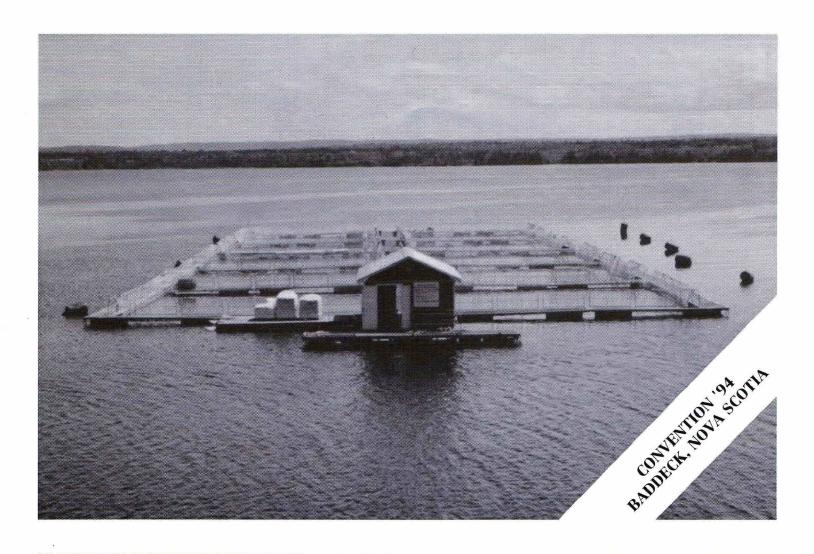
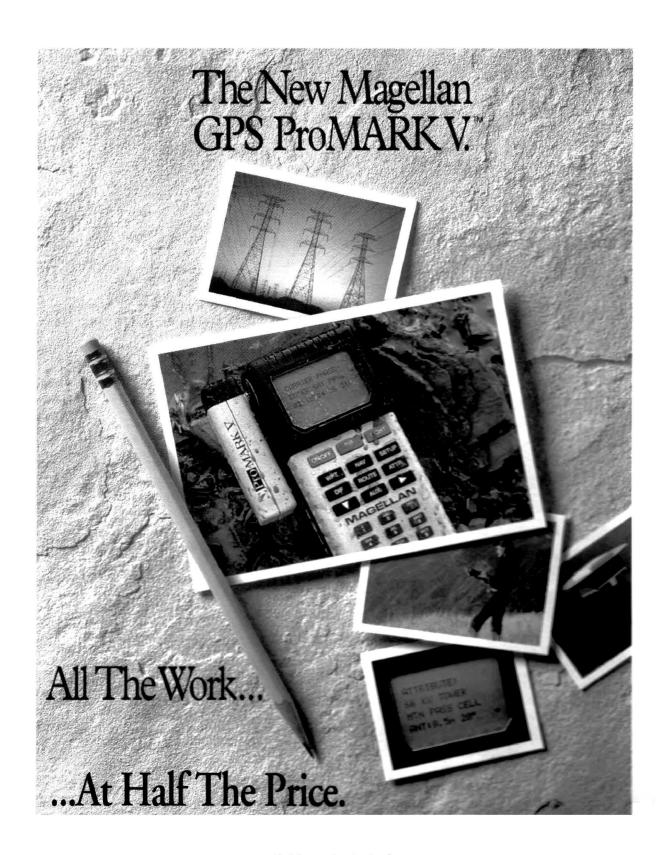


AQUACULTURE LEASES

see page 26





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FALL 1994 No. 147

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THE NOVA SCOTIAN SURVEYOR

Editor:

Robert A. Daniels

Production:

Kathy Alcorn

Norman Wade Company Limited

Circulation:

Free of charge to ANSLS members. To non-members at a yearly rate of \$12.00 in Canada and the USA; \$16.00 for other countries,

plus handling charges.

The Nova Scotian Surveyor is published twice a year. Address all enquiries to: Association of Nova Scotia Land Surveyors, 159 Portland Street, Suite 301, Dartmouth, Nova Scotia, B2Y 1H9.

Views expressed in articles appearing in this publication are those of the author and not necessarily those of the Association. Letters to the Editor should be limited to one page.

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PRESIDENT'S REPORT

Gordon P. Isaacs, CLS, NSLS, NBLS



Time is running out on my term as President, and it's hard to believe that the year has passed so quickly. When one starts an assignment such as this one, there are often great expectations on what you can accomplish and what you can do to make a difference or to advance your profession. Many of the things that I wanted to address were dealt with, however, there are still some areas that I felt could be improved within our association which, although touched upon this year, will take a few years to see the effects.

There were two significant changes to our association's structure this year which will change the way we do business. After a number of years with a combined Executive Director/SRD Manager position, your Council decided to return to the previous structure with two full-time positions. A careful analysis of our financial situation showed that we were in a position to do this within the operational budget, and we felt that it was time to have an Executive Director who could dedicate his full

time to the administration and direction of our association, and also allow the SRD Manager to put his emphasis on the task of running the SRD to ensure the quality control program which had been established would continue to the benefit of our members. The association recognizes the contribution that Jim Gunn made during his term as Executive Director and SRD Manager, however, we realize that Jim's heart was in running SRD.

The competition for Executive Director was won by Bob Daniels, NSLS, CLS, the immediate Past President of our association. Bob's appointment to the position by Council was unanimous and we look forward to taking advantage of the many skills and initiatives which we are sure he will bring to the job. One of Bob's first tasks will be to establish an administrative procedures guideline for our office which will outline the working relationship between the Executive, Council and the staff of the association. This should make it easier in the future to identify responsibilities and authorities and provide some continuity in application of policy from year to year.

The second major initiative this year was the transfer of the SRD to Cape Breton in August, 1994. As many of you are aware, Jim had indicated his intention to resign as SRD Manager and return to his home in Ingonish, Cape Breton. At last year's annual meeting, there was a recommendation from member, Paul Harvey, for Council to consider allowing Jim to carry out his present duties in Cape Breton, and this idea

was discussed at our first Council meeting. After some discussion on this matter, Council requested that Jim put together a proposal for their consideration, outlining how SRD could be run from Cape Breton without any cost increase to the association. After some rather hard negotiations between the Executive and Jim, a deal was approved by Council to establish a two-year pilot project to test the concept of two office locations. After that time, Council would have the option to either continue with the arrangement for a further term, or return the SRD to the main office in Dartmouth The terms of reference agreed to are published elsewhere in this magazine.

One of my aims as President this year was to make some inroads with government to address issues which affect our association. We met initially with fellow member and MLA, Russell MacKinnon, to seek his assistance in dealing with some issues which constantly plague our association, and to get his advice on how best to approach government on these issues. This meeting was very worthwhile, and we look forward to Russell's assistance in the future.

This year we also established a Private Practice Committee to identify issues affecting the private sector surveyors and to prepare recommendations to Council on how to deal with the issues raised. Ken Robb and Bob Daniels initiated the committee and have investigated New Brunswick's methods of dealing with Highway surveys, with the intention of preparing a brief to Caucus recommending the adoption of the New

Brunswick model in Nova Scotia. The committee has also identified issues pertaining to the Development Officers' interference with our members in the practice of professional surveying. This resulted in a brief being prepared and submitted to the Ministers of Justice and Municipal Affairs. We must be proactive with government in situations such as this, and I hope that now that we have the manpower in place, we can assign the necessary resources to ensure prominent issues are dealt with in a timely manner.

The association made a significant effort to point out problem areas in the proposed Environment Act to the travelling committee seeking public input. Thanks to the efforts of Ken Robb, Bob Daniels, Jim Gunn and others who attended the committee workshops and public forums and made our concerns known, the association was successful in getting several changes recommended by the committee which will hopefully save us and the public future headaches in dealing with the provisions of the act related to water boundaries and wetlands.

During my term as President, Linda and I were fortunate to represent our association at every provincial association meeting in Canada. with the exception of Quebec, where an urgent conflicting meeting prevented our attendance. We were also able to attend the MALSCE convention, which was held in Cape Cod, Massachusetts in September. I want to thank the Surveyor General for the financial support and time off which was afforded to me so that I could attend these functions as your representative. The experience of attending the meetings of our sister associations is one I would recommend to all our members, and is something that Linda and I will remember for a long time.

The President's position can be a demanding one for anyone who has a full-time job or business to attend to, however, with the excellent staff we have in our association office, and the dedication of our committees, this workload is kept to a minimum. I want to thank Bob Daniels, Jim Gunn, Kathy Alcorn, Shelley Lane and Sharon Gunn who have worked to make the association office an efficient and supportive organization during my year as President. I want to wish good luck to incoming President, Clive MacKeen, and I am sure that by leaning on the association's staff for support, as most of us have in the past, his year will be as enjoyable as mine was.

Last, but not least, I want to express my sincere thanks to the members from Cape Breton who so graciously offered to host the convention this year in Baddeck. When Athol Grant approached me two years ago in Wolfville with the idea of having my convention in Cape Breton, I thought of the two conventions I had attended previously on the Island, and I feel confident that, with the dedicated committee they have assembled, a good time will be had by all. I just hope he remembers to leave me a little time to hold a business meeting during the social See you in Baddeck on November 17th, 18th and 19th.

CONVENTION '94

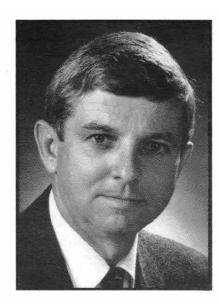
NOTICE OF ANNUAL MEETING

Pursuant to By-law 5.5, you are hereby given notice that the 44th annual meeting of the Association of Nova Scotia Land Surveyors will be held at the Inverary Inn, Baddeck, Nova Scotia, beginning Friday, November 18, 1994 at 9:30 am and continuing on Saturday, November 19, 1994.

Robert A. Daniels, Secretary Association of Nova Scotia Land Surveyors

EXECUTIVE DIRECTOR'S REPORT

Robert A. Daniels, NSLS, CLS



Five months have passed since I became the Executive Director for our Association. They have been five busy months with no sign of a slow down of things to do. The following is a summary of the activities that have been dealt with at the office:

- 1. The Survey Review Department has made the move to Ingonish, Cape Breton. The office opened for business as of September 1, 1994. Council approved the move for a two year term and signed an agreement with Jim Gunn for that time. The details of the agreement are included in this issue of *The Nova Scotian Surveyor*.
- 2. The Nova Scotia Board of Examiners held their semi-annual meeting in August. There are presently thirteen student members, several of whom are actively perusing their Nova Scotia Land Surveyors commission.

- 3. In August, I travelled to New Brunswick to meet with the New Brunswick Department of Transportation to obtain information on their contracting out procedures and the role played by New Brunswick Land Surveyors in the department. On the same trip, I also met with Ralph Brown, Director of Professional Affairs for the New Brunswick Association of Land Surveyors. The purpose of this meeting was to gain information on the survey plan database that the New Brunswick Association currently has in place and to be updated on the status of the SINET project (Surveyors Information Network), which is intended to be a complete GIS database of all of the survey information prepared by New Brunswick Land Survevors. The purpose of SINET is to make information available to the surveyors and other interested parties for a fee and ensure that the surveyors are in control of their data.
- 4. Mr Ken Robb, NSLS, requested financial assistance from the association to appeal the decision of the Nova Scotia Utility and Review Board. The Nova Scotia Utility and Review Board upheld a decision of a development officer to withhold approval of a subdivision plan due to possible infilling along the shoreline of the property. After much discussion by council and an opinion by our solicitor, it was decided that this was not the best test case to take to the Nova Scotia

- Supreme Court Appeal Division. However, the decision of the Nova Scotia Utilities and Review Board did state that the decision of the development officer to determine if there were, in fact, infilled lands and that they belonged to the crown, was probably beyond a Development Officer's jurisdiction. The decision went on to state that the issue as to whether or not infilling has occurred is a matter of professional difference between two registered land surveyors, and the Board does not believe that it is within its jurisdiction to determine which of these two professionals may have made the correct decision.
- 5. As a result of Mr. Robb's dealings with the development officer and concerns of a similar nature submitted by other members across the province, a brief was prepared and sent to the Minister of the Department of Justice and the Minister of the Department of Municipal Affairs. The essence of the brief was to express concern that development officers were exceeding their mandate and questioning boundary decisions made by Nova Scotia Land Surveyors without apparent valid reasons. To the present time, there have been meetings between the two departments to discuss our concerns.
- As everyone should be aware by now, the fiscal year of the association will change from Oc-

- tober 1 to January 1. This will cause us to have a fifteen month year extending from October 1, 1994 to January 1, 1995. The upcoming budget and invoices for dues and certificates of authorization all reflect this change.
- 7. The fine effort put forward by Jim Gunn and Ken Robb, as well as other members across the province with respect to the new Environment Act, has caused our recommendations with respect to the definition of water courses and vesting in the crown to be included in the final report to government. This is an excellent example of how every member can make a difference in what happens in Nova Scotia if they put forth the effort.
- 8. On September 7, 1994, I assisted Dr. David Woolnough and Grant McBurney, NSLS with the interview process for the selection of a candidate to be hired as an instructor for the survey program at COGS.
- 9. An Executive meeting was held in New Glasgow on September 8, 1994 prior to the Zone 4 meeting. At present, I am attending all of the zone meetings at the invitation of the councillors. I was invited to attend the fall meeting of the Massachusetts Association of Land Surveyors and Civil Engineers at Cape Cod, September 23 & 24, 1994. This meeting was attended at my own expense, as Gordon Isaacs attended as the official representative of our association.
- 10. At the present time there are two items being given priority by the association. The new definition of the Practice of Professional Engineering that is being considered by APENS and the proposed changes to the regulations for Aquaculture Leases being prepared by the Department of Fisheries. Both of these issues may have a negative impact on the survey profession. Input from the members is welcome on either of these issues or any other issue.

Our association is only as strong as the members within it. Involvement by all members on any issue is important. Remember, "THINKING WILL DETERMINE WHAT YOU WANT, ACTION WILL DETERMINE WHAT YOU GET".



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SRD MANAGER'S REPORT

by Jim Gunn, NSLS, CLS



1993-94 was a busy year for SRD. We processed 4,370 plans in total. This compares with 3,874 the previous year and 3,482 the year before that. Two major events took place in Survey Review Department in 1994. Firstly, we introduced a new billing system and secondly, we relocated the SRD office to Cape Breton.

There were a number of reasons why SRD felt it was necessary to introduce a new billing system.

1) We thought it was unreasonable to make our members pay for a service before it was rendered. Now, members only pay for stickers after they have been used. Hopefully, the member will have already recovered the cost of the sticker from his client before having to pay SRD for it.

- 2) Under the old system, members would experience a time delay when ordering stickers. They had to forward their payment to the association before stickers were issued. This procedure was especially inconvenient for members working outside metro.
- 3) Under the old system, many members were inclined to purchase their stickers in small quantities so as not to tie up too much money in inventory. The truth is, it takes no more time for SRD to process an order of 50 stickers than it does for 5 stickers. By sending out stickers in batches of 50, SRD staff can use their time more efficiently. This has been a major contributing factor to a significant reduction in clerical expenses.
- 4) The old system was not 100% effective. Once a member purchased a sticker, SRD had little reason to track it until it was returned on a plan. For the four years prior to the introduction of our new system, SRD had received only 83% overall return of its stickers. Now however, each sticker is tracked until it is returned on a plan.
- 5) Our new system has created a much needed communication link with our members. Now when SRD receives plans, the member receives an invoice. If there are no plans received during a given month, the member receives a reminder notice. Either way, members are constantly reminded of their duty to SRD.

As for the SRD move to Cape Breton, the idea came after two taxing years of extra duty for the SRD Manager. He was ready to pack it in and return to private practice in Cape Breton. However, a resolution at the 1993 annual meeting prompted Council to consider various options. After some lengthy negotiations, a compromise was reached whereby the SRD operation would be relocated to Cape Breton and the manager would stay on. The details of this agreement are found in "The Terms of Reference for the Relocation of SRD to Ingonish, Cape Breton" available at either association office.

SRD's new home is in a small professional building at 36243 Cabot Trail in the community of Ingonish, Victoria County. SRD occupies a comfortable 300 square foot ground level office at slightly less cost than the previous Dartmouth location.

The move will insure a quick recovery for SRD. During the past two years while the SRD Manager's time was split between the Executive Director's job, the quality of plans diminished considerably. The number of plans receiving full marks has dropped to 54% from a previous high of 70%. SRD is working hard to reverse this trend and regain the success it was beginning to enjoy before the crunch. Our goal for the coming year is to raise the quality of plans and lower the cost of stickers.



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CANDIDATE FOR PRESIDENT CLIVE S. MACKEEN, NSLS



Clive S. MacKeen, NSLS, was born in Oshawa, Ontario in 1954. He moved to Nova Scotia and attended school in Guysborough County. He graduated from St. Mary's Rural High in 1973. Clive attended the Nova Scotia Land Survey Institute and received a Diploma in Land Surveying in 1976.

Clive was employed with C.J. MacLellan and Associates from 1976 - 1979. Since Clive received his commission in 1979, he has been a partner in the firm of Taylor and MacKeen Surveys Limited.

He served on Council from 1990 to 1992, has been Chairman of the Surveyors Real Property Committee since January 1993 and has served as our Association's Vice-president since November 1993.

Clive, his wife, Margo, and children, Tania, Trent, Tyson and Tyler, reside in Aspen, Guysborough County.

CANDIDATE FOR VICE-PRESIDENT PHILIP M. MILO, NSLS, CLS, B.Sc.



Phil Milo graduated from the Nova Scotia Land Survey School in 1957, under the late Major J.A.H. Church and later from Acadia University.

He worked on the Annapolis River Dam, site of the present Tidal Power station, and went on to highway construction and Crown Land surveying. Phil moved to Halifax to engage in legal surveys, and was involved with the military installation at Mill Cove, and the original layout of Burnside Industrial Park in Dartmouth.

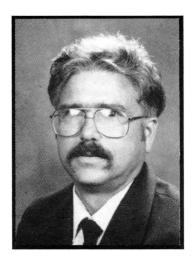
Phil and his wife, Liz, went to Lawrencetown in 1963, when he began teaching at the College of Geographic Sciences. He served on the Village Commission of Lawrencetown and was twice Chairman. He was a Councillor in the Association of NS Land Surveyors from 1977 to 1979. Phil is on the Management Board of the Annapolis Valley Exhibition. He also serves on the Wilmot Parish Council and Church Council for St. Andrew's Church in Lawrencetown.

Phil retired from COGS in June, 1994, and is now teaching Engineering Surveying at TUNS. The Milos reside in Lawrencetown. They have three children, Valerie, Hilary and Travers.

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THE NOVA SCOTIAN SURVEYOR FALL 1994

CANDIDATE FOR COUNCILLOR ZONE 1 ARTHUR BACKMAN, NSLS



Arthur Backman graduated from the Nova Scotia Land Survey Institute in 1975, and received his certificate of qualification in 1977. He worked for D.W. Joudrey & Associates in 1975-76, for the City of Halifax from 1976 - 1981 and has been in private practice in Chester since 1981.

Arthur resides in Chester Basin with his wife, Janet, and youngest daughter, Kristal. Their other children, Nicole and Brian, live in Shelburne where Brian is working as a production assistant on the movie *The Scarlet Letter*.

Arthur is a Charter Member of the Chester Basin Volunteer Fire Department, and enjoys sailing and recreational hockey.

Arthur feels that we need a stronger professional attitude and a Council that works to achieve this.

CANDIDATE FOR COUNCILLOR ZONE 4 JOHN SUTHERLAND, NSLS



John Sutherland was born in Truro, NS in 1948. He graduated from the Nova Scotia Land Survey Institute in 1971 and qualified as a Nova Scotia Land Surveyor in 1973.

In 1971-72, John worked for the Department of Lands and Forests; in 1972-73, he worked for Frank Longstaff Surveying Limited; from 1973-76, John was employed at Servant, Dunbrack, McKenzie and MacDonald Ltd.; and he has been self-employed since 1977.

John lives in New Glasgow and enjoys hunting and fishing.

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CANDIDATE FOR COUNCILLOR ZONE 5 GEORGE PODETZ, NSLS



George Podetz, NSLS, was born in Sydney Mines Nova Scotia, in 1956, and graduated from Sydney Mines High School in 1974. He was enrolled in the Civil Engineering Technology program at the UCCB Tech Campus from 1974 - 1976. George graduated from the Nova Scotia Land Survey Institute in 1979 with a Diploma in Land Surveying.

George worked for the NS Department of Highways in 1978 and has been employed with the NS Dept of Natural Resources - Surveys Division from 1979 to the present time. He was commissioned as a Nova Scotia Land Surveyor in 1984.

George resides in Sydney Mines with his wife, Debbie, and their daughters, Nicole, Stacy, Cheryl and Maria.

CANDIDATE FOR COUNCILLOR ZONE 6 PAUL ZINCK, NSLS



L. Paul Zinck, NSLS, graduated from the Nova Scotia Land Survey Institute in 1971, and received his Nova Scotia Land Surveyor's commission in 1975.

From 1971 to 1973, Paul was employed with the Department of Lands and Forests - Control Surveys until the Council of Maritime Premiers formed LRIS. Paul stayed with LRIS for a short period before joining the firm of Wallace-Macdonald Surveys Ltd., where he articled with Ivan Macdonald, NSLS. Since 1976, Paul has been employed with the City of Dartmouth Engineering Department.

Paul, his wife, Donna, and daughter, Sarah, reside in Fall River where Paul was a volunteer firefighter with the LWF Fire Department for fourteen years.

CANDIDATE FOR COUNCILLOR ZONE 6 GARRY PARKER, P.ENG, NSLS

No Photo Available

Garry Parker was born in 1947. He graduated from Acadia University in 1968 with a diploma in Applied Science, and from the Technical University of Nova Scotia in 1970 with a Bachelor of Engineering (Industrial).

Garry articled with Frank Longstaff and Edward MacDonald and received his commission as a Nova Scotia Land Surveyor in 1977.

He was a member of the Barristers/Surveyors Liaison Committee in 1989 and 1990 and is currently a member of the Private Practice Committee.

Garry is in private practice and owns Eastech Consultants Ltd. He lives in Gaetz Brook, Halifax County.

SURVEYING: An Evolving Science by Robert W. Foster, PE, PLS

Reprinted from the Colorado "Side Shots" February 1994

The professors of this science are honored with a more earnest attention than falls to the lot of any other philosophers. Arithmetic, theoretical geometry, astronomy, and music are discoursed upon to listless audiences, sometimes to empty benches. But the land surveyor is like a judge; the deserted fields become his forum, crowded with eager spectators. You would fancy him a madman when you see him walking along the most devious paths. But in truth he is seeking for the traces of lost facts in rough woods and thickets. He walks not as other men walk. His path is the book from which he reads; he shows what he is saying; he proves what he hath learned; by his steps he divides the rights of hostile claimants; and like a mighty river he takes away the fields of one side to deposit them on the other.

- Cassiodonis, AD 5406

Surveying is indeed an ancient science. For as long as mankind has needed to replace flood-obliterated land marks, or find his position on the face of the earth, or translate ideas of the designer to dimensions on the ground for the builders, there has been an exercise of the art and science of surveying.

The Great Pyramid of Khufu at El Gizeh was built in 2600 BC. So well did the Egyptian surveyor ply his craft, the southeast and northwest corners of the 13-acre base of the pyramid measure within four one-hundreds of a foot of each other, in elevation. The base is a nearly perfect orientation to the cardinal directions.

An example of the early efforts of surveyors in positioning, rather than retracement or construction layout, can be found in our own American history. In 1763, Charles Mason and Jeremiah Dixon, while laying out the famous line that bears their name, established a 12-mile radius circle around New Castle,

Continued on Page 34

COMMITTEE REPORTS

SURVEY REVIEW DEPARTMENT ADVISORY COMMITTEE

E.J. (Ted) Webber (C) Grant McBurney Dennis Prendergast

The activities of this committee were carried out by telephone, letter or fax in response to requests from James Gunn, Manager of the Survey Review Department. These requests dealt with:

- 1. Sticker pricing and invoicing procedures.
- 2. Statistical information by zone.
- 3. Deferred monumentation.

There were no inquiries or requests by the general membership. Members are encouraged to contact the Advisory Committee when there is a concern regarding the practices of the Survey Review Department. I would like to thank Grant McBurney and Dennis Prendergast for their efforts, comments and interest during the past year.

E.J. Webber, NSLS Chairman

BY-LAWS COMMITTEE

The Committee met only once this year. Discussion was

directed at resolving the designation for the retired category. After some deliberations, the consensus was that the Land Survevors Act does not permit persons other than full members or life members to use the designation "Nova Scotia Land Surveyor" or "NSLS". However, the Act does state that by-laws may be passed providing for the appointment and privileges of other membership categories. believed an immediate solution was to amend By-Law 13 by adding another section which would thereby permit a retired member to use a designation. such as "Nova Scotia Land Surveyor, Ret." ("NSLS, Ret.").

This concept, and a request for other ideas, was presented to the membership by mail. Both replies received were in favour of the above. Thus, the Committee will be preparing a motion to revise By-Law 13 for presentation to the 1994 Annual Meeting for the membership's consideration.

In our opinion, it would require a change in the Act for a retired member to use NSLS. The membership may want to consider this in the future. The By-Laws Committee will present the Statutes Committee with some observations on making such a change.

At the request of a member, the Committee also reviewed By-Law 12 (admission of Life Members). It was believed the requirements for this category are quite stringent and we could not recommend any changes.

Members of the committee are Peter Lohnes, Glenn Crews and Gerry Bourbonniere (C).

Gerry Bourbonniere, NSLS Chairman

ATLANTIC PROVINCES BOARD OF EXAMINERS FOR LAND SURVEYORS

The representatives of the ANSLS on the APBELS are: John MacInnis, NSLS (C) Grant McBurney, P.Eng., NSLS Paul Slaunwhite, P.Eng., NSLS

The APBELS met on January 20, 1994 in conjunction with the Association of New Brunswick Land Surveyors' annual meeting in Moncton, NB, with John MacInnis and Paul Slaunwhite attending. Some of the issues dealt with by the Board included: syllabus review, mandatory continuing education and interpretations on accreditation and credits among the various Boards of Examiners.

Dr. Wolfgang Faig (Registrar, APBELS) attended a meeting of the CCLS Examination Coordinating Committee on February 8, 1994 in Ottawa. At that meeting, the CCLS Board of Directors approved a proposal to revisit the accreditation policy.

An article, "APBELS After 15 Years", by W. Faig, J. Doig and A. Hamilton has been accepted for publication in *Focus*, and will appear in the Fall edition of this CCLS journal.

APBELS activity also included five new candidates being registered with the Board, and five candidates receiving certificates. No examinations were written this year.

Paul Slaunwhite, P.Eng., NSLS Committee Member

CONTINUING EDUCATION COMMITTEE

The Continuing Education Committee was relatively inactive for most of this past year. The committee is co-sponsor of this year's seminar on GPS scheduled for November 17th as part of the annual convention. After the convention, the committee hopes to put on some information sessions for those members interested in writing Canada Lands Surveyor examinations. More information will be available at the convention.

Lester Tingley, NSLS Chairman

COMPLAINTS COMMITTEE

The Complaints Committee has held regular meetings once a month over the past year.

- Individually and as small groups we have met at other

- times with complainants and surveyors.
- Ten new files were opened this past year, which formed part of eighteen active files.
- Presently, there are eleven active files.
- None of the complaints have been referred to the Discipline Committee.
- The new complaints were laid by the general public and the Land Surveyors' Association.
- The complaints laid related to boundary problems, incomplete research, plan preparation, communication and failure to respond/react to requests of the Survey Review Department.

I would like to thank all the committee members for their dedication, support and time in attending meetings and carrying out the necessary investigations and the preparation of reports and letters.

The Committee for 1993-94 consisted of Carl Hartlen, David Hiltz, Ted Webber, Allan Owen and John MacInnis.

John C. MacInnis, NSLS Chairman

BOARD OF EXAMINERS

The Board of Examiners held two meetings during the current year.

 Two new members qualified as Nova Scotia Land Surveyors - David Attwood,

- NSLS # 612 and Kevin Lombard, NSLS # 613.
- There are twelve active student members

I would like to thank the members of the Board for their dedication and attendance at the meetings.

The board for the past year consisted of J. Forbes Thompson, James Chisholm, Chris Masland, Bruce Gillis, QC - Barristers' representative, David Cushing, P.Eng., NSLS - Engineers' representative, K.P. AuCoin - representing the Minister of Natural Resources and John C. MacInnis, Chairman.

John C. MacInnis, NSLS Chairman

ACT ENFORCEMENT COMMITTEE

The Act Enforcement Committee was originally formed to deal with three issues in particular:

- 1. The fact that plans prepared by the Department of Transportation are not always signed by a Nova Scotia Land Surveyor. This issue has been referred to the newlyformed Private Practice Committee.
- 2. The continued use of Instrument of Subdivision.
- Boundary line maintenance and renewal by non-surveyors.

Earlier this year, our position paper on the Instrument of Subdivision was presented to a workshop organized by TUNS for planners and development people. We are always available to make similar presentations as opportunities arise. There has been no recent discussion on the issue of boundary line renewal. All in all, this committee has been relatively quiet.

James Gunn, NSLS, CLS Chairman

CCLS DIRECTOR'S REPORT

As reported in the last issue of "The Nova Scotian Surveyor", the results of the annual meeting held in St. John's, Newfoundland were very positive. All of the controversial issues dealing with election of officers, recommendations of the Strategic Plan and by-laws were resolved to the satisfaction of all provinces. The Quebec association is still the only province that is not a member of CCLS, however, CCLS is keeping them informed of the various activities.

Dave Clarke of Nova Scotia is the new President of CCLS. With his background in survey associations, he will be a great asset to the survey profession across Canada.

The following is a summary of the projects that are being undertaken by CCLS. Each project was approved by at least 75% of the members and is national in scope:

- 1. Public Relations A survey will be carried out to determine what is being done across Canada with respect to PR activities. A report will be prepared outlining the results of the information compiled.
- Standards for Non-Cadastral Surveys - This will primarily be done through Ontario with input from the other provinces. The purpose is to determine existing standards and recommend new standards where necessary.
- 3. Provincial Legislation Copies of each province's act,
 regulations and by-laws and
 other information that deals
 with self-governing bodies
 will be compiled into "packages" and distributed to each
 province for their reference
 and use.
- 4. Standard Contracts for Surveyors Various types of contracts used by surveyors will be compiled and distributed to each association to be used as samples and reference by surveyors who wish to use contracts in their daily practice.
- 5. Co-operation within the Survey Profession A study will be undertaken to determine how the various national survey associations can work together for the betterment of the survey profession.
- 6. The Expanded Profession CCLS will form a committee to review and propose amendments to the by-laws to provide for an expanded profes-

- sion within the member associations of CCLS.
- Environmental Issues Information will be gathered on environmental issues that affect surveyors in each province. A report will recommend future action on this issue.
- 8. Title Insurance A committee will be formed to gather information on title insurance across Canada, and develop approaches to deal with this issue.
- 9. International Representation As CCLS is regarded as the national body that represents surveyors in Canada, there are requests from international survey organizations for information and cooperation. Recommendations for cooperating with other international organizations will be prepared.

The fall meeting of the CCLS directors will be held on October 29 & 30, 1994 by teleconference. This method was used last year and found to be very cost effective and efficient.

Robert A. Daniels, NSLS, CLS CCLS Director, Nova Scotia

BUILDING COMMITTEE

It was moved "that Council investigate the possibility of setting up a separate legal entity to be the Building Committee of the Association with the mandate of owning and managing any Association real estate and the

income associated therewith and make a recommendation to our next Annual Meeting including legislation, if necessary."

Council Action

Council set upon the following Building Committee to pursue the concept of owning a building and to make a recommendation to Council:

Edward Rice, Chairman William Chambers Marcellin Chiasson

Action by Building Committee

A questionnaire was circulated to our membership in 1993 with 37 members (approximately 14%) responding. The recommendations of the Committee are compiled from the results of the questionnaire as well as the experience and familiarity of the members with the affairs of the Association. Any change in circumstances within the association (ie. moving of Survey Review Department to Cape Breton) could change the recommendations of the Committee.

Findings of the Building Committee Results from the Ouestionnaire

- 1. ANSLS own the building
- 2. Split on location (Metro vs. other)
- 3. Used building oversized for our needs
- 4. a) Mortgage held rent the excess space
 - b) Have fund raising ventures

- 5. Less than 10% of members have made contact with the Association office in person in the last year. Most communicate by phone or mail
- 6. 44% of the members will be leaving the association in the next 20 years
- 7. Very interested in pursuing concept of shared facilities with other professional groups.

Findings from Discussions

- 8. If the various associations of land surveyors in the Atlantic Provinces combine, the Nova Scotia Association would be only part of this group. However, the number of surveyors will be the greatest in Nova Scotia, thus it follows that the office should be in the province.
- Other locations were discussed at length and did not meet the test to scale to provide a self-supporting building.
- It was made abundantly clear that the membership dues were <u>not</u> to be used to finance or support this endeayour.
- 11. It is fair that the Association initially pay rent to the society.
- 12. Other groups have their buildings held independent from their organizations to protect themselves. The Association would be divorced from liabilities as-

sociated with ownership of a building (taxes, insurance, water, etc).

Why We Need a Building

The membership of ANSLS is reducing and there appears to be a feeling within the Association that we must invest in the future, and the best way to do that is to invest in a building.

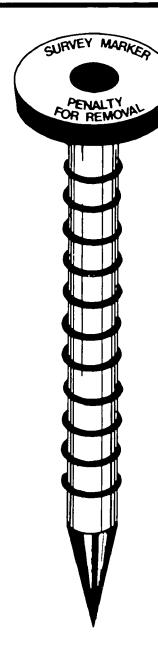
Why now? Interest rates are relatively low, however, they may have bottomed out and could rise considerably in the next couple of years.

There seems to be a general feeling that we need to bring some stability to the profession by owning our own building.

Recommendation of the Committee

- 1. The association must continue a visible service for the public and the members of the association.
- 2. The association should form a separate non-profit corporate body under the Societies Act to which all members will belong and said corporate body (society) would own the title to the building.
- 3. The executive officers of the association will be the officers of the new corporate body (society), with the executive director of the association being the building manager.
- 4. The new corporate body should acquire a building

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- 5. The building should be of such size and capacity that it have the capabilities of being self-supporting.
- 6. The building be located in the Metro area, for visibility, accessibility and market opportunities.
- 7. The financing be arranged in such a manner: (a) 75% be mortgaged; (b) 25% down payment acquired by fund raisers, shares or grants, endowments, etc.
- 8. The association council (if they so choose to adopt this report) should appoint a committee comprised of members from the Metro area to form a non-profit corporate body under the Societies Act to implement the recommendations of this report.

The Building Committee Edward Rice, NSLS (C) William Chambers, NSLS Marcellin Chiasson, NSLS

LIMS LIAISON COMMITTEE

This committee resulted from a request from LIMS (Land Information Management Service) for copies of survey plans submitted to the Survey Review Department. SRD informed LIMS that authorization to release plans would have to come from each individual member. It was agreed by Council that caution should be

exercised when releasing survey plans to the government, as this would prevent surveyors from controlling the destiny of their survey plans.

A meeting was held between Tom Foster of LIMS and Bob Daniels to discuss the concerns raised by members at zone meetings. These concerns are as follows:

- 1. Confidentiality of survey plans and information.
- 2. Extending the surveyor's liability beyond the original client to third party users of the survey information.
- 3. Unlimited use of the survey plans once in the possession of the government.
- 4. Government selling the surveyor's information for profit, with the surveyor not benefitting from the transaction.

A letter outlining the above concerns was sent to LIMS suggesting that a formal agreement be established. This agreement would be between either the Association of Nova Scotia Land Surveyors or individual land surveyors and the Department of Municipal Affairs. There has been no response to this letter.

At the present time, some surveyors have authorized the SRD to supply their plans to LIMS.

If the Association is successful in developing a plan database that is available to all of our members, then all of the plan information will be under the control, direction and management of Nova Scotia Land Surveyors.

Robert A. Daniels, NSLS, CLS

PRIVATE PRACTICE COMMITTEE

The Private Practice Committee resulted from an interest by members in private practice to have issues which affect their day-to-day business addressed. The members of the committee are:

Ken Robb
Dennis Prendergast
Derik DeWolfe
Garry Parker
Bob Daniels

Although many issues are of interest to this committee, the bulk of the effort has been focused on gathering information to prepare a presentation to the Nova Scotia Department of Transportation and Communications. It is the intent of the committee to prepare a brief to deal with two issues of concern to land surveyors.

- 1. Convince the Dept. Transportation & Communications that all of the acquisition plans should be prepared in accordance with the regulations made under the Land Surveyors Act and signed by a Nova Scotia Land Surveyor, not an engineer. The department has several land surveyors on staff who could certify the legal plans and prepare descriptions required.
- 2. Convince the department that they should contract more of the survey work to

1

the private sector on an equitable and regional basis. This should include legal, topographic and "as built" surveys. The contracting of projects should not be based solely on low bid, but should be distributed equally to all surveyors in the province. The land surveyors on staff would issue, monitor and manage the contracts with each private surveyor. They would ensure that all of the specifications are met and that the department was receiving quality survey services for the money being spent.

At the present time, the committee has compiled a series of plans and other relevant information to assist in the presentation of a sound rationale to try and create change in the way the Nova Scotia Department of Transportation and Communications does business with the professional land surveyors in Nova Scotia.

Robert A. Daniels, NSLS, CLS

DISCIPLINE COMMITTEE

There have been no problems and no action.

Walter Rayworth, NSLS Chairman

COUNCIL RESTRUCTURING COMMITTEE

This is a new committee formed in late 1993 to do further study on the matter of downsizing Council as a result of a tabled motion at the 1993 annual meeting.

The committee members are:
Stewart MacPhee (C)
Allan Owen
Bob Daniels
Derik DeWolfe

This is an ad hoc committee formed to evaluate the effectiveness of the association Council in its present form, consider the alternative structures for Council and make recommendations to Council prior to the next annual meeting.

To date, the committee has held one meeting at the January workshop in Truro. Most of the discussion at this meeting centered around the content of the motion which was put forward at the last annual meeting, which proposed a downsizing of Council from the present 10 councillors to a possible 5 people. This motion was put forward as a result of a feeling by some of the membership that there are more people on Council than necessary to do the job, and also that there is a substantial cost saving to be realized by the association by eliminating some council positions.

The consensus of the members present at this committee meeting was that the potential savings in cost to the association by downsizing was not an important factor, since this only involves members' expenses.

Based upon the attendance at zone meetings by the committee members, the situation seems to be that some zones are quite prepared to go along with some reduction in size, while others are reluctant to see their representation decreased. It has been suggested that this matter may have to be decided at each zone level.

The suggestion has been made that: Zones 1 and 2 would be willing to merge, to form one new zone with 1 councillor; that Zone 5 would be willing to reduce their representation from 2 councillors to 1; that Zone 6 would be willing to reduce their representation from 4 councillors to 2. Zone 3 has expressed a willingness to merge with Zone 4 to create one new zone with 1 councillor. Zone 4 is reluctant to change from the present structure as it affects their zone.

Several other points were raised:

- 1. Statistics be compiled and provided to the zones for response.
- 2. Downsizing may eliminate some of the deadwood, and attract a better candidate to offer for council
- 3. Smaller numbers will work more efficiently and be less likely to get bogged down due to conflicting opinions.
- 4. Geographical representation should be maintained.
- Elimination of zones altogether, and elect all councillors at large.
- 6. Redefine zone boundaries to ensure more even numerical representation by each councillor.



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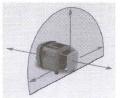
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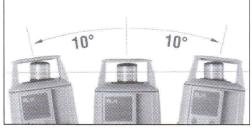
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St. John's • Halifax • Saint John • Moncton • Quebec • Montreal • Ottawa • Toronto • Sudbury Windsor • Hamilton • London • Winnipeg • Calgary • Saskatoon • Edmonton • Kamloops • Vancouver • Victoria In addition to one meeting, the committee has also circulated information to councillors in the zones not represented on the committee for their comments. The feedback from these inquiries has been limited. However, from some of the comments received, I conclude that there is not a clear consensus in any of the zones to make this change.

Some of the points raised through discussion included a concern that a smaller council would not adequately represent the issues in the diverse areas of the province (ie. rural areas as opposed to Metro). The demographics do not make it practical to divide the province geographically. The size of the proposed new zones may discourage attendance at zone meetings.

As a result of some of the suggestions made, this committee is recommending to Council that the matter of downsizing addressed on a zone level, with the following demographic statistics being provided for the members' consideration. Although the committee concluded at its meeting in January that there is no substantial saving to be realized by having a smaller council, there have been some new developments in the recent past that may affect this. The moving of the Survey Review Department out of the Metro area may allow us to have a considerably smaller office, and as a result, the cost savings in rent could be sub-It is beyond the stantial. resources of this committee to establish what those savings would be, however some figures or projections may be available.

The lack of response from most areas suggests to me that this matter is not considered to be a pressing issue at this time. We remain receptive to any comments from the membership.

Demographic Statistics

Ratio of Representatives to Members

	Existing 6 Zones				
Zone 2	# of Reps.	per # of Mem			
1	1	27			
2	1	32			
3	1	34			
4	1	29			
5	l	19			
6	1	24			

	Proposed 4 Zones				
Zone 2	# of Reps. per	# of Mem			
1 & 2	1	59			
3 & 4	1	63			
5	1	38			
6	1	48			

S.E. MacPhee, NSLS Chairman

PUBLIC RELATIONS COMMITTEE

The committee has been relatively inactive this year. Ray Pottier made a presentation on land surveying to the Century 21 First-Time Home Buyers seminar in Yarmouth.

At present, only one nomination for Surveyor of the Year has been received.

Raymond Pottier, NSLS Chairman

INSURANCE COMMITTEE

The Insurance Committee for the 1993-94 term is comprised of the following members:

Paul Slaunwhite, P.Eng., NSLS (C)

Stewart MacPhee, NSLS Robert Feetham, NSLS

At the Truro workshop held in January, the Insurance Committee had discussions on may issues pertaining to Liability Insurance. The major topics were:

- 1. Policy Issues
 - Prior Acts
 - Adjusters
 - Retirement Insurance
 - Deductible Splitting
- 2. Partial Self-Funded Insurance
 - Statistics
 - Cost
 - Feasibility
 - Administration

Recently, the CCLS Professional Liability Insurance Committee, of which Jim Gunn, NSLS, CLS, is our representative, and Encon Insurance Managers Inc. have negotiated several new coverage enhancements. These include, but are not limited to: deductible splitting, estate coverage, retirement coverage, improved claim handling and loss control seminars.

Also negotiated was a commitment from Encon for the CCLS to eventually share in the profits from the current program based on certain conditions. This can lead to the CCLS becoming a full participant and pursuing a partially self-funded professional liability insurance program.

The ANSLS Insurance Committee continues to liaise with Jim Gunn to keep abreast of events and offer input.

On behalf of the Insurance Committee, I would like to thank Jim for his efforts and assistance, and once again invite the members of the ANSLS to use the Insurance Committee as a resource for their concerns and needs.

Paul Slaunwhite, P.Eng., NSLS Chairman

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FROM THE FIELDBOOK

ENGINEERS' ACT

APENS is redoing their act, part of which is the definition of the practice of professional engineering. The following is the current draft version of that definition:

"The Practice of Professional Engineering means the carrying on of any act of planning, investigating, designing, commissioning, composing, evaluating, advising, reporting, directing or supervising, or managing any of the foregoing that requires the application of engineering principles, and that concerns the safeguarding of life, health, property, economic interests, the public welfare or the environment, and includes:

- a) consultations or reports, designing, making specifications, supervising the construction, maintenance or operation of inventories or appraisals on: machinery, structures, works, plants, mines, mineral deposits, processes, transportation systems and communication systems, or any part thereof; and
- b) any act of agricultural and bio-resource, biomedical, chemical, civil, computer, electrical, environmental, forest, geological, geophysical, industrial, mechanical, metallurgical, mining, naval and marine, petroleum, structural and survey engineering; and
- c) other disciplines of engineering that may be designated by Council and for which university engineering programs have been accredited by the Canadian Accreditation Board, or other body which, in the opinion of Council, is equivalent."

If you have any comments concerning the foregoing, please fax them to the Association office.

HELP, PLEASE!

To all Surveyors:

My name is Veryle I. Lewis, a student surveyor, from Five Islands, NS. I am currently enrolled in my final year of Surveying Engineering at the University of New Brunswick, Fredericton Campus.

I need your help in researching a paper for SE 4521 (Survey Law), titled "The Necessity and Justification of Instruments of Subdivisions", and would appreciate any surveyors' input regarding the following: As a survey technician, working for Russell Atkinson & Associates of Southampton, NS (during summers), I have experienced various discrepancies between evidence in the field and the plans, as well as violations against the intended purpose of these surveys.

It would be very helpful to me if surveyors across the province with similar findings would write me sending relevant information to this matter as soon as possible (hopefully on or before November 20, 1994).

My address is: Lower Five Islands Colchester Co, NS B0M 1N0

Thanking you in advance.

SAMPLE CONTRACTS

David Green, CCLS director from New Brunswick, is seeking samples of contracts, work orders or similar items which could be included in a manual of sample contracts which is being compiled. A draft of the manual will be presented at the fall CCLS directors meeting.

If you have any information which you believe may be of help, please fax or mail it to:

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Surveying Sub-Aquatic Land for Aquaculture Purposes

by James D. Gunn, NSLS, CLS

Aquaculture is fast becoming one of the major players in the east coast fishery. Much of this activity takes place in tidal areas considered to be either federal or provincial Crown lands depending on who you talk to. Despite the ownership question, the authority over aquaculture has been given, by agreement, to the province and is detailed in a provincial statute known as the "Aquaculture Act and Regulations".

The object and purpose of this Act is to encourage and promote aquaculture by

- (a) providing an environment in which aquaculture may flourish;
- (b) establish the quality of water so that maximum aquaculture produce may be harvested; and
- (c) providing those persons engaged in aquaculture with a property right in the area licensed or leased and in the aquaculture produce being cultivated.

The Act defines Aquaculture as:

"The culture or husbandry of aquatic flora and fauna over which the Minister (of Fisheries) exercises control..."

Sub-aquatic land is defined in the Act as:

"The bed of a natural body of water including the solum of the sea." Furthermore, Section 3 of the Act states that "the granting of an aquaculture licence carries with it the exclusive right to possession of the water column ..."

Section 7 (2) of the Act states: No person shall carry on aquaculture on Crown land without an aquaculture licence and an aquaculture lease from the Minister.

This is where Land Surveyors may become involved. Section 11 (1) (a) of the Act states:

An aquaculture licence shall be granted for a specific geographic area which the Minister may require to be defined by a Nova Scotia Land Surveyor unless it is on private property or in an area where natural boundaries are clearly evident.

Furthermore, Section 5 of the Act requires: When an aquaculture area has been designated, the Minister shall cause a copy of the order in council and a plan and description of the area designated...to be registered in the registry of deeds for the county or district in which the areas are located. Leases issued by the Minister on Crown land must also be recorded in the Registry of Crown Land Records for the province.

Having said all that, one would naturally assume that a survey would precede most all other activity. However, this is not always the case. The Minister can waive the survey requirement for any particular application.

Regulation 5 under the Act states: "All aquaculture leased or licensed areas in marine or brackish waters outside a development area shall be surveyed by a licensed Nova Scotia Land Surveyor, at the applicant's expense, unless in the opinion of the Minister, acceptable natural boundaries or other nautical determinations exist sufficient to identify the area.

Recently, in an apparent effort to control the costs of aquaculture lease applications, the Minister seems to have formed the opinion that GPS coordinates, without the benefit of ground survey, are sufficient for aquaculture purposes.

Despite this fact, a survey may still be required prior to the project receiving financing, especially if public money is involved. As well, the Registrar of Crown Land Records may require detailed survey information to ensure that aquaculture leases do not conflict with privately owned waterlots. There are also a number of provincial interests such as game preserves and protected beaches to be considered.

The surveying of these sub-aquatic lands were originally supervised by staff of the Department of Natural Resources. Now, however, the Department of Fisheries has assumed this responsibility. The following standards were developed while still under the control of the Department of Natural Resources.

Surveying Standards for Aquaculture Leases on Crown Land

1. General

- 1.1 The issuing of an aquaculture lease involves the transfer of an interest of land therefore the surveying of the lease boundaries is considered to be a legal surveying activity that shall be carried out in accordance with the provisions of the Nova Scotia Land Surveyors Act and Regulations.
- 1.2 The survey plan and description shall be prepared in accordance with the regulations established under the ova Scotia Land Surveyors Act.

2. Set-out requirements

- 2.1 The set-out location for the anchors for the corner witness buoys shall be within 10 meters of the coordinates previously selected from the approved application.
- 2.2 Shore control stations shall be identified with a monument that would appear to others to be set by a Nova Scotia Land Surveyor (ie. survey marker, rock post etc.)
- 3. Position

- 3.1 Before ties are made from shore control stations to the corner buoy markers, the buoy lines must be pulled taut so that the point to be fixed is vertically over the corner anchor.
- 3.2 The position of each anchor used to mark the limits of the leased area shall be established from ties from each of two shore based control stations.
- 3.3 A minimum of two Nova Scotia Coordinate Monuments shall be used for referencing the lease boundaries.
- 3.4 Should the actual corners of the lease be located with the use of a short range electronic positioning system (ie. miniranger), then distance ties from each lease corner to three control stations would be required. In such cases, it is recommended that shore control stations be selected so that angles of less than 30° or greater than 150° will not be used in any trilateration calculations.
- 3.5 If undue hardship and expense can be shown to exist for tying to the Nova Scotia Coordinate system, then a series of at least three localized shore control points can be used to reference the lease boundaries. Astronomic bearings are requested in such situations and a tie from two end control points shall be shown to two different corners of the lease.
- 4. Boundary determination and plan preparation.
 - 4.1 The boundaries of the lease that are to be shown on

- the survey plan shall define the set-out location of the anchors marking the lease corners.
- 4.2 The bearings and distances of the lease boundaries shall be calculated from the coordinates that were determined independently for each corner of the lease.
- 4.3 Geographical coordinates (latitude and longitude) shall be given for each corner as well as the centre of the lease and if the lease boundaries are referenced to the Nova Scotia Coordinate system, Nova Scotia grid coordinates shall also be given.
- 4.4 The maximum radius of drift range for each corner witness buoy shall be shown on the plan adjacent to each corner.
- 4.5 At least three reference ties for each shore control point shall be shown in a detail sketch on the plan of survey.
- 4.6 There shall be a notation on the plan of survey indicating the distance of the lease from the mean low water mark or the minimum depth of water along the shoreward boundary of the lease as called for in section 4(1) of the regulations made pursuant to the Aquaculture Act, Statutes of Nova Scotia 1983, Chapter 2.
- 4.7 There shall be a notation on the plan of survey indicating the distance between existing leases as called for in section 3 of the regulations made pursuant to the Aquaculture Act, Statutes of Nova Scotia 1983, Chapter 2.

4.8 The coordinate datum used shall be indicated on the plan of survey ie. ATS 77, NAD 27 or other.

5. Return of Survey

- 5.1 Fourteen copies of the plan of survey and a good clear copy of all field notes (ie. for microfilming) shall be submitted initially as a return of survey to the Department of Fisheries for checking before the lease is issued. Once the plans have been examined and approved, lease documents will be issued.
- 5.2 A property (Schedule "A") description shall be submitted with the return of survey.

Revised: September 29, 1992 Regulations made pursuant to the Aquaculture Act

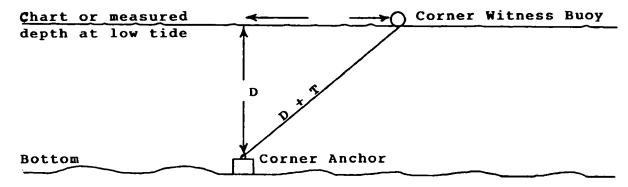
There are also a number of regulations made under the Aquaculture Act that must be considered in the course of a survey. They include:

- 2. The holder of an aquaculture license or lease shall
 - (a) Mark all corners of the license site with florescent orange buoys of a minimum of sixty centimetres in diameter.
 - (b) mark all corners of the leased bottom with a cement block or similar device weighing at least twenty-five kilograms; and
 - (c) display the license or lease number at one corner of the licensed or leased area on a stamped metal plate provided by the Department.
 - 2A Where the Minister is of the opinion that a specific geographic area with respect to which an aquaculture license or lease is granted is used for bottom culture only and that the aquaculture carried on pursuant to the license or lease does not occupy the water column of the geographic area in such a way as to constitute a hazard to navigation, the Minister may

- exempt the holder of the aquaculture license or lease from compliance with all or part of the provisions of Section 2.
- 3. There shall be a one hundred meter buffer zone between leased or licensed aquaculture sites.
- 4. (1) Aquaculture areas whether licensed or leased shall
 - (a) be located twenty-five meters from the mean low water level; or
 - (b) have a water depth of two meters on the shoreward boundary at low tide.
- 7. No aquaculture license or lease shall be approved for an area within a distance of one hundred fifty meters from a public wharf onshore facility.

Please Note: Appendix A showing drift range parameters follows below and a sample aquaculture lease plan is on the following page.

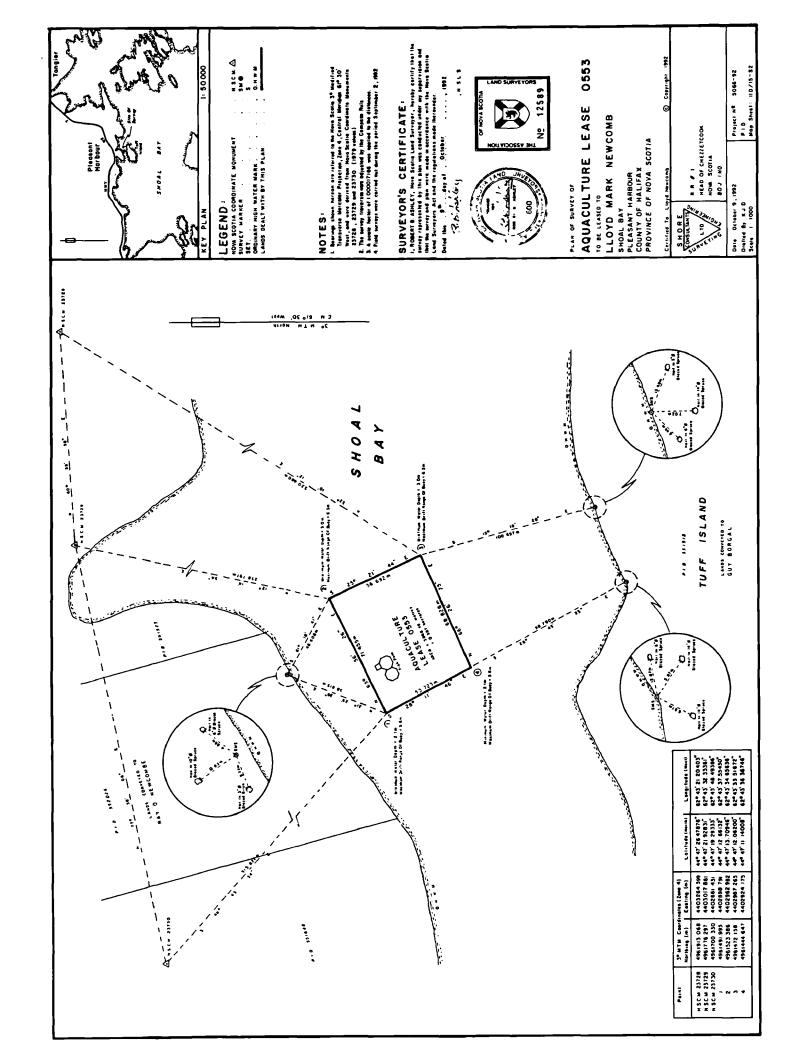
Appendix A - Drift Range Parameters



Corner witness buoys will have a drift range (R) as follows:

$$R = \sqrt{2DT + T^2}$$

where R = Drift Range; D = Depth of Water at Low Tide T = Distance between High and Low Tide + 3 meters



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Below is a sample of the questions which graduates of the Survey Diploma course at COGS had to answer this past year during their regular tests and assignments. Feel free to try them and, if you want, call us at COGS to have your answers checked and commented upon. (Of course, if you are with it you will fax your answers, and if you are really with it you will e-mail your answers and questions to us!!) We promise complete confidentiality, and we will not use you as an example to our students.

If you feel totally lost when reading the questions, you might like to try one of three approaches: 1) call the association executive director, and ask him if he could arrange for training courses in the areas of weakness (it's called "continuing education"); 2) hire a new graduate from COGS next year, either for the summer or permanently; or 3) take early retirement.

From time to time, as space and the editor permit, and assuming that there is some reaction to this sec-

tion, we will repeat the sampling. Send your answers to:

Dr. David Woolnough College of Geographic Sciences 50 Elliott Road Lawrencetown NS B0S 1M0 Tel: 902-584-2226

Fax: 902-584-7211

e-mail: woolno@cogs.ns.ca

Sample Questions

- 1. What do the following acronyms stand for:
 - a) PRN
 - b) MHz
 - c) WGS
 - d) SV
 - e) L1
- 2. The use of land can be controlled by the common law doctrine of nuisance. What is meant by "nuisance" in this context?

What two remedies may be available if a "nuisance" has been proven in court?

Give one example of land use control by contract.

3. Calculate the discharge of a river, given the following measurements made with a flow meter.

Distance across river from one bank (ft.)

0 20 40 60 80 100 120 140

Depth of bed (ft.)
0 3.5 6.0 7.5 9.0 7.5 4.5 0

Rate of flow at 0.6 depth (ft./sec.)
0 0.5 0.8 1.0 1.2 1.1 0.8 0

4. What is the legal subdivision immediately to the northwest of LSD13-6-1-20-W3?

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RESCUED FROM LIMBO

by James F. Doig, NSLS

Mandamus. An order of a superior court commanding an inferior tribunal, public official, corporation, etc. to carry out a public duty.

The Collins English Dictionary 1989

BACKGROUND

On 18 Jan 1993, Armoyan Group Ltd. applied to the Municipality of the County of Halifax for permission to subdivide a parcel of land at Morris Lake Estates, Cole Harbour. The County referred that application to the provincial Department of Transportation and to its own Department of Engineering and Works (DEW) for review and comment.

The Department of Transportation approved the application. The municipality's DEW, however, did not. As a result, there were meetings and exchanges of correspondence between Armoyan and DEW which produced several alterations to the original application.

Armoyan then requested the development officer for the County of Halifax to give final endorsement to the lots in the application in order for Armoyan to be able to register the subdivision plan at the Registry of Deeds and sell the lots. When such was not forthcoming, Armoyan asked the development officer by letter of 1 Mar 93 to act—one way or the other:

We request all lots now be approved or rejected. If the county wishes to approve only a portion of

lots please do so but we request written confirmation of the rejection of any lots. With this rejection, please advise in writing as to why this has occurred and which standard has not been adhered to. This information will be required to allow us to examine how and where we can next proceed.

The development officer did not do this. Rather, she wrote to say, "When a response is received from the Engineering Department, we will be in a position to recommend endorsement or rejection, as is applicable, of the requested lots." Further correspondence ensued and on 22 Mar 93 the Director of DEW wrote Armoyan and rejected the proposals:

Our requirements have evolved because of problems which have been experienced in the past, and we are being consistent in attempting to ensure that they don't reoccur in new development. We strongly disagree with your consultant's current submission, and reject the proposal as submitted. Your option is to appeal to the [Nova Scotia Utility and Review] Board, or to submit drawings which our staff can agree with.

The matter of an appeal was the nub of the difficulty.

PROBLEM

The Planning Act provides that an applicant may appeal to the Utility and Review Board "where a devel-

opment officer refuses to approve a plan or instrument of subdivision." Armoyan could not appeal the DEW position, however, because there had been no refusal on the part of the development officer. And the Board had previously ruled in another instance that since there had been no refusal by the development officer, the Board had no jurisdiction to hear the appeal.

There was more correspondence on the matter and revised survey and drainage plans were submitted to DEW. An internal memo on 9 Jul 93 from DEW to the development officer made it clear that DEW regarded final approval of the subdivision application as something separate and apart from the final endorsement of that approval on the plan. This—and the consequences that flowed from it—were made known to Armoyan by the development officer in a letter of 13 Jul 93:

The above noted subdivision application was given final approval on July 9, 1993.

Prior to endorsement of approval of this plan it will be necessary to meet [certain stated provisions of the subdivision by-law].

Precluded from making an appeal to the Review Board, Armoyan now applied to a judge of the Supreme Court "for an order in the nature of mandamus requiring the Development Officer to forthwith make a decision and exercise his (sic) jurisdiction, pursuant to Section 105(3) of the Planning Act, R.S.N.S., 1989, c. 346."

MANDAMUS

The matter at issue was the interpretation of s. 105 (3) of the Planning Act:

Within thirty days of receiving a completed application, the development officer shall

- (a) approve the plan or instrument if it
 - (i) conforms to the subdivision regulations or by-law, and
 - (ii) has received all approvals, if any, of departments or agencies of the Province or of the municipality or an agency thereof in addition to those set our in the regulations or bylaws, as the case may
- (b) notify the applicants in writing of all approvals received and, where necessary, departments or agencies of the Province which have not approved the plan or instrument as submitted, where such approval is required; or

be:

(c) notify the applicant in writing of his decision refusing to approve the plan or instrument as submitted, which decision shall contain the reasons for the refusal.

Armoyan took the view that s. 105 (3) directed the development officer to either approve or refuse the application; that approval implied endorsement; and that there had to be finality in the system. Because no decision had been given by the development officer, Armoyan could not appeal the requirements of the County to the Review Board; its only recourse was to apply, on the principle of mandamus, for either approval or rejection of its application.

Readers will of course recall that an application in mandamus can not be employed as a broadside attack upon a situation that is merely unfavourable or inconvenient. There must be a public duty to be performed, which obligation has not been discharged. More specifically:

[T]here must be, first of all, standing, a sufficient legal interest in the parties making the application. There must also be no other legal remedy, equally convenient, beneficial and appropriate. Thirdly there

must be a duty to the applicant by the parties sought to be coerced to do the act requested. Fourthly, the duty owed must not be one of a discretionary nature, but may be established either at common law, or by statute. Fifthly, the act requested to be done must be required at the time of the application, not at some future date. Sixt hly, there must be a request to do the act and that request must have been refused.\(^1\)

The County's position was that it had interpreted s. 105 (3) properly; that there was a distinction between approval and endorsed approval; and that the final approval given in July 1993 was all Armoyan was entitled to.

The judge considered other parts of the Planning Act which drew a distinction between approval and endorsement, and, in particular, the

use of the words "and" and "or" in s. 105. Her conclusion in September 1993 was that Armoyan "was entitled to no more than the final approval contemplated in Section 105 (3)." She further concluded that mandamus was not appropriate under these circumstances.

Armoyan appealed this decision.

APPEAL

In February 1994 the Court of Appeal summed things up as they then stood following the earlier judgment:

The appellant clearly indicated that it was seeking

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endorsed approval of Morris Lake Equally clear were its Estates. reasons for that request. DEW fully understood the appellant's position as did the development officer. Unfortunately the option of an appeal to the Board was not open to the appellant until the de**vel**opment officer... notified...her refusal. The appellant is effectively stymied. It obviously disagrees with the position taken by DEW. As matters stand it must bend to the will of DEW or the application is simply in limbo....As matters now stand the development officer would never be required to decide whether to approve or refuse the application for endorsed approval and the appellant has no recourse.

The court concluded that the proper approach to the problem was not the "technical interpretation of s. 105 (3)" which had led to the situation just described; rather, it was to discover the intent of the legislature in framing the Planning Act. That object, as stated in the Act itself, is to:

2 (d) provide the fair, reasonable and efficient administration of the Act, in order that sound development may be encouraged.

This, in conjunction with other authorities, led the appeal court to conclude that it was "unnecessary to minutely examine the usage of 'or' and 'and' in s. 105 and give an overly technical meaning to them."

On the question of whether mandamus was warranted, the court said:

Here there is no other legal remedy. If mandamus is not granted, [the County], by simply not responding to the appellant's request

for endorsement or refusal, will have achieved an inequitable result.

Somewhat in passing, came the observation, "It is difficult to appreciate why the development officer has not acted...it would be simple to refuse the application for final endorsed approval, giving as reasons...those set out [by] the staff engineer of DEW."² The appeal court then identified the basic reason for the initial hearing and the subsequent appeal:

[The County of Halifax]...seeks to rely upon its interpretation of s. 105 (3) to prevent the mandamus application from succeeding. As Lacourcière, J.A. commented in Hall v. Toronto (1979), 8 M.P.L.R. 155 (Ont. C.A.) at p. 163 "the objective pursued was not planning, but the blocking of the appellant's right to an order in the nature of mandamus."

DECISION

Armoyan's appeal was allowed; a mandamus order was issued; the development officer was directed either to approve the subdivision application or to refuse it.³

The earlier hearing had resulted in the County being awarded costs of \$ 1,500. This sum was to be returned to Armoyan along with an additional \$ 1,500 as its costs of the hearing plus a further \$ 1,000 as costs of the appeal.

PUBLIC DUTY

From the foregoing it is plain that a development officer owes a duty to the public. But does this make a development officer a public officer? The point will be of interest to those who have followed

G.K. Allred's presentations on the land surveyor in that capacity.⁴

More generally, and setting aside the question of who is a public officer and who is not, the Armoyan—Municipality decision is a good reminder that virtually everyone in public employment owes a duty not only to their immediate employer, but also to those members of the general public with whom their responsibilities bring them into association. A concept easy to acknowledge in principle, this is often a very difficult one to apply equitably in practice.

Notes

- 1. Rawdon Realties Limited v. Rent Review Commission (1983), 56 N.S.R. (2d) 403 at p. 405.
- 2. Two reasons come to mind. First, no rational development officer is going to antagonize both the engineering staff and her employer, in this instance County Council, by unilaterally cutting the ground from beneath a position they were in the process of taking, or had taken. Second, until the courts had settled the question of how s. 105 (3) was to be interpreted, the development officer had no way of knowing her proper course of action. Also, and in a broader context, until the appeal decision was made there seems to have been no universal perception that development officers owe a duty to subdivision applicants as well as to their immediate employers.
- 3. Armoyan Group Ltd. v. Municipality of the County of Halifax, 16 Feb 1994, C.A. No. 02925.
- 4. See, for example, "The Land Surveyor as a Public Officer", Geomatica, Spring 1990, Vol. 44, No. 1, pp. 51-54.

LETTER TO THE EDITOR

To the Editor:

In the summer issue of *The Nova Scotian Surveyor*, Gordon Isaacs addressed the direction of the Canadian Council of Land Surveyors in his President's Report. As President of the national council, I want to thank Gord for his support of CCLS and to make a couple of comments on his reflections

The Canadian Council of Land Surveyors is and always has been an association-driven council. The members of CCLS are the provincial associations and its directors are appointed by their respective provincial associations. it is the responsibility of each director not only to represent his or her own association, but also to participate in the collective ongoing activities of the group and to promote and inform the home association of the projects and issues that are being addressed. In this way, each association has its own director representative and CCLS can honestly reflect and, more importantly, act on the concerns iterated by its members.

As Gord noted, CCLS does not undertake any project without express approval from the members - this means that a project must first be proposed with all appropriate documentation and budgetary concerns outlined. As evidenced from the 1994 agm in St. John's, the members willingly are sharing projects and project costs. Indeed, each member is involved in at least one project and these will be reported upon at the fall council teleconference meeting and completed by the 1995 CCLS agm.

I applaud Gord's comments recommending that CCLS directors be an

integral part of provincial association executives. I feel this is essential in order to provide clear communication and continuity in direction. In fact, the ANSLS Executive Director, Bob Daniels, serves as the Nova Scotian director to CCLS.

Gord noted his concern that CCLS must bear in mind the expanded profession and what it will mean to cadastral surveyors. I would like to note here that CCLS does have a project under way, chaired by Ontario in conjunction with Nova Scotia and British Columbia, examining precisely this topic.

As we race towards the year 2000, it is imperative that our profession has a national voice to contribute to such discussions surrounding, for example, labour mobility within NAFTA, FTA, or our professional status within the global community as reflected in the Gatt negotiations.

CCLS welcomes any comments and concerns from members of the land surveying profession. For further information or comments, contact CCLS at Box 5378, Merivale Station, Ottawa, Ontario K2C 3J1, or your CCLS director, Bob Daniels.

David C. Clark, NSLS President, CCLS

Surveying: An Evolving Science Continued from Page 11

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Delaware, as part of their effort. A 20th century survey by the United States Coast and Geodetic Survey Service found the true radius of the circle to be 12 miles and 18 feet. Five monuments were recovered along the line within five feet of the

circle. Not only is surveying an ancient science, some of the earliest applications of that science give evidence to astonishing accuracies when measured with the instruments of the twentieth century.

What Cassiodorus said about the survevor of his time may not have current cultural relevance insofar as public recognition and acclamation is concerned, but the general principle which impressed that statesman and scholar of the first century holds true today. In retracement work the first effort of the surveyor is still to walk in his predecessor's foot-steps. The big changes affecting surveying in the recent 20 centuries are due to technological advances, societal needs and institutional arrangements.

The laser and satellites being used in surveying today might surprise those Egyptian rope stretchers as much as the accuracy of their work amazes us. The same could be said for our photogrammetric mapping data remote sensing collection methods, our CADD systems, and our total stations and data collectors. Surely there are surveyors working on the banks of the Nile in 1990, collecting data during the day, down loading in the evening, and reviewing the day's work in plan form the next morning. No doubt the modern Middle Eastern technicians and professionals are as blasé about the great technical leap forward that they are practicing, in the very place where it all began, as we are here in the United States, where John Love made his observations about surveying history over three hundred years ago.

We have, indeed, become inured to the technological drama of the times. After all, many of the surveyors of today were school children when we first walked on the moon; many were "We offer more than the competition"

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not even born when Sputnik beeped its way into our lives. Why be especially excited or surprised that we are now using satellites in measuring vector and position? There are those of us who remember using logarithms and steel tapes; we have become accustomed to the stunning technological advances of our century. There are less dramatic but equally significant institutional changes affecting the surveying profession today.

The man or woman entering the surveying profession in 1990 may no longer be considered educationally prepared if he or she carries only a basic bachelor of science degree in civil engineering. To cope with the requirements placed on the surveying profession by society in the next quarter century, the very least that one will need is an undergraduate degree. At least twenty colleges and universities in seventeen states are

now granting degrees in surveying engineering, surveying and mapping, geodetic science, or civil engineering with a surveying option.

What is the impetus for this growth in the surveyor education industry? It is not, as some would suggest, due legislative trend toward a requirement for a four-year degree as a minimum requirement for licensure. Of the nine states requiring the fouryear degree for surveying licensure. only four were in

force at the end of 1988. The next two (New Jersey and Wyoming) will not become effective until 1991. The explanation is somewhat more abstract. Increased land values, economic expansion, confused land tenure claims, regulatory requirements demanding more and better data, more sophisticated technologies, even increased liability for the poorly-prepared professional - all these factors are placing more demands on the surveyor and on his educational preparation.

A growth industry in the land data business is the development of land information systems and geographic information systems. The land-dependent activities of government and industry are discovering that it is possible to store, sort, recall, and manipulate data that have any direct or remote relationship to the land. This applies to census data as well as

land use, agricultural inventories, parcel ownership, and mineral exploration. In fact, the only limit to LIS and GIS applications is the ingenuity of those who have custody - or a need for - the data.

The surveyor is at the center of the LIS/GIS evolution. It is the surveyor/cartographer who will prepare and qualify the mapping systems on which the LIS/GIS systems are based; and it is the surveyor/ geodesist who will put in place the monumented datum to which the mapping systems will relate. undergraduate surveying modern curriculum contains elements of geodesy, cartography, computer science, boundary law, environmental law, photogrammetry and remote sensing, and cadastral systems, along with the usual courses in mathematics and science, and the standard technical surveying courses.

To satisfy the needs of society in the next 25 years, the surveyor must be prepared to be boundary specialist, and translator of the schemes of the land planner, architect, and engineer. As a data collector, the surveyor must be prepared to recognize a bewildering array of environmental attributes while defining cultural improvements. The surveyor must be cartographer and geodesist; in short, he must be a land data specialist. Come to think of it, that is what the well-prepared professional surveyor has always been. It's just more complicated today.

Robert W. Foster is Executive Vice-President of Schofield Brothers, Inc. of Framingham, MA. Mr. Foster is also a Past President of ACSM.

* NOTICE *

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Terms of Reference for Relocation of SRD to Ingonish

The following is a verbatim copy of the document signed by James Gunn and Gordon Isaacs:

Introduction:

Under new business of the 1993 annual meeting a motion was made requesting that council offer the Survey Review Department manager an opportunity to continue with his current position in Ingonish, Cape Breton. At its first council meeting the council asked the SRD manager to prepare a proposal for review by council outlining the proposed structure and showing cost estimates for the proposed operation. The proposal was reviewed by the executive and revised to address issues identified.

The final version was then presented to the various Zones by Jim Gunn and comments received were mostly positive. Following the zone presentations council discussed the proposal in a closed session and debated the pros and cons of moving SRD and the methodology for implementing such a move.

Initially is was suggested that the proposal should be sent to the membership for a mailout vote, however, it was later suggested that council, having debated the matter at great length should make the decision. The original minutes of the annual meeting were reviewed and in light of the wording of the motion, council deiced to make the decision through a majority vote of council.

A vote was taken on the following motion:

"moved: that the executive negotiate an offer with Jim Gunn to operate the SRD out of Ingonish, Cape Breton, as a pilot project, for a two year period commencing March 31, 1995."

The motion was passed by a majority vote of council. The executive council G. Isaacs, Clive MacKeen and Bob Danials were instructed to prepare an offer to Jim Gunn setting out the terms of reference for the move and any financial considerations pertaining to the proposal.

Terms of Reference:

The move of the SRD to Cape Breton will take place on March 31, 1995 to coincide with the end of the association's lease of the current office space in Darthmouth. An office space of suitable size and not exceeding the current SRD usage shall be negotiated in a suitable office building in Ingonish Cape Breton and at the best price available. The office space to be leased for the SRD operation shall be approved by the council of the association. The cost of the rental space shall not exceed the current cost of SRD space occupied in Darthmouth.

Subject to the above paragraph, the proposed move to Ingonish, Cape Breton may take place at an earlier date as requested by the SRD manager and approved by the executive, providing that the cost of the current office space which is attributed to the SRD is personally reimbursed by Jim Gunn to the association. The association will be responsible for any costs for the SRD rental space at the new location.

The association will not be responsible for any personal expenses associated with the SRD manager's move to the new location in Cape Breton. Costs associated with the transport of association records, computers and furniture etc. will be paid for by the association.

This SRD office in Cape Breton will be mandated to carry out Survey Review Department work only and shall not be involved in other matters which are the responsibility of the executive director unless otherwise instructed to do so by Council. Should the SRD manager be requested to serve on an association committee by the council, the time spent on that committee shall be considered as part of the regular salaried duties of the manager for the period served on the committee. Any committee work carried out for the association or other professional groups

1

which are not requested by the council, shall be performed outside regular SRD office hours and no compensation shall be provided other than those normally approved by the NSLS council for other committee members.

Any services provided by the association administration staff, in Metro, to the SRD at its new location shall be charged to the SRD's annual budget and operating and maintenance expenses of the SRD shall include those items covered in the current operation in Dartmouth. The current operating budget of the SRD shall not be exceeded in its new location and any savings realized as a result of the move shall be applied to as to reduce the sticker price for plans. Changes to the sticker price will continue to require the approval of council.

A part time survey assistants position may also be established at the new location within a salary range approved by council. Any increases in salary and or hours of work as a result of increased workload for the assistant shall also be approved by council. This position will be offered to the current survey assistant and, if unacceptable to her, may be filled by the current acting survey assistant, Sharon Gunn, subject to a notice of appeal being published in a local newspaper. In the event that there is an appeal filed by some interested party, the position will be filled through a competition process. Sharon Gunn's appointment to this position shall be for the term of the pilot project and will be subject to the workload requirements of the SRD. Should the workload decrease significantly then the position may be terminated by council with due notification.

The SRD manager will attend council meetings at councils request. A written report on the status of the SRD program will be required for each council meeting and shall be forwarded to executive director in sufficient time for distribution to council prior to the meeting. Reports shall also be supplied for executive meetings as requested.

The SRD manager will attend one meeting in each zone per year and other meetings as requested by the Zone Councillors. Expenses for theses meeting shall be charged against the SRD budget.

The SRD manager will submit an operations budget to council for approval at the beginning of each calender year. The day to day operational expenses of the SRD shall be controlled by the SRD manager through the executive director. Any major expenditures shall be approved by council. The manager will have an expense account not exceeding \$5300.00 per year unless a higher amount is approved by council. This account will be used to cover expenses to carry out field inspections throughout the province, to make necessary trips to the associations main office to attend council meetings and to attend Zone meetings. Also included in this amount is an allowance for any out of province travel to attend a professional survey association meeting which has a content directly related to the operations of the Survey Review Department. All such trips must be approved in advance by the executive of the association.

The SRD manager reports to Executive Director of the association and to the council of the association.

This offer is for a pilot project only and at the end of the two year term of this project, council will decide whether this operation will be re-integrated into the main office of the association. If council decides to reintegrate the offices then the SRD manager will have the option to return with the position to the new location or resign without costs to the association.

The salary of the SRD manager at the new location in Ingonish shall be \$42,500.00 per annum. This salary will come into affect on July 31, 1994 and will continue for the duration of the project unless council deems otherwise. The salary for the survey assistant at the new location shall not exceed the salary currently paid to the survey assistant at the Darthmouth location, without the approval of council.

The current professional survey dues for Nova Scotia and other professional dues, as determined by council, on an annual basis will be paid for by the association. Other benefits currently provided to the association staff will continue to apply at the new location.

The SRD manager will continue to receive five weeks vacation annually. The survey assistant will receive a vacation allotment based upon three weeks per year prorated at the number of hours worked compared to a standard 40 hour week.

This agreement is made between James Gunn and the Association of Nova Scotia Land Surveyors on the 5th day of July, 1994.

Signed,

Gordon P. Isaacs - President ANSLS and Jim Gunn - Manager SRD.



Association of Canada Lands Surveyors Association des Arpenteurs des Terres du Canada

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Videotapes of the Seminar 'Native Land Issues and the Surveyor' held in Victoria on April 18, 1994 are now available for distribution. This seminar was highly acclaimed by those who attended as one of the best ever held in presenting the Canadian Aboriginal point of view. Among its features are an eloquent presentation by Herb George (Satsan), a hereditary Chief of the Wet'suwet'en people, on Aboriginal perceptions concerning land and resources; and an absorbing review on the nature and history of treaty making in Canada and the prospects for just and lasting treaties in British Columbia, by Dr. Frank Cassidy, a well known expert on Aboriginal affairs.

(over)

Also featured, in order of appearance, are:

- Dr. Lorne Greenaway, Commissioner British Columbia Treaty Commission: the work of the B.C. Treaty Commission, the treaty making process in B.C.
- Mark Krasnick, Chief Negotiator B.C. Ministry of Aboriginal Affairs : a Provincial perspective on Native Land Issues and the Surveyor
- Tom Molloy, Q.C.; Chief Federal Negotiator Indian & Northern Affairs Canada: the Federal Government point of view in B.C. treaty negotiations
- Gérard Raymond, CLS, QLS; Director, Legal Surveys Division, NRCan & Surveyor General of Canada: changes in mentality and structure in the Legal Surveys Division, their effects on the Native and Surveying communities
- Richard (Dick) Wright, CLS, BCLS; Senior Partner, Wright, Parry, Taylor & Fuller: establishing and maintaining good relationships with Indian Bands.

The seminar is contained in a set of two 160 minute videotapes and is approximately 5 hours in length. The tapes may be purchased for \$95.00. GST is not applicable. The price includes shipment by Canada Post. Materials handed out at the seminar are included in the cost and are shipped with the videos. Please use the order form below.

Note: This seminar was presented for continuing professional development and general interest purposes. It is not part of the Canada Lands Surveyor examination curriculum. It will be of interest to all surveyors having or anticipating relationships with individuals, Bands or Tribal Councils of the First Nations of Canada; persons interested in the development and status of treaty negotiations in B.C.; or any other persons interested in the subject of Native Land Issues in Canada.

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NATIVE LAND ISSUES AND THE SURVEYOR SEMINAR VIDEOTAPE ORDER FORM

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