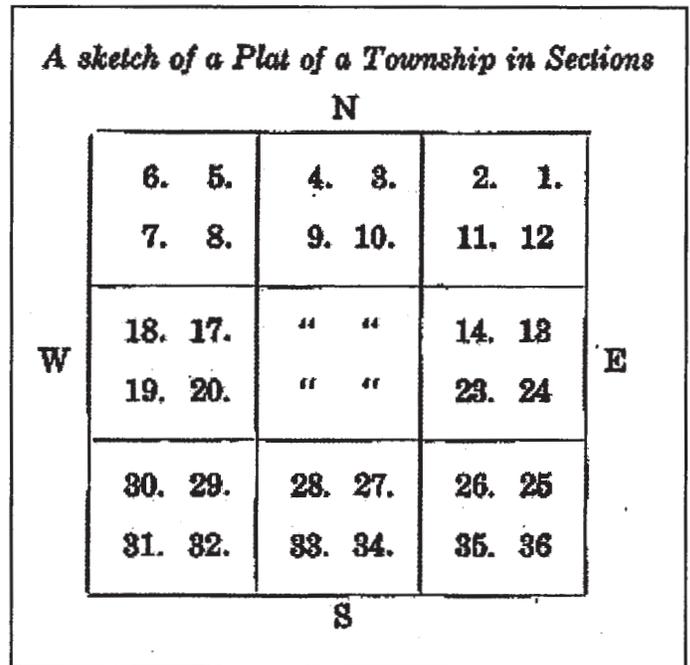


Figure 1.  
Wolcott's sketch showing how a township plat should be divided into sections.

(continued on next page)

## Part 1 – The Beginnings (continued)

On April 8, Putnam responded that he had received Wolcott's letter and the following week sent another letter to Wolcott,

*On the first instant I acknowledged the receipt of your's (sic) of the 14<sup>th</sup> & 17<sup>th</sup> ultimo - Agreeably to the 11<sup>th</sup> article of Instructions I inform you that on the fifth instant - I drew an order on the Treasurer in favor of William Skinner for three hundred and seventy five Dollars - I have written to Cap<sup>t</sup> Israel Ludlow inviting him to undertake the survey of the Indian boundary from Muskingum to Larimies Store, (sic) - I shall be prepared for the Agents of the Moravian people whenever they arrive - I have made provisions, for employing six Surveyors, in running out the Military Lands; as soon as the survey of the Indian boundary is complete.*

*Your directions respecting transcripts of oaths &c to be taken by the Assistant Surveyors and Chain Carriers will be observed; but the Law appears not to have authorized (at least not expressly) the Assistant Surveyors to administer the necessary oaths or affirmation to the Chain-Carriers; which it appears absolutely necessary they should be empowered to do, because by reason of sickness or accidents these Men are liable to be taken off from service, and the business stop; or the Surveyor must supply himself with others when probably he's at a great distance from the Surveyor General or any Magistrate whatever - and therefore out of his power to have them sworn unless he does it himself - from these circumstances I conceive the propriety of the Assistant Surveyors possessing this power must appear very reasonable; it ever has been the practice where I have been concerned - I shall therefore until otherwise directed instruct my Assistants to administer the necessary oaths & affirmation to their Chain Carriers.<sup>8</sup>*

The following month, on May 6, he wrote again,

*Your favor of the 14th ult. Enclosing a copy of Genl Waynes (sic) treaty with the Indians has been receiv'd - I drew an Order this day, on the treasurer of the United States for two hundred & twenty dollars in favour (sic) of Dudley Woodbridge - Genl Wilkinson when on his way down the River, (a few days since) informed me that the Indians were invited by him to be at GreenVill - the 20<sup>th</sup> instant - to attend Running the boundary line of the reason which induced Genl Wilkinson to this measure I am Ignorant and for which I cannot account - because agreeably to your instructions - I was to "inform him when & where I should be ready to commence running the line" And he must know that it was very uncertain whither (sic) the Surveyor could be procured, and in readiness by that time - However that nothing should be wanting on my part that is possible to be effected I have forwarded to Cap<sup>t</sup> Ludlow the necessary powers & instructions for executing the Survey of the Indian boundary from Fort Recovery to Lorimies (sic) Store, and from thence to the Muskingum - presuming that he would undertake the business; (sic) altho (sic) I had had no answer to my letters to him on that subject - written soon after the receiving your instructions of the fourteenth of March should Cap<sup>t</sup> Ludlow agree to go forward with the Survey - as I trust he will it will be so far well; but with respect to making the line in a proper manner -*

*according to what appears to me necessary - it is doubtful (sic) if any thing will be done, unless Gen<sup>l</sup> Wilkinson should receive some instructions on that head, from the Secretary of War - the enclosed copy of my letter to Gen<sup>l</sup> Wilkinson will explain the reason of my doubts - in addition to which I would observe that the Gen<sup>l</sup>. Said if the troops were to labour (sic) they ought to be paid for it - However if Capt Ludlow agrees to undertake the business (sic) he will mark the line in the Usual Manner, and a party may at any time, hereafter; open a vestage (sic) of such a width as Government (sic) should think proper to direct.<sup>9</sup>*

Two weeks later, on May 18, he wrote once again,

*I herewith enclose a certificate made by Judge Woodbridge of my having taken the necessary oaths, to qualify me for executing the office, of Surveyor Genl., the reason why it is of so late a date; it may be proper to explain: on my appointment in October last - I was sworn before Judge Symmes who certified on the back of the Commission - an appointment was afterward made with the Advice of Senate and a new Commission issued, on receiving of which it did not immediate)y occur to me that it was necessary I should be again sworn into Office -*

*I enclose transcripts of the Oath administered to Martin & Biggs; two of my Deputies, and of the Contract made with them for the survey of a part of the Military Land - Capt Ludlow has agreed to survey the Indian boundary line from Fort Recovery to Lorimies (sic) Store, and from thence to the Muskingum River, he writes me that he shall be ready by the 20<sup>th</sup> inst<sup>t</sup> he is instructed to make his way to the Muskingum by estimated courses, according to the best of his Judgment "to have each course measured with great exactness as well as run with much care, that his calculation for the true course may be as correct as possible, and having erected a very conspicuous monument at the point or station assigned by the Treaty, he will run the true course back setting (sic) a post at the end of every Mile and blaizing (sic) the line in the usual manner."*

*If Capt. Ludlow meets with no delay from the Indians I expect he will reach the crossing place above Fort Laurence about the first of July - Whither (sic) Gen<sup>l</sup> Wilkinson will furnish a party of axe men to open a Vestage (sic) or not I am not informed but sure I am that it is a matter of no small consequence that it should be done -*

*Martin and Biggs are ordered to Commence their Survey by the tenth of June - they will begin at the Northwest corner of the Seven Ranges and are not -to cross the Muskingum until (sic) Capt Ludlow commences running the true line from thence toward Lodmies Store - The Agents of the Moravian Society have arrived (sic) in this Country. I expect to have the Survey of their lands commence about the tenth of June shall myself be on the spot to determine the location and from thence go up the river to meet Capt Ludlow at the crossing above Fort Laurence I have divided the Military tract into five districts - Martin & Biggs have the two eastern as per Cop[y] of the Contract enclosed M<sup>r</sup> Matthews from the County of Hamilton I expect will have the North Middle*

(continued on page 38)

## Southwest Chapter's 7th Annual Fall Workshop Thursday, August 22, 2013.

**Speaker:** Dennis Mouland

**Topics:** "To Accept or Not to Accept" (4 hours) and "Thinking Beyond Technology" (4 hours).

**Time:** Doors open for registration at 7:30 am, classes begin at 8:00 am.

**Location:** Christ's Community United Methodist Church, 2700 East 44th Street, Joplin, Missouri.

**Lunch:** Catered Buffet at 12:00 noon from Red Hot & Blue and Charlie's Chicken.

**Directions:** From Exit 8 on I-44, head South along Range Line Road approximately 0.4 mile to the 44th Street Signal, head West along 44th Street approximately 0.25 mile to Church's driveway on South side of street.

**Contact:** Steve Lewis 417-781-0643 ext-1005

Registration Fees (8 PDU's)  
Licensed Surveyor \$100.00  
Registered Engineer \$100.00  
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## Part 1 – The Beginnings (continued)

district at three dollars per mile & a Mr Jackson from Harrison County in Virginia is agreed with the for south Middle District at two dollars & a half per mile - but the contract is not yet executed, Capt Ludlow is to have the west District at three dollars p Mile - If no misfortune happens I trust the Survey of the whole will be compleat, (sic) and plans returned into your office by the first of January next -

In your favor of the 14th of March you informed me that you had directed a standard chain to be prepared - and the Register of the Treasury - to transmit a few black books suitable for the records of the field notes - and a quantity of paper on which the plats of Townships are to be protracted - the black books have arrived, but the chain has not, nor have I heard anything of the paper which will be much wanted - a paper of a suitable quality for such plans cannot be procure'd (sic) here.

NB May 20<sup>th</sup> drew an order on the treasurer of the United States in favor of Dudley Woodbridge for one hundred dollars.<sup>10</sup>

On May 19, Wolcott responded

I have received your Letter of May 6th and now enclose a Copy of the Letter of the Secretary of War to General

### (A Geography of the Public Land Surveys in the US

Wilkinson dated March 18th which you will see is conformable to what was contained in my instructions.

I shall state to the Secretary the doubt which has arisen, which I presume he will obviate.<sup>11</sup>

On June 1 Putnam acknowledged Wolcott's last letter,

Your favor of the 19<sup>th</sup> ultimo was receiv'd by the last Mail, the standard chain arrived, the week before: I drew an Order on the Treasurer, dated this day ,for one hundred dollars, in favour (sic) of Wm Skinner - The enclosed is a Copy of the Oath - taken and subscribed by Wm Rufus Putnam a Deputy Surveyor - tomorrow I set out with him to survey the Moravian lands, from whence I shall proceed to the Tuskarawa's fork, to meet Capt Ludlow.<sup>12</sup>

On June 15 Israel Ludlow, then at the forks of a creek, near Loramie's store, wrote to Putnam,

I have been waiting with my party since the first inst. For the Escort & the Indians I shag wait three days longer after which, if the Indians do not collect, I move on to Tuscarawas with my party accompanied by a small Escort of twelve men - I expect no Indians except a few Shawonoes (sic) & some Delawares - the other nations have either not had timely notice, not pleased with the operation or think it of too trifling consequence to claim

their Notice I hope we shall succeed in our efforts in getting through with our line - but the provision for cutting it is by no means adequate to the Service - only five men are employ'd to cut the road through - the season of the year, the state of our provision; the wages annex (sic) to the Service all unite to urge forward as expeditiously as possible - cannot therefore wait for the cutting of the Road, but shall be able to mark it very well - I have hopes of seeing you at Tuscarawas & being able to procure flour from you but fearing some disappointment, I shall drive two or three small cattle to furnish ourselves with provision - I shall endeavour (sic) to get to Tuscarawas - by the 10<sup>th</sup> of July - find the Gnats & Mosketoes (sic) a very great affliction.<sup>13</sup>

On July 29, Putnam forwarded the first of the surveying contracts he had awarded along with the required oaths to Wolcoft.<sup>14</sup> He subsequently sent his accounts ending June 30, 1797, the end of the federal fiscal year. Included was a brief description of the surveys that had been completed during his first year as surveyor general.

### Conclusion

The characteristics of the public land surveys are well known, as are some of the changes that have occurred in the surveying process over time, but there's always some new information that can be gleaned from reading old letters with fresh eyes. 🇺🇸

### Endnotes

1. Stat.464. Squires, Rod. *Vignettes of the Public Lands Surveys: a Striking Triumph of Geometry over Physical Geography* (Minnesota Society of Professional Surveyors, St. Paul, MN 2010) 297-301.
2. Pattison, William D. *Beginnings of the American Rectangular Land Survey, System, 1784 – 1800* (University of Chicago, 1957) 193.
3. The office of surveyor general was not unknown in 1796. Pennsylvania, Vermont, and Georgia all had such positions.
4. Massachusetts had nominated Putnam as their surveyor to work with Thomas Hutchins on the Seven Ranges but he had already accepted the position of Surveyor General of Massachusetts and so declined the position. Putnam and others organized the Ohio Company that had acquired approximately one million acres of land from the United States. He became Superintendent of Surveys for the Company and thus “kept alive and ... developed the tradition of rectangular surveying which began in the Seven Ranges.” Pattison supra note 2, 172. C. Albert White wrote,

“Though Putnam was not well educated, was deficient in mathematics, and was to allow poor surveys to be executed, he was probably the best man for the job. He knew the country, was highly respected in the territory, and could draw a large number of experienced surveyors in a short time to execute the work.” White, C. Albert. *A History of the Rectangular Survey System* (United States. Bureau of Land Management. Washington, DC. 1983) 34.

5. There are, as I have suggested in several places, various sorts of instructions. Wolcott’s letters informed Putnam on how he was to proceed with his duties – thus they were similar to general instructions. The letters also informed Putnam about where he should carry out his duties – thus they were similar to the annual instructions surveyors general received.
6. Carter, Clarence E. *The Territorial Papers of the United States v.2 The Territory Northwest of the River Ohio, 1783 – 1803* (United States, Government Printing Office. Washington, DC 1934) 588 – 589. The grant of land mentioned in the postscript was authorized in the Land Ordinance of 1785.

7. Ibid 591 – 594.
8. Ibid 602.
9. Ibid 605. I do not know what “vestage” means in this context.
10. Ibid 606 – 607. John Matthews, mentioned in the letter, was Rufus Putnam’s nephew. Ibid 607 footnote 48.
11. Ibid 607 footnote 49. The letter is not included.
12. Ibid 609.
13. Ibid 609 – 610.
14. Ibid 616.
15. Ibid 624 – 625.

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# Brokering of Survey Services

by William E. McGrath, PLS, Reprinted from *The Texas Surveyor*, July-August 2012

As the surveying profession is undergoing an evolution of changing technologies and methods to achieve various deliverables and even deliverables themselves, so too is the title insurance industry. After the refinancing boom of the early 2000s, major title companies have been gobbling up smaller companies to consolidate a multi-billion dollar industry in an effort to increase profits. Because of the present day downturn in the real estate market, major title companies are seeking ways to maximize profits in a number of different ways. One of the ways is by lowering their overhead costs. Because of the electronic age more and more searches are done “on-line” rather than at the county clerk’s office. Many of the larger title companies are outsourcing their searching tasks overseas. The other day I needed a deed prior to 1972 in order to complete a survey. Since that particular county clerk’s “online” records only go back to 1972, I have to go get it myself

Another way major title companies are seeking to increase their revenue source is by bundling more and more products and services to offer their customers in previously untapped markets. Everything from employee background checks to environmental due diligence services. The title insurance industry is learning from their big brother, the Health Maintenance Organization (HMO) industry. The HMO industry has become the gatekeeper to your medical care which relegates your doctor to a mere employee of your HMO. To your health care detriment, it is your HMO who decides what medical test or procedure you can have, not your doctor.

The title insurance industry, in following in their big brother’s footsteps (HMO’s), are now offering “Land Surveys” from their “list of providers.” Does that sound familiar? In order to remove the survey exception off their title policy it is THEY and they alone, who will determine if you need an ALTA survey, a boundary survey that meets the minimum standards of your state board, or something less like an Express Aerial Map. An Express Aerial Map is basically an aerial photograph overlaid by a local tax map or deed plotting. The Express Aerial Map is provided by the title company not a licensed professional land surveyor.

One major title company made the decision to forego the approximately \$30,000 per ALTA survey of commercial sites and

opted to pocket \$3,000 to \$7,000 per commercial transaction for their own Express Aerial Map product, which is nothing more than an “on-line” aerial with a tax map or deed plotting (which may not mathematically close) superimposed on the photo.

An ALTA Land Survey is performed by a Professional Land Surveyor licensed in the particular state that the survey is performed. It is prepared and certified to meet the requirements for an ALTA/ACSM Land Title Survey as detailed by the American Land Title Association, National Society of Professional Surveyors and the American Congress on Surveying and Mapping. A Boundary Survey is a Land Survey that is performed by a Professional Land Surveyor licensed in the particular state that the survey is performed. It is prepared and certified to meet the minimum standards of the rules and regulations promulgated by that particular state where the survey is performed.

Both the ALTA Survey and the Boundary Survey are prepared so the title insurer can make specific underwriting decisions regarding the deletion of the standard survey exceptions within a title policy. When a title insurance company issues a title policy, the holder of the policy wants these standard exceptions removed. Both types of surveys (ALTA & Boundary) will

report on the ground matters of concern in relation to these exceptions. Both types of surveys are certified by the surveyor to the title insurer and other parties to the transaction. This extends the liability to the surveyor for any error or matter not reported or shown. Without the added protection having the survey certified to the consumer (insured), the consumer (insured) would no-ally not be able to recoup any damages from the surveyor because of privity of contract laws.

Consider the standard title exception pertaining to “...rights, interests or claims of parties in possession not disclosed by the public records.” Even with high-resolution photos, it is virtually impossible to locate property corners and any existing survey ground monuments on an Express Aerial map product. Without an exacting location of property corners, it is impossible to super-impose the property boundary onto the aerial map with any degree of acceptable accuracy. If the boundary cannot

***“One major title company made the decision to forego the approximately \$30,000 per ALTA survey of commercial sites and opted to pocket \$3,000 to \$7,000 per commercial transaction for their own Express aerial Map product, which is nothing more than an “on-line” aerial with a tax map or deed plotting (which may not mathematically close) super-imposed on the photo.”***

be accurately depicted, then the easements locations, which are most likely tied into the boundary, cannot be accurately shown. In most instances, there would be questionable situations regarding the possibility of encroachments across property lines or into easements. This would be a detriment to the end user relying on this product in much the same way as an HMO not allowing you to have that biopsy. This particular product could be deemed illegal in some states by offering surveying services without being duly licensed.

In cases where the title company is relying solely on their Express Aerial map product they are taking the risk that no claim will arise regarding the issues raised within the standard survey exceptions. There should be questions asked of the title insurer who may be preparing the map product to suit their best interest rather than those of the ultimate property owner or lender. In order to properly protect the consumer (insured) an ALTA Survey or Boundary Survey should be prepared by a Professional Land Surveyor duly licensed in that particular state, most preferably one with adequate errors and omission insurance. The surveyor would be acting as an independent outside party, that has no interest in any underwriting decision and can accurately report the facts to be reviewed not only the title insurer, but by all parties within the transaction.

The main purpose of the ALTA Survey or the Boundary Survey is to allow the title insurer to delete the standard survey exceptions. But, many other parties within a real estate transaction rely upon the survey and the matters reported thereon during the due-diligence process. The buyer, and more importantly their legal counsel who is looking out for their client's best interests, are very concerned about the information revealed on the survey. Not only regarding the matters relating to the deletion of the standard exceptions, but the exacting configuration of the land, matters on the property relating to zoning compliance, restrictions, easements not revealed by public record but observed on the ground by the surveyor. When the title company uses its Express Aerial map product there is no guarantee to the accuracy of the legal description of record and more importantly, there is no verification of any discrepancy between the recorded legal description and the facts on the ground. On many occasions a legal description is recorded with a typographical error or mathematical error of closure. Without an on-the-ground survey to check for these discrepancies, gaps, gores or overlaps may inadvertently be created, causing a potential claim against the property. On a properly performed ALTA Survey or Boundary Survey, the legal description is revealed and the surveyor must note and show any discrepancy between the record and measured dimensions. Furthermore, the surveyor must report any gap, gore or overlap\* with adjacent deeds. This will not be disclosed on Express Aerial map product.

Besides title companies offering property surveys from their "list of approved surveyors," there are a number of survey brokering companies that only offer that service. In reviewing some of the

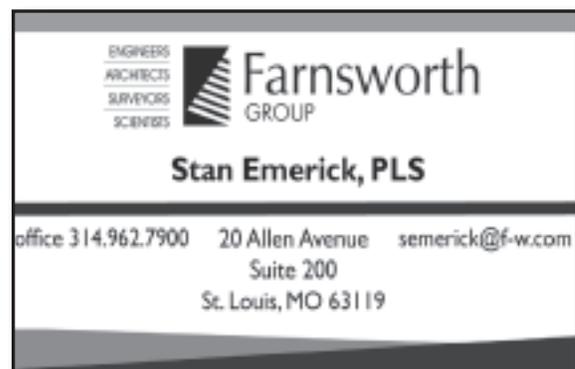
service provider contracts, they don't allow the professional land surveyor to contact or communicate with the end user client at all. This is not only unethical, it is illegal in many states.

Some of the advertised services these re-invented "Real Estate Due Diligence" companies offer include: Land Title Surveys, Elevation Certificates, Flood Zone Determination Certificates, Express Aerial Maps (that have the tax map and/or deed plotting super-imposed), Zoning Reports, Geotechnical Reports, Phase I & II Environmental Reports, As-Built Surveys, and the list goes on and on. Many of these services are offered in violation of state licensing laws.

In reviewing some of the disciplinary actions of a number of state licensing boards throughout the country, I have noticed that several have sent out "cease and desist" orders to these companies. One large title insurance company that does over a billion dollars a year in revenue had their attorneys send a letter back to one licensing board stipulating that they were not "offering survey services," they were merely "coordinators of survey services". I suspect these companies view these "cease and desist" orders as nothing more than mosquito bites. Some of these "coordinators of survey services" companies could very well be in violation of federal RESPA laws. Some states are using "back door" regulations by disciplining licensees for doing any work for these companies. What has your state done to curb or regulate this assault on the consumer? What has your state professional organization or the National Society of Professional Surveyors done to lobby for badly needed legislation to protect the consumer? 🐛

#### ABOUT THE AUTHOR:

*William E. McGrath, PLS, is a Riparian Consultant who specializes in New Jersey Tidelands issues relating to grants, licenses, tidelands claims and waterfront land use. He is a NJ Licensed Professional Land Surveyor and is currently Vice President of the New Jersey Society of Professional Land Surveyors. He was chosen as "Surveyor of the Year" by that organization in 2010. He has authored many articles in national professional publications (e.g. Professional Surveyor Magazine 11/10 <http://www.profsurv.com/magazine/article.aspx?i=70829>)*



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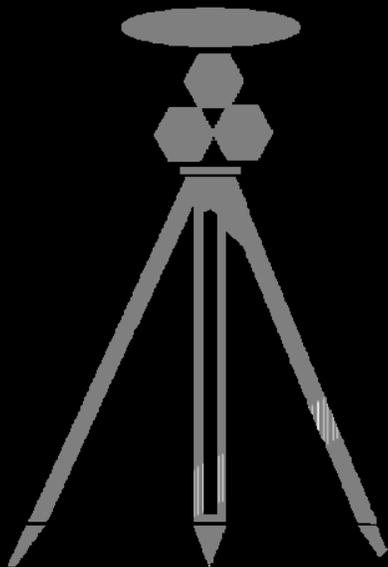
Firm	Street_Address	City	State	Zip	Office_Phone	email
ABNA Engineering, Inc.	4140 Lindell Blvd.	St. Louis	MO	63108-2914	314-454-0222	aadewale@abnacorp.com
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Anderson Survey Company	203 NW Executive Way	Lee's Summit	MO	64063	816-246-5050	jsa@andersonsurvey.com
Bader Land Surveying, Inc.	16255 Sugar Bottom Road	Ste. Genevieve	MO	63670-8613	573-483-2777	baderls@brick.net
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Bowen Engineering & Surveying, Inc.	2121 Megan Drive	Cape Girardeau	MO	63701	573-339-5900	info@bowenengsurv.com
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Burdine & Associates, Inc.	1638 Jeffco Blvd.	Arnold	MO	63010	636-282-1600	
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Cochran	530 A E. Independence Dr.	Union	MO	63084	636-584-0540	mail@cochraneng.com
Cochran	737 Rudder Road	Fenton	MO	63026	314-842-4033	tvaneer@cochraneng.com
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Doering Engineering, Inc.	5030 Griffin Road	St. Louis	MO	63128	314-487-6913	mdoering@doeringeng.com
Frontenac Engineering Group, Inc.	2725 Sutton Blvd. B	St. Louis	MO	63143	314-644-2200	billb@frontenacengineering.com
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John R.M. Nelson, Inc.	PO Box 482	Bolivar	MO	65613	417-326-2777	jinjkn@yahoo.com
Koehler Engineering & Land Surveying, Inc.	194 Coker Lane	Cape Girardeau	MO	63701	573-335-3026	wkoehler@koehlerengineering.com
Midland Surveying, Inc.	501 N. Market	Maryville	MO	64468	660-582-8633	tryhayes@midlandsurvey.com
Migar Enterprises, Inc.	PO Box 528	Grandview	MO	64030	816-966-0839	
Minnick Surveying	7905 Big Bend Blvd., Ste. 101	Webster Groves	MO	63119	314-721-9500	info@minnicksurveying.com
Musler Engineering Co.	32 Portwest Court	St. Charles	MO	63303	636-916-0444	rich@muslereng.com
Olsson Associates	7301 W. 133rd St., Ste. 200	Overland Park	KS	66213	913-381-1170	oward@oaconsulting.com
Pellin Surveying LLC	208 South Church Street	Union	MO	63084	314-985-5263	pellinsurveying@gmail.com
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Pickett, Ray & Silver, Inc	3320 Rue Royale	St. Charles	MO	63301	636-397-1211	dkornia@prs3.com
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Riggs & Associates, Inc.	102 W. Trish Knight St., PO Box 71	West Plains	MO	65775	417-256-8125	ralphr@riggslandsurveying.com
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Schultz Surveying and Engineering	4800 West Blvd.	Poplar Bluff	MO	63901	573-686-0806	sjschultz@sseeng.com
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Zahner & Associates, Inc.	26 N. Jackson St.	Perryville	MO	63775	573-547-1771	zahner@zahnerinc.com



**Saturday**

**July 13, 2013**

Capitol Plaza  
Hotel  
Jefferson City,  
Missouri



This course has been approved for continuing education credits from the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors and Landscape Architects for 8 PDUs (8 hours of professional development units - four hours of Minimum Standards credits)

Missouri Society of Professional Surveyors

# 24th Annual Minimum Standards Workshop

## PROGRAM

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- 7:00 am. .... Registration & Continental Breakfast
- 8:00 am ..... **Panel Discussion: Missouri Statute Chapter 327, The Licensing Board, Common Complaints, and Board related topics**  
*Mike Freeman, Dan Govero, and Mike Flowers*
- 9:00 am. .... **Minimum Standards for Property Boundary Surveys**  
*Darrell Pratte*
- 11:00 am. .... **US Public Land Survey Corners-Registration Standards**  
*Jim Mathis*
- 12:00 noon .. Lunch
- 1:00 pm. .... **FloodPlain Management**  
*Bob Shotts*
- 5:00 pm. .... Review/Closing Remarks

## PRESENTERS

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**MIKE FREEMAN, PLS**, Chairman, Land Survey Division, Missouri Board for Architects, Professional Engineers, Land Surveyors and Landscape Architects and President of Freeman Land Survey, Hermitage, Missouri (417) 745-6957

**MIKE FLOWERS, PLS**, Member, Land Survey Division, Missouri Board for Architects, Professional Engineers, Land Surveyors and Landscape Architects and retired State Land Surveyor

**DAN GOVERO, PLS**, Member, Land Survey Division, Missouri Board for Architects, Professional Engineers, Land Surveyors and Landscape Architects and President of Govero Land Services, Imperial, Missouri (636) 464-9380

**JIM MATHIS, PLS**, President, Mathis & Associates, Poplar Bluff, Missouri (573) 785-4202, member of MSPS Board of Directors

**DARRELL PRATTE, PLS**, State Land Surveyor, Land Survey Program, Division of Geology and Land Survey, Missouri Department of Natural Resources, Rolla, Missouri (573) 368-2300

**BOB SHOTTS, PLS, CFedS**, President, Robert S. Shotts, Inc., Lebanon, Missouri (417) 588-7877, and past president of MSPS



**Missouri Society of  
Professional Surveyors**  
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