Saskatchewan Land Surveyors' Association

Newsletter

President's Message to the Membership

By G. D. Craig, SLS, P. Surv., P. Eng., President

This will be my last report for my term as President. The last couple of months have been challenging and rewarding. I have been very busy since my last report.

I attended 4 different AGM's during the months of January, February and March. The first of these meetings was kicked off when New Brunswick celebrated their 50th anniversary at the end of January. This was followed in fairly rapid succession by the British Columbia and Ontario AGM's. The Canada Lands Surveyors' AGM was held in March.

At each of these meetings the Association Presidents held a forum to discuss common concerns and news from the various Associations. We focused on a few areas of concern in particular: professionalism, membership and the new co-location/co-management arrangements between CCLS, ACLS, CIG and GIAC. Our discussions on professionalism raised as many questions as answers. For example, does the public think of us as professionals or are we perceived as "those guys in the dirty coveralls who stand around looking through those funny cameras"?

What can we do to raise our profile and be perceived as true professionals? Not only does our Association have to work on raising our profile but our members and their respective firms need to be active in promoting professionalism.

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Council Highlights

By: A. Carl Shiels, M. Sc., P. Eng., Executive Director

The ***Saskatchewan Land Surveyors' Association Newsletter*** is published by the Saskatchewan Land Surveyors' Association for circulation to its members.

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2001/2002 Council

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2002-03 Meeting #4

The President called the telephone conference meeting to order at 9:35 a.m. and reported on his attendance at the ANBLS annual meeting. This was an historic meeting because it was their 50th Annual Meeting and also because it was the first meeting at which every president from every survey jurisdiction in Canada was present. The president's forum included a panel discussion at the University of New Brunswick before Survey Engineering students. This was followed by lunch with the students which provided an opportunity for exchange of information.

A common concern with most associations seems to be declining membership numbers. This indicates the need for increased efforts to promote careers in Land Surveying.

Other items of interest included:

B.C. - The CBCLS has been encouraging its members to minimize damage to personal property.

- The B.C. government will no longer be doing plan examinations. Instead, surveyors have been provided a list of items that are to be checked and their affirmation that these items meet the standards becomes part of the public record associated with the plan.

- The B.C. government has been moving to disband the provincial association of technologists and technicians by having the self-regulated professions create a new category of membership that would accommodate persons with technical school backgrounds.

- The CBCLS is looking for a new Executive Director.

Quebec - The Quebec government has amended their legislation related to Joint and Several Liability.

Government Meetings

M. L. Waschuk had contacted the membership for questions and concerns which might be raised at a March meeting with provincial officials.

C. R. Sakundiak/D. J. Quirk

Council approved the Practical Experience report submitted by C. R. Sakundiak, supported by D. J. Quirk and confirmed that Mr. Sakundiak would be eligible to write his professional exams in April.

C. D. Kuntz/W. C. Soroski/D. J. Clarke

Council approved Practical Experience reports submitted by C. D. Kuntz, supported by W. C. Soroski and D. J. Clarke and confirmed that Mr. Kuntz would be eligible to write his professional exams in April.

Administration Agreement

The president reported on discussions that were being held between the Executive Committee and Shiels and Associates for renewal of the administration agreement. The agreement being considered would include a 6.7% increase in the fees.

Membership Report

One SLS had opted to retire at the end of 2002 and the number of Land Surveyors in Training decreased by one with one new student and two having received their commissions in 2002.

The president noted that, although there has been a good influx of new members in the past couple years, declining membership could still be a problem in the near future as the 'bubble' of new members from the 1980's reach retirement age.

Joint and Several Liability

The Association received an invitation from the Department of Justice to comment on possible changes to the Joint and Several Liability provisions of the Contributory Negligence Act. A response was to be prepared taking into account input from underwriters of the CCLS insurance plan.

Convention Committee

Planning for the Annual Meeting was well in hand with the Convention Committee projecting a modest deficit. Room rates for the hotel were expected to be somewhat more expensive than in past years but there are other, less expensive accommodations available in Moose Jaw. Any new members receiving their commissions would be introduced at the opening breakfast so the accompanying persons would get to know who the new members and their spouses are.

Education Committee

Council was reminded that D. A. Bouck would be stepping down as Chairman of the Education Committee upon his retirement from NRCan.

Finance Committee

Council reviewed and approved the Auditor's Report for the 2002 fiscal year.

Practice Committee

Council was told that the Committee had been working on a revised schedule of fees and on an update to the standards for Real Property Reports.

SLSA/ISC Panel on LAND

The president and past-president had met briefly with the panel members to review progress. The next meeting of the Panel was expected to occur in March when further details would be released regarding the re-organization of ISC and the proposed new fee structure.

The President acknowledged a motion to adjourn at 12:03 p.m.

2002-03 Meeting #5

The president called the meeting to order at 7:30 p.m. and reported on his attendance at the annual meetings of the CBCLS, AOLS and ACLS. Highlights of the meetings included:

B.C. - The CBCLS are reviewing and updating their strategic plan.

Ontario - The province has regulations to provide for deferred monumentation. The AOLS is now working out standards of practice which, for example, might require the original surveyor to put in sufficient monuments in a specific area to allow another surveyor to complete new work in the area.

- The AOLS have been very successful at increasing the number of professionals who are not land surveyors within their membership roster.

CIG - While there had been a temporary co-location of ACLS, CCLS, CIG and GIAC, CIG have now agreed to co-locate with GIAC with one person to be appointed Executive Director of CIG and President of GIAC.

ACLS- Is developing training modules for national distribution.

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Councillor's Report

By Howard Larson

Spring is here after another long winter. It is a very welcome sight. No more frozen ground or snow drifts for awhile.

The topic I have chosen to write about concerns several old survey plans in Saskatoon with significant errors.

Two adjacent plans, Reg'd Plan No's 11853(CE3) and F6162(CE2) not only don't close with each other, they don't close with themselves. They are out by several feet. Another, Reg'd. Plan No.G4296(FK), has missing measurements with no way of determining them and others which are incorrect. This has resulted in an overhead power line encroaching by several feet into private properties along Blocks 29-35. In another case on Reg'd Plan No. G4947(FZ), there are a series of errors in Block 5 one of fifty feet.

These are concerns coming up in the past six months. It is difficult to see how these plans were originally approved for registration or why they have not been amended after almost 100 years. It's time something was done as the public is at risk. The areas, Riversdale, Caswell Hill and North Park, are completely developed residential neighbourhoods. Property owners involved don't know their lot size causing problems for additions, fences or new construction.

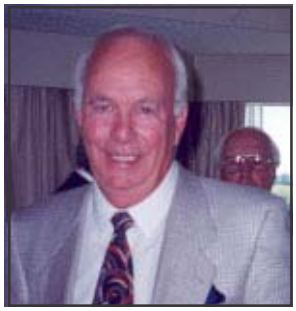
It really shouldn't be up to individual surveyors to have to try to wade through this without complete information. Possibly local surveyors could pool resources, prepare and submit concerns to ISC and the City of Saskatoon. Areas with more serious problems could have plans amended or could be resurveyed.

Memorium

Murray Reginald Skelton, SLS (L. M.)

Murray was born, August 10, 1931 in Radville, Sk. to Murray L. M. and Sarah Skelton. He articled to John Nesbitt July 15, 1950 and transfered articles to Cecil Biddell, June 12, 1952. Commission # 122 was granted to Murray, June 20, 1953. Murray worked for the PFRA for 36 years and in 1986, he retired, only to start his own business. He had taken on the job of Secretary Treasurer of the SLSA at various times throughout the years. He was then asked to become Executive Director May 15, 1987, which he accepted and continued until September, 1995.

Murray and Roxane were married for 45 years. They raised 4 children, "Tad" Murray D., Curtis, Jeffery and Renee (Curtis) Berquist. They have 3 grandchildren, Melissa, Courtney and Justin Berquist. Murray loved golf, hunting, fishing, and playing bridge. He was a big asset to the organizations he volunteered for, Board of Catholic Family Service, The Wascana Country Club and Group Medical Services.



Murray passed away January 18, 2003, after a courageous battle with cancer. A memorial service was held at St. Martin's R.C. Church. Interment was at Riverside Memorial Park. Donations can be made to the Pallitiative Care Unit at the Pasqua Hospital, 4101 Dewdney Ave. Regina, SK, S4P 1T4.

He will be missed.

Kathy Clark
Executive Assistant

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One suggestion for changing our public image was for each member to take time to show their commitment to their local community by helping out in various organizations. This could include involvement in churches, business associations and service clubs.

One idea that I found particularly intriguing for raising our profile was to have the various Provincial Land Survey Associations become involved with a major charity. Funds would be raised for the charity through an annual golf tournament. Each Provincial Association would have their own tournament with the funds raised going to a common charity.

The subject of professionalism and our public image ties in with concerns over declining membership in the various Provincial Associations. If we can't show the public who we are and what we do then how can we be expected to continue to attract new members to the Associations.

It seems that most of the Associations are concerned about their declining membership. Even Quebec, which has more than 900 members is concerned. In our Association we have commissioned many new members over the last few years and we anticipate that we will see more new commissions in the near future.

Even with these new members, should we be complacent? Current demographics of our Association shows that we will lose a significant portion of our members within 10 to 15 years. Will we be able to make up for these losses with new members as time goes by?

There is a bigger picture to consider here as well. It appears that other professional organizations are anticipating declining membership numbers. Does this mean that there will be a shortage of potential members? Will we have to compete with the other professions to grab people from the same pool of candidates? After all why should anyone become a surveyor if they don't even know what a surveyor is?

On a topic a little less philosophical…

Quebec will very likely rejoin the CCLS in 2004. A great amount of effort has been spent on the part of CCLS and the L'Ordre des arpenteurs-géomètres du Québec to try to bring this about. One of the consequences of the rejoining will be a new fee structure for the annual dues for CCLS membership.

The last, and likely final, draft of the proposed fee changes that I have seen looks like our Association will not see any significant changes in our annual dues. However, the larger associations will likely see some decrease in dues and the smaller associations will likely see an increase in dues.

If you haven't already heard the Canadian Institute of Geomatics (CIG) and the Geomatics Industry Association of Canada (GIAC) have gone ahead with a co-management agreement. Both of these organizations have been struggling lately and it seems like this arrangement will be beneficial to them. There has been some concern however that an organization that represents the geomatics profession (CIG) should not be aligned with an industry lobby group (GIAC). I will leave that for you to decide.

You should have received your AGM registration package by now. Take care and I will see you in Moose Jaw.

"No man is an island in his profession. He will prosper in part as his profession prospers and he will suffer somewhat as the profession suffers. For that reason, I believe that each of us who feels he has reached some level of success owes some of his time, some of his talent and maybe a little of his money toward the improvement of our profession. This sharing is the true mark of the professional."

(anonymous)

ANLS newsletter 1987
Reprinted from "The Newfoundland Surveyor" February 2003

Saskatchewan Land Surveyors' Association

93rd

Annual General Meeting

May 29, 30, & 31, 2003
Temple Gardens Mineral Spa
Moose Jaw, Saskatchewan

Mac the Moose

Burrowing Owl

Temple Garden Mineral Pool

Moose Jaw Casino

Biography

By John H. Webb SLS (LM)

EDWARD HORACE PHILLIPS 1878 – 1954 D.L.S; S.L.S; Prof. Eng.

Like many other engineers and surveyors who came west in the early days, Mr. Phillips was a graduate of the "School of Practical Science", University of Toronto in 1900.

Born in Whitby, Ontario December 19,1878, he attended public and high school prior to enrollment at the University of Toronto.

Upon graduation he joined the Surveyor General's office in Ottawa. His duties included work with the Topographic Surveys Branch on photo topographical surveys in the Rocky and Selkirk mountains in British Columbia, along with township outline surveys in western Canada, now Alberta. He finished his work with the Surveyor Generals office in 1907 as an inspector of topographic surveys.

In 1907 he became a District Engineer, Department of Public Works, Surveys Branch, (Saskatoon District) for the Province of Saskatchewan until 1912 (from his files), when he went into private practice with his brother H.G.Phillips DLS, SLS, until 1914.

Mr. Phillips was one of the original charter members of the Saskatchewan Land Surveyors Association with commission number 4 in 1910.

Due to Colonel Garner, Chief Surveyor, going into the army in 1914, Mr. Phillips was made Acting Chief Surveyor, Regina Land Titles Office until 1919 when he returned to private practice in Saskatoon and formed a partnership with W.M. Stewart,DLS, SLS, and R.M. Lee, DLS, SLS as Phillips, Stewart and Lee until 1926. Later the firm was named Phillips, Stewart and Phillips.

The early days of Saskatoon saw Mr. Phillips involved in a majority of the subdivisions within the Saskatoon and northern areas of Saskatchewan. He was involved in laying out the grand Saskatoon plan along with its boom town atmosphere.

His professional accomplishments included a University of Toronto degree in 1900, a DLS commission in 1902, SLS commission in 1910, member Engineering Institute of Canada in 1915 and later a Life Member. Mr. Phillips was on the first board of examiners for land Surveyors in 1909.

In 1923 the Land Surveyors Act was amended to provide affiliation with the University of Saskatchewan with the University being responsible for setting examinations for Land Surveyors in the Province. He became the first Chairman in 1923 and was also elected President of the Saskatchewan Land Surveyors association the same year. He was made a Life Member in 1953. He was a Honorary Member of the then Canadian Institute of Surveying and Mapping. Mr. Phillips was involved as a member of the Saskatoon Town Planning Committee in the early days.

I only knew Mr. Phillips for a short period of time but knew him as a fine surveyor and a gentleman of the first order. Many of his old field notes are still used to identify lost corners in the city.

Mr. Phillips was a member of Knox United Church in Saskatoon, and a life member of Civil Service Lodge #148, A.F. and A.M.,Ottawa, Ontario. He was married to Josephine Mabel Budo and they had one son, Kent.

Quoting a portion of a newspaper article at the time of his Death:

One of the first organized steps in opening up this Province, as indeed in opening up any land, was surveying. So it was that as a surveyor, Mr. E.H. Phillips who died Tuesday had an intimate hand in the growth of this Province and this City.

Continued from page 3

- Their 2004 annual meeting is to be held in Whitehorse.

The vice-president reported on his attendance at the WESTFED conference in Seattle. As a result of the attendance by Alberta and Saskatchewan representatives, WESTFED members voted to include those two western provinces in future WESTFED meetings.

- Representatives of WESTFED had met with First American State Insurance to discuss surveys to be completed before title insurance would be issued. In some US jurisdictions, the title insurance companies are the surveyors best customers.

- Common issues and concerns within many US jurisdictions include:

- Professional surveyors are licenced by the State;

- Most states have mandatory continuing education;

- Many states are pushing for a university degree to be the minimum entrance qualification to the profession;

- Some states are work on their definition of land surveying.

- An Auction Night carried out by survey students raised approximately $30,000 for student scholarships.

- Because ALSA had been invited by the state of Washington, their registration fees for the joint WESTFED/Land Surveyors Association of Washington were complimentary. However, because Saskatchewan was invited by WESTFED, the registration fees were not complimentary.

- There was no discussion of NAFTA at the meeting but that topic is expected to come up at future WESTFED meetings.

Meeting with Provincial Agencies

Past-president Waschuk reported on a meeting held with representatives of several Crown Corporations and government agencies. There had been an excellent exchange of information between SLSA and agency representatives and between agency representatives themselves. There was unanimous agreement that informal meetings such as this should be held on an annual or semi-annual basis to provide a forum for discussing survey related issues of common interest to all concerned. It was also agreed that future meetings should include ISC and the Department of Highways and Transportation.

Administration Agreement

Council approved a new three-year contract with Shiels & Associates which provided for a 6.7% increase in administration fees.

R. J. Eichel/E. F. Twarowski

Council approved a Practical Experience report submitted by R. J. Eichel, supported by E. F. Twarowski and confirmed that Mr. Eichel would be eligible to write his professional exams in April.

J. H. McLeod/L. W. McLeod

Council approved a Practical Experience report submitted by J. H. McLeod, supported by L. W. McLeod and confirmed that Mr. (Jade) McLeod would be eligible to write his professional exams in April.

Lloydminster Boundary

Council discussed actions taken recently by the City of Lloydminster to remove the landmarks that had been erected in that city to identify the provincial boundary. The Executive Director was asked to check with the city to see if replacement landmarks were being considered and whether the SLSA might participate in the development of any such new markers.

Western Development Museum

Preliminary discussions between Past-president Waschuk and a representative of the Battlefords division of the Western Development Museum indicated that there may be interest in the construction of an old time survey office as one of the exhibits at the Battleford site. In particular, the museum at Battleford focuses on developments since about 1930. Council encouraged Mr. Waschuk to continue his inquiries and to coordinate any such planning with those being undertaken by the Centennial Projects Committee.

Convention Committee

Planning for the 2003 meeting continues but exhibitors have been slow to respond.

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BUSH or PRAIRIE?

By David Marquardt, ALS
Reprinted from "ALS News" March 2003

In Case Study No. 14 (Editors Note: See Page 25) in the December 2002 issue of ALS News, the Director of Practice Review brings up a few key considerations when assessing and re-establishing section and quarter section corners from pits and/or mound configurations, according to Bulletin 38, (assuming no trace of a wooden post or rust hole is found).

When finding an iron post and a full or partial pit and mound configuration, he indicates the first question to ask is, is the post original or not? The second question to ask is, is it in its original position? A third question might be, if there is no post or trace of it, where was it as opposed to where should it be?

Knowing a thing or two about past history and Bulletin 38, I thought there might be some regulation, instruction, or at least a rule-of-thumb that the good ole boys followed when determining what configuration of monument to place in those transition areas, between bush and prairie. After all, with all the records of Thompson, Hearne, Henday, Palliser, and others, they knew what they were up against, as far as what type of terrain to expect. Not necessarily so.

A few scenarios are fairly straight-forward. Let's say you are somewhere south of Oyen, in a township surveyed in 1883, and find a rusted, but solid iron post marked correctly, in the center of four good but fading pits, and a very old fence line heading west. Couple that with the fact that the seventy-five year old landowner is with you relating every detail of when his family homesteaded the place and he remembers helping replace or erect the fence. I hope one takes the time to appreciate some history here and that your client doesn't mind. With a fair degree of certainty, I think you have the corner and you can sleep soundly in knowing that. The next week, or day, brings you or your crew, south west of Red Deer into what can be considered the transition zone as was encountered 120 years ago, between the physical characteristics of bush and prairie. Your mindset as an Alberta Land Surveyor now needs to change.

As I perused through copies of old township plans, this transition area varies in width from 6 to 18 miles or more, and goes in an arc from the US border up along the east side of the Porcupine Hills, around Turner Valley and Bragg Creek, to just east of Cremona, to just west of Innisfail, to a point north and west of Camrose, and then turning north east to around township 51 ranges 8 & 9, just west of Vermillion. From there, to a point just north of Winnipeg, anything south and east of that rough area was prairie and was indicated as such on the original field notes and the original township plan. I say original, in this case, referring to the township plan, because in some succeeding editions, some of the original topographical notes and line work of the first editions have been left out. It is interesting to note a few incidentals on this rather subtle transition from prairie to bush. The buffalo, which were primarily grass and shrub feeders, did their unique part to keep this area fairly well-defined from a topographical perspective.

So now that we know that, and upon only finding say two pits (no trace of wood or rust hole), at a corner, can we say for sure where the post was? Some areas perhaps yes; some areas I would say no, definitely not. The difference between the position of the post in a bush monument configuration and one in a prairie configuration, according to Bulletin 38, is that the bush post is about 3.5 feet, or 1.07 metres, north of the centre of the four pits on the north side of the mound. The prairie one would be in the centre of the mound and pits. When I looked at the township plans for the transition area I have described, a few things stand out. The topographical descriptions are amazingly consistent and, secondly, the majority of the township/ range blocks I looked at had no less than five survey dates between 1881 and 1917, (all were partially surveyed in 1883), and no less than 6 DLSs or DTSs were involved in that particular survey.

Knowing this, is it reasonable to expect to find both bush and prairie monument configurations in the same area? Not only reasonable, unfortunately, but a reality. Many of my colleagues have found what I have found: a prairie monument configuration in an area you would think was bush, and vice-versa. Another reason for this is the fact that many field

Continued on page 12

Continued from page 10 "Bush or Prairie"

surveyors didn't get updated instructions from Ottawa on a regular, and timely basis. (Perhaps one can appreciate cell phones and e-mails a little more.) Consider this as well. During the record-setting year of land surveying in Western Canada, 1883, a total of 119 crews were in the field on township survey projects. I am not sure if there was one DLS per crew, I suspect a few DLSs operated a series of crews within their project area, and conferred their instructions to the mounders who were the persons who actually did the pits and mound configurations and set the monuments. They (the DLSs and the various survey crews) were not a well-connected bunch. Telegraph lines didn't reach Alberta until the 1880s or so and were not usually that reliable until later. Most surveyors usually accompanied their field returns back to Ottawa via Winnipeg and the northern USA/Chicago, into the mid-1880s as the Lake Superior section of the CPR was not completed until mid-1885, and it was unusual for them to do that more than once a year. Thus, when monumentation configurations changed, some field surveyors spent a whole season or more erecting older configurations, in places where new ones should have been.

Referring to the year of 1883, in which the majority of the surveyed portion of Alberta was completed, then Surveyor General Edward Deville was quoted as saying, a couple of years later when issuing contracts for resurveys due to sub-standard work, "...and *it was surveyed within a year, but it was not surveyed with the degree of accuracy that we are used to today ... anyway it was done.*"

So in transition areas, how do we know which configuration was used for our particular corner, as the original township notes don't say which configuration was used? I asked this question to Tom Holt years ago in an intense eight-hour session studying for ALS exams at his house, over tea and sandwiches and plenty of homemade cookies. The original notes give a date and the name of the surveyor (DLS/DTS) who surveyed or re-surveyed that line. That information gives you yet another clue as to solving the problem. With thanks to Leanne Martens and Heather Evans at Alberta Sustainable Resources Development, Strategic Corporate Services Division, copies of the field notes are readily available online these days for a minimal charge. The confirmation comes in checking out other monument configurations in that area, which were established and erected by that surveyor. That is... if you can find one. And herein lies yet another obstacle. Province-wide, I estimate that maybe 20% of the original monumentation still exists, possibly 25% in the north and maybe 15% in the south, and is declining every year. One other disturbing fact is that this document, Bulletin 38, that we have come to rely on sometimes heavily, was drafted in 1915, in part by a Saskatchewan Land Surveyor, some 32 years after most of the West was surveyed. So it is really not surprising that most of the inconsistencies we find in township monumentation occur on surveys prior to 1900. In the preface to Bulletin 38, H.L. Seymour DLS. states,

"From old correspondence on file, it would also appear that surveyors in the field were not always cognizant of changes in instructions, relating to their posts, or were not always in a position to follow out their instructions. There can therefore be no guarantee that a surveyor has always closely followed his manual or the general instructions as outlined in the annual reports referred to. In some cases the surveyor's field notes show that he did not. Furthermore, it has been found that monuments on the ground are not as shown in the notes. "

However, if the present-day surveyor has done his due diligence, and has found traces of the original corner, and has recorded it and confirmed and monumented its position using proper methodology, it will never really be "lost." If no traces of the original can be found, and we are left with only one or two pits, or none, the rule of best evidence, both physical and documentary, must always apply.

By the way, how are we doing with our evidence assessments and descriptions? Can we do a little better here? I'm sure we all can. One of my favourite articles on evidence, is in the June 1993 issue of ALS *News* by Hugo Engler, ALS, BCLS, SLS entitled "Survey Evidence" and I would like to echo his parting thought, "re-establish - to place the corner where it was, not where it should be."

Never argue with an idiot...
People watching can't tell
which is which

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Reasonable Care-Surveys on Rural Land

By Craig McBride, ALS
Reprinted from "ALS News" March 2003

Developing good relationships with rural landowners is one of the most beneficial functions land surveyors perform to ensure that their clients' needs are met and the landowners' rights are respected.

In the landowner's eyes, the land surveyor is often seen as acting on behalf of the client and the responsibility to show consideration and keep the landowner informed is vital to everyone's best interests. *ALS News* has published numerous articles over the years about land surveyors and real property reports and complaints from the public arising from this work. Many of the news articles are related to phone calls received by the Association office from landowners concerned with survey crews not filling in post holes, damaging lawns, and uninformed trespass to name a few. Just recently in the June, 2002 issue of *ALS News,* a copy of a letter from a landowner to Hon. Dave Coutts, Minister of Government Services was published. The content of the letter described in detail the problems encountered by the landowner in regards to surveyors "...digging into the lawn and leaving large holes or, at times, removing the sod and then putting it back." On January 6th 2003, the Alberta Land Surveyors' Association published the *Best Practices Statement.* The statements within this document are designed to *"help promote communication and minimize landowner concerns."*

As professional land surveyors, we are granted the right to access private land as prescribed in law. This right of access is by no means absolute and the public is protected from damages and denial of reasonable care. The definition of an owner is found in the *Land Titles Act.*

".. a person entitled to any freehold or other estate or interest in land, at law or in equity, in possession, in futurity or expectancy;"

In the landowner's eyes, the land surveyor is often seen as acting on behalf of the client and the responsibility to show consideration and keep the landowner informed is vital to everyone's best interests.

For this discussion, I would like to expand the definition to also include occupants and grazing lease holders who have specified rights to land through leases or other agreements. The lawful right of an Alberta Land Surveyor to enter private property is stated in the Surveys Act, RSA 2000, Section 16 as follows:

"A surveyor and the surveyor's authorized assistants may, using reasonable care, pass over, measure along and ascertain the bearings of any line or boundary, and for those purposes may pass over and through the land of any person, but the surveyor is liable for any damage the surveyor or the surveyor's assistants may cause. "

Key words in the preceding section are *"reasonable care,"* and *"liable for any damage. "*

Although many of the complaints raised by urban and rural landowners are similar, there are additional concerns related to rural surveys which should be noted. According to Land Titles' plan registration statistics, the most common types of surveys being performed in rural areas are utility right-of-ways for pipelines, power lines, roads and other dispositions. For illustration purposes, the following example chronicles the events from start to finish for performing a legal survey of a pipeline right-of-way on freehold land.

1. The oil company client sends out a request to survey a pipeline right-of-way to the land company and the land surveyor.

2. The land company contacts the landowners and occupants affected by the proposed right-of--way for permission to survey.

3. Once the land company has received permission from the landowners, a line list is forwarded to the land surveyor. The line list will spell out any specific concerns or requirements for each parcel of land or owner.

Continued on page 41

Nominating Committee

For Council

Biography of Barry Jordens, SLS, P. Surv.

Affiliations

- Received Commission No. 264 as a Saskatchewan Land Surveyor in 1985.
- Received Professional Surveyor License in 1997.

Work History

- Employed by Condon Surveys Ltd. since 1970.
- Articled to J.P. Condon
- Presently a partner with Condon Survey Group Inc.

Education

- Graduated from Kennedy High School in 1966

Personal

- Born October 19, 1948, Regina, Saskatchewan
- Reside in Yorkton with wife Darlene and sons Josh (24) and Chris (19)

Interests

- Gardening and camping

Biography of Morley Seis SLS, P. Surv.

Affiliations

- Received Professional Surveyors License in 1997
- Received Saskatchewan Land Surveyors Commission # 219 in 1975
- Served two three year terms on council of SLSA
- Served on the Board of Examiners for SLSA

Work History

- 1968 to 1981 The Dept. of Highways and Transportation
- 1981 to 1990 Deputy Chief Surveyor Survey Branch Saskatchewan Land Titles
- 1990 to 1992 Acting Chief Surveyor Survey Branch Saskatchewan Land Titles
- 1992 to August 26th 2002 Chief Surveyor Survey Branch Saskatchewan Land Titles
- 1998 to 2002 Land Project

Personal

- Born Bengough Saskatchewan
- Resides in Regina with wife Elaine

Interests

- Golf, Woodworking and Gardening

Biography of Murray G. Radoux, SLS, P.Eng., P.Surv.

- Born September 26, 1969 in Watson, Saskatchewan.
- Grades 1 – 10 in Englefeld, Saskatchewan.
- Grades 11 – 12 in Watson, Saskatchewan, graduated in 1987.
- Graduated from Saskatchewan Technical Institute in Moose Jaw with a diploma in Survey Engineering Technology in 1989.
- Started work with Tri City Surveys in Saskatoon in the summer of 1988 on first Co-Op work term.
- Attended University of Calgary from 1992 – 1995, and received a B.Sc. degree in Survey Engineering in May, 1995.
- Articled to Max Putnam in 1996.
- Received Commission #279 in 1998.
- Received P.Eng. License #9539 in 1999.
- Received P.Surv. License #62 in 2000.
- Became a partner with Tri City Surveys Ltd. in 1998.

For Council

Biography of Dale Rosnes, SLS

Professional Affiliations

- Articled to Chris Everett in 1990, and James Condon in 1993.
- Obtained SLSA commission # 277 July 02, 1996.
- Currently serving as a Public Relation committee member.
- Auditor of financial statements 1997.

Work History

- 1978 to 1995 Party Chief for several private survey firms.
- December 1995 to present working for Crown Investment Corporation - ISC

Mapping Department – Cadastral database
Legal Surveys Branch – Plans examinations, and Department of Highways Program.
LAND conversion project - Assistant GIS/Surveyor Expert

Educational Background

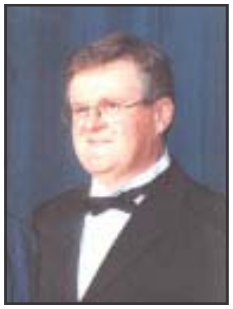
- Elementary School in Ottawa, Ontario, and Moose Jaw, Saskatchewan
- 1978 - Diploma in Survey Engineering at Saskatchewan Technical Institute
- 1992 - B. Sc. in Survey Engineering at University of Calgary

Personal

- Born July 28, 1956 in Medicine Hat, Alberta
- Enjoy hunting for deer, and currently taking Tai Chi classes.
- Looking forward to residing on an acreage outside of Regina with my special friend Halia Sushko.

Community Involvement

- Lifetime member of Canadian Hard of Hearing Association, and former President of the Regina Branch.
- Currently a board member with Saskatchewan Deaf and Hard of Hearing Services.
- Four year member of City of Regina Education Subcommittee, a subcommittee of the Advisory Committee on Access.



For Vice President

Biography of Jim Clarke, SLS, P.Sur.

- Born September 18th 1949 in Edmonton Alberta.
- Elementary schooling at Frenchman Butte, Saskatchewan.
- 1967, graduated from Lloydminster Comprehensive High School
- 1969 graduated from the Survey Technology program at the Northern Alberta Institute of Technology.
- 1969 to 1977 worked for Hamilton and Olsen Surveys out of Edmonton Alberta as a chainman, Party Chief and construction supervisor.
- 1978 married Linda.
- 1977 to 1984 worked for McElhanney Surveys out of Lloydminster,Saskatchewan.
- 1984 obtained commission number 259 as a Saskatchewan Land Surveyor.
- 1984-2000 manager and partner of Clarke Land Surveys Ltd.
- 2000 to present, manager of Fugro Clarke Land Surveys Ltd.
- Linda and I have been residing on our hobby farm near Paradise Hill , Saskatchewan since 1981. We have three Children aged 15, 18 and 22. We are both very active in the community doing volunteer work with the school, church, sports and service clubs.

Why Does a Professional Need a Will and Power of Attorney?

By: G. Wayne Braid, Executive Director, Society of Notaries Public of British Columbia
Reprinted from "The Link" December 2002

The new year 2003 is rapidly approaching. In the hustle to make sure our financial affairs are in order before year-end, it seems timely to write a reminder of the importance of estate planning for professionals.

Too often, professionals, busy with their own practices, postpone planning for death and/or incapacity.

Why do we Need a Will?
A Will is the instrument that will provide some important direction with respect to your wishes for family and friends.

Let's Discuss Executor(s)
The first function of the Will is to determine whom you have appointed executor of your estate - the person who will finalize the details of your estate.

Sometimes, the conflict (jealousy) between adult children and second spouses regarding who is appointed executor is enough to split families apart at the very time they need emotional support. Is the person you have chosen as executor competent to handle all your affairs? Is he or she also familiar with the details of your practice?

Solution: Consider having two executors - one to consolidate and distribute your personal assets and one for issues relating to the wrapping up or selling of your survey practice or corporation. We Notaries generally appoint another Notary to be responsible for the custody of our practices until they are wound up.

If you do not have a Will, here are some tips for choosing your executor. Is the person likely to be in conflict with any of the beneficiaries?

Does the individual have enough business acumen to perform the duties in a timely and effective manner? You may want to look for a professional person, trust company, or friend who can represent your estate in a non-biased and businesslike manner.

Provisions for Minor Children/Spouse
Have you made adequate provision for minor children and your spouse? You must look beyond the present to determine the responsibilities we have to others. The Wills *Variation Act* in BC provides an opportunity for all children and spouses to apply for Wills to be varied if they feel they have not been adequately accounted for.

If you feel you have provided sufficiently for an adult child during your lifetime, and want to leave that person a lesser proportion of your remaining assets through your Will, or if you want to eliminate a gift to that person altogether, there needs to be a clear indication of your reasoning in your Will or memorandum.

Spouse only	All to spouse.
Child or children only	All to children equally.
Spouse and one child	1st $65,000 and life estate in matrimonial residence to spouse. Rest divided equally.
Spouse and children	1st $65,000 and life estate in matrimonial residence to spouse. Balance divided 1/3rd to spouse and 2/3rd among children equally.
No spouse or children	Closest next-of-kin: parents, siblings, nieces, nephews, cousins.

It is also important to indicate whether a major gift to a child (perhaps a degree education or down-payment on a house) is truly a gift or whether it should be deducted from that child's share of the estate. There is a presumption at law that, where a parent makes a gift to a child in his Will and later gives the child a sizeable sum of money (or portion), the gift is to be set off or deducted from any gift in the Will. Naturally, if you have made a substantial gift to a child after the date of your current Will, you would be well advised to review the Will and add a codicil either incorporating or excluding the gift.

Sometimes it's Better to die Without a Will

You don't often get *that* kind of advice! In rare circumstances, the *Estate Administration Act* - legislation that determines who gets what if you die without a Will - provides a preferable and less contentious way to settle an estate. If you die without a Will, the breakdown is like this:

If you die without a Will, one of your close next-of-kin (spouse or child or children) must apply to the court to be appointed administrator of your estate.

There are many permutations of family. Second and multiple marriages are much more common. Legislation now allows for recognition of more than one spouse and for same sex spouses.

Powers of Attorney and Representation Agreements

These planning tools will appoint a person or persons to take over if you become incapacitated. You may wish to consider appointing one person to look after your practice affairs and another to look after your health and personal care needs. Imagine if you were injured suddenly on the job. Hopefully, you have disability insurance to cover such an incident. But do you have a properly drawn Power of Attorney and/or Representation agreement, giving legal authority for someone to negotiate insurance benefits and ICBC claims, file income tax returns, and make arrangements for your health care and the myriad tasks involved, should you become incapacitated?

It may be that your spouse, who would be wanting to spend as much time as possible with your personal needs, would not be the best person to look after your business and legal affairs. If you don't have a Power of Attorney or Representation Agreement in place at the time of your incapacity, a family member must make court application for Committeeship (expensive!) AND report to the government annually as to his or her management of your affairs. Even worse, if no one is able to make that application, the government will appoint the Public Guardian and Trustee to administer your affairs. The fee for that service will be charged to your estate.

These are some of the reasons why you, as a professional, need to ensure your affairs are protected. See a BC Notary soon for advice on how to protect yourself and family, both for incapacity and for death. Sound advice will ensure that your family gets the most from your hard-earned estate.

G. Wayne Braid, Executive Director, Society of Notaries Public of British Columbia, (604) 681-4516 gwb@notaries.bc.ca

ENGLISH LANGUAGE ... MADE SIMPLE?!?

1) THE BANDAGE WAS WOUND AROUND THE WOUND.

2) THEY WERE TOO CLOSE TO THE DOOR TO CLOSE IT.

3) HE COULD LEAD IF HE WOULD GET THE LEAD OUT.

4) I HAD TO SUBJECT THE SUBJECT TO A SERIES OF TESTS.

5) THE FARM WAS USED TO PRODUCE PRODUCE.

6) WE MUST POLISH THE POLISH FURNITURE.

7) THE INSURANCE WAS INVALID FOR THE INVALID.

8) UPON SEEING THE TEAR IN THE PAINTING I SHED A TEAR.

LET'S FACE IT – ENGLISH IS A CRAZY LANGUAGE. THERE IS NO EGG IN AN EGGPLANT NOR HAM IN HAMBURGER; NEITHER APPLE NOR PINE IN PINEAPPLE. ENGLISH MUFFINS WEREN'T INVENTED IN ENGLAND OR FRENCH FRIES IN FRANCE. SWEETMEATS ARE CANDIES, WHILE SWEETBREADS, WHICH AREN'T SWEET, ARE MEAT.

Succession Planning

By Ron Hall, ALS
Reprinted from "ALS News" December 2002

This time of the year is when most of us reflect back on the past and give thanks for what we have been blessed with.

As I reflect back on the past five or six years, including my involvement in the Association, I feel very fortunate as I have had the opportunity to serve with some very dedicated individuals. I am now half way through my first of two years on Council and I am thoroughly enjoying serving you as a councillor. It is a great opportunity to learn more about our Association and I can assure you there is never a shortage of things for Council and President Dave McWilliam to do.

I had the privilege of sitting on the Registration Committee including one year as chairman, and one year representing the ALSA on the federal initiative on labour mobility. Being a member of the Registration Committee gave me a tremendous opportunity to meet many of our new, up-and-coming professionals. There is often a lot of discussion about the shortage of prospective members joining our profession. However, I can attest to the fact there is no shortage of quality.

The question then is whether there is truly a shortage, either currently or in the future and, if so, why is there a lack of individuals seeking a career in geomatics or, more explicitly, in the profession of "land surveying." Who is responsible to ensure there are enough professionals in our vocation in the future?

There have been many discussions and reports within our Association and amongst many of our sister associations with respect to a future, or perhaps a current shortage of professionals. In the December 2000 *ALS News,* Lyall Pratt provided a statistical analysis regarding the number of land surveyors that may be required in the future. Brian Munday, in the June 2001 issue of *ALS News,* did a similar statistical historical analysis. Based upon these, many discussions, and the ever-increasing global demand for geomatics professionals, I believe there is a legitimate concern for the future of our profession.

As with any organization, association, profession, and so on, the future lies with our youth and in our ability to attract them.

In the September 2002 issue of *ALS News,* Robert Radovanovic identified many ways in which we can educate and attract future professionals. While I agree that the ALSA has a role to play in encouraging new members into our Association, I believe the responsibility for ensuring sufficient individuals entering our profession lies with the members of our Association.

Practitioners and corporations must directly assume responsibility for recruitment of students into a career in geomatics and land surveying. We, as individuals in the land surveying profession, must make ourselves and our vocation better known to students and potential students and demonstrate the career benefits our profession has to offer. Many young people today select career paths while still in high school, so we must be actively recruiting potential geomatics students at this early stage in order to compete with other professions. Individual practitioners can have the biggest impact at this level, as this is a very regional or local impact area.

New members are the future of our Association and the future lifeblood of our businesses. Succession planning is fundamental to any enterprise, whether you are a single practitioner or a corporation. It is incumbent on us, as professionals, to guarantee a sufficient number of professional surveyors are available, now and in the future, to provide for succession and to serve the needs of society.

There are many ways for us to heighten our profile with potential future members. As mentioned ear-

Continued on page 24

Are you getting the best RTK range possible?

35km+

15km?

Get RTK at 35km+ with Leica's GPS System 500. That's about twice as far as competing systems.

Every surveyor knows the longer your RTK range, the less time you spend moving base stations. That means your crews get more work done — and that's the name of the game. In many urban areas, UHF radio communication can limit your RTK range. Fortunately, using cellular communications with Leica System 500 allows you to extend your range significantly. In fact, you'll get accurate, reliable results at 35km+ from the base station. Compared to the typical 15km range others are getting with their GPS equipment, your productive work area will be up to 500% greater. Now those are the kind of numbers that will give you a real competitive advantage. For more info contact Leica Geosystems (Canada) at 1-800-746-3607. Or visit www.leica-geosystems.com.

Leica Geosystems

SURVEY HUMOUR

Tale of the Great Eastern Antelope Hunters

Reprinted from "Geomatica" Volume 56, Number 4, 2002

For about a decade and a half beginning in 1975 the Geodetic Survey Division at Geomatics Canada made extensive use of the Inertial Survey System (ISS) to establish horizontal and vertical control for gravity and topographical mapping projects. A system of gyros, accelerometers and computers, the ISS could be mounted in either van or helicopter for work in almost any terrain. In 1986, Mike Strutt, a current member of the CIG Publications Committee, was then a field officer with Geodetic Survey. The following is taken from a field report written by Mike when he supervised a helicopter supported ISS survey project in Saskatchewan that summer.

A misunderstanding with one of the local landowners occurred during this survey. Our procedure, in order to ensure that the same point was observed on the return leg of the traverse, was to place a small, removable peg, complete with "dayglow" survey ribbons attached. This ribbon-adorned peg was then retrieved on the return run, thereby ensuring that no obstructions remained in the ground which could damage any farm equipment. Unfortunately, for us, there is also an illegal antelope hunting practice, known locally as "baiting". Apparently, unscrupulous hunters, specifically poachers, place similar type pickets in open areas, with long, colourful ribbons attached. This attracts the naturally curious antelope. The hunter simply lies in wait as the quarry approaches to investigate the fluttering ribbons. Another practice, both frowned upon and illegal, is spotting game from aircraft, particularly helicopters, for the purpose of facilitating the hunt. This is a favorite practice of poachers in search of trophy game, a situation with which local residents have had some experience.

A decaying, burntout, aircraft shell bears witness to the feelings of the locals for this method of sport. Whether our arrival in the area preceded the hunting season by a few days or weeks is still not quite clear. However, I can assure you that our timing could have been better. One of the farmers had been keeping tabs on a certain "trophy" buck near his home, and was definitely not pleased with the arrival of our helicopter, and, particularly, with our practice of flying low-level and laying out "bait". I was later informed by an RCMP officer that it was the farmer's full intention that our aircraft join the list of range-bound wrecks.

The farmer, failing to catch the aircraft by himself (although I understand he did try!) joined forces with the RCMP. The helicopter pilot and surveyor, blissfully unaware of the fervor created by their appearance, were, at that moment, on the return leg of the traverse. They were somewhat perplexed by the disappearance of one of their position markers. At the next landing site the mystery was solved when they were confronted by an RCMP squad car. The farmer stayed in the car, but continued to clutch the "bait" tightly. The explanations offered to the officer were sufficiently convincing to allow the survey to continue, with little degradation noted on the results.

However, there is an obvious discrepancy in the time to do the forward and backward traverse runs. The RCMP detachment (at Eastend, Saskatchewan) was contacted later that evening to further explain the purpose of the survey and our, seemingly, illegal and suspicious actions. The RCMP officer was very understanding, and explained the farmer's concerns. In addition, he assured me that steps had been taken to ensure that no retaliatory action (such as attempting to down the aircraft) would be taken by the farmer.

As a follow-up to these events, I paid a visit to Corporal Mills at the Eastend detachment, to again explain the nature of our work and to show him the field maps. I also provided Corporal Mills with literature regarding our work, and asked him to convey an apology to the farmer for any inconvenience or aggravation we might have caused (I was never given the gentleman's name). Corporal Mills seemed very satisfied with our actions, informed me that the case was closed, and wished us well in our work. I suspect that the farmer is still shaking his head over the "fool government surveyors who don't know spit about poaching antelope".

The Significance of the North American Boundary Commission (1872-1876) Recognized

Reprinted from "ALS News" December 2002
From Office of the Minister of Candian Heritage

On September 8, 2002, The Honourable Sheila Copps, Minister of Canadian Heritage announced the unveiling of a plaque celebrating the national historic significance of the North American Boundary Commission (1872-1876). The ceremony took place at the site of Fort Dufferin National Historic Site of Canada near Emerson, Manitoba.

One hundred and thirty years ago, the British-Canadian contingent of the North American Boundary Commission established its base camp at Fort Dufferin near the 49th parallel-the border between Canada and the United States of America-from which it would conduct its field work between 1872 and 1874.

The North American Boundary Commission was commemorated as an event of national historic significance because it completed the last link in the transcontinental boundary between Canada and the United States. The Commission surveyed and demarcated the 1,384 kilometres between the Lake of the Woods and the summit of the Rocky Mountains with remarkable accuracy even by modern standards.

"Making the international boundary a reality enabled the new Dominion of Canada to assert its sovereignty in the West. For the first time, Canadians were included in the making of political boundaries which affected their lives," explained Minister Copps.

The work of the Commission also had long term indirect effects on agriculture, settlement and resource development. The accuracy of the survey proved essential to the success to the Canadian government's implementation of the Domnion Land Survey. It established a rational, easily undertood, section-and-township grid on the Canadian west which facilitated the settlement of the region. The Commission's work also greatly increased Canadians' knowledge of the newly acquired lands in the West enabling a better understanding of the agricultural potential it presented.

Created in 1919, the Historic Sites and Monuments Board of Canada advises the Minister of Canadian Heritage regarding the national historic significance of places, persons and events that have marked Canada's history. The placement of a commemorative plaque represents an official recognition of historic value. It is one way of educating the public about the richness of our cultural heritage which must be preserved for present and future generations.

This initiative connects Canadians to our roots, to our future and to each other.

Continued from page 20 - "Succession Planning

lier, Mr. Radovanovic identified some ways to achieve this. However, there are still others. Perhaps one of the best opportunities may be by providing financial assistance to students within the various geomatics programs across the country. Several options exist, including:

- offering summer employment to students at all levels of the program, as the sooner we get them involved the better, even right out of high school;
- being involved in a co-op program;
- contributing to existing or creating new scholarships and/or bursaries. Obtaining an education is an extremely expensive proposition. Through scholarship involvement, we can dramatically improve the profile of our profession and financially assist future employees and business partners.

The future of our Association and our individual businesses is in the young people of today and tomorrow. It is each and every professional's obligation to be involved in our profession and to ensure its existence into the future.

Case Study No. 14 Pits as Evidence

By Lyall Pratt, ALS, Director of Systematic Practice Review

Reprinted from "ALS News" December 2002

This is the fourteenth in a series of articles featuring problems commonly encountered in Systematic Practice Review. The purpose of these articles is purely educational, so no names or identifying legal descriptions are included. Opinions expressed are those of the author.

The Issue

Three times this summer our field inspections have found statutory iron posts that do not appear to be in their proper location relative to the pits and mound. When a plan says "Fd. I. Pit M." and the field notes say the same thing, it sounds like you have the best possible evidence, so what could be wrong?

In the hierarchy of evidence "IFd. I. Pit M." sounds like you have the original monument. In previous articles, I have written about the two questions that should be asked for every found iron post. Is it the original monument? And is the monument in its original position? A yes answer to both of these questions means you have the corner. Of course, the original pits and the mound are part of the monument and the statutory iron post, or wooden post is the other part. In all cases, the actual corner is the position of the post.

Over the years, since the original township surveys, many iron posts have been restored in relation to the pits. Do you and your staff know where the statutory iron post should be in relation to the pits? What does "Fd. I. Pit M." shown in the field notes mean to you?

Is it an original monument?

The practitioner being reviewed here was establishing the east/west quarter line in Section 6 for his survey. His field notes and plan show "E 1/4 6 Fd. I." The township plan surveyed in 1904 shows "W.P.M." at the E 1/4 Sec. 6. A 1942 road survey plan shows "EM.Pits P.I.P." The original post was wooden, and the 1942 survey restored the corner by placing an iron post, so the answer to our first question is 'no' the iron post is not original.

To answer the second question, we need to determine if the iron post is in the correct relationship to the pits and partial mound. Today, contrary to the practitioner's field notes and plan, there are still four reasonably good pits and a partial mound visible. Bulletin 38 describes 77 different monuments erected on surveys of Dominion Lands between 1871 and 1917. Most of the township subdivision surveys in this province were conducted between those dates. As this area is not prairie, the correct configuration in bush areas for quarter-section corner monuments erected in 1904 and consisting of wooden post, pits, and mound is found on page 19 of Bulletin 38. Our measurements would indicate that this iron post was 0.7 metres east and 0.5 metres south of the correct position relative to the pits and mound.

There is an older fence corner post northwest of the statutory iron post within about a foot of where the original wooden post should have been. Was the iron post moved to conduct fencing operations, or was it incorrectly placed by the 1942 survey? I am not sure, but either way I don't believe the iron post is at the 1/4 section corner. Our findings have been forwarded to the practitioner. Of course the practitioner's field notes and plan should have mentioned the pits and partial mound at the E 1/4 Sec. 6 and perhaps even have indicated where the iron post was in relation to the old fence corner.

Is this iron post in its original position?

The practitioner being reviewed required the East 1/4 Sec. 34 to intersect the east limit of the NE 34. The township plan surveyed in 1908 showed "I.RM." at the E1/4 Sec. 34. The practitioner's field notes and plan show "E.1/4 34 Fd.I. M. & W. Pit." As this area is not prairie conditions, the correct post to pits and mound configuration according to Bulletin 38 would be shown on Page 22.

Our field inspection found an old-style iron post marked 1/4 on two sides. I am reasonably confident that this is the original iron post from 1908. So the answer to our first questions is yes, it is the original iron post. The post, however, was in the mound a little north and east of the centre of the mound. We also found three relatively good pits (NE, NW, & SW). Since the original iron post was placed at the north corner of the mound, we determined that the iron post was approximately 0.9 metres south and 0.25 metres east of what should have been its original location.

Upon digging at the proper location according to the pits and mound, we located a fence post butt where the iron post should have been. Did some landowner long ago remove the iron post and place his fence

corner where the post was? I, of course, don't know for sure, but I sure suspect the iron post is not in its original position. Our findings have been forwarded to the practitioner.

Is this iron post in its original position?
In another review, the practitioner being reviewed showed in his field notes and on his plan "N 1/4 24 Fd. I. M. Trace of SE Pit." He had used the N 1/4 Sec. 24 to re-establish a road post near the NE 24. The original township survey was conducted in 1912 and shows I.P.M. at the N 1/4 24. According to Bulletin 38, under these bush conditions, the correct configuration of pits, mound and iron post is as shown on page 22.

Our field inspection found the same situation as the practitioner's plan described (iron post, mound and trace of SE pit). The post, however, while likely the original iron post, appeared to be in the top east side of the mound, rather than the north corner of the mound. After removing broken telephone cable at the north side of the mound, we excavated and found what appeared to be a good rust hole. This rust hole was about 1.5 metres northwest of the iron post found in the mound. Photographs and a description of our findings have been forwarded to the practitioner.

What does Fd. I. Pit M. Mean?
If the field notes say "Fd. I. Pit M." most land surveyors would suggest that you have the original monument, and, in the hierarchy of evidence, it doesn't get any better than that. Part 2 monuments, however, usually have three parts, pits, mound, and the iron post. Are you checking to see that the relationship between the pits and the post is reasonable? Use the two-question test. Is the post original? No doubt the pits and mound are probably original, but is the post in its original position relative to what are likely original pits and a mound?

Often an iron post with pits and mound is accepted as found, with minimal checking to verify the location of the iron post.

Do you know if your field staff check the location of the iron post in relation to found pits? Many landowners erroneously believe that the monument is always midway between the four pits. Have landowners moved it to midway between the pits? Has construction of fences, or other activity, altered the monument location? In all three situations outlined here, the correct location for the iron post was the north corner of the mound. In some instances, a previous survey may have incorrectly restored the iron post from the pits.

If you don't know if your field staff are checking for these disturbed or displaced situations, then you should find out. Many practitioners have been using survey evidence field note forms for some time now. I suggest that a field note sketch showing the measurements to the iron post from the pits could become part of the evidence forms for all Part 2 monuments.

Bulletin 38 may show the monument that was to be placed. However, as noted in the introduction to Bulletin 38, surveyors in the field were not always cognizant of changes in instructions. The monument actually placed at a corner may not always match the type shown in Bulletin 38. Other monuments placed by the same survey may have to be viewed and, in some cases, copies of the original field notes may show what the surveyor did. Bulletin 38 is simply a guide to aid surveyors in knowing what to expect at a corner. It will also aid surveyors in locating the exact corner when traces of the original monument (pits and mound and so on) are all that remain. Also, use it to confirm what you find.

FOUR ELDERLY SURVEYORS WERE ENJOYING THEIR MORNING CUP OF COFFEE AT A LOCAL CAFÉ, DISCUSSING EVERYTHING FROM WEATHER TO TECHNOLOGY AND HOW THINGS USED TO BE IN THE "GOOD OLD DAYS". ONE OF THE OLD SURVEYORS TURNED TO THE OTHER AND ASKED, "ROY, AREN'T YOUR AND YOUR BRIDE CELEBRATING YOUR 50TH WEDDING ANNIVERSARY SOON?

"YUP, WE SURE ARE, "ROY REPLIED.
"WELL, ARE YOU GONNA DO ANYTHING SPECIAL TO CELEBRATE?" THE OTHER SURVEYOR ASKED.

THE OLD GENTLEMAN PONDERED THIS FOR A MOMENT THEN REPLIED, "FOR OUR 25TH ANNIVERSARY, I TOOK BEA TO TUCSON. MAYBE FOR OUR 50TH, I'LL GO DOWN THERE AND GET HER."

Property Line Surveys

By John Criswell, 2002 President, Memphis Area Association of REALTORS®

As Printed in "Tennessee Surveyor" - Reprinted with Permission for The Memphis Area Association of REALTORS®

Many buyers are no longer opting to purchase a survey - once an essential element in most real estate purchases - because most lenders are no longer requiring it.

The primary purpose of a survey is to show the location of buildings, fences, driveways, and easements of record, relative to each other, the boundaries of the property, and the setback lines. A survey, which should be prepared by a state licensed surveyor, will reveal any encroachments of improvements on property lines, building setback lines, or easements. The buyer generally pays its cost.

Many buyers incorrectly assume that a survey is an unnecessary expense because their lender does not require it. What they do not realize is that most lenders have made surveys optional because the lender's title insurance policies have been expanded to cover title problems due to encroachments or easements. Homeowner's title insurance policies, unlike lender's policies, have not been broadened, and specifically exempt such title problems from coverage.

The Memphis Area Association of REALTORS® standard residential sales contract form provides buyers with the opportunity to indicate whether they will order a survey on the property or waive the right to do so. If a survey is performed and shows any problems concerning encroachments or adverse factors affecting the title, the buyers have the option to terminate the contract and receive a refund of their earnest money, or accept the defects and complete the purchase of the property.

Often buyers do not recognize the value of a survey until they find that there is an encroachment on their property, such as a neighbor's fence, or learn that one of their property's improvements, such as a garage or pool, is built on a utility easement or city setback line.

To protect yourself from surprises such as these, insist that a survey be performed before you purchase your next home. In addition, if you plan to add any buildings or build a fence, you might ask that your surveyor flag the corners of the property, which is an additional cost, but can save you from property line disputes in the future.

Ripairian Boundaries

Part VI

By: Terry McHenry, PLS

Reprinted from "Treasure State Surveyor, January, 2003

WATER BOUNDARY DOCTRINES

Doctrine Where Boundary Not Affected - Avulsion

Introduction

Generally, through natural causes, when an uncharacteristically sudden (often catastrophic) and perceptible change in course occurs in a watercourse, it is known as an avulsion. Though usually associated with riparian (i.e., flowing water) settings, avulsive action has been recognized in littoral (i.e., contained water) environments as well. In the latter case, rapid erosive destruction of a shore occurs from unusually heavy wave action, occasionally even to the extent of a breach in the shoreline. The ensuing discussion, however, will focus on riparian avulsion, as clearly the majority of case law to be found is within this realm.

Sometimes referred to as "revulsion," avulsive action is not restricted to natural causes alone. The court has ruled for avulsion under artificial (man-caused) circumstances. These will be discussed later in terms of case law principles.

Naturally Occurring Avulsion

Distinguishment of the doctrine of avulsion from that of previously discussed doctrine lies in the "sudden and perceptible" vs. the "gradual and imperceptible." Generally, with the former, a boundary remains in place at its preavulsive location, whereas in the latter, a boundary will "run with" the gradual and imperceptible change in course.

In *Nebraska v. Iowa,* 143 U.S. 359 (1892), avulsion was defined as follows:

"*..where a stream , which is a boundary, from any cause suddenly abandons its old and seeks a new bed, such change of channel, termed avulsion, works no change of boundary; the boundary remains as it was, in the center of the old channel, although no water may be flowing therein."*

From *Bonelli* Cattle Co. v. Arizona, 414 U.S. 313 (1973):

"The rationale for the doctrine of avulsion is a need to mitigate the hardship that a shift in title caused by a sudden movement of the river would cause the abutting landowners were the accretion principles to be applied."

From *Nebraska v. Iowa,* supra:

"(When, in) deserting its original bed, the river forces a new channel in another direction, then the nation through whose territory the river thus breaks its way suffers injury by the loss of territory greater than the benefit of retaining the natural river boundary, and that boundary remains in the middle of the deserted river bed."

There is a presumption at law that the gradual processes of accretion and erosion have been operative on riparian land, unless evidence clearly indicates otherwise (see e.g., *Wyckoff'v. Mayfeld,* 130 Or. 687, 280 p. 340, 342). In terms of a natural setting, there will invariably be evidence of unaltered improvements, undergrowth, vegetation or timber between the old (preavulsed) and new (postavulsion) channels. This is a strong indicator for avulsion, which can be further substantiated through use of historical records and aerial or terrestrial photographs.

In *McCafferty v.* Young, 144 Mont. 385, 397 p.2d 96 (1964), the court observed, in part:

"While it is true, as counsel for defendant contends, that it is presumed that changes in river banks are due to accretion rather than avulsion (Wyckoff v. Mayfield, 130 Or. 687, 280 p. 340), that rule does not apply where there is evidence of avulsive change. We think the evidence showing the age of trees lying between the former channel and the new channel precludes any conclusion that the lateral migration of the river was slow and imperceptible. The witness Hamre, who was the Helena National Forest Supervisor, testified that the trees lying on the land between the two channels were 70 to 80 years in

age and still growing. Had the lateral migration of the river been gradual, the soil supporting the roots would have been eroded and the trees would have been washed out. Instead, this physical evidence demonstrates that those trees have remained strong since at least 1880 or 1890. The question is one of fact, and the trial judge found there had been an avulsive change. We feel there is ample and credible evidence to support that finding, and, therefore, it will not be disturbed." Ramsey v. Spratt, 79 Mont. 158, 255, p.5. (Emphases added).

From the Manual of Surveying Instructions 1973, U.S. Department of Interior, Bureau of Land Management, at Section 7-73:

"An avulsive change cannot be assumed to have occurred without positive evidence. When no such showing can be made, it must be presumed that the changes have been caused by gradual erosion and accretion."

Note that is McCafferty v. Young, supra, the court makes reference to questions of fact as key decisive elements in this case. Here we are reminded that what are boundaries is a question of law, but where are boundaries is a question of fact (and evidence). While professional land surveyors tend to deal principally in the latter, we must also be more than casually knowledgeable of the laws governing water boundary determinations (i.e., what are boundaries). For the client and the public at large to be adequately served, the land surveyor must possess a measure of competence no less than this.

Inclusion of competent legal counsel is extremely important when dealing with any potentially avulsive setting. Circumstances leading to a legal determination of avulsion will vary from state to state and, in fact, are not always consistent within a given state. Rulings from a federal perspective on avulsion will sometimes differ from those at the state level. Federally owned lands abutting a watercourse should be a red flag to the land surveyor and attorney that further investigation is both warranted and prudent.

The land surveyor's role in addressing a potential avulsive event is initially one of an investigative, evidentiary compiler and chronicler. Dates, sequence of events, parties impacted, historical records and documents, photographs, and possible testimony must all play into consideration. When merged with the field work, this often-disparate assemblage of information and evidence must thoroughly be evaluated and portrayed in a manner readily comprehensible to the attorney and, ultimately, the court.

Certain conditions necessary to satisfy avulsion might be listed, in somewhat descending order of importance, as follows:

1. Perceptible change.
2. Sudden (see following discussion on artificially caused avulsion), unexpected or unusual event.
3. Abandonment of old (former) channel, or portion thereof.
4. Pre-avulsive (former) channel must be recognizable; it may be dry or may contain stagnant water, but nevertheless is identifiable as the old channel.
5. The cut-off land mass must remain the same land mass and must not simply be a replacement land mass. It must not lose it's pre-avulsive integrity and must still be identifiable.
6. No restricted as to natural or artificial causes.
7. Under most circumstances, the length of a watercourse will be shortened as a result of an avulsion.

Where avulsion has in fact occurred, the preavulsive boundary is now permanently fixed place, having suspended for all time the processes of accretion and erosion over the extent of the avulsed (former) channel. Thus, the ambulatory characteristics formerly associated with the preavulsive boundary must now take on those of an upland boundary. It is important that a survey be performed to establish the preavulsive location of the former channel, which must be capable of reestablishment as a fixed boundary into the future. This survey, if properly performed, can be considered an original survey for purposes of future reestablishment, as it serves to witness the location and configuration of the former channel at the time of the avulsive event, or as soon thereafter as possible. Care must be taken with this survey, particularly in the areas where the watercourse breached its banks and departed from its former course, and again where it reentered the former course further downstream.

There exists little definitive case law guidance in this specific subject area. Remember that the doctrines

of accretion and erosion remain operative upstream and downstream of these two points. Also, the bed of the newly created channel (between these two points) now belongs to the owner(s) over whose land the avulsion has encroached, thus creating ownership(s) which now span(s) both sides of the newly formed channel. These is a question in some jurisdictions as to whether the State requires an easement interest over the newly formed channel. This is to be answered under State law, and once again points out the necessity for involvement of competent legal counsel.

In the case of a non-navigable watercourse, the bed of the preavulsed (former) channel still belongs to the opposing riparian owners, as in the pre-avulsive condition, and at the location of the boundary at the moment of the avulsive event. For a navigable watercourse, the abandoned channel's preavulsive ownership will vary. Did the State have sovereignty in the bed? If so, up to the mean high water line or mean low water line? Here there may be a third party involved (the State), in difference from a non-navigable setting. In this instance, ownership will be a function of the operative State law. Federal interests abutting the watercourse may compound the issues, as previously indicated.

The question of reversion of title in an avulsed, navigable L4 setting is one of a legal nature. Remembering from Part I of this series that title vested originally (under most circumstances) in the state by virtue of the navigability test, it follows that when this condition of ownership has been extinguished (viz., through an avulsion), the door is opened for considering whether the state has lost its claim of title over that portion of the channel abandoned, thus invoking possible reversion to the riparian owners. These are legal questions which surface once a determination of avulsion has been made. For an excellent discussion of the various methods of reversion in connection with avulsed channels, the reader is referred to Reference No. 6 herein, River and Lake Boundaries by James S. Simpson, beginning on Page 150.

Artificially Caused Avulsion

As man has encroached further upon his environment, we have seen the extent of rivers and streams in their wild land state diminish. With growth and urbanization come the need for flood control, water conservancy, navigational aids and the like, all related in some fashion to engineering works. These "man-caused" facilities take on many forms, often significantly and permanently altering the watercourse environment. Examples would include everything from major dam construction to dredging and rechannelization, levees and bulkheads, dikes, etc. The bottom line is that these facilities attempt to alter and control what previously was left to the forces of nature. The question that arises is: what impact does this have on the watercourse as a boundary, particularly when we see that water boundary doctrine in place has evolved largely on the concept of naturally occurring events?

It has previously been indicated that our system of common law, while historically slow to change, is dynamic in nature, being particularly sensitive to socio-economic trends. This of course has both its benefits and drawbacks, neither of which is within the scope of this series to discuss. The point is raised here simply to help the reader bridge the definition of avulsion from naturally occurring causes to those which are induced by man, particularly in terms of the test (for avulsion) of being sudden and perceptible (as previously defined in this series). Most engineering works in connection with waterway projects of any magnitude are of considerable duration, involving extensive planning, design, site preparation and construction. On the surface, at least, a contradiction would seem to exist between this fact and the condition of being sudden and perceptible for the court to rule on avulsion. How has the court rationalized this?

Over time, the court has evolved some precedent in this area which we can look to as guidance. Keep in mind, however, that each case is ultimately decided on its own merits and on the circumstantial evidence presented. Avulsion is complete when water no longer flows in the abandoned bed. Standing water may remain for a period, but seems to have had little bearing on ruling for avulsion. When the last section of bulkhead is poured in place, or the last load of material is deposited, the watercourse is suddenly, at that moment, visibly and perceptibly altered, thus satisfying the key tests for avulsion.

As in the case of accretion, the court has disallowed man's influence to benefit himself, but has allowed the actions of one (a stranger to the land) to benefit another, so long as collusion is not present. In applying this tenet to a setting where accretion vs. avulsion is in debate, the court has ruled both ways in matters of equity or to preclude a windfall on the part of one party over another.

Keep in mind that for artificially caused avulsion there frequently is a third, often detached, party involved. This party may be the U.S. Army Corps of Engineers, a water conservancy or flood control district, irrigation district, and so forth. The principal interest of this entity will typically be the contemplated works in terms of meeting its mandated function. Of secondary interest will boundary issues resulting from the project.

In Arkansas v. Tennessee, 246 U.S. 158 (1918), the U.S. Supreme Court addressed, in part, the point in time at which an avulsion is completed.
"An avulsion has this effect whether it results in the drying up of the old channel or not. So long as that channel remains a running stream, the boundary marked by it is still subject to be changed by erosion and accretion; but when the water becomes stagnant, the effect of these processes is at an end; the boundary then becomes fixed in the middle of the channel as we have defined it, and the gradual filing up of the bed that ensues is not be treated as an accretion to the shores, but as an ultimate effect of the avulsion." (See also Arkansas v. Tennessee, 397 U.S. 88 (1970).

Next: Madison v. Basart, and Re-Emergence

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Reprinted with permission of the author, and from The Nevada Traverse, Vol. 24, No. 4, 1997, through Vol. 26, No. 4, 1999. Terry W. McHenry, PLS, is the editor of The Nevada Traverse. He has worked in surveying since 1964, with experience in both private and public capacities. Currently he is the principal of Consulting Land Boundary Specialties, a consulting firm specializing in land and riparian boundary matters. He may be contacted as follows: 14710 Rancheros Drive, Reno, Nevada 89511. Phone: (775) 852-7290, or email at: editorrtvtraverse@aol.com

SURVEY HUMOUR

Law on the Mayo-Keno Road

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The administration of justice north of the 60th parallel in the early days of the 20th century was often quick and wonderful. It was fair and often had a sort of folkloric aspect. Of the various northern circuit judges, Judge Sissons was known for his ability to get to the heart of the matter and once there make the punishment fit the crime. A minor event in Keno Hill during the summer of 1948 is a case in point.

Keno Hill was a ghost town in 1948 when Wally Johnston (Army Survey Establishment) arrived there with his survey party to carry out a tri-angulation survey for 1:50,000 mapping north of the town. Keno was the end of road transportation in this region; all travel beyond this point was by pack horse.

Keno had perhaps 100 houses but only 10 inhabitants. There was Willy Norbert, his estranged wife Sally, and eight other men. All had come into the Yukon during the Gold Rush and consequently all were in their sixties. It was a friendly selfsupporting group; all that is except Willy and Sally. Johnston used one of the many abandoned stores as a sort of base camp.

It was a happy town, but one day, probably after some minor argument between the unhappily married couple, Sally went in to Mayo and reported to the police that her husband had for some years falsified his statements of development work on his mining claim. All residents of Keno had at least one such claim, the area being moderately rich in lead-silver ore. Judge Sissons patiently heard the evidence, pointed out the seriousness of the crime, and placed a $200 fine on poor Willy. Poor Willy indeed-he probably had less than $20 to his name. Pleading poverty he asked for a more suitable penalty. Without much thought Sissons reduced the penalty to 30 days labour cutting back the brush along the Mayo-Keno road.

During the 30 days of hard labour Willy plotted his revenge. No sooner had he fulfilled his debt to society than he went to the police office to report that his wife was a bootlegger. This was a fact well-known to the police and the judge but ignored by all, if it was not brought to their attention.

In due course Sally was hailed into court where Willy was standing by to give evidence. The judge again pointed out the seriousness of the crime and fined her $200. "But judge", sobbed poor Sally,"I haven't got any money".

"Then your husband will have to pay", replied Sissons with a very straight face. "Judge, you know I can't pay the fine", exclaimed the startled Willy. "Then I sentence you to 30 days cutting back the brush on the Mayo-Keno road".

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Leica Geosystems

Leasing vs Buying

By Andrew Cameron, P.Eng., OLS, OLIP

Reprinted from "The Ontario Land Surveyors", Winter 2003/03

Those of us in private practice are often confronted with the dilemma of whether we should lease or buy when we decide to acquire new survey equipment. My company accountant has always said that there is no clear "winner" between the 2 methods. Leasing allows you to expense your monthly payments, and to spread out your provincial sales tax over the term of the lease. Buying lets you depreciate your capital expenditure over a longer term, but you must pay the provincial sales tax up front.

I tend to listen to my accountant, so over the years I have both bought and leased equipment, without putting too much thought into the decision. If I have money in the bank, I usually buy ... if I'm well into my "line of credit" I tend to favour leasing rather than borrowing money from the bank.

Well, I have recently had the opportunity to analyse the two methods, and I find the results dramatically favour buying, as opposed to leasing. What follows is a comparative analysis, based upon an actual lease of survey equipment from one of the leading equipment suppliers.

The lease was for equipment valued at $24,634.26 plus PST of 1,970.74 for a total purchase value of $26,605.00. The term of the lease was 27 months with an option to buy out the lease after the end of the 24th calendar month for 10% of the initial value or $2,463.43. For reasons I will demonstrate later, you should always exercise the buy-out option. As a standard term, the lessor required us to pay the first and last months payments in advance.

Leasing Method

24 payments of $1,208.57	$ 29,005.68
27th payment (paid in advance)	1,208.57
Buy-out	2,463.43
Total Lease Cost	$ 32,677.68

Cost to Lease = $6,072.68 (32,677.68 - 26,605.00)

In order to compare "apples to apples" I would suggest that the equivalent amount to borrow would be $26,605.0 less a down-payment of $2,417.14 (the 2 months payment required in advance) less the buy-out option of $2,463.43 therefore $21,724.43 must be borrowed and the term will be 24 months.

My banker has assured me that I could have borrowed th money at the rate of 6% annual interest or $962.84 monthly.

Borrowing Method

Down Payment	$2,417.14
24 payments of $ 962.84	23,108.16
Buy-out	2,463.43
Total Borrowing Cost	$ 27,988.73

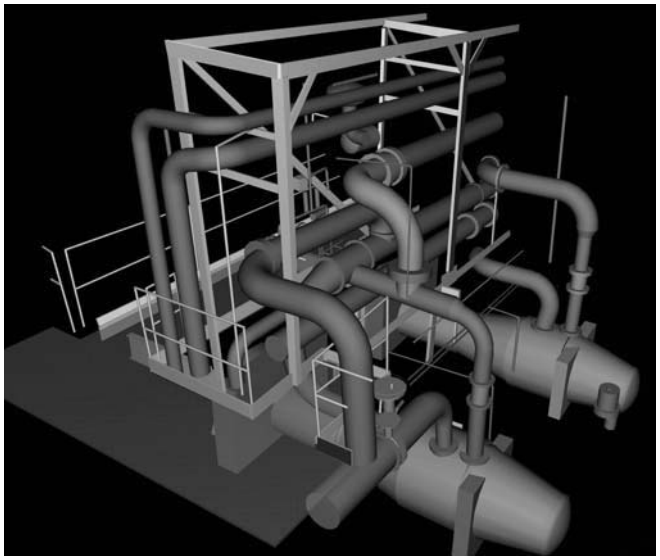
Cost to Borrow $1,383.73 (27,988.73 - 26,605.00)

I have therefore come to the rather startling discovery that the cost to lease is 4.4 times the cost to borrow ... or put in other terms, your borrowing rate is 6% and your lease rate is in excess of 25%.

Now it would appear that the leasing company should be very content with this rather usurious rate of return, but they build a rather nasty "pitfall" into the lease, which can be great "windfall" for the leasing company. If you fail to give them 60 days notice that you wish to exercise the buy-out option, then the customer is deemed to have requested a automatic renewal of the lease. The leasing company will thus be very happy to continue leasing you the equipmet that they themselves value at $2,463.43, for a month]y payment of $1,208.57, and they will do so FOREVER and THEY still own the equipment.

So my conclusion is obvious. Be very nice to your banker or be very careful if you lease.

GEOMATICS AND ENGINEERING SOLUTIONS



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SURVEY HUMOUR

Baseline Surveying

Reprinted from "Gematica" Volume 53, Number 3, 2002

By the early 1920s all of the good prairie farmland had been surveyed and mapped on sheets of the 3-Mile Map Series. These were excellent contoured maps suited for the region and the people who lived there. But they were much less successful when the series was extended into the boreal forest to the north. The Department of the Interior continued to push the DLS meridians northward, and every 24 miles they ordered the survey of a baseline running from the Principal Meridian west to the Rocky Mountains. Before air photography, this survey grid seemed the best way to explore and measure the country.

As can be imagined this was very tough surveying. There was no local fodder for horses so all equipment and supplies had to be brought in by back packing. As the survey party cut out the baseline, usually working westward, they occasionally met up with a trapper or prospector. These people, living alone in the bush, were almost always happy to have someone to talk to, even if it was only for a day or two.

On one occasion the chief of a survey party noticed that near the line a trapper had built a tidy cabin with a good roof. Sticking out through the roof was a stove pipe and from it there issued a good stream of smoke. As they were going to be in the area for a couple of days, the chief asked the trapper if he would bake up some bread. This was quickly agreed to.

As the chief entered the cabin he was surprised to see that the stove was mounted on long five-foot legs and was pushed up almost to the roof. This necessitated a short ladder so the trapper could work the stove. When asked why this strange arrangement was necessary the trapper explained that he had had to bring in all of his goods and supplies on one toboggan load. "I had only room for one length of stove pipe," he explained.

This tale was first told many years ago by the western author, James MacGregor.

NO YOU'LL KNOWEVERYTHING

1. RUBBER BANDS LAST LONGER WHEN REFRIGERATED.

2. PEANUTS ARE ONE OF THE INGREDIENTS OF DYNAMITE.

3. THERE ARE 293 WAYS TO MAKE CHANGE FOR A DOLLAR.

4. THE AVERAGE PERSON'S LEFT HAND DOES 56% OF THE TYPING.

5. THE SHARK IS THE ONLY FISH THAT CAN BLINK WITH BOTH EYES.

6. THERE ARE MORE CHICKENS THAN PEOPLE IN THE WORLD.

7. TWO-THIRDS OF THE WORLD'S EGGPLANT IS GROWN IN NEW JERSEY.

8. THE LONGEST ONE-SYLLABLE WORD IN THE ENGLISH LANGUAGE IS "SCREECHED."

9. ON A CANADIAN TWO DOLLAR COIN, THE FLAG FLYING OVER THE PARLIAMENT BUILDING IS AN AMERICAN FLAG.

10. ALL OF THE CLOCKS IN THE MOVIE "PULP FICTION" ARE STUCK ON 4:20.

11. NO WORD IN THE ENGLISH LANGUAGE RHYMES WITH MONTH, ORANGE, SILVER, OR PURPLE.

12. "DREAMT" IS THE ONLY ENGLISH WORD THAT ENDS IN THE LETTERS "MT."

13. ALL 50 STATES ARE LISTED ACROSS THE TOP OF THE LINCOLN MEMORIAL ON THE BACK OF THE $5 BILL.

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Do You Charge Too Much?

By Daniel E. Beardslee, LS
Reprinted from "The Georgia Land Surveyor", March/April 2003

How often have you given a potential client a survey estimate and had them say, "That sounds fair. When can you get started?" If you're like me, you get this uneasy feeling that maybe something was left on the table. In my travels and discussions it has become clear that surveyors are generally afraid to charge enough for their services. Let's say, for instance, that you are surveying the boundaries of a lakefront home valued at a million dollars. Let's further assume that you have surveyed lots of property in the area, you have good control, and you feel that the survey will really be pretty easy. Does that make it worth less? Of course not. So why do we typically charge as if it were? We almost all do it because we fear that someone else will if we don't. But that doesn't make sense.

In property boundary surveying, surveyors are actually insurers - paid to accept liability and nothing more. After all, if folks knew where their property boundaries were, they could set monuments themselves. A surveyor is, in fact, a single premium, lifetime (of the surveyor), unlimited liability insurer. That should be worth something, shouldn't it? And it is even more valuable where a valuable piece of reality is concerned.

One of the most common themes I come across in discussion groups among surveyors is the concept of charging a percentage of the value of the property, much as one would expect to be charged by a realtor, a title insurance company, or a casualty insurer. Maybe someday that will happen, but that's way down the road. So how can you test the market? Remember, it is impossible to charge too much. If a client accepts your price, it must be worth it.

In any professional service business, clients tend to come in bunches. Just when you think you're getting caught up, the phone sometimes rings off the hook. The main goal of being in business is not just to do a lot of work, but to make a profit. If you are constantly behind or unable to get work done in a timely manner, it may be symptomatic of a poor pricing structure, poor organization, or inefficient methods. The ability to quickly turn work around will enhance your reputation and set you apart from other surveying firms in your market area. If you are reasonably efficient in doing your work, and you can't get it done, your prices are probably too low.

Test the Market

Raise your prices and see what happens. Usually when I suggest this to someone, I get a response like "I'll be out of business in 30 days, it's so price competitive around here." In my experience "around here" is anywhere, and it's pretty much the same one place as another. Some markets are more price-sensitive than others, of course. If you happen to be in the "mortgage survey" business, price competition is fierce, because this type of service is generally regarded as a commodity and one surveyor is just as good as another for that particular sector of the market. But for most surveying services, it's simply not the case, regardless of the irrational fears of some land surveyors.

Consider this: What would happen if you doubled your rates and did half the work? Would you make more or less money? The answer of course, is that you would make nearly twice as much money. You would have the same amount of revenue and somewhat more than half the cost. No one is willing to bet his or her business on such a tactic, understandably. It's too drastic for most folks. But test the market by raising your rates 10%, then 20% and see what happens. What would happen if this tactic were successful? The first thing, logically, is that you would lose some accounts. That's to be expected, inasmuch as there is some price sensitivity in the market for land surveying services. But the market doesn't always behave logically - sometimes a higher price is perceived as an indication of better service. The second thing that would happen is that because you have less work, you could get it done faster, and thereby improve your market position. A reputation for fast delivery will spread quite rapidly and may result in enough additional requests for work to offset those losses that resulted due to the price sensitivity of your market.

The third thing that will happen is, because you're making more money (net that is), you'll be in a position to invest in new equipment and hire better employees (or retain the best you have) and further improve your market position.

In the end you may be perceived as the best, fastest, and most expensive surveyor in town. That's not bad.

Setting your rates based on what other surveyors charge is not a rational way of pricing. Market rates are logically based on two things - cost and value. As a surveyor you should know the cost of performing a survey; value is another matter. You may not know the value of your service. The only way to determine that is to test the market. Setting your rates based on what your competitors are charging does not address either cost or value. It's simply a reaction to the perceived market force of competition, and a completely illogical means of establishing rates, especially when you consider that they are probably basing their rates on yours.

The effect of all this volleying is that rates tend to stagnate. I set my rates somewhere near yours, and you set your rates somewhere near mine, and both of us complain about the competition's rates being too low. If you aren't making money, it's a lot more likely that you are charging too little. I have never heard of an instance where a surveyor has complained about not making money because he or she charged too much, have you?

Daniel Beardslee resides in Pateros, Washington. He has been in land surveying for more than 27 years, and is also a Contributing Writer for the magazine, Professional Surveyor Magazine.

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Scheduling for the 2004 meeting is being discussed with the ACLS to avoid a conflict with their meeting.

D. J. Clarke, nominee for vice-president, was encouraged to begin looking into suitable accommodations for the 2005 annual meeting because there are expected to be many functions planned in Saskatchewan for the provincial centennial.

Practice Committee

Council approved proposed changes to the Suggested Schedule of Fees submitted by the Practice Committee, subject to a few minor changes.

Council directed the Executive Director to draft a motion for consideration by the membership at the next annual meeting whereby a Suggested Schedule of Fees would no longer be published.

P. R. Committee

The President outlined preliminary discussions at the President's Forum regarding a charity golf tournament, held in each jurisdiction, as a way to raise funds for a suitable charity and raise the profile of the Land Survey Profession in Canada. Council encouraged the president to continue pursuing the idea with the other association presidents.

CCLS Representative

R. J. Pominville has expressed his wish to step down as SLSA representative to the CCLS. He has also recommended to Council that the representative be someone who is on Council or who has very recent working knowledge of the issues being dealt with by Council. Council appointed G. D. Craig as SLSA representative to CCLS effective May 30, 2003.

Next Meeting

The next regular meeting of Council was scheduled for Wednesday, May 28, 2003 in Moose Jaw although a telephone conference meeting is expected to be necessary before that date to consider applications for new commissions.

The President acknowledged a motion to adjourn at 10: 12 p.m.

Surveyor Immunity

By Knud E. Hermansen
As reprinted from "The Georgia Land Surveyor" March/April 2003

The surveyor's skills are in great demand by a sophisticated society that requires order, clarity, and technical expertise. At the beginning of each survey, the surveyor steps off into the unknown -attempting to bring clarity to confused and often disputed boundaries. The surveyor is entrusted with performing a service that often lacks a clear and unimpeachable solution. Surveying, as in other professions, is not an exact science.

Advertisements on television and other mass media communications make it clear that that if you choose the law firm featured in the advertisement, then for every perceived harm there will be a remedy (i.e., "the money you deserve"). Vindictive neighbors often view litigation like armies wage war fare -a surveyor is either a friend or enemy. The anger of the neighbor is often focused on the surveyor as the source of their boundary problem, the reason for the expenses they incurred in litigation, or the reason for their loss in litigatior. It is not uncommon for surveyors to be sued or threatened to be sued by the neighbor. Fortunately for the surveyor, the law balances the neighbor's need for a remedy with the needs of society and the courtroom.

Public policy requires that witnesses not be intimidated or fear vexatious litigation when testifying or preparing to testify. Circumstances often arise where a surveyor is unable to prove beyond a reasonable doubt the basis for their opinion yet, this should not stand in the way of offering the opinion when required to fairly try a boundary dispute where only a preponderance of evidence is needed. Surveying according to ancient landmarks and old deeds among vexatious neighbors is like sailing on the ocean, charting a path through unknown winds and tides. Surveying practice requires some privilege and immunity under such conditions or no surveyor would sail except upon the calmest seas and would run in fear of the slightest storm. In such cases, there arises the sound public policy that where a cause of action would ordinarily lie, there shall be a privilege when commicating statements prior to or during a judicial proceeding. The common law has been codified in the *Restatement (Sec ond) Of Torts § 588(8) (1976).* Accordingly, allegations, opinions, and statements made by a surveyor in good faith and relevant to a disputed boundary involved or likely to be involved in litigation shall enjoy an absolute privilege. The protection is afforded in both criminal and civil proceeding; This privilege applies to arbitration matters as well.

A witness is absolutely privileged to publish defamator matter concerning another in communications preliminary to a proposed judicial proceeding or as a part of judicial proceeding in which he is testifying, if it has. " some relation to the proceeding. Restatement (Second) O Torts § 588 (1976)

The privilege encompasses all statements made prior to or during the judicial proceedings. It is not necessary that the opinion be under oath or during an official proceeding. The protection is afforded when litigation is proposed or otherwise likely to occur (though more than a slight chance is required). Where a communication occurred prior to a proposed judicial proceeding, the privilege extends to those matters made in good faith and under serious consideration by a witness or possible party to the judicial proceedings. The privilege is absolute. The exceptions are few and narrowly construed. It is immaterial that the testimony is irrelevant, incorrect, malicious, or spiteful so long as the information has some reference to the litigation or was prompted by counselor needs of counsel, even if later judged to be inadmissible or incorrect. Redress lies only in contempt or perjury brought before the court.

Accordingly; while the surveyor should always tread cautiously when providing an opinion, where litigation appears imminent or is ongoing, the surveyor should not be intimidated into changing their opinion or avoid giving it under threat of a lawsuit by the opposing party.

Knud is a licensed professional land surveyor, professional engineer, and attorney at law. He teaches at the University of Maine in the surveying engineering technology program and has a consulting practice specializing in boundary disputes, title, land development, liability, and easements. Http//www. umaine. edu/set/sw/articles/

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4. The surveyor contacts the landowner to arrange for access and a field meeting.

5. Instructions are issued to survey crews such as access by motorized vehicles or foot traffic only, ensure all post holes are filled, gates closed, routing considerations, staking requirements, contact phone numbers for owner/occupant, watercourse restrictions, crop restrictions, hazardous chemicals warnings (fertilizers, weed killers), marker post usage, cattle at large, residence buffers, and so on.

6. Field crews meet landowner (usually on site) and discuss routing and any specific concerns.

7. Legal survey is performed.

8. Plans are prepared. Land company meets with landowner to sign agreements.

9. Client calls surveyor to have pipeline right-of-way staked for construction.

10. Surveyor or field crews usually contact landowner prior to staking.

11. Staking for construction is performed.

Obviously, from the above steps, we note that there are many instances where communication with the landowner comes into play. Sustaining a good relationship with the landowner ensures that communication lines are kept open and expedites the process of acquiring the right-of-way. All it takes is one blunder to have the owner feel that he/she is being misled or illtreated. Furthermore, significant delays in acquiring the right-of-way may cost your client money and jeopardize any future work. If a landowner calls the client and complains about lack of respect, damages, or failure to follow instructions, then one can only hope that the client is very understanding and will not terminate your contract.

Unlike urban surveys, many of the complaints rural landowners have with surveyors never make it to the Association office. Often, the land-owner addresses any complaints directly to the land surveyor, land company, or client. The Association, therefore, does not have many statistics on these types of complaints. However, individual survey corporations heavily involved in oil patch activities will likely have knowledge of the number and types of complaints they have received from landowners over time.

The following is a list I have compiled outlining common problems and consequences associated with not taking *"reasonable care."*

Problem: Gates not closed during or after survey.
Consequence: Domestic animals escape. Farmer must spend time rounding up. Animals may be killed/injured by traffic.

Problem: Counter-sunk post holes not filled in.
Consequence: Damage to farm equipment. Injury to cattle, horses. Injury to farm workers.

Problem: Post not counter-sunk in cultivation.
Consequence: Tractor tire puncture. Farm equipment damages post.

Problem: Leaving iron spikes in cultivation.
Consequence: Tractor tire puncture.

Problem: Unauthorized motor-vehicle use.
Consequence: Trucks and quads causing damage to crops, creating
ruts, scaring cattle, horses. Snowmobiles cutting through fences.

Problem: Lack of communication with landowner.
Consequence: Rework. Delay in land acquisition. Landowners feel left out of the process.
Problem: Stakes not visible in high crop.
Consequence: Farmer cannot see right-of-way and knocks down stakes. Stakes damage farm equipment.

Problem: Using flagging in grazing areas.
Consequence: Cattle and horses will eat flagging.

Problem: Cutting down trees, bushes
Consequence: Cost to replace vegetation.

I have been fortunate enough to have had the opportunity during my career to meet many rural landowners and can attest to their friendliness, courtesy and helpfulness. Countless times, many a farmer, without hesitation, has pulled a survey truck out of a mud field or snow-filled ditch with their tractor. Most of these rural landowners are grain farmers or ranchers who have an intimate knowledge of their land. However, farmers and ranchers have been experiencing some tough times these past few years due to droughts, low grain prices and high-feed costs. The last thing they need is further stress caused by neglectful survey crews.

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By including the landowner in the survey process, all parties will benefit.

I have found that by spending a little extra time at the start of a project talking to the landowner, valuable information can be obtained such as route selection, field access points, underground structures and other concerns the landowner may have. By including the landowner in the survey process, all parties will benefit. Here are some key points to keep in mind during communications:

•Listen carefully to any concerns the landowner has.

• Determine where the field access points are situated.

• Check with farmer on the use of trucks, quads, or snowmobiles. Only foot traffic is allowed on cultivated land from seeding to end of harvest.

• Discuss whether staking should occur during the legal survey or at another time. Usually staking is performed just prior to right-of-way construction. Well sites are usually staked during the survey.

• Find out if there are cattle or horses grazing in close proximity to the survey.

• If access to adjacent lands is required, then the landowner is usually a good source of informa-tion on how to contact the adjacent landowners.

• The landowner may have some knowledge as to the whereabouts of survey evidence in the vicinity.

• Document any specific requests by the landowner.

• Keep the landowner informed of any changes throughout the project.

• Leave a business card and let the landowner know to contact you if he/she has any concerns. This is great for marketing and opens up the possibility for extra work.

• Above all, show respect.

The right to enter land for surveying purposes was first incorporated in the Alberta Surveys Act in 1931 and included in subsequent acts since then. I am sure we all agree it is absolutely essential to retain this right in order for the land surveyor to perform his/her duties under the Surveys Act and Land Titles Act. However, laws can and may be changed to accede to the wishes of public sentiment. Without public support of Section 16, land surveyors could eventually lose the right to access private land.

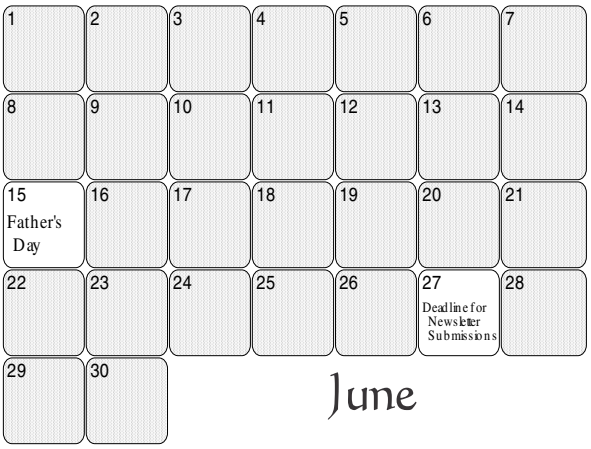
Looking Ahead...

2003

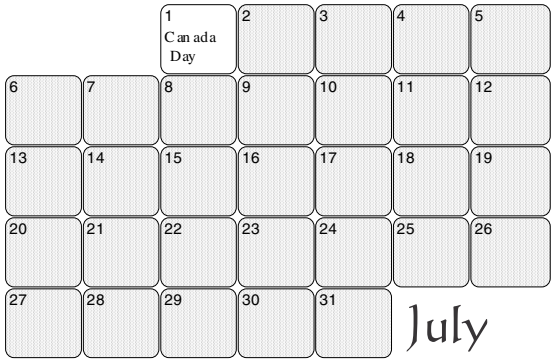
April

May

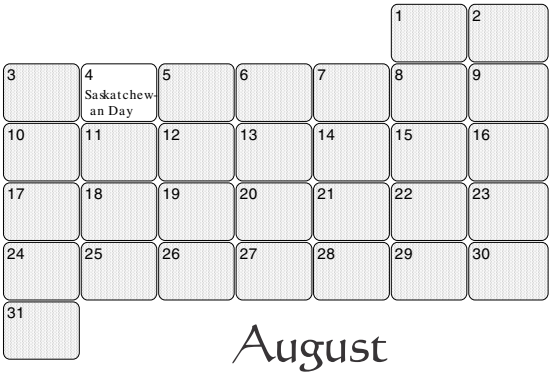
June



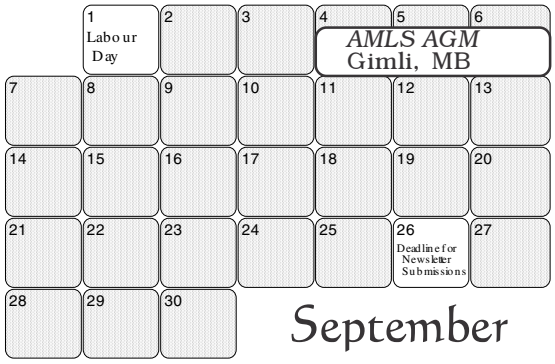
July



August



September



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