The Law and Practice of Land Surveying in Alberta

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Alberta Land Surveyors’ Association

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Foreword

Years ago, when I was starting my land surveying career, I found myself in the very first class of Surveying Engineering at the University of Calgary. It was an exciting time. My professors developed lecture notes and curriculum and labs for a small group of eager-to-learn students. There was not a lot of land survey material available and it did not always relate to Alberta or even Canada. We relied on the tremendous experience of senior land surveyors who could tell us the way things really were.

After I graduated and started my articles to become a professional land surveyor, I realized there was so much more to learn and study. I had the good fortune to article under the late Ralph Bunting and there were times when I wished that one of Ralph’s lessons, in particular, was down on paper so I could always refer to it.

Since I received my commission in 1985, there have been many times over the course of my professional career when I have wanted to, or needed to, refer to important case law or survey practices to help me re-establish a boundary. There were numerous times when access to the experience of senior land surveyors would have been invaluable. Even during my term as president of the Alberta Land Surveyors’ Association, I continued to look to these mavens for advice and guidance.

With that in mind, the Alberta Land Surveyors’ Association commissioned this book, *The Law and Practice of Land Surveying in Alberta*, to capture the knowledge and expertise of these well-respected professional land surveyors. This textbook is designed not only for students at educational institutions and articulated students, but also for practising land surveyors. I know that for me, *The Law and Practice of Land Surveying in Alberta* will become as important a working tool as any piece of survey equipment.

D.H. VandenBrink, ALS
Introduction

In matters concerning the whereabouts of a particular piece of land and identifying the person to whom it belongs, Alberta is particularly fortunate. First, because it has an accurate survey framework that created the geographic townships into which the province is divided. Second, because it possesses an enviable system of land title registration, under which the provincial government assures the ownership of, and the validity of legal rights affecting, every registered parcel of land. The link between the survey framework and the land title registration system is central to the work of an Alberta Land Surveyor.

A land surveyor in Alberta must be thoroughly familiar, and keep up to date, with a variety of modern technology that includes, for example, sophisticated measurement and positioning equipment, computer-assisted drafting, and land information systems. Of equal importance to the land surveyor is a knowledge of the law and professional practice that underlie his or her work. Some of this law is statutory and is contained in provincial or federal acts. There is also subordinate legislation, such as regulations made under the authority of an act, as well as orders-in-council and municipal bylaws. Judicial decisions in court cases assist in the development of law, by providing an interpretation of statutes and regulations when that becomes necessary, and also by expounding the relevant common law and applying it to disputes that form the subject of litigation.

As the governing body of the land surveying profession in the province, the Alberta Land Surveyors’ Association has established rules to guide its members and to ensure that their clients and the general public receive the highest quality of surveying services. These rules consist of bylaws, technical and professional standards, and a Code of Ethics. Much of this information is contained in the Association’s Manual of Standard Practice, which is complemented but not superseded by the present publication.

The Law and Practice of Land Surveying in Alberta is aimed at land surveyors, students, lawyers and others who are interested in surveying, especially that branch known as cadastral surveying which is concerned with the location of land parcel boundaries and the registration of real property rights. The authors are all practising land surveyors whose wisdom and experience are demonstrated in the chapters they offer. It is hoped that readers will find the book interesting, informative and useful.

The Editor wishes to acknowledge the contribution of the authors, co-authors and others who made it possible to produce The Law and Practice of Land Surveying in Alberta. He also expresses his gratitude to Sherry Wilson McEwen for her valuable assistance in copyediting and layout.

Alec McEwen, Editor
The Authors

**G.K. (Ken) Allred, ALS, CLS**

Ken Allred has extensive experience in professional affairs, having served as Executive Director of the Alberta Land Surveyors' Association for 14 years. He has served as President of the ALSA and of the Canadian Council of Land Surveyors. He was Chair of Commission 1 - Professional practice of the International Federation of Surveyors (FIG) from 1994-98 and is currently Vice President of FIG.

He was an Adjunct Professor at the University of Alberta from 1982-92, teaching Cadastral Studies in the Faculty of Geography. He has done research in boundary and legal issues related to surveying and professional affairs.

Ken has also been involved in municipal politics, serving as an Alderman with the City of St. Albert for 15 years. In that capacity he chaired the Edmonton Metropolitan Regional Planning Commission for three years. Ken serves on a number of adjudicative tribunals and practises in the area of alternative dispute resolution relative to land and boundary issues.

**R.A. (Dick) Bassil, ALS (Hon Life)**

Dick Bassil was born in Minnedosa, Manitoba and raised in southern Alberta. He graduated from Southern Alberta Institute of Technology with a diploma in Land Surveying Technology in 1961. He obtained a commission as an Alberta Land Surveyor in 1967.

Over a period of 37 years, employed by the Province of Alberta, Mr. Bassil performed legal surveys for the government from 1967 to 1974. In a management role, he was responsible for municipal survey control programs throughout the province, which led to an integrated surveying and mapping infrastructure in major urban municipalities in Alberta. Mr. Bassil served as Director of Surveys in Alberta from 1990 until his retirement from public service in 1996.

As a member of the Alberta Land Surveyors’ Association, Mr. Bassil served on and chaired several Association committees including terms on Council and President (1983-1984). He was awarded Honorary Life Membership in the Association in 2004. He currently serves as Registrar of the Association.
Duncan B. Gillmore, ALS, CLS

Duncan B. Gillmore Sr. graduated from the Nova Scotia Land Surveying Institute in Lawrencetown, Nova Scotia in 1950 and received his ALS commission in 1956. He also qualified as a Saskatchewan, Manitoba, Nova Scotia and Canada Lands Surveyor. Dunc has operated his own professional practice in Edmonton since 1962.

Dunc is an Honorary Life Member and a recipient of the Professional Recognition Award of the Alberta Land Surveyors’ Association. He has served on the ALSA Council and on a number of the Association's committees.

Dunc’s extensive experience includes surveys of mineral claims, Indian reserves and trans-mountain pipelines. He is renowned for his expertise in township and other official surveys in Alberta.

Dunc’s opinion in land surveying matters is well respected and is sought after by individuals and by different levels of government. He has appeared in court as an expert witness in land surveying issues on numerous occasions.

Monroe E. Kinloch, ALS, CLS (Ret)

Born in Calgary and educated there in primary and secondary school, Monroe Kinloch attended the Provincial Institute of Technology and Art, in Calgary where he graduated in Survey Technology in 1960.

He obtained his Alberta Land Surveyor’s Commission (326) on December 10, 1968 after serving his articles under George C. Walker, PEng, ALS. He obtained his Canada Lands Surveyor Commission (1268) on May 6, 1982. He was employed in private practice from 1961 until 1974 when he formed Kinloch Underwood & Associates Ltd., a private practice legal survey firm in Edmonton, Alberta. He continues to provide legal survey services in the Edmonton and surrounding area.

Monroe has served on several Alberta Land Surveyors’ Association committees, as an active member, and as Secretary-Treasurer 2001-2004. He continues related activity as a Professional Liability Committee member under the Canadian Council of Land Surveyors.
Gordon E. Olsson


Since 2001, Gord as a land survey consultant has carried out a variety of land survey related work for government and other clients. The work has included boundary and title research, natural boundary and mines and minerals research, investigating and analyzing land survey requirements and developing survey related standards.

Prior to 2001, he was employed by the Legal Surveys Division, Geomatics Canada, Department of Natural Resources before leaving in the position of Deputy Surveyor General, Western Region after 36 years of service.

Marie Christine Robidoux

Born in Shawinigan Québec, Marie attended high school at Collège Marie de L’Incarnation in Trois-Rivières, followed by Cégep de Shawinigan where she obtained her Diplôme d’Études Collégiales in Humanités (major in psychology) in 1974. She attended law school at Université Laval and graduated with Baccalauréat en Droit in 1977 and Diplôme D’Études Notariales in 1978 when she became a member of the Québec Chamber of Notaries. In 1987 she graduated from Northern Alberta Institute of Technology with Diploma in Surveying Technology (Honours) and obtained her commission as a Canada Lands Surveyor in 1993. In 2002 Marie obtained a Master of Laws in Information Technology (Internet Intellectual Property).

Marie worked with Natural Resources Canada, Legal Surveys Division, in Edmonton and Yellowknife until 2000 when she moved to the private sector. She joined Challenger Geomatics Ltd. in Calgary in 2004. She specializes in aboriginal and northern land issues.
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<td>Alberta Survey Control</td>
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<td>ACSM</td>
<td>Alberta Survey Control Marker</td>
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<td>ALS</td>
<td>Alberta Land Surveyor</td>
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<td>ALSA</td>
<td>Alberta Land Surveyors’ Association</td>
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<td>ALTA</td>
<td>Alberta Land Titles Automation</td>
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<td>AR</td>
<td>Alberta Regulation</td>
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<td>ATS</td>
<td>Alberta Township System</td>
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<td>c.</td>
<td>Chapter</td>
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<td>CAD</td>
<td>Computer-assisted Drafting</td>
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<td>CBEPS</td>
<td>Canadian Board of Examiners for Professional Surveyors</td>
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<td>CCLS</td>
<td>Canadian Council of Land Surveyors</td>
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<td>CDGPS</td>
<td>Canada-wide Differential Global Positioning System</td>
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<td>CED</td>
<td>Canadian Encyclopaedic Digest</td>
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<td>CGVD28</td>
<td>Canada Geodetic Vertical Datum 1928</td>
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<td>CIG</td>
<td>Canadian Institute of Geomatics</td>
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<td>CLS</td>
<td>Canada Lands Surveyor</td>
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<td>CLS Manual</td>
<td>General Instructions of the Surveyor General of Canada Lands</td>
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<td>CLSR</td>
<td>Canada Lands Survey Records</td>
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<td>CPR</td>
<td>Canadian Pacific Railway</td>
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<td>CRC</td>
<td>Consolidated Regulations of Canada</td>
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<td>CSRS</td>
<td>Canadian Spatial Reference System</td>
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<td>C of T</td>
<td>Certificate of Title</td>
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<td>DIAND</td>
<td>Department of Indian Affairs and Northern Development</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>DiPS</td>
<td>Dual Image Processing System</td>
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<td>DLS</td>
<td>Dominion Land Surveyor</td>
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<td>DRR</td>
<td>Document Registration Request</td>
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<td>EDM</td>
<td>Electronic Distance Measurement</td>
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<td>EUB</td>
<td>Alberta Energy and Utilities Board</td>
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<td>FIG</td>
<td>Fédération Internationale des Géomètres (International Federation of Surveyors)</td>
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<td>FTP</td>
<td>File Transfer Protocol</td>
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<tr>
<td>GPS</td>
<td>Global Positioning System</td>
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<td>ILR</td>
<td>Indian Lands Registry</td>
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<td>LINC</td>
<td>Land Identification Code</td>
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<td>LSAS</td>
<td>Land Status Automated System</td>
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<td>MSP</td>
<td>ALSA Manual of Standard Practice</td>
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<td>NAD83</td>
<td>North American Horizontal Datum 1983</td>
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<td>NEB</td>
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<td>Natural Resources Canada</td>
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<td>PRB</td>
<td>Practice Review Board</td>
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<tr>
<td>RPR</td>
<td>(Surveyor’s) Real Property Report</td>
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<tr>
<td>RSA</td>
<td>Revised Statutes of Alberta</td>
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<td>RSC</td>
<td>Revised Statutes of Canada</td>
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<tr>
<td>s., ss.</td>
<td>Section, sections (Acts, Regs)</td>
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<td>Abbreviation</td>
<td>Description</td>
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<td>SA</td>
<td>Statutes of Alberta</td>
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<tr>
<td>SC</td>
<td>Statutes of Canada</td>
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<tr>
<td>SDW</td>
<td>Spatial Data Warehouse</td>
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<tr>
<td>SPIN II</td>
<td>Alberta Governments Services Spatial Information System</td>
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<tr>
<td>3TM</td>
<td>3-degree Transverse Mercator</td>
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<tr>
<td>TIFF</td>
<td>Tagged Image File Format</td>
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<tr>
<td>TILMA</td>
<td>Trade Investment Labour Mobility Agreement (Alberta-BC)</td>
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<tr>
<td>TLE</td>
<td>Treaty Land Entitlement</td>
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<tr>
<td>UTM</td>
<td>Universal Transverse Mercator</td>
</tr>
<tr>
<td>WCBE</td>
<td>Western Canadian Board of Examiners for Land Surveyors</td>
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Chapter 1: The Surveying Profession

G.K. (Ken) Allred, ALS, CLS

Surveying is an investment in the future, its impact often lasting for centuries or millennia. . . . That places a huge responsibility on us all. [Dale 1998]

The Role of the Professional Surveyor

§1.1 When the general public thinks of a surveyor, they often identify with the rodman or instrument man seen on road or building construction sites. These persons may be part of a survey crew or part of the staff of a construction company, but are not what is normally referred to as a “professional land surveyor”.

§1.2 The term “surveyor” is derived from the term sur voir which is translated to mean “overseer”. A surveyor in the generic sense is thus an overseer. A surveyor in the context of this book was historically an overseer of land. In the modern connotation, however, the scope of the term has been expanded to include positioning and measurement of land as well as the gathering of land information and the management of land.

Figure 1-1. CCLS Model of the Expanded Survey Profession [Raymond 1981]
§1.3 Most people associate surveying with the technical aspect of measurement. Actually there are many different types of surveying within the context of the term positioning and measuring. Some of the more common types of surveys are described in the following paragraphs. Since most surveys involve the gathering of large amounts of data and the reduction of that data to a meaningful medium, a survey normally includes a plan or map of some sort to depict the results.

§1.4 *Geodetic and control surveys* are precise surveys that measure the shape of the earth. They form the basic skeleton of control points for aerial photography, photogrammetry and cartography and also provide a framework for more localized surveys. Geodetic and control surveys provide on-the-ground reference points for our system of geographical position by latitude and longitude and other coordinate systems. Geographical information systems rely on precise geographical positioning for their spatial reference base.

§1.5 *Geological surveys* determine the location of geological features of the earth and the location of various ore-bearing formations. Seismic surveys measure subsurface geological formations that indicate the potential presence of pockets of liquid hydrocarbons.

§1.6 *Topographic surveys* measure the relative positions of various topographic features on the surface of the earth and include the determination of elevations and contours for mapping purposes.

§1.7 *Hydrographic surveys* chart bodies of water and waterways to assist navigation and highlight unsafe marine traffic conditions. In this regard they also measure currents, tidal fluctuations and other bathymetric data.

§1.8 *Construction surveys* are concerned with the layout of engineering or architectural projects for construction—ensuring that each component is located at the proper spatial juxtaposition with every other component so that the project operates as one unit. Data collection and topographic surveys are often conducted prior to construction so that the project can be precisely designed, taking into account all of the related topographic and man-made features that may constrain or enhance the project. Deformation surveys may be conducted either on raw land to determine its stability during or after completion of a project; or on a structure, to determine any movement in the structure or the ground in the vicinity of the structure.

§1.9 This chapter will deal more specifically with a field of surveying called *cadastral surveying*, which is commonly referred to as “land surveying” or sometimes even “legal surveying”. Cadastral surveying addresses the location of legal interests in land and in particular the boundaries between those legal interests. The study of the legal aspects of boundaries is commonly referred to as “survey law” or “boundary law”.
§1.10 “Land and people are our two most important resources.” [Barlowe 1986]. From the land we obtain our food, building materials for shelter, minerals for fuel, and materials for clothing. Land is basic to human habitation and has been the subject of human occupation and possession for millennia. Wars and neighbourhood squabbles are often fought over the right to own and possess land. As Henry George observed in Progress and Poverty:

land is the habitation of man, the store-house upon which he must draw for all his needs, the material to which his labor must be applied for the supply of all his desires. . . . On the land we are born, from it we live, to it we must return again – children of the soil as truly as the blade of grass or the flower of the field. Take away from man all that belongs to land, and he is but a disembodied spirit. [Barlowe, 1986]

§1.11 Fortunately, in the Alberta context, land and the boundaries of land are seldom in dispute and to a large extent are taken for granted. We have inherited a very efficient land survey township system identify and a Torrens land title registration system that have served us for well over a hundred years with virtually no significant problems.

§1.12 The role of cadastral surveys in the broader context serves society in a more global sense in that cadastral surveys when all pieced together form the geographical grid upon which all land management functions are based. Boundaries defined by the land surveyor, monuments placed, and plans prepared, become the basis for cadastral records that form the very foundation of land registration systems. Land record systems for municipal public works and taxation departments, utility companies and mapping agencies also rely on the cadastral fabric created by this labyrinth of cadastral surveys and compilation of survey plans. Even though a single landowner retains the surveyor’s services to subdivide the owner’s parcel of land, the data created by that survey becomes an integral part of the public record upon which the record of future landholders is based. Society becomes the ultimate beneficiary of the surveyor’s diligence. Whether we are referring to a small town, a city or the entire province the framework for all land data is based on the cadastral fabric of individual parcels of land ownership.

§1.13 All surveys have a number of things in common. They all use similar measuring equipment. Scientific instruments are used to measure precise angles and distances on the face of the earth, or on the surface of the sea or under it, and even in the airspace above the earth. Historically these instruments were quite crude, developing from a wooden pole to the Gunter’s link chain, to precise steel tapes and to electronic measuring equipment. Angular measurement also developed from a basic protractor style instrument, to the modern theodolite and total stations that measure angles and distances electronically and simultaneously.
§1.14 More recently the use of satellite positioning system (such as GPS) technology is capable of pinpointing precise positions on the surface of the earth by observation of a series of navigational satellites orbiting the earth. In this regard it would be remiss to omit the observations of the sun and the stars, which served as early navigational and surveying aids in determining geographic position. Astronomic observations were very important to early navigators and exploration surveyors such as David Thompson, who had to rely on astronomic observations using a sextant and chronometer to determine his position on the surface of the uncharted Canadian West. Astronomic observations were still very important in remote areas prior to the advent of GPS.

§1.15 Surveyors are data gatherers. With their measuring skills and their measurement devices they accurately locate various features over, under, or on the surface of the earth in relation to various geographic reference frameworks. Surveyors may be engaged to provide an opinion as to the existence of certain features, in order to define boundaries that have become uncertain over the passage of time; or perhaps to determine the cause of vehicular or other accidents. Essentially the surveyor is an information sleuth. By searching through as-built, historic, oral, or legal records a surveyor is able to identify various features and relate them positionally to other relevant information in order to provide an accurate picture of a given situation at a given point in time. The surveyor measures in four dimensions: three spatial coordinates - x, y and z as well as the dimension of time - t.

§1.16 To accomplish all of these tasks is a complex operation requiring a survey team. While an instrument person and rod person form an essential part of the survey operation, they only form the field component. There is usually a draftsperson to draft the final product and a computer operator to transform the field measurements into positions on the reference framework. There is also a research person to search out the necessary documentation and prepare the plan and evidence file for the field crew. Plans and title searches must be obtained from the Land Titles Office, infrastructure information may be required from the municipality, and interviews may need to be conducted with persons who are familiar with the land. And of course, office assistants are required to schedule and coordinate the work. Often the personnel in a survey firm are multi-skilled, performing one or more tasks depending on the complexity of the job. The person in charge of and responsible for this complex operation is the professional land surveyor, who will pay particular attention to previous surveys that the field crew will have to search out. Evidence of prior surveys or lack of that evidence may create challenges in the field.

§1.17 The survey professional is a man or woman of many hats. He or she must be familiar with the technology and appreciate its limitations. The surveyor must understand the law—in particular the law of real property. One can think of cadastral surveying as the application of measurement technology to real property law. Cadastral
surveying is, however, more than measurement and legal concepts—it is also about local history, subdivision design, land management, logistics, business management and many other fields of endeavour. An Alberta Land Surveyor is very much a generalist. In a normal survey practice, a land surveyor may deal with as many as two dozen pieces of Alberta legislation, in addition to some federal legislation. A surveyor may not be conversant with all of this legislation but must be familiar with those sections that pertain to specific aspects of the practice.

§1.18 The modern term for the broad field of surveying is “geomatics”. One definition of this term (there are others) is given by Gagnon and Coleman:

> Geomatics is a field of scientific and technical activities which, using a systematic approach, integrates all the means used to acquire and manage spatially referenced data as part of the process of producing and managing spatially based information. [Gagnon 1990]

§1.19 From this definition it is apparent that geomatics includes not just surveying disciplines but also the mapping disciplines, and in particular the integration of those disciplines to include the application of positioning and measurement to the gathering of land information for the purpose of land management.

The Surveying Profession

§1.20 In the context of this chapter when we speak of the surveying profession we speak primarily about the profession of the cadastral surveyor. Cadastral surveyors perform other types of surveys but in most jurisdictions there are limitations on who can perform cadastral surveys and how they are performed. This makes sense since cadastral surveys define the boundaries of private and public property, and in fact define the boundaries between land holdings and other legal interests of different individuals, corporations or governments.

§1.21 Under Alberta government policy self-government is delegated to a profession to protect the public against incompetence and fraud that would endanger the life, health, welfare, safety or property of citizens [Hohol 1978].

§1.22 The practice of land surveying is governed by the Land Surveyors Act, RSA 2000, c.L-4 and the performance of land surveys is legislated under the Surveys Act, RSA 2000, c.S-26.
Exclusive Field of Practice

§1.24 Because of the importance to the public of property and its boundaries, the practice of cadastral surveying is restricted to members of the Alberta Land Surveyors’ Association, under section 3 of the Land Surveyors Act. Alberta Land Surveyors have an exclusive field of practice in the practice of land surveying as defined in section 1(i) of the Act.

1(i) “practice of land surveying” means
   i. the survey of land to determine or establish boundaries;
   ii. the survey of land to determine or establish the boundaries of any right or interest in land or in air space;
   iii. the survey of air space to determine or establish boundaries;
   iv. the survey of land to determine the location of anything relative to a boundary for the purpose of certifying the location of the thing;
   v. the survey of lakes, rivers or watercourses to establish or determine their boundaries;
   vi. the survey by any means, including photogrammetric, electronic or astronomic methods, of land, water or air space for the purpose of preparing maps, plans and documents connected in any way with the establishment or determination of boundaries delineating any right or interest in land, water or air space;
   vii. cadastral operations and compiling and recording information related to the matters specified in sub clauses (i) to (vi); and
   viii. establishing and maintaining a network of geodetic points of any order of precision and establishing photogrammetric controls for the purposes of the work specified in sub clauses (i) to (v), including the preparation of maps, plans and documents and the giving of advice with respect to any of the matters specified in this clause;

§1.25 Contrast the definition of the practice of land surveying above with the definition of the practice of surveying following.

§1.26 It will be clear that the definition of land surveying pertains exclusively to the determination of property boundaries and the certification of things relative to those boundaries whereas the practice of surveying is much more general and refers to the broader field of surveying. The practice of surveying it will be noted is not exclusive to
Alberta Land Surveyors; however, they are entitled to practice in the general field of surveying as well as the exclusive field of land surveying. Persons not registered as Alberta Land Surveyors may engage in the general practice of surveying but not in the exclusive practice of land surveying.

1(j) “practice of surveying” means
   i. the determination, establishment or recording by any means of the positions of points, natural features or features made by persons on, over or under the surface of the earth,
   ii. the determination of the form of the earth,
   iii. the practice of land surveying.

§1.27 and includes the preparation of maps, plans, systems and documents and the giving of advice with respect to any of the matters referred to in this clause;

§1.28 The title “Alberta Land Surveyor” is a protected title reserved under section 4 of the Land Surveyors Act only for practising members of the Alberta Land Surveyors’ Association.

§1.29 One of the key aspects in the training of a professional surveyor is to ingrain upon one’s practice the concept of redundancy. Although basic surveying is relatively simple, mistakes can still occur. A surveyor must ensure that there are enough redundancies in the survey measurements to ensure that the final product is statistically correct. The emphasis should be on independent processes to arrive at the same result.

The Alberta Land Surveyors’ Association as a Self-regulating Profession

§1.30 It has been said that an exclusive field of practice is a privilege. It is more than a privilege, being also a vehicle of the state to ensure that those competent and qualified to perform the required duties are permitted to accept the delegation of sovereign powers. As Justice Belzil stated in the context of a discipline appeal entitled Fang v. The College of Physicians and Surgeons, [1986] 2 W.W.R. p. 384:

   The practice of a profession is a privilege. The law grants to certain groups a monopoly to carry on certain well-defined activities and imposes upon members of those groups an obligation to prevent abuse and to ensure that the monopoly will be exercised for the public good. It is normal that those who enjoy those privileges should be subjected to more rigorous discipline than that which applies to ordinary citizens. This discipline is peculiar to them and is not part of penal law. In consequence of this, the right to silence preserved in Article 11(c) of the Charter does not apply to professional
disciplinary law. One cannot claim in the one breath the so-called right to silence and the privileged status of a professional.

§1.31 Under the government policy previously referred to, and as affirmed in the Fang case, professions are granted the privilege of self-government “only when it is clear the public can best be served by delegating this authority.” [Hohol 1978]

§1.32 Pursuant to the Land Surveyors Act, the Alberta Land Surveyors’ Association is incorporated as a statutory corporation responsible for the governance of the surveying profession in Alberta. Its responsibilities under section 9 of the Act are to manage and conduct the business and affairs of the Association. In addition to this rather general responsibility the legislation sets out direction to establish a procedure for the registration of members, disciplinary provisions and the requirement to established a Practice Review Board. The Association is also required to submit an annual report to the Alberta Legislature.

Registration

§1.33 The registration process to qualify as an Alberta Land Surveyor requires that a person have an academic background equivalent to a baccalaureate degree in surveying. This is achievable by obtaining a degree in Geomatics, or a similar designation, from a program that is accredited by the Canadian Council of Land Surveyors. At present there are three such programs in Canada. These are the University of Calgary degree program in Geomatics Engineering, the University of New Brunswick degree program in Geodesy and Geomatics Engineering and the University of Laval degree program in Geomatics. In lieu of a degree from one of these three programs, candidates can have their academic credentials evaluated by the Canadian Board of Examiners for Professional Surveyors (CBEPS). The CBEPS will compare one’s academic qualifications with its syllabus and grant exemptions where appropriate. The candidate can then write the CBEPS examinations in the remaining subjects in order to qualify for a Certificate of Completion. Candidates who have the required degree will be granted a Certificate of Completion upon application. The CBEPS was formed on January 1, 2006 by the merger of the Western Board of Examiners for Land Surveyors (WCBE) and the CLS Board of Examiners.

§1.34 Once a candidate has the required Certificate of Completion he or she may enter into articles with a practising Alberta Land Surveyor for a period of two years and then challenge the ALSA professional examinations. At least 18 months of the two-year article period must be served in actual field practice and a minimum of 6 months must be spent in office practice. The articles are a formal indenture between the student and the principal, whereby the student pledges to serve the principal faithfully and diligently and the principal agrees to provide the pupil with training in the art, practice
and profession of an Alberta Land Surveyor. Prior to and during the articles, the pupil and the principal meet with the ALSA Registration Committee to ensure that each understands their obligations and that the articles are proceeding without difficulty. The articles must be completed within a period of five years, barring extenuating circumstances.

§1.35 The professional examinations consist of:

1. The Surveying Profession
2. Statute Law
3. Practical Surveying
4. Qualifying Examination
   a. Three project reports
   b. Oral examination.

§1.36 Upon successful completion of the examinations the pupil must satisfy the Registration Committee that he or she is of good character, submit a discharge of articles and an affidavit of field service and appear before a Judge of the Court of Appeal or the Court of Queen’s Bench to swear an oath of allegiance and an oath of office. The Oath of Office, as set out in section 24(1)(f) of Examination and Training Regulation AR 86/2003, is very precise in its wording and is worthwhile reproducing:

**Oath of Office**

I, (name) do swear (or solemnly affirm) that I will diligently, faithfully and to the best of my ability, execute according to law the office of land surveyor; and that I will, as an Alberta land surveyor, conduct all surveys faithfully and to the best of my ability, giving due consideration to the lawful rights of all persons; I will accurately locate and record all evidence of boundary monumentation truly and accurately to the best of my ability, I will measure and record all data truly without prejudice either toward or against any land owner, but in all things conduct myself truly and with integrity; maintaining and upholding the law and the interests of the public.

So help me God

**Interprovincial mobility**

§1.37 During the last number of years Alberta and the other nine provinces, as well as the Association of Canada Lands Surveyors, have participated in discussions to assist in inter-provincial mobility. As a result of these discussions, the Mutual Recognition Agreement was signed in 2001 between Alberta and all other provinces except Prince Edward Island. Prince Edward island joined the pact in 2005. Specifically, this
agreement permits land surveyors registered in one of the other provinces or with the Association of Canada Lands Surveyors to apply for registration with the Alberta Land Surveyors’ Association. The agreement allows the candidate to become registered, subject only to the completion of the four professional examinations, without serving a period of articles. The Alberta-BC Trade Investment Labour Mobility Agreement (TILMA) represents a further step in interprovincial labour mobility.

**Implications of NAFTA**

§1.38 Similar discussions have taken place between Canada, the United States and Mexico. The situation with regard to the North American Free Trade Agreement (NAFTA) has not been finalized at the present time. The general principles that are being proposed, however, are that a registered surveyor in a province of Canada or a state of the United States or Mexico should be able to practise in a province or state of the other country with a minimum of extra academic or experiential requirements. In Alberta there are no restrictions on the practice of surveying but there are licensing requirements in the practice of land surveying. In the United States, however, there are restrictions beyond the field of cadastral surveying. It has been acknowledged by all three countries that because of the different real property jurisdictions restrictions must remain on cadastral surveying.

§1.39 Perhaps the best way to sum up the issue of transferability of credentials is to quote from the *Policy on Professions and Occupations*.

Inter-provincial reciprocity and portability of credentials is desirable, but the province’s vulnerability to standards set by national associations must be safeguarded, where such standards would adversely affect the public interest [Hohol 1978].

§1.40 The policy seems to make it clear that portability of credentials will always be subject to the existence of standards in the foreign jurisdiction that are similar to those that exist in Alberta. In other words standards will not be allowed to gravitate to the lowest common denominator.

**Corporate Membership**

§1.41 The *Land Surveyors Act* and in particular the *Professional Practice Regulation* (AR 327/82) authorize the registration of corporate practitioners and partnerships.

§1.42 A surveyors’ partnership may be a partnership between an Alberta Land Surveyor and a person who is not an Alberta Land Surveyor provided that a controlling interest in the partnership is held by Alberta Land Surveyors.
§1.43 Surveyors’ corporations may be registered and receive a permit to practise if they have majority control by Alberta Land Surveyors and a majority of its directors are Alberta Land Surveyors. There are two exceptions to this requirement. First, if a corporation is owned by surveyors and professional engineers registered under the Engineering, Geological and Geophysical Professions Act, and the shares are distributed in proportion to the share of the practice in engineering and land surveying—provided that at least 10% of the shares are owned by Alberta Land Surveyors—it may be registered as a surveyors’ corporation. Second, a corporation, which was engaged in the practice of land surveying as of June 2, 1981 may be registered as a surveyors’ corporation if a majority of its shares are held by Alberta Land Surveyors and professional engineers.

§1.44 In all cases an Alberta Land Surveyor must assume responsibility for the personal supervision, direction and control of the practice of surveying in which the corporation or partnership engages. A corporation or a partnership that proposes to engage in the practice of land surveying must apply to the Council of the Alberta Land Surveyors’ Association for approval and, subject to compliance with the Professional Practice Regulation, will be issued a permit to practise. A permit stamp issued by the Association must be placed on all plans, drawings and documents certified by an Alberta Land Surveyor who is a member or employee of the surveyors’ corporation or partnership. A surveyors’ corporation or partnership is subject to the governance provisions of the Land Surveyors Act.

Maintaining Professional Competency

§1.45 One of the main reasons referred to in the Policy on Professions and Occupations for the statutory regulation and control of professions is

to protect the public against incompetence and fraud that would endanger the . . . property of citizens [Hohol 1978].

§1.46 There are a number of ways to protect the public against incompetence and fraud. It is important to ensure that practitioners are properly qualified in the first place. It is, however, even more important to ensure that practitioners once qualified and admitted into the practice of land surveying maintain their competence and keep up with the rapidly evolving changes in science, technology, law and professional practice.
Continuing Professional Development

§1.47 Once practitioners become registered they can normally maintain their registration by paying their annual fees and complying with normal administrative requirements. This is, however, no guarantee that the public is being protected against incompetence or obsolescence of registered practitioners. The Alberta Land Surveyors’ Association therefore is active in maintaining a program of professional development for its members. Despite the fact that the program is voluntary, most members are not only cognizant of their obligations, but eager to keep abreast of new developments and they attend Association-sponsored seminars as well as meetings and conferences.

§1.48 In addition to ALSA-sponsored events there are several other professional development opportunities sponsored by the Canadian Council of Land Surveyors (CCLS) Professional Liability Insurance program, Canadian Institute of Geomatics (CIG), International Federation of Surveyors (FIG), local educational organizations and other bodies in which members participate. As well as formal educational seminars there is a variety of other means whereby a professional may keep abreast of the times and retain his competency. These include active participation in professional affairs, formal courses, conferences and seminars, research, professional journals, peer reviews, and quality assurance audits, to name a few.

§1.49 Loss control seminars sponsored by the CCLS Professional Liability Insurance program are especially valuable to members because of their relevance to maintaining a financially viable practice free from adverse claims against their insurance coverage. As in any insurance program, a high incidence of insurance losses soon results in an increase in insurance premiums. Since the CCLS insurance program is dedicated to the surveying profession and managed in part by a CCLS committee, there is a strong incentive for surveyors to attend loss control seminars in an effort to learn how they can assist in reducing claims.

§1.50 Members are encouraged to maintain records of their professional development endeavours in case their competency is ever called into question in a practice review or a disciplinary action. Both the Practice Review Board and a disciplinary tribunal have the mandate to direct a practitioner to take professional development courses when warranted.

Practice Review

§1.51 Section 12 of the Land Surveyors Act establishes a Practice Review Board (PRB). The PRB consists of no fewer than five members, one of whom must be a public member appointed by the Government of Alberta. The mandate of the PRB is the evaluation of desirable standards of competence of practitioners among other things; all
related to the educational, experiential and competency standards of the surveying profession. The Board is also obligated to conduct reviews of the practice of individual practitioners.

§1.52 The program of practice review is a key component in the maintenance of competency in the surveying profession in Alberta. In accordance with the direction of the governing statute the Systematic Practice Review program is established as a peer review program aimed at ensuring that the public can rely on practitioners to offer an acceptable level of expertise primarily in the practice of cadastral surveying. In point of fact the Council feels that an acceptable level of expertise is the minimum acceptable standard and philosophically the program should encourage a standard of excellence.

§1.53 The overriding philosophy of practice review in Alberta has always been to act as a coach as opposed to a police officer. In this regard the program is of an educational nature despite the fact that section 13(2) of the *Land Surveyors Act* does give the Practice Review Board certain disciplinary powers. The Board has always taken the position that it will not wear its disciplinary hat but rather refer potentially punitive decisions to the Discipline Committee for an independent evaluation and resolution when warranted. The early decision of the ALSA to maintain the concept of coaching as opposed to punitive action has proved to be wise in view of several court decisions. As an example, the court in *Chandler v. Association of Architects (Alberta)*, [1989] 6 W.W.R. 521, relating to sections 38-39 of the *Architects Act*, RSA 2000, c.A-44, which contained (at the time of the decisions) nearly identical provisions to sections 12 and 13 of the *Land Surveyors Act*, found the role of the Practice Review Board as a disciplinary tribunal to be somewhat problematic. This tradition adopted by the ALSA has helped to establish the acceptance and credibility of the Practice Review Board in the eyes of survey practitioners and the courts.

**Administrative Structure**

§1.54 The Systematic Practice Review department is currently established as a work team composed of two professional surveyors, a technical assistant and a half-time administrative assistant. The Director of Practice Review, who is a professional surveyor, manages the program. The overall program is specifically designed to systematically review a minimum of one product of each practitioner in a five-year period, as well as conduct an office visit and interview with the practitioner. This office visit may involve a discussion of the results of the field and plan review, review of field notes, office procedures and a random check of current or archived files. The Director with his broad experience in overseeing the practice of 350 practitioners is in a good position to coach members (both novice and veteran) in how they might raise their standards of practice, or possibly to offer some friendly advice on areas of concern in
situations where a member may be falling behind the norm of current practice. If a member is not in agreement with an assessment made by the Director, the Practice Review Board may review the matter by holding a formal hearing, which the member is entitled to attend.

§1.55 The Director of Practice Review reports to the Practice Review Board which at the time of writing is composed of nine land surveyors and a public member appointed by the Government of Alberta. The PRB in turn reports to the Association’s Council which sets the policy direction for the Board within the mandate prescribed by the statute.

The Review Process

§1.56 A review consists of an internal audit and an external audit.

§1.57 The internal audit consists of a face-to-face review by the Director of Practice Review with the practitioner in that practitioner’s office. The internal review may consist of a review of staff experience and education, types and volume of work, field and office equipment available, quality control processes, supervision, safety programs, advertising and promotion programs, office systems and field procedures employed in the practice, filing and archival systems, and an on-site review of a number of files selected at random. Files may also be selected for a subsequent external audit. A review of corrective actions as a result of previous reviews may also be included in the internal audit.

§1.58 The external audit includes a random review of a selection of plans registered by the practitioner in the Land Titles Office, a review of field notes and a field inspection. Standardized checklists are used in the examination of plans and field inspections. This portion of the review is normally conducted by the field surveyor and assistant.

§1.59 Upon completion of the auditing process a report of findings with recommendations is compiled and submitted to the practitioner with a request for a response. The report with the practitioner’s response, together with an overall general analysis is submitted to the Practice Review Board for its information and deliberation. The anonymity of the practitioner is maintained in all reports submitted to the Practice Review Board. If so desired, the practitioner may voluntarily appear before the Board to answer questions or provide further comment on the report. The Board may also request that the practitioner appear before it, if it feels that further clarification is required.
Observations and Outcomes

§1.60 Statistics are maintained which compare the practice review ratings from year to year based on several different types of surveys, and are broken down into categories of plan conformity, field notes and field inspection. Areas which are noticeably out of sync with good practice are highlighted and further analysis and general remedial actions may be proposed.

§1.61 The Director of Practice Review is also active in providing regular reports of a general nature to the membership through the Association’s quarterly newsletter ALS News. A report on general observations of practice concerns, together with a case study, is published in each issue.

§1.62 A system of practice review has been in place in the Alberta Land Surveyors’ Association for nearly 20 years since the Government of Alberta discontinued the practice of checking plans for correctness, prior to registration in the Land Titles Office. This post registration audit has required practitioners to accept total responsibility for their professional activities and the quality of their work, rather than relying on a government office to review their plans prior to registration. By and large the profession has accepted the challenge and practices have steadily improved. There is always room for improvement but systematic practice review will hopefully keep abreast of the practice of surveying in general, as well as the competence of individual practitioners, and will curb any serious problems. The additional advantage of this process has been to speed up the plan registration process and give the surveyor more control of project timeline.

Discipline

§1.63 The disciplinary process is a quasi-judicial process, which must be initiated by a complaint. A complaint may be made by a member of the public, by another land surveyor, by the Practice Review Board or by the Registrar. An investigated person has a full opportunity to respond to the complaint at all levels and can be, and in practice is encouraged to be, represented by counsel. In the event that a member is found to be guilty of either unskilled practice or unprofessional conduct that member can be subjected to a reprimand, a fine not exceeding $10,000, membership suspension or cancellation. He or she may also be required to practice under supervision or to take additional courses or a number of other remedial measures.

§1.64 A practitioner has full recourse to appeal first to the Council of the ALSA and if Council upholds the conviction, then an appeal may be made to the Alberta Court of Appeal. A practitioner may be levied the costs of the hearing and the appeal and the
decision is usually published in *ALS News* once all appeals have been exhausted. Neither the Council nor the complainant has a right to appeal the decision of the Discipline Committee.

§1.65 As a quasi-judicial process, all of the rules of natural justice apply ensuring that the investigated person receives adequate notice including reasonable particulars of the charges to be defended. All evidence is disclosed to the investigated person who has a full right, either personally or through legal counsel, to cross examine any witnesses and to argue any aspects of the proceedings or points of law. As noted previously in the quotation from Justice Belzil in the *Fang* case, a practitioner is a compellable witness and may be required to produce plans, field notes or other documentation and must answer to his conduct before the disciplinary tribunal.

§1.66 The disciplinary process is outlined in detail in sections 32 – 69, Part 5 of the *Land Surveyors Act* and in the *Discipline Regulation*, AR 325/82.

§1.67 A practitioner can be disciplined for either unskilled practice or unprofessional conduct. Webster’s dictionary defines unskilled as “having no special skill or training.” In the context of a disciplinary action involving a professional person the definition probably means not applying a skill or training to one’s practice, although it is not improbable that a professional may not have kept current with advances in technical or professional practice and may be practising in an area beyond the limits of the skills and training that he or she has acquired and maintained. With so many advancements in modern society, it is essential that a professional keep up to date by a combination of formal and informal educational upgrading.

§1.68 The definition of unprofessional conduct is perhaps a little more elusive. *Unprofessional* is defined as violating the rules or ethical code of a given profession; not of, characteristic of, belonging to, or connected with a profession; nonprofessional. Black’s Law Dictionary is somewhat more helpful in defining unprofessional conduct as:

That which is by general opinion considered unprofessional because immoral, unethical or dishonorable. That which violates ethical code or rules of profession or such conduct which is unbecoming member of profession in good standing. It involves breach of duty which professional ethics enjoin. Within statutes, rules, etc., promulgating standards of professional conduct for attorneys denotes conduct which is recommended to be made subject to disciplinary sanctions.

§1.69 Ethical codes are somewhat nebulous and subject to a fair degree of interpretation usually based on the application of the ethical code to a given set of facts. As Lord Moulton once said:

The real greatness of a nation . . . is measured by the extent of . . . Obedience to the Unenforceable [Moulton 1924].
§1.70 A code of ethics is very difficult to enforce but the Discipline Committee is charged with making a determination of whether a practitioner is guilty of unprofessional conduct based largely on adherence to the Code of Ethics.

§1.71 In the case studies two disciplinary cases are summarized. The first is a case primarily of unprofessional conduct and the second is a combination of both unprofessional conduct and unskilled practice. (Case Study A and B)

Standards of Practice

§1.72 Every profession has standards of practice, although very often they are not codified. It is particularly helpful to the neophyte practitioner to have some written standards, which can be referred to for guidance in difficult situations. A proactive enunciation of standards by a professional body is much more desirable than forcing members (and particularly their clients) to learn from their own mistakes. We can all benefit from the wisdom of our peers in discussing and establishing rules or guidelines that conform to normal standards of practice. To expect every practitioner to search out, and develop standards on their own is an inefficient model for building a professional practice. That is not to say that standards need to be developed to micro manage the details but rather to develop broad general principles which can apply in routine situations, and in particular can be applied generally to new ground-breaking situations. Perhaps the major benefit of developing standards of practice is the process of developing them. Through a thorough review and deliberation of each individual standard among a variety of practitioners, each standard is fully aired and debated prior to adoption. Many hours of committee work are involved but the process in itself is an education for everyone involved and the end result is usually a clear understanding of the issues involved, with a resulting firm consensus.

Manual of Standard Practice

§1.73 Section 10 of the Surveys Act requires that “All surveys . . . be made . . . in accordance with good surveying practices.” It does not, however, set out what good surveying practices are. Section 15(1)(g) of The Land Surveyors Act authorizes the Council of the Alberta Land Surveyors Association to “make regulations prescribing standards and rules for the practice of land surveying.” Unfortunately, regulations are somewhat difficult to amend since they require the approval of the Lieutenant Governor in Council. For example, in 1997 the ALSA membership approved the Examination and Training Regulation (AR 326/82) for amendment and submitted it to the Minister. The Cabinet approved it in 2003, as AR 86/2003.
§1.74 In lieu of this process the Council has adopted a *Manual of Standard Practice* (MSP) that is not a regulation as prescribed by the Act. Standards must be dynamic and are subject to change. Upon recommendation of the Standards Committee of the ALSA, proposed amendments must be endorsed by Council and then approved by a majority vote of the membership at an annual general meeting.

§1.75 The *Manual of Standard Practice* (MSP) is a comprehensive documentation of standards relating to all different aspects of the *practice of land surveying* in Alberta. Common sections address detailed guidelines for Real Property Reports, Wellsite Surveys, Condominium Surveys and Descriptive Plans, to name only a few. The MSP also addresses some standards relative to the general *practice of surveying* such as Deformation Surveys and Control Surveys. As a consequence it will be seen that Alberta Land Surveyors are held to a higher standard even in the general *practice of surveying* that may not apply to non-land surveyors practicing in the general *practice of surveying*. Some might think that this creates an un-level playing field for land surveyors to compete with non-land surveyors in the general *practice of surveying*. This may be so but Alberta Land Surveyors have an exclusive field in the *practice of land surveying* and are recognized as experts in the field of positioning and measurement. As such, the public is entitled to rely on the professional association to hold Alberta Land Surveyors accountable for any services that they provide. Indeed, Part B, section 1, paragraph 2(4) of the Commentary to the Code of Ethics requires that an Alberta Land Surveyor shall not practice in those areas beyond ones competence. Again, as Justice Belzil said in the 1985 *Fang* case, “those who enjoy those privileges should be subjected to more rigorous discipline . . .”.

§1.76 The *Manual of Standard Practice* attempts to consolidate all government standards as well as recognized acceptable standards of procedure for various surveys in Alberta. The standards are formulated by direction given by Council to the Standards Committee, often at the direction of the membership at an annual general meeting or as a result of concerns expressed by the Practice Review Board.

§1.77 Land Titles Office requirements are separate requirements that are only referenced in the MSP but are determined by the Land Titles Offices in consultation with the Standards Committee.

§1.78 The MSP has evolved over nearly 50 years of history of the Alberta Land Surveyors’ Association. It was started as a set of nine Good Practice Resolutions adopted by the membership at the 1958 Annual General Meeting [*Holloway 1960*].

§1.79 Perhaps the most important statement in the *Manual of Standard Practice* is contained in the introduction, which sets out the purpose of the manual. The introduction states that:
The purpose of this Manual is to assist the Alberta Land Surveyor in practicing, with integrity and competence, and to ensure surveys and survey plans result in clear and unambiguous definitions of boundaries.

All standards in this manual should be followed by the Alberta Land Surveyor. Where full compliance is not possible because of local conditions, conflicting requirements of other authorities or other circumstances, the onus is on the Alberta Land Surveyor to be able to defend non-compliance.

There is also an onus on the Alberta Land Surveyor to improve the manual and to participate in keeping it current. If a surveyor believes the existence or absence of a standard is necessary, he has an obligation to bring recommendations for change to the membership.

§1.80 From the foregoing it is clear that the Manual of Standard Practice is intended to be more than just a guideline, rather a recommended standard that should only be modified where extenuating circumstances dictate that the standard is impractical or would result in an absurdity. The practitioner has discretion to use his or her professional judgment in applying the standards that have evolved over the years, but in departing from those established standards must be able to justify a decision if challenged. A good rule of thumb would be to record in the field notes or in other documentation the reasons for not following the standard when the circumstances and reasons are fresh in one’s mind. This would show that the decision was a conscious one and not an afterthought. Such a notation would prove to be credible evidence if the practitioner was challenged either in court or before a disciplinary panel.

§1.81 But what about the authority for establishing standards by means of a manual that is not a regulation pursuant to the Land Surveyors Act? In the opinion of legal counsel for the Alberta Land Surveyors’ Association:

As they are not regulations, they do not automatically bind every action by a surveyor. In the context of a discipline proceeding they are merely evidence, albeit strong and persuasive evidence, of what the majority of land surveyors consider to be acceptable practice and impose upon themselves as an expectation as to the professional standard of practice.

Because the Manual of Standard Practice is not a regulation, it is open to a surveyor to depart from it so long as that surveyor can demonstrate either that a higher duty required a departure or that the surveyor’s practices are nevertheless consistent with the best interests of the public and the profession. [Shores 1996].

§1.82 It appears that under normal circumstances the Manual of Standard Practice would be upheld, or at least would be very persuasive for either a discipline committee or a court of law if the issue was to be placed before either of those bodies. A court will
normally ask for expert opinion of one or more qualified practitioners when attempting to assess the appropriateness of a given action by a professional. The MSP is actually an opinion that has been debated and adopted by a majority of the membership through a process which includes a review and recommendation by the Standards Committee, review and approval of Council and then debate and approval by a majority of the membership of the Alberta Land Surveyors’ Association at an Annual General Meeting. The MSP also is subject to periodic reviews and amendment through the same process. The strong endorsement of the Manual of Standard Practice by a practitioner’s peers may even be viewed by the courts as stronger evidence of good practice than an expert opinion.

**Code of Ethics**

§1.83 Nothing distinguishes the professional from the businessman more than reliance on ethics in fulfilling commitments to colleagues, employers, clients, and society as a whole.

§1.84 The Code of Ethics of the Alberta Land Surveyors’ Association is actually a government regulation (AR 324/82) approved by the Lieutenant Governor in Council. The Policy on Professions and Occupations previously referred to requires that all professional associations have a code of ethics and that it be made available to the public. The Alberta Land Surveyors’ Association has actually had a code of ethics for many years prior to the policy but upon adoption of the policy the code was refined and ratified by the membership and introduced as a government regulation. Since the formal adoption of the code, the Association has added a *Commentary to the Code of Ethics*, which expands on the nine respective canons of the code by detailing more specific principles. The commentary has been adopted by the membership as part of the Manual of Standard Practice.

§1.85 The Code of Ethics details such specific responsibilities as duties to personnel, confidentiality, integrity and competence, and unauthorized practice. The Code of Ethics and commentary are included in Appendix A to this chapter. Case Study C also addresses the Alberta Land Surveyors’ Code of Ethics and Commentary.

**Professional Responsibility**

§1.86 The cadastral surveyor holds a unique position in society. In establishing a boundary, the land surveyor may be engaged by one landowner but nevertheless the monuments placed also define the extent of the lands of the client’s neighbour and potential adversary.
The Land Surveyor as a Public Officer

§1.87 Although not specifically designated as such, a land surveyor is a public officer whose actions are based on the functions and responsibilities that the surveyor owes to society [Allred 1995]. The surveyor’s role as a public officer imposes several ethical obligations on the exercise of professional duties. Clients and the public at large must be able to rely on the objectivity and integrity of the surveyor in rendering professional opinions regarding private and public boundaries. A boundary is always a dividing line between one legal interest and another; therefore the land surveyor in carrying out his or her boundary defining function must not be biased either in favour of or against the client [see Case Study C]. These obligations may sometimes appear to be in conflict with the surveyors’ obligations to clients, associates and other professionals. A land surveyor however, unlike the lawyer, does not represent his client against that client’s neighbour. He or she is engaged as an arbiter to determine to the best of his or her ability where the boundary between client and neighbour is located.

The first-rate land surveyor is a superior person who is ethical and has the intelligence to appreciate his role as sometimes judge and jury - acting for both his client and the adjoiner. [Slack 1961].

§1.88 The first duty of a surveyor is not to the client but rather to the public at large. The surveyor is basically a fact finder and provider of geographic information. Based on the facts the surveyor has found, he or she is often expected to give a professional opinion as to various outcomes or solutions to society’s problems. Whether the surveyor is investigating a private boundary matter or designing a system for land management, his or her skills are employed in order to determine the best information that the situation permits. It is therefore important that the surveyor be diligent, competent, impartial and of unquestionable integrity in ensuring that the information he or she searches out and provides is true, correct and complete, to the best of his or her ability. As an Australian colleague sums it up, “A surveyor’s obligation is to the truth!” [Allred 1998].

Liability and Negligence—Duty of Care

§1.89 A land surveyor, like all professionals, is responsible for his or her errors and omissions. We are all human—we all make mistakes. We learn to apply the theoretical knowledge acquired to practical situations and at times make errors of judgment. We may overlook facts that in retrospect would have a bearing on the opinion being rendered. At times these errors in judgment will cause a client or another party to suffer damage. The surveyor may find that he or she has a financial liability for that damage.

§1.90 Generally speaking, a surveyor may be liable in contract or tort.
§1.91 In contract, a surveyor is only liable for those things that he or she has contracted to perform for a client or possibly some other party. The contract can be oral or written. Obviously written contracts are preferred because they spell out for all to see exactly what the parties have agreed to. In the absence of a written contract it will be up to the parties and probably an adjudicator of some form to determine what in all probability the parties actually agreed to either specifically or implicitly. Oral contracts often lead to dispute as to the actual terms of the agreement, which requires the adjudicator to make certain findings based on the best available evidence. In the end a surveyor may be found liable if he or she breached the terms of whatever contract the adjudicator determines that the parties agreed to.

§1.92 Tort is a different matter in that it will be up to the adjudicator to determine what a reasonable surveyor would have, or should have done to determine whether the surveyor in question was negligent in the performance of his or her duties. The courts usually attempt to determine the reasonable standard of care of a competent practitioner. This is not the standard of an expert in the field or of a novice but of a normal practitioner. The test for negligence is therefore not what the most competent person in the field would have done but what the normally competent practitioner would have done.

Limitation of Actions

§1.93 Alberta has a new Limitations Act, RSA 2000, c.L-12, originally passed in 1999, which has not had extensive judicial review as of this date. Sections 3(1)(a) and (b) of this Act provide a limitation period of two years with an ultimate limitation period of 10 years from the time the original service was performed. This means that legal action must be taken, by a claimant within 2 years of the date when the claimant became aware of the claim, or within a maximum time period of 10 years from the time the services were performed.

§1.94 Prior to the 1999 Limitations Act, a surveyor was liable for his or her actions for a period of two years or six years from the time the cause of action arose. This discovery rule posed a particular hardship on surveyors because a survey error may lie dormant for decades before it is discovered and the clock starts ticking. The surveyor could very likely be retired or even deceased when the error is discovered.

Professional Liability Insurance

§1.95 Pursuant to Section 65 - Mandatory Insurance - of the Bylaws of the Alberta Land Surveyors’ Association, all practitioners are required to carry professional liability insurance to cover their potential liabilities against errors and omissions. This bylaw
provides protection for the member against legal actions but at the same time it assures the public that all practitioners are financially responsible should they make an error from which a client or other party suffers damages. The Canadian Council of Land Surveyors (CCLS) offers a liability insurance program that is available to all members. This program contains an endorsement for claims made against retired and deceased practitioners. Persons who are not engaged in the actual practice of land surveying, such as government officials, academics or a few other classes of surveyors, may apply for exemption from the provisions of the bylaw [Brett 2000].

§1.96 The CCLS professional liability insurance policy is a claims made policy. Under a claims made policy an insured is covered for any claims that are brought against the insured within the policy period. In other words, an insured is covered for any claim that is made while the policy is in force, regardless of when the service was provided. A claims made policy is contrasted with an occurrence policy such as automobile insurance, which covers an insured against claims resulting from an incident that occurred during the policy period.

§1.97 An individual or a corporate practitioner must be particularly cautious when changing employment or winding down a corporate practice to ensure that coverage is obtained for past actions—actions against the insured for incidents that might have occurred when still in practice, and which may result in a claim several years after the surveyor’s involvement. Employers and employees must also be cognizant of potential past actions when hiring new employees or accepting new employment. An employer who hires a new employee who has a potential for a claim from his or her previous practice could find his or her own professional liability insurance policy subject to a claim of the new employee based on prior acts. This could affect the employer’s claims record and the employer could also be liable for the deductible. Similarly, the new employee should ensure that the new employer’s policy will cover prior acts and the issue of who pays the deductible if there is a claim for a prior act should be determined in advance in order to avoid an uncomfortable situation.

**Personal Supervision**

§1.98 Section 10 of the Surveys Act requires that all surveys made pursuant to the Act be carried out under the personal supervision of an Alberta Land Surveyor. Section 3 of the Land Surveyors Act is somewhat more specific.

3. (3) Everything done in the practice of land surveying shall be done by or under the supervision, direction and control of a practitioner.
(4) No Alberta land surveyor shall sign a plan or document in the practice of surveying unless it is prepared by him or under his personal supervision, direction and control.

§1.99 There are many different concepts on what constitutes personal supervision. Pratt in an article in ALS News states:

In all professions, there is an expectation that all services relating directly to the field of expertise will be carried out by the professional engaged. Certainly there is an expectation that a lawyer will personally represent his client in court, and that a surgeon will personally perform your surgery. [Pratt 1998]

§1.100 Why then should you not expect that a surveyor will personally perform a survey on your property? The noted legislation requires a land surveyor to exercise personal supervision, direction and control. Pratt goes on to cite Webster’s dictionary which defines:

- Supervision: to oversee for direction, to superintend, to inspect;
- Direction: to guide or supervise action; and
- Control: to direct influence over.

§1.101 The meaning of personal is clear, in that it is to be done in person, not through an agent or other representative. It therefore seems fair to say that there is a requirement for the surveyor personally to direct, guide, superintend and inspect all surveys for which he or she is responsible. The word overseer or sur voir also appears in the definition of supervise. In the context of personal supervision, an Alberta Land Surveyor is an overseer of a survey in much the same way a surveyor was historically an overseer of land.

§1.102 The general practice is that a land surveyor will be personally responsible and supervise an individual project but may not actually be on the ground in the field for the duration of the project. The surveyor should however be present at all material times and should be engaged in the preliminary setup of the survey and review of the final plan of survey. Of course, if boundary uncertainties become apparent during the conduct of the project the land surveyor would attend in the field and ensure that he or she was totally comfortable with the assessment of the physical, documentary and oral evidence that was found and that it is totally acceptable, or alternatively to expand the search for further evidence of the boundaries in question.

§1.103 The Alberta Court of Appeal had the opportunity to address the concept of personal supervision in a discipline appeal where the Discipline Committee had found that “the plan was not prepared under the personal supervision” of a practitioner. The Court commented that “supervision must relate to effort and promptness, and not
merely to accuracy” when addressing supervision as it related to ensuring that a project is completed in a timely fashion. [ALS News 1995-1], see also Case Study B.

§1.104 The fact is, however, that most land surveyors are responsible for several field crews and often do not get the opportunity to spend as much time in the field as they would like. They therefore must rely heavily on articed pupils and experienced party chiefs to perform most of the field work. Nevertheless they remain personally and professionally responsible for the results of each and every survey which they accept.

Contract Crews

§1.105 Contract crews are a further complication in the personal supervision conundrum. Contract crews are contracted as contrasted with employed by the surveyor to execute some or all of the field or office operations of a survey firm. In the case of a survey crew employed by a surveyor or survey firm, there are day-to-day contacts that include training, direct supervision on a regular basis, personal assessment and evaluation of their work, and the opportunity to become totally familiar with a crew’s work habits and discipline. Unfortunately, contract crews are removed from the normal employer-employee relationship and the surveyor cannot always rely on the contract crew to the same extent as with employees.

§1.106 There is, however, a provision in the Manual of Standard Practice whereby an Alberta Land Surveyor may engage the services of a contract crew that is not in a direct employment relationship to conduct technical functions on behalf of the surveyor. These functions are normally in the context of performing the field work, although it can include plan preparation or computing, either as a single service or as part of a package. The land surveyor however still assumes full responsibility for the job set-up instructions, supervision and review of the final results. The contractor cannot act as a business agent for the surveyor or provide the necessary client liaison.

Unauthorized Practice

§1.107 The practice of land surveying is exclusive to members of the Alberta Land Surveyors’ Association. Unfortunately, situations arise where persons who are not registered as Alberta Land Surveyors attempt to engage in the practice of land surveying. The general public is often not aware of either the qualifications required, or the need for registration as a land surveyor when obtaining cadastral surveying services and can unknowingly accept the work of unauthorized individuals. This can lead to problems if the unauthorized person makes a mistake or a dispute arises with regard to a boundary. If the survey is a Real Property Report or a survey for which a plan must be registered in a public office, the unauthorized person must try to obtain a qualified
One specific area that has caused concern is where a contract party chief is engaged to provide technical surveying services to the land surveyor. The public is rightfully confused because they do not always appreciate the difference between a land surveyor and a survey technician. The borderline between the ethical contracting of contract survey crews and the solicitation of surveying services by representing a non-licensed person as an Alberta Land Surveyor is often clouded by a grey area. There have been a number of instances where an unauthorized person has strayed across the line, purporting to be able to do a cadastral survey for a client and hoping to get an Alberta Land Surveyor to “sign the plan.” These transgressions often end up either before a disciplinary tribunal where the land surveyor is accused of breaching the Code of Ethics or before the courts where the unauthorized person is charged with unauthorized practice [ALS News 1995-2]. Unfortunately it takes two to tango, and both the land surveyor and the unauthorized person are implicated in what can end up being very messy proceedings, whether they are before a court of law or before a disciplinary tribunal. [See Case Study A]

**Rights and Privileges**

§1.108 A land surveyor has a number of statutory privileges with regard to the acquisition of evidence of boundary location and entering upon private properties. In view of the fact that every boundary represents the dividing line between two or more properties, it is often impossible to survey the boundaries of one client’s property without entering the property of several other landowners. Particularly in the case of a rural quarter section of land it may be necessary to enter eight or ten different properties in order to determine and demarcate the boundaries of a single quarter section.

**Right of Entry**

§1.109 Section 16 of the *Surveys Act* authorizes a surveyor and his authorized assistants to enter upon the land of any person for the purpose of conducting cadastral surveys. The surveyor is, however, responsible for any damage caused by the survey operation. Damage would typically include cutting trees and causing damage to fences or crops. In the urban context a surveyor normally has to dig up private lawns, which often causes considerable consternation to residents, particularly when they are not benefiting from the survey.

§1.110 Section 6(2)(a) of the *Pipeline Act*, RSA 2000 also contains provisions to enter upon private lands in the conduct of a survey for the location of a pipeline. The *Expropriation* and *Surface Rights Acts* contain similar provisions as the *Pipeline Act*. 
§1.111 The Alberta Land Surveyors’ Association has developed a number of policies to alleviate some of the adverse public impact caused by the necessity to enter upon private properties. The ALSA Commitment to Property Damage Mitigation [Website 1], which is available from members and at the Association’s office as well as on the ALSA website, encourages the surveyor and his field staff to attempt to contact landowners before entering onto private property and, where it is necessary to dig up lawns or cut trees, to do as little damage as possible and restore the site as nearly as possible to its original condition. The policy also requires field crews to leave a message with a landowner when they are not able to contact them and to display proper contact information on vehicles.

Taking Oaths

§1.112 Since survey monuments that may have been placed to mark original boundaries one hundred or more years ago have often disappeared it is often necessary to rely on other evidence as to where the original boundary monument was established. This may involve taking testimony of an elderly landowner who has lived on the land for many years and may recall the original survey monument being removed for the erection of a fence or some other improvement. That person’s testimony may in fact be the best evidence of the location of the boundary in question. Section 13 of the Surveys Act authorizes a surveyor to examine witnesses and administer an oath setting out the person’s oral evidence. The surveyor must ensure that full particulars are obtained from the landowner and that the information is recorded properly in case it ever needs to be produced in court.

Copyright

Since it is this pictorial or graphic form, and not the map’s subject matter, that is relevant to copyright protection, maps must be distinguished from non-pictorial fact compilations, [Wolf 1992]

§1.113 A survey is prepared based on a set of circumstances presented by a single client at an expressed point in time, and subject to a contract (either oral or written) that is agreed to (either specifically or implicitly) by both the surveyor and the client. A survey usually results in the preparation of a plan or report detailing the result of the surveyor’s investigations and possibly drawing some conclusions. The plan is based on a field survey, which is intended to depict the field conditions existing at a specific point in time and to the required degree of accuracy for the intended purpose. This expression of a considered opinion by the surveyor is similar to a legal opinion of a solicitor, or the artistic expression of an artist. As such the plan of survey or survey report is subject to the protection of the Copyright Act, RSC 1985, c. C-42, as amended.
§1.114 It must be emphasized that copyright is the protection of the expression of an idea such as in a survey plan or an artist’s painting. Copyright does not protect the information depicted on a plan, only the graphical expression of those ideas.

§1.115 Copyright has become an issue for surveyors in the last two decades as a result of the misuse of survey plans, particularly Real Property Reports. Several cases have come to light where a person who is not a land surveyor has taken a Real Property Report or other survey plan and added on a garage or other building and submitted the plan for approval of a sale or mortgage. It is only some time later, when it is discovered that the building location is in error and the surveyor is brought into the picture, that it is found that the document has been altered without permission. Liability may initially be an issue; however, if it can be proven that the survey predates the building in question or that the incorrect information was not provided by the surveyor, the surveyor’s actions are readily defensible even though the surveyor may suffer costs in researching and defending a claim.

§1.116 Surveyors have always held copyright in their documents, even without displaying the copyright symbol. The public, including many allied professionals, have treated copyright in plans very casually, issuing copies at random without consideration of the consequences.

§1.117 For the last several years it has become common practice to identify copyright in survey plans by the use of the copyright symbol © and the year and owner of the copyright. This simple step has made the public much more aware of the issue of copyright and the need to have survey information updated and verified before being reused.

Marketing

§1.118 Marketing needs to be examined from two points of view: (1) the role of the professional association and (2) the role of the practitioner.

§1.119 Marketing is often viewed with some trepidation as being perhaps unprofessional and undignified. Marketing is, however, essential to the long-term sustainability and advancement of the surveying profession. It is useful to look at marketing more from the perspective of educating the public and informing them about what services and tools are available to assist them in enhancing their property. Robert Daniels comments that:

many of the people who need survey services . . . have no idea what we do or how we do it. All they know is they need it . . . clients of
land surveyors usually have the most valuable asset of all – land
[Daniels 2001].

§1.120 Accurate positional data is essential for anything to do with land, whether it be constructing a railway or landscaping one’s backyard. Unless the general public understands what is available and what might be important to them, it is difficult for them to plan effectively. In the same way that knowledge of stocks, bonds and other investments is necessary for one to plan for long-term financial needs, an understanding of what is located where - both on the surface and under ground-is necessary to properly develop one’s property to its optimum use.

§1.121 A professional association needs to market the profession with a number of key objectives in mind.

§1.122 It is important that the profession is sustainable into the future. This requires new entrants into the profession, advancement of the body of knowledge and general education of the public as to what services are available.

§1.123 It also involves keeping abreast of current issues and advising organizations such as government on issues that may be of concern to the general public. As a professional association responsible for the provision of surveying services in Alberta it is part of the ALSA mandate to be concerned about issues that affect public safety and protection of property rights and to bring those concerns to the attention of the appropriate public body. This again must not take the form of promoting professional services but rather be based on an informational, advisory approach.

§1.124 A professional association can also provide general marketing of professional services, informing and educating the public on what concerns they need to be aware of when buying and purchasing property or when excavating in the vicinity of buried facilities. A professional survey association also needs to make the public aware of the importance of legal boundary markers and the need to preserve them. The general public is often not aware of the importance of boundary monuments and the fact that there is a penalty for removal of monuments, even though a private owner may have paid to have them placed to demarcate the boundaries of their property.

§1.125 It was not very long ago (20–30 years) that all professional advertising was deemed to be undignified and unprofessional. A number of court cases in the United States and more recently in Canada, such as the Jabour case in British Columbia Jabour v. Law Society (British Columbia), [1982] 2 S.C.R. 307 have disallowed strict rules prohibiting advertising by professionals.

§1.126 Surveyors normally do not provide the type of services that a promotional marketing program is likely to attract in the way of clients from the general public.
When a potential client needs a surveyor they will seek one out. The most common forms of marketing are referrals and the telephone book. The classification “Surveyors - Alberta Land” in the Yellow Pages identifies members of the Alberta Land Surveyors’ Association who are licensed to practise in the field of cadastral surveying. Other classifications deal with fields of surveying that are not restricted. Land surveyors, who practise in several areas of surveying, often advertise in more than one category. For larger clients such other land professionals—developers, house builders, lawyers, engineers, architects, town planners and appraisers—a professional-looking brochure or booklet with samples of the type of work the firm engages in, and perhaps a list of former clients, will provide suitable information to inform prospective clients of the range and scope of services offered.

§1.127 All advertising, whether in the public media or in booklets and brochures, should be informational as opposed to being promotional. Professional advertising should not promote a product or service for the sake of selling it, but rather to provide information as to what is available and what the benefits of that product or service are. Listing one’s key personnel and qualifications and the types of projects that have been completed is a good form of marketing. It is wise to refrain from promotional statements that claim a surveyor to be better or cheaper than other professional colleagues. Stick to the facts. The ALSA Advertising Guidelines are included in Appendix B to this chapter.

§1.128 From the perspective of the practitioner, it is important to advise and educate the client or potential client about what services are available and how they may benefit the particular situation that is of concern. A professional should always ask “How can I be of service to my clientele?” as opposed to “What can I sell them?” The general public does not understand the scope of surveying services that may be available to solve their particular problem. They are looking for advice; not just advice on what a survey is going to cost, but advice as to what services they actually need, or even the basic question “do I need a survey?” A practitioner has a responsibility to discuss the problem or concern that the client is attempting to resolve, and assist that client in solving the problem in the most efficient and effective manner possible. Unless the practitioner understands the client’s problem and the client understands what services the practitioner can offer, neither party will appreciate the end result.

Fees and Estimates

§1.129 Fees and estimates go hand in hand with marketing. The time to market the profession and to explain what surveying services are available is when a potential client is on the telephone or in one’s office inquiring as to the cost of a given survey. Chances are that the enquirer has little idea what is required or what options are
available. They may very well want the cheapest and fastest survey they can get, not realizing that not all surveys are the same. This is a great opportunity to explore with the potential client as to exactly what the survey is intended to accomplish and if there are any other potential needs that are imminent. It is also a great opportunity to educate the client as to what is entailed in completing the survey and what options are available. The opportunity should not be used to sell the client something more than is required but to assist in choosing what services will be useful to the client in the short and long term. Public education is a major role of all professionals.

§1.130 It is also important to be frank and accurate as to what the respective survey services will cost, being sure to make it clear if it is not a straightforward service, that there are variables which could affect the overall estimate. Never guesstimate! If necessary do the proper research in order to give an estimate that is realistic and that you can stand behind.

§1.131 Some surveyors always seem to feel it is their primary duty to do the job at the lowest possible cost. While that may be an admirable trait that many clients will find attractive, it can be a mistake. The surveyor should work in consultation with the client to determine what the client really needs and strive to meet those needs as the primary objective. Even then, a surveyor must be cognizant of his ultimate responsibility to the client, the public, the profession and to his own values. Surveyors need to present a professional product and go that extra mile to ensure that the product is presented in a professional manner. A simple invoice for services with a copy of the final plan is not sufficient; a surveyor must ensure that the final product is presented in an attractive, professional and comprehensible manner. The client may or may not understand the significance of the services that have been offered without a detailed explanation.


**The Alberta Land Surveyor as an Expert Witness**

§1.133 Alberta Land Surveyors are frequently engaged to prepare surveys in anticipation of litigation. They may also be called as expert witnesses either to testify in relation to a survey that they performed or to give their opinion on a survey provided by another practitioner. They may even be engaged to give their expert opinion on a boundary matter that does not even involve a survey. Examples of some of the situations that might arise are: water boundary determinations, boundary disputes, vehicular accidents, interpretation of survey or other land-related plans, maps and other documents.
§1.134 When doing any type of survey a surveyor should always anticipate having to defend the professional opinion rendered by that survey in court. After all, a surveyor only gives an opinion on where a boundary is located; the courts are the final arbiters! When engaged specifically in anticipation of litigation, however, a practitioner needs to be especially careful in documenting the technical details of the survey in a clear and explicit manner. No stone should go unturned in the search for evidence and delimitation of every detail. It is imperative that the surveyor be in the field and personally observe any evidence that may be material to the dispute. A camera is an important ally to supplement the documentation of evidence and to assist in the retention of details.

§1.135 Litigation is a slow and expensive process. It is very often several years between the commencement of an action and the time that the case is resolved in court. Very often disputes get resolved during this time and often resolution is reached literally on the courthouse steps. One should not be surprised to be called to review their evidence with counsel several times during the course of the litigation process. Lawyers often have many files proceeding at one time and will often need to review matters on several occasions as new evidence or arguments are put forward. A surveyor may also be requested to provide a comprehensive report setting out all of the details and the reasons for the conclusions put forward. Another expert witness, who may or may not be a land surveyor, may be asked to critique the report and provide counter arguments.

§1.136 When the dispute is tried in court, the surveyor may be requested to sit through the entire proceeding to advise the legal team on any irregularities or potential concerns about any of the evidence or testimony presented to the court. In other situations, the surveyor may just be requested to stand by, in case counsel needs to call the surveyor to testify. When appearing in court it is important to dress properly and conduct oneself in a professional manner. Cross-examination by the opposing counsel can at times be very stressful. Opposing counsel may try to discredit the expert’s qualifications or testimony and may pose a number of irrelevant questions to catch you off guard and get you flustered. Never let your emotions get away from you! Try to remain calm and feel free to ask counsel for clarification if questions are unclear or imprecise. Answer only the questions put to you.

§1.137 An expert witness in court is not there to advocate a position but rather to testify as to the expert evidence and professional opinion that has been formulated, based on the experience and education of the expert. The lawyers will argue the case; your job is to present the evidence and expert opinion.

§1.138 As a final thought, it cannot be emphasized enough that one has to be fully prepared when going into the courtroom. It is worthwhile to review all of your evidence with your own staff and with the legal team that engaged you well in advance of, as well
as immediately prior to, the court date. It is also worthwhile to review information on
courtroom procedure, particularly regarding expert testimony. Two references that
come to mind are: Chapters 4-6 of Fundamentals of Trial Techniques [Mauet 1995] and
Surveying the Courtroom [Briscoe 1999].

Summary

§1.139 The surveying profession is a broad-based discipline in which measurement
science is applied to establishing geographical order to society’s legal system of parcel
identification and determination. Surveyors work in conjunction with a variety of real
property professionals such as lawyers, town planners, engineers, architects, appraisers,
realtors and municipal officials to create and maintain orderly and efficient settlements
for modern society.

§1.140 Surveys establish settlement patterns and boundaries that create indelible
marks on the face of the earth—urban agglomeration is a product of many individual
surveys dating back to the time when the first settler carved off a parcel, thereby
leading to a new era of socialization. As such the role of the surveyor is intertwined with
other real property professionals in the complexities of building villages, towns, and
cities. Even prior to the development of Western Canada, surveyors played a key role
in designing the system that established the largest coordinated project of land division
in the world—the system that is commonly known as the Dominion Land Survey
system.
Case Studies

Case Study A: Discipline and Unauthorized Practice [ALS News 2002]

This case study involves a situation where a senior practitioner made extensive use of a contract party chief to carry on virtually all of his business, technical and professional activities. The practitioner basically signed Real Property Reports (RPRs) solicited by and prepared by the contract person.

Two complaints were filed with the Association, one filed by another member and the other by the Executive Director of the Association on behalf of a legal firm which had obtained an RPR that was in fact a copy of a former RPR done by another practitioner with some data whited out on the original. Both RPRs had been signed by the practitioner with no client contact, no supervision of the contract party chief and little if any review of the final document. One of the RPRs even had an invalid permit stamp on it which had been pre-stamped onto a blank form.

The Discipline Committee found the practitioner guilty on twelve counts of unprofessional conduct and unskilled practice, and recommended an immediate suspension with the possibility of reinstatement subject to a number of restrictions on his practice such as practising under the supervision of another land surveyor.

Upon appeal of the decision of the Discipline Committee to the Council, the solicitor representing the practitioner admitted to the findings of the committee but pleaded for a reduced penalty in view of the fact that the practitioner had not been represented by counsel and had displayed an indignant and hurt attitude before the committee.

Council, acting as an appeal body, upheld the order of the committee and the essence of the committee’s findings of unprofessional conduct and unskilled practice. Council reiterated the need for professional responsibility in ensuring that the public is properly protected from unqualified contract crews that have little regard for the reliance that the public is entitled to when engaging professional land surveyors. Council also noted that the unprofessional attitude of the practitioner before the committee did not appear to have mellowed on appeal.

The practitioner appealed the decision of Council to the Court of Appeal but ended up dropping the appeal in exchange for some monetary leniency which Council accepted. In the end the practitioner only upheld part of his obligations and was eventually struck from the register for non-payment of fees.

The contract party chief had previously been convicted of unauthorized practice [ALS News 1994].
Case Study B: Discipline and Unskilled Practice [ALS News 1995-1]

A surveyor and a surveyor’s corporation were charged with unskilled practice and unprofessional conduct in relation to a series of plans, which were found to contain extensive errors. A major part of the problem was the fact that the correction of the errors was the subject of considerable delay and procrastination by the practitioner, extending over a period of several years. The problem was exacerbated by the surveyor and his field supervisor leaving the employ of the survey corporation during the time that the practice review and later the disciplinary process were taking place.

The process went the whole gamut, commencing with a review by the Inspector of Surveys (predecessor to the position of Director of Practice Review), referral to the Practice Review Board (PRB), complaint to the Discipline Committee, discipline hearing, appeal to Council as an appeal tribunal, and ultimately to the Alberta Court of Appeal.

At all decision-making points in the process the surveyor and the surveyor’s corporation were found guilty of unprofessional conduct with the surveyor also being found guilty of unskilled practice.

The unprofessional conduct charges were primarily related to not taking responsibility for ensuring that the surveys and the plans were corrected in an expeditious manner. The unskilled practice charge related to the absence of personal supervision and a “lack of technical competence in the methodology used in attending to corrections”. On numerous occasions the plans were found to contain a “considerable number of deficiencies” and evidence that “data appears to have been manufactured.” The PRB even made the statement at one point that:

The plans and survey practice are so deficient that it appears that the Affidavit sworn in respect of each plan was false in that:

(i) the plan was not prepared under the “personal” supervision . . .

(ii) the surveys were not conducted in accordance with Good Survey Practice or in accordance with the provisions of the Surveys Act.

Upon appeal to the Alberta Court of Appeal by the appellant surveyor (the surveyor’s corporation did not appeal beyond the Council) counsel for the appellant argued that the surveyor had relied on the surveyor’s corporation to ensure that the corrections were carried out with accuracy and diligence and that the surveyor was entitled to rely on the work of the field crews. The Court disagreed stating:

Those questions are the degree of personal supervision and checking requisite, what is to be done once field personnel prove unsatisfactory, and what is done is to be done once field work seems not to close properly. All three experiences are matters close to the heart and experience of this profession.

Reading between the lines, it is clear that the Court was very reluctant to tamper with the decision of the Discipline Committee and the Council sitting on appeal of the Discipline committee’s decision. In addressing the penalty levied, which was substantial, the Court concluded that “the penalty seems to us to be reasonable, even modest.”
Case Study C: Professional Liability

Robertson v. Wallace (2000), 81 Alta L.R. (3d) 84, heard by the Alberta Court of Queen’s Bench, resulted in a lengthy and complex decision. The essence of the case involves the professional liability of a land surveyor and his conduct in registering a plan of survey defining the natural boundary dividing two properties. The case also deals with accretion, conventional lines, trespass, expert testimony, the Manual of Standard Practice and the Land Titles Act.

An oxbow in a river was surveyed through a quarter section in 1890. A later survey in 1919 showed the river had straightened out. During the intervening years titles had been issued based on the 1890 survey. The owner on the left bank engaged a surveyor to survey her property to determine the acreage for a pending sale of the land. The surveyor rendered his opinion as to the location of the bank (and hence the boundary), based on his observation that the bank had shifted slowly and imperceptibly. The surveyor prepared his plan, consulted with Alberta Environment and Land Titles and submitted his plan for registration. At no time did he contact the neighbouring land owner on the right bank.

The surveyed parcel was sold to a third party, there were allegations of trespass, and the neighbour brought an action in court against the surveyor, the original owner of the left bank parcel and the purchaser.

The court held that the bank had shifted by avulsion and hence the boundary remained as defined by the 1890 plan. The court was sympathetic with the surveyor’s error with regard to the location of the boundary but found that the surveyor was negligent in not consulting the right bank owner. The court examined a number of issues in the Manual of Standard Practice, including the Code of Ethics, and held that the surveyor was in breach of his professional obligations not only to his client but to his client’s neighbour. The court also found negligence on the part of the Land Titles Office.

Four expert witnesses were called: three land surveyors and a surficial geologist. The opinion of the surficial geologist was accepted as his “qualifications are more suited to the assessment.” One of the survey witnesses was criticized for being inconsistent in his testimony and crossing the line of advocacy in his testimony.

Robertson v. Wallace is a landmark case in Alberta. It is one of the few Canadian cases that deals with the tricky issue of avulsion and tackles the issue of professional negligence in a complex scenario involving negligence of a land surveyor and a government regulatory department. It also sets out some very good guidelines for expert witnesses.
References


Websites

Appendix A: Alberta Land Surveyors’ Code of Ethics

The Code of Ethics represents a standard of conduct for the Alberta Land Surveyor. It stresses the Alberta Land Surveyor’s responsibility to the public and clients and to his personnel and colleagues.

Those who rely on an Alberta Land Surveyor may find it difficult to assess the quality of his services. They have a right, however, to expect a person of integrity and competence.

Because ethics are abstract concepts they are not easily defined. Therefore, care must be used in applying the Code of Ethics to judge the Alberta Land Surveyor. There could be cases when certain parts of the commentary should not be strictly enforced. Similarly, the code cannot cover all instances of unethical conduct. It is the responsibility of the Association to judge whether the Code is followed not so much in fact, as in spirit.

1. The Code

An Alberta Land Surveyor shall serve society, his clientele and his profession with the ultimate objective of contributing to the knowledge of land, to the better management of land and to the preservation of peaceful and lawful enjoyment of land.

- The public responsibility of an Alberta Land Surveyor to contribute in the above areas imposes particular obligations. Especially important is the work of establishing or re-establishing boundaries of land. The correct survey or resurvey of land boundaries is essential to the maintenance of the land survey and titles system in the province of Alberta. An Alberta Land Surveyor shall at all times maintain the cadastral fabric.

- This public interest must be greater than the interest of any individual client of the Alberta Land Surveyor and requires that the professional carry out his duties without favour, affection or partiality.

2(1) Duty to Personnel

An Alberta Land Surveyor has a duty to assist his pupils and employees to achieve their optimum level of contribution to society through their contribution to the profession.

An Alberta Land Surveyor:

- shall assist his students/trainees and employees to obtain instruction in the practical, ethical and theoretical aspects of surveying.

- has a particular obligation to ensure students/trainees receive instruction in the art, practice, ethics and profession of an Alberta Land Surveyor.
2(2) Professional Impropriety

An Alberta Land Surveyor should avoid even the appearance of professional impropriety.

An Alberta Land Surveyor:

- shall disclose to his client any conflict of interest, affiliation or prior involvement that could have even the appearance of preventing the surveyor from carrying out professional duties with independence and objectivity. The surveyor should accept or continue such employment only if the client consents.

- in doing work for clients who could have conflicting interests, must explain fully to each the implications of common representation. He should accept or continue such employment only if all clients consent and the duties can be carried out with independence and objectivity. A conflicting interest could occur where the timing or completion of projects or approval of plans gives one client an advantage over another.

- must recommend that his client retain another Alberta Land Surveyor if any conflict of interest, affiliation, or prior involvement prevents him from carrying out professional duties with independence and objectivity.

- shall not solicit employment by offering payment or other inducement to secure such employment. This includes compensation to a third party for recommending him.

- must attempt to resolve amicably any controversy over fees with clients. The surveyor shall explain all charges incurred and make available to the client copies of any details relevant to the assessment. Where differences cannot be resolved, the surveyor shall ensure that the client has knowledge of complaint or mediation procedures available through the Alberta Land Surveyors’ Association.

- shall not influence improperly any public body or official; or state or imply that he is able to do so.

- shall guard the reputation of his profession as he guards his own, rebutting unjustified criticism of the profession, other surveyors or of him/herself.

- shall not allow his name to be associated in a professional manner with any person or enterprise of a dubious nature.

2(3) Professional Confidences

An Alberta Land Surveyor has a duty to preserve the confidences of his client and regard as privileged the information he may obtain regarding the affairs of his client.

An Alberta land surveyor:

- shall maintain confidentiality of clients’ affairs during and after completion of an assignment or termination of employment.

- is responsible for compliance of students/trainees and staff with this article, therefore, must exercise care in selection and training of employees.

This article does not apply to the normal release on request of boundary definition survey information to other Alberta Land Surveyors.
2(4) Professional Judgement

An Alberta Land Surveyor has a duty to exercise unbiased independent professional judgement on behalf of his client, and shall represent his client competently.

An Alberta Land Surveyor:

• must decline to accept direction from employers, directors, officers, or other superiors in his organization if such direction compromises his integrity, independence or objectivity. A written agreement between organization and surveyor should be in place to prevent any misunderstandings. The agreement should define the relationship and allow the surveyor independence of action and decisions.

• when forming a corporation, must ensure that any director, officer or stockholder cannot influence the independence of any Alberta Land Surveyor employed by the corporation in carrying out his professional duties.

• shall not accept assignments that are beyond his resources to complete in a reasonable time, that are beyond his competence or that he cannot carry out in a professional manner. This does not necessarily preclude the surveyor from accepting employment in an area in which he may not be completely proficient, providing the client is made fully aware of his capability, in good faith he expects to become qualified and his accepting the assignment would not result in an undue delay or expense to his client.

• if offered employment for which he is not and does not expect to become qualified, an Alberta Land Surveyor should either decline the employment or, with the consent of the client, accept the employment in association with another Alberta Land Surveyor with the required expertise.

• shall present clearly to a client, circumstances where his professional judgement may be overruled by regulatory or legal authority and the consequences.

2(5) Integrity and Competence

An Alberta Land Surveyor shall assist in maintaining and improving the integrity and competence of the profession of surveying.

This responsibility includes maintaining the survey system, by cooperating with colleagues to resolve any apparent errors or discrepancies in his work and taking all necessary measures to remedy those errors or discrepancies.

An Alberta Land Surveyor shall:

• report to the Association any matter of incompetence or disregard for good practice. To let inappropriate practice continue could result in a deterioration of the survey system and harm the integrity of the profession. Occasional errors or oversights in work, however, can often be resolved between surveyors and need not be reported to the Association unless the parties cannot agree to a solution to the matter.

• assume the professional responsibility for all authorized work carried out by his nonprofessional staff.

• ensure, before he accepts any applicant for articleship, that the applicant has the necessary personal attributes including good character required of an Alberta Land Surveyor.
• devote some of his time to the affairs of his Association. Changes in human affairs and imperfections in human institutions make necessary constant efforts to maintain and improve the survey profession, institutions, procedures and system.

• participate in proposing and supporting legislation and programs to improve the survey profession, institutions, procedures and system. If an Alberta Land Surveyor believes that the existence or absence of a rule of law, regulation or instruction causes or contributes to an unjust result, he should endeavor to obtain appropriate changes.

• continually advance his knowledge and skills by participating in the activities of the Association, in relevant professional development programs and related professions or societies.

2(6) Dignity of the Profession

An Alberta Land Surveyor has a duty to maintain the dignity of the profession through his association with his clients, colleagues and subordinates.

An Alberta Land Surveyor shall:

• Limit his advertising to the adequate provision of information to the public. Special care must be taken to ensure the information set forth in any advertising is relevant to the appropriate selection of a surveyor. Preparation of advertisements and professional articles for lay publications and participation in seminars, lectures and civic affairs should be motivated by a desire to educate the public and provide information relevant to the selection of the most appropriate Alberta Land Surveyor rather than to obtain publicity for particular surveyors.

• refrain from any false or misleading statements or self-laudatory language in any advertising.

• not in any dealing he has with a client or prospective client, attempt to solicit assignments or projects that are being carried out by another surveyor. If asked to participate in or complete a project being carried out by another surveyor, he shall do so only with the approval, withdrawal or termination of services of the previous surveyor.

• not attempt to injure the professional reputation of any other Alberta Land Surveyor.

• refrain from public criticism of the conduct or practice of any other Alberta Land Surveyor.

2(7) Professional Services

An Alberta Land Surveyor should assess and receive fair and just compensation from his client, commensurate with the technical complexity, level of responsibility and liability potential of the services performed.

An Alberta Land Surveyor shall:

• assess a fee that will enable him to serve the client effectively and complete the project using good survey practices. He shall not charge more than a reasonable fee that could discourage potential clients from using professional land surveyors for the protection of their property rights and that could generally harm the reputation of Alberta Land Surveyors.

• when in the process of being employed, arrive at a clear agreement with the client for fees to be charged. This will prevent misunderstandings later and contribute to good relations.

• in any estimates or quotations given to a prospective client, clearly outline the work covered by the estimate and any conditions which could contribute to additional costs. He should not
quote a fixed fee for an unknown quantity of work unless the fee includes all contingencies. Once he has entered into an agreement to carry out survey work for a specified fee, he shall complete the work for the agreed amount.

• not reduce the quality of his professional services to complete a project within the agreed cost.

• not divide a fee for surveying services with another surveyor not a partner or associate of his survey firm unless:
  – the client agrees to employment of an additional surveyor after full disclosure of a fee division is made,
  – the division is proportional to the services performed, and
  – the total fee does not exceed reasonable compensation for all services provided to the client.

• not use the advantage of a salaried position to compete unfairly with another Alberta Land Surveyor and will not engage in outside work without the knowledge and consent of his employer.

2(8) Unauthorized Practice

An Alberta Land Surveyor shall assist in preventing the unauthorized practice of land surveying.

An Alberta Land Surveyor shall:

• report to the Association any instances of unqualified persons practising land surveying. Limiting the practice of land surveying to professionals is intended to ensure the public receives these services with competence and integrity.

• not enter into any arrangement that will enable an unqualified person or corporate body to complete a land survey directly or indirectly.

• not join or become a member of a company which carries out survey work unless he or another Alberta Land Surveyor will be taking responsibility for all land survey work performed.

• not establish offices or branches unless these centres are under the full-time direction and management of a resident Alberta Land Surveyor. In management of this nature, there is a real danger that nonprofessional personnel will assume, or appear to assume, professional duties and that supervision will be inadequate. It is essential that the client-surveyor relationship be retained in the practice of land surveying.

This article does not preclude an Alberta Land Surveyor from delegating tasks to field assistants, clerks, secretaries and others while the Alberta Land Surveyor maintains a direct relationship with his client and supervises the work.
Appendix B: Advertising Guidelines

2.1 Advertisements

Advertisements shall:

- be in good taste.
- not be misleading by containing a misrepresentation of fact or creating unrealistic expectations.
- make no reference to price or fees for professional services.
- not be self-laudatory.
- be factual, without false or inaccurate information.
- be in the best interest of the public.
- not harm the dignity, integrity and honour of the profession.

2.2 Vehicle Signage

Alberta Land Surveyors shall place identification signage on all field vehicles used in the practice of surveying, with the company name to be a minimum of 5 cm in height. A logo, address and telephone number or any combination thereof may also be added. Signage of any subcontractors shall not be visible.

Chapter 2: Real Property Law

Marie Christine Robidoux

Introduction

§2.1 This chapter will introduce the nature of real property and the various interests in land that someone can hold and how, and the form these may take. Real property law governs the use of real property by persons and their interactions in that use.

§2.2 The term “property” is generally defined as everything which is the subject of ownership [Duhaime 2004], meaning the thing itself. A second meaning of property is the legal interest in the thing, i.e. the right or rights that the law will recognize and protect. The term “real” historically referred to the kind of remedy one could get in court when property rights had been interfered with such as a “real action” which gave a right to repossess the interest. In time the term “real property” came to refer to interests in land generally and this is the definition used here.

§2.3 Land has a special meaning in real property law. Land is permanent, except in rare occasions, exists perpetually and has a fixed location. Land includes the surface and all that is under the surface, including the minerals, oil and whatever else is there within the boundaries of the land, and everything above the surface, including all things permanently affixed to it (trees, buildings, fences) and the air above it, although the height of the column of air above the land is limited by statutes and other restrictions.

Finding Legislation, Subsidiary Legislation and Case Law

Legislation

§2.4 With the advent of the Internet, finding legislation of any kind has become fairly easy. The use of a good search engine, for example, simplifies the task to a great extent. One can type in the name of the legislation and origin, e.g. Alberta, and will be directed to the most current version of the legislation and most often to the associated subsidiary legislation as well. There are also a number of law journals that provide copies of court decisions under subscription—either in hard copy, on the Web or both.
§2.5 A search on the Internet for Property Act Alberta returns 364,000 pages. Generally the top 10 pages will be the most relevant to the search and this case is no exception with the very first page returned presenting a direct link to the legislation as follows: CanLII>Consolidated Statutes of Alberta>Law of Property Act Alberta>Statutes and Regulations>RSA 2000, c. L-7. Law of Property Act, RSA 2000, c. L-7. Last update on CanLII: 2004-09-01 [Website 1].

§2.6 This link provides a direct connection to the latest version of the Act in question and gives its proper citation. By clicking on the Act, one can access the text of the legislation directly. All Canadian legislation provides an overview of what is in its table of contents. From there it is a simple exercise to find the exact section of interest. The link also provides another important feature: it has links to subsidiary legislation such as the regulations made under the authority of an Act.

§2.7 CanLII stands for the Canadian Legal Information Institute [Website 2]. Its free website is one of the most comprehensive Canadian legal websites available. There are many other sites providing much of the same information or sometimes information more specific to an area of the law [e.g. Websites 3, 4, 5].

§2.8 Another excellent website provides information on Alberta statutes, regulations and case law [Website 6]. There is also the Alberta Queen’s Printer website for all Alberta legislation and regulations [Website 7].

Case Law

§2.9 Websites provide much of the information that is needed for all types of legal requirements. There are sites for legislation as indicated above, as well as for case law [e.g. Websites 8, 9, 10, 11].

§2.10 The judgments from various federal and provincial courts and jurisdictions are now available on the Internet. The Bora Laskin Law Library's web site provides links to judicial decisions from all across Canada [Website 12]. Court decisions are available on the Internet through the University of Montreal [Website 13] and through the CanLII [Website 2], maintained by the federation of law societies of Canada.

§2.11 Quicklaw, the online commercial service, provides the most comprehensive coverage of court decisions from all jurisdictions across Canada [Website 14]. Its case law databases are organized by jurisdiction that includes all reported and unreported cases from a specific jurisdiction; by topic such as the Torts Law database, and by format (such as full-text versus the summary databases). Other online providers of Canadian case law include eCarswell, Westlaw [Website 15] and Lexis [Website 16].
Canadian Encyclopaedic Digest and the Canadian Abridgment are other examples of law journals available by subscription.

§2.12 Reading cases is easier than might be expected. In most websites and reports of cases there is a memorandum of judgment or a concise summary of the decision which provides a quick look at what the case discussed and decided. It is an important way to figure out the relevance of a court case to what one is looking for and helps in deciding if the case should be read in its entirety or not. The full judgment includes all arguments, considerations by the court, opinions of all the judges involved including majority and dissenting opinions. As well, they will often include what is called an obiter dictum—opinion of a judge having no direct legal or binding effect on the outcome of a pending judicial decision. An obiter dictum [Website 18] is considered to be an incidental judicial remark about some point that may or may not be directly relevant to the matter before the bench; it is an opinion expressed by a judge in passing which is unnecessary for his or her decision.

Nature of Real Property and Interests in land

§2.13 Canadian real property law is based on the law of England, except in the province of Québec where a Civil Code is used and different rules apply. Because of this, one of the basic principles of Canadian real property law prescribes that only the Crown can own land absolutely. All that anybody else can own are rights to the land and these are many as land can be the subject of several complicated interests. Real property comprises the set of legal principles that govern the use of real property by people and their interactions with respect to that use.

§2.14 As Canadian real property law is derived directly from English law, there is an important development to keep in mind, referred to as “the transfer to Canada of English law and the reception date”. At some point in the existence of Canada, the entire body of English law—common, equity and statute—became the law of the colony. The reception date of such transfer varies throughout the common law provinces as each province has a different date of reception, although the transfer was uniform. The effect of such transfer was that the whole body of law, including major English statutory reforms, became part of the common law of the colony [Dobbin 1989: 31].

§2.15 Tenure refers to the “how” of owning rights in land, while estates are the measure of the quantity of those rights. Tenure describes the rules for allocating land rights and corresponding obligations but it does not describe their duration. Duration of tenures is determined by the doctrine of estates. There are two main ways that ownership in land can be divided: according to the time during which the holder of the
interest would have the right to exclusive possession of the land—interests called *estates in time*, and according to the kind of use permitted or restricted upon the land—interests called *less than estates*.

**Tenure: Ownership, possession and occupation**

§2.16  *Tenure* is the how of owning rights in land. Tenure refers to ownership and in common law theory, land is ultimately held (cf. the verb *tenir*) from the Crown as paramount owner. The evolution of tenure extends deep into history but briefly the Crown granted rights to large sections of lands to great lords who then made grants to lesser lords who themselves made grants and so on to the lowest level. In exchange for each grant compensation was paid and generally the size and type of compensation indicated the quality of the right held.

§2.17  Tenures and estates form the basis of land law in the common law provinces and territories of Canada although most, if not all, of the accompanying feudal obligations have disappeared long ago. Probably the only remaining feudal incident is escheat, whereby land reverts to the Crown if there is no heir or other person lawfully entitled to it upon the owner’s death. Alberta abolished the old law of escheat and replaced it with the *Ultimate Heir Act*, RSA 2000, c. U-1.

§2.18  The tenure system in Canada is based on the Crown owning the land and people who are in possession of land are actually seized of the land (in *seisin*—the actual possession of the land) [Duhaime 2004]. Seisin is considered the connecting link between tenure and estates. Seisin is the fact of having the immediate right to possession of a freehold estate in land held in freehold tenure—the person is said to be “seized of the land”. The most common type of tenure is “socage” [Duhaime 2004] where land is held subject only to the Crown.

§2.19  Tenure can be divided into three main categories: free tenure, unfree tenure and leasehold tenure. Freehold tenure means the holding of land by a free person which could be enforced in a common law court by way of a real action, i.e. an action for return of the land if the right to possession was challenged [Dobbin 1989: 33]. Unfree tenure meant exactly that: the lord had complete control. Over time, the distinctions between free and unfree tenures disappeared and the situation brought into Canada was that individuals who owned land owned it in free tenure, holding their rights directly from the Crown. These rights can be enforced in a common law court by a real action. Leasehold tenure developed as a relationship between the owner of the land and a tenant defined by a contractual agreement between them—the lease.

§2.20  *Estate* is the measure of the quantity of the rights in land (ownership) and specifically describes their duration. The common law in the fourteenth century
recognized three types of freehold estates: the fee simple, the fee tail and the life estate. Canadian law distinguishes between estates of freehold and leasehold.

§2.21 The fee simple estate represents the largest possible holding; fee simple estate is for all practical intents and purposes the same as absolute ownership. Most private lands in Canada are held in fee simple. An estate in fee tail, which is considered a dinosaur in Canada [Ziff 1996:147], devolved only to lineal descendants and its primary purpose was to perpetuate family dynasties. A fee tail estate would last as long as there were direct lineal descendants of the holder and the acceptable line included only children and their descendants. A fee tail could also be restricted to the male line or the female line and even to those lineal heirs born of a named person such as “a gift to the daughters of Paul by Mary begotten” produced a “tail female special”. This type of estate (fee tail) has been abolished in Alberta by the Law of Property Act, RSA 2000, c. L-7, s. 9. The only surviving portion of this type of estate is a potential conditional fee simple, the condition being the birth of a child.

§2.22 Possession and occupation in real property law do not follow a formal rule- the legal context in which the question of possession and occupation is posed will inform the factual requirements, except of course in a case of adverse possession which will be examined later. The physical element of possession may vary as land does not lend itself to being held manually, as the most accepted definition of possession would entail. The other element is more of a cerebral nature: the intent to possess. An owner of land may be taken to intend to possess items on the land although the owner may be unaware of exactly what the items are. Occupation is not a condition of ownership although it plays a significant role in adverse possession and in aboriginal title, both of which will be examined in more detail later.

Estates in land

§2.23 Estates in land define the temporal limits of property ownership. An estate grants a slice of ownership and is measured in time. It is a concept associated with interests related to possession of land.

Freehold Estates

§2.24 A freehold estate implies that the rights continue through to heirs. There are three types of freehold estates: the fee tail estate, the life estate and the fee simple estate. The term “fee” indicates that the estate can survive beyond the death of the holder and potentially forever.
Fee simple estate

§2.25 A fee simple estate is the highest form of freehold estate possible, the largest estate known to the law. “Fee” means it is heritable and “simple” means there are no conditions attached to the estate and it can pass to the largest range of heirs contemplated by the law either through a will or intestacy (where the heirs are identified by law in the absence of a will). It is the closest to absolute ownership in the Canadian system of landholding. A fee simple estate is potentially forever and provides its holder with a larger bundle of rights than any other estate.

§2.26 In Alberta, private lands are generally held in fee simple from which the mines and minerals are reserved to the Crown in right of Alberta, referring to the special meaning of “land” in real property law. And in Canada as a whole, almost all freehold estates encountered in present day are fee simple estates.

Fee tail estate

§2.27 Of the freehold estates, the fee tail estate—which devolved only to lineal descendants—has been abolished in Alberta by the Law of Property Act, RSA 2000, c. L-7, s. 9. Therefore an attempt to grant a fee tail now is generally treated as having produced a fee simple.

Life estate

§2.28 The life estate is considered the lowest ranking of freehold estates and harks back to Norman times. It is an estate in land which exists only as long as the life of some named person. It can be the life of the owner of the estate or some other person (a life estate pur autre vie). The estate reverts back to the grantor (or some other person) upon the death of the person to whom it is given. These estates were mainly created as inheritances through wills and conveyances by carving out this limited freehold interest from the larger fee simple. Although still part of Canadian land law the life estate is not widely used.

§2.29 Another way to create a life estate is through operation of law that overrides the intentions of the property owner. There are two such life estates recognized by the common law, namely dower and curtesy. In Alberta, the common law dower and curtesy have been abolished by Law of Property Act, RSA 2000, c. L-7, ss.3 and 4. In modern Western Canada a similar concept can be found in homestead legislation (Dower Act, RSA 2000, c. D-15).
Leasehold estate

§2.30 A leasehold estate is an interest in land for a definite period of time. The word “lease” describes both the leasehold interest and the agreement creating the leasehold. Historically, leasehold estates have always been considered lesser estates than freehold. A leasehold interest must be derived from a freehold interest and cannot last longer than the freehold interest from which it is derived, as a result of the application of the rule that a person cannot grant to another a greater interest than what the person holds.

§2.31 A leasehold estate entails possession of a property by virtue of a lease. There are four types of leasehold estates: estate for years (fixed term), periodic tenancy (month by month), tenancy at will (as long as both parties wish), and tenant at sufferance (without permission). The only type considered here is the leasehold estate—estate for years. It is this interest that is referred to generally in Alberta when speaking of leasehold estate: its duration is certain or capable of being rendered certain—it cannot run indefinitely—its duration is fixed in time by a definite term or by sufficient notice at any time.

§2.32 A lease is a temporary transfer of land under which exclusive occupation and possession of the land is conferred by the owner (landlord) to another party (tenant or lessee). A leasehold estate defines the duration of the tenant’s holding: as long as the lease is in force, the landlord’s right to possession is suspended during the term of the lease. Basically, the tenant holds the land for the landlord.

§2.33 A leasehold interest is created when a lessor grants a term to a lessee. A term is an interest in land for a definite period. At the end of the term, the tenant must give up the land and the right to possession reverts to the landlord.

Concurrent Estates

§2.34 Concurrent estates are concerned with concurrent ownership in real property. The traditional forms of co-ownerships found in Canadian law are: joint tenancy; tenancy in common; tenancy by entireties; and coparcenary. The last two are functionally extinct in Canada [Ziff 1996: 291] and will not be examined further. The nature of a co-ownership depends on the intent of the creator of the co-ownership and that intent is found in the document creating it. It is important to note that in all common law provinces and territories there are statutory provisions declaring that any equivocal document creating concurrent ownership, or a document silent on the matter of the type of co-ownership, will be assumed to create a tenancy in common.
Joint Tenancy

§2.35 To create joint tenancy “four unities” must exist [Blackstone 1769]: unity of interest; unity of title; unity of possession; and unity of time. These provide for a perfect equality between all of the joint tenants. The holding of each tenant needs to be equal in nature, extent and duration—this is the unity of interest where all the joint tenants have the exact same bundle of rights to the property. It must also come from the same act or instrument—this is the unity of title. The rights of each tenant have to relate to the same property—this is the unity of possession where each joint tenant is entitled to possession of all of the property in question and subject to identical rights of possession in all other joint tenants. Finally, the interests of the tenants must arise at the same time—this is the unity of time where the interests of all joint tenants must vest at the same instant of time. These “four unities” have been treated by the Canadian courts as carved in stone. Moreover there must be a sufficient intention to create a joint tenancy. Alberta law requires a purposeful act to create a joint tenancy of land and invoke survivorship (see Law of Property Act, RSA 2000, c. L-7, s. 8).

§2.36 Joint tenancy creates a legal fiction that there is only one tenant and there are therefore no shares held by anyone. The most important element of joint tenancy is the right of survivorship: once a joint tenant dies, his or her interest is extinguished and the interest held by the survivor(s) increases. If the joint tenancy was between only two owners, such as spouses, the survivor holds the entire estate. If there were more than two joint tenants, then the survivors continue as joint tenants until such time as there is only one surviving tenant who then holds all of the property. Generally in Alberta, joint tenancy is found mostly in the context of family holdings where it can be used as an estate planning tool, thereby avoiding the need for probate to effect a change in the registration of title.

Joint Tenancy Severance

§2.37 A joint tenancy may be severed by several methods which will all have the same result of converting it to a tenancy in common. A unilateral conveyance by one of the joint tenants to a third party would destroy the unities of time and title, therefore converting the existing joint tenancy to tenancy in common. The severance can be mutual by agreement of all joint tenants. Severance can occur from an act of a third party such as a creditor seizing and selling the interest of a joint tenant. Severance will also occur on a judicial sale of the land or on bankruptcy of one of the tenants. Also, the murder of one joint tenant by another will produce severance by operation of the law, because of the principle that one is not permitted to profit from an illegal act.

§2.38 A severance by will cannot occur: a joint tenant cannot sever his or her share by disposing of it in a will as the right of survivorship trumps that owner’s will, i.e. it
determines the course of title after the death of an owner. A will speaks only at the moment the testator has died and at that moment the share has already passed to the surviving joint tenant(s).

Tenancy in Common

§2.39 Of all the four unities necessary to a joint tenancy, only the unity of possession must exist for a tenancy in common to arise, even though all four can be present. Therefore, it is possible for each party to hold a different share of the title, for example one-third to A and two-thirds to B. Under that type of arrangement there is still unity of possession and both parties are entitled to the possession of the whole property. Their shares of the title remain undivided for the duration of the relationship as tenants in common.

§2.40 Tenants in common may transfer their interest to any third party without affecting the relationship. Upon the death of one of the tenant, the interest passes to the heirs who continue to hold the interest with the other tenant(s) in common.

Condominium

§2.41 A condominium exists when two or more property owners get together under an arrangement where there are individually owned units and shared ownership of others, all under a scheme of management. In Canada condominiums have existed since the 1960s and are governed by statutes. In general, the legislation provides for the creation, registration, regulation and termination of condominiums. In Alberta the main documentation comprises the bylaws of the condominium corporation and a condominium plan describing the property. Condominium owners relinquish a certain amount of independence as the rules enacted through the internal decision-making of the condominium corporation take over. That is part of the normal process of being a condominium owner—the imposition of obligations to maintain and repair common walls and ceilings is totally understandable. However, in Alberta the standard bylaws found in the legislation (the default setting) go further: they stipulate that an owner must not use the unit for an illegal purpose; use a residential unit for a purpose other than residential; keep an animal in the unit after the date specified to remove it; hang or place anything anywhere on the property that is in the opinion of the board aesthetically unpleasing when viewed from the outside. There are very few limitations on the potential content of the bylaws and broad restrictions are permissible.
Co-operatives

§2.42 Similarly to condominiums, co-operatives are designed to create a community of interest that has both shared amenities and individual units, and members co-operate in the administration of the project.

§2.43 Two of the main ways to accomplish this are: the freehold property is held in common and leases are granted to the members; or the entire property is held by a corporation and participants purchase shares in the corporation which in turn leases residential units to its shareholders.

Other Communal Property

§2.44 Communal arrangements are also available under common law in Canada. In Hutterite colonies, for example, all property is vested in the congregation. If a member is expelled or excommunicated, there is no right to remain or claim a share of the assets.

§2.45 Another type of communal arrangement is exemplified in the property rights under the Indian Act, RSC 1985, c. I-5, where the rights exist in the Band unless and until they are allotted or allocated to individual members.

§2.46 A newer type of communal property is timesharing. One type of timesharing may involve one condominium unit divided into 52 shares of one week each allotted to time sharers. Another type is indirect ownership of the land where title is placed in a corporation with individuals receiving a share of that asset.

Interests in Land

§2.47 There are several rights in land that can be taken out of the fee simple estate and bought and sold separately and independently of the ownership in the property. The ones which will be examined here are leases and licences, easements, covenants, mortgage, dower, curtesy and lis pendens.

Leases and Licences

§2.48 A lease is a grant of exclusive possession, and that distinguishes a lease from a licence. A lease creates an interest in land, whereas a licence does not as it is merely a permission to do something that would not normally be allowed. A licence is not binding on a purchaser of the land upon which the licence has been granted. A licence for residential premises does not enjoy the protection afforded by law to a residential tenant. The differences between the rights associated with a lease and those associated with a licence are substantial: the licence conveys a personal right to certain privileges.
As it is a personal right, it cannot be inherited, although a licence creates binding rights between the original parties and can be transferred, especially contractual licences between enterprises. Generally, a licence can be revoked at any time by its grantor.

§2.49 A licence is necessary in many provinces and all territories for collecting wildlife data and for entering public lands for hunting and fishing purposes. A licence provides a right to use the land in common with others, while a lease is about exclusive possession—it distinguishes control over land from a mere right to use the land. The right to exclusive possession of land gives a tenant the ability to acquire other rights such as an easement over adjoining land for the period of the tenancy in the same way as the owner of a fee simple estate could.

**Easements**

§2.50 Easements fall into the law governing “servitudes” which refers to rights of use over property belonging to someone else. A servitude is attached to the land and is passed with a transfer of the land—it is said to “run” with the properties as the primary function of servitudes are to improve the utility of the land, and it binds subsequent owners. There are several types of rights which may be easements: a right of passage over someone else’s land; a right to walk or drive along a lane, to stroll along a beach; for support of structures; and many others. There are four doctrinal limits restricting easements. First, there must be a dominant tenement—enjoying the benefit of the easement, and a servient tenement—burdened with the easement. Second, the easement must accommodate the dominant tenement—some real benefit must ensue for the dominant tenement, making it better. This also requires the proximity of the two parcels of land—the parcels must adjoin or be reasonably close. Third, the dominant and servient tenements cannot be owned by the same person, although there are exceptions such as in Alberta where the law permits easements to be registered over lands owned by the same person (see *Land Titles Act*, RSA 2000, c. L-4, s.68). This permits easements to be registered in a subdivision prior to the individual sales of lots, obviating the need to grant separate easements on the sale of each separate lot. Fourth, the easement must be capable of forming the subject matter of a grant—a grant is required as there is no actual transfer of possession.

§2.51 An easement is always obtained for a special purpose and entails the right for the owner of one parcel of land—the dominant tenement, to use another parcel—the servient tenement—for the benefit of the dominant tenement [*Dobbin* 1989: 36]. It may also involve the right to ask the occupier of the servient tenement to refrain from doing something with the land for the benefit of the dominant tenement. The right is never a right of possession but a right to use.
§2.52 Easements can be created in different ways and three will be covered here:

- Grant, express and implied
- Statutory
- Prescription

Grant: express and implied

§2.53 An easement can be acquired by an express grant made by the owner of the servient tenement. An express grant will have some form of written document detailing the terms, duration and most of the time describing the parcels of land. As it is an interest in land, it must comply with the formal requirements needed for a valid transfer of land.

§2.54 An easement created by implied grant refers to a necessary incident of a property transaction. The example of a landlocked parcel is useful to explain this: in order to transfer a parcel of land that is landlocked, an easement of strict necessity of access will arise in favour of this parcel provided that there is some land retained by the grantor over which the easement of access can be exercised. In other words, if A sells a parcel of land X adjacent to another parcel that A owns, parcel Y; and parcel X is landlocked, that is to say there is no access to the parcel from a public road; an implied grant of an easement of necessity of access to parcel X through parcel Y will be assumed even if the right is not spelled out.

Statutory

§2.55 Easements may be created by federal, provincial, local or municipal legislation. In these cases, reference must be made to the statute creating the easement to determine the extent, duration and other characteristics of the right involved. In Alberta for example, under the Condominium Property Act, RSA 2000, c. C-22, an easement is created by the statute over the common areas and rights-of-way for all utilities.

§2.56 Statutory rights-of-way are easements without a dominant tenement. In Alberta, only public bodies (government), utilities and municipal corporations qualify to own these types of right-of-way.

Prescription

§2.57 The law recognizes that rights to an easement may arise out of continuous use through the rules of prescription. Prescription involves the acquisition of a right encumbering someone else’s property and may limit the other person’s use of the servient tenement. Concerns that acquisition of a right through the operation of the
prescription rules may impede development and/or create nuisance activity forever has led some provinces to abolish some or all of those rights. In Alberta prescription has been totally abolished through the Law of Property Act, RSA 2000, c. L-7, s. 69 (3).

Termination of Easements

§2.58 There are a number of ways to terminate easements:
1. By express release: the owner of the dominant tenement expressly and in writing relinquishes his or her right to the easement.
2. By natural termination (effluxion of time): when a time limit is expressed in the easement and the time expires, and in a situation where the reason for the easement has disappeared.
3. By unity of ownership: where the dominant and servient tenements come under one ownership, the easement ceases—although see the above noted exceptions in Alberta.
4. By abandonment (implied release): if the owner of the dominant tenement behaves in such a way as to imply that the easement is no longer needed—requires proof in a court of law.
5. By destruction: this generally applies to common walls and such support easements. When the dominant tenement is destroyed, a support tenement will continue. But if the servient tenement is destroyed with no fault of the owner, the easement is terminated.
6. By expropriation: some expropriation statutes provide that an easement is terminated if the servient tenement is expropriated (see Expropriation Act, RSA 2000, c. E-13, s. 57).

Covenants

§2.59 Covenants over land are used to create rights enforceable by a landowner over a piece of land owned by another owner. Covenants begin through contracts and are converted into real property rights. They are widely popular as they are very useful to control use and regulate a number of activities on the property affected by the covenant. They are often used when the owner of a large parcel of land wishes to sell it or a portion of it, yet still control or restrict the use of the land being sold. They are also standard in any subdivision where the owner may wish to set standards of construction and activities. Covenants are used at the conveyance stage to bring the desired results by the original owner.

§2.60 Generally, a covenant is a personal contractual obligation between the parties to a land transaction related to the use of the land, and breach of the covenant gives rise
to a personal action for restraint and/or damages. When these original parties are no longer owners of the lands, such contractual obligations cannot be enforced as there is no privity of contract between the new owners. However, even when there is no privity, there are rules that can make a covenant enforceable. A parcel owner is said to have the benefit of a covenant if the owner of the other parcel involved in the covenant is required to do or not to do something that enhances the value of the first parcel. The owner of the other parcel will have the burden of the covenant.

§2.61 In the middle of the 19th century, the famous English case of *Tulk v. Moxhay* (1848), 41 E.R. 1143, decided that if a covenant is purely negative, such as restraining from doing something or using the land in a certain way, then the covenant is valid and enforceable. These covenants became known as “covenants running with the land” or “restrictive covenants” and are enforceable by any subsequent owner of the land benefiting from it against any subsequent holder of the land subject to it. Restrictive covenants require a piece of land subject to the covenant and a piece of land benefiting from the covenant and as long as the covenant “touches and concerns the land” [Dobbin 1989: 43]. Touching the land refers to its being affected with respect to its mode of occupation and value. In summary, a restrictive covenant will run with the land if it is negative in nature, relates to the use and value of the land, and the benefit accrues to an identifiable parcel of land.

§2.62 In modern Canadian law there are four requirements [Ziff 1996: 356] for a covenant to run with the land. They are:

1. The covenant must have been made for the protection of the dominant tenement; it must touch and concern that land; and the land must be ascertainable from the document.
2. It must have been intended that the burden was meant to run with the land.
3. The covenant must be negative, i.e. restrictive in nature.
4. All general limitations imposed on the availability of equitable remedies apply. That is to say that a bona fide purchaser for value without notice will not be bound to comply with a restrictive covenant.

§2.63 Restrictive covenants are mostly used in residential suburban (and sometimes rural) land subdivisions to control the appearance, size and colour schemes of the houses and the uses of the land in the subdivision. They are commonly referred to as “building scheme covenants” meant to apply to the whole neighbourhood. In Canada, the traditional position is that a subdivision scheme will be created if:

1. Title to the affected parcels is derived from a common vendor.
2. Prior to the sale of the first parcel the vendor establishes restrictions consistent with a scheme of development only.
3. The restrictions were intended for the benefits of all lots.
4. The parties purchased from a common vendor on the understanding that restrictions applied.
5. The land is adequately described.

§2.64 Covenants may be terminated by expiration of a specified time period and by agreement.

Adverse Possession

§2.65 The law of adverse possession refers to the acquisition of title by possession, which is also referred to as “squatters’ rights”. The rights of the true owner may be extinguished by someone who has been in adverse possession of the land for a specific period of time, which in Alberta is 10 years (Limitations Act, RSA 2000, c. L-12, s. 3(1)). This unusual way of title acquisition has been alive in Canada for a very long time and is in effect in Alberta to this day. Alberta is the only land titles jurisdiction in Canada where adverse possession applies to registered land.

§2.66 Adverse possession arises when no action has been taken against a trespasser during the statutory period of time allowed for a suit to be commenced. The “quieting of titles” can be performed because an owner who has enjoyed possession for a long period of time can sell a piece of land knowing that the title’s defects can be remedied by the assertion of possession rights over any unknown previous owners.

§2.67 The rules of adverse possession reward a squatter who uses the land, penalizing the owner of the title to the land for the failure to use and occupy the land. In order to avoid such harsh consequences an owner needs only either to sue the squatter or assert title occasionally through occupation and/or use.

§2.68 In the Land Titles system existing in Alberta, adverse possession has been integrated through provisions allowing a squatter to acquire title by a longstanding occupation while, at the same time such interest will not be binding on a “bona fide” purchaser for value without notice of the adverse claim.

§2.69 A person asserting squatter’s rights must intend to possess the land and must demonstrate possession. The acts of possession must be open, notorious, adverse, exclusive, actual and continuous. If any one of these elements is missing at any stage during the statutory period, and especially if the time period is interrupted, the squatter cannot assert any rights over the registered owner of the land. An excellent article on the basic components of adverse possession can be found in an article entitled “Something for Nothing: The Law of Adverse Possession in Alberta” [Petersson 1992].
§2.70 Some of the most common cases of adverse possession involve only a small portion of a parcel of land and can be exemplified by a situation where the owner of Parcel A built a side fence one foot over into Parcel B. The owner of Parcel B never complained or asked the owner of Parcel A to move the fence. For over twenty years the situation has remained the same where the owner of Parcel A enjoyed possession of the one-foot strip of his neighbour’s land openly, notoriously, adversely, exclusively, actually and continuously. The owner of Parcel A could commence an action in court to “quiet” the title by demonstrating that the disputed land was adversely possessed. For very many years there were no Alberta court cases in which an adverse claim was upheld. In recent years there have been several such cases. An important point to keep in mind is that if the time period is interrupted by the sale of the land, it starts running again whenever land is transferred—transfer in fact interrupts the time component of adverse possession.

Estoppel

§2.71 Estoppel can be defined as a rule of law that when person A, by act or words, gives person B reason to believe a certain set of facts upon which person B takes action, person A cannot later, to his or her benefit, deny those facts or say that the earlier act or words were improper. In other words, person A will be precluded (estopped) from denying those facts. An 1891 English court decision summarized estoppel as “a rule of evidence which precludes a person from denying the truth of some statement previously made by himself.” [Duhaime 2004].

§2.72 Invoking the principle of estoppel is possible as a means of protection for an action made in good faith on the basis of a statement made by the other party. Estoppel is a defence mechanism and not a means of attack as the basis of an action. Estoppel will never establish title or a right or interest. For example if person C made the decision to buy a parcel of land based on the statement from D that a lane was going to be put aside for the use of the parcel C purchased, D and people claiming through D would be estopped from preventing C from using the lane as a right-of-way (see Adams v. Loughman (1876), 39 U.C.Q.B. 247 (C.A.).

§2.73 There are four basic elements to the doctrine of estoppel:

1. There must be acts or conduct amounting to a representation or concealment of material facts—made with knowledge or negligence—by the party to be estopped;

2. The party to be estopped must intend that this conduct shall be acted upon or is acting in such a way as to cause the other party to reasonably believed it was so intended;
3. The other party must be ignorant of the true situation; and
4. The other party rely upon that conduct to his or her prejudice or injury.

Encroachment of Improvements

§2.74 Improvements to adjoining properties as well as encroachments unto adjoining properties create boundary uncertainties, and in Alberta statutory provisions address these in the Land Titles Act, R.S.A. 2000, c. L-4.

§2.75 The definition of encroachment as it applies to real property law is as follows: an intrusion onto an adjoining property. Common examples are a neighbour’s fence, storage shed, or overhanging roof line that partially (or even fully) intrudes onto the next property.

§2.76 Section 72 of the Alberta Land Titles Act allows for encroachments on adjoining property to be remedied through an encroachment agreement. Such an agreement allows the encroachment to remain and the owner of the development that encroaches onto the adjoining property is granted the right to enter that property to maintain or repair the construction. However, an encroachment agreement registered under the Land Titles Act goes much further: section 72 (1) (b) states that after registration an encroachment agreement “shall be binding on and enures to the benefit of all persons subsequently acquiring interests in the parcels of land affected by that agreement to the same extent as if it were an easement.”

§2.77 Section 60 of the Law of Property Act, RSA 2000, c. L-7, provides statutory relief to a person who honestly but mistakenly encroaches upon and improves another person’s land. A recent case is S.W. Properties Inc. v. Calgary (City) (2003), 222 D.L.R. (4th) 430, in which this provision balanced against another, i.e. the Municipal Government Act, S.A. 1994, c. M-26.1, ss. 18(1), 609. The Appeal Court of Alberta in this case ruled in favour of the City of Calgary. Section 60(1)(b) authorizes an order permitting a person who has made improvements under mistake of title to “retain” the land, subject to possibly paying compensation pursuant to s. 60(2). This language suggests the creation of an interest in land. Permitting the encroachment to “continue to exist”, so long as the building remains in its present form, implies that the City’s ordinary rights as a landowner will be subject to the respondent owner’s encroachment over the alley where the building encroaches 9 cm (about 3.5 inches) into the alley owned by the City. Section 609 of the Municipal Government Act prohibits the acquisition of an estate or interest in municipal land “by adverse or unauthorized possession, occupation, enjoyment or use of the land.” This prohibition conflicts with s. 60 of the Law of Property Act that gives the Court a general jurisdiction to deal with
improvements to land under mistake of title. It permits the granting of rights in favour of one landowner against another. Section 609 prohibits the acquisition of prescriptive rights against a municipality, a specifically named category of landowner. In this conflict, the prohibition contained in s. 609 must prevail.

**Mortgage**

§2.78 This section will refer only to the land mortgage, i.e. a loan secured against real property.

§2.79 A mortgage is a conveyancing tool used to assist in lending money and has become an important social and economic institution as the mortgage plays a leading role within the credit system. The mortgage document is an important addition to a loan. Under a loan a borrower is required to repay the amount borrowed, together with interest in accordance with a repayment schedule identified in the loan document. This contractual arrangement creates a personal obligation to repay against the borrower. Through a mortgage contract the same loan now has a security attached to it to be used in case of default by the borrower (the mortgagor). The term “security” refers to an arrangement by which a creditor can get a right over a property that is exercisable in the event that the obligations of a debtor are not fulfilled.

§2.80 The mortgage is a contract by which a borrower charges (or mortgages) his or her property as security to the lender (the mortgagee) on the understanding that the sum of money lent will be repaid. The mortgage document as a contract contains all the terms and the personal covenant of the mortgagor (borrower) to pay off the debt and of the mortgagee (lender) to discharge its interest in the land upon repayment.

§2.81 In Alberta a mortgage that is registered in the Land Titles Office is regarded as a charge on the land. A mortgage or encumbrance under the *Land Titles Act, RSA 2000, c. L-4, s. 103*, has effect as security but does not operate as a transfer of the land charged by it. A property that is mortgaged can be the subject of a sale and under the common law the mortgagor does not become free of the loan’s obligations simply by virtue of the sale; all the obligations to repay the loan survive the sale as a matter of contract law because the loan itself created a personal covenant—a promise—to repay the loan. However, the new owner may “assume” the existing mortgage and agree to make the payments in accordance with that mortgage as part of the purchase price. In this case the “assumption agreement” should contain a promise by the person assuming the mortgage to indemnify the vendor if he or she is sued on the promise to pay. In Alberta, legislation provides an automatic right of indemnity and also deems privity of contract between the purchaser and the original mortgagee. This results in the mortgagee being able to sue the new owner directly if there is default on the mortgage.
§2.82 The modern system of land titles registration in force in Alberta requires that a property interest be registered against the property (registration process provides notice of the existence of the interest). The failure to register such interest changes the priorities that normally would govern this entitlement, and its priority status is dependent on its registration.

Dower and Curtesy

§2.83 The common law gave wives and husbands certain rights known as dower and curtesy respectively. Dower was the right of a wife to a life interest after the death of her husband to one-third of the lands that he owned at any time during the marriage. Curtesy was the right of a husband to a life estate after the death of his wife to all the lands that she owned at any time during the marriage, provided they had children who might have been capable of inheriting the lands. The rights of dower and curtesy did not prevent the owners from alienating the lands; it meant that any purchaser had to ensure these rights were released by the appropriate spouse and therefore not affecting the lands purchased.

§2.84 These rights no longer exist in Alberta as they have been replaced by the Dower Act, RSA 2000, c. D-15, granting dower rights to both wife and husband using the term “spouse”. Dower rights apply to the homestead, which is defined as “a parcel of land on which the dwelling house occupied by the owner of the parcel as his residence is situated and that consists of (a) not more than four adjoining lots in one block (according to a registered plan) of a city, town or village; or, (b) not more than one quarter section of land other than in a city, town or village” [Alberta Registries Land Titles, Procedures Manual, DOW-1: 1] [Website 17]. Any disposition of a married person’s homestead requires the consent of that person’s spouse, or alternatively the disposition must be accompanied by an order of the Court of Queen’s Bench of Alberta dispensing with the consent.

§2.85 A release of dower rights in the homestead of the married person by the spouse of the married person can also be registered against the homestead property, with the effect that the land described in the release ceases to be the homestead of the married person and the spouse of the married person ceases to have dower rights in the property described in the release. This release will then appear on the certificate of title, providing notice that dower rights are not applicable to the property.
Doctrine of Lis Pendens

§2.86  *Lis pendens* is Latin for a dispute or matter which is the subject of ongoing or pending litigation (“a pending suit”). A *lis pendens* affecting a property is a court document indicating that a court action has been filed against the property. It is a certificate issued by the Court and filed in the Land Titles Office. The Court can give a *lis pendens* to a party starting a court proceeding in which a claim is made for an estate or interest in land, or in which a right of action in respect of land is given by an Act other than the *Land Titles Act*. The effect of the *lis pendens* is to immediately freeze the title and to prevent any subsequent applications from being registered.

§2.87 Generally, interests that have been registered against a certificate of title may be withdrawn or discharged by the registration of an instrument executed by the person who appears as the owner of the interest, or the authorized agent of that person, on the register. The courts have authority in any proceedings to direct the registrar to do anything to give effect to a judgment or court order, including discharging an interest. In the case of caveats, a person claiming an interest may be served with notice to take proceedings in court and file a certificate of *lis pendens* against the property within a certain amount of time. At the end of this period of time, if no certificate of *lis pendens* has been filed, the registrar can remove the caveat as it is considered lapsed.

§2.88 In the case of mechanics’ or builders’ liens, statutory provisions in the *Land Titles Act*, RSA 2000, c. L-4, s. 153, require that after the expiration of a certain period of time the lien shall cease to exist unless action is taken by which the lien may be realized and a certificate of *lis pendens* is filed. A single certificate of *lis pendens* is sufficient to protect all liens as all lien claimants can join the action.

Aboriginal Title

§2.89 The term “Aboriginal” is a fairly recent term in Canadian history. It is only recently that the courts ceased using the term “Indian”, which appears in subsection 91(24) of the *Constitution Act, 1867* and the *Indian Act*, in favour of the more inclusive “Aboriginal people(s)” and “Aboriginal”. “Aboriginal” refers to the original inhabitants of a territory. Section 35 of the *Constitution Act, 1982*, defines the “Aboriginal peoples of Canada” as including Indian, Inuit and Métis.

§2.90 Subsection 35(1) of the *Constitution Act, 1982* created a new legal framework for addressing longstanding Aboriginal claims, including claims to Aboriginal title. The provision recognizes and affirms, but does not define, the “existing Aboriginal and treaty rights” of the Aboriginal peoples of Canada. Therefore the task of determining the nature and scope of these rights has fallen to the courts, especially because the
features inherent in Aboriginal title cannot be explained fully under either common law rules of real property or property rules of Aboriginal legal systems.

§2.91 Aboriginal title arises upon proof of continued occupancy of the lands which are in question at the time at which the Crown asserted sovereignty. Canadian courts began in the 1970s to acknowledge the existence of Aboriginal legal rights in the land other than those provided for by treaty or statute. In 1973 the Supreme Court of Canada in Calder v. Attorney General of British Columbia, [1973] S.C.R. 313 ruled that “Indian title” was a legal right, independent of any form of enactment, and rooted in Aboriginal peoples’ historic “occupation, possession and use” of traditional territories and therefore existed at the time of first contact with Europeans, whether or not it was recognized by them.

§2.92 In Guerin v. The Queen, [1984] 2 S.C.R. 335, four members of the Supreme Court of Canada described Aboriginal title as a unique interest in land “best characterized by its general inalienability, coupled with the fact that the Crown is under an obligation to deal with the land on the Indians’ behalf when the interest is surrendered.” In its 1988 decision in Canadian Pacific Ltd. v. Paul, [1988] 2 S.C.R. 654, the same Court affirmed that its analysis of Aboriginal title to that point led to the “inescapable conclusion . . . that the Indian interest in land is truly sui generis [the only one of its kind]. It is more than the right to enjoyment and occupancy, although . . . it is difficult to describe what more in traditional property law terminology.”

§2.93 The Supreme Court’s decision in Delgamuukw v. British Columbia, [1997] 3 S.C.R. 1010, is one of the latest pronouncements on Aboriginal title. Aboriginal title includes the following features:

- inalienability;
- source, in that Aboriginal title arises from occupation of Canada by Aboriginal peoples prior to the Royal Proclamation of 1763 and from the relationship between common law and pre-existing systems of Aboriginal law;
- communal nature, in that the Aboriginal title is a collective right to land held by all members of an Aboriginal nation.

§2.94 Title to land gives Aboriginal people the exclusive right to use and occupy the land for a number of purposes which do not need to be related to traditional Aboriginal practices, like mining for example [Hurley 1998]. However, the uses protected by Aboriginal title do not include the right to destroy the land, as this would be contrary to the group’s attachment to the land that gives rise to the title right. Aboriginal title is held collectively by all members of an aboriginal nation, rather than individually, and therefore any decisions related to the land are made by the community.
§2.95 The following elements are required to prove the existence of Aboriginal title:

- the land(s) must have been occupied prior to sovereignty (the fact of physical occupation proves legal possession of the land)
- continuity of occupation may be proved through evidence of present occupation, supplemented by evidence of continuity. The need is not to establish an unbroken chain of continuity, but rather a substantial maintenance of the connection with the land
- occupation must have been exclusive

§2.96 The latest cases have been decided by the Supreme Court of Canada in November 2004 and are referred to as the Haida and Taku cases (*Haida Nation v. British Columbia (Minister of Forests)*, [2004] 3 S.C.R. 511, 2004 SCC 73 (2004-11-18); *Taku River Tlingit First Nation v. British Columbia (Project Assessment Director)*, [2004] 3 S.C.R. 550, 2004 SCC 74 (2004-11-18)). These cases dealt with the duty of the Crown to consult First Nations based on the “honour of the Crown”. What is most interesting from the point of view of Aboriginal title is that the duty to consult and accommodate does not rely on proven rights. In other words, proven Aboriginal rights are not required to trigger the duty to consult. A possible Aboriginal right supported by prima facie evidence (a real and credible claim which is known to the Crown but not necessarily accepted for example) is sufficient to impose the duty to consult.

This case deals with the nature and purpose of restrictive covenants, and their enforceability in Alberta. This case is interesting for a number of reasons: it is a recent case; it defines the nature of restrictive covenants which is important for land owners; it deals with the discretion accorded to the courts by the Land Titles Act to vary or discharge a restrictive covenant; and speaks of the remedy to enforce a restrictive covenant. The facts are also interesting because none of the current owners are original owners, thus providing the court with an opportunity to define the nature and purpose of restrictive covenants. The decision in this case is a welcome clarification of the state and enforceability of restrictive covenants in Alberta.

The Court rejected the request to vary or discharge the restrictive covenant in this case.

Facts of the case

In the early part of the last century William Scott and Samuel Hartronft owned large areas of land in West Hillhurst. At one time they owned all of Block 22, the north half of Block 23, and the south half of Blocks 28 and 29, on Plan 331 AB. Scott and Hartronft sold off the lots in blocks. It appears to have been their practice to place a restrictive covenant on the blocks of lots at the time of sale.

On July 13, 1911 Scott and Hartronft transferred lots 22 to 32 inclusive, in Block 22 of Plan 331 AB, to John Nealy and Melvin Scott. The transfer contained a restrictive covenant stating that:

The Transferee for himself, his executors, administrators and assigns hereby covenants and agrees with the Transferors their executors, administrators, and assigns that he will not erect, or use, or cause, or suffer, or permit to be erected or used on the said land any mercantile or business building. That he will not erect, or use, or cause, or suffer, or permit to be erected on the said land any dwelling house that shall cost less than Eight Hundred Dollars ($800.00). That he will not erect, or use, or cause, or suffer, or permit to be erected on less than Two of the aforementioned lots more than One such dwelling house, and further that any such house or dwelling that shall be erected or placed on the aforesaid lots shall be placed at least Twenty feet from the Street or Avenue at the front and rear of the said lots and will also insert similar covenants to the above in all Agreements for Sale and Transfers made by him for the resale of the land or any part thereof.

This restrictive covenant was registered in Land Titles against the 11 lots. The Applicants Potts, Clarke-Potts, Taylor, and Fairburn and the Respondents McCann are all owners of property originally encumbered by the covenant. There were also three further lots covered by the restrictive covenant: lots 30, 31 and 32.

Scott and Hartronft sold off other parcels. On June 16, 1910 they had transferred lots 21 to 40 in Block 23 to other purchasers, and had imposed an identical covenant on those lands, which was registered in Land Titles. These twenty lots are in the city block immediately west of the lands subject to this action.
On December 28, 1910, Scott and Hartronft had transferred lots 12 to 21 in Block 29 subject to a similar restrictive covenant, which was also registered in Land Titles. This block of 10 lots is immediately across the street from the properties subject to this action. The Applicants Thompson, Mueller, and Fleming own properties subject to this encumbrance.

Finally, on May 6, 1911, Scott and Hartronft had transferred lots 1 to 21 of Block 22 to purchasers subject to a similar restrictive covenant, also registered in Land Titles. This block of 21 lots is immediately behind the properties subject to this action, and is separated from those properties by the lane. The Applicants Goba, Hemming, and Walker own some of these properties.

A number of persons have constructed houses on the encumbered properties, allegedly in reliance on the restrictive covenant. The parties constructed or renovated properties in this area on the expectation that it would remain a single family neighbourhood, and that the restrictive covenant would prevent the construction of more than one house on every two lots. The lots in question are only 25 feet wide, so effectively there would be one house on every 50 feet of frontage if the restrictive covenant is enforceable.

At the end of May of 2002 the Respondents Patrick and Luisa McCann purchased lots 24 and 25 of Block 22. These properties were encumbered by the restrictive covenant on the date of purchase. It is not disputed that at the time of or very soon after the purchase the Respondents formed the intention to separate the two lots, and construct one house on each lot. The Respondents’ plans came to the attention of many of the neighbours, including the Applicants, and this action was commenced.

The Applicants requested a declaration that the restrictive covenant was valid and enforceable, and restraining the Respondents from constructing two houses in breach of the covenant.

The Respondents requested an order discharging the restrictive covenant and declaring it to be unenforceable.

Potts and Clarke-Potts are the owners of lots 22 and 23 of Block 22. Potts built a single family home on the two lots in 1999, in full compliance with the restrictive covenant. The restrictive covenant was registered against this property in 1911, but it was discharged by Court Order in 1982.

In 1982 lots 22 and 23 were owned by James R. Park, a real estate agent. On June 23, 1982 he obtained from Court of Queen’s Bench an order discharging the restrictive covenant from his property. Park was successful in having the restrictive covenant removed from his two lots only.

The Order as initially drafted would have removed the restrictive covenant from all of lots 22 through 32, which would have resulted in the complete extinguishment of the restrictive covenant. For reasons that are not disclosed on the record, the reference to “lot 32 inclusive” was struck out, and “lot 23” was handwritten in. The effect was that the restrictive covenant was removed only from the property owned by Park, and not from the titles to the other residents. Potts and Clarke-Potts are successors in title to Park, and they are accordingly bound by the terms of this Order.
Sometimes restrictive covenants that were protected by caveat were removed by the stratagem of serving a notice to take proceedings on the caveat. Often the caveator had no further interest in the lands, the caveator was deceased, or the address on the caveat was no longer current. When no *lis pendens* was filed, the Registrar would strike the caveat. This procedure for removing a restrictive covenant has now been foreclosed by s. 139 of the *Land Titles Act*, R.S.A. 2000, c. L-4. The *Land Titles Act* has for many years had provisions, now found in s. 48, allowing the Court to vary or discharge restrictive covenants. Sometimes applications were brought under those provisions. On other occasions, applications were brought without any apparent statutory basis, and orders were simply obtained discharging the restrictive covenants.

A restrictive covenant is a form of agreement between the various owners of the properties in question. It is an unusual type of contract, in that the burdens and benefits of the contract run with the land, and are enforceable by and against the particular owners of the land from time to time. It is a fundamental principle that the rights of parties are not taken away except on proper notice to them, which in court proceedings generally means that the interested parties must be served with court process. There seems to have never been any justification for removing restrictive covenants from properties without serving the other owners of properties encumbered by the covenant.

Like any ex parte order, those who are affected by it can move to have it set aside. It is accordingly often a false economy for an applicant to try to avoid serving all of the owners of property subject to a restrictive covenant, because any order obtained by that method is vulnerable to being set aside. The rules for setting aside an ex parte order are set out and generally, the party affected must move promptly after becoming aware of the order. When an attempt is made to set aside an ex parte order after a lengthy passage of time, the Court is concerned with the intervention of third party rights, and whether any party would be prejudiced by the setting aside of the order. Here there has been a passage of twenty years since the Order was granted, and it is accordingly unclear whether any of the other owners could now successfully set aside the Order obtained by Park, and have the covenant restored to the title of the Applicants Potts and Clarke-Potts. However, until the order is actually set aside it must be treated as being effective.

The Applicants Potts and Clarke-Potts are bound by that situation unless and until the Order is set aside, and as the covenant is not presently registered on their title they are not subject to its burdens. Therefore, it cannot be possible that these two Applicants are in any position to enforce the covenants against their neighbours.
Decisions and Reasons

Nature of a Restrictive Covenant and Who Can Enforce

A restrictive covenant is a form of contract between the owners of land. It runs with the land, and the benefits and burdens of the covenant are those of the owners from time to time of the lands. Like any contract, it can only be enforced by the parties to it. The general public has no ability to enforce, vary, or set aside the restrictive covenant. Just as the Applicants Potts and Clarke-Potts cannot enforce the covenant because they are not subject to its burdens, likewise the encumbered neighbours, the unencumbered neighbours, and the general public have no legally-recognized interest in these proceedings. The Applicants Taylor and Fairburn are parties to the restrictive covenants, and it is sufficient to support the present application to enforce the covenant.

In proceedings to set aside or vary a restrictive covenant, it is necessary that all of the owners of the encumbered properties be parties to the proceedings. Those who are not applicants should be respondents. In applications to enforce the covenant it is desirable that all of the owners be parties, although it is not strictly necessary. Therefore, any of the present Applicants who are owners of properties subject to the restrictive covenant can bring proceedings against the Respondents to enforce the covenant. Those owners have an interest in the restrictive covenant, and it is not appropriate to interfere with their rights without notice to them.

The Validity of the Restrictive Covenant

The law of Alberta recognizes two types of negative covenants relating to the use of land that are capable of running with land. The first type arises when a covenant is placed on a servient tenement for the benefit of a dominant tenement. These types of covenants were first recognized in Tulk v. Moxhay (1848), 41 E.R. 1143 (Ch. Div.). The second type of covenant that runs with land arises when a building scheme is imposed over an area of land to regulate the development of that area. In this situation the benefits of the covenant accrue to all the lots, and all of the lots are subject to the burden of the covenant. The restrictive covenants at issue in this case are a form of building scheme, and will be examined accordingly.

The test for a valid building scheme was outlined in the decision of Parker, J. in Elliston v. Reacher, [1908] 2 Ch. 374 (Ch. Div.), at 384, affirmed [1908] 2 Ch. 665 (C.A.) where it was decided that it must be proven that four conditions are met: both the plaintiffs and defendants derive title under a common vendor; that previously to selling the lands the vendor laid out his estate, or a defined portion thereof for sale in lots subject to restrictions intended to be imposed on all the lots, and that are consistent with some general scheme of development; that these restrictions were intended by the common vendor to be and were for the benefit of all the lots intended to be sold; and that the owners, or their predecessors in title, purchased their lots from the common vendor with the understanding that the restrictions made were to enure for the benefit of the other lots included in the general scheme.
The restrictive covenants here do form a part of a valid building scheme covering the nine remaining lots. It is clear that all of the present Owners derive their title from a common vendor. It is clear that the vendor subjected these lots to restrictions intended to be imposed on all of the lots. The restrictions were imposed for the benefit of the lots. Because of the wording of the transfer, and the operation of the Land Titles Act, all of the present owners and their predecessors in title purchased the lots on the understanding that they would be bound by the scheme.

Where the conditions are met, then the covenants are capable of running with the land, and all of the owners from time to time may enforce and are subject to the covenants. In effect, the satisfaction of the conditions is sufficient to indicate an intention on the part of the vendor that the covenants would run with the land. The transfer clearly discloses an intention that the covenants will run with the land. In the transfers, the transferee covenants on his own behalf and on behalf of his assigns. He covenants in favour of the transferor and his assigns. There is a further covenant that the lands will not be further transferred without a similar covenant being imposed on subsequent purchasers, something which would probably follow under the land titles system anyway when the covenant is registered against the land.

The restrictive covenant represents a valid building scheme, and the covenant is capable of being enforced in law.

**The 1982 Order discharging the covenants**

The Respondents argued that the effect of the 1982 Order was to completely discharge the restrictive covenant. However, the text of the 1982 Order states in paragraph 2 that the covenant would have no further effect as against lots 22 and 23 only. The 1982 Order can only be interpreted as implying that the covenant was to be removed from lots 22 and 23, but it was to remain valid and effective as against the other nine lots. By its very terms this Order cannot have intended to compromise the enforceability of the covenant on the other lots, because if that had been the intention it would have been signed in its original typed form.

The 1982 Order itself did not affect the validity of the restrictive covenant as against the other nine lots.

**Subsequent Events – have the covenants become unenforceable?**

Has anything occurred which has resulted in the covenants becoming unenforceable. Section 48(5) of the Land Titles Act reads as follows:

(5) The entry on the register of a condition or covenant as running with or annexed to land does not make it run with the land, if the covenant or condition on account of its nature, or of the manner in which it is expressed, would not otherwise be annexed to or run with the land.

This section essentially states that registration does not permit a covenant to run with the land, if it was not capable of running with the land at common law. For example, at common law the covenant must be negative in nature, and relate to the land itself. The section therefore preserves, indirectly, the common law respecting restrictive covenants. These restrictive covenants meet the requirements of the common law for a valid building scheme.
At common law, an otherwise valid restrictive covenant could become unenforceable if the character of the neighbourhood changed significantly after the imposition of the covenant. This would usually be an indication that the owners of the property in question had acquiesced in numerous violations of the covenant, such that the original objectives of the building scheme had been defeated. The covenants might also become spent, obsolete or unworkable. Further, the Court might decline to enforce a covenant if its enforcement was vexatious.

In applying this test, it is necessary to define the “neighbourhood”. In this case the Respondents argued that other lands around the nine lots encumbered by the covenant had been developed in a way that was inconsistent with the covenant. It was therefore suggested that the entire neighbourhood no longer reflected the type of single family community originally contemplated by the covenants. But legally, the relevant “neighbourhood” for these purposes consists of the parcels of land encumbered by the covenant.

Only the owners of properties encumbered by the covenant can take the benefits of that covenant and enforce it.

Another issue that arises is whether the relevant “neighbourhood” should simply include the 11 lots originally encumbered by the restrictive covenant, or whether it should include all of the lands originally owned by Scott and Hartronft. Scott and Hartronft owned other properties in the area, and placed identical or nearly identical restrictive covenants on all of them when they were sold. It might be argued that there was but one building scheme covering all of the lots previously owned by these common vendors. If there was but one building scheme, then presumably any of the owners, subject to any of the various caveats, could enforce all of them. This matter must be decided on the basis that the “neighbourhood” consists only of the 11 properties originally encumbered by the restrictive covenant.

The Respondents also argued that the removal of the covenant from the property owned by Potts and Clarke-Potts was a sufficient change in the circumstances of the neighbourhood to undermine the enforceability of the restrictive covenant against the other lots. The law is however clear that the mere discharge of a restrictive covenant from one property in the building scheme, or the breach of the covenant by a few owners, is not sufficient to undermine the entire covenant.

In this particular situation all nine of the lots encumbered by the covenant at present have been developed in a manner that is consistent with the restrictive covenant, as have the two lots formerly encumbered. The character of the neighbourhood has not changed. Therefore the covenant cannot be spent, obsolete, or unworkable, and it is not suggested that the enforcement is at all vexatious.

Accordingly, the covenant remains enforceable under the common law standard.
Variation of a Restrictive Covenant under the Land Titles Act

The Land Titles Act gives the Court discretion to vary or discharge a restrictive covenant. The relevant provisions are:

48(4) …but any such condition or covenant may be modified or discharged by order of the court, on proof to the satisfaction of the court that

[a] the modification will be beneficial to the persons principally interested in the enforcement of the condition or covenant or

[b] that the condition or covenant conflicts with the provisions of a land use bylaw or statutory plan under Part 17 of the Municipal Government Act,

and the modification or discharge is in the public interest.

The Respondents requested discharge of the restrictive covenant from the titles.

The section provides two different circumstances under which the Court could discharge the covenant. The first is that the modification will be beneficial to the persons principally interested in the enforcement of the covenant. Those persons are the owners, other than the Respondents, of the seven lots currently encumbered by the covenant, some of whom appear today to enforce it. They obviously do not feel that it is beneficial to them to have the covenant discharged. The Respondents have not established that it would be beneficial to the persons principally interested to discharge the covenants.

The second part of the section provides that the covenant can be discharged or varied if it conflicts with the land use bylaw. “Inconsistent” must mean that it is impossible to comply with both the bylaw and the covenant. That test is not met, because it is admittedly possible to comply with both the bylaw and the covenant in this case. There is accordingly no basis upon which the covenant can be discharged under s. 48.

Restrictive covenants were developed as a method of providing planning control over lands at a time when municipal planning was in its infancy, if it even existed. The covenants and restrictions on development that arose from restrictive covenants were private in nature, and were enforceable only by the immediate parties. Statutory planning control, on the other hand, has a public element to it, and enforcement is often by a combination of penal provisions and civil actions. Restrictive covenants survive today and are placed on many new subdivisions, notwithstanding the sophisticated form of municipal planning that now exists in Alberta. This is because municipal planning, by its nature, involves the imposition of minimum standards that are deemed necessary in the public interest. Privately enforceable restrictive covenants can place higher standards than those on properties, where the owners find them to be in their interest.

There is accordingly nothing inconsistent about a regime of restrictive covenants existing in parallel with municipal planning statutes. There is no aspect of the “public interest that requires the discharge of these covenants.
Remedy

Where there is a breach of a restrictive covenant, the presumptive remedy is an injunction, although the Court always has discretion to exercise if an injunction would be inappropriate. In this case a remedy in damages would be wholly inadequate. The Respondents have not demonstrated any reason why an injunction would not be appropriate.

The Applicants Fairburn and Taylor are accordingly entitled to a declaration that the restrictive covenant is valid and binding on the Respondents and their successors in title. They are also entitled to an injunction restraining the Respondents and their successors in title from constructing any building on the Respondents' property in breach of the covenant.
Case Study B: Alberta (Attorney General) v. Huggard Assets Ltd.,
[1953] 2 W.L.R. 768.

This case provides an overview of historical tenure in Canada and was ultimately won on appeal
to the Privy Council in England, one of the last civil appeals from Canada heard by the Privy
Council. Originally the Province of Alberta lost in the lower courts as well as in its appeal to the
Supreme Court of Canada, but finally won on appeal to the Privy Council.

This historical overview is of particular interest as it gives the reader an understanding of how
Alberta’s land tenure evolved to its current status and therefore most of the historical particulars
of this case are included here.

The main issue raised on this appeal is whether the Crown in Right of the Province of Alberta is
entitled to levy certain royalties from Huggard Assets Ltd., respondents in the appeal and
plaintiffs in the action, on petroleum and natural gas derived by them from a certain area in that
province.

The decision was that the appeal should be allowed and the action dismissed.

Facts of the case

The plaintiffs claim an interest in these minerals as successors of a company called the Northern
Alberta Exploration Company Limited, the original grantees of the area under a grant in the form
of a patent dated August 25, 1913. The grantor was the Crown in Right of the Dominion.

The Crown in Right of Alberta succeeded, under the Transfer Agreements Acts of 1930, to any
right which the Crown in right of the Dominion had owned in Crown lands, mines and minerals
situate in Alberta, and royalties derived therefrom; together with the right to enforce “any power
or right, which by any contract, lease or other arrangements, or by any Act of the Parliament of
Canada relating to any of the lands, mines, minerals or royalties hereby transferred or by any
regulation made under such Act, is reserved to the Crown in right of the Dominion”. These
provisions have been described as constituting a “statutory novation” where the province is
stepping into the shoes of the Dominion, and succeeding to its rights.

Was the Dominion, at the time of the grant in 1913, entitled to the right to exact royalties? The
determination of that issue depends on the answer to two questions:

1. What, on its true construction, does the grant of 1913 purport to provide in respect of
royalties payable by the grantee?
2. Whatever on its true construction that provision means, is it legally valid and enforceable?
The grant stated:

To have and to hold the same unto the grantee in fee simple. Yielding and paying unto Us and Our Successors such royalty upon the said petroleum and natural gas, if any, from time to time prescribed by regulations of Our Governor in Council, it being hereby declared that this grant is subject in all respects to the provisions of any such regulations with respect to royalty upon the said petroleum and natural gas or any of them, and to such regulations governing petroleum and natural gas as were in force on the First day of September in the year of Our Lord one thousand nine hundred and nine [and there follow provisions for forfeiture on failure to pay such royalty].

At the time of the grant there were regulations in existence affecting the terms on which the Dominion could dispose of Crown lands, mines and minerals in Alberta, but none of these regulations prescribed a specific rate of royalty chargeable in respect of petroleum or natural gas derived from these sources.

Decision and Reasons

In the court of first instance, the Court found for the plaintiffs. This decision was appealed to the Appeal Court of Alberta where the appeal was dismissed by an equally divided court. The case went before the Supreme Court of Canada where the appeal was dismissed.

The main reason for this decision was that owing to the supposed application of Charles II's Statute of Tenures, 1660, a royalty in the form contended for by the Crown was contrary to law, bad for uncertainty, and void, and that no competent legislation had validated it. They further held that, the condition for payment of royalties being bad, the forfeiture clause conditioned its breach was bad also, and that the grant was valid minus the provision as to royalties.

Terms of Grant

The first question to decide is whether the terms of the grant, and in particular to the words “from time to time,” purported to entitle the crown, as grantor—then in right of the Dominion—to levy royalties “prescribed” by a regulation, or a succession of regulations, made after the date of the grant.

And the answer must be in the affirmative: the grant does purport to confer such a right on the grantor. This was the unanimous opinion of the Supreme Court of Canada. Any other answer would render the words “from time to time” meaningless.

The question remains as to whether the grant could validly contain such a provision. This question emerged when, some time after the 1930 Transfer Agreement had vested Crown lands, mines and minerals (situate in Alberta) and rights and powers in respect of royalties on such lands, etc., in the Crown in right of that province, the province, by various orders-in-council made between 1941 and 1948 imposed a royalty on any petroleum and natural gas derived from lands, etc., vested in the province by the 1930 Act.

As the result of this imposition the plaintiffs claimed the following relief:

1. A declaration that the Lieutenant Governor in Council (of Alberta) was not entitled to exact any royalty with respect to petroleum and natural gas produced from the lands.
2. An order rectifying the Patent by striking out all references to royalties.

The royalty is one which the grantor claims to be entitled to impose for the first time after the contract or grant, at any figure he chooses, or to vary from time to time at his uncontrolled discretion, as a “variable royalty”.

The areas which came to be called after 1670 “Prince Rupert’s Land” and the “North West Territories” are referred to in this case simply as “Rupert’s Land.”

The argument in support of the proposition that the grant could not validly provide for a “variable royalty” in this sense of the term may be summarized under the following heads:

- A royalty is akin to rent if not a species of it. A rent must be “certain,” and a rent variable at the whim of the lessor is uncertain. So, therefore, is a royalty similarly variable, and unenforceable independently of any argument founded on the statute of King Charles II.
- The Statute of Tenures, 1660, applies to Canada or that part of it called Rupert’s Land, which was vested in the Dominion in 1870 and from which in 1905 Alberta (including the mineral lands in question) was carved out. This statute by clauses 2 and 4 abolishes grants in fee of land on tenures (such as the old English tenure by knight service) for which the consideration consisted at one time of uncertain services, or of payments by way of composition for such services which reflected in their quantum or in the method of their determination the uncertainty of the services themselves. Clause 4 provided that “all tenures hereafter to be created by the King’s Majesty . . . upon any grants . . . of any estate of inheritance at common law . . . shall be in free and common socage, and shall be adjudged to be in free and common socage only, and not by knight service, and shall be discharged of all wardship, value and forfeiture of marriage, livery, primer seisin, ousterlemain,” and certain other burdens incident to tenure by knight service. Clause 4 relates to estates to be created “hereafter.” Clauses 1 and 2 abolish knight service tenure and its characteristic burdens (which in those clauses were described as including “escuage”) in respect of existing estates, and convert them also into tenure by free and common socage, free from those burdens for the future. The hall-mark, it was said, in Littleton, Coke on Littleton, and Blackstone, of tenure by “free and common socage” was and is that any services, or cash composition in lieu thereof, must be “certain;” and, so the argument continued, since a “variable royalty” could not be described as “certain” in any sense of the word, ergo “a variable royalty” was prohibited by the statute.

It was further contended that whether or not the Act of 1660 applied to Rupert’s Land with the results described in (2) above, in any case the charter by which in 1670 Charles II granted Rupert’s Land to the Hudson’s Bay Company expressly included a term providing for the prevalence of free and common socage as the standard basis of tenure of land therein. The same result, it was suggested, could be reached if Rupert’s Land was a “settled” colony even if there were no such provision in the charter, for it is well established that settlers import into a settled colony the common and statute law of their country as they existed at the time of settlement and so far as applicable to the settled territory. But the terms of the charter would seem to make resort to this rule superfluous so far as the establishment of socage tenure is concerned.
All these three arguments have either of two answers:

- That a "variable" royalty is consistent with "free and common socage," or
- That, if it is not, Dominion legislation has displaced the requirement of such socage tenure and validated a form or forms of tenure which are inconsistent with it. The second of the three arguments—that based on the 1660 Act—may, in addition to these possible objections, be exposed to a third, namely, that the Statute of Charles II never applied to Canada, or to the material part of Canada, namely, "Rupert's Land."

The Privy Council does not consider that the first of the arguments in question is established. There may well be an analogy between royalties in respect of a grant and rent in respect of a lease and it may well be that rents must be in some sense of the word "certain." But what does "certain" mean in this connection? What is an "uncertain" rent? It is clear that a fluctuating rent is not as such necessarily "uncertain". It would seem that what was "uncertain" was not the quantum of the rent but the times at which it was to be payable. In this case, the charter of 1670 provided for a royalty which in some sense depends on the whim of the grantor, the King. He is to receive two elks and two black beavers every time he visits the territories in question. No one can tell whether he will visit the territory at all; nor if he does, how often; yet his unpredictable election to visit it never, seldom or repeatedly, determines the number of elks and beavers to be "yielded up". It would still (like the other two) fall to the ground if adequate "validating legislation" were proved.

The majority of the Supreme Court, as has been stated, based their decision, in the main, on the Statute of Tenures, 1660. Their reasoning assumes that this statute applied to Canada, or at least to "Rupert's Land."

The Act has no express "extent" clause. An Act of the Imperial Parliament today, unless it provides otherwise, applied to the whole of the United Kingdom and to nothing outside the United Kingdom, not even to the Channel Islands or the Isle of Man, let alone to a remote overseas colony or possession. In 1660 there was, of course, no United Kingdom. The Acts of Union of 1706 (with Scotland) and of 1800 (with Ireland) were still unknown.

There was not, in 1660, any technical rule of draftsmanship governing the geographical area to which an English Act of Parliament was presumed to apply where its terms were silent on that point. The question whether such an Act applied outside England (which since 1536 has by Act of Parliament included Wales) must depend in such circumstances on the intention of its framers, to be deduced from the nature of its subject matter and substantive provisions. It would presumably have no such external application if its subject matter was beyond question of merely insular and domestic import.

The Act of 1660 was found by the Privy Council of purely local application; that it applied to England only. Its main objects were two: to abolish certain oppressive incidents of feudal military tenure, "wardships", "marriage", "primer seisin", "ousterlemain" and the like. To effect this it was necessary to abolish the military or knight service tenures themselves—the soil from which those incidents sprang. Their sacrifice must involve the King in financial loss, for which he was to be compensated under the terms of the Act (clauses 15 to 27) by certain duties on strong liquors, for
It seems to their Lordships strained to suppose that such an Act, recording a compromise between the King of England and his people, the main object of which was the abolition of certain peculiarities of our insular medieval land tenure, was intended to apply to a vast tract of country thousands of miles away which was only inhabited at the time by a few Indians and half castes, people who had never smarted under wardships, marriage and *prima seisin*, and had almost certainly never heard of them. It seems to their Lordships that these and the other provisions of the Act—notwithstanding that it provides that “free and common socage” should prevail in future, and abolishes tenure by “escuage”—were not intended to apply outside England and Wales, to which, along with Berwick-on-Tweed, the machinery for collecting the compensatory duties is expressly confined (clause 47).

Apart from the rule governing settled colonies, the charter of 1670 under which the Hudson’s Bay Company was granted Rupert’s Land provides expressly for tenure of that land in “free and common socage and not in capite or by Knightes’ service.”

Two questions remain:

(A) Were the terms of the grant which is in question in this case—a grant subject to a “variable royalty”—inconsistent with and in breach of the requirements of tenure in “free and common socage?”

(B) If yes, were those requirements still valid when the grant was made in 1913, or had legislation, regulations or orders passed in the meantime so far modified them as to validate the grant?

The first of these questions is open to doubt for in the charter itself the consideration proving from the tenant—the royalty—is as to its amount largely at the discretion of the grantor, the King of England. If he chooses never to visit the area, no royalty is payable at all; and this would seem to argue that a considerable degree of “uncertainty” in the consideration moving from the tenant is compatible with “free and common socage”.

It was assumed, without deciding, that it is inconsistent with the terms of the 1913 grant.

Upon that assumption, the question is whether competent legislation has validated the grant. The conclusion of the Privy Council is that it has done so.

The Dominion parliament was competent at all material times, after 1870, by clear enactment to repeal or vary any law as to land tenure prevailing in Rupert’s Land before that region was in that year vested in the Dominion, even if this meant introducing forms of tenure unknown in the past to English law or forbidden by it. The question is not whether the Dominion possessed the necessary power but whether in fact it exercised it.

The legislature of a new country with a small population and vast possibilities of development might well favour an elastic policy in its efforts to attract settlers, and be the less inclined to submit indefinitely to the fetters of English feudal tradition in such matters as land tenure.
By a complex of legislation between 1868 and 1870, the Hudson’s Bay Company surrendered its grant of Rupert’s Land for £300,000 and on June 23, 1870, that region was admitted to the Dominion. The charter of 1670 under which it had been granted to the Hudson’s Bay Company expressly provided that tenure should be in “free and common socage”. Interim legislation (e.g., the Act of 1869 [Dom.] 32-33 Vict., Ch. 3) provided that all laws in force in Rupert’s Land at the time of its admission should (unless contrary to the B.N.A. Act, 1867) remain in force until altered. An Imperial Act of 1871 (34-35 Vict., Ch. 28) “to remove doubts” confirmed all Dominion statutes relating to this transaction and gave power to the Dominion \textit{inter alia} to make provision for the “peace, order and good government . . . of any territory not yet for the time being included in any province” (which would aptly describe that part of Rupert’s Land which later became Alberta). Subsequent Dominion Acts followed containing similar provisions, e.g., the \textit{Northwest Territories Act}, RSC, 1906, Ch. 62 (which itself reproduced similar provisions in an Act of 1886 and even earlier legislation) and by Section 12 enacted as follows:

Subject to the provisions of this Act, the laws of England relating to civil and criminal matters, as the same existed on the fifteenth day of July, in the year one thousand eight hundred and seventy, shall be in force in the Territories, and in so far as the same have not been, or are not hereafter, as regards the Territories, repealed, altered, varied, modified, or affected by any Act of the Parliament of the United Kingdom or of the Parliament of Canada, applicable to the Territories, or by any ordinance of the Territories.

This provision was in force at the time of the disputed grant of 1913.

Tenure by socage was in 1870 a part of the “laws of England” and cannot be \textit{inapplicable} to Rupert’s Land, since this tenure had been in force in that tract under the terms of its charter for exactly two centuries before its transfer to the Dominion. Has competent legislation subsequent to the transfer this part of the “laws of England” had been “repealed, altered, varied or modified” in such a way as to validate the present grant? Such validating provisions, if they exist, are found in the successive “\textit{Dominion Lands Acts}” and regulations or orders made thereunder.

\textit{The Dominion Lands Act} in force at the time of the 1913 grant was Ch. 20 of the statutes of 1908. Before referring to its terms it may however be helpful to refer to an earlier statute, the \textit{Dominion Lands Act}, RSC, 1886, Ch. 54. Sec. 47 of that Act reads as follows:

Lands containing coal or other minerals, whether in surveyed or unsurveyed territory, shall not be subject to the provisions of this Act respecting sale or homestead entry, but shall be disposed of in such manner and on such terms and conditions as are, from time to time, fixed by the Governor in Council, by regulations made in that behalf, and was reproduced by sec. 47 of the \textit{Dominion Lands Act}, 1892, with the addition of a proviso which does not affect the present case.

The Act of 1886 further provided, by sec. 90:

The Governor in Council may . . .

(h) Make such orders as are deemed necessary from time to time to carry out the provisions of this Act according to their true intent, or to meet any cases which arise, and for which no provision is made in this Act; and further make and declare any regulations which are considered necessary to give the provisions in this clause contained full effect; and, from time to time, alter or revoke any order or orders or any regulations made in respect of the said provisions, and make others in their stead.
There are two points of note in relation to these provisions of the 1886 Act: (1) Sec. 47 gives the Governor in Council powers as wide as imaginable as to the “disposal” of coal and other minerals by regulation. He can impose any terms he, “from time to time”, fancies, and employ any method of disposal. If this provision had stood unmodified at the time of the grant, and a regulation had been made giving effect to it, it would have authorized the grant notwithstanding any inconsistency between the terms of the grant and technical socage tenure. (2) Side by side with this power, in sec. 90 (h) there is a power to make “orders”. These two parallel powers are somewhat sharply distinguished and the distinction persists in the Act of 1908. The regulations under the 1886 Act (as amended in 1892) were made between 1901 and December, 1906, inclusive.

The sections of the 1908 Act corresponding to those from the 1886 Act, and dealing respectively with “regulations” and “orders,” are Secs. 37 and 76 (k).

Sec. 37 is as follows:

Lands containing salt, petroleum, natural gas, coal, gold, silver, copper, iron or other minerals may be sold or leased under regulations made by the Governor in Council; and these regulations may provide for the disposal of mining rights underneath lands acquired or held as agricultural, grazing or hay lands, or any other lands held as to the surface only, but provision shall be made for the protection and compensation of the holders of the surface rights, in so far as they may be affected under these regulations.

Sec. 76 (k) reads:

The Governor in Council may . . . .

(k) make such orders as are deemed necessary to carry out the provisions of this Act, according to their true intent, or to meet any cases which arise, and for which no provision is made in this Act; and further make any regulations which are considered necessary to give the provisions of this section full effect.

This Act maintains the distinction between regulations and orders, which are intended to serve different purposes; and the distinction, in this Act of 1908, is emphasized by sec. 77.

77. Every regulation made by the Governor in Council, in virtue of the provisions of this Act, and every order made by the Governor in Council authorizing the sale of any land or the granting of any interest therein, shall have force and effect only after it has been published for four consecutive weeks in The Canada Gazette, and all such orders or regulations shall be laid before both Houses of Parliament within the first fifteen days of the session next after the date thereof, and such regulations shall remain in force until the day immediately succeeding the day of prorogation of that session of Parliament, and no longer, unless during that session they are approved by resolution of both Houses of Parliament.

This section provides that, while both regulations and orders shall be laid before both Houses of Parliament within 15 days of the session next after their date, regulations (though not orders) shall become inoperative on the day succeeding the prorogation of the session of parliament unless during the session approved by a confirmatory resolution. Orders are not now defeasible for want of such a resolution, but the corresponding section of the 1886 Act, Sec. 91, while providing for similar formalities, does not distinguish between the effect of not complying with them in the case of a regulation on the one hand and an order on the other.
There is a difference between the language of Sec. 37 of the Act of 1908 and Sec. 47 of the 1886 Act, which would seem to limit the almost despotic powers of disposal vested in the Governor in Council by the latter provision. For where sec. 47 spoke of “disposal” of lands, etc., “in such manner and on such terms and conditions as are, from time to time, fixed by the Governor in Council”, by “regulations”. Sec. 37 provides simply that such lands, etc., “may be sold or leased under regulations made by him”. There is no corresponding limitation in that Act in his powers to proceed by order. An order cannot, like a regulation, lapse for want of a confirmatory resolution, and is capable of dealing with cases uncovered, or not adequately dealt with, by any regulation.

The instrument by virtue of which the grant of 1913 purported to be made was an order-in-council, or rather two such orders, dated May 31, 1911, and March 21, 1913 and not a regulation.

The points remaining are:

1. Did these orders, if themselves valid, purport to authorize a grant in the terms of that of August 25, 1913?
2. Were the orders which purported to be made under sec. 76 (k) of the 1908 Act a valid exercise of the powers conferred by that subsection? Or should the subsection be read as not authorizing any order which runs counter to tenure by “free and common socage?”

A regulation normally applies uniform treatment to every one, or to all members of some group or class. There is one and the same “rule” for all. On the other hand there may be special cases which the rule did not contemplate or to which owing to special circumstances it cannot apply without hardship, or without violating the spirit of the Act; and the object of the “order-making” power is to enable the crown to make special and equitable provision ad hoc for such cases.

This case was a very special one, not covered by ordinary rules, and was so considered and treated by those who on behalf of the crown in right of the Dominion made the two orders and issued the grant or patent.

The first order, dated May 31, 1911, opens with a reference to regulations assumed to be obsolete or rescinded—“the late regulations”—and refers to them in its last paragraph once more as “the old regulations”. These are the regulations made under the 1886 and 1892 Acts, between 1901 and 1906 inclusive, and referred to above as “the 1906 regulations” because they were issued in a consolidated form in December of 1906. These consolidated regulations has provided for the “reservation” in suitable cases for purposes of prospecting for petroleum of an area of 1,920 acres, in favour of an applicant for such reservation, of land in, inter alia, the province of Alberta. They further provided that “if oil in paying quantities should be discovered by the prospector” an area not exceeding 640 acres of land, including the oil well, would be sold to the person making such discovery at the rate of $1 per acre, and the remainder of the reserved area, 1,280 acres, would be sold at the rate of $3 per acre. Par. 6 provided that “a royalty at such a rate as may from time to time be specified by Order in Council will also be levied and collected on the sales of the petroleum . . .”, para. 8 provided that the patent which might “be issued for petroleum lands” would be made subject to the payment of the above royalty: and that the patent might be declared null and void for default in the payment of such royalty.
The order of May 31, 1911, when it refers to these regulations as the “late” or “old” petroleum regulations, assumes them to have been rescinded. There was nothing to prevent the Minister from proposing, or the Governor in Council from making, an order-in-council, under the powers conferred by sec. 76 (k) of the 1908 Act dealing with a special case of hardship by providing that it would be governed by the rescinded 1906 regulations if the equity of the case appeared to him so to require. And this is what in fact the orders-in-council of May 31, 1911, and March, 1913, professed to do.

A “reservation” had been made under the old “1906 regulations” in favour of a Mr. Bennetto on January 1, 1906, of a tract of land in Alberta, which is called here “Tract X.” Bennetto had done prospecting work on that tract, which was continued by his assigns the Northern Alberta Exploration Company, the assignors to the respondents. Oil had been discovered, but not in “paying quantities”; hence no right of sale had been acquired by anyone. Meanwhile the “reservation” was due to expire on June 17, 1911. The Northern Alberta Company asked for a renewal of the reservation. The order recites that large expenditure had been incurred by Bennetto and the company, and provides that the reservation of petroleum and gas rights should be extended in favour of the company for two years from June 17, 1911; but that it should apply to land other than, though overlapping with, the land originally covered by the reservations. This may be called “Tract Y.” This substitution was necessitated by the acquisition by bona-fide squatters of a large area of riverain territory covering part of the surface of “Tract X”, the original reservation. The order of 1911 finished by reciting and giving effect to the following recommendation:

Should oil or natural gas be discovered in paying quantities within the period of one year from the 17th June, 1911, the Minister also recommends that he be authorized to sell to the company, under the provisions of the old petroleum regulations, all the lands contained within the entire area above mentioned both as regards the surface and petroleum and natural gas rights, and that if oil in paying quantities is discovered after the expiration of the first year, but before the 17th of June, 1913, he be authorized to sell to the company the petroleum and natural gas rights under the entire area reserved and the surface rights of that portion lying between the southerly boundary of the McMurray Settlement and Horse Creek.

The second order-in-council of March 12, 1913, recites these facts and the provisions of the order-in-council of 1911, in particular its final paragraph which has just been quoted. It does not record, and presumably it was not the fact, that within one year or even nearly two years of June 17, 1911, oil or natural gas “in paying quantities” had been discovered in the substituted area; but it does record that valuable prospecting work had been done by Bennetto and the Northern Alberta Exploration Company, and that at least $75,000 had been expended by them by October, 1912.
The order-in-council ended by providing as follows:

That in view of the very large expenditure which the Northern Alberta Exploration Company, Limited, has incurred for the purpose of demonstrating the existence or otherwise of petroleum in the McMurray field, which demonstration must be of very great public benefit, and in view of the fact that the location first reserved for the application was lost to him through the encroachment of squatters, the Minister recommends that the above company be permitted to purchase the petroleum and natural gas rights under the entire area reserved for them by the Order in Council dated the 31st May, 1911, together with the available surface rights thereof, at the rate of $3.00 an acre, subject, however, to such rights as may be established under the provisions of the Dominion Lands Act and the regulations, by any persons in a position to show that they have in the meantime squatted upon these lands.

If these two orders are read together, their effect is to authorize the grant which followed on August 25, 1913, both as regards the price of the land and “under rights” sold and as regards royalties. The price under the grant was $3 an acre both for the surface (1,296 acres) and the mineral rights (1,320 acres). If the order-in-council of 1911 had stood alone, the price would have been $1 as to part and $3 as to another part, for the order of 1911 imports the 1906 regulations and that is what they provide. But the order-in-council of 1913 alters this rate to $3 overall; and the grant is so far within the authority conferred by the two orders read together.

The grant contained as part of its terms what has been described as a “variable royalty”. The order-in-council of 1911 imports in this regard also the terms of the “old” regulations; they are called the “regulations in force on 1st September, 1909”, but these are the same as the “1906 regulations” and these authorize (in the regulation of May 31, 1901 or par. 6 of the consolidating regulation of 1906) the levy of royalties on petroleum sold “at such a rate as may from time to time be specified by Order-in-Council”. Under sec. 76 (k) of the 1908 Act the Crown in right of the Dominion had power to deal with a case such as this by applying to it certain of the terms (those as to royalties) of a superseded regulation. This was a special case. Oil and gas had not been discovered in paying quantities but research and expenditure, attended with much benefit to the public, had been carried out and incurred by the prospectors, the predecessors in title of the respondent company. Hence they were allowed to acquire the land and rights in question without complying with any regulation but were compelled to submit to liability in future to a royalty not prescribed by any regulation in force at the time of the grant.

It was not considered that in dealing with such special or hard cases under sec. 76 (k) it was intended that the discretion of the Crown should be fettered or controlled by incidents of English feudal land tenure. It had been expressly enacted that the Dominion parliament could repeal, vary or modify any English law prevailing before 1870 in territories such as Rupert’s Land, and territories like Alberta which might be carved out of it. In providing as it did in sec. 76 (k) of the 1908 Act for a discretionary power to deal with hard or anomalous cases the legislature was arrogating to itself the right to infringe the requirements of “free and common socage”, so far as the end in view required. Where the justice of the individual case required it, it is unreasonable to hold that the Crown’s liberty to deal with such cases was intended to be exercised only within the limits set by a rigid respect for the (obscure and debated) frontiers of historical socage tenure.
It follows that the grant of 1913 was valid not only in other respects but in respect of the variable and prospective royalties reserved to the Crown in right of the Dominion. Those rights have now been transferred to Alberta. In 1930 the “transfer agreement Acts” were passed in identical terms by the legislatures of Alberta (statutes of Alberta, 1930, Ch. 21), of the Dominion (statutes of Canada, 1930, Ch. 3) and of the Imperial Parliament (20 & 21 Geo. V, Ch. 26). Sec. 1 of the Alberta Act [of the agreement] is as follows:

In order that the Province may be in the same position as the original provinces of Confederation are in virtue of section 109 of The British North America Act, 1867, the interest of the Crown in all Crown lands, mines, minerals (precious and base) and royalties derived therefrom within the Province, and all sums due or payable for such lands, mines, minerals or royalties, shall, from and after the coming into force of this Agreement and subject as therein otherwise provided, belong to the Province, subject to any trusts existing in respect thereof, and to any interest other than that of the Crown in the same, and the said lands, mines, minerals and royalties shall be administered by the Province for the purposes thereof, subject, until the Legislature of the Province otherwise provides, to the provisions of any Act of the Parliament of Canada relating to such administration; any payment received by Canada in respect of any such lands, mines, minerals or royalties before the coming into force of this Agreement shall continue to belong to Canada whether paid in advance or otherwise it being the intention that, except as herein otherwise specially provided, Canada shall not be liable to account to the Province for any payment made in respect of any of the said lands, mines, minerals or royalties before the coming into force of this Agreement, and that the Province shall not be liable to account to Canada for any such payment made thereafter.

Sec. 3 of the Act [of the agreement] is as follows:

Any power or right, which, by any such contract, lease or other arrangements, or by any Act of the Parliament of Canada relating to any of the lands, mines, minerals or royalties hereby transferred or by any regulation made under any such Act, is reserved to the Governor in Council or to the Minister of the Interior or any other officer of the Government of Canada, may be exercised by such officer of the Government of the Province as may be specified by the Legislature thereof from time to time, and until otherwise directed, may be exercised by the Provincial Secretary of the Province.

The right to levy a “variable” royalty on these lands was a “right” which within sec. 3 by “contract ... or other arrangements ... relating to any of the lands, mines, minerals or royalties” was originally reserved to the Crown in right of the Dominion and by Secs. 1 and 3 was in 1930 transferred from the Crown in right of the Dominion to the Crown in right of the Province of Alberta, which was justified, through its Lieutenant-Governor in Council, in levying by the various orders-in-council of 1941-1948 the royalties complained of in this case.
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Chapter 3: Parcel Boundaries

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Introduction

§3.1 The right to enjoyment and benefit of ownership or holding an interest in real property in Alberta since the late 1800s has been based on property title. The property title, which is a document of ownership, refers in the majority of cases to a plan of survey, which shows parcel boundaries and corner monuments placed to govern the physical extent of ownership of the title.

Land Boundaries

§3.2 A land boundary is defined in *Black’s Law Dictionary*, 6th edn, as:

Limit(s) of land holdings described by linear measurements of the borders or points of the compass, or by stationary markers.

§3.3 A land boundary may be a straight or curved line at or above the ground surface. The boundary defines the common limit of abutting or contiguous parcels of land. A boundary may be marked or monumented at its corners on the ground as shown by a plan of survey. Some boundaries are not marked on the ground but they are identified by textual descriptions or descriptive plans which create new boundaries in the simple relationship of being parallel with, perpendicular to, or at a specified distance from an existing boundary that is marked on the ground.

§3.4 The Government of Canada under Prime Minister John A. Macdonald decided to ensure that, with few exceptions, settlement of the new Western provinces would not occur until the land was surveyed, marked on the ground by monuments, and shown on an official plan approved and confirmed by the Surveyor General. This principle was formalized by provincial legislation which is now the *Survey Act*, RSA 2000 c.S-26 and amendments thereto. It is the Alberta township plans of survey confirmed by the Surveyor General of Canada up to 1930 and the Director of Surveys of Alberta thereafter, that provide the basis for creating new titles under the Alberta land titles system.
§3.5 The *Land Surveyors Act*, RSA 2000 c.L.3, the *Surveys Act* and the regulations under those Acts, together with professional survey standards, provide the framework necessary to ensure that well-established and maintained property boundaries continue to provide the basis of ownership and interests in land under the Alberta land titles system.

**Creation of Parcel Boundaries**

§3.6 A parcel is a tract of land whose limits are land boundaries. A parcel boundary may be defined as a geometric closed figure having three or more straight, curved or sinuous sides. One or more of the sides can be along a sinuous natural boundary. The boundaries of a parcel may be marked on the ground surface with survey monuments along the boundaries and at the points of deflection of the boundaries. Each parcel has a unique identifier for easy description and referral in a title. The identifier may be the original township designation of quarter section, township, range and meridian number, or lot, block and plan number, for reference in a land title.

§3.7 Parcel boundaries are created for the purpose of identifying the physical extent of ownership of the parcel and for facilitating the transfer of ownership. An interest in a parcel, subject to a court order or an agreement between the owner and the interest seeker, may be held by the Crown in right of the Province of Alberta, or by an individual, corporation, association or other entity. The parcel may require the creation of other types of boundaries within the parcel, to restrict the granting of an interest to a portion of the parcel. These interior boundaries are usually created by plans of survey which show their relationship to the exterior parcel boundaries. However, the interior boundaries could also be created by descriptive plans or by textual description. Plans of survey that create parcel boundaries include subdivisions, condominiums, roads, railways, and utility rights-of-way. Parcel boundaries in Alberta can also be created through the use of natural boundaries such as water and heights of land, artificial boundaries defined by survey monuments, textual land descriptions referenced to natural or artificial boundaries, and descriptive plans also using natural or artificial boundaries as a reference. Since textual land descriptions and descriptive plans provided for under the land titles system are discussed elsewhere in this book, only natural and artificial boundaries will be treated in this chapter.

§3.8 There has always been a sequence procedure to the creation of a new parcel from Crown land. Lands that are in unsurveyed territory now in the Province of Alberta are not under a title of ownership. The first step in creating a new parcel is the request to the Director of Surveys office to commence a township survey in a specific location in unsurveyed territory. When the survey is completed, the Director has a new township plan prepared. New township boundaries are created at the instant when the Director
approves and confirms the survey of the township and the township plan. The plan creates the individual basic unit of the Alberta Township System of quarter sections in the pattern of 36 sections as outlined in Part 2 of the *Surveys Act*. A partial township plan can also be created. This type of plan is not registered in the Land Titles Office; however, a copy of it is available from that office.

§3.9 The present sequence procedure to create new titles has followed the same process since 1930 when the federal government transferred resources to the Province. The minister of the department administering Alberta public lands requests that titles be created for a specific tract of land by way of a signed notification to the Registrar of the Land Titles Office. The notification may direct the issuance of a new title in the name of the Crown or that of an individual.

§3.10 A title may also refer to another type of plan called a descriptive plan introduced in 1988 by amendments to what is now the *Land Titles Act*, RSA 2000 c. L-4. The descriptive plan was created to replace the creation of new textual descriptions and to present a pictorial representation of new parcel boundaries. Also, the descriptive plan was introduced to eliminate the ambiguity that can arise in textual descriptions, and to facilitate the maintenance and updating of the current provincial digital mapping database. This chapter will deal with matters that pertain to parcels and their boundaries in the context of land ownership, the statutes that relate to land ownership and other interests in land. An interest in land can be granted by an agreement to a person or corporation for the use of all or part of the land in the title for a specific purpose.

§3.11 The *Surveys Act* and the *Land Surveyors Act* state that an Alberta Land Surveyor is the designated professional to monument new boundaries by the placement of new survey monuments, to retrace old boundaries by the assessment of evidence of previous survey monuments, and to place new survey monuments at re-established or restored corners where the original survey monuments have been partially or totally destroyed.

§3.12 In performing route surveys, such as those for utility lines or road rights-of-way, only one boundary of the parcel is normally marked or monumented in Alberta. The opposite boundary is at a prescribed and parallel distance from the marked or monumented boundary.
Natural Boundaries

Bodies of Water and Heights of Land

§3.13 Bodies of water and heights of land are natural features that may be used to create a boundary. Section 17 of the Surveys Act provides that any method may be used that has the effect of accurately determining the location of the natural boundary at the time of the survey.

§3.14 Water bodies in Alberta are not subject to recordable tidal variations, and are considered as stationary or flowing as they relate to parcel boundaries. The line of separation between a body of water and its land form is the bank, which is defined in subsections 17 (2) and (3) of the Surveys Act as:

(2) When surveying a natural boundary that is a body of water, the surveyor shall determine the position of the line where the bed and shore of the body of water cease and the line is to be referred to as the bank of the body of water.

(3) For the purposes of this section, the bed and shore of a body of water shall be the land covered so long by water as to wrest it from vegetation or as to mark a distinct character on the vegetation where it extends into the water or on the soil itself.

§3.15 The bank is thus the line of separation between the owner of the land parcel and the Crown which owns the bed and shore of the water body. Although the wording of the statutory definition may appear easy to interpret, the onus in locating the actual physical bank rests with the Alberta Land Surveyor under subsection 17(1). The bank can be difficult to determine along shallow-shored water bodies where marsh areas have both land and water vegetation along the bank.

§3.16 There is an owner on each side of a natural water boundary. This is referred to as riparian ownership and it ensures access to and from the body of water over the natural boundary which is the bank. The Crown in right of Alberta is normally the owner of the bed and shore of the water body, by virtue of section 3 of the Public Lands Act, RSA 2000, c.P-40. However, the Crown can grant the bed and shore to others, as was done for example with respect to the Métis settlements in northern Alberta.

§3.17 Generally, although there are some exceptions, a body of water subject to a claim by the Crown must be permanent and not merely seasonal. The determination of permanence may not require an entire open water surface year round, but it is dependent on the existence of surrounding land vegetation and possibly its navigability.
§3.18 The navigability of a water body may have some influence on the interpretation of its permanence. Historically, under section 109 of The Constitution Act, 1867 the beds of all navigable waterways belong to the provinces. Section 91(10) of the Act gave the Parliament of Canada authority over all navigation. The present (federal) Navigable Waters Protection Act, RSC 1985, c. N-19 refers to “navigable” waters. The Act contains no explicit definition of navigable water. Past judgment as to what navigable water is has been at the discretion of the Minister of Transport who has delegated the administration of the Act to the Canadian Coast Guard. The Navigable Waters Protection Act, Application Guide, 1994 contains a more extensive definition of “navigable”. The interpretation of navigable with respect to a non-tidal body of water may have been only as the term suggests: suitable for travel by vessel, the smallest of which may be a canoe with a shallow draft. Case law also shows that a body of water can be judged to be navigable for only part of a season.

§3.19 A natural boundary can occur along a height-of-land such as a ridge and is often described as the starting point of a watershed of a named creek, river or lake. It can also be the separation point between two watersheds. These height-of-land boundaries are often difficult to define and are not recommended for new boundaries. At present they exist along Alberta’s southwest boundary and in the boundary definitions of the national parks adjacent to the Alberta-British Columbia border. While most of the natural boundary between Alberta and British Columbia is clearly defined and visible by the continental divide, in the saddle areas where the land use activity is high with urban development, recreation, transportation and resource development, the natural boundary has been marked by artificial boundary monuments, such as a portion of the Alberta-Jasper National Park boundary near Mystery Lake in Township 48, Range 26, West of the 4th Meridian.

Changes in Natural Boundaries

Land Erosion and Accretion

§3.20 Natural water bodies are subject to erosion and accretion. This is the gradual and imperceptible natural lateral movement of the natural boundary position over a considerable period of time. The factor of imperceptibility refers to non-noticeable day-by-day permanent change over time. Accretion can occur from natural erosion, alluvion, eruption or subsidence of the water body if the resulting lands above the bank are attached to the subject parcel. An eruption of the bed and shore of the body of water would create an island in the body of water if the eruption were not attached to the parcel. The lowering of a water level can also create islands out of the bed of the water body.
§3.21 Erosion, similar to accretion, is the gradual and imperceptible loss of land due to natural action of water. This can occur in the form of river channels changing course and eroding a new channel across land. In this action of erosion the change of riparian ownership of a portion of the land originally on one side of the river can change to the other side of the river because of the channel’s altered location. The title to the new submerged land belongs to the owner of the bed and shore, which is the Crown in right of the Province of Alberta. The previous channel may be visible but once it is overgrown by land vegetation, even if it is subject to occasional spring high water flows, it becomes accreted to the adjacent lands. This type of erosion and accretion tends to occur along meandering water courses. A similar scenario is the erosion at a bend in a flowing watercourse where the erosion occurs on the outside of the bend and other sediments are deposited on the inside of the bend, and there is a drift of the water channel in one direction. This situation often occurs where the banks are soil-like in composition rather than exposed rock formations.

**Accretion Apportionment**

§3.22 If riparian rights exist, and the change in the natural boundary is a few metres, the adjacent parcels will most likely retain access to the water. The side lot lines of the parcels will usually project toward the water on their same bearing to meet the natural bank. Large changes to boundaries by accretion or erosion can create another concern that is attached by implication to parcels adjacent to water bodies—that of the use and access to the water for the support of a livelihood. The thought here is a historical consideration for an agricultural use, which would include the household, gardens and livestock. It is possible, owing to the convergence of the parcel side boundaries, for an owner to lose water access when the projected side boundaries reach a vertex on the accreted lands. Hence the argument of historical implication of access to the water can be presented. There are at least four possible solutions of apportionment in this case, which are outlined in *Survey Law in Canada*, sections §5.88 and §5.89, where they are described as applying to tidal coastlines. The same principles could apply to the accretion of any inland body of water in Alberta.

§3.23 The planning legislation in Alberta introduced environmental reserves in the *Planning Act*, S.A. 1977 c. 89 to require new artificial boundary setbacks from water bodies to give public access along the shoreline. The artificial lake frontage boundary prevents giving riparian rights to the adjacent parcels. The area between the parcel boundary and the natural boundary, which are often somewhat parallel and about 30 metres apart, is designated as an environmental reserve. If the water level of the water body were to rise to permanently arrest part of the reserve and parcel lands such that it became part of the bed and shore, the ownership of this acquired bed and shore area would be claimed by the Crown in right of the Province of Alberta under section 3 of the
Public Lands Act. The point here is that the artificial boundaries of the parcels do not block the claim to the bed and shore as the water level permanently advances onto the parcel land.

Natural Boundaries on Plans of Survey

§3.24 A natural boundary can appear on a plan of survey as a sinuous line between offset measurement points from a survey field instrument line called a traverse line. Traverse lines are arbitrarily positioned so that linear and angular measurements can be taken along their length. The traverse is a series of connected straight lines between two known points from which offsets are measured to the natural boundary, in most cases the bank of a body of water. In the preparation of a plan of survey or a descriptive plan, the natural boundary may also be shown with a note indicating that it was determined from vertical aerial photographs, with the photograph reference number and date annotated to the boundary. Technology is advancing in remote sensing and these methods can be used as described in the next section. Natural boundaries are often generically described in textual title descriptions as being the left or right bank of a flowing watercourse, or along or around the shore of a lake. The area of parcels containing a water boundary, where the bed and shore are to be excluded, are often described in a subtractive way with the words “all that portion of the parcel not covered by the waters of Apple Lake as shown on township plan dated . . .”. This is a standard wording which exists in many titles and usually refers to the original township surveys in Alberta. All the permanent water bodies of the late 1800s were traversed and shown on the original township plans. Owing to land form and climate changes, some of the water bodies no longer exist and previous lakes are now farmed or have mature tree stands.

Natural Boundary Determination by Aerial Photographs and Remote Sensing

§3.25 Section 17(1) of the Surveys Act states that a surveyor who needs to determine the position of a natural boundary when performing a survey under this Act may do so by any survey method that has the effect of accurately determining its location at the time of survey, relative to the surveyed boundaries of the affected parcel. The section continues by stating that when surveying a natural boundary formed by a body of water, the surveyor shall determine the position of the line of the bank.

§3.26 The ALSA Manual of Standard Practice (MSP), Part E, Section 2, 2003.04.26, Natural Boundaries, contains provisions regarding the determination of natural boundaries by photogrammetry. The provisions require that:
a) The scale of the photographs is as large as or larger than the scale of the final plan of survey. Enlargements may be used to fulfill this requirement only if the resolution is such that the boundary feature is sharply defined on the enlargements,

b) The boundary is inspected on the ground by the surveyor,

c) The position of the boundary is clearly marked on the photographs and, where it is inspected on the ground, is marked on the photograph in the course of the inspection; and

d) Photo identifiable points are positively identified and are pinpricked on the photographs and surveyed on the ground in relation to the monumentation of the survey.

§3.27 The above provisions regarding inspecting the surveyor’s inspection of the natural boundary on the ground and clearly marking it on the photographs remain a relevant photo-interpretation procedure. Shadows, tree cover, vegetation and other elements make natural boundary definition strictly from air photography subject to errors in identification. The surveyor may use his judgment in determining if it is necessary to inspect the entire boundary on the ground over large areas, or whether a sample ground inspection is sufficient.

§3.28 Orthophoto mapping, which shows the natural boundary true to scale and position, is very useful in natural boundary determination. There are several other options available for coordinating and transferring the position of natural boundaries from mapping to survey plans for title area adjustments.

§3.29 Digital ground imagery with resolution accuracy up to one metre or better is available from satellites or from aircraft. Therefore, the provisions in the MSP regarding scale become less important than image resolution. Photograph pinpricking, although still useful, is somewhat outdated compared with orthophoto mapping that is produced directly from digital imagery controlled by ground control points or by an onboard Global Positioning System (GPS). Accuracy is the main consideration for the bank positioning in these imaging methods. The best check of the results is to relate the imagery to the position of known points to make the boundary determination.

§3.30 The accuracy of natural boundaries and the areas of parcels involving natural boundaries depend on the frequency of the traverse line offsets or the methods used for the aerial interpretation or remote sensing of the bank location. Ground traversed bank location will give the most accurate natural boundary position and area.
Natural Parcel Boundary Adjustment under the Land Titles Act

§3.31 The MSP, Part E, Section 2.1, sets out a clarification of a natural boundary:

In common law, a natural boundary at any instant is the designated natural feature as it exists at that instant, and the boundary position changes with the natural movements of the feature as long as these movements are gradual and imperceptible from moment to moment.

§3.32 Common law with regard to natural boundaries has not changed over the years. However, occasionally the administration of the law has been misdirected. In Alberta, the Department of Lands and Forests, which administered the Public Lands Act, had interpreted the Act as requiring that the original natural boundary as shown on the confirmed township survey plan remain the natural boundary regardless of natural changes over time in its position. Following a brief by the Alberta Land Surveyors’ Association submitted in 1958, the Alberta Attorney General’s Department rendered an opinion. Mr. H. J. Wilson Deputy Attorney General, Edmonton, confirmed on 5th February 1959 that the rules of English common law still applied in Alberta. This meant that the Department of Lands and Forest, which administered the Public Lands Act and the Land Titles Office, would have to change their previous administrative practices with regard to natural boundaries and recognize the movement of natural boundaries. Their previous administrative practice was still being revised in the 1980s and encumbrances may still exist on titles as a result of this previous administrative practice.

§3.33 Section 89 of the Land Titles Act contains the following provisions for dealing with changes in natural boundaries.

89(1) Where a parcel of land that adjoins land owned by the Crown in right of Alberta has a natural boundary, the Registrar, on application by the registered owner of the parcel or the crown, may amend the description of the parcel to reflect the current location of the natural boundary.

(2) Where a parcel of land

(a) had adjoined land owned by the Crown in right of Alberta, and

(b) had a natural boundary that no longer exists, the Registrar, on application by the registered owner of the parcel, may amend the description of the parcel to reflect the non-existence of the natural boundary.

(3) An application under subsection (1) or (2) shall be accompanied

(a) in the case where the natural boundary still exists, with a plan of survey or other evidence satisfactory to the Registrar showing the location of the natural boundary,
(b) in the case where the natural boundary no longer exists, with evidence satisfactory to the Registrar of the non-existence of the natural boundary,

(c) with the consent of the Minister charged with the administration of the adjoining land or a person authorized by the Minister, where the Crown is not the applicant, and

(d) with the consent of the registered owners of parcels that may be adversely affected by the amendment of the description.

§3.34 Section 89 only applies to natural boundaries. Under section 3 of the *Public Lands Act*, the title to the beds and shores of all permanent and naturally occurring bodies of water, and all naturally occurring rivers, streams, watercourses and lakes, is vested in the Crown in right of Alberta. Subsection 3(3) goes on to say that a river, stream or watercourse does not cease to be naturally occurring by reason only that its water is diverted by human act.

§3.35 The ownership of any land or the loss of any land through natural movement of the boundary occurs as the boundary changes. It is not dependent on the amendment of the textual description to reflect the current location of the natural boundary by the Registrar. The amendment of the textual description only updates the title for public information.

§3.36 The *Land Titles Procedures Manual*, SUR 12, Surveys - Natural Boundaries Changes, outlines the registration procedures and plan requirements to be followed when a registered owner or the Crown makes application to the Registrar to amend the textual description of the parcel to reflect either the current location of the natural boundary or its non-existence in the title being dealt with. This procedures manual is constantly changing and it is now available on line through the internet [Website 1] in pdf format which can be printed in part or in its entirety.
Case Studies

Case Study A: Robertson v. Wallace (2000), 81 Alta L.R. (3d) 84

This case was analysed by Brian Ballantyne in ALS News, September 2000, vol. 29-3, pages 20-25.

This Alberta case brings forth the legal ramifications of a surveyor doing what he thought was correct to update a title to lands bounded by a water body, when his client was challenged by the adjacent land owner for an apparent loss of land. The case involved a natural re-channelling of the Highwood River across an oxbow of the river. It raised several questions for the court to decide concerning the natural boundary between the two owners. The court found, among other things, that the surveyor was negligent in not contacting the adjacent owner for consent to the boundary adjustment when that ownership was related to the same water boundary. The magnitude of the movement of the boundary was visually obvious and both owners saw it. However, the court upheld the ownership rights of the adjacent neighbour, in accordance with the principles of title update procedure and water boundary case law. The court also based the ownership on part of the 1890 bank of the Highwood River, which appeared to contradict the reason for the process to update the titles. The case summary outlines several cautions to surveyors when reviewing a boundary adjustment that affects private owners.
Case Study B: Rockland Holdings Ltd. v. 309458 Alberta Ltd., [1987] A.J. No. 1349 (QL)

This case was reported in ALS News where the entire judgment is reprinted together with a sketch showing the two locations of Sheep Creek [Allred 1990].

This was an oral decision by the Court of Queen's Bench in Calgary. It involves Sheep Creek in the N.E 1/4 Section 22 Township 20 Range 29 West of the 4th Meridian, which is just north of Highway 7 and southeast of the Town of Okotoks. The case was presented to determine the boundary separating the plaintiff Rockland and the defendant 309458 Alberta. The lands of the parties are described in their titles as being respectively north and south of the Sheep Creek as shown on the township plan approved August 1, 1892. These descriptions, in effect, excluded the bed and shore of Sheep Creek from these and previous owners since the original full quarter section was split in 1920.

The Court made the judgment on the principle of an indefeasible title under the Torrens System of land registration. That system enables an owner to rely on the words of a title document to determine boundary location and not have to go behind the document to statutes or policy to interpret its wording. Common understanding of the wording as written in these titles would lead the owners to believe that they were separated by the Sheep Creek at any given point in time. Natural boundaries move over time and any natural change in the position of the creek would result in a change in adjacent owner areas. If the change in position was not by natural causes then the position of the last known boundary position would tend to govern a court in any request to settle a dispute over the boundary.

The evidence showed and the parties did not dispute that the 1987 position of Sheep Creek was substantially different from that shown on the 1892 township plan. The Court observed that the change in Sheep Creek's location was due to the extensive removal of gravel. Because of the lack of records since 1892 of the positional change and the fact that the changes were not natural, the Court chose to ignore the principles of accretion and avulsion. The Court also chose to ignore adverse possession as there was no evidence presented of constant or visible possession of either land to exclude owners from the use of their land. There is mention of purchase price and taxation which may indicate that the municipality had adjusted its assessment areas to the changed location of the creek.

Both solicitors in their last comments to the Court offered to agree on the position of the common boundary between the parties and suggested it to be the mid line of the 1892 Sheep Creek position. This was done in 1988 by a plan of survey.

Rockland was considered by the Alberta Court of Queen's Bench in Johnson v. Alberta (2002), 95 Alta L.R. (3d) 311, a case involving claims to accreted land at Buffalo Lake.

Land surveyors who are dealing with natural boundaries need to be exhaustive in determining the reason for the change in a boundary location. Is it natural or man made? The Sheep Creek case takes the view that once the position of a natural boundary is recorded it can form the basis for a court to create a dividing line between adjacent owners.
Artificial Boundaries

§3.37 There are only two types of boundaries, natural and artificial. An artificial land boundary is any other boundary that is not a natural boundary. Artificial boundaries may be created on the ground by the use of a monument, as defined in section 1 of the Surveys Act. While the definition of a monument in the Act is broad to provide for an evolving society and its needs, the types of monuments have been consistent since the original township surveys that preceded the settlement of the western prairie provinces. Iron posts, wooden posts, brass tablets, pits, mounds, trenches, were used in marking the Dominion Land Survey Third System of survey and later the Alberta township system. Subsequent surveys for subdivision, roads and utility rights-of-way purposes have been consistent in the use of a 96 centimetre (36 inch) statutory iron post described in the MSP, Part C, Section 3-2.

§3.38 Historically, not every parcel corner was marked by a monument. In the township Third System of survey, the centre of the section, the north quarter corner on the section line not bounded by a road allowance (referred to as the blind line), legal subdivisions, and the north or east limit of road allowances were not normally marked with a monument. The boundary layout of the section and portions of sections is defined in sections 20 to 26 of the Surveys Act and is described elsewhere in this book.

§3.39 Subdivisions created under Part 3 of the Surveys Act and registered in the Land Titles Office between February 16, 1912 and June 9, 1988 did not require the placement of governing monuments at interior lot corners. These corners are defined by proportioned measurements, according to the registered plan, between the monuments placed at the block corners as outlined in the Surveys Act, subsections 45 (4) and (5). Rights-of-way surveys in Alberta are generally marked by monuments placed on one limit and a “prescribed” width shown on the registered plan of survey defines the unposted, usually parallel, other limit.

§3.40 Once monuments are placed by the surveyor, shown on a plan of survey and filed or registered in the Land Titles Office, they govern boundary location. The hierarchy of evidence discussed later in this chapter alludes to what constitutes a complete or partial monument. This is a fundamental principle in survey law and must be well understood in the retracement of old boundaries. The fact that a monument did not get placed as intended when the boundary was created does not alter the location of the boundary. Procedures for dealing with monuments that were placed in error, or that create a boundary uncertainty, are treated later in this chapter.
Artificial Parcel Boundaries

§3.41 An artificial parcel boundary has the same general description as a land boundary as noted above, but it is a sequence of straight or curved lines at the ground surface. The artificial parcel boundary is the sequence of lines that create a closed geometric shape. The artificial parcel boundaries are created by three main methods: plans of survey, textual descriptions in Certificates of Title, and descriptive plans.

Parcels with Natural and Artificial Boundaries

§3.42 A parcel of land may be bounded by one or more natural or artificial boundaries.

§3.43 The parcel has a unique identifier that can be used in its Certificate of Title. On a plan of survey, the unique identifier may be described, for example, as the North East Quarter Section 5, Township 52, Range 21, West of the Fourth Meridian (N.E. ¼ Sec. 5, Twp. 52, Rge. 21, W4thM.) or Lot 1, Block 2, Plan 345 6789.

§3.44 The parcel identifier may also be a textual description, which is then referred to as the number of its Certificate of Title (C of T). The words in the certificate describe the parcel boundaries, by what is known as a metes and bounds method, where the new boundary is described as being parallel or perpendicular to existing boundaries. The descriptive words can also use sequential bearings and distances or distances from a starting point which is usually on an existing boundary of a plan of survey. These textual descriptions have been used since the Alberta land titles system was created, and many of them still exist.

§3.45 Textual descriptions have been replaced for the most part since 1988 by descriptive plans, which are a diagrammatic representation of new boundaries that are created by the registration of the descriptive plan.

Deferred Monumentation of Boundaries

§3.46 With the development of the Alberta Survey Control program in the 1960s, the option of registered plans of survey based on the adopted coordinate system became available. This option has two main advantages and is normally used in an urban setting. Firstly, monuments can be placed to govern boundaries after lot-grading activity is complete, thereby minimizing the loss of monumentation due to grading activity. Secondly, the developer is also able to market and sell lots prior to total utility installations, thereby advancing the project phases, timing and return on investment.

§3.47 Deferred monumentation of a survey is an option only if the area is covered under the Alberta Survey Control System at the required survey control marker
density. An integrated network, consisting of new survey reference markers called control points, is placed and connected to existing monuments governing adjoining boundaries. The position of each survey reference marker is computed and adjusted to give its final northing and easting coordinate values. The coordinates of the proposed new property corners are computed relative to the new survey control points and adjacent boundaries, thus creating a coordinated relationship between the proposed boundaries and the adjoining boundaries. Until such time as the surveyor places a monument to mark a boundary corner, the coordinates of the corner govern its location. These coordinates are shown on the plan of survey and registered in the Land Titles Office in a table format with point number identifiers.

§3.48 After monuments are placed in the field to govern the boundaries created by the registration of the subdivision plan, the surveyor files a form in the Land Titles Office indicating that the monuments have been placed and are now intended to govern the boundaries. Section 47 of the Surveys Act provides the authority and requirements for deferred monumentation.

Boundary Retracement

§3.49 Boundary retracement in the context of this discussion is defined as the locating of monuments that were originally placed and intended to govern a boundary. In Alberta, this refers to a monument placed in the survey of land under the Dominion Lands Surveys Act and Parts 2 and 3 of the Alberta Surveys Act. The Dominion Lands Surveys Act was the authority for surveying the Dominion Land Township System prior to the enactment of provincial legislation. Part 2 of the Surveys Act provides the authority for surveying the Alberta Township System, and Part 3 provides for the survey of land, a plan of which is required to be registered at the Land Titles Office or filed at the Métis Settlements Land Registry.

§3.50 Boundaries created by textual description, descriptive plans and deferred monumentation are laid out according to the bearings, distances, or coordinates used in the document that established the boundary. The only portion of the parcel boundary to be “retraced” would be that portion containing monuments that were intended to govern the boundary. “Monument” is defined in section 1 (p) of the Surveys Act as being:

- a brass tablet, iron post, wooden post, mound, pit or trench, or anything else used by a surveyor to mark a boundary, corner or line;

§3.51 In Alberta, beginning with the original township surveys under the Dominion Lands Surveys Act, there have generally been standard types of monument in use. Brass tablets, iron posts, and wooden posts have been used to mark the actual boundary
corner. Other physical features, such as pits, mounds, trenches, stone mounds and marker posts have also been added to enhance the monument and aid the landowner and surveyor in locating the boundary corner. The spatial relationship between these other features and the brass tablet, iron post or wooden post was recorded and shown in field notes, plans of survey or other documents. See, for example, the publication entitled *Descriptions of Boundary Monuments Erected on Surveys of Dominion Lands 1881 – 1917*, referred to as Bulletin 38 in this chapter.

§3.52 This section will address the principles of retracing boundaries that were created and intended to be governed by monuments in the ground. The authority for creating boundaries by placing monuments to govern property corners in Alberta is found in sections 2, 3, 36 and 45 of the *Surveys Act*. Section 2 distinguishes surveys of land within Alberta that is under provincial legislation from the surveys of land within Alberta that is under the administration of the Government of Canada (National Parks and Indian lands). Section 3 provides that any survey of land that was registered under different legislation is deemed to have been made under the *Surveys Act*. Sections 36 and 45 provide that all boundary lines surveyed in accordance with sections 29 or 32 of the *Surveys Act* are determined by the monuments placed for that purpose, whether or not dimensions or areas are found on re-measurement or retracement to be different from dimensions shown in the original field notes or plan of survey. In other words, in retracing a boundary marked by monuments under the *Surveys Act*, the surveyor must find the monument as it was placed originally or use the best evidence of where it was originally placed. The essence of this section is the role of the surveyor in locating and documenting the evidence of a boundary corner used to express a professional opinion as to the location of the boundary.

§3.53 It is this professional opinion on boundary retracement that is fundamental to the role of the land surveyor in Alberta. While technical expertise is essential in such matters as measurement standards or measuring devices, all evidence of a boundary corner must be used in retracing the boundary as it was originally marked. The role of the surveyor is to gather and assess evidence on the location of the monument, as it was originally placed. It is the role of the courts to weigh that evidence in situations where the boundary location is challenged and brought before a court for judgment.

§3.54 Since the courts will use the legal principles of evidence in ruling on the “best evidence”, it is incumbent on the land surveyor to apply these same rules when gathering and assessing evidence, and providing an opinion on the location of a boundary monument. The following definitions, found in *Black’s Law Dictionary*, 6th edn, relate to the principles of evidence and may be helpful in understanding the principle of best evidence.
Presumption. A presumption is a rule of law, statutory or judicial, by which finding of a basic fact gives rise to existence of presumed fact, until presumption is rebutted.

Presumptive evidence. Prima facie evidence or evidence which is not conclusive and admits of explanation or contradiction; evidence which must be received and treated as true and sufficient until and unless rebutted by other evidence.

Best evidence. Primary evidence, as distinguished from secondary; original, as distinguished from substitutionary; the best and highest evidence of which the nature of the case is susceptible, not the highest or strongest evidence which the nature of the thing to be proved admits of. A written instrument is itself always regarded as the primary of best possible evidence of its existence and contents; a copy, or the recollection of witness, would be secondary evidence. “Best evidence” or “primary evidence” includes the best evidence which is available to a party and procurable under the existing situation, and all evidence falling short of such standard, and which in its nature suggests there is better evidence of the same fact, is “secondary evidence”.

§3.55 The surveyor, as an expert, therefore must use all the principles of evidence in locating the original monument position, with the objective of achieving the best evidence of the boundary location. In the best scenario, the surveyor may find the monument as originally placed, including its supporting physical features. In the worst scenario, the surveyor finds no physical evidence of the original monument and must consider other evidence that best indicates where the monument was “most likely” placed. From these two extremes, together with other evidence in between, evolves the “hierarchy of evidence” principle that is used by the courts in weighing the evidence on which the surveyor based his or her expert opinion.

§3.56 An opinion as to the best evidence must therefore include supporting evidence. At first glance, a monument may appear to be in its original location, but other factors must be used to verify its current position. Land use by owners or occupants that dates back to the time when the monument was placed is evidence that may support or conflict with the monument location. Whether it was an 1888 homesteader or a subsequent landowner, one of the first things owners do is to fence the property. In the absence of any other evidence, a fence or remnants of a fence dating back to the time of the original survey or shortly thereafter, may be evidence as to where the monument was located if the other supporting features of the monument are missing.

§3.57 In the absence of any physical evidence as to the location of the original monument, a landowner’s recollection of the location of the corner or the dimensions on a plan of survey may prove to be the best evidence. It is important to note that the hierarchy or order of evidence used to determine the best evidence ranges from the most
reliable to the least reliable evidence found. The surveyor must respect this order but at
the same time use lower order criteria as “supporting evidence”. This supporting
evidence may not be a feature of the original monument. It is also important to
understand that this hierarchy of evidence will be reviewed should the matter result in
a dispute that has to be settled judicially or by another body with legislated authority.

§3.58 The following hierarchy of evidence may be helpful in determining the best
evidence available when retracting old boundaries.

- **Found**: complete monument, such as a brass tablet, iron post or wooden post;
and other elements such as pits, mound, trench, stone mound or marker post.

  **Supporting Evidence**: the relationship of other adjacent monuments, fence lines,
road centre-lines, other improvements, cut lines, original notes, survey plan
dimensions or land owner testimony.

- **Found**: a brass tablet, iron post or wooden post, and other elements such as a
trace of pits, mound, trench, stone mound, or marker post.

  **Supporting Evidence**: the relationship of other adjacent monuments, fence lines,
road centre-lines, other improvements, cut lines, original notes, survey plan
dimensions or land owner testimony.

- **Found**: iron post or wooden post hole, and other elements such as pits, mound,
trench, stone mound marker post or traces thereof.

  **Supporting Evidence**: the relationship of other adjacent monuments, fence lines,
road centre-lines, other improvements, cut lines, original notes, survey plan
dimensions or land owner testimony.

  **Note**: Iron post or wooden post holes are created when the post is
pounded into the ground. Moisture conditions cause the iron post
to rust with time. If the iron post is inadvertently removed, a
rust ring may be found by carefully scraping the sub-soil. Black
top soil may have fallen into the hole created when the iron post
or wooden post was removed, which often leaves a black circle
surrounded by the rust ring or a black square where the corner
was marked by a square wooden post. Finding only the black
circle of topsoil may indicate that the iron post was removed
before any rusting took place.

- **Found**: pits, mound, trench, stone mound, marker post or traces thereof.

  **Supporting Evidence**: the relationship of other adjacent monuments, fence lines,
road centre-lines, other improvements, cut lines, original notes, survey plan
dimensions or land owner testimony.
§3.59 Since all elements of the monument used to mark the corner are part of the original monument (i.e. brass tablet, iron post or wooden post, pits, mound, trench, stone mounds, marker posts), a thorough knowledge of the size and configuration of pits, mounds, trenches, marker posts is necessary to determine the location of the actual monument. Bulletin 38, referred to earlier, is an excellent reference for information as to the size, orientation and relationship of the brass tablet, iron post or wooden post, and the other elements of the boundary monument used to mark a corner. This publication was originally published by the Topographical Surveys Branch of the federal Department of the Interior. It is available from the Alberta Land Surveyors’ Association and can also be obtained by accessing the Association’s website [Website 2]. Figure 3-1 shows an example of one of the monuments used during this period.
Figure 3-1. Description of Boundary Monument – Bulletin 38 (redrawn from Bulletin 38)
§3.60 In areas of the province where soil drifting occurred in the early 1900s, traces of pits can be located by scraping the surface in the vicinity of the original monument. Black topsoil tended to drift into the original pits or trenches, leaving very well-defined squares or circles of black soil contrasted with the clay sub-soil, and can be readily seen many years after the monument was placed.

§3.61 The relationship of marker posts, bearing trees or other physical evidence of occupancy that may be shown in original field notes or on plans of survey, may also be good evidence as to the original location of a brass tablet, iron post or wooden post.

- **Found:** evidence of occupation improvements, such as wooden, wire or stone fences, buildings, roads or livestock paths, stone lines, cut lines etc.

  **Supporting Evidence:** the relationship of other monuments, original field notes, plans of survey, landowner testimony.

§3.62 Landowners tend to fence property boundaries. In the homestead era of settlement in Alberta, homesteaders would have located the monuments to ensure that their improvements were made on their property. Existing fences erected at a time when monuments were in good condition are good evidence as to where the monument was located. Caution is advised on using fence lines or other evidence of occupation on parcel corners that were not monumented, i.e. mid-point on the blind line, centre of the section etc., or lot corners not governed by a monument but by a proportioned distance from the block boundaries. In the absence of a fence line that may have been erected when the monuments were intact, there are other useful things to consider. Livestock tend to follow fence lines or stand at fence corners, leaving worn trails as evidence of where fence lines were at one time. Stones were often picked and piled along fence lines or at fence corners during early homesteading.

§3.63 In areas of the province where, because of droughts, soil drifting occurred in the so-called “Dirty Thirties” (1930s), it is not uncommon to find evidence of old fences or fence post butts well below the present ground surface. A found strand of barbed wire may be in fact the top strand of a completely drifted-over fence line. Old tree stumps from an overgrown cut line may also be good evidence of the old boundary. Original field notes should be consulted to determine whether the boundary line in question was actually run on the true line or if an offset or trial line was used to place the monument.

- **Found:** original field notes and plans of survey, registered plans or confirmed township surveys

  **Supporting Evidence:** the relationship of other monuments, fence lines, road centre-lines, other improvements, landowner testimony.

§3.64 Information on the relative position of other monuments used in the survey is provided by dimensions between monuments and angular and linear measurement ties.
to other features shown in the original field notes or the registered plan of survey. This information must be used with caution, supported by other evidence, and used only when other physical evidence is lacking or considered unreliable. Remember that field notes and plans of survey only indicate the intent of the survey or the intention of the surveyor to place monuments at property corners. If monuments were not placed as intended, the relationships, such as bearings and distances shown in field notes or plans of survey, do not reflect the existing relationship between monuments. Therefore, unless other supporting evidence is used, a boundary re-establishment or retracement may be in error. Original field notes and plans of survey show the original intent of creating the boundary by placing monuments. If, for whatever reason, the monument was not placed in its intended position, evidence supporting the location where the monument was actually placed would supersede dimensions shown in the original field notes or on the plan of survey. Dimensions such as distances, bearings, angles or coordinates, as shown in original field notes and on plans of survey, show the mathematical relationship between monuments.

§3.65 In the absence of any physical evidence of the monument, or reliable supporting evidence such as lines of occupation or landowner testimony, the last resort in re-establishing a lost monument may involve recreating the mathematical relationship between monuments. This may be done in different ways depending on the most reliable method. An understanding of the “theory of errors” in survey measurements is essential. Some examples may be as follows:

- Laying off an angle and distance relationship from other monuments as shown on field notes or plans of survey. The baseline or backsight used must be longer than the angle and distance laid off.
- Monuments originally laid out on a straight line may be re-established by recreating the straight line between found monuments and re-establishing missing monuments in their original relationship by proportioning the distances. Note: proportioning methods should only be used when the original monuments were placed by laying off the linear measurements along a straight line such as the township system or block boundaries. Linear proportioning may be inappropriate in retracing modern surveys where monuments may have been placed by angle and distance measurements using a control framework and coordinates.

§3.66 Take care that any use of mathematical relationships as shown in field notes or on plans of survey in the re-establishment of lost monuments does not lead to an unreliable re-establishment. For example, a wrong distance, bearing or coordinate shown in the field notes or on the plan of survey would erroneously place the re-established monument. Also, disrupting what appears to be accepted lines of occupation, by laying out mathematical relationships shown in field notes or plans of
survey, may not be in the best interest of affected landowners. A fine line may exist in considering the best evidence between mathematical relationships and other forms of physical evidence or landowner testimony. Hence, experience and judgment are essential to the role of the professional land surveyor in evidence assessment.

- **Found:** testimony provided by landowners.

  **Supporting Evidence:** the relationship of other monuments, improvements, field notes, plans of survey.

§3.67 Section 13 of the *Surveys Act* provides that a surveyor may administer an oath and examine witnesses under oath on matters relating to the survey of land. In a situation where a monument is no longer visible or is lost, landowners may be able to provide written or oral evidence as to its location. A landowner who provides evidence under oath may prove to be the best witness as to the location of the original monument. Fencing property boundaries is fundamental to landownership. It therefore follows that testimony of a fence that was erected by the landowner may be excellent supporting evidence or in fact the only evidence available. Landowners of the late 1800s and early 1900s may no longer be alive to provide first hand testimony as to the location of the original monuments. A son or a grandson may still own the property and may be able to recall his father or grandfather placing the fence corner at or near the original monument. Recollection of a person standing in a pit or seeing the original monument may be helpful in collecting evidence and deciding on the best evidence.

§3.68 In the course of retracing a boundary, the professional land surveyor may be required to re-establish or restore a monument. For example, upon finding a rust hole or a damaged iron post, wooden post or brass tablet, the monument may be restored by placing a new one. Field notes and plans of survey of record must show that this has occurred in order to avoid confusion as to whether or not a subsequent retracement survey locates the original monument or one that has been restored.

§3.69 Other elements of the monuments used in the original township surveys, such as pits, mounds, trenches, or stone mounds must not be reconstructed unless instructions to do so are provided by the Director of Surveys Office. Again, this is to avoid confusion as to what constitutes original evidence in a subsequent retracement survey.

§3.70 The MSP contains standards of practice for Alberta Land Surveyors when performing land surveys and provides further direction for retracing old boundaries.

§3.71 In conclusion, the retracement of property boundaries in Alberta falls within the exclusive field of practice of the Alberta Land Surveyor, as authorized by the *Land Surveyors Act* and the *Survey Act*. 
§3.72 The professional land surveyor has the responsibility to be the expert on property boundaries, and to offer an opinion as to what constitutes the best evidence of the location of old boundaries. He or she must, therefore, he personally involved in the assessment of evidence. A strong understanding of the rules and hierarchy of boundary survey evidence is essential to meet this professional standard. Reported boundary law cases also give guidance to Alberta Land Surveyors as to the courts’ interpretation of that law in Alberta and other jurisdictions.

§3.73 Conflicting evidence or challenged professional opinions may need to be resolved in the courts. The courts will expect the professional surveyor to bring forward the best evidence based on the rules and hierarchy of boundary evidence.

Boundary Uncertainty

§3.74 Only an Alberta Land Surveyor, as defined in section 3 of the Land Surveyors Act, shall engage in the practice of land surveying in Alberta. With the exception of creating a boundary by textual description as provided in the Land Titles Act, only an Alberta Land Surveyor shall perform surveys made under section 10 of the Surveys Act. Alberta Land Surveyors also perform surveys that create boundaries under the Land Titles Act, which are called descriptive plans. In the performance of their duty, land surveyors may commit errors. These can be errors of judgment or technical errors in undertaking computations or in marking field boundary corners. There are a number of solutions available in resolving errors committed in retracing boundaries or re-establishing lost boundary corners that cause boundary uncertainties. This section will categorize examples of boundary uncertainties and provide possible solutions to resolving them. A further discussion on the “Settlement of Boundary Uncertainties” by James F. Doig may be found in Chapter 8 of Survey Law in Canada.

§3.75 For the purpose of this discussion, a boundary uncertainty occurs when the marking or retracement of any boundary is found to be in conflict with one or more other boundaries. In Alberta these boundary uncertainties can therefore arise when:

a. Monuments were used to mark a new boundary and an error in placing the monument occurred. Under sections 36 or 45 of the Surveys Act the monuments so placed still govern the corner.

b. An error was made in re-establishing a lost corner by incorrectly placing the re-established monument; (The professional assessment of the best evidence was good but an error was made in physically placing the new monument).
c. An error was made in professional judgment by not using the best evidence in re-establishing a lost monument, by poor assessment of what was the best evidence, or by a failure to obtain all the evidence available.

d. There is conflicting opinion between two or more professional land surveyors as to the best evidence to be used.

e. Coordinates are used to create a boundary and an error in the computed coordinate value is made. Under section 47 of the Surveys Act, the coordinates still govern the position of the property corner, until the certificate required by section 47 is filed.

f. An error was made in placing a monument to mark a boundary created by computed coordinate values. After the filing of the certificate under section 47 of the Surveys Act, the monument now governs the position of the property corner.

g. An error was made in creating a boundary by a textual description that is ambiguously worded, so that more than one interpretation or an impossible parcel configuration results.

h. An error was made by the professional land surveyor in interpreting a textual description.

i. An error was made in laying out property corner marks for a boundary created by a textual description.

j. An error was made in the dimension or angular relationship on a descriptive plan used to create a boundary.

k. An error was made in marking a property corner of a boundary created by a descriptive plan.

l. A dimension error was made in expressing a unit boundary length on a condominium plan, thereby which producing an incorrect unit area.

Resolving Boundary Uncertainties

Resurvey – Section 39 of the Surveys Act

§3.76 Section 39 of the Surveys Act provides that on the application of 50% of the registered owners of parcels affected by a boundary uncertainty, or without an application, the Minister may authorize a resurvey of the land in question. This would occur if the land owners are in dispute, or are affected by an error made in the original township survey, or if there is no evidence of governing monuments remaining. The monument so placed in the resurvey, once it is confirmed by the Director of Surveys, becomes true and unalterable even though the monument placed in the original survey
is subsequently found. Similarly, a resurvey may occur for surveys performed under section 45 for the same reasons.

Survey Error Investigation – Section 9 of the Surveys Act

§3.77 If a land owner, municipality, Alberta Land Surveyors’ Association Council, or the Registrar of the Land Titles Office in a written notice, alleges that the position of a monument or boundary is in question as a result of a survey error, the Director of Surveys shall investigate and report his findings to the Minister. The Minister may appoint a Board to investigate the alleged survey error and revise the survey and/or the plan of survey. The use of this provision is limited; it has been interpreted to apply to matters that result from overlapping parcels. See Figure 3-2 Boundary Uncertainty as an example.

Legend: Owner “A”: Monuments placed in accordance with section 29 of the Surveys Act govern the boundaries for the SE ¼ of Section 5 in accordance with section 36 of the Act.

Owner “B”: Monuments placed in accordance with section 45 of the Surveys Act govern the boundaries for Lot 1, Block 1, Plan 123 4567.
§3.78 In Figure 3-2 Boundary Uncertainty, landowners “A” and “B” are protected by the provisions of sections 36 and 45 of the *Surveys Act* respectively, in that the boundary in each case is governed by the monuments placed by each survey. Since an error was made in placing the monument under section 45 for owner “B”, the Board has the authority to alter the survey and its plan of survey so that no overlap in ownership occurs. This solution could also be applied when a wrong coordinate value of a property corner was used to define a boundary or the monument intended to replace the coordinate value. Under section 47 of the *Surveys Act*, the monument governs once the Monumentation Certificate - Form 11.1 (section 77 of the *Land Titles Act*) has been filed in the Land Titles Office.

§3.79 Boundary uncertainties arising from conflict as to the best evidence available or conflicting evidence used by different land surveyors to re-establish the lost monument may lead to a court action. It is the duty of the court to settle the conflict and determine the true location of the boundary in question. The role of surveyors is to present their professional opinion of the matter to assist the court in reaching its decision.

**Decisions of the Board of Investigation**

§3.80 For further reading on the application of section 9 of the *Surveys Act*, the Decision and Order of the Board of Investigation for three cases is reprinted in *ALS News*, September 1995, pp. 29-34.

§3.81 These cases show the importance of pursuing the best evidence in any retracement survey, particularly when the retracement survey leads to the creation of new boundaries.

**Strata and Condominium Boundaries**

**A Brief History of Three-dimensional Ownership**

§3.82 The concept of territorial rights, which evolved into ownership of real property at, above or below the ground surface, has existed since the first recorded history of civilization. It most likely began in nomadic camps with a marking off of two-dimensional ground space for the use of family groups in a common area of occupation or activity. When nomadic groups settled on permanent sites to construct walled communal enclosures, the concept of areas of exclusive use and common use was part of the administration of the community by its leaders. Once the population increased and construction methods permitted occupation of two or more levels for exclusive use over or under the same ground space, the concept of communal living rights began to develop. The concept also included the designation of common areas in the community.
for the purpose of access to the exclusive areas and to a water source. The construction, upkeep and improvement of the common use areas was the responsibility of the users and was done by them or paid for by them. Initially, these rights were expressed orally until they began to take written form in grants and treaties as a result of the spoils of war. This concept of ownership and tenancy has continued; it came to North America in the 1960s and was first introduced to Alberta as the Condominium Property Act in 1966. The current Condominium Property Act, RSA 2000, c. C-22 deals both with strata boundaries and titles as well as condominium boundaries. The naming of this type of Act is not consistent in Canada and other parts of the world. Further explanation is needed in any discussion concerning strata or condominium ownership as the concept has been given both names. Figure 3-3 Condominium Concept shows the Alberta present-day concept of a typical condominium ownership.

**Strata Boundaries**

(See also Strata Surveys in Chapter 6)

§3.83 Strata boundaries under section 85 of the Land Titles Act are artificial boundaries and are intended to enclose volumetric space. Unlike a condominium plan, which may for the most part relate its boundaries to an existing physical structure such as a wall, strata boundaries are determined by planes or curved surfaces, which have a geodetic elevation. The boundaries may consist of vertical, horizontal or inclined planes or cylindrical surfaces, which have vertical or horizontal alignment. The limit of the boundaries for each strata title conforms to or stays within a single parcel shown on a previously registered plan of survey. The strata plan can only show volumetric space for one parcel on each plan. Strata plans use geodetic elevations to define the vertical position of the boundaries of the designated “strata lot” on the plan. Top view and cross sections of the strata space must be shown on the plan. The legend will refer to the Alberta Survey Control Markers from which the geodetic elevations shown on the plan were derived. Strata plans have been registered with three-dimensional views which help to relate the volumetric space of the strata lot to the land boundaries.

**Condominium Boundaries**

(See also Condominium Surveys in Chapter 6)

**Condominium Boundaries in Buildings**

§3.84 The present legislation in Alberta for condominium governance and ownership is the Condominium Property Act, proclaimed September 1, 2000. A description of the history and operation of the Act is given elsewhere in this book. This chapter concerns
boundaries created under the current Act. The three-dimensional boundaries are created for the individual condominium units upon the registration of the condominium plan. Section 1(1)(y)(i) defines a condominium building unit as

(i) in the case of a building, a space that is situated within a building and described as a unit in a condominium plan by reference to floors, walls and ceilings within the building.

§3.85 The common wording that appears in the legend on condominium plans for the boundaries of a condominium unit is:

The boundary of any unit with the common property is the undecorated interior surface of the unit floor, wall or ceiling as the case may be.

§3.86 This wording is provided for in section 9(1) of the Act. It states specifically that the boundaries that enclose the unit areas are the surfaces of the undecorated physical floor, wall and ceiling. This permits an owner to repaint his or her unit, change floor coverings and make other cosmetic interior changes. In situations where a unit wall does not exist, the plan legend will clarify that the unit dimensions govern this non-physical part of the boundary. The measurements shown for each condominium unit are an indication of unit size, configuration and location in the common property. The unit diagrams with their dimensions on the floor layouts show the relative position of the units on each floor and the building cross-section shows the relationship of the floors to each other in each building. The site plan shows the position of the building within the perimeter boundaries of the site. From this series of measurements expressed on the condominium plan, the positional location of all units is shown, but the unit boundaries are the physical undecorated surfaces of the interior of each unit. Section 10(1)(b) of the Act also provides that a certification is required by an architect, an engineer or a land surveyor stating that the units on the plan are the same as the existing units. The plan will also show the boundaries of the common property and label it clearly. With the advancement of computer graphics, building cross-sections may be drawn in three dimensions in the future, which will be easier to read and relate to the buildings they represent. This is not a condominium plan requirement at the present time.

§3.87 The present Act contains a number of additions which are of major benefit to the operation of condominium corporations. One of these benefits is the ability to re-divide one or more units in a condominium plan. The new unit numbers are the old unit numbers suffixed with letters of the alphabet. This re-division could be used to adjust walls between units. The unit factor of any new units must be equal to the unit factor of the old units. A second benefit is the ability to amalgamate adjacent condominium plans and re-designate unit factors to the combined units. Phased development of a condominium plan is also permitted by the Act. Condominium plans for older buildings
can be created under the Act. The unit boundary definition is the same throughout the Act.

Condominium Boundaries in Bare Land

§3.88 Condominium plans may be prepared without the existence of buildings, in which case section 1(1)(y)(ii) of the *Condominium Property Act* defines a unit and its relationship to condominium boundaries as:

(ii) in the case other than that of a building, land that is situated within a parcel and described as a unit in a condominium plan by reference to boundaries governed by monuments placed pursuant to the provisions of the *Surveys Act* respecting subdivision surveys;

§3.89 In this case the unit boundaries are usually artificial land boundaries. There is nothing preventing a natural boundary from being a bare land unit boundary; however, subdivision planning control would usually require a setback from the natural boundary which would be an artificial boundary and become the bare land unit boundary. It can also be useful in phased development of condominium projects. In these plans common property may not be needed because the parcel has legal access to a public roadway; therefore they will only show the unit boundaries.

The Subdivision Planning Approval Process

§3.90 New boundaries are created to satisfy the needs of new owners. They are also created to transfer interests in land for roads and rights of way. Community planning plays a major role in designing the position and shape of new boundaries. Utility
services also have a major influence on the creation of new boundaries. Planning approval is only part of the process to create new boundaries.

The History of Planning in Alberta

§3.91 The first planning law in Alberta was the 1913 Town Planning Act. Subsequent amendments and new legislation included the 1928 Town Planning and Preservation of Natural Beauty Act.

§3.92 The Alberta government selected Mr. Horace Seymour, a member of the Alberta Land Surveyors’ Association, to draft a new town planning act, which was passed in 1929. Mr. Seymour had practised town planning around the world. The new legislation proved to be very progressive for that time; among other provisions it required the layout of subdivisions to fit the topography and not the section lines of the township system of survey. Subsequently, the 1953 Town and Rural Planning Act, the 1963 Planning Act and the 1977 Planning Act were enacted. In 1995 the Municipal Government Act, Part 17, Planning and Development, included planning. The Municipal Government Act, RSA 2000, c. M-26 is the present authority for municipal planning and subdivision in Alberta. One of the significant changes that the present Act made to the planning structure in Alberta was the abandonment of regional planning commissions, which had existed from 1963 to 1994, and the return of control in planning matters to the municipal level throughout the province.

Municipal Government Act

§3.93 Part 17 of the Municipal Government Act provides a means whereby plans and related matters can be prepared and adopted to achieve the orderly, economical and beneficial development of the use of land and the patterns of human settlement. The purpose is also to maintain and improve the quality of the physical environment within which the patterns of human settlement are situated in Alberta, without infringing on the rights of individuals, except to the extent that is necessary for the overall greater public interest.

§3.94 Part 17 of the Act also provides for land use policies that may be established by the Lieutenant Governor in Council and for the establishment of subdivision authorities. It also provides for Statutory Plans (including Intermunicipal Development Plans, Municipal Development Plans, Area Structure Plans and Area Redevelopment Plans), as well as land use bylaws, development levies and conditions, subdivision of land including approvals, reserve land, land for roads and utilities, and regulations, bylaws and appeals. In addition, the Subdivision and Development Regulation authorized by the Act provides for the administration of subdivision
applications, subdivision and development conditions, registration and endorsement of subdivision plans. An owner wishing to create one or more lots from a parcel of land must obtain subdivision approval from the municipal subdivision authority. The proposed subdivision must conform to the Statutory Plans, land use bylaws and the Subdivision and Development Regulation. The municipal subdivision authority may refuse an application, approve it, or approve it with conditions. The legislation also provides for appeal of a municipal subdivision authority decision.

§3.95 The Municipal Government Act needs to be referred to because there are frequent changes regarding the subdivision of land. Planning Law Practice in Alberta [Laux 2002] is a comprehensive reference on planning law and practice in Alberta and is a valuable source of historical information about planning policy in the province.

Exemptions from the Planning Process under the Municipal Government Act

§3.96 There are some exemptions from the planning provisions of the Municipal Government Act. Under section 14 of the Interpretation Act, the Municipal Government Act is not binding on Her Majesty, thus the province is not required to obtain subdivision approvals. The federal government and federal government agencies are also exempt. However, both the provincial and federal government will usually work with municipal subdivision authorities to ensure that any subdivision or development complies with the plans, bylaws and regulations.

§3.97 Sections 618 and 619, Part 17 of the Municipal Government Act specify certain exceptions to the provisions of the Act. From a survey and boundary perspective, the exceptions apply when a survey is affected only for the purpose of a highway or road, a well site or battery site within the meaning of the Oil and Gas Conservation Act, or a pipeline. Under Planning Exemption Regulation (AR 223/2000), other developments such as power transmission and electric distribution lines and irrigation works are exempt, as also is the geographic area of a Métis settlement.

Subdivision Surveys under the Municipal Government Act

§3.98 Subdivision plans are registered under section 84 of the Land Titles Act. Subdivision surveys and their plans may take many forms, including a deferred posting plan prepared pursuant to section 47 of the Surveys Act or a condominium plan under the Condominium Property Act. In certain situations, with the prior approval of the Surveys Section of the Land Titles Office, a descriptive plan may be prepared.

§3.99 The Alberta Land Surveyor has always had a key role in the subdivision process to create new boundaries. Only the landowner or an agent acting on behalf of the landowner may apply for subdivision. Often landowners choose an Alberta Land
Surveyor to act on their behalf when they do not wish to undertake the application on their own. Once a subdivision application has been approved, the applicant must meet the conditions of the decision and have a subdivision plan prepared by an Alberta Land Surveyor.

§3.100 The survey and subdivision plans that create new boundaries must comply with the requirements of the Municipal Government Act, the Subdivision and Development Regulation, the Land Titles Act, the Surveys Act and the MSP. The Alberta Land Titles Procedures Manual of Alberta Registries, Land Titles Office, outlines requirements for depiction of areas, parcel designation, dimensioning, and deferred posting plans prepared pursuant to section 47 of the Surveys Act. The MSP also includes specific requirements regarding the integration of the survey and reference control network with the surrounding and adjacent Alberta Survey Control markers, the placing of perimeter monumentation and the information to be shown on plan sheets. Upon the registration of the plan, the current title(s) are cancelled in full or as to part and the new separate title(s) are issued to the registered owner. Titles to the municipal and environmental reserves and public utility parcels are issued to the municipality, while no titles are issued for the roadways created by the plan registration.
References
Land Titles Procedure Manual, SUR-12

Websites
Chapter 4: Land Registration

Marie Christine Robidoux

Introduction

§4.1 This chapter will introduce land registration and its development in Canada and specifically as it relates to Alberta. It will not consider the land registration system in the Province of Québec which is derived from different premises than those of the common law provinces and territories of Canada, even though it is based on deeds registration. As was noted in Chapter 2, the whole body of English law was transferred to Canada, a British colony at the time, and became the applicable law. However, the current English land registration act, Land Registration Act 2002 (UK) c. 9, is based on the Land Registration Act of 1925 which introduced a system of title registration for England and Wales. Canadian law did not wait for those English developments and land registration was introduced to various part of the country starting in the mid-eighteenth century.

§4.2 Of special interest is the introduction of a comprehensive system for the Northwest Territories introduced by the federal government in 1886. This system was later the basis of the land titles system in the Prairie Provinces.

§4.3 In broad terms, Canada has two types of land registration systems: deeds registration and titles registration. This chapter will review the significant components of each and then focus on the Alberta system currently in use.

Deeds Registration

§4.4 A deeds registration system, in use in many eastern Canada provinces, creates a record and repository of all documents pertaining to a specific parcel of land. The documents pertaining to the title of a parcel become a matter of public record and registration serves as notice to the world. However, registration has nothing to do with the validity of the documents noted in the register. The registered documents form a chain of title and each instrument in the chain must be examined closely to ensure that the owner shown on record in the last deed has good title subject only to the agreed-to encumbrances, easements or interests. Generally, statutes determine the number of years required to establish title, i.e. the number of years one has to search back to a deed which establishes a good root of title. Oftentimes it is necessary and wise to search back
all the way to the original Crown grant of the land to determine whether or not there are reservations on the Crown grant which could affect current title and that have been omitted from the later land descriptions. The value of a document rests with real property law and the validity of any document in the register remains open to challenge, and as a result a historic search to show good root of title is necessary. This is especially true with respect to mines and minerals title in certain areas of the country where a missed mines and minerals reservation would have a large impact on the purchaser of a large rural parcel of land.

§4.5 A deeds registry system works very well if the land descriptions defined the boundaries of the land satisfactorily and can be ascertained with reasonable certainty, and if the instruments recorded in the public registry are recorded using an adequate indexing system, allowing each document affecting a specific parcel to be retrieved quickly. Of course, such a system works well only if registration is compulsory.

§4.6 There are generally few overriding interests in a deeds registry, i.e. interests that can be enforced against a registered owner although they are not themselves registered. But they do exist in all provinces.

§4.7 Defective interests or missing deeds in the chain of title create problems that can only be resolved through the courts to obtain an order under a Quieting of Titles statute [Lamont 1989: 65].

§4.8 The easiest method of indexing for retrieval, searching and copying is a parcel-based index. The system is based on the land parcels. The particulars of a document are entered in the register separately for each parcel of land under the parcel heading.

Priority of Registration

§4.9 Priority of registration is a fundamental principle of deed registration. It generally means that in all cases (apart from certain exceptions) priority of registration of a document prevails over a document executed earlier but not registered. For prior registration to prevail, however, the purchaser must have purchased the property for valuable consideration and not have had actual notice of the prior instrument.

§4.10 Transfer of ownership is accomplished through a document called a “deed”, which includes a description of what is being transferred; clause vesting title; consideration; name of the parties; and covenants assuring that the title is good and that the grantee will have quiet possession and that the grantor will execute further documents if required.
§4.11 The functions of the Registrar include administration, indexing, and ensuring that the registered documents meet specific statutory requirements. Survey plans are governed by specific rules.

§4.12 A first mortgage under a Registry system operates as a conveyance of the legal estate in the land to the mortgagee (the lender) subject to defeasance if the money is repaid in accordance with the mortgage’s terms, in which case the document becomes null and void. Basically the mortgagee has the legal estate and the mortgagor has the equity of redemption [Lamont 1989: 69].

Title Registration

§4.13 The term “title registration” refers to any system where title is certified. The system in use in western Canada can be traced all the way back to Robert Torrens and the implementation of his system (the Torrens title registration system) in South Australia in 1858.

§4.14 The Torrens system was first introduced in Canada in 1886 into the North-West Territories [as it was spelled at that time] and came into effect on January 1, 1887, by the Territories Real Property Act, 1886 (Can.), c. 26: Setter v. The Registrar (1914), 18 D.L.R. 789, 6 W.W.R. 1116, 8 Alta. L.R. at p. 193; and on appeal, 20 D.L.R. 166, 7 W.W.R. 901, 8 Alta. L.R. 191. A new act replaced it in 1894 which was itself replaced in Alberta by the first Alberta Land Titles Act in 1906. The current Act reference is Land Titles Act, RSA 2000, c. L-4.

§4.15 Lands in the public domain, surveyed and unpatented, are first brought into the Land Titles system through Crown grants, i.e. letter patents issued by a province which cause the Registrar to issue title to the land described.

§4.16 The cardinal elements of this system are contained in the indefeasibility of title and are represented by the following principles: the mirror principle, the curtain principle, and the insurance (or net) principle.

Priority of Registration

§4.17 The register is said to be a mirror (mirror principle) of all rights related to a certain parcel of land. As a result, the failure to register a property interest changes the priorities that would normally control that interest. Anyone registering without prior notice of a prior interest can claim priority over it. Notice in this case would generally be provided by registration.
Indefeasibility of Title

§4.18 A title is indefeasible when it cannot be made defective by some prior act that might undercut the validity of the current rights. Therefore, registration provides protection against any defect in title for the person shown by the register to be the owner of a parcel of land. This concept involves the lowering of a curtain on all past transactions and dispenses with the requirement to verify the validity of title.

Curtain principle

§4.19 The curtain principle lies at the heart of the indefeasibility of title that is crucial to the Torrens system and its attempts to certify titles. Under the Torrens system, a curtain is supposed to be brought down on the past dealings related to a certain parcel of land. In other words, if “A” is the registered owner of parcel X, there should be no need to look behind the abstract to see if “A” had acquired the property from someone who had the right to sell it, or if the prior documentation is free of defects (as would be required under a deeds registry system).

Mirror principle

§4.20 Under a Torrens system, the register is supposed to be everything, meaning that one should be able to examine the abstract of title for a specific parcel of land and see all interests pertaining to this parcel. The register is then said to be a mirror of all rights related to that parcel.

Insurance (or Net) principle

§4.21 This “net” principle refers to the insurance fund which is established to provide compensation for errors produced by the system. If the government is responsible for issuing title, and it professes to convey an indefeasible title, there are bound to be some mistakes and the insurance fund is designed to compensate for them. The owner who has been deprived of his or her property must make a claim against the fund for any errors resulting from fraud, mistake or administrative errors.

Fraud

§4.22 It has always been a feature of the Torrens system that a purchaser contaminated with fraud does not get an indefeasible title. However, a good faith purchaser cannot be upset in his or her rights by the earlier element of fraud. In all cases though, the title of the fraudulent party is vulnerable to challenge.
§4.23 Fraud involves a dishonest dealing that leads to deprivation. The fraud must result in the loss of an interest in title or the gaining of priority over another interest yet to be registered. Generally, the failure to make inquiries once there are suspicions is considered fraudulent; wilful blindness is Torrens fraud while objective negligence (failure to uncover fraud when reasonable inquiries would have revealed it) is not.

Overriding Interests

§4.24 In the Torrens system the register is meant to be a true and accurate reflection of all interests and rights affecting a parcel of land - the mirror principle. However, most if not all Torrens systems allow some rights to exist outside the system while being binding on purchasers.

§4.25 In Alberta (see Land Titles Act, RSA 2000, c. L-4, s. 61(1)) the overriding interests are:

a. any subsisting reservations or exceptions, including royalties, contained in the original grant of the land from the Crown,
b. all unpaid taxes, including irrigation charges and drainage district rates,
c. any public highway or right-of-way or other public easement, howsoever created, on, over or in respect of the land,
d. any subsisting lease or agreement for a lease for a period not exceeding 3 years, if there is actual occupation of the land under the lease or agreement,
e. any right of expropriation that may by statute be vested in any person or corporation or Her Majesty, and
f. any right-of-way or other easement granted or acquired under any Act or law in force in Alberta.

§4.26 This is not an exhaustive list for there is the possibility that other legislation will also give rise to overriding interests.

Caveats

§4.27 Although in a Torrens system guaranteed title is available for a limited, defined set of interests, there is also a need to show unregistrable interests on the title allowing the mirror to reflect everything related to a parcel. A caveat filed against a parcel allows for these unregistrable interests to show up on the title.
§4.28 The word caveat comes from the Latin expression *caveat emptor* and means “let the buyer beware”. Therefore, caveats are warnings recording the presence of some interest in land. Caveats cannot create a new interest in land. Under the Alberta system, a caveat is a statutory notice of a claim of an interest in land that has been brought under the *Land Titles Act*. The interest claimed may or may not be a valid interest and, if contested, it has to be proved in court. The nature of the interest claimed and the grounds on which it is based must be stated for the caveat to be registrable. Under the Alberta system a caveat is widely used to record interests in land—a right protected by caveat can only be an interest in land. Registration of caveats equals notice and therefore the filing of a caveat has the same effect on priority as the registration of an instrument. The *Land Titles Act*, RSA 2000, c. L-4, s. 130, provides guidance on where interests which can be protected through a caveat may come from, as well as how to discharge a caveat (s. 141). The Land Titles Office Procedures Manual provides detailed information on what kind of interest may and may not be filed through caveats. The Manual is available through the Land Titles Office website [Website 1] and following the link *Land Titles Procedures Manual*.

Misdescription

§4.29 Situations occur where the boundaries of the land are incorrectly described in the certificate of title. Under the Torrens system the curtain will not be drawn and prevent a contention that the land has been misdescribed in a title, even to a bona fide purchaser for value. The boundary error that resulted in too much or too little land in the certificate of title can be rectified later. Moreover, a purchaser deriving title from an uncancelled prior certificate of title will retain the priority accorded to this prior title.

§4.30 In the jurisdictions where adverse possession is possible, the true owner can say that while the certificate is in error, the clock has run out over the lands in question and if that is true on the facts, then the title of the deprived person is extinguished [Ziff 1996: 425].

Title Insurance

§4.31 Title insurance has been widely available in the United States since 1867 as a means of protecting a purchaser against the dangers of acquiring an imperfect title. The coverage of this insurance generally protects against defects in title, including those not disclosed at the registry and reimbursement for expenses associated with a lawsuit related to the title. Such insurance evolved as the result of inadequate deeds registry systems and reliance on privately held mortgages which were mostly unregistered.
§4.32 Title insurance is still used in much of the United States because of:

- The poor condition of deed registry systems in many states.
- The uneven manner in which lawyers and surveyors are licensed and regulated from state to state.
- The custom in many states to complete real estate transactions through escrow companies without the benefit of legal advice.

§4.33 The U.S. Federal government has made the issuance of a title insurance policy a mandatory requirement for any lending institution selling mortgages through security pools.

§4.34 Therefore it is virtually impossible to obtain a mortgage in the U.S. without first buying a title insurance policy to protect the lender. It should be noted that in most states a Surveyor’s Real Property Report must accompany a Title Insurance policy.

§4.35 Title insurance has found its way into Canada in the last few years. Its main goal is to protect the purchaser during the time when the money changes hands (also referred to as the “closing” of a real estate transfer). The protection is against someone else registering transfer documents and title being transferred to the detriment of the purchaser.

§4.36 Title insurance is growing in popularity in Canada, especially in areas where a deeds registry system is in place. Sometimes problems (or defects) regarding title are not discovered before closing, or are not remedied before closing. Such defects can make the property less marketable when the buyer subsequently sells and, depending on the nature of the problem, can also cost money to remedy. For example, the survey might have failed to show that a dock and boathouse on a river adjoining a vacation property were built without permission. The buyer of the property could be out of pocket if he or she is later forced to remove the dock and boathouse. Or, the property might have been conveyed to a previous owner fraudulently, in which case there is the risk that the real owner may come forward at some point and demand their rights with respect to the property.

§4.37 Title insurance also aims at convincing land purchasers that the cost of a survey can be avoided by the purchase, at a lower cost, of title insurance. The inference is that the survey is of no value to the purchaser and can conveniently be replaced by title insurance to expedite loan approval. However, title insurance does not provide any information about a property to an owner or lender. Any problems that may be revealed by a survey are not uncovered and are passed on to the uninformed purchaser or lender, to be resolved by them at some later date [see Website 2].
§4.38 Title insurance policies can be issued in favour of a purchaser, a lender, or both the purchaser and lender. Lenders will sometimes require title insurance as a condition of making the loan. Title insurance protects purchasers and/or lenders against loss or damage sustained if a claim that is covered under the terms of the policy is made. The insured purchaser is indemnified for actual loss of damage sustained up to the amount of the policy, which is based on the purchase price.

Registries

§4.39 This section will examine the various registries where one can find land-related information for land situated in Alberta.

Land Titles Registries

§4.40 Alberta uses the Torrens system of land registration and has established its Land Titles Registries under the authority of the Land Titles Act, RSA 2000, c. L-4. There are two offices: one in Edmonton (head office) and the other in Calgary. Both offices function as one operation. The Land Titles Office (LTO) comprises the Document Examinations and Surveys Sections, part of the Registries and Consumer Services Division of Alberta Government Services.

§4.41 The Alberta government has custody of all titles, documents and plans, and bears the legal responsibility for the validity and security of all registered land title information. It guarantees the accuracy of the title.

§4.42 The Land Titles system has been automated in Alberta since 1988 and all current titles are maintained in electronic register form. In 1999, the surveys registration system was also converted to an electronic system and all survey-related information, as well as a wide variety of land-related information, is searched and delivered through a web-enabled Spatial Information System called SPIN II [Website 3].

§4.43 The Land Titles Act authorizes the Land Titles Office to create and cancel certificates of title immediately upon the registration of certain types of documents, such as land transfers and notifications, and certain types of survey plans such as subdivision and condominium plans.

§4.44 In the fall of 1988, the Alberta Land Titles Automation (ALTA) system was implemented and all live paper titles were converted from their paper format into an electronic format. Each certificate of title is assigned a unique title number at the time of its creation, and each parcel of land contained within each title is also assigned a
unique Land Identification Numeric Code (LINC) number. A LINC number is a unique, non-intelligent system-generated number having no inherent meaning. The LINC number assigned to a parcel of land remains as a permanent identifier of that parcel until the parcel boundaries are changed.

§4.45 The registration process requires that a person wanting to have land-related documents and/or plans registered at the Land Titles Office must complete Document Registration Request (DRR) forms that must be submitted with the documents and/or plans to ensure that all of the documents and/or plans remain together and are dealt with in accordance with any special instructions provided on the form. The registration fees must also be submitted at the same time. All documents are examined in the order in which they are received to ensure that priority of registration is maintained between competing interests.

§4.46 There are two separate and distinct examination areas. Legal documents are dealt with in the Document Examination Sections. All legal plans, and documents that are registered in conjunction with them, as well as documents which deal with creating new parcels or deal with partial interests in full parcels, are examined in the Surveys Sections.

§4.47 The Document Examination Sections are staffed with Land Titles Examiners who are responsible for performing the legal examination and associated data entry of documents. Examiners compare the documents with the appropriate titles, then perform a legal examination to make sure that the documents are correct and in compliance with the many statutes affecting land transactions. If the documents are in registrable form, they are registered in the ALTA system.

§4.48 The Surveys Sections are staffed with Survey Technologists who are responsible for performing the review and associated data entry of all legal plans as well as documents associated with them. Technologists review legal plans to verify that the plan and document packages conform to all applicable statutes, case law, and policy and procedures. By comparing and interpreting existing survey evidence with the new survey, and by interpreting and comparing title boundaries, technologists ensure that the land surveyed and shown on the new plan does not encroach onto adjacent lands.

§4.49 All plans must be submitted for registration in digital format through three primary electronic files that accompany the legal documents required to register a plan: the Survey Plan Text (.txt) file, the Survey Plan Drawing (.dwg) file containing 34 layers, and the Survey Plan Plot or (.tif) file. If the plans and documents are in registrable form, they are registered on-line in the ALTA system.
Plan Registration

§4.50  The *Land Titles Act* requires the registration of survey plans [Website 4]. These plans must be prepared by an Alberta Land Surveyor with the exception of plans registered under some other acts, such as the *Navigable Waters Protection Act*, which do not need to be prepared by an Alberta Land Surveyor. Plans submitted for registration are examined to ensure compliance with associated land related statutes and office procedures.

Subdivision Plans

§4.51  An owner wishing to subdivide his land may, with the approval of the subdivision authority, have the land surveyed by an Alberta Land Surveyor and register a subdivision plan. The plan may also contain reserve land, roads and public utility parcels as required by the *Municipal Government Act*, RSA 2000, c. M-26. The plan must show all information required to define the boundaries of the new parcels. Upon the registration of the plan, the current title(s) are cancelled in full or as to part and the new title(s) are issued to the registered owners. Titles to the reserves and public utility parcels are issued to the municipality, while no titles are issued for the roads. Subdivision plans do not affect the ownership of mines and mineral rights as these are sub-surface rights.

Condominium Plans

§4.52  The *Condominium Property Act*, RSA 2000, c. C-22, provides for the separate ownership of space located within a building or bare land within a parcel, which is designated as a unit on a condominium plan. In the case of a building, the boundaries of the units are defined by reference to the floors, walls or ceilings. In the case of bare land units, for which a building is not needed, the boundaries are defined by reference to monuments placed in accordance with the *Surveys Act*, RSA 2000, c. S-26. The Act also provides for common property which is that part of the parcel shown in a condominium plan not contained in a unit. The common property is held by the owners of all the units as tenants in common in shares proportional to the unit factors for their respective units. There is no separate title issued for the common property created by the registration of a condominium plan.

§4.53  The registration of a condominium plan, which for the purposes of the *Municipal Government Act* and the *Land Titles Act* is a plan of subdivision, has the effect of cancelling the certificate of title to the parcel described in the plan except as to the mines and minerals, and causing the issuance of a separate certificate of title for each unit described in the plan.
§4.54 The registration of a condominium plan also has the effect of creating a condominium corporation. The corporation consists of all unit owners or those persons entitled to ownership on the termination of the condominium status. The powers and duties of the condominium corporation are exercised and performed by an elected board of managers. The corporation is regulated by its bylaws which provide for control, management and administration of the units, the real and personal property of the corporation and the common property. If no Change of Bylaws is registered, then the bylaws as prescribed by the Condominium Property Act apply.

Descriptive Plans

§4.55 The primary and preferred method of creating new parcels is by way of plan of survey, based on actual monuments placed in the ground. However, the Alberta land registration system has historically allowed exceptions in limited circumstances through the creation of parcels by way of metes and bounds description. A provision to authorize descriptive plans was proclaimed in 1988, with the intention of largely replacing the use of metes and bounds descriptions by plans showing graphic representations of the parcels. While a descriptive plan is not based on an actual survey of the new parcel, it does describe boundaries by reference either to sections in the surveyed Alberta Township System or to registered surveyed plans. In addition to giving the Registrar discretion to accept descriptive plans for the creation of new parcels, the Land Titles Act also authorizes the Registrar to prepare descriptive plans to replace existing metes and bounds descriptions.

Strata Plans

§4.56 A plan subdividing volumetric space, other than mines and minerals lying on or under the surface of land, into strata spaces may be registered. Unlike a condominium plan which, except for bare land condominium, requires the boundaries of units to be shown in relation to an existing physical structure, strata space boundaries are independent of physical structures and are determined by planes or curved surfaces having defined geodetic elevation.

Right-of-Way and Related Site Plans

§4.57 The Land Titles Act provides for the registration of a plan of survey where land is required for an easement or right-of-way, a purpose incidental to the undertaking for which a right-of-way is required, a purpose with respect to a railway or another purpose approved by the Registrar and not provided for in the Land Titles Act. Some examples of these other purposes are:
a. plan showing area required for a road closure bylaw, lease or a restrictive covenant; and
b. plan showing a lake, river, stream or other body of water for the purpose of amending the legal description in a certificate of title owing to a change in the natural boundary.

§4.58 The registration of this type of plan does not affect the certificate of title to the land shown on the plan or convey any interest or right to any person. A further instrument, such as a utility right of way, a transfer, a road closure bylaw, a lease or an application must also be registered to effect any change to the certificate of title.

Road Plans

§4.59 Surveys of areas acquired for public purposes, such as new roads, road widening, diversion and drainage ditches, are undertaken by the provincial government under the authority of the *Public Works Act* or by the municipality under the authority of the *Municipal Government Act*.

§4.60 When a municipality or the Crown acquires land for a road or other public work by an agreement with the owner, title to the land is vested in the city, or in the case of any other municipality, the Crown in right of Alberta by filing a plan of survey at the Land Titles Office. A transfer of land is not required.

§4.61 As neither a municipality nor the Crown is entitled to the mines and minerals, the titles to mines and minerals are not affected by the registration of the plan.

SPIN II and Digital Plan Submission

§4.62 Alberta Registries initiated the Surveys Automation Project in the late spring of 1997. Its primary goal was to move the entirely manual survey plan registration, archiving, printing and distribution process into a modern digital environment over a two-year to three-year period. This has now been completed and allows clients direct online search, view and download of surveys data via the Internet as well as its use in updating the provincial cadastral mapping of the province through Spatial Data Warehouse (SDW) [Website 3].

§4.63 The requirements of digital plan submission have remained the same as defined in the *Land Titles Procedures Manual*, except where specifically noted or impractical given a digital environment.

§4.64 Software was provided to the surveying community to assist in converting existing Computer-assisted Drafting (CAD) files into the level structure required for submission. Following delivery (on diskette) or by online File Transfer Protocol (FTP)
transmission of a digital plan submission files and documentation to the Calgary or Edmonton Registries offices, error checking is done against the plan prior to commencing the registration review process. If errors are detected, the files are deleted and the documentation is returned to the surveyor to make the required changes.

§4.65 If the plan is acceptable, Registries’ survey technologists perform the registration processes in an online environment, using the cadastral map fabric as a plan index (including Edmonton and Calgary) and the scanned registered plans to verify the surround data.

§4.66 If the plan is rejected the submission files are deleted and the documentation is returned to the surveyor to make the required changes.

§4.67 Once examination is complete, the newly registered plan is captured as a TIFF file (to “freeze” the plan). The plan is stored on a file server for later digital distribution via SPIN or digital printing. A copy of the CAD file is sent to SDW for map updating purposes.

§4.68 Submissions are accepted in either MicroStation .dgn, AutoCAD .dwg or .dxf formats in their true scale.

§4.69 All plan submissions must be accompanied by an attribute file (DiPS) containing detailed specifications on the CAD file (e.g. file type, scale, NAD etc.). The software to create this file is available free of charge, together with the layer checking software.

§4.70 All plan submissions must also be accompanied by a plot file suitable for direct conversion into the “plan of record” TIFF Group IV image using an hpgl2 plotter driver. As an alternative, Registries accept a TIFF file in a format which it has previously approved.

§4.71 A FTP system that allows direct transfer of survey plan CAD files between surveyors and Registries was put in place in July 1999. This service allows surveyors to submit digital plans of survey for registration across the Internet. The process includes the use of encryption software which basically encodes the digital plan file(s) and decodes them once they reach the Registries FTP server. This ensures secure transmission of the plan(s) across the Internet.

§4.72 Surveyors using the FTP site must submit the appropriate files before or concurrently with the hard copy documentation. Registries will not proceed to examine any plans of survey unless the proper documentation is submitted to the Surveys Section.
If a registered survey plan must later be corrected, the TIFF file will be altered using raster-editing software. The error will be crossed through and the new value (e.g., dimension or bearing) entered as another layer of information onto the TIFF image of the plan. Other changes such as road closures will be added as a text notation to the file. No original surveyor information will be removed from the plan.

In the case where AltaLIS finds alleged plan errors, it will contact the surveyor. If it is a minor CAD file error (e.g., wrong level assignment of a feature) AltaLIS will make the adjustment. If it is a more serious alleged error, the surveyor would follow existing plan correction routines through the Director of Surveys Office, the ALSA and Registries. Data must be segregated according to the LTO Layer chart. Surveyors are encouraged to segregate other miscellaneous data onto other CAD file levels, rather than collect them all on level 34.

All information bulletins related to digital submissions are posted on the Registries website and digital plans are available on the SPIN II site.

The SPIN II site is the Alberta Government Services Spatial Information System that allows online searches for Land Titles data products, registered survey plans, township images, survey control markers, soil capability information and other land information services.

Plan Rectification

Where there is an omission, clerical error or other defect in a registered plan, the Registrar may correct the plan pursuant to section 92 of the Land Titles Act if he or she is satisfied that the correction will not adversely affect any person, or if all persons who may be adversely affected have consented to the correction. The Alberta Land Surveyor who signed the plan or, if the Alberta Land Surveyor is not available, the Director of Surveys, must consent to the correction. If the consent of a person who may be adversely affected cannot be obtained, an application may be made to the court under section 91 of the Act for correction of the plan [Website 4].

Reference in section 92 to “an omission, clerical error or other defect in a registered plan” is restricted to defects other than an actual survey error. The terms “omission” and “clerical error” do not encompass a survey error and accordingly, “other defect” must be restricted in its meaning. The Registrar cannot use this section to approve corrections to plans which have the effect of moving monuments or altering property boundaries. This would include making corrections to the Table of Coordinates on delayed posting plans, where the correction would have the effect of altering a property boundary. A Judge’s Order pursuant to section 91 or an Order issued pursuant to section 9 of the Surveys Act, RSA 2000, c. S-26, is required in all cases where
survey monuments are to be moved or property boundaries are being altered as a result of the correction to the plan.

§4.79 There may be situations where other methods can be used to correct title boundary problems in place of registering an actual correction to a plan through the use of one of the types of orders described above. Documents such as transfers of land, road closing bylaws and plan cancellation bylaws all registered in conjunction with new plans of survey may be an acceptable way to correct the title boundary problems. This would also require various approvals, such as subdivision approval, if the boundary issue were being resolved by way of a new subdivision. There is a significant difference between correcting a title boundary problem through the registration of new documents and plans versus the registration of an order which directs that survey monuments, and thus title boundaries, be moved.

Registration of Plans under Section 47

§4.80 Section 47 of the Surveys Act, RSA 2000, c. S-26, allows a surveyor, without placing the monuments required by section 45(1), to submit a plan for registration at the Land Titles Office or filing at the Métis Settlements Land Registry if sufficient survey control markers exist in the vicinity of the survey. The coordinates of the survey control markers and of the monuments, as shown on the plan of survey, determine the boundary lines established by the survey and plan.

§4.81 A surveyor who submits for registration such a plan has one year from the date of the plan registration to place the monuments in accordance with the survey control markers and the coordinates shown on the plan, and to file with the Registrar proof under oath of having done so.

§4.82 Upon registration of the form the Registrar shall endorse a memorandum on the plan, and the monuments placed determine the boundary lines as if they had been placed before the registration of the plan.

Other registries

§4.83 Alberta registry agents are a network of community-based service centres currently numbering more than 200, offering one-stop shopping for a wide range of registration, information, and licensing services on behalf of Alberta Government Services. Services provided include motor vehicle registration, driver licensing and testing, personal property (lien) searches and registrations, land title searches, Corporate Registry searches, and Vital Statistics searches. The agents do not provide land registration services but only searches.
Métis Settlements Land Registry

§4.84 The Métis Settlements legislation provides for a land management system that deals with land interests and includes land surveys. The system regulates all instruments dealing with land interests on Métis Settlements lands.

§4.85 The legislation affecting the Métis Settlements, including Settlement by-laws, are:

- Métis Settlements Land Protection Act
- Métis Settlements Act
- Surveys Act
- Métis Settlements Land Registry Regulation
- Land Conversion Regulation
- Subdivision Regulation
- Métis Settlements General Council Land Policy

§4.86 The most important piece of legislation for the purposes of this section is the Métis Settlements Act, RSA 2000, c. M-14. The Act establishes eight Métis Settlements in Alberta and provides for regulations with respect to a Métis Settlements Land Registry and a system for the recording, registration, and filing documents in that Registry. It also includes provisions for planning regulations.

Surveys Act

§4.87 The Surveys Act provides for establishment, maintenance, and preservation of the land survey system for the purpose of determining the positions of boundaries that govern the extent of interests in land in Alberta within the jurisdiction of the Alberta government. Generally the provisions of the Surveys Act apply to land within Métis Settlements, although there are some specific provisions for survey requirements and re-surveys for example.

Métis Settlements Land Registry Regulation


§4.89 After the establishment of the fee simple registers, Métis Title registers are established for all patented land. There are two major exceptions to this rule: the beds and shores of all permanent and naturally occurring bodies of water and of all naturally
occurring rivers, streams, watercourses and lakes; and land set aside or used for highways, roads, and road allowances, including land that would be required to be set aside for road allowances if the Settlements were to be surveyed under Part 2 of the *Surveys Act*. The Registrar does not establish registers for any land subject to a road title.

§4.90 Provisional Métis Title, allotments, and road titles, along with other interests as established by General Council Policy, are also registered in the Land Registry.

§4.91 After a parcel has been defined by an official survey plan, subdivisions are carried out under the provisions of the *Métis Settlements Land Registry Regulation*, which requires that survey plans are filed in the deposit file.

**Indian Lands Registry**

§4.92 The Indian Lands Registry (ILR) provides for the registration of documents related to land on Indian Reserves in Canada.

§4.93 The *Indian Land Registration Manual* [Website 5] states that any instrument that grants or claims a right, interest or charge in or transfer, encumbers or affects Indian reserve, designated or surrendered lands that is submitted to the Registrar of Indian Lands in accordance with the Manual may be registered.

§4.94 The Indian Lands Registry was initially put in place in 1967 and was computerized in 1990 under the Indian Lands Registry System (ILRS). It is important to note that this system is modelled after provincial registry offices with a system of abstracts and books and that it puts the responsibility of searching the records to ensure the status of a parcel on the parties seeking registration. Certificate of Occupation or Possession may be issued by the Registrar.

§4.95 A notice may be deposited in the Indian Lands Registry and it reflects the existence of a claim or interest against a parcel of reserve, surrendered or designated lands. This notice is the equivalent of the caveat with a substantial exception: it expires automatically after one year from the date it was deposited, and the Registrar is not responsible for notifying the person affected by the claim.

§4.96 There are two basic types of “status” for reserve land:

1. Lawful possession land is land that the First Nation Council has legally allotted under sec. 20 (1) of the *Indian Act* to a First Nation member, and is usually evidenced by a Certificate of Possession number on the parcel abstract. This land is also known as “locate” or “allotted” land.
2. Designated land is reserve land which the First Nation Council has not allotted to a First Nation member and has been designated for leasing purposes.

§4.97 When carrying out a search for lawful possession land, the extent of the landholding can be verified by the evidence of title (for example, a Certificate of Possession, Certificate of Occupation, Notice of Entitlement, Location Ticket, or No Evidence of Title Issued). Unless the abstract reflects a subsequent registered document to the contrary, the land being held is the exact land described in the last evidence of title issued. When doing a title search for a lease on lawful possession land of a First Nation member (s. 58 (3) of the Indian Act), the searcher must be satisfied that the locatee requesting, and consenting to the lease, has lawful possession of the land.

§4.98 During a title search on designated land, it must be verified that the First Nation has designated the land for leasing under ss. 37 through 41 of the Indian Act. This verification can be done by searching for Designation and Order-in-Council documents on the Reserve General Abstract. The Indian Lands Registry will return any lease for which the Designation and accepting Order-in-Council has not been registered.

§4.99 Every instrument for the lot must be reviewed. If there are any doubts as to whether or not an instrument affects a transaction, the parties must check the chronological sequence back to the root of title.

§4.100 For an individual land-holding abstract the root of title is the Band Council Resolution allotment, and for a leasing abstract the root of title is the Designation/OCPC and/or the lease.

§4.101 The basic registration requirements are extensively described in the Indian Land Registration Manual.

Canada Lands Surveys Records (CLSR)

§4.102 Chapter C-1 of the General Instructions for Surveys of Canada Lands, e-edition [Website 6], stipulates that the Surveyor General has the custody of all the original plans, journals, field notes and other papers connected with surveys under the Canada Lands Surveys Act. These documents are recorded in the Canada Lands Surveys Records in Ottawa.

§4.103 The CLSR is not a registry system but a repository of survey-related information that contains all survey and parcel information related to Canada Lands (formerly Dominion Lands); its records go back to the mid-1800s.
§4.104 On Canada Lands, i.e. Indian Reserves, National Parks, Offshore, and the Territories (Yukon, Northwest Territories and Nunavut), no title search is complete without a search of the CLSR. This provides a historical review of any parcel of land, how it has come to exist and who the current owner or administering government department is.

§4.105 A search of the CLSR, for example, must be carried out in concert with any search of the Indian Lands Registry for Indian Reserve lands to ensure complete information is acquired on a parcel of land.

§4.106 The CLSR also contains all survey plans related to oil and gas activities on Indian Reserves in Alberta.

National Parks Registry

§4.107 The federal government remains the owner of all National Parks lands and generally only leasehold interests in those lands can be held by individuals or corporations. All transfers of National Parks lands in Alberta are normally registered in the appropriate Land Titles office. There is a National Parks Registry at Parks Canada head office in Ottawa; however, this registry is really just a filing system. Section 30 of the Land Titles Act, RSA. 2000, c. L-4, allows leases and other interests in National Parks lands to be filed in the Land Titles Office. Many lawyers in Alberta prefer to do that as it is the system that they are familiar with, and at the same time it provides the required level of comfort for financial institutions providing mortgages, as well as the parties involved in a leasehold title transfer.

Disposition of Crown Lands

Alberta Public Lands

§4.108 Crown Grants include letters patent issued by the Crown in right of Canada and notifications issued under the Public Lands Act, RSA 2000, c. P-40. Prior to the Natural Resources Agreement between certain provinces and the Federal Government in 1930, (Constitution Act, 1930 in RSC 1970 App. II No. 25), public lands in Alberta were under the jurisdiction of the Crown in right of Canada. Grants of land were made in the form of letters patent. After the transfer of jurisdiction over public lands to the provinces under the 1930 agreement, the Crown in right of Alberta has granted public lands using the form of notification provided for in the Public Lands Act. The same notification
process is also used to bring land under the operation of the *Land Titles Act* in the name of Her Majesty the Queen in right of Alberta.

§4.109 Letters patent and notifications provide the authority for the Registrar to bring land under the operation of the *Land Titles Act*, RSA 2000, c. L-4, and issue a certificate of title. The bringing of a parcel under the system, whether it is in the name of the Crown or a subject, binds the estate to the rules under the Act unless there is a specific enactment to the contrary [DiCastri 1987].

§4.110 Section 35(1) of the *Public Lands Act* provides that mines and minerals and the right to work the same are excepted whether they are mentioned in the notification or not. Thus, even if the notification fails to except the mines and minerals and the right to work the same, the certificate of title must contain the following exception: “excepting thereout all mines and minerals and the right to work the same”.

**Federal Crown Lands**

§4.111 Section 5(1) of the *Federal Real Property and Federal Immovables Act*, SC 1991, c. 50, provides that federal real property may be granted and federal immovables may be conceded either by letters patent under the Great Seal or by an instrument of grant or an act of concession, in a form satisfactory to the Minister of Justice, stating that it has the same force and effect as if it were letters patent.

§4.112 Federal real property and federal immovables within Canada may also, at the discretion of the Minister of Justice, be granted or conceded, as the case may be, by any instrument or act by which, under the laws in force in the province in which the property is situated, real property and immovables may be transferred by a natural person (s. 5(2)).

**Special Areas**

§4.113 The Special Areas is a unique rural municipal area covering approximately 2.1 million hectares in southeastern Alberta. There are three separate areas administered as a single entity.

§4.114 The Special Areas Board, created by section 29(1) of the *Special Areas Act*, RSA 2000, c. S-16, is responsible for the administration of the area as it relates to providing all municipal services as well as the leasing of public lands within the area. Sixty percent of all lands in the Special Areas are public lands and leased as grazing, cultivation or irrigation leases. The Board also operate five community pastures, providing grazing for some 9,000 cattle annually.
§4.115  The Board is responsible for all local roads, comprising some 5,000 miles within
the area.

§4.116  All revenue and expenditures are controlled by the Board through the Special
Areas trust account.

§4.117  The Special Areas Board was set up for land use control in the 1930s and still
continues to operate the area for the betterment of the land and its people.

§4.118  The *Special Areas Dispositions Regulations*, AR 137/2001, regulates all leasing
of public lands within the area, such as leases and permits for hay, grazing and
cultivation; mineral surface leases; licences of occupation, easements and others as
required. None of these require registration; they concern public lands in right of
Alberta which are subject to recording under the *Public Lands Act*, RSA 2000, c. P-40
and are not concerned with the sale or transfer of public land.

**Special Alberta Statutes**

§4.119  This section will briefly examine two specific statutes: the *Historical Resources
Act* and the *Irrigation Act* and their implications on ownership and registration.

**Historical Resources Act**

§4.120  The *Historical Resources Act*, RSA 2000, c. H-9, provides the Alberta
Government with the powers required to designate a building and the land upon which
it sits as a historical resource. Following the procedures outlined in the Act for such
designation, the Minister, if the order relates to or includes any land, shall cause a
certified copy of the order to be registered in the appropriate Land Titles Office. Upon
such registration, the Registrar of Land Titles shall endorse a memorandum on the
certificate of title to any land affected by the order, thereby effectively prohibiting the
owner from destroying, disturbing, altering, restoring or repairing any historic resource
or land that has been so designated, or from removing a historic object from a historic
resource that has been so designated without the written approval of the Minister.

**Irrigation Act**

§4.121  Under the *Irrigation Districts Act*, RSA 2000, c. I-11, when a use of irrigation
works agreement is entered into under the Act, the manager must file with the Registrar
of Land Titles a notice that the parcel is subject to a use of irrigation works agreement.
Upon receiving such notice, the Registrar must endorse on the certificate of title to the
land affected by the agreement a notice that the land is subject to a use of irrigation works agreement. If a use of irrigation works agreement under Act is terminated for any reason, the manager must notify the Registrar that the parcel is no longer subject to a use of irrigation works agreement and upon receiving such notice the Registrar must cancel the endorsement on the certificate of title.

Foreign Ownership

§4.122 In Alberta, foreign ownership is regulated under the Agricultural and Recreational Land Ownership Act, RSA 2000, c. A-9 which aims at preventing non-Canadians from buying and owning significant amounts of prime agricultural and recreational land. It does not per se discourage non-Canadian investors to invest in Alberta [Website 1].

§4.123 The Foreign Ownership of Land Regulations, AR 160/79, were passed on the dual authority of the Citizenship Act, RSC 1985, c. C-29 and the Agricultural and Recreational Land Ownership Act. The Act and Regulations put a number of restrictions on foreign ownership of “controlled land”, which means land in Alberta but does not include land of the Crown in right of Alberta, land within the boundaries of a city, town, new town, village or summer village, and mines and minerals.

§4.124 Foreign citizens and foreign controlled corporations may own or beneficially own up to two parcels of “controlled land” not exceeding 20 acres in total.

§4.125 The Regulations do not prohibit the acquisition of an interest in controlled land for pipelines, oil and gas processing plants, refineries, power plants, electric distribution systems, or extractions of coal and aggregates. As well, under certain conditions, industrial processing, manufacturing, commercial or transportation facilities and residential subdivisions are exempt. Furthermore, wills and the transfer of land on death are not controlled, and leases up to 20 years are exempt if registered at a Land Titles Office within 60 days.

§4.126 Where controlled land is acquired contrary to the Regulations, procedures for judicial sale are set forth.
Case Studies


This case deals with caveats and the introduction of the Land Titles system in Alberta.

Facts

The respondents, 16 Indian chiefs, claimed an interest in certain lands in the Northwest Territories on behalf of themselves and all the Indian people and Indian bands of the Territories by virtue of aboriginal rights. They sought to file a caveat in respect of their claim in the Land Titles Office of the Northwest Territories. The Registrar referred the matter to Morrow, J., who held that the caveat should be filed and entered.

On appeal, held, Moir, J.A., dissenting, the appeals should be allowed.

*Per* McDermid and Sinclair, JJ.A., McGillivray, C.J., concurring: Having regard to the object and context of the *Land Titles Act*, R.S.C. 1970, c. L-4, and its historical development, it is not possible to file a caveat respecting an interest on the basis of aboriginal title or otherwise, against land where no certificate of title has yet been issued or where no application for the issuance of a certificate has yet been made but where the allodial title remains in the Crown. The sections that would appear to give such a right are referable to lands in respect of which a patent was issued before the coming into force of the Torrens system in the Northwest Territories in 1887 and which have not yet been brought under that system, or which deal with special cases. Section 134 (2) which provides that the Registrar shall register a caveat received before registration of the title under the Act in the day-book, is one such section, as is apparent from s. 35 which provides for the keeping of such a book in which shall be entered all instrument given in registration with respect to lands "for which a certificate of title has issued or been applied for". Sections 49 and 56 which also permit the filing of caveats also apply to lands patented before 1887. Section 95, which provides for the filing of a mortgage or other encumbrance prior to the granting of a certificate of title, is an exception to the general rule. It contemplates a mortgage from a person lawfully in possession of the premises who is entitled to but who has not yet received the Crown grant.

*Per* Clement, J.A., McGillivray, C.J., concurring: The allodial estate of the Crown is not brought within the purview of the *Land Titles Act*. Such unpatented land becomes subject to the Act when letters patent are issued or a notification with respect to it (which has the same effect) is given under s. 5(1) of the *Territorial Lands Act*, R.S.C. 1970, c. T. Neither Act contemplates the registration of the allodial estate of the Crown but only the registration, i.e., the issuance of a certificate of title, of derivative titles. Thus, s. 134(2) which permits the filing of a caveat before registration of title refers only to a derivative title after it has been granted but before registration. Neither it nor the other sections of the *Land Titles Act* permits the registration of documents affecting the allodial estate of the Crown. Nor does s.132 of the latter Act permit the filing of a caveat in respect of aboriginal rights. The section permits the filing of a caveat by a person who claims to be interested in any land under a variety of instruments listed in the section, "or otherwise". Having regard to the definition of "instrument" in s. 2 of the Act, these specific instruments listed establish a genus the common feature of which is that their claim must be based on some documentation. Thus, in whatever form the interest claimed may be, whether it be an interest in land or a chose in action, since it is not documented, it is not capable of being protected by a caveat.
Per Moir, J.A., dissenting: That the native people *prima facie*, have certain rights in the Northwest Territories was recognized in the Order in Council dated June 23, 1870, admitting Rupert's Land and the North-Western Territory into Canada. Furthermore, while such aboriginal rights must be an interest in land in order to maintain a caveat, it is not necessary to show such an interest to be able to file a caveat. Section 132 of the *Land Titles Act* merely requires for that purpose that the person claims "to be interested in . . . land". The personal and usufructuary right claimed by the Indians is sufficient to support the filing of a caveat. Finally, on the clear language of ss. 49, 56, 95 and 134(2), a caveat and other instruments can be registered before the land is patented and does not depend upon proof that the land will be patented within a shorter or longer period of time. Indeed, having regard to the object of the Torrens system it is necessary that caveats can be filed whether or not the land has been patented.

**Decision and Reasons**

These are appeals by the Attorney-General of Canada, on behalf of Her Majesty The Queen, from three judgments of Morrow, J., dated respectively April 3, 1973, June 22, 1973 and September 6, 1973. In essence, the appeals concern the right of certain Indian chiefs to file a caveat in the Land Titles Office of the Northwest Territories.

As Morrow, J., stated, this is "not an ordinary caveat in any sense of the word" and "this is no ordinary lawsuit". The caveat, presented to the Registrar for lodgment, was signed by 16 Indian chiefs claiming an interest on behalf of themselves "as representatives of all the Indian people and Indian bands of the Northwest Territories by virtue of Aboriginal Rights" in an area of approximately 400,000 square miles.

On April 3, 1973, the Registrar, pursuant to the provisions of s. 154(1) of the *Land Titles Act*, RSC 1970, c. L-4, referred the matter to a Judge in the following terms:

A question has arisen as to the legal validity, and the extent, right and interest of the persons making application, to forbid the registration of any Transfer, and whether the Registrar has a duty conferred or imposed upon him, by the *Land Titles Act*, to lodge such a document, and enter same in the day book.

The caveat forbade the registration of any transfer affecting the lands or the granting of a certificate of title thereto, except subject to the claim set forth in the caveat. Excepted from the prohibition contained in the caveat were "all lands for which a Certificate of Title in fee simple has been issued".

Details of the course these proceedings have taken up to this Court are set out in the reasons for judgments of Morrow, J., of the Supreme Court of the Northwest Territories (reported 39 D.L.R. (3d) 45, 42 D.L.R. (3d) 8, [1973] 6 W.W.R. 97, 115) and Collier, J., of the Trial Division of the Federal Court of Canada (reported 39 D.L.R. (3d) 81, [1973] 6 W.W.R. 150, [1973] F.C. 889).

It is necessary to deal only with one ground of appeal of the Crown:

**THAT** the *Land Titles Act*, Revised Statutes of Canada, 1970, Chapter L-4, has no application to lands for which a Certificate of Title has not been issued, or in respect of which no application for a Certificate of Title has been made.
This ground of appeal was set out in respect of the appeal of the judgment of June 22, 1973. A decision on this ground in favour of the Crown will settle all appeals.

The interpretation of the statutes relating to land must be made against the background that no lands in Canada are held allodially except by the Crown in the right of Canada or a Province. In Earl Jowitt's *Dictionary of English Law*, at p. 103, it is stated:

No subject in England can hold lands allodially; and the highest estate known to the law is an estate in fee simple, which, however, is for all practical purposes equivalent to absolute ownership.

The laws in force in England on July 15, 1870 (in so far as applicable), are the laws which are the starting point for laws in force in the Northwest Territories. All titles derive from the Crown and without a title from the Crown there can be no registration under the Act for there is nothing to register. It is not land in the physical sense that is brought under the Torrens system, but the title to such land.

The court allowed the Crown’s appeals and directed that the Registrar refuse to accept the caveat and refuse to enter the same in the day-book.

This decision is a classic in Canadian law and contains a compendium of principles related to the Alberta Land Titles Act. It is concerned mainly with misdescription, prior certificates of title, correction of errors and relies on mirror and curtain principles and is sometimes referred to as the authority for indefeasibility of title.

Facts

- 1903: CPR received from Crown Certificate of Title (CT) 424 for section of land. A quarter of this section would eventually be the issue of the dispute.
- 1908: CPR transferred a quarter section to Podgorny. The transfer was for the quarter section but CPR was supposed to retain the oil and petroleum rights. The registrar erred and gave Podgorny a CT for the land without the coal rights but did not reserve the petroleum rights for CPR.
- 1910: West half of the quarter section was transferred to Sitko from Podgorny without reservation. Sitko registered and CPR was still reserved the right to coal.
- 1910: Registrar did some house cleaning and cancelled CT 424. This would play a large part later in undermining CPR's claim to the prior CT exemption to indefeasibility as the prior claim must be subsisting.
- 1911: Podgorny transferred west half to Turta without reservation which meant that CPR still retained the coal but Podgorny was finished. Podgorny's CT was cancelled as he has sold both his halves.
- 1911: Turta reunited quarter section by buying from Sitko with only the coal being reserved for CPR.
- He applied for a consolidation and this is where the registrar erred again by issuing the CT but reserving mines and minerals for the Crown.
- 1943: The Registrar checked all of its claims in the area because of the oil boom and found the mistakes. Thus mines and minerals to the Queen was changed to coal to CPR but also returned petroleum to CPR.
- Basically Turta wanted his oil.

Principles

1. Effects of the Registrar’s errors.
   - The purpose of the Act must be returned to. Wanted to do away with comprehensive search. Should not have to go behind title; the mirror principle applied.
   - The result was that Podgorny and eventually Turta got a fantastic deal.
   - Note that if the deal was still between the initial two parties and there had been a mistake in regard to how the Registrar represented the transfer then the Registrar could have
2. Effects of the corrections:

- 174(4) of the Land Titles Act states that the Registrar can make corrections as long as it is not prejudicial to rights conferred for value.
- Thus if it was between the original two parties that the transfer was misapplied then the Registrar could correct it.
- It was argued that Turta was not in fact a purchaser for value as he had no intention of using the land for oil purposes. The court went back to the underlying values of a Torrens system and stated that it would undermine speed and reliability if one were not allowed to rely on title as it was stated. Turta does not have to search title to see if what is on the Certificate of Title is actually valid as this is the essential guarantee of land titles.
- s.180; Judge’s power of correction.
- not limited in the same ways as Registrar.

Exceptions to indefeasible title (prior CT and Misdescription; note that fraud is also an exception but not really dealt with extensively in Turta)

3. Prior Certificate of Title:

- s.173(f) makes an exemption to indefeasibility that states that a prior Certificate of Title is an exception where one party can get their land back.
- The court interpreted this as meaning that there must be two existing Certificates of Title and that if there is a prior one it will be an exception under s.174. CPR is out of luck as its Certificate of Title was cancelled.
- Note that it is not just the time of the Certificate of Title that counts—it must be unblemished and a caveat counts as a blemish.

4. Misdescription

The majority of the Court stated that there are two types of misdescription and this is not considered to be one. If it is not a true misdescription, it bars the original owner from getting the land back but awards damages. If it is a true misdescription it leaves the right unaffected against the bona fide purchaser.

There are three types of true misdescription that can defeat the indefeasibility of title:

- Two parcels of land: one under Land Titles system and one not
  - If the legal description of the parcel under the Land Titles system is wrong and includes the land belonging to the other parcel, the owner of the land under the Land Titles system will not have indefeasible title with respect to the misdescribed portion of the land.
- Two parcels under Land Titles system
  - The Certificate of Title of one contains a misdescription of the land and that misdescription can be discovered by reference to the land itself. This is an error in the metes and bounds description.
• Misdescription as between the original parties to a transaction: can be corrected subject to the limitation period under the *Land Titles Act*.
  – This is really an error of transcription and can be corrected if between the original two parties.

The facts of this case did not give rise to a true misdescription, which would have overcome Turta’s indefeasible title.

Note that in Alberta the first type is rare as there is not a great deal of land outside of the land titles system, the second type is rare as “metes and bounds” descriptions are not used anymore, and that in all cases of true misdescription there are always two pieces of land present.

**Issues**

If Turta is a bona fide transferee purchaser or mortgagee for value:

• Is there an exception to indefeasibility because of (a) misdescription? (b) prior Certificate of Title? or (c) fraud?
• What does the Registrar’s power to correct include?
• What is the effect of the limitation period?
• Does Turta have rights to the petroleum?

**Results**

The Court found in favour of Turta because he was a bona fide purchaser for value and the only reservation on title was for coal.

1. Act protects indefeasibility of current titleholders, not past titleholders.
2. The powers of the Registrar include:
   a. the legal capacity to make errors that are binding.
   b. limited power to make corrections—can’t correct where there has been an intervening bona fide purchaser.
   c. everyone who purchases is deemed to have purchased on the faith of the Registrar and will be entitled to a certificate of title.

**Reasoning**

1. Limitation problem:
   a. no limitation problem because time hadn’t started to run.
   b. limitation for action against transfer of land is 10 years.
   c. time starts to run when someone in reliance of the correction does something inconsistent with your belief.
   d. limit of action against Registrar; must occur within six years.
2. Effect of the Registrar’s errors:
   a. improper inclusion of petroleum in Podgorny’s title.
   b. improper cancellation of CPR’s petroleum and co title.
   c. majority indicated that it was covered under the statutory compensation provisions, the purchaser that purchased on the faith of the Registrar’s mistake is protected (assurance fund).

3. Whether the CPR has a prior Certificate of Title:
   a. prior Certificate of Title only applies when there are two Certificates of Title existing at the same time.
   b. therefore, in order to prevail, CPR would have to show that its title wasn’t cancelled. But it was cancelled and therefore there was no prior CT.
   c. gave s. 66 a narrow interpretation

4. Whether CPR can claim an exception to indefeasibility based on a misdescription:
   a. majority indicated that there are two types of misdescription and this is not considered to be one:
      • If not a true misdescription, it bars original owner from getting the land back but awards damages.
      • If it is a true misdescription, it leaves the right unaffected against the bona fide purchaser.
      • types of true misdescription giving rise to defeat indefeasible title.
        Two parcels of land: one under Land Titles (LT) system and one not:
        If the legal description of the parcel under the Land Titles system is wrong and includes the land belonging to the other parcel, the owner of the land under the LT system will not have indefeasible title with respect to the misdescribed portion of land.
        Two parcels under Land Titles system:
        The CT of one contains a misdescription of the land and that misdescription can be discovered by reference to the land itself.
        Misdescription as between the original parties to a transaction—can be corrected subject to the limitation period under the LTA.

The facts of this case did not give rise to a true misdescription which would overcome Turta’s indefeasible title.

1. Can Turta rely upon the mistakes made by the Registrar?
   The majority decided that one can rely upon the Registrar, not concerned with minds of purchaser.
2. When can the Registrar make corrections and what are their effects?
   a. Act grants Registrar limited power to correct clerical errors and those as serious as shown here.
   b. Majority decided that the Registrar has no power to make changes against the bona fide purchaser for value (where rights conveyed may be prejudiced), therefore change should have been made at the Podgorny stage.

**Ratio:** Most recent title registered gets benefit of it.

**Notes**

Always get a certified copy of the certificate *after* it has been registered, make sure there are no mistakes and check after every limitation date.

If you don’t notice the mistake right away, it can still be changed up to the time that it would adversely affect somebody else’s rights.

On fraud; even if Turta knew of CPR’s title, that is not fraud. But if he had acted and tried to defeat the title, that would have been fraud.
References


Websites

1. Land Titles Office: http://www3.gov.ab.ca/gs/services/lrs/
Chapter 5: Official Surveys

Duncan Gillmore, Sr. and Gordon E. Olsson

Part 1: Duncan Gillmore, Sr.

Township System

§5.1 The Township System is a general term used to describe the grid system that was developed and used in the latter part of the nineteenth century to subdivide the vast unsurveyed areas of the Canadian west and to provide an orderly system of land description for the initial settlers and the future generations to follow.

§5.2 With the use of a topographical series map of the type produced by the governments of the Western provinces, one can locate an area as small as 10 acres in size (a quarter of a legal subdivision) by using the grid description of the area, for example, the NE1/4 Legal Subdivision 10 – Section 21 – Township 59 – Range 21 – W5Meridian. The Township System in Western Canada is divided into five different systems of survey. (See Figure 5-1 for the general layout of the Township System.) As this chapter is about the practice of land surveying in Alberta, it will deal primarily with the Third System of Survey.
§5.3 The DLS Third System of Survey consists of quadrilateral townships containing 36 sections as nearly one mile square as the convergence of meridians permits. The boundaries of the townships on the east and west sides are meridians and on the north and south sides are chords to parallels of latitude.

Dominion Land Survey (DLS) Third System

§5.4 The sections in the township are numbered as shown in Figure 5-2, and road allowances of 66 feet are allowed as follows:

1. In a north-south direction, every mile between each column of sections and
2. In an east-west direction, every 2 miles between each second row of sections commencing at the township outline (See Figure 5-2 for the location of the 66-foot road allowances).
§5.5 Every section is considered to be divided into sixteen separate areas called legal subdivisions, each 40 acres more or less, and arranged and numbered as shown in Figure 5-3.
§5.6 The townships are numbered in regular order northerly from the 49th parallel of latitude and lie in ranges numbered westward from their initial meridians. Townships are given their prescribed width on the baselines. Each quarter section on the baseline is 40 chains and each road allowance one chain. The meridians are then drawn across these baselines, northward and southward to the depths of two townships to the correction lines.

§5.7 The first baseline is the 49th parallel of latitude, the 2nd baseline lies between townships 4 and 5, the 3rd baseline between townships 8 and 9, and so on northerly in regular succession. Baselines are four townships apart (approximately 24 miles). Refer to Figure 5-4. Although the 49th parallel of latitude or international boundary is referred to in most survey texts as the first baseline, it is not a true baseline as it consists of a series of monuments (not section and quarter section monuments) joined by straight lines. The most southerly monumentation on the township system begins on the south boundary of Township 1 on a line which is on a one chain offset north of the monuments on the international boundary. This boundary also serves as a correction.
line as all the north-south error in the townships between the first and second base lines is left in the last quarter sections along the south boundary of Township 1.

§5.8 The correction lines are those on which the jog resulting from the convergence of the meridians shall be allowed and are those lines running east and west between townships and midway between adjacent baselines. These correction lines are located every four townships (approximately 24 miles apart) with the most southerly one lying between townships 2 and 3, then townships 6 and 7, townships 10 and 11, and so on northerly in regular succession.

![Figure 5-4. DLS Township Outline](image)

**Township Surveys (Third System)**

§5.9 The initial operation in laying out a township subsequent to the establishment of its initial meridian is to survey the baselines. A baseline commenced at the northeast corner of Section 36 and was surveyed westerly as a chord to a parallel of latitude. The azimuth of each chord was set at 270° at the intersection of the central meridian of the
township and the baseline (the northeast corner of Section 33) and extended in a straight line with a bearing of 270° for a distance of 243 chains east and west to the northeast and the northwest corner of the township. Consequently, star observations taken at points on the baseline, other than the northeast of Section 33, had to allow for convergence when determining the bearing of the chord, depending on how far east or west of the central meridian the observation was taken. The townships were given their prescribed widths on the baselines, being 12 quarter sections at 40 chains each, plus 6 road allowances of one chain each. These lengths were measured twice as the survey progressed westerly, usually with one tape divided into chains and links and the other in feet or some other unit of measurement.

§5.10 At the westerly end of each baseline chord, a small deflection was made to the north to allow for the convergence of meridians. This deflection is listed in the Supplement to the Manual of Instructions for the Survey of Canada Lands [Canada 1952] which gives the deflection in minutes and seconds, and also an offset in inches for each chain in distance.

§5.11 Subsequent to making this deflection, the next chord or range was laid out and this process was continued westerly until closing on the next initial meridian, with the final chord or partial chord deflecting to create a straight line to the northeast corner of Section 36 on that meridian.

§5.12 Once the baselines were established, the next operation was to survey the control or central meridian of the township. This was normally done by starting at the northeast corner of Section 33 on the baseline and surveying the control meridian due north or south to the correction line. The corresponding control meridian was then surveyed due north on an azimuth of 360°. Quarter sections were laid out at 40 chains with a road allowance of one chain every four quarter sections. Again, as on the baseline, distances were laid out using tapes of two different units and permanent monuments were erected at all section and quarter section corners, except on the correction line where temporary monuments were established. These temporary monuments were connected by a traverse line. The road allowance was then computed to be one chain in width halfway between where the control meridians met the correction line, with the quarter sections immediately north and south of the baseline being given an equal depth.

§5.13 The north and south boundaries of the townships on each side of the correction line were then laid out from the northeast corner of Section 33 or the southeast corner of Section 4 at 90° to their respective control meridians, so it follows that the road allowance at the control meridian from the south is slightly smaller than one chain in width, while the road allowance at the control meridian from the north is slightly larger than one chain in width. See Figure 5-5.
§5.14 The east and west section lines across a township were surveyed parallel to the baseline and are called chords. The central chord of the township being surveyed, called the control chord, was surveyed east and west through the northeast corner of Section 16 and the quarter sections were laid out at the theoretic width as shown in Table X of the *Supplement to the Manual of Instruction for the Survey of Canada Lands* [Canada: 1952]. Permanent monuments were erected at all section and quarter section corners. The survey was then completed by turning the chords from the section corners on the control meridian and turning the meridional section lines from the section corners of the control chord. The chords are perpendicular to the control meridian, but the convergence of the meridians is allowed for in turning the meridional sectional lines from the control chord.

§5.15 The permanent monuments were erected at the intersection of the meridional and chord lines. The quarter section monuments were erected midway between the section corners, with the allowance being made for the road allowances.

§5.16 Chords and meridional lines are not deflected in the interior of a township, except in the last row of quarter sections adjoining a previously surveyed township. Any deflection or deficiency or surplus is left in this last row of quarter sections.

§5.17 Although this is the preferred method for surveying a township, lines for control may be used other than the central meridian or the central chord if the topography of the township being surveyed is such that the other lines would be more accurate or more convenient.
Monumentation of Township System

§5.18  Only a single row of monuments to indicate the corners of townships, sections and quarter sections were placed on any survey line. These monuments were placed on the west limit of the road allowances on the north and south lines and on the south limit of the road allowances on the east and west lines, or the line between the sections where there were no road allowances. These monuments fix and govern the positions of the corners of the adjoining townships, sections and quarter sections on both sides of the road allowance, or the line between sections. See Figure 5-2.

§5.19  In the year 1915, new monuments were adopted for the survey of Dominion Lands. These boundary monuments consisted of a standard post planted midway between four pits or in the centre of a circular trench, with or without a mound, depending on the terrain. In rocky ground requiring the use of a short standard post, the pits were omitted.

§5.20  The standard post consisted of a piece of one inch pipe filled with concrete. An iron foot plate, three and one-half inches in diameter and a bronze cap three inches in diameter were fastened to the bottom and top of the one inch pipe. They weighed 7.5 pounds and came in crates of 10 posts each. This standard iron post was planted with the bronze cap flush with the surface, except in cases where a large rock or bed rock was encountered more than 12 inches and less than 30 inches below the ground, in which case the base was placed upon the rock and the earth was built up around the post until it was flush with the surface.

§5.21  The short standard iron post was a bronze casting 3 inches in diameter with a 0.875-inch shank projecting from the bottom, to be used in areas where rock was encountered at the surface, or less than 12 inches below the surface.

§5.22  Posts were referenced by pits and mounds, or by witness trenches and mounds. The pits were three feet square and eighteen inches deep and the mound was five feet square and thirty inches high. Whether a mound was built or not, the centre of the four pits is seven feet from the post, which is the centre of the square formed by the four pits. Except for correction lines, the mound is built nearly ten feet (9 feet, 11 inches) due south from the post. (See Figure 5-6). The post was inscribed with lines denoting the survey lines and the adjoining sections, as well as the township and range.
§5.23 Witness monuments consisted of a circular trench with an inside diameter of six feet, with the post being at the centre of the circle. The trench itself was two feet wide and one foot deep. A witness mound six feet in diameter and thirty inches high was constructed with the centre of the mound ten feet from the post in the direction opposite to the corner being referenced. See Figure 5-7.
§5.24 The post was inscribed with lines denoting the survey lines, the adjoining sections, township and range and the witness distance to the corner.

§5.25 Monuments erected on correction lines were of the same horizontal measurement and depth as shown in Figure 5-6. The orientation however was changed so that the alignment of the pits was directly north, south, east and west of the post and the mound, if constructed was 10 feet to the northwest if on the north side of the correction line and 10 feet to the southwest if on the south side of the correction line.

Restoration of Obliterated Monuments

§5.26 A monument is obliterated when its position can be ascertained beyond reasonable doubt, either by traces of the original monument or by other evidence, although the monument itself has partly or entirely disappeared. The preceding
paragraphs and monument descriptions will assist in restoring obliterated monuments that were planted subsequent to the year 1915.

1. Prior to the adoption of the standard post in 1915, the mound was in all cases in the centre of the square formed by the four pits, or in the centre of a circular trench.

2. Until the adoption of the standard post in 1915, the iron post at a township corner and, since 1890, every other corner post, was planted at the northerly corner of the mound, except on correction and similar lines, where it was planted in the middle of one side of the base of the mound. From 1890 to 1902 a witness iron post was planted at the point of the base of the mound nearest to the corner. From 1902 until 1915 the post was planted in the trench midway of its width.

3. In 1913, 1914, 1915 and 1916 placing a post in the centre of a rock mound was authorized when rock prevented driving the post into the ground.

4. Except as noted in 1, 2 and 3 the iron post, or in some cases a wooden post was planted in the centre of the mound.

§5.27 In all cases, when no mound was erected, the iron post was in the centre of the square formed by the four pits. The above descriptions will give a surveyor a general idea as to where the post was planted on monuments that were partially obliterated. However, there were several small variances in the type of posts and monuments used in the years between 1871 and 1915. If a surveyor is doubtful of the position of a post, he or she would be wise to consult Bulletin No.38 [Seymour 1917].

Field Notes in the DLS Third System

§5.28 Field notes must be a faithful, distinct and minute record of everything officially done and observed by the surveyor and his or her assistants pursuant to instructions in relation to running, measuring and marking lines, establishing monuments, laying out of road allowances, etc. In addition, the field notes must present, as far as possible, a full and complete topographical description of the country surveyed. This was usually accomplished by having a field book with two pages for each section line, with the left page used for an accurate record of the chaining operations along the line. The right page shows split-line field notes of the line, with type of monuments and distances between them; direction of the line; improvements; water areas such as creeks, lakes, swamps, marshes; changes in vegetation; type of tree cover; and trails crossed. Measurements to these items were deduced from the measurements on the left hand page. On later township surveys in Alberta a separate book was used for the field measurements, with the split-line notes completed in a different book at the end of the day. See Figure 5-8 for an example of split-line notes.
§5.29 With the availability of electronic distance measuring and satellite positioning systems, notes of this type are probably no longer necessary. Topographic plans from aerial photography also show detailed information about forest cover, soil types and access information. The type of field notes required on a township survey at present...
would depend entirely on the requirements and specific instructions of the department requesting the survey.

Natural Boundaries in the DLS Third System

§5.30 Natural boundaries are covered under Chapter 3. The general rule in defining a natural boundary under both the DLS Third System and the Alberta Township System is as follows:

The bed of a body of water has been defined as the land covered so long by water as to wrest it from vegetation, or as to mark a distinct character upon the vegetation where it extends into the water or upon the soil itself. According to this definition, the limit of the bank is the line where vegetation ceases, or where the character of the vegetation and soil changes.

§5.31 In the case of an inland lake or stream, the boundary, if the parcel does not include the bed, is the edge of the bed of the lake or stream, which edge is called the bank. The bank of a river or stream is referred to as the right bank or the left bank, depending on whether it is on the observer’s right or left when looking downstream.

§5.32 These banks were normally tied in by traverse surveys by measuring a direct right angle distance to the bank from the traverse line wherever there was a change in the direction of the bank, or by a stadia traverse where distances were radiated to the bank from stations on the traverse line.

§5.33 If the body of water was shallow, not permanent and not susceptible to precise definition, the land was dealt with by selecting the legal subdivision and quarters of legal subdivisions (10 acres) which are not rendered worthless by water. For example, a certificate of title would read “Meridian 4, Range 26, Township 51, Section 19, the North West Quarter of legal subdivision 12 and the whole of legal subdivision 13, containing 20.2 hectares (50 acres) more or less. The remainder of the NW ¼ would be covered by a shallow water body not susceptible to precise definition.

The Alberta Township System

§5.34 The Alberta Township System of Survey is identical to the Dominion Land Survey (DLS) Third System of Survey in all of the following aspects: the system of survey, the sections in a township and their numbering, the township boundaries, the numbering of townships and ranges, monuments, division of quarter sections and division of sections into legal subdivisions.
§5.35 The method of surveying a township under the Alberta Township System is similar to the DLS Third System where the control chord was surveyed at 90° to the control meridian. The remainder of the township was surveyed by intersecting the chord lines turned from the control meridian with the meridional lines turned from the control chord. Although this was the normal method of surveying a township, the Minister responsible for the Surveys Act may direct that public land be surveyed under the supervision of the Director of Surveys in the Alberta Township System of Survey, conforming as nearly as possible to the Act, in lots of a size and shape and with an allowance for roads that the Minister considers advisable. Although new ATS township surveys are still continued on a yearly basis and they still conform as near as possible, to the DLS third system, the last one surveyed under the normal method of cutting and clearing lines was in 1988. The last township survey to use pits and mounds was in 1985.

§5.36 With the availability of satellite positioning such as GPS, portions of townships or sections remote from the baseline can now be surveyed without commencing the survey at the baseline and cutting and monumenting unnecessary miles of line prior to establishing the monuments for the area required.

§5.37 Most areas of the township grid in Alberta are in the DLS Third System of Survey (1881 to the present). However, in 1963 the Province of Alberta modified that system by increasing the width of road allowances from one chain (66 feet) to one and one-half chains (99 feet). The extra half-chain is taken from the land on the unposted side of the road allowances. As a result, the north-west and south-east quarters of Sections 1 to 6, 13 to 18 and 25 to 30 lose 2 acres each. In the same sections, the south-west quarters lose approximately 4 acres each. The north-west and south-west quarters of Sections 7 to 12, 19 to 24 and 31 to 36 each lose 2 acres as well. See Figure 5-9.

§5.38 On correction lines the road allowance shall be given its prescribed width (99 feet) midway between the south-east corner of Section 4 of the township, north of the correction line, and the north-east corner of Section 33 of the township south of the correction line. This modification has affected all townships surveyed in Alberta since 1963, most of them being in the northern part of the province.
§5.39 Under Part 2 of the Alberta Surveys Act: (1) If an east-west section line does not have a road allowance adjacent to it, and if a monument has not been placed at a quarter section corner on that east-west line, then the position of the quarter section corner is the point that is midway on a straight line connecting the section corners lying on either side of the quarter section. (2) If no monument has been placed at the centre of a section, the position of that centre is the point of intersection of the straight lines joining the opposite quarter section corners. (3) If no monuments have been placed to mark the corners of legal subdivisions, the corners are the midpoints of the boundaries of the quarter sections and the intersections of the straight lines joining those midpoints.

§5.40 It should be noted that monuments placed at non-monumented positions—Part 2 positions described in (1), (2) and (3) above—do not have governing status if placed under Part 3 of the Surveys Act. There is also no governing status for re-established Part 3 monuments placed at non-monumented Part 2 positions. Although
these monuments, when placed by Alberta Land Surveyors, are accepted by the public as defining the position of the corner, they have no official governing status and it is generally accepted that their position should be checked whenever a new survey uses them to determine the positions of monuments on a subsequent survey.

Monumentation of Alberta Township Subdivisions

§5.41 The following types of monuments were used for the surveys of Alberta Township Subdivisions:

1. Old pattern iron post designated “I”. A hollow ¾-inch iron post, sharpened on one end with the top 4 inches squared and marked with a crown. These posts were used until the mid-1950s and occasionally after that date.

2. Standard post designated “P”. This post consisted of a 7/8-inch iron pipe with a foot plate 3 inches square on the bottom and a cap 3 inches in diameter affixed to the top. The top was usually planted flush with the ground. These posts came into use in the mid-1950s.

3. Marker posts designated Mp. This consists of a six-foot long steel post with a metal tag attached to the top, stating “Alberta Survey Marker. Do Not Remove”. This post is generally placed one foot (0.30 m) from the old pattern iron post or standard post marking the corner and is used strictly as a guard post and reference to locate the legal corner post.

§5.42 Once the monuments are placed and recognized on an official plan, all boundary lines are determined by monuments placed, whether or not the dimensions between them or the areas expressed on the official plan are found by re-measurement to be different. This doctrine of original monumentation is further supported by section 37 of the current Surveys Act wherein it states that every parcel surveyed within the provision of official surveys “shall consist of all the land included between the several monuments placed to determine the boundary lines, and no more and no less, notwithstanding any quantity or measure expressed on the official plan, certificate of title, grant or other instrument.”

Re-establishment of Lost Monuments

§5.43 A monument is lost when its position cannot be ascertained beyond a reasonable doubt. A monument should not be considered lost until an exhaustive search has been conducted for remains of the original monument, such as traces of pits and mound, old rust holes or remains of an old wooden post. Old fence lines and corners, crop lines and even constructed section roads should be considered. Statements from long-term residents in the area as to the location of the original post are also very good evidence,
and may be the best evidence available in retracement surveys. The evidence should be transcribed in writing and signed under oath by a witness. It should be noted that most township plans are close to being theoretical. For example, most east-west lines along road allowances are shown to have a bearing of 90° 00’ or 270° 00’. Most plans also show that the sections are evenly split on the north boundary. It is the author’s experience that many of these east-west lines were never completely surveyed. The surveyor ran the north-south lines independently of each other, knowing the distance between them at the baseline and the township boundary was 6 miles away. In fact, what often happened can best be described as follows: The surveyor would survey two miles north to the northeast corner of Section 9 and was then supposed to run and measure the line to the northeast of Section 10 already in existence. Instead of surveying the entire mile he would turn the theoretic township angle for the north boundary of Section 10, measure one-half of the calculated distance to the northeast of Section 10, and establish the north quarter of Section 10 without bothering to check along the whole mile. It is often found when retracing these east-west lines that one quarter has the breadth shown on the township plan while the other one quarter is substantially different. The plan may also show a straight line between the two section corners, but in fact a considerable deflection is found to exist at the north one-quarter.

§5.44 When an obliterated monument on an original township survey cannot be restored from traces remaining on the ground of the original monument, other physical evidence, or testimony by witnesses, the surveyor may, as a last resort, re-establish the monument by measurement from other existing monuments that were connected to the survey. If the re-establishment uses other monuments from the original township survey, the following methods of re-establishment are generally acceptable:

1. If the lost monument is on the exterior boundary of the township, other monuments on either side of the lost corner on the same township boundary should be used.
2. If the lost monument is in the interior of the township, other monuments north and south of the lost corner should be used.
3. If the lost monument is a quarter corner on an east-west section boundary in the interior of the township, the relationship to section corners on either side should be considered.

§5.45 When re-establishing lost corners on original township surveys, due weight should be given to the bearings shown on the official or registered plan.

§5.46 All damaged or obliterated monuments used on a survey should be restored. Pits, mounds and trenches on original township surveys should not be reconstructed unless so instructed by the Director of Surveys.
§5.47 When a surveyor restores an obliterated monument or re-establishes a lost monument, he or she shall “use the best evidence that the nature of the case admits”.

**Settlement Surveys in Unsurveyed Territory**

§5.48 The Surveys Act states that the Minister may direct that public land be surveyed under the supervision of the Director of Surveys (a) in the Alberta Township System or (b) in lots of a size and shape and with an allowance for roads that the Minister considers advisable. The plans of surveys made under (b), generally referred to as settlement surveys, require confirmation by the Director of Surveys before the land is considered to be surveyed. Plans of Surveys of Public Lands of Settlement lots, which are carried out under the supervision of the Director of Surveys, are plotted from the surveyor’s field notes and shall show the directions and lengths of the boundaries, the nature and positions of the monuments and the areas of the parcels laid out. The following exception should be noted:

**Subdivision Plans within Unsurveyed Territory**

§5.49 Over the past thirty years or more a number of plans located within unsurveyed territory have been approved by the Director of Surveys, but not confirmed. To accommodate these exceptions the following decisions were made:

a. Even though these plans were not “confirmed” by the Director of Surveys they would retain the same status as a settlement survey. New township plans of the area would have to indicate these subdivision boundaries and acreages adjusted accordingly.

b. Surveys affecting both unsurveyed and surveyed territory on the same plan would be classed as either a subdivision or settlement for the relevant portions.

c. Public work surveys (roads, airports, gravel pits, etc.) and parcel surveys for right of way purposes (microwave sites, pump stations, etc.) would not be defined as official surveys requiring confirmation of the Director of Surveys. These plans would not offset new township plans as far as boundaries and acreages are concerned.

§5.50 The confirmation of a plan of Public Lands surveyed under Part 2 of the Surveys Act shall be held to be a confirmation of the survey and the confirmed plan is the official plan.
Provisions for Resurveys

Resurvey of Public Land

§5.51 Land that is the property of the Crown and respecting which there are no adverse interests may be resurveyed when necessary. The boundary or boundaries of such land is considered resurveyed subject to the issuance of a new official plan confirmed by the Director of Surveys, one copy of which shall be filed with the Registrar of Land Titles after confirmation.

Resurvey of Métis Patented Land

§5.52 Métis patented land may be resurveyed when necessary if (a) the Métis title to the land is in the name of the Settlement Council, (b) the Settlement Council approves the resurvey and (c) there are no adverse interests.

§5.53 A boundary of such Métis patented land may be considered resurveyed after a new official plan has been confirmed by the Director of Surveys and a copy filed with the Registrar of Land Titles Office.

Resurvey of Land in a Municipality

§5.54 The council of a municipality may, on application of 50 percent of the registered owners of the parcels of land to be affected, or without an application, pass a resolution that it is desirable to resurvey and place monuments at the corners of parcels surveyed in accordance with Section 29 (Survey of Public Lands) or Section 32 (Survey of Métis patented land in unsurveyed territory).

§5.55 On receipt of the resolution the Minister may direct the Director of Surveys, or a surveyor appointed by the Director of Surveys, to resurvey the land in question and to place monuments of a style approved by the Minister for the purpose at the corners of the land.

§5.56 Prior to commencing the survey, the Director of Surveys shall publish a notice of it in one issue of the Alberta Gazette and one each week for two consecutive weeks in a newspaper that circulates in the neighbourhood of the land to be resurveyed.

§5.57 Any person who claims to know the position of any of the survey monuments defining the land to be resurveyed or who claims to be in possession of information whereby the position of monuments can be established may, before the commencement
of the resurvey, notify the Minister by registered mail of the information in his or her possession.

§5.58 Prior to re-establishing a monument with respect to which a notice has been given, the Director shall, by registered mail or personal service, request the person with such information to appear before the Director at a specified time and place to show the position of the monument, or to produce the evidence in his or her possession with regard to it.

§5.59 The Director or the surveyor appointed by him or her shall commence the resurvey in accordance with the Surveys Act not less than two weeks after the last publication of the notices in the Alberta Gazette and the local newspaper. The resurvey so commenced shall mark the corners of the resurveyed land and the surveyor shall submit to the Minister a plan and other records respecting the survey.

§5.60 On receipt of the plan and other records, the Minister shall publish a notice in the Alberta Gazette and once a week for two consecutive weeks in a newspaper that circulates in the neighbourhood of the land resurveyed. The notice shall specify a day, not less than two weeks from the date of the last publication of the notice, on which the plans and other records will be considered and parties affected by it may be heard.

§5.61 Subject to hearing the parties affected, the Minister may either confirm the resurvey or direct that any amendments or corrections that he or she feels necessary shall be made, and shall confirm the resurvey as amended or corrected.

§5.62 On the confirmation of the resurvey the Director of Surveys shall amend the official plan accordingly and the monuments established by the resurvey shall mark the boundary lines of the resurveyed land for all purposes.

§5.63 The order of the Minister confirming the resurvey is final and conclusive and shall not be questioned in any court, whether or not the monuments marking the original survey are subsequently found or their position proved by other evidence.

§5.64 The Director of Surveys shall, after confirmation by the Minister, file one copy of the plan of resurvey with the Registrar of the Land Titles Office who, upon receiving the plan may make corrections to the Certificates of Title or Registrars to reflect any changes effected by the resurvey.

§5.65 The expenses for the resurvey shall be paid to the Minister by the Municipality on whose resolution the resurvey was made, upon receipt of an invoice from the Minister, which may be issued from time to time during the progress of the survey. The Municipality may pay the expenses out of the general funds in whole or in part, as it considers proper. If the Municipality pays only a part out of the general funds, it may
order that the remainder be placed on the tax roll as an additional tax against the property affected by the resurvey, in proportion to the assessed value of the property as shown on the last assessment roll.

Hudson Bay Reserves, River Lots, Old Trails and Lake Lot Surveys

§5.66 Prior to the coming into effect of the Dominion Lands Survey System (introduced by the Dominion Lands Act of 1872) there were a number of areas which were previously allocated or surveyed before the Dominion Township grid was established. These areas include Hudson Bay Reserves, river lots, old trails and lake lot surveys which, because they were generally established at an earlier date, do not coincide with the township system of quarter sections and grid road allowances. The following is a brief description of each:

Hudson Bay Reserves

§5.67 The Hudson’s Bay Company which, by the original 1670 charter had title to all property in the watershed of Hudson Bay, relinquished title to the Dominion of Canada on July 15, 1870 for a sum of 300,000 pounds, retaining only about one-twentieth of its previous holdings. The retained holdings included lands used or reserved for Hudson’s Bay Company Posts and also Section 8 and all of Section 26 except for the northeast quarter in every township. However, in every fifth township the Company received all of Section 26. In 1873 Deputy Surveyor W. S. Gore, surveying out of Fort Edmonton, surveyed eleven reserves in central Alberta which included St. Paul, Fort Victoria, Lac La Biche, Pigeon Lake, Rocky Mountain House, Old Whitemud Fort, Lac Ste. Anne, Lac La Nonne, Fort Assiniboine, St. Albert and Fort Edmonton. Subsequently, most of these lands were sold by the Company. However, even today subdivisions, road surveys, etc. within these areas still refer to the Hudson Bay Reserve in the title on the plan.

River Lots

§5.68 Areas of the province where settlements along rivers occurred prior to the establishment of the township grid were surveyed into long narrow tracts of land bordering on the river or navigable water course. These lands were surveyed by ascertaining the claims of existing occupants and by making a rough compass survey of their holdings. A baseline was then established from the plan of the compass survey in the area of the improvements and in such a direction so as to be perpendicular to the lot lines. The limits of the lots were marked on the baseline. The rear line was then established and the lot corners marked. The baseline may be offset at various stages to
keep it close to the improvements and deflected where necessary due to changes in the
direction of the water course and in order to keep the lot lines perpendicular. The front
of the lots along the river was then traversed, and to complete the survey, a road was
surveyed across the settlement, giving access to all the lots. Access to the rear of the lots
was provided at distances not greater than two miles. These surveyed river lots were
excepted from the township plan with the survey grid tying to their exterior boundaries
and generally leaving a 66-foot road allowance along same.

Old Trails

§5.69 Prior to and during the establishment of the township grid in Alberta in the
latter part of the nineteenth century there existed a series of old trails which were used
as transportation routes by the settlers, who initially acquired homesteads in the area.
Some of these trails, such as the Edson Trail (Grande Prairie to Edson), the Athabasca
Trail (Fort Saskatchewan to Athabasca) followed a direct route between major centres.
Others followed the general location of the railway lines along which the various towns
were established. The Victoria Trail ran northeasterly from Edmonton to Victoria (now
Pakan) on the north bank of the Saskatchewan River south of Smoky Lake. These trails
were tied in during the survey of the township grid in Alberta and sketched on the initial
township plans. Some of the trails were then surveyed and posted at a later date. For
example, a portion of the Victoria Trail in Townships 55 to 59, Ranges 19 to 22, West
of the 4th Meridian was surveyed in 1906 by A. W. Ponton, D.L.S., and the plan filed
with the Topographical Surveys Branch of the Department of the Interior on July 24,
1907. Subsequently, portions of the survey of these old trails have been abandoned or,
in some cases, have been widened by later surveys until they are part of the major
roadway system of today.

Lake Lot Surveys

§5.70 During the establishment of the township grid in Alberta, certain areas
bordering on lakes where settlement had already occurred could not be surveyed into
the convenient quarter sections due to the existing improvements made by the
occupants. These areas were surveyed into long, narrow lots fronting on the lake shore,
similar to river lots but different because they did not create a plan of their own, but
were incorporated into the existing township plans with the existing exterior
boundaries conforming with section and quarter section lines. These lots were numbered
from Lot 1 upward on each township plan and their legal description, for example,
would be “Lot 20- Township 66 – Range 24 – W4th Meridian”. An example of this type
of lake lot can be found in Township plans 66 and 67 – Range 24 – W4th Meridian on
Baptiste Lake in Alberta.
Defining and Describing the Boundaries of Alberta

§5.71 The boundaries of Alberta were first defined and described in the Alberta Act, S.C., c. 3, in force 1 September, 1905) as follows:

“2. The territory comprised within the following boundaries, that is to say, – commencing at the intersection of the international boundary dividing Canada from the United States of America by the fourth meridian in the system of Dominion Lands Surveys; thence westerly along the said international boundary to the eastern boundary of the province of British Columbia; thence northerly along the said eastern boundary of the province of British Columbia to the northeast corner of the said province; thence easterly along the parallel of the sixtieth degree of north latitude to the fourth meridian in the system of Dominion Lands Surveys as the same may be hereafter defined in accordance with the said system; thence southerly along the said fourth meridian to the point of commencement, is hereby established as a province of the Dominion of Canada, to be called and known as the province of Alberta.”

Canada-United States Boundary

§5.72 The Canada-United States Boundary was defined in Article II of the Convention of 1818 between Great Britain and the United States (signed 20 October, 1818, ratifications exchanged 30 January, 1819) as follows: “It is agreed that a line drawn…. along the forty-ninth parallel of north latitude … shall be the line of demarcation … from the Lake of the Woods to the Stony Mountains.” (Stony Mountains later became Rocky Mountains.)

Boundary Commissions

§5.73 A permanent International Boundary Commission (IBC) was created by Article IV of the Treaty between the United States of America and His Britannic Majesty, in respect of the Dominion of Canada, to define more accurately at certain points and to complete the International Boundary between the United States and Canada and to maintain the demarcation of that boundary (signed 24 February, 1925, ratifications exchanged 17 July, 1925). Boundary commissions are technical bodies created to determine, survey and mark the location of jurisdictional boundaries, such as inter-provincial boundaries, on the ground, and to depict their location on maps or plans of survey. Separate boundary commissions were created to survey and demarcate the east, westerly and north boundaries of Alberta. The south boundary had been surveyed by the international Canada-United States boundary commission. Before 1925, temporary international boundary commissions were created by agreement (treaty, convention)
by Canada (Great Britain) and the United States of America as required to survey parts of the Canada-United States boundary.

§5.74 With the formation of a permanent International Boundary Commission in 1925, the international boundary is jointly maintained by Canada and the United States by conducting retracements, monument replacement, line clearing and the placement of new monuments.

Alberta South Boundary (Canada-United States Boundary)

§5.75 This boundary was determined and surveyed before Alberta was created. It is part of the Canada-United States boundary of the forty-ninth parallel that was first defined in Article II of the Convention between Great Britain and the United States, concluded on 20 October, 1818. Commissioners were appointed in 1872 and the boundary from Lake of the Woods to the Rocky Mountains was located, surveyed and marked on the ground from September 1872 to August 1874. The 24 maps (scale, 2 miles to one inch), and an index map, depicting the boundary as surveyed were approved by the governments on 29 May, 1876. Boundary monuments on the parallel were numbered starting at 1 at Lake of the Woods and going west to number 382 at the summit of the Rocky Mountains.

§5.76 Starting in 1908, the boundary was retraced and restored. The portion that formed the south boundary of Alberta was restored from 1908 to 1910. In 1914, all the boundary monuments were re-numbered starting with 1 at the Gulf of Georgia and continuing to 925 at Lake of the Woods. The southwest corner of Alberta was marked by monument 272. The southeast corner was not monumented in this work; the nearest monument was 393.

Surveying the Parallel of Latitude

§5.77 The procedures for surveying and demarcating a parallel were developed in surveys of the international boundary along the forty-ninth parallel of latitude. In 1876, the International Boundary Commission's procedure had the boundary as the curvature of a parallel of 49 degrees north latitude in the intervals between the monuments along the parallel. Monuments placed by the commission in 1908 followed this procedure. In the 1925 treaty the procedure was changed to make the international boundary a series of right, or straight, lines joining adjacent monuments established or re-established on the boundary. The reasons given for the change were that the straight lines made “any point between adjacent monuments... conveniently ascertainable on the ground.” Also, since the average distance between adjacent monuments along the boundary is about 1.3 miles, the deviation of the curve of the parallel from the straight
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lines joining adjacent monuments is so small (about 0.3 feet, and not greater than 1.8 feet) that it is impracticable to determine the curvature of the parallel on the ground between the adjacent monuments.

Boundary Reservations and Protection

§5.78 Pursuant to the International Boundary Commission Act, R.S.C. 1985, c. I-16, (which came into force 7 July, 1960), no person is allowed to construct, enlarge or place any work within 10 feet of the international boundary. According to the Dominion Lands Survey system, surveys in Alberta required a 66 foot road allowance on the Canadian side of the international boundary. The Province of Alberta has not imposed any specific reservation on land adjoining any of its boundaries, or provided any specific protection for its boundaries.

Inter-Provincial and Provincial-Territorial Boundary Surveys

§5.79 The inter-provincial and provincial-territorial boundary surveys for any boundary line between Alberta and any adjoining province or the Northwest Territories are governed by the Boundary Surveys Act, R.S.A. 2000, c. B-5. Part 1 of the Act gives the responsible Minister, with the approval of the Lieutenant Governor in Council, the right to enter into any arrangement or agreement with the Government of Canada or an adjoining province relating to the survey and demarcation of the boundary line. The Minister may agree to participate in any survey of the boundary line, pay a portion of the costs, provide for re-establishment, restoration and maintenance of survey monuments and other physical evidence of the boundary and to do other things as necessary in connection with the survey demarcation of the line.

Boundary between Alberta and Saskatchewan

§5.80 Part 2 of the Boundary Surveys Act approves and confirms the report of the Inter-Provincial Boundary Commission appointed to complete the necessary surveys to mark the boundary between the provinces of Alberta and Saskatchewan. The plan of survey in the Director of Surveys office for Alberta, and that portion of the boundary between Alberta and Saskatchewan as marked on the ground by the Commission in 1938 is approved, confirmed and declared the true inter-provincial boundary.

§5.81 The Alberta-Saskatchewan boundary as presently defined on the ground is the fourth meridian. Under the authority of the Dominion Lands Act of 1883, it was established that “other initial meridians” (other than the principal meridians) should
be established as nearly as possible 4 degrees in longitude apart, commencing at the
second meridian in longitude 102 degrees. This meant that the fourth meridian should
coincide with the line of longitude 110 degrees or be as close to that line as possible,
given the accuracy they were able to obtain at that time.

§5.82 The Alberta-Saskatchewan boundary is defined as the “fourth meridian in the
system of Dominion Land Surveys” in the Alberta Act and the Saskatchewan Act, both
enacted in 1905. The position of these initial meridians as established by the
Department of the Interior fixed the location of the meridians on the ground and the
monuments marking their positions govern absolutely. Consequently, although the
position of the fourth meridian as ascertained by today's Global Positioning Systems is
somewhat offset from the line of 110 degrees longitude, the monuments as shown on the
approved township and provincial boundary plans and as located on the ground, govern
the position of the inter-provincial boundary.

§5.83 A similar situation that emphasized the primacy of original monuments
occurred in South Australia v. Victoria [1914] A.C. 283. The line between South
Australia and New South Wales was partially surveyed in 1847 on the 141st degree of
east longitude and proclaimed in 1849 by the Governor of New South Wales to be the
boundary. In 1850 the portion of New South Wales lying south of the Murray River was
established as the Colony of Victoria. In that same year the boundary was run north to
the Murray River and both governments were satisfied with the work. In the 1860s it
was found that the true meridian was 2¼ miles east of the surveyed boundary and
South Australia claimed it was entitled to shift its boundary 2¼ miles east. The Privy
Council dismissed the appeal of the High Court of Australia and established the
boundary as marked on the ground to be the true boundary between the State of South
Australia and the State of Victoria.

Boundary between Alberta and the Northwest Territories

§5.84 The line between the Slave River and the Little Buffalo River, as surveyed by
the Department of the Interior in 1924 and 1925, and the line surveyed and demarcated
between 1950 and 1954 by the Alberta-Northwest Territories Boundary Commission,
and both shown on the 20 map sheets entitled “Alberta and the Northwest Territories
Boundary”, signed by the Commissioners and a copy deposited in the Director of
Surveys of Alberta, are consented to be declared by the Parliament of Canada the
boundary line between Alberta and the Northwest Territories, whether or not this
increases, diminishes or otherwise alters the territory of Alberta.
Boundary between Alberta and British Columbia

§5.85 The Lieutenant Governor in Council may appoint a boundary commissioner who has the power and duty, in cooperation with a similar commissioner from the Government of British Columbia and from the Government of Canada to carry out any agreement entered into under Part 1 of the Boundary Surveys Act and, subject to the approval of the Lieutenant Governor in Council, to enter into an agreement with the Government of British Columbia to provide for the conversion of all or part of the sinuous boundary line (meaning those portions of the boundary along the natural line of watersheds that are indicated on the map sheets by a series of broken lines) to a conventional boundary line (a boundary marked on the ground by survey monuments and shown on map sheets by a series of straight lines). The boundary commissioners may also locate the position of a sinuous boundary line on the ground and amend its depiction on the map sheets, settle disputes referred to them respecting the location of the boundary, establish, restore and maintain the boundary monuments and do all acts necessary to the functions of a boundary commissioner. Problems or disputes respecting the location of the boundary on the ground in relation to a sinuous boundary are referred to the boundary commissioners who may, if a majority agree, have that portion of the sinuous boundary surveyed and marked by survey monuments and have revised maps prepared to show the line so established. The commissioners may, if they unanimously agree, have a portion of the sinuous boundary line marked on the ground by survey monuments and maps of revision prepared, even though there are no problems or disputes.

Boundary Uncertainty

§5.86 Part 2 section 9 of the Surveys Act provides the Minister responsible for the Surveys Act in Alberta to appoint a board to investigate alleged survey errors when these errors are brought to his attention. This provision confers on the board the powers and duties to make necessary changes to official plans which also, by implication, include adjustment of boundaries upon completion of their investigation. The board has the authority to order the change of any descriptions, registers, certificates of title or plans of survey in a Land Titles Office or the Métis Settlements Land Registry necessary to reflect the true position of monuments or boundaries, or the accuracy of any plan dimensions or areas.
Alberta Coordinate System

ATS Coordinate System

§5.87 In 1977, the Alberta Cabinet approved the ATS (Alberta Township System) Program. The program consisted of performing field measurements and computing coordinates for township, section and quarter section corners. The computed coordinates are stored in the ATS coordinate file. The ATS coordinate file is a digital file containing geographical coordinates for every governing quarter section corner in Alberta. The following is a brief description of the different ATS coordinate files leading up to the Master ATS file, which was completed in 1995, covering the entire province and currently in use.

1st Generation File

§5.88 This file, completed in 1977, generated theoretical geographical coordinates for all governing corners in the township system. The computations for the file used the township system (Third System of Survey) in Alberta as a mathematical model. Previously published theoretical coordinate data on the northeast of Section 36 in all townships in surveyed territory, as well as the northeast corner of Section 36 on all baselines in unsurveyed territory was used. The model assumed all north-south lines were astronomically north, each quarter section was 40 chains north-south, that each east-west line was a straight line between corresponding points on the township boundary, and any discrepancy between existing coordinates on township corners would be proportioned equally throughout.

2nd Generation Coordinate File

§5.89 This upgraded file was completed in 1991 with the main objective of improving the accuracy of the coordinates. This was carried out by RDD (Resource Data Division) which gathered field data to connect the Alberta Township System to the Alberta Survey Control System. Based on these field ties, the coordinates for all township corners in Alberta were recomputed. The coordinates for section corners within surveyed territory were then recomputed using the information on the official township plans.
3rd Generation Coordinate File

§5.90 On January 1, 1991, RDD received funding to commence the Parcel Mapping Program. The scope of this program was to compile in digital graphic format every plan of survey registered in the two Alberta Land Titles Offices. As some of the coordinates generated in the 2nd Generation Coordinate file do not actually reflect the position of the monuments on the ground, these secondary plans of survey were used to make improvements to the coordinates where significant differences occurred. A significant change in coordinate positions is not expected in unsurveyed territory.

Master Coordinate File

§5.91 Computational methodology and accuracy of the Master Coordinate file is identical to 3rd Generation, except that it is referenced to NAD83. All previous versions of the Master Coordinate file were referenced to NAD27. The Master ATS Coordinate file is compatible with the Parcel Mapping Digital Bases and not necessarily with the 1:20,000 Provincial Digital Bases, as was the previously published version. The Master ATS file contains upgraded coordinates for the entire province and these were updated through, for example, the Parcel Mapping Maintenance Program. These are the most up to date and accurate values available and only small scale revisions are anticipated in the future. The ATS Coordinate file is used by oil, gas ad utility companies. These companies use the data in conjunction with coordinates for pre-calculating survey evidence and, in some cases, for re-establishing lost survey monuments which were tied directly to Alberta Survey Control. The ATS Coordinate file is available to the public in different file formats, but generally shows geographical coordinates (latitude and longitude in degrees and decimals thereof, or in degrees, minutes and seconds) and 3TM or UTM or 10TM coordinates (northing and easting). A brief description of these coordinate systems follows:

3TM

§5.92 The 3TM (Three-degree Transverse Mercator Projection) mapping plane has a zone width of 3 degrees with central meridians in Alberta of 111º, 114º, 117º and 120º. The scale factor at the central meridian is 0.9999 and there is no false easting or false northing of the two mapping planes used for ASCMs. The 3TM mapping plane is typically used for all municipalities that previously comprised the 73 Municipal Integrated Surveying and Mapping (MISAM) areas, referred to as Urban Cadastral Map Areas.
§5.93 The UTM (Universal Transverse Mercator Projection) mapping plane has a zone width of 6 degrees, with central meridians in Alberta of 111° (Zone 12) and 117° (Zone 11). The scale factor at the central meridian is 0.9996. There is a false easting of 500,000 m and no false northing. The UTM mapping plane used for ASCMs is typically used for all other municipalities and non-urban areas, referred to as Rural Cadastral Map Areas.

§5.94 The 10TM (Ten-degree Transverse Mercator Projection) has a zone width of 10°, with a central meridian at 115° west longitude. The scale factor at the central meridian is 0.9992. There is a false easting of 500,000 m and no false northing. At present there are two versions of the 10TM—one with a false easting of zero and one with a false easting of 500,000 m. There is no false northing. The 10TM mapping plane is used basically for mapping, as the zone width of 10 degrees covers the entire province of Alberta under a single zone.

Acknowledgment

The author expresses his thanks to Peter Sullivan, International Boundary Commissioner, for providing information relating to the Canada-United States boundary and the International Boundary Commission.

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Métis Settlements Surveys

Introduction

§5.95 This section discusses Métis settlement surveys. The reader should also refer to the section “Métis Settlements Lands Registry” in Chapter 4.

§5.96 Under the Métis government regime in Alberta there is a Métis Settlements General Council which has the authority to enact policies affecting the collective interest of the Métis settlements. There are eight Métis settlements: Paddle Prairie, Gift Lake, Peavine, East Prairie, Buffalo Lake, Kikino, Elizabeth and Fishing Lake. Each settlement has a settlement council made up of five councillors elected from the settlement membership.

§5.97 In order to discuss Métis settlement surveys some understanding of the various interests in Métis settlement lands is required. The Métis Settlements Land Protection Act 1990 c. M-14 ratified and confirmed the letters patent granting land, held in fee simple, to the General Council. Interests in this land flow to the settlement councils and to settlement members. The Métis Settlements General Council Land Policy provides a framework for the ownership and management of interests in settlement lands. Métis Title gives settlement members an exclusive interest in settlement lands, Provisional Métis Title gives the right to use the land and make improvements to the extent needed to obtain a Métis Title and an Allotment gives a right to operate a farm, ranch, or business. The Land Policy also provides for road titles and deals with leases, covenants, licences, easements, utility right-of-way and rights of removal. The Métis Settlements General Council Mineral Projects Policy addresses land interests for projects for finding and removing minerals.

Official Surveys

§5.98 The Surveys Act, RSA 2000, c. S-26 applies to land in Alberta that is within the jurisdiction of the provincial legislature and this includes Métis patented land. Under section 31(1) of the Act, an official plan of Métis patented land is required before Métis Title, Provisional Métis Title, or an Allotment in Métis Settlement patented land may be granted or transferred to a member of a Métis settlement or recorded in the Métis Settlements Land Registry. Some settlements may have been already subdivided, or partly subdivided, by official survey when the settlement was established. However, if
the land, in which the title is required, is in unsurveyed territory an official plan is required.

§5.99 There is no requirement that the land be subdivided into the Alberta Township System of Survey. The Surveys Act gives the settlement council the authority to determine the system of survey to be used for unsubdivided land. Section 32(2) states that the council shall direct that the land be surveyed in the Alberta Township System of Survey or in lots of a size and shape and with an allowance for roads that the council considers advisable.

§5.100 For Métis settlement lands the Surveys Act also includes special provisions for survey error investigation in section 9, and the re-surveying of surveyed land in section 35. The major difference from provisions for public lands is who is to be notified. In the case of re-surveys the settlement council is required to approve the re-survey.

**Descriptive Plans**

§5.101 Once the land has been surveyed under the Surveys Act, subsequent subdivisions for Métis Title, Provisional Métis Title, or an Allotment may be defined by descriptive plan under the Métis Settlements Land Registry Regulation AR 361/91. As can be seen from sections 87 (1) and (2) of the regulation the Registrar has considerable discretion regarding the requirements for descriptive plans.

87(1) The Registrar is not required to file a descriptive plan prepared under this Regulation or the Métis Settlements Subdivision Regulation (Alta. Reg. 363/91) unless the requirements of this section are met.

(2) A descriptive plan must

(a) be styled as a descriptive plan;

(b) be prepared in a manner and on a medium or material that is satisfactory to the Registrar;

(c) contain sufficient detail so that, in the opinion of the Registrar, the boundaries of the parcel for the relevant interests can be ascertained from the plan;

(d) be signed by the person who prepared the plan.

§5.102 In practice, descriptive plans are usually prepared by technical personnel of the Métis Land Registry from information provided by settlement staff.
Surveys for Roads

§5.103 Section 2.7 of the Métis Settlements General Council Land Policy 1992 deals with road titles. Road title for roads over which the settlement council has the right of direction, control and management can be created by filing a plan with the Registrar. When the plan is filed, Métis title on that land is terminated.

Surveys for Other Interests

§5.104 The requirement for surveys for road titles, leases, licences, easements, utility right-of-way or rights of removal appears to be at the discretion of the Registrar. See section 83 (1) of the Métis Settlements Land Registry Regulation. Generally the Registrar accepts plans, including those for oil and gas surveys that are carried out in accordance with the practice for public lands in Alberta.

§5.105 Survey information is also available in Part E, Appendices, Section 6 of the Alberta Land Surveyors’ Association (ALSA) Manual of Standard Practice (MSP). In particular, one should note that all plans of survey in settlement lands must be filed with the Métis Settlements Lands Registry.

Subdivision of Settlement Lands

§5.106 The Métis Settlements Subdivision Regulation provides for the subdivision of Settlement lands. Its purpose is to establish a process and authority that will enable the Registrar to register an interest in a portion of a parcel of land or to create two or more Métis titles for a subdivided parcel. It provides for the holder of the Métis Title interest to apply to the subdivision approving authority, which is the settlement council, for approval. It also provides for the imposition of conditions on the subdivision of land and for the right to appeal.

§5.107 There is no requirement to conform to the provisions of the Subdivision and Development Regulation under the Municipal Government Act. Section 618(2) of the Municipal Government Act, RSA 2000 c.M-26 states that the regulations do not apply to the geographic area of a Métis Settlement.

Acknowledgments

§5.108 The author would like to thank Ron Raitz, Registrar, Métis Settlements Lands Registry and Terry Wywal, Geomatics Technician, Alberta Aboriginal Affairs and Northern Development who reviewed and provided comments on this section, Métis Settlement Surveys.
Canada Lands Surveys

Introduction

§5.109 “Canada Lands” as defined in section 24(1) of the Canada Lands Surveys Act, RSC 1985, c. L-6, means any lands belonging to Her Majesty in right of Canada or of which the Government of Canada has power to dispose that are situated in Yukon, the Northwest Territories, Nunavut or in any National Park of Canada and any lands that are surrendered lands or a reserve, as defined in the Indian Act. The definition includes lands covered by several First Nation self-government Acts (none of which apply in Alberta) and lands under water belonging to Her Majesty in right of Canada or in respect of any rights in which the Government of Canada has power to dispose.

§5.110 Throughout this part, the term “First Nation” is used instead of “Indian Band” (or “Tribe”), except where Indian is used in a legal context or where Indian is part of an official title: For example; Indian Act, Indian Lands Registry, Indian Reserve, etc.

§5.111 In addition to Canada Lands as defined above, the federal government has administration and control of other lands in the province of Alberta. These include federal office buildings, airports, national historic sites, land for the Department of National Defence, etc. These lands are usually held under Certificate of Title. As well, the federal government may have certain management responsibilities for, or interests in, other lands such as bird sanctuaries and heritage areas. There is a general power to survey, under section 47(1) of the Canada Lands Surveys Act, any lands belonging to Her Majesty in right of Canada or of which the Government of Canada has power to dispose. Normally this section is not used and any required surveys are carried out under provincial acts and regulations.

§5.112 There is no direct relationship between Canada Lands and the Canada Lands Company Limited, which is a Crown corporation that purchases surplus properties from the federal government and then improves, manages or sells them.

§5.113 The focus of this part is Canada Lands Surveys for Indian Reserves and for National Parks in Alberta.

Management of Canada Lands Surveys

§5.114 The Surveyor General of Canada Lands has the management of surveys made under the authority of section 3(2) of the Canada Lands Surveys Act. For Canada Lands Surveys in Alberta the contact is: Alberta Client Liaison Unit, Canada Centre for
Cadastral Management (formerly known as Legal Surveys Division), Natural Resources Canada. This office is located in Edmonton.

§5.115 In 1999, Canada Lands Surveyors were granted self-regulation when the Canada Lands Surveyors Act, SC 1998, c. 14 came into force. Under the Act, Canada Lands Surveyors are licensed to engage in cadastral surveying and other disciplines of surveying on Canada Lands by the Association of Canada Lands Surveyors. Companies and partnerships must also hold a permit issued by the Association.

§5.116 Where surveys of Canada Lands in a province affect or are likely to affect the rights of landowners of adjoining lands that are not Canada Lands, section 26(2) of the Canada Lands Surveys Act requires that the surveys shall be made by a surveyor of the province in which those surveys are made:

**Official Surveys**

§5.117 An official survey is a survey of Canada Lands for which a plan is confirmed under Part II or Part III of the Canada Lands Surveys Act. Part II deals with Surveys of Canada Lands, which include Indian Reserves and National Parks. Part III is not applicable to Alberta as it deals with surveys of Territorial Lands which are lands situated in the Yukon, the Northwest Territories or Nunavut.

§5.118 There are several types of surveys, other than official surveys, that are carried out on Canada Lands in Alberta under the Canada Lands Surveys Act. They will be discussed under the following topics, Indian Reserves or National Parks, as they usually are applied in one or the other of those jurisdictions.

§5.119 The Canada Lands Surveys Act is quite clear in describing the process and the effect of confirmation under the Act both for original plans and resurveys:

**Plans**

s. 28 (3) The Surveyor General shall indicate his confirmation on the plans, if he is satisfied that the survey has been carried out in conformity with this Act and that the survey and plans are satisfactory to the minister of the department of the Government of Canada or the Commissioner administering the Canada Lands in respect of which the survey was made.

s. 28 (4) On confirmation by the Surveyor General, the plans shall be deemed to be official plans under this Act.

**Resurveys**

s. 33. (1) Canada Lands may be resurveyed under this Part
for the purposes of correcting errors or supposed errors or re-establishing lost monuments; or

(b) at the request of the member of Her Majesty's Privy Council for Canada or the Commissioner charged with administering the Canada Lands in respect of which the resurvey is to be made.

s. 33 (2) Plans of Canada Lands that are resurveyed shall be dealt with in accordance with this Part and shall, after confirmation thereof by the Surveyor General, be deemed to be the official plans under this Act of the lands thereby affected and shall be substituted for all, or corresponding portions of all, former official plans of the lands thereby affected.

§5.120 The first time that the word “confirmation” appeared in legislation applying to lands that were to become the province of Alberta was in the Dominion Lands Act, SC 1872, c. 23. Section 21 stated that, for lands to be transferred to the Hudson’s Bay Company, the company shall be notified when the survey was confirmed. For other lands, section 29 stated that the land could be purchased when the survey was confirmed.

§5.121 The 1908 Dominion Lands Surveys Act was more specific in that it outlined requirements for and the effect of confirmation. The Act also provided, for the first time, that the owner of land granted under letters patent must give his consent to a resurvey of the land, unless the error exceeded five chains. It also provided for a resurvey upon receipt of a petition by the owners of lands where the monuments had disappeared. Part III of the current Canada Lands Surveys Act has a somewhat similar process for territorial lands. The survey is called a special survey and each person who has an interest in land affected by the special survey and plan may have input.

§5.122 Resurveys of lands in Indian Reserves and National Parks may also be carried out for the purposes of correcting errors or re-establishing lost monuments. However, there is no public consultative process, most likely because there is no private ownership.

§5.123 Whether or not an official survey is required depends on the type of land transaction for which the plan will be used. The types of land transactions requiring official surveys are outlined in interdepartmental agreements between the Surveyor General and the government departments having administration and control of the land.

§5.124 Standards for official surveys are in Part D1 of the General Instructions for Surveys, e-Edition (CLS Manual) [Website 1]. For official surveys of Canada Lands in Alberta, specific survey instructions must also be obtained from the Alberta Client Liaison Unit.
§5.125 If the boundary of the Canada Lands being surveyed or resurveyed is common to provincial lands then all applicable provincial laws and regulations pertaining to surveys must also be followed. If there is any conflict between federal and provincial survey requirements the regional office of Canada Centre for Cadastral Management is consulted. Generally the requirements leading to the higher standard of survey are used.

Indian Reserves

Historical Background

§5.126 The survey of Indian Reserves in Alberta began after the signing of the Treaties Six, Seven and Eight. The first Treaty, Treaty Six, was signed at Fort Carlton and Fort Pitt in 1876, and Treaty Seven was signed at Blackfoot Crossing in 1877 [Morris 1880: 351]. Treaty Eight was signed at Lesser Slave Lake in 1899 [Canada 1912: 293].

§5.127 The Indian Act, SC 1876 c.18 defined the system of “reserves” to be set aside for the members of “bands” who adhered to a treaty. Section 6 defined the term “reserve” as follows:

6. The term “reserve” means any tract or tracts of land set apart by treaty or otherwise for the use and benefit of or granted to a particular band of Indians, of which the legal title is in the Crown, but which is unsurrendered, and includes all the trees, wood, timber, soil, stone, minerals, metals or other valuables therein.

§5.128 In 1873 when the Department of the Interior was created it included responsibility for Indian Affairs. In May 1880, the Indian Affairs Branch of the Department of the Interior became a separate government department and responsibility for Indian Reserve surveys was transferred to that department [Property Rights 1990:7-12]. In 1936, the Department of Indian Affairs was made a branch of the Department of Mines and Resources. Although the Indian Affairs Branch was transferred to the Department of Citizenship and Immigration in 1949 [Website 2] responsibility for Indian Reserves surveys stayed, including the custody of the Indian Affairs Survey Records which became incorporated in the Canada Lands Survey Records. After a number of name changes, in 1994 the Department of Energy, Mines and Resources became the Department of Natural Resources, often referred to as Natural Resources Canada (NRC).
§5.129 Several reserves in Alberta were surveyed in the 1880s, particularly in the areas covered by Treaties Six and Seven. This was in the part of the prairies that was being subdivided under the Dominion Lands Survey System for settlement.

§5.130 In the early 1900s, in particular, some reserves or parts of reserves were surrendered. Some of the reasons for surrender included changes in reserve population, pressure from settlers for additional land and the realization of financial compensation by bands for the land. Surveyors of the Department of Indian Affairs subdivided the surrendered portions into sections and quarter sections, so that the land could be sold.

§5.131 The survey of reserves under the treaties continued into the 20th century. In the 1970s, the federal government made a serious effort to settle remaining treaty obligations by renewing negotiations with the provinces and First Nations to establish additional reserve land that was still owed to the bands. This work, including the surveying of reserves or additions to reserves, is only now nearing completion in Alberta.

Indian Reserves and their Boundaries

Background

§5.132 All reserves in Alberta have been set aside for the use and benefit of an Indian band by federal orders-in-council. This is not necessarily the case in some other provincial jurisdictions in Canada where some reserves were created by various other methods, including grants, treaties and legislation.

§5.133 The unique nature of rights pertaining to Indians and to Indian lands relate back to the Royal Proclamation of 1763. There has been very little case law regarding surveys and/or boundaries for Indian Reserves in the Prairie Provinces. Because of the historical development of the Indian Reserve system in the prairies, case law from other provinces and also from the United States is useful for reference; however, it cannot be assumed to apply to Alberta Indian Reserves.

Indian Reserve Boundaries and the Surrounding Township System

§5.134 The relationship of reserve boundaries to the township system surrounding the reserve depends on whether or not the township system had been previously surveyed when the reserve boundaries were surveyed.

§5.135 Many of the early reserves were surveyed before the township system was in place. Alexander IR #134 and Alexis IR #133, which were surveyed in 1880, and Driftpile River IR #150, which was surveyed in 1901, are examples. Later on, when
townships adjoining the reserves were surveyed, surveyors were instructed to leave a road allowance on the boundaries of all Indian Reserves. See the *Manual of Dominion Land Surveys* 1883, paragraph 41 [Website 3]. Other reserves were also surveyed before the township system was in place but after certain key lines had been run, such as base lines or township outlines. This enabled some of the boundaries to be coincident with surveyed lines of the township system.

§5.136 As a general rule, no lines were to be run in Indian Reserves. This no doubt stemmed from First Nations’ concern that internal subdivisions would lead to the sale of their land. The Manual showing the System of Survey of the Dominion Lands 1892, paragraph 52, specified that if it was necessary to cross an Indian Reserve, when surveying a base line or other important governing line, no posts were to be planted nor permanent marks of any kind left within the boundaries of the Reserve [Website 3].

§5.137 Some reserves, such as Beaver Lake IR #131 and Heart Lake IR #167, surveyed in 1908 and 1913 respectively, were set aside as sections of land with no mention of the intervening road allowances. It has been the opinion of First Nations having such reserves that the road allowances were intended to be included. However, at least in Alberta, the description has been taken literally and the road allowances are generally considered by the provincial government to be under its administration and control.

§5.138 In all cases it is important to review the orders-in-council establishing the reserves and the survey plans referred to therein.

**Interior Township Surveys**

§5.139 Initially, First Nations were reluctant to have the interior of their reserves subdivided into the township system. However, as time went on some interior township subdivisions were carried out for agricultural purposes and later on in the 1950s for oil and gas. They were most often laid out by any practical method that yielded sections and quarter sections. As a result, the subdivision lines were seldom laid out strictly in accordance with the DLS Third System of survey and did not necessarily mesh with existing township surveys around the perimeter of the reserves. It is therefore necessary when doing survey work along exterior boundaries of reserves to obtain plans and field notes for both the reserve side and the provincial side of the boundary and not to project township survey lines across reserve boundaries.

**Monumentation**

§5.140 Requirements for the monumentation of reserve boundaries differed depending on the time when the surveys were carried out. After the Department of
Indian Affairs became a separate department and took over responsibility for Indian reserve surveys in 1883, it issued a set of general instructions. According to these general instructions, the corners of Indian Reserves were to be marked by squared wooden posts and a mound of stone or earth 18 inches high around it [Website 4]. Later on, it was decided to enhance the monuments at the corners of all reserves by placing 2\" square, 3' 6" long, solid iron posts at each corner. Unfortunately, there is no comprehensive record of monumentation requirements for the early years. Furthermore, surveyors did not always follow the instructions; often they upgraded the monumentation or used the monuments prescribed for the township system. This should not cause a problem for surveyors doing resurvey work as the field notes for the original surveys usually describe the type of post used. In cases of doubt, the surveyor can often tell what type of post was used by finding undisturbed monuments for the same survey.

*Ad medium filum aquae (to the middle thread of the stream)*

§5.141 One area of contention of some First Nations in Alberta with regard to Indian Reserve boundaries is whether the control and administration of the beds of rivers and streams forming the boundaries of Indian Reserves is with the provincial government or with Canada (and thus for the use and benefit of the First Nation).

§5.142 Legislation such as the *Northwest Irrigation Act*, SC 1894, c.30, which reserved beds and shore of bodies of water from Crown grants, along with subsequent similar federal and provincial legislation, clarified the ownership of beds and shore of bodies of water for public and private lands. However, the ownership with regard to Indian Reserves is not so clear. There remains an opinion that certain presumptions under English common law, such as the *ad medium filum aquae* rule, should apply to river boundaries of reserves.

§5.143 In 1986 the Peigan Indian Band started an action against Her Majesty the Queen in right of Alberta. They asked for a declaration that the Band has the rights to the water and the underlying land for the portion of the river that is located within the reserve; *Yellowhorn v. The Queen*, 1998 ca.ab.qb. Later on, the Blood Indian Tribe also claimed riparian rights and the related ownership of bank and beds, including the use of water associated with the Belly and St. Mary’s Rivers; *Shade v. The Queen*, 2001 FCT 1067. To date, only technical and procedural matters have been addressed in the courts. The main issue regarding rights to the water and the underlying land has not been resolved.

§5.144 It is uncertain how long it will take for these matters to be decided. In the meantime, one must be careful not to assume that the law relating to the ownership of beds and shores of bodies of water applicable to public lands or private lands in Alberta,
including provisions in early statutes and in particular those that came into force after the reserves were set aside, also applies to reserve lands.

§5.145  A source for further information on this subject is *Aboriginal Water Rights in Canada: A Study of Aboriginal Title to Water and Indian Water Rights* [Bartlett 1988].

**Land Interests**

*Certificates of Possession*

§5.146 Individual First Nation members hold rights to land by Certificate of Possession granted under the *Indian Act*.

§5.147 Not all First Nations choose to allot land to their members by Certificates of Possession, which are registered in the Indian Lands Registry. Some First Nations, particularly in the prairies, have never granted or seldom grant Certificates of Possession to individual members. However, they may still allocate individual land rights. Customary allocation, as it is often called, may be given by a First Nation Resolution and will generally include a description of the land based on the township system, a survey, a sketch or a metes and bounds description. This type of allocation does not give any legal rights under the *Indian Act* and it is not normally registered in the Indian Lands Registry. For some First Nations, customary allocation may be simply an unwritten informal recognition by the First Nation that an individual has a right to the peaceful use and occupation of a general area of land.

*Leases, Permits and Agreements*

§5.148 The *Indian Act*, RSC 1985, c.I-5 contains provisions for issuing leases under sections 58, for permits under section 28 (2) and for taking land for schools, roads, churches, etc. for the general welfare of the First Nation under section 18(2). These are registered in the Indian Lands Registry.

§5.149 Some First Nations and/or individual band members may make agreements with third parties to use First Nation lands for farming or other purposes which are not processed under the *Indian Act* and are not registered in the Indian Lands Registry.

*Surrenders and Designations*

§5.150 By a surrender process pursuant to subsection 38(1) of the *Indian Act*, a First Nation may surrender absolutely all its rights in land to the federal government. The surrender may be unconditional or conditional and, so long as it is within the terms of the surrender, the rights in the land may be transferred to a provincial government by
order-in-council or granted to a private individual or company by issue of letters patent or otherwise dealt with.

§5.151 Instead of surrendering their land, most First Nations nowadays prefer to use the designation (formerly known as conditional surrender) provision of the Indian Act. In accordance with subsection 38(2), an Indian Band may by designation release its right or interest in any part of the reserve land to the federal government for the purpose of lease or granting of an interest in the land. The federal government is then obligated to lease or dispose of the interest in the designated lands for the benefit of the band.

§5.152 Section 35 of the Act provides for land or any interest in land to be taken for public purposes under expropriation legislation. It is seldom, however, that this provision would be used without the First Nation’s agreement.

Indian Lands Registry

§5.153 The Department of Indian Affairs and Northern Development maintains an Indian Lands Registry to record all interests acquired or granted under the Indian Act. The Department also maintains a First Nation Lands Registry System for First Nations that have management of their reserve lands under the First Nations Land Management Act [Website 5].

Interdepartmental Agreement

§5.154 Schedule A of the 2003 Interdepartmental Agreement between the Department of Indian Affairs and Northern Development and Natural Resources Canada regarding Land Transactions on Reserve Lands outlines the various types of land interests and dispositions in land on Indian Reserves and the type of survey or plan to be used for each type of interest or disposition [Website 6].

§5.155 The Agreement does not apply to First Nations who under self-government legislation may use land registries other than the Indian Lands Registry System, the First Nation Lands Registry System, or to dispositions made pursuant to the Indian Oil and Gas Regulations.

Mines and Minerals

§5.156 Some provinces, such as New Brunswick and Nova Scotia, retained mines and minerals when reserve lands were transferred to Canada [London 1991:242]. This was also the case in British Columbia. However it did not apply to reserves on the prairies where, at least with respect to the earlier reserves, Her Majesty in right of Canada held
the lands when they were set aside as reserves and there were no noted reservations with regard to mines and minerals. It is less certain with regard to precious metals (gold and silver) for reserves on the prairies. Precious metals are a prerogative right of the Crown and are not transferred within the property unless expressly included. The definition of reserve in the *Indian Act*, SC 1876 c.18 appears to include precious metals. Also of interest is that under the *Dominion Lands Act*, SC 1872, c. 23, patents from the Crown were not to exclude gold, silver, iron, copper or other mines and minerals. One should not necessarily equate issuance of patents under the *Dominion Lands Act* to that of setting aside Indian Reserves; however, it could be inferred from it that there was no reason to exclude precious metals from the lands set aside as reserves.

§5.157 Rights relating to the development of oil and gas on Indian Reserves and the associated surface rights required for this development are issued and administered by Indian Oil and Gas Canada. The rights are issued in accordance with the *Indian Oil and Gas Regulations* 1995, under the *Indian Oil and Gas Act*. Under section 4 of the Regulations provincial laws that are applicable to oil and gas exploration, development, etc. on provincial lands also apply to such development on Indian Reserves, provided they are not in conflict with the *Indian Oil and Gas Act* or its Regulations.

§5.158 For exclusive right to use or occupy the surface of the lands, a surface lease is obtained under 27(1)(a) of the Regulations. If the operations require an easement in, or a right to cross over, the lands, a right-of-way is obtained under 27(1)(b).

§5.159 The *Indian Mining Regulations* under the *Indian Act* provide for the disposition of surrendered minerals underlying lands in Indian Reserves. A survey of a lease for mineral rights may be required under sections 21, 22.

Summary

§5.160 This description of the land interests affecting Indian Reserves is only briefly discussed here. Those wishing more information should refer to the *Indian Act* and the 2003 Interdepartmental Agreement. In addition, the Indian Lands Registry maintains an Indian Land Registration Manual which is available on-line. [Website 7]

Legal Surveys for Indian Reserves

General

§5.161 Part D of the *CLS Manual* includes general instructions for a variety of surveys and related products and services that are or could be used on Indian Reserves.
These include official surveys, explanatory plans, strata surveys, condominium surveys, registration plans, Indian oil and gas surveys, boundary monitoring, boundary maintenance, base mapping, land descriptions, survey reports and as-built surveys.

§5.162 The type of survey or plan to be used for each type of interest or disposition to be registered in the Indian Lands Registry is specified in the 2003 Interdepartmental Agreement. Only official plans and registration plans (with or without a field survey) are included in the Interdepartmental Agreement. These are discussed below.

Official Surveys

§5.163 Under the 2003 Interdepartmental Agreement, official plans are required for: additions to reserves; resurveys of boundaries common to the province; sales or transfers of administration and control and for land taken for public purposes such as highways.

§5.164 For additions to reserves, a plan of survey prepared under provincial legislation may be used if the land was surveyed and the plan prepared to a standard similar to that required by the Canada Lands Surveys Act.

§5.165 Standards for official surveys are in Part D1 of the CLS Manual. For official surveys of Canada Lands in Alberta specific survey instructions must also be obtained from the Alberta Client Liaison Unit.

Registration Plans

§5.166 Under the 2003 Interdepartmental Agreement, registration plans are required for surrender or designation votes, easements, lawful possession, leases and permits. As a general rule, registration plans are used for all new internal subdivisions or other surveys related to internal interests in a reserve.

§5.167 Standards for registration plans are in Part D5 of the CLS Manual and in Schedule A, Section B of the 2003 Interdepartmental Agreement. Specific survey instructions are required.

Oil and Gas Surveys

§5.168 Most survey requirements for oil and gas on Indian Reserves in Alberta are for surface rights required to obtain access to the land and for pipelines and related facilities required for the exploitation of the oil and gas. Insofar as possible, provincial provisions regarding oil and gas survey-related matters are applied to Indian Reserves. For example, the provisions regarding spacing units are the same as they are on provincial
lands, and the Alberta Energy and Utilities Board (EUB) issues a licence to drill on reserve lands as it does on provincial lands.

§5.169 Before commencing a survey for oil and gas rights, pipeline, or other facility on a reserve, the surveyor must determine whether the surface rights are being disposed of under the *Indian Oil and Gas Regulations 1995*, s. 27 or under the *Indian Act*. In general, the *Indian Oil and Gas Regulations* apply to surface rights for wellsites and other facilities related to drilling and production operations, such as tanks, flow lines and access roads where the facility services resource development in a reserve. If the pipeline or other facility crosses a reserve and does not service development on the reserve, then rights are granted under the *Indian Act* and specific survey instructions are required.

§5.170 Surveys for surface rights disposed of under the *Indian Oil and Gas Regulations* are carried out in accordance with the provisions of Part D6 of the CLS Manual. Specific survey instructions are not required for these surveys; however, the surveyor must obtain authorization from the First Nation Council and any other party that may be affected by the survey.

_Treaty Land Entitlement Surveys_

§5.171 Although First Nations in Alberta may have several types of land claims, Treaty Land Entitlement (TLE) has been the most significant by far. TLE refers to the entitlement to land that First Nations have under the treaties. While most First Nations in Alberta received their full entitlement in the late nineteenth century and early twentieth century, many did not. Under the *Natural Resources Transfer Agreement* of 1930, Alberta is obliged to transfer provincial Crown land to the federal government to fulfill outstanding land obligations. The process involves Alberta transferring provincial land to Canada by order-in-council. Canada accepts the land and by order-in-council sets it aside as Indian Reserve.

§5.172 In Alberta, public lands which are to become a reserve are surveyed in accordance with provincial legislation. The Surveyor General of Canada Lands (through the Alberta Client Liaison Unit) and the Director of Surveys for Alberta issue joint survey instructions. These instructions incorporate standards for the survey of Canada Lands insofar as possible.

_First Nation Land Management_

§5.173 Increasingly, First Nations are opting out of the land management provisions of the *Indian Act* and implementing their own land management regimes. This is being achieved through several initiatives including: self-government; the *First Nations Land*
Management Act; and having oil and gas resources on reserves managed and controlled by First Nations.

§5.174 Under self-government, First Nations may acquire jurisdiction or authority in a number of areas, including property rights and land management. The First Nations Land Management Act also provides First Nations with the option of managing their reserve lands under their own land code which replaces the provisions in the Indian Act dealing with the management of land. The goal of the oil and gas initiative is to have oil and gas resources of participating First Nations fully managed and controlled by the First Nations themselves.

§5.175 Under these initiatives each First Nation may develop agreements similar to the 2003 Interdepartmental Agreement between the Department of Indian Affairs and Northern Development and Natural Resources Canada regarding land interests and surveys. While several First Nations in Canada have self-government or have management of their lands under the First Nations Land Management Act, none are in Alberta. However, several Alberta First Nations are in the process of obtaining land management through one or other of the initiatives mentioned.

National Parks

Introduction

§5.176 In 1885, ten sections of land were reserved by order-in-council, near the Canadian Pacific Railway (CPR) station at Banff. This land was reserved from sale, settlement or squatting in anticipation of the creation of a park. This came about in 1887 with the passage of the Rocky Mountain National Park Act, SC 1887, c. 32 which officially set aside an area around Banff as Rocky Mountain Park. Over the years many changes were made to the boundaries of the Park now know as Banff National Park.

§5.177 The current legislation dealing with National Parks is the Canada National Parks Act, SC 2000, c. 32. There are now over 40 National Parks in Canada. The boundaries of the National Parks are described in Schedule I of the Act. These lands are vested in Her Majesty in right of Canada and are Canada Lands.

Land Interests

Granting Interests in Public Land in National Parks

§5.179 Leases and Licences of Occupation are issued under the National Parks of Canada Lease and Licence of Occupation Regulations P.C. 1991-2469. Under section 3, leases may be granted for any term not exceeding 42 years with provision for renewal. A Licence of Occupation of lands which is issued for a specific purpose without conferring any interest in the lands may also be granted for a period of 42 years under section 18 of the Regulations.

The National Parks Registry

§5.180 The National Parks Act does not contain a requirement for a land registry, nor does it deal with the recording or registering of land interests. Nevertheless, for administrative purposes a system referred to as the “Registry” has been in place in Ottawa since the first park was created [Property Rights 1990:9-11]. The purpose of the registry is to enable storage and retrieval of documents pertaining to the acquisition and alienation of National Parks lands and of leasehold, licence of occupation and other documents granting interests in land in National Parks.

§5.181 There is also provision for the registration of leases under section 30 of the Land Titles Act RSA 2000, c.L-4. Although it is not compulsory for lease owners to register their interests under the Act, they usually do so as mortgage companies require it and it has evolved into a general practice. Parks Canada officials maintain that registration under the Alberta Land Titles Act is just to suit local purposes and that the actual documents in the National Parks Registry take precedence over the provincial land titles system [Property Rights 1990:9-12].

Establishing National Parks

§5.182 Under Section 5 of the National Parks Act the Governor in Council may, by order-in-council, establish or enlarge a park by amending Schedule 1 of the Act by adding the name and a description of the park, or by altering the description of the park. However, Her Majesty in right of Canada must have title to or an unencumbered right of ownership in the lands and the government of the province in which those lands are situated must be in agreement.
Legal Surveys in National Parks

General

§5.183 The CLS Manual includes general instructions for a variety of surveys and related products that are or could be used in National Parks. These include official surveys, explanatory plans, strata surveys, condominium surveys, boundary monitoring, boundary maintenance, base mapping, land descriptions, survey reports and as-built surveys.

Surveys for Leases and Licences of Occupation

§5.184 Section 3(2) of the National Parks of Canada Lease and Licence of Occupation Regulations outlines the requirements for surveys required for leases:

(2) No lease of public lands shall be granted

(a) until the public lands have been surveyed in accordance with the Canada Lands Surveys Act and unless the description of the lands in the lease is based on an official plan or plans under that Act; or

(b) unless, where the Minister so directs, the lease describes the public lands by

(i) reference to an explanatory plan approved by and in the custody of the Surveyor General, or

(ii) a metes and bounds description, or the equivalent thereof, prepared under the direction of and approved by the Surveyor General.

§5.185 Legal surveys are not normally required for granting licences of occupation in remote areas; however, as stated in Part C6.20 of the CLS Manual, if a licence of occupation is in a town, visitor centre or other built-up area, a legal survey may be required by Parks Canada.

Subdivision Posting

§5.186 Surveyors working in the National Parks need to be aware that, between the dates of 1912 (when the Alberta Surveys Act, SA 1911-12, c.13 came into force) and 1988 (when the Surveys Act was amended), the provisions regarding block corners governing interior lots never applied to subdivisions in the National Parks in Alberta. National Parks in Alberta have always been surveyed in accordance with the Canada Lands Surveys Act or its predecessors, the Dominion Lands Act and the Dominion Lands Surveys Act, and that for subdivision surveys under these Acts the lot corners have always been monumented and govern the lot corners.
Effect of Resurveys

§5.187 Under Section 33 of the *Canada Lands Surveys Act*, confirmed plans of resurvey are to be substituted for the former official plans of the land affected under the Act. This provision has the potential to cause a misdescription if certificates of leasehold titles in Alberta Land Titles offices are not updated. Procedure LEA-1 of the Land Titles Office Procedures Manual states that when a lease is being renewed, the old legal description may be replaced with a new legal description pursuant to a registered plan of resurvey under the *Canada Land Surveys Act*. The renewal must be accompanied by a statutory declaration by a surveyor stating that the land referred to in the old legal description is the same as the land referred to in the new legal description [Website 8].

Condominium Surveys

§5.188 The only National Parks in which condominiums are recognized in the *National Parks of Canada Lease and Licence of Occupation Regulations* are in Alberta.

§5.189 For the purpose of surveying condominium subdivisions the Alberta *Condominium Property Act* is used insofar as it can apply for leasehold interests in National Parks. Part D4 of the *CLS Manual* has general instructions for condominium surveys. In addition to these general instructions, specific instructions are required for a particular survey.

Integration of Surveys

§5.190 Sections 70 to 71 of Part D1 of the CLS Manual provides for surveys to be connected to existing federal or provincial survey control monuments that are within one kilometre of the survey. This is a general requirement applying to all surveys.

§5.191 In addition, Coordinated Survey Areas may be established pursuant to section 28 of the *Canada Lands Surveys Act*. In Alberta, Coordinated Survey Areas have been established in the Town of Banff, the Town of Jasper and the Lake Louise Visitor Centre, Banff National Park. Legal surveys in a Coordinated Survey Area must be integrated into the network in accordance with the provisions in Part D1, Sections 82 to 85, of the CLS Manual.

Acknowledgment

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Chapter 6: Other Surveys

Gordon E. Olsson

Public Lands – Intergovernmental Transfers, Grants and Dispositions

Historical Background

§6.1 An appreciation of the legislation and land administration policies of the past is essential to a good understanding of Alberta’s current public lands policies. Many of the statutes under which transfers, grants and dispositions are carried out today can be related back to legislation that applied prior to the transfer of public lands and natural resources to Alberta in 1930, or even prior to 1905 when Alberta was established as a province.

§6.2 Under the Constitution Act, 1867 the four signing provinces of Ontario, Quebec, Nova Scotia and New Brunswick were given the right to the management of public lands and to all natural resources within their boundaries. However, after Rupert’s Land and the North-Western Territory were added to the Union in 1870, Ottawa continued control over the public land and natural resources of the newly formed North-west Territories.

§6.3 In order to provide for the proper and efficient administration and management of lands included in Manitoba and the North-West Territories, Parliament passed the Dominion Lands Act, SC 1872, c.23. The Act provided for the establishment of a Dominion Lands Office and for a system of survey and disposal of Dominion Lands, including lands reserved for the Hudson’s Bay Company. It also included provisions regarding timber and timber lands and surveys and surveyors.

§6.4 Initially there were few reservations in the land grants, but this changed over the years. In the 1880s mines and minerals were reserved, first by orders-in-council, and then in 1892 by an amendment to the Dominion Lands Act, SC 1892, c.15. Another major change was the reservation of the beds and shores of bodies of water under the North-west Irrigation Act, SC 1894, c.30, s.5.

§6.5 On September 1, 1905, the Alberta Act, SC 1905, c.3 established Alberta as a province. While under this Act the province gained the administration of land titles, it did not obtain administration and control of public lands and natural resources. One
exception was public roads. In 1905 Canada passed the *Saskatchewan and Alberta Roads Act*, SC 1905, c.38, under which all road allowances in the North-west Territories within the limits of Alberta became vested in the Crown in right of Alberta. The Act also provided for other existing public travelled roads or trails, and for new roads as may be deemed necessary in the future, to be transferred to the province.

§6.6 On July 20, 1908 the *Dominion Lands Act* was again consolidated and amended. The new Act SC 1908, c.20 applied to public lands of the Dominion of Canada in the provinces of Manitoba, Saskatchewan and Alberta, and in the Northwest Territories of Canada; and a portion of the Peace River district of British Columbia. The provisions regarding surveys and surveyors were removed and incorporated into the *Dominion Lands Surveys Act*, SC 1908, c. 21.

§6.7 Finally Alberta gained administration of public lands and natural resources in the province by the *Constitution Act, 1930*. This required that the local records of the Department of the Interior relating to the active administration of those lands and resources had to be transferred to provincial control [Website 1].

§6.8 Several Acts regarding Dominion Lands continued to apply to the transferred lands and resources in Alberta as if they were Alberta Acts, under the *Administration of Natural Resources (Temporary) Act* SA 1930 c.22. One of the Acts was the *Dominion Lands Act*. It ceased to be in force when the *Provincial Lands Act*, SA 1931, c.43 was proclaimed. Under the *Provincial Lands Act* the Department of Lands and Mines became responsible for provincial Crown Lands.

§6.9 In most respects the *Provincial Lands Act* was similar to the *Dominion Lands Act*. With regard to dispositions there were reservations pertaining to the bed and shore of lakes, rivers, streams or other bodies of water. The Act provided for a reservation for future roads of an area not to exceed 4 percent out of every disposition. Mines and minerals (precious and base) were reserved with the right to work the same. Under section 13 of the Act no land could be open for entry for a homestead or for sale until it was surveyed in accordance with the provisions of the *Alberta Surveys Act*. The *Provincial Lands Act* also contained provisions regarding the sale of land and for the leasing, licensing and permitting of land rights for grazing, for hay lands, for the exploitation of minerals and for the cutting of timber.

§6.10 Over the subsequent years many changes to the *Provincial Lands Act* occurred. In 1949 it was replaced by the *Public Lands Act*, SA 1949, c.81 and another separate Act dealing with mines and minerals. Despite these changes, for all intents and purposes the new Acts dealt with the same matters as did their predecessors.

§6.11 Today, approximately 60 per cent of the province of Alberta’s land base is public land [Website 2].
Intergovernmental Transfers, Grants and Dispositions under the Public Lands Act


§6.13 In the interest of simplicity and convenience the following discussion has been grouped under three general headings: Intergovernmental Transfers, Grants of Fee Simple Title, and Dispositions.

Intergovernmental Transfers

§6.14 The commonly used phrase “transfer of land” when the “transfer of land” is between the federal government and a province, in a sense, is a misnomer. It is not a transfer of land - it is a transfer of administration and control. The principle is explained by Paul London, Q.C. in Crown Law:

A transfer of property between the federal government and a province is not done by ordinary conveyance because of the principle of indivisibility of the Crown. Her Majesty is the owner of the property, whether in right of Canada or the province and cannot grant to Herself. Only administrative control of the property passes. The transfer is, therefore, made by reciprocal Orders-in-Council and is confirmed by statute where third party rights are involved. [London 1991:283].

§6.15 The above principle also applies when transferring administration of public lands from one Minister of a provincial government department to another, such as in the case of public roads.

§6.16 The transfer of administration and control of public land to the Crown in right of Canada or the transfer of administration of public land from one Minister of the Crown of a provincial government department or Crown corporation to another or for certain other purposes, is carried out by order-in-council under section 7 of the Public Lands Act. There is an exception. A transfer may be carried out by ministerial order under section 12 of the Act, where the area of the land is less than 640 acres and the administration is being passed from one provincial minister or crown corporation to another.
Grants of Fee Simple Interest of Public Land

§6.17 Before discussing grants of fee simple interests in public land, an awareness of the division of the province into the “white area” and the “green area” is helpful. The objective of the division is to balance the use of Alberta public lands. Figure 6-1 Public Lands Map showing “White Area” and “Green Area” shows the white area (settled portion, managed by Public Lands) and the green area (forested portion, managed by Land and Forest) of the province [Website 3]. Note the green area appears shaded in this text.

Figure 6-1. Public Lands Map showing “White Area” and “Green Area”

Source: Website 4
§6.18 An individual or corporation may obtain a grant of fee simple interest in public land. However, normally the land would be in the “white area” of the province and would be for agricultural purposes, for commercial, industrial and recreational use, or to provide land for essential services.

§6.19 The term grant is defined in section 1(h) of the Public Lands Act.

(h) “grant” means letters patent under the Great Seal of Canada or a notification issued pursuant to The Provincial Lands Act, RSA 1942 c62, the former Act or this Act;

§6.20 When a person or corporation is entitled to an estate in fee simple to any public land, a notification is issued under section 30 of the Public Lands Act and forwarded by the Minister to the Registrar of the Land Titles Office who will issue a Certificate of Title.

Dispositions

§6.21 Authority to use public land is granted through dispositions under the provisions of the Public Lands Act. The term disposition is defined in section 1(e)

(e) “disposition” means every instrument executed pursuant to this Act, the former Act, The Provincial Lands Act, RSA 1942 c62, or the Dominion Lands Act (Canada), RSC 1927 c113, whereby

(i) any estate or interest in land of the Crown, or

(ii) any other right or privilege in respect of land of the Crown that is not an estate or interest in land,

is or has been granted or conveyed by the Crown to any person and, without derogating from the generality of subclauses (i) and (ii), includes a conveyance, assurance, sale, lease, licence, permit, contract or agreement made, entered into or issued pursuant to any of those Acts, but does not include a grant;

§6.22 The division of the province into the white and green areas is also relevant for dispositions of public lands. While agriculture is the primary use of public land in the white area, surface access for development of mineral resources by the oil and gas industry is also provided through more than 35,000 agreements (dispositions) for wellsites, access roads and pipelines. Other dispositions are for sand and gravel extraction, recreation, and industrial development [Website 3].

§6.23 In the green (shaded) area, the primary land use is timber production. Forest Management Agreements (FMAs) take up a large proportion of the land base. The green area also accommodates surface access for oil and gas through almost 78,000
agreements. Other dispositions are for land uses, including recreation, livestock grazing, sand and gravel extraction and industrial development [Website 3].

§6.24 During the period April 1, 2003 to March 31, 2004 there were approximately 187,000 dispositions covering 7.5 million acres in both the white and green areas [SRD: 2005].

§6.25 To describe all the types and purposes of dispositions—there are approximately 100—granted by the Public Lands and Forests Division would go beyond the scope of this chapter. Of particular interest to surveyors are mineral surface leases for oil and gas wells, licences of occupation for access roads, power line easements and pipeline agreements which are discussed under the Surveys for Surface Rights for Oil and Gas section.

§6.26 Mineral leases are discussed under the Mines and Minerals section.

Survey Requirements

Surveys for Intergovernmental Transfers

§6.27 There are no specific legislated requirements for surveys when the transfer of administration and control of public land is to the Crown in right of Canada, or from one Minister of the Crown of a provincial government department to another, or for other purposes as outlined in section 7 of the Public Lands Act. As a policy, surveys are required and they comply with the general requirements of the Surveys Act and the Alberta Land Surveyors’ Association (ALSA) Manual of Standard Practice (MSP) [Website 5].

§6.28 There are special cases where legislation contains provisions as to when a survey is required or for the type of survey. For example, the Public Works Act, and the Municipal Government Act have provisions regarding surveys where the land is required for a road or public work.

§6.29 Where the administration and control of public land is transferred to the federal government, each situation will be reviewed to determine if existing surveys adequately describe the land or if there is a need for a new survey. If a new survey is required, for example for a new Indian Reserve, an official survey is carried out under the Alberta Surveys Act. The survey will also incorporate standards for the survey of Canada Lands insofar as possible, and since the land will become Crown Canada Lands it is the policy to have the survey carried out by a surveyor who holds commissions as an Alberta Land Surveyor and as a Canada Lands Surveyor.
Surveys for Grants of Fee Simple Title

§6.30 Until 1966, it was a legislated requirement that public land must not be disposed of (except by lease) if it had not been surveyed under the provisions of either the Alberta Surveys Act or the Dominion Lands Surveys Act. The last statute that this requirement appeared in was the Public Lands Act, SA 1949, c.81, s.8.

§6.31 The requirement was replaced by the following in the Public Lands Act, 1966, SA 1966, c.80:

20 (1) If for any reason the Minister considers it necessary or advisable to have a survey or re-survey made of the land contained in a disposition to determine its exact position, or in order to settle any dispute that may arise respecting it, he may direct that such a survey or re-survey be made by an Alberta land surveyor.

§6.32 This section remains in the Public Lands Act, RSA 2000, c.P-40, s.23.

§6.33 Nevertheless, current Alberta Government policy is to require an official township survey or settlement survey of the land to be granted if it is located within unsurveyed territory. In the case of unsurveyed land of Métis patented land, the requirement is clearly specified in sections 31 to 33 of the Surveys Act, before Métis title, provisional Métis title or allotment may be granted or transferred.

§6.34 For official township and settlement surveys of unsurveyed territory of public lands, or of Métis patented land, specific survey instructions issued by the Director of Surveys under the Surveys Act are required.

Surveys for Dispositions

§6.35 Although there may be no specific legal requirements for surveys for dispositions under the Public Lands Act, good management requires that the location of activities and dispositions on public land be accurately defined in order that overlaps or conflicting land use do not occur.

§6.36 In some cases, legislation, such as the Mines and Minerals Act, the Pipeline Act, the Oil and Gas Conservation Act and/or the associated Regulations, contain requirements for surveys and survey plans applicable to certain dispositions.

§6.37 The Department of Sustainable Resource Development, in consultation with the ALSA, has enhanced the plan requirements for the more than 100 types and purposes of disposition. These enhanced Disposition Plan Requirements, issued by Sustainable Resource Development on April 23, 2004, encompass 14 disposition types including: disposition reservation, easement, licence of occupation, miscellaneous lease,
miscellaneous permit, mineral surface lease, pipeline installation lease, pipeline agreement, rural electrification association easement, recreation lease, surface materials licence, surface materials exploration, surface materials lease, and vegetation control easement. Each of these types of disposition is further broken down into purposes. For each disposition type and purpose, the plan requirement and the recommended monument type to be used are identified.

§6.38 Disposition Plan Requirements, content requirements for Application Plans, content requirements for Final Plans, suggestions as to what to avoid on plans and samples of suggested base types are available on the Public Lands website [Website 6].

§6.39 Part D, Section 5.8 and 5.9 of the MSP also includes requirements for Surveys of Public Land Dispositions. If disposition plans are to be registered at the Land Titles Office, a surveyor should also refer to the appropriate section of the Land Titles Office Procedures Manual.

Searches for Public Lands Disposition Information

§6.40 Surface Public Land and Crown Mineral disposition and activity information is contained within the Land Status Automated System (LSAS) managed by Alberta Energy. This system enables access to information about surface and mineral interests on public land. Although the legal description may be used to obtain information within a specified land parcel (quarter section, section, etc.) searches may also be made using several other criteria. Access to the LSAS is through the Department of Energy Information Centre, Crown Land Record Searches, in Calgary [Website 7]. The LSAS is somewhat limited in that it does not provide graphical information pertaining to the various land interests.

§6.41 Graphic indexes of the land interests are maintained by Public Lands and Forest Division of Alberta Sustainable Resource Development. These indexes show all dispositions (surface activities) within a township or section. They are colour scanned with daily updates, and are distributed through IHS Energy [Website 8].

§6.42 Copies of the actual survey plans and other plans showing the extent of land for the various activities are available either from Land Titles or from IHS Energy.
Mines and Minerals

Introduction

§6.43 A theoretical concept of land is that it extends from the centre of the earth to the outer edge of the atmosphere, often referred to as the “heaven to hell concept” or the “carrot-theory”.

§6.44 Land has also been defined by a United Nations Ad Hoc group of Experts on Cadastral Surveying and Land Information (1985) as “an area of the surface of the earth together with the water, soil, rocks, minerals and hydrocarbons beneath or upon it and the air above it. It embraces all things which are related to a fixed area or point of the surface of the earth, including the areas covered by water, including the sea” [Henssen 1995] [Website 9].

§6.45 The concept in today’s society is full of exceptions. For example, the airspace above the land is subject to the rights of others, such as airline travel. There may also be obligations as well, such as the use of water or the obligation not to pollute. A common reservation is ownership of mines and minerals. Section 1(1)(p) of the Mines and Minerals Act RSA 2000, c.M-17 gives the following definition for minerals:

(p) “minerals” means all naturally occurring minerals, and without restricting the generality of the foregoing, includes

(i) gold, silver, uranium, platinum, pitchblende, radium, precious stones, copper, iron, tin, zinc, asbestos, salts, sulphur, petroleum, oil, asphalt, bituminous sands, oil sands, natural gas, coal, anhydrite, barite, bauxite, bentonite, diatomite, dolomite, epsomite, granite, gypsum, limestone, marble, mica, mirabilite, potash, quartz rock, rock phosphate, sandstone, serpentine, shale, slate, talc, thenardite, trona, volcanic ash, sand, gravel, clay and marl, but

(ii) does not include

(A) sand and gravel that belong to the owner of the surface of land under section 58 of the Law of Property Act,

(B) clay and marl that belong to the owner of the surface of land under section 57 of the Law of Property Act, or

(C) peat on the surface of land and peat obtained by stripping off the overburden, excavating from the surface, or otherwise recovered by surface operations;

§6.46 To complicate matters further, oil and gas do not neatly fit into the concept of ownership of mines and minerals. Oil and gas, while generally in situ (in its original
natural place or site) may, when tapped, move or drain from an adjoining property. The following quote explains the “rule of capture”:

The question of nature of an interest in oil and gas is important. On it depends the right of a mineral owner to protect against “drainage” by adjoining operations, and the right of mineral owners to sell or otherwise deal with their mineral interest.

Early courts searched for analogies. English courts settled on the analogy of percolating underground water. American courts preferred the analogy of wild animals. Both of these doctrines hold that the subject matter is not capable of ownership until it is reduced to possession or captured. This “rule of capture” has become clearly associated with oil and natural gas, both in the United States and Canada [CAPL 1982:32].

§6.47 If there are several mineral owners in one spacing unit, a pooling agreement is needed to share in the costs and revenues associated with drilling and producing a well from that spacing unit. Spacing units are discussed later in this chapter. For now it is sufficient to say that the normal spacing unit for oil wells in Alberta is currently one well per quarter section and for gas wells one well per section.

§6.48 To add to the complexity, leases of petroleum and natural gas granted by the provincial government are for specific geological zones described in the lease.

§6.49 The provincial Crown owns the mineral rights to approximately 81 percent of the lands in Alberta. Mineral rights to the remaining 19 percent are held by the federal Crown within national parks and Indian Reserves, or by freehold owners [Website 10].

Historical Background

Dominion Lands Act

§6.50 There were no reservations for mines and minerals in the Dominion Lands Act, 1872. Section 36 stated:

36. No reservation of gold, silver, iron, copper, or other mines or minerals shall be inserted in any patent from the Crown granting any portion of the Dominion Lands.

§6.51 Fifteen years later, Ottawa took action to reserve mines and minerals from sale. An 1887 order-in-council reserved all mines and minerals from patents for lands lying west of the third meridian [Ballem 1985:9]. A similar order was made on September 17, 1889, applying to all patents for lands in Manitoba and the North-West Territories, which included land that would be in the province of Alberta, Creighton v. United Oils
Limited, [1927] 2 W.W.R. 458. In 1892 the section of the Dominion Lands Act dealing with the reservation of minerals was repealed by An Act further to amend the Dominion Lands Act 1992, c.15 and the following was substituted therefor:

47. Lands containing coal or other minerals, including lands in the Rocky Mountains Park, shall not be subject to the provisions of this Act respecting sale or homestead entry, but the Governor General in Council may, from time to time, make regulations for the working and development of mines on such lands, and for the sale, leasing, licensing or other disposal thereof . . .

§6.52 Although specific dates are given above with regard to the reservation of mines and minerals, the actual land grants should be referred to in determining whether or not mines and minerals were included in land that was granted by Ottawa in that general period of time.

§6.53 The importance of these legislative changes to the future wealth of the province of Alberta is noted in The Administration of Dominion Lands 1870-1930.

Dominion Lands policy regarding mineral resources involves two developments of fundamental importance. First, the Dominion moved to effect a severance of mineral title from surface title in settlement dispositions. Second, it gradually moved from a policy of sale of Crown mineral title to one of leasing. Severance of surface mineral rights enabled the Crown to regulate the disposition of minerals notwithstanding alienation of the surface. Transition from a regulatory policy of sale to a policy of leasing preserved untold mineral wealth for the Crown. [Lambrecht 1991:41]

Hudson’s Bay Company

§6.54 Under the provisions of the Rupert’s Land Act, 1868, the Hudson’s Bay Company, by deed of surrender in 1869, conveyed Rupert’s Land to Her Majesty. The agreement provided in part that the company would obtain compensation in the form of money and land.

§6.55 The land received by the Company totalled approximately seven million acres in the fertile belt, which it gradually sold during the next 85 years [Website 11]. Homesteaders who received land from the company obtained title to mines and minerals, excluding gold and silver, until 1908 [CED (Western) (3rd ed.), Vol 22:90-41].

§6.56 Although the date of 1908 is given in the above reference, as for Crown Grants, the actual land grants should be referred to in determining whether or not mines and minerals were included in land that was received from the Hudson’s Bay Company.
Canadian Pacific Railway

§6.57 In the 1880s and 1890s, land grants were used to encourage the construction of the Canadian Pacific Railway (CPR) and several other smaller railways.

§6.58 To assist in financing the railway, the federal government transferred certain sections of land to the CPR by a contract that was set out in a schedule to the Canadian Pacific Railway Act 1881. The contract obligated the government to grant a subsidy of 25,000,000 acres to the CPR.

§6.59 As the purpose of the land grants was to enable the CPR to finance the construction of the railway, the company in turn sold land to settlers. Initially, the CPR reserved only gold and silver. Because coal later became valuable it was also reserved. In 1902, oil was discovered in Waterton Lakes National Park and stone was being used for building in Calgary. These two events resulted in the CPR again amending its land grants, so that future reservations included coal, petroleum and valuable stone [CAPL 1982:40]. Until 1902, homesteaders who received land from the CPR acquired all minerals on or under the land, with some homesteaders continuing to obtain such minerals until 1912 [CED (Western) (3rd ed.), Vol. 22:90-41].

§6.60 The same general caution as mentioned for Crown Grants and for land received from the Hudson’s Bay Company should be applied to the dates for land received from the CPR.

Constitution Act, 1930

§6.61 Alberta gained administration of public lands and natural resources in the province as a result of the Constitution Act, 1930. This Act confirmed and gave force to the Memorandum of Agreement (MOA) made on December 14, 1929 between the Government of the Dominion of Canada and the Government of the Province of Alberta. Article 1 of the Agreement as set out in Schedule 2 to the Act stated:

Transfer of Public Lands Generally

1. In order that the Province may be in the same position as the original Provinces of Confederation are in virtue of section one hundred and nine of the Constitution Act, 1867, the interest of the Crown in all Crown lands, mines, minerals (precious and base) and royalties derived therefrom within the Provinces, and all sums due or payable for such lands, mines, minerals or royalties, shall, from and after the coming into force of this agreement, and subject as therein otherwise provided, belong to the Province . . .
§6.62 In 1931 the *Provincial Lands Act*, SA 1931, c.43 replaced the *Dominion Lands Act*. In most respects it was similar to the *Dominion Lands Act*. Section 10 dealt with the reservation of mines and minerals:

10. There is hereby reserved to the Crown out of every disposition of Provincial lands under this Act all mines and minerals (precious and base), together with full power to work the same and for this purpose to enter upon, use and occupy the said lands or so much thereof and to such extent as may be necessary for the effectual working and extracting of the said minerals, and such mines and minerals together with the right to enter, locate, prospect and mine such minerals shall be disposed of only in such manner and on such terms and conditions as are hereinafter provided.

§6.63 Over the subsequent years there were many changes to the *Provincial Lands Act*. In 1949 it was replaced by two Acts: the *Public Lands Act* SA 1949, c.81 and the *Mines and Minerals Act* SA 1949, c.66.

§6.64 The 1949 *Mines and Minerals Act*, as stated in section 3, applied generally to all mines, minerals and related natural resources vested in or belonging to the Crown in right of the Province and to all mines, etc. in the Province. The Act contained separate parts dealing with: administration of minerals, quartz mining, placer mining, coal mining, mining in road allowances, petroleum and natural gas, and geophysical and geological exploration. Since 1949 there have been many changes to the Act.

**Case Law**

**Eliason v. Registrar, et al.**

§6.65 Prior to the 1990s it was generally considered, in the case of a mineral lease having one or more natural boundaries, that once the lease was executed the area of the lease did not change, even though the natural boundary may have changed position through natural processes.

§6.66 In the case *Eliason v. Registrar, North Alberta Land Registration District and Alberta Energy and Natural Resources*, [1980] 6 W.W.R. 361, the applicant landowner held title to a quarter section of land, including all mines and minerals except coal, described as “All that portion . . . not covered by any of the waters of a certain surveyed lake as shown on a plan of survey.” The area formerly covered by the lake had been dry since the applicant took title. The landowner was applying for the fee simple title, including mines and minerals for the land covered by the lake. The addition of the surface was not an issue, but the mines and minerals were. With regard to the application, the question was whether the mines and minerals had accreted to the
applicant’s land, or whether they were still owned by the Crown. In granting the application the judge said:

As accreted land took on the legal characteristics of land to which it accreted, as accreted land prima facie includes all mines and minerals, and as there was no statutory reservation to rebut the presumption of the applicant’s ownership, the applicant was entitled to a declaration of ownership including all mines and minerals, except coal.

§6.67 In 1991 the Mines and Minerals Act was amended by SA 1991, c.20 in which mineral accretions were recognized. The same wording remains in the Mines and Minerals Act RSA 2000, c. M-17, s. s2 (1):

62(1) If
(a) a mineral in, on or under a parcel of land is or was the subject of a certificate of title under the Land Titles Act issued to a person other than the Crown in right of Alberta,
(b) the certificate of title described the parcel by reference to a natural boundary, and
(c) the area of the parcel, as described in the certificate of title, increased by reason of a natural accretion to the land constituting the parcel,

the area of the accretion is a “mineral accretion” for the purposes of this section.

§6.68 The legislation also prohibited any claim or action to recover any royalty or money paid to the Crown in right of Alberta prior to 1991 in relation to the mineral accretion.

The Turta Case

§6.69 There were several Torrens system-related issues in the case Turta v. Canadian Pacific Railway, [1954] S.C.R. 427. The details of this case are given in Chapter 4. For the purposes of this discussion the case is noteworthy in that it pointed out that in the early days, mineral reservations were not given the required attention by the Land Titles Office and a substantial number of titles were issued with errors and omissions. This seriously undermined the integrity of the Torrens system in Alberta.

§6.70 To add to the lack of integrity of the system, the government a few years earlier had taken action to control the damage. In 1949 The Land Titles Act RSA 1942, c.205 was amended, c.56, s.4, by limiting the time for action for damages against the Registrar for reasons of error, omission, or misdescription to six years from the time that the error, omission, or misdescription was made and in s.5 by limiting any loss or
damage to the recovery of monies actually paid out for the interest in mines and minerals, and a further sum not exceeding five thousand dollars for any present or prospective loss of profit. This action certainly saved the Alberta Government insurance payouts exceeding many millions of dollars. However, it also compromised the assurance principle of the Torrens system, particularly with regard to mines and minerals.

Public Lands

§6.71 Responsibility for the Mines and Minerals Act, RSA 2000, c.M-17, is shared between the Minister of Energy and the Minister of Sustainable Resource Development. The Act and related regulations deal with the development and exploitation of all minerals under the administration and control of the provincial government.

§6.72 Under section 10, no grant has operated or will operate as a conveyance of gold and silver unless gold and silver are expressly named and conveyed in the grant. Minerals underlying roads are to be included in the mineral rights of the adjacent properties. For example, section 14 (1) provides that when, by letters patent, the surface of land and any mineral in the land were granted, and an area or strip of land was excepted or reserved for a road, roadway or trail, the letters patent are deemed for all purposes to have conveyed that mineral underlying the road, roadway or trail. There are some exceptions to this, described in section 14 (2).

§6.73 The Petroleum and Natural Gas Tenure Regulation AR 263/97, a regulation under the Mines and Minerals Act, prescribes the requirements for licences and leases. Both licences and leases are similar in that they grant the right to drill for and recover oil or gas. However, licences carry the obligation to drill a well, while leases do not. In order to be continued, leases must be proven productive at the end of their primary term.

§6.74 The Oil Sands Tenure Regulation AR 50/2000, a regulation under the Mines and Minerals Act, deals with permits for exploration and leases for development and exploitation of the oil sands.

Surveys

§6.75 Section 26 of the Mines and Minerals Act deals with surveys and provides for the Minister, if he or she considers it necessary or advisable, to have a survey or resurvey made of any “location” to determine the exact position of the location or in order to settle any dispute that may arise respecting it, and that the Minister may direct that the survey or resurvey be made by an Alberta Land Surveyor. Section 2(1) (m) of the Act defines “location” as the tract described in an agreement.
§6.76 Section 28(1) of the Act prescribes that in determining the size of a location, all measurements must be taken horizontally, irrespective of the inequalities of the surface of the ground, and the boundaries beneath the surface must be the vertical planes in which the surface boundaries lie. Section 28(2) states in calculating distances, the widths of road allowances are not to be considered unless expressly included in the agreement.

§6.77 Section 66, Part 2 of the Act contains instructions regarding the area and location of coal leases both in surveyed and unsurveyed territory.

§6.78 It is very seldom that an Alberta Land Surveyor will be involved in a survey for a mineral lease, particularly for oil and gas. Usually, the area of a lease will be described by a written land description and the area will conform to sections and quarter sections of the township system. An example where a lease might not conform is where an original grant (for example to the CPR) of a section, included mines and minerals, excludes a body of water and now the oil and gas rights underlying the body of water are being leased.

Land Titles

§6.79 Most of the land in Alberta that is held under Certificate of Title does not include mines and minerals. This is because in the part of the North-West Territories that was to become the province of Alberta, mines and minerals were reserved from Crown grants after 1887. The majority of persons in Alberta who have mineral title will be able to trace the title back to prior to 1887, or to land obtained from the Hudson’s Bay Company or from the CPR.

§6.80 In the early days, mines and minerals were not given much attention by those administering land titles in Alberta. This was evident in the Turta case. However, with the discovery and exploitation of oil and gas in the province it became very important that mines and mineral ownership be clearly defined.

§6.81 In Alberta, most titles which previously included both surface and mines and minerals have now been separated into “surface only” titles and “minerals only” titles. The requirement for separate Certificates of Title for surface and for mines and minerals came about when the Land Titles Act was amended by SA 1950, c. 35, as further damage control for the problems revealed in the Turta case. The following is taken from the Alberta Government Services website:

If the land described on a certificate of title is surface only, the legal description will be followed by a “mineral reservation”, a phrase such as “excepting thereout all mines and minerals”. If the title includes both surface and minerals, it will not have a mineral reservation. If
the title is for minerals only, they will be named in a phrase like “all coal, petroleum and natural gas” or “all mines and minerals.”

§6.82 For some parcels of land there may be more than one mineral Certificate of Title: for example, one for coal, one for oil and gas and one for the remaining mines and minerals. The 1950 amendment to the Land Titles Act also introduced the mineral certificate. A mineral certificate is defined on the Alberta Government Services Website as:

A Mineral Certificate is, in effect, a search of the historical title record to verify the proper ownership of the mines and minerals intended to be dealt with. It is only issued in conjunction with a disposition document that has been submitted to the Land Titles Office (i.e. a Transfer or Lease). Before any disposition of mines and minerals can be registered, Land Titles must conduct a mineral search and be able to issue a mineral certificate [Website 13].

§6.83 If there has been any error, omission, or other event that has the effect of making the mineral title uncertain, the Registrar will not issue a mineral certificate. As well, individuals or companies may conduct their own historical search and form their own opinions. In Alberta, if oil and gas are involved, it is common practice to conduct a historical search, as stated in the following statement by the Canadian Association of Petroleum Landmen in Introduction to Oil and Gas Law:

Due to the number of exceptions to indefeasibility, the problems arising out of the errors and corrections by the Registrar, and the limited compensation that is provided by the Assurance Fund, it is recommended that a historical search be undertaken when dealing with any mineral rights in order to determine the validity of the mineral title [CAPL 1982: 86].

§6.84 In situations where the mineral title is uncertain, or if there are differences of opinion regarding the title, resolution may be obtained from the courts.

Surveys for Surface Rights for Oil and Gas

Introduction

§6.85 Agreements for the exploration and development of oil and gas have been discussed under Mines and Minerals in the previous section. This section deals primarily with the surface rights and the surveys for the surface rights required to obtain access to the land for the development of oil and gas, and for pipelines and related facilities to transport and store it.
§6.86 The surveys and related plans, in addition to being used to describe surface rights, show information required by various regulatory authorities dealing with operations, safety, and protection of the environment. For example, wellsite plans also show information required by the Alberta Energy and Utilities Board (EUB) for the issuance of drilling licences.

§6.87 Surface rights related to oil and gas development are dealt with under two jurisdictions: Land Titles and Public Lands. Also, the rules regarding surveys differ according to whether the land is in surveyed or unsurveyed territory. A third jurisdiction, Indian Reserves, is covered in Chapter 5.

Statute Law Affecting Surface Rights

§6.88 For the purposes of this discussion, statute law and the associated regulations dealing with surface rights are grouped into three categories: 1) those that regulate operations, safety, and protection of the environment; 2) those that provide resolution of issues regarding right of entry; and 3) those dealing with the granting and registration of surface rights.

Operations, Safety and Protection of the Environment

Alberta Energy and Utilities Board

§6.89 The Alberta Energy Utilities Board (EUB) is established under the Alberta Energy and Utilities Board Act, RSA 2000, c.A-17. The EUB regulates the safe, responsible and efficient development of Alberta's energy resources: oil, natural gas, oil sands, coal, and electrical energy; and the pipelines and transmission lines to move the resources to market [Website 14].

§6.90 The EUB was created in 1995 by the amalgamation of the Energy Resources Conservation Board and the Public Utilities Board. It regulates Alberta’s energy resource and utility sectors through more than 30 pieces of legislation [Website 15].

Pipelines

§6.91 The EUB regulates crude oil and natural gas pipelines within Alberta under the authority of the Pipeline Act, RSA 2000, c.P-15. The Act deals mainly with safety and environmental matters related to pipelines in Alberta. It applies to public and titled (private) land.
§6.92 While the EUB regulates pipelines within Alberta the National Energy Board (NEB) regulates energy transportation across interprovincial and international borders.

§6.93 Normally, a pipeline easement is obtained from the landowner, or a facility surface agreement is obtained if the land is on public lands, before the EUB approves an application and grants a licence to construct and operate a pipeline or related facility (battery, processing plant, gas plant, etc) under Section 9 of the Pipeline Act.

§6.94 Section 39 of the Pipeline Act contains requirements with regard to setbacks for pipelines paralleling and crossing roads. Section 41 deals with crossing irrigation canals or ditches under the Irrigation Districts Act or a drainage ditch under the Drainage Districts Act. Section 43 deals with crossing a lake, river, stream or other body of water.

§6.95 Under section 3(1) of the Pipeline Regulation AR 122/87, a survey of the right-of-way boundaries is required in accordance with the Surveys Act before the commencement of construction, unless an exemption is granted.

Oil and Gas

§6.96 The EUB regulates conservation and the safe, economic, orderly and efficient development of the oil and gas resources of Alberta through the Oil and Gas Conservation Act, RSA 2000, c.O-6.

§6.97 Familiarity with certain provisions in the Oil and Gas Conservation Regulations AR 151/71, EUB Order No. SU 1088 [Website 16] and EUB Directive 056: Energy Development Applications and Schedules [Website 17] is essential to an Alberta Land Surveyor conducting wellsite and related facility surveys for oil and gas.

§6.98 Before an oil or gas well can be drilled, under section 11 of the Oil and Gas Conservation Act a licence to drill is required. Under section 2.020 of the Regulations the application for a licence shall be accompanied by a suitable plan. Section 2.020 (3) contains very detailed provisions regarding the survey and plan requirements, including locating and showing the relationship of the well to the survey system and to surface topography, and showing elevations, surface improvements, other wells, coal mines, water wells, etc. The plan shall be prepared from a survey made under the direct supervision of an Alberta Land Surveyor and be certified by him or her.

§6.99 The Regulations also describe drilling spacing units (the subsurface area that one well can drain) and target areas (the part within a spacing unit in which the well must be located). The normal spacing unit for oil wells in Alberta is one well per quarter section and for gas wells one well per section. The EUB under Section 4.040 of the Regulations may also prescribe special drilling spacing units which may differ from
normal spacing units in size, shape or target area. A reduced size of spacing units may be prescribed if it will result in improved recovery or increased capacity.

§6.100 Prior to 1981, the location of target areas as prescribed in the Oil and Gas Conservation Regulations was a contentious issue for the agricultural community, owing to the impact that wellsites and access roads had on productive land. In 1981, after a period of consultation, the EUB issued Order No SU1088. It amended target areas so that wellsites and access roads could be contiguous with property boundaries. It is applied in the agricultural areas of the province which are not within declared oil pools.

§6.101 EUB Directive 056: Energy Development Applications and Schedules: (September 2005) presents the requirements and procedures for filing a licence application to construct or operate any petroleum industry energy development that includes facilities, pipelines or wells. Of particular interest to land surveyors is Section 7.9.1 which deals with the technical requirements for survey plans for wellsites.

Oil Sands

§6.102 In a manner similar to that for oil and gas, the EUB regulates conservation and the safe, economic, orderly and efficient development of the oil sands resources of Alberta under the authority of the Oil Sands Conservation Act, RSA 2000, c.O-7.

§6.103 Under section 10(1) of the Act, the Board’s approval is required before facilities for the recovery of oil sands or crude bitumen are constructed, commenced or continued. In most cases oil sands development will be on public lands.

Right of Entry

§6.104 The holder of an oil or gas licence or lease cannot be denied the right of access over the land to explore and develop. The surface owner also has rights, including having input as to the location of wellsites, access roads and other facilities and the right to fair compensation. The same general principles apply to pipelines under the Pipeline Act and to oil sands development.

§6.105 The energy company will first attempt to reach agreement with the landowner as to the location of the wellsites and access road, or other facilities and for compensation. In the case of oil and gas development, normally a surface lease agreement for a well and access road must be obtained from the landowner before the EUB approves a licence to drill. If agreement between the energy company and the landowner cannot be obtained, a formal EUB hearing under the Alberta Energy and Utilities Board Act may be required. However, before launching a formal hearing the energy company and the landowner may seek resolution through the EUB’s
Alternative Dispute Resolution (ADR) program. Under this program facilitation is available through EUB field staff and/or through third party ADR professional assistance [Website 18].

§6.106 Even though a formal EUB hearing may grant the energy company the right to drill, the right to access the land is still required either by obtaining the consent of the owner of the land or by obtaining a Right of Entry Order under section 12(1) of the *Surface Rights Act RSA 2000, c. S-24*.

§6.107 Issues regarding financial compensation are under the authority of the *Surface Rights Act*. Compensation Orders issued under section 25 of the Act provide for payment of compensation for the value of the land, loss of use, nuisance, inconvenience, damage, etc.

§6.108 Section 17 of the Act and sections 5 to 10 of the *Surface Rights Act General Regulation AR 189/2001*, outline requirements for survey plans in connection with applications for right of entry orders on Crown land.

§6.109 There are also relevant statutes other than those mentioned above. For example, the *Hydro and Electric Energy Act*, the *Water and Electric Companies Act* and the *Railway (Alberta) Act* have provisions where the *Surface Rights Act* can be used.

**Granting and Registration of Surface Rights**

*Land Titles*

§6.110 Leases for wellsites and access roads, rights-of-way (easements) for pipelines, etc. for surface rights for oil and gas development on titled lands are negotiated between the energy company and the owner of the surface land and may be registered under the *Land Titles Act*. For clarification, such surface rights are still required from the surface owner, even if the mines and minerals have been leased to an energy company by the government of Alberta.

§6.111 As noted in the Land Titles Office Procedures Manual, SRA-1, right of entry orders under the *Surface Rights Act* may be registered [Website 19].

§6.112 Surface rights on titled lands may also be protected by caveats. This may cause future problems as there may not be a public record of the current lease or survey. It is not necessary that a copy of the survey plan be attached to the caveat. Furthermore, if the location of the access road or the size of the wells site is subsequently changed and a revised surface lease is negotiated with the landowner, it may not be registered, as the
interest was already protected by caveat. Also, if the actual well location did not change, the EUB is not supplied with a new plan [Wesolowsky 2005].

Public Lands

§6.113 Dispositions administered under the Public Lands Act are required by energy companies to obtain access to public land for oil and gas development. The following disposition types are some of those that are most likely to be required:

- Mineral Surface Leases (MSL) are required for oil and gas well sites, battery sites, etc.
- Licences of Occupation (LOC) are required for access roads.
- pipeline agreements are required for flow lines, pipelines and water injection lines.
- power line easements are required for power lines.

§6.114 Surface Public Land disposition information is contained within the Land Status Automated System (LSAS) managed by Alberta Energy. Normally the disposition would not be registered in the Land Titles Office.

Survey Requirements

§6.115 In this part, the survey requirements for obtaining licences for facilities, pipelines and wellsites from the EUB are discussed first. This should help to differentiate the requirements of the EUB from the survey requirements for surface rights. Also mentioned in this part are plan requirements for dispositions on public lands.

Survey Requirements for Wellsite Licensing

§6.116 The EUB is concerned with operations, safety, and protection of the environment.

§6.117 EUB Directive 056: Energy Development Applications and Schedules: (September 2005) presents the requirements and procedures for filing a licence application to construct or operate any petroleum industry energy development and includes facilities, pipelines or wells. Section 7.9.1 includes technical requirements for wellsite survey plans. A key requirement to be shown on the plan and used as the well location for the licence is the location of the wellhead as defined by the coordinates from the two boundaries of the quarter section that are also the boundaries of the section, and by calculated distances to the interior boundaries of the quarter section.
§6.118 An energy company requiring a wellsite to be located will supply the surveyor with the latitude and longitude of the proposed wellhead location. Once the surveyor has the location, the wellhead can be positioned using a variety of methods. One method using GPS has greatly facilitated this work and is now at the state where accurate positioning of the wellhead can be accomplished by differential measurement between Alberta Survey Control Markers (ASCMs) and the wellhead, possibly hundreds of kilometres apart. There are also systems such as the Canada-wide Differential Global Positioning System (CDGPS) and similar commercial services that operate base stations on ASCMs. These systems and services obviate the need for the surveyor to have a GPS receiver on a base station and they provide the GPS data that is required to determine the position of the wellhead being laid out.

§6.119 Once the well position has been determined, it must be related to the boundaries of the township system. In surveyed territory this requires physical ties to the section and quarter section monuments. However, in unsurveyed territory there are additional considerations which are discussed below under the Unsurveyed Territory section.

Survey Requirements for Surface Rights

Pipeline Surveys

§6.120 The Pipeline Act and the Pipeline Regulation include provisions regarding survey and plans for pipelines and have been previously discussed in this section.

§6.121 Section 45 of the Surveys Act specifies certain requirements that apply to pipeline surveys. For example, placing monuments on curves and on changes of direction, and the need to mark only one boundary line for rights of way bounded by parallel lines that are not more than 150 feet apart.

§6.122 Part D, Section 4 of the MSP contains standards for right-of-way surveys, which apply to pipelines.

§6.123 For right-of-way surveys, in addition to the requirements mentioned above, Procedures SUR-5 and SUR-6 in the Land Titles Office Procedures Manual should be consulted.

Wellsite and Related Facility Surveys

§6.124 The Oil and Gas Conservation Regulations AR 151/71, EUB Order No. SU 1088 and EUB Directive 056: Energy Development Applications and Schedules include
provisions regarding survey and plans for pipelines and have been previously discussed in this section.

§6.125 EUB Order No. SU1088 amended spacing units so that wellsite locations and access roads could be contiguous with section and quarter section boundaries. Surveyors may have been allowed some flexibility in locating boundaries of quarter sections when wellsite locations were in the middle of quarter sections. However, since locations are contiguous with quarter section boundaries, as required by SU1088, the surveyor must ensure that those boundaries are properly determined in accordance with the Surveys Act to avoid encroachments [Impey 1984].

§6.126 The MSP, Part D, Section 5, Wellsites and Public Land Dispositions, includes standard practice in both surveyed and unsurveyed territory. Part D, Section 10 includes additional requirements in unsurveyed territory.

Surveys for Surface Rights for Oil and Gas on Public Lands

§6.127 Sustainable Resource Development has developed a number of documents to assist in determining plan requirements for dispositions. These include Disposition Plan Requirements, Content Requirements for Disposition Application Plans, Content Requirements for Disposition Final Plans, Suggestions of what to avoid on Plans and Samples of Suggested Base Types. Many of these requirements apply to surveys for surface rights for oil and gas. They are all available from Sustainable Resource Development [Website 6].

Unsurveyed Territory

Introduction

§6.128 Unsurveyed territory for the purpose of this part generally refers to public land which has not been surveyed into the Alberta Township System of Survey.

§6.129 Section 2 Oil and Gas Conservation Act, RSA 2000, c.O-6. specifies that in the Act and in any regulations or orders made pursuant to it, land may be described or referred to as if it were surveyed into sections in accordance with the Surveys Act, whether or not the land is so surveyed, and reference to a legal subdivision, section or township in land that is not so surveyed is deemed to refer to that which would be the legal subdivision, section or township if the land were so surveyed. There is a similar provision in the Oil Sands Conservation Act. This presents a challenge in unsurveyed territory because monuments defining the township system may be many miles away from the wellsite to be surveyed.
§6.130 In laying out wellsites and other parcels of land in unsurveyed territory, all parcels are related to the NE corner of Section 33 on the baseline closest to the parcel. The location of the legal subdivision, section or township in which the parcel is to be laid is determined by using distances shown in the Supplement to the Manual of Instructions for the Survey of Canada Lands. Over the years, surveyors have employed many methods or combinations of methods to make the relationship.

Wellsite Control Traverse Plans

§6.131 The first regulation dealing with wellsite surveys was the 1959 Wellsite Survey Regulation AR 407/59. Over the years there were several changes to the regulation to keep up with the times; however, provisions regarding carrying out and recording wellsite control traverse plans remained throughout. Once a wellsite control traverse plan was recorded, the control monuments shown on it could then be used by any surveyor to lay out wellsites in the same general area, thus avoiding the need to go back to the township system monuments. The regulation was revoked in the late 1980s and the provisions were incorporated into the MSP. The current standard in Part D, Section 5.3 (1 to 4) outlines the requirements. Under this section a surveyor when performing a survey for a well location in unsurveyed territory is to prepare a plan of survey (Traverse Plan) if the well location is more than 2 kilometres from an existing survey performed in accordance with the Surveys Act. It also requires that the wellsite control traverse plans be submitted to the Land Titles Office for registration, within 180 days of completion of the survey. It should be noted that wellsite control traverse plans filed prior to 1997 are available from Alberta Sustainable Resource Development; however, land surveyors should be aware that they do not show any corrections to the plans made after 1997. Therefore, copies of wellsite control traverse plans obtained from Alberta Sustainable Resource Development may not be up to date [Website 20].

§6.132 Distances and bearings shown on registered plans, including township or baseline plans, can also be used as part of the data to calculate the relationship of wellsites to the NE corner of 33 in unsurveyed territory.

Considerations in using GPS in Unsurveyed Territory

§6.133 Nowadays, surveyors are using GPS to position wellheads for oil and gas surveys. Since GPS surveys are normally independent of local surveys there is usually the additional requirement to relate the wellsite to the boundaries of the theoretical township system and to other existing dispositions in the area. Surveyors use several different methods to determine these relationships. A surveyor may take into consideration the following factors when carrying out this work.
§6.134 The relationship of the boundary of the wellsite and/or related facilities being surveyed to other dispositions in the area is important. In dealing with public land dispositions (leases, licences of occupation, easements, etc.) in unsurveyed territory in normal circumstances, there should be no reason not to comply with the basic principles of survey evidence as one would for any other survey. The survey monuments (nails, bars, etc.) placed to mark the boundaries of the various existing dispositions, or other best evidence, governs the location of the boundaries. Unfortunately, in the past the boundaries of these surveys were poorly marked or have long since disappeared. Nevertheless, if boundaries of a new survey (wellsite, access road, etc.) are likely to intersect or be contiguous with a previous boundary of a disposition, then it would seem to be required that the monuments, or other best evidence, that govern the boundaries of the disposition should be located in the field, as would be done for any other survey.

§6.135 The MSP, Part D, Section 5, Wellsites and Public Land Dispositions, includes the following provisions:

5.1

.2 An Alberta Land Surveyor performing a survey for the location of wellsites and related facilities in unsurveyed territory shall locate and confirm sufficient monuments to define the theoretic section in which the wellsite is located to allow the determination of the wellsite in relation to the theoretic section boundaries. Monuments in this section refer to those placed in accordance with Part 2 or Part 3 of the Surveys Act, or shown on a wellsite control traverse plan on file with the Director of Surveys office or Alberta Survey Control Markers integrated with the Alberta Survey Control System.

5.2

.1 Where the boundaries of a wellsite or related facility purport to define a property boundary, the said boundary shall be defined in accordance with the Surveys Act excepting thereout the provisions of Sections 44(3) and 46(3) to define the boundaries of the parcel.

.2 Notwithstanding Section 5.2.1, when a related linear facility (access road), crosses or terminates on a property boundary, the intersection may be calculated. The plan shall clearly indicate that the intersection is calculated.

§6.136 It is obvious from this standard that there is some relaxation in what would be a normal standard for other surveys. Sections 44(3) and 46(3) of the Surveys Act require a surveyor, who establishes a corner or re-establishes the position of a monument, to mark the corner or position with a new monument and to submit to the Registrar a re-establishment plan of survey.
§6.137 There has been considerable discussion over the years as to whether or not the ATS file may be used (or what verification is required for it to be used) to determine the location of the township system fabric in relationship to the wellhead. A good discussion on this issue is in the March 1998 issue of *ALS News* [Impey et al. 1998:11].

§6.138 The above discussion only covers some of the basic principles and practices of oil and gas surveys in Alberta. It should give the reader a basic understanding and appreciation of the complex technical matters and other issues that surveyors must take into consideration when conducting these surveys.

**Taking Land for Public Use (Expropriation)**

**Introduction**

§6.139 Section 1(g) of the Alberta *Expropriation Act*, RSA 2000, c.E-13 defines expropriation as the taking of land without the consent of the owner by an expropriating authority in the exercise of its statutory powers.

§6.140 The Law Reform Commission of British Columbia in a 1971 Report on Expropriation stated the following:

Expropriation is confined, by its very meaning, to the taking of an interest in property. Property interests, particularly those relating to land, fall within a limited number of traditional classifications. The acquisition of a right to use land by the transfer of a property interest can arise by the giving of a freehold estate (estates in fee simple or life estates), lease, easement, or *profit-a-prendre*. Unless a right to enter and use land comes within these traditional categories, established centuries ago under the English feudal system, the right can only amount to a licence. The licence permits what would otherwise amount to a trespass [Website 21].

§6.141 What is the difference between a right of entry order under the *Surface Rights Act* and an expropriation under the *Expropriation Act*? It would appear that a right of entry order falls within the definition of an expropriation, but is limited in that it can not convey title and for the most part is used with respect to operations pertaining to the development and delivery of energy resources in Alberta.

**Expropriation Act**

§6.142 The *Expropriation Act* RSA 2000, c.E13 explains how private property is expropriated and what rights to compensation the owner has for expropriated property.
The right of expropriation under the Act must be granted by some other provincial legislation, referred to as the expropriation authority.

§6.143 The preferred method of acquiring land is by agreement or transfer. Section 5 recognizes the right of acquisition by an expropriating authority of any estate or interest in land by agreement or transfer. While no owner may dispute the right of an expropriating authority to expropriate land under sections 6(1)(2) of the Act, the owner may question whether the taking of the land, or the estate or interest in it, is fair, sound and reasonably necessary in the achievement of the objectives of the expropriating authority. If the parties cannot agree on the terms for transferring the land to the appropriating authority or the compensation to be paid, the Act provides procedures in which the owner has the right to be heard.

§6.144 If there were such a thing as “the spirit of expropriation” it would be: expropriate only the interest in land which is absolutely necessary for the public work or project. Section 3 of the Act allows for the expropriation of a lesser interest than the fee simple, such as “profit, easement, right, privilege or benefit in, over or derived from the land”. Section 4(1) provides that unless the authorizing Act expressly authorizes the expropriation of mines or minerals, they are not included.

§6.145 Provided the provisions of the Expropriation Act have been followed, a certificate of approval for the expropriation is issued. Under section 19(1), the expropriating authority may register the certificate of approval in the Land Titles Office. Subject to the Public Highways Development Act and the Municipal Government Act, registration vests in the expropriating authority the title to the land described in the certificate as to the interest specified in the certificate. Section 19(2) requires that the description of the title to the land shall be satisfactory to the Registrar of Land Titles or shall be accompanied with a plan of survey of the land.

§6.146 Section 63 of the Act provides that a land surveyor may enter upon and survey the land and, if it is necessary, cut down any trees or brush that obstruct the running of survey lines. The owner or person in possession of the land shall be compensated for damages.

§6.147 The Expropriation Act does not apply to Métis Patented Lands. Right of Entry and compensation is determined under the Métis Settlements Act, RSA 2000, c.M-14, Part 4. Expropriation of an interest less than the fee simple is under the Métis Settlements Land Protection Act, RSA 2000, c.M-16, s. 6.

§6.148 Her Majesty the Queen in right of Canada may expropriate land for a public work or other public purpose, including land that belongs to Crown Alberta under the federal Expropriation Act, RSC 1985, c.E-21.
Alberta Statutes with Expropriation Authority

§6.149 The right to expropriate land required for a road or other public work by the provincial government is under the authority of the Public Works Act. If the use is by a municipality, expropriation is under the authority of the Municipal Government Act.

§6.150 Under section 20 of the Public Works Act, RSA 2000, c.P-46, the Crown may acquire by expropriation any land required for a public work. Section 21 of the Act requires that if the land: is not shown on a plan that is filed or registered under the Land Titles Act; or is not the subject of one Certificate of Title; or consists of one or more legal subdivisions; or cannot be described sufficiently without the necessity of a plan of survey or an additional plan of survey, it shall be surveyed by a land surveyor who shall prepare a plan of the land. Section 22 provides a right of entry for the land surveyor to survey the land.

§6.151 Section 32 provides that when the Crown acquires land for a highway by agreement with the owner, title to the land may be registered in the name of the Crown by the filing of the plan or by notification, and it is not necessary to register a transfer of that land.

§6.152 Under section 14(2) of the Municipal Government Act, RSA 2000, c.M-26, a council may acquire land by expropriation, inside or outside the municipality for a municipal purpose. Also, under section 602.13(1), a commission may acquire land by expropriation for the purpose of providing a public utility or a transportation service.

§6.153 Several other statutes grant the right of expropriation. For example, the Railway (Alberta) Act, the Water Act, and the Hydro and Electric Energy Act.

Surveys under the Expropriation Act

§6.154 Most surveys required as a result of expropriation will be for roads or other public purposes under the authority of the Public Works Act or the Municipal Government Act. The rights granted may be the fee simple or a lesser interest such as a utility right-of-way or easement.

§6.155 There is no difference in the survey and plan requirements for a road, utility right-of-way or easement, etc. whether or not the survey requirement results from an expropriation or from some other agreement. The Surveys Act and the Land Titles Act contain provisions that apply generally to surveys of roads, rights-of-way, easements, etc. The MSP includes general standards and procedures applying to these surveys in Part C and in Part D, Sections 1 and 4. Procedures EXP-1, EXP-2 and SUR-5 in the Land Titles Office Procedures Manual also are applicable.
Condominium Surveys

(See also Condominium Boundaries in Chapter 3)

Introduction

§6.156 Condominium legislation is a modern development in real property law in response to pressures of increasing land values, diminishing urban space and a need to have more flexibility to accommodate diverse social needs. A condominium has been described as follows:

Reduced to essentials, a condominium exists when two or more property owners band together under an arrangement in which there are individually-owned units, coupled with shared ownership of other lands, all held under a general scheme of management. [Ziff 1993: 274]

§6.157 Condominium ownership has existed in Canada only since the 1960s. However, somewhat similar forms of ownership have existed in Europe and parts of Asia for ages:

This system of individual space ownership coupled with co-ownership of common property has a long history; the ancient Hebrews, Babylonians and Romans all referred to it. By the Middle Ages, this unique type of housing had become widespread in Europe.[Loeb 1989:1-2]

Condominiums in Alberta

§6.158 Alberta’s first condominium legislation was the Condominium Property Act SA 1966, c.19. Under this Act, condominiums consisted mainly of residential apartment buildings or townhouses.

§6.159 An amendment to the Act, SA 1983, c.71 brought the concept of bare land condominiums. A bare land condominium is somewhat similar to a traditional normal subdivision in that it allows for single family homes. However, as for the normal condominium corporation, a bare land condominium corporation can provide common services such as utilities, snow removal, grounds maintenance and community recreation facilities. It also allows a developer to build homes as they are sold, and enables new owners to obtain title before the entire development is finished. Condominiums are also not limited to residential housing; they may also be used for purposes such as businesses and resort developments.
§6.160 Section 3 of the current Condominium Property Act, RSA 2000, c.C-22, provides that for the purposes of subdivision planning a condominium plan is a plan of subdivision under the Municipal Government Act and the Land Titles Act.

§6.161 Section 5 states that on the registration of a condominium plan the Registrar shall cancel the Certificate of Title to the parcel described in the plan and shall issue a separate Certificate of Title for each unit described in the plan. There is no separate title for the common property; each unit title includes the owner’s share of the common property. Under section 25(1), the registration of a condominium plan also has the effect of creating the condominium corporation.

§6.162 The Condominium Property Regulation, AR 168/2000 deals with such matters as registration of condominium plans, capital replacement reserve fund, phased development, amalgamation, modification of condominium plans, insurance, purchaser's protection programs and amendment of condominium plans.

§6.163 Condominiums in the National Parks of Alberta are discussed in Chapter 5.

Surveys

§6.164 Sections 8, 9 and 10 of the Condominium Property Act, the Condominium Property Regulation and Procedure SUR 4 of the Land Titles Office Procedures Manual have very comprehensive and detailed requirements with regard to condominium surveys and the information to be shown on condominium plans, and should be referred to directly.

§6.165 Boundary definition deserves special mention. For condominiums where boundaries of units are described by reference to floors, walls or ceilings, the boundary of the unit is the surface of the floor, wall or ceiling that the finishing material (any lath and plaster, panelling, gypsum board, panels, flooring material or coverings or any other material that is attached, laid, glued or applied to the floor, wall or ceiling) that is in the interior of that unit. In the case of bare land condominiums, boundaries of units are defined by reference to monuments placed pursuant to the provisions of the Surveys Act.

§6.166 A schedule to the plan is required, setting out the unit number, the unit factor, the basis for determining the unit factor, the approximate floor area for each unit in the case of a building, and the approximate ground area for each unit in the case of land divided into bare land units.

§6.167 Section 45(3)(c) of the Surveys Act provides that a surveyor when surveying the boundaries of condominium units, other than bare land units, shall not mark the
boundary lines of the units but shall locate or re-establish the monuments that determine the boundaries of the parcel within which the units lie.

§6.168 As the above-mentioned survey and plan requirements are so comprehensive, additional standards are not required for condominium plans or surveys in the MSP.

Strata Surveys

(See also Strata Boundaries in Chapter 3)

Introduction

§6.169 A strata survey in Alberta defines volumetric space. There is a need to define volumetric space for the granting of various rights for structures such as underground or aerial walkways, transit tunnels and buildings or space in buildings.

§6.170 A strata survey is different from a survey for a condominium development. While a condominium survey may define volumetric space, as in the case of a unit in an apartment building, its main purpose is to provide the means to facilitate condominium ownership (ownership of individual property coupled with shared ownership of common property).

§6.171 In Alberta the difference between the terms condominium and strata is clear. However, it is not clear globally. Indeed in some jurisdictions, such as Australia and British Columbia, statutes for condominium developments are called Strata Title Acts.

Strata Surveys in Alberta

§6.172 The Land Titles Act is the legislative authority for surveys of strata space. Section 86(1) defines “strata space” as volumetric space, whether it is located below or above or below and above the surface of the land, or occupied in whole or in part by any structure and that is shown as strata space on a strata space plan.

§6.173 Section 86(6) provides that when a strata space plan is registered, the existing certificate of titles are cancelled to the extent necessary, and new Certificates of Title are issued to the strata spaces.

§6.174 If a strata space plan will result in a subdivision of land, it will be a plan of subdivision under the Municipal Government Act and the Land Titles Act.
Surveys

§6.175 Section 86 of the *Land Titles Act* contains very specific instructions for the survey of strata space.

§6.176 Under section 86(3), before volumetric space is subdivided into strata space, the land in which the subdivision is to be made must be shown as a single parcel on a plan of survey registered under the *Land Titles Act*. Section 86(4)(a) states that the boundaries of a strata space may consist of vertical, horizontal or inclined planes or curved surfaces. Section 86(5)(c) requires the elevation of each corner or angle of the strata spaces in relation to monuments of known elevation or survey control markers to be shown on the strata space plan.

§6.177 Procedure SUR 2.1 of the *Land Titles Office Procedures Manual* includes additional requirements for strata plans and reinforces this boundary concept with the following statement:

> Strata space boundaries are independent of physical structures and are determined by planes or curved surfaces having defined geodetic elevation. A portion of a building may be located within a strata space but conceptually it is like a building constructed on a surface parcel and therefore subject to the possibility of encroachment beyond the defined boundaries.

§6.178 Three-dimensional positioning is needed to define corners or angles of strata space—which is not clear in the *Land Titles Act*. The *Surveys Act* clarifies this requirement. Section 45(3)(b) of the *Surveys Act* requires that a surveyor:

(b) when surveying the boundaries of a strata space, as defined in the *Land Titles Act*, shall not mark the boundary lines of the horizontal, vertical or inclined planes or curved surfaces, but shall relate the locations of them

(i) to at least 2 monuments of known elevation in the geographical positioning system placed within or adjacent to the boundaries of the parcel for that purpose, or

(ii) to 2 survey control markers and shall relate the locations of them to the external boundaries of the parcel within which the spaces lie.

§6.179 In defining volumetric space the structure must be encompassed by the volumetric space. For stand-alone structures this should not present a problem and often the vertical extensions of the boundary lines of the parent parcel shown on the plan of survey registered under the *Land Titles Act* are used as a boundary of the strata space. However, where separate strata titles are required for contiguous structures, such as apartments in a building or adjacent floors in a building, the dimensions or
elevations defining the volumetric space must accurately reflect the location of the physical feature of the boundary.

§6.180 One can not help but wonder why physical features of the structures cannot also be used to define strata space, as they do for condominiums. Medium planes or surfaces (exterior or interior) of floors, walls, etc. of structures such as buildings are in many cases definable. It seems that good survey practice would allow the option for the boundaries of strata space to be defined by physical features where such definition would clearly reflect the intention of the survey and avoid any future problems.

§6.181 The MSP does not have any standards for strata plans. As for condominium surveys, it appears that the provisions in the Land Titles Act, the Surveys Act and the Land Titles Office Procedures Manual are so comprehensive that no further standards are required.

**Descriptive Plans**

**Introduction**

§6.182 Alberta introduced the concept of descriptive plans in 1982 by the Land Titles Amendment Act 1982, c.23. The amendment, subject to proclamation, provided for the replacement of metes and bounds descriptions with descriptive plans prepared by the Registrar, and the option of using descriptive plans prepared by Alberta Land Surveyors for future subdivisions.

§6.183 At that time, other Western Canadian Land Titles and Canada Lands jurisdictions had introduced, or were in the process of introducing, similar provisions. It was felt that descriptive plans were easier to read and provided less chance for error than written land descriptions. Furthermore, the lower cost and time savings involved in preparing descriptive plans for relatively straightforward land descriptions for subdivisions, compared with the time and expense involved in conducting a fully monumented survey added to the justification.

§6.184 The Alberta Land Surveyors’ Association sought assurance that descriptive plans would be prepared by qualified staff and that their use would be authorized with discretion for new subdivisions. As a result the 1982 amendment dealing with descriptive plans was not proclaimed until March 25, 1988.

§6.185 Under section 88 of the Land Titles Act, RSA 2000, c.L-4 the Registrar may have a descriptive plan prepared by his staff for parcels of land currently described in a certificate of title. An Alberta Land Surveyor, with the approval of the Registrar, may
prepare descriptive plans for new parcels. There are conditions. If the plan has the effect of subdividing land, sections 88(1)(b) and 88(2) state that it shall not include more than two parcels, or include any land dedicated for public purposes, and the plan must contain sufficient detail so that, in the opinion of the Registrar, the parcel boundaries can be ascertained from the plan.

§6.186 Certificates of Title, for which descriptive plans have been prepared to replace the written descriptions therein, are cancelled, and new Certificates of Title are issued with the new descriptive plans describing the land. Section 88(4) states that the descriptive plan of a new parcel is dealt with as if it were a plan of survey.

§6.187 In the years from 1994 to 2002, there were 8,947 descriptive plans registered in Alberta, about an average of 994 per year [Pratt 2003c:26].

Plan Preparation

§6.188 While the Land Titles Act gives some direction for preparing descriptive plans, Procedure SUR 3 of the Land Titles Office Procedures Manual contains more specific requirements.

§6.189 Additional standards for descriptive plans are given in Part D, Section 6 of the MSP. These standards reflect the surveyors’ concern that boundaries created by descriptive plans are consistent with the intent of the subdivision, that all improvements lie within the boundaries of the proposed parcel, and that there are no encroachments on the subject property from adjacent lands.

§6.190 It is important that clients understand that monuments are not placed when a descriptive plan is used. Part D, Section 6.2 of the MSP requires a statement on the plan as to whether or not a field inspection was carried out and affirming that boundaries have not been established or marked on the ground.

§6.191 Part D, Section 6.3 of the MSP specifies that where a descriptive plan includes a natural boundary, the surveyor should conduct a field inspection to confirm its location. In 1989 in the Guardpost column, a regular feature in ALS News, the Practice Review Board suggests that a surveyor should go even further by determining the nature of the boundary change:

If descriptive plans based on natural boundaries are to be accepted by Land Titles, the surveyor must ensure the boundaries are in fact natural, through a combination of field and office research and not the result of a man made diversion or avulsion. [Hunter 1989]
§6.192 The column also emphasizes the need to apply the rules of good description writing to ensure that a descriptive plan contains no ambiguous or conflicting measurements or statements. It also makes the very important point that the surveyor must give consideration to the expense of laying out the descriptive plan on the ground at a later date. For example, the future cost of surveying and monumenting a parcel that has boundaries perpendicular to an adjacent road allowance would likely be significantly less than surveying and monumenting a parcel having boundaries parallel to a distant blind line or quarter line.

Measurement Accuracy

§6.193 The term *accuracy*, as used by Alberta Land Surveyors and defined in the MSP is:

The degree of conformity of closeness of a measurement to the true value. (Mikhail & Gracie, Analysis and Adjustment of Survey Measurement) [Website 5].

§6.194 Accuracy and precision are words often used interchangeably but they warrant distinction. In surveying, precision may be defined as the conformity of repeated measurements of the same distance. For example a distance measured twice or more times with a chain or other measuring device that is not properly calibrated may yield good repeatability and thus be precise. However the measurement will not be accurate unless it is close to the true value.

§6.195 When the township system was surveyed in the Canadian prairies in the 19th century, the measurement concern was that the chain was calibrated, so that in laying out the section boundaries, the boundaries were accurately measured. Paragraph 2 on page 10 under Instructions to Surveyors, of the 1881 Manual Shewing the System of Survey of Dominion Lands with Instruction to Surveyors, stated:

2. All measurements shall be made with the ordinary four pole or Gunter’s chain. It is to be tested and corrected, during use, by a standard measure which shall have been previously compared with the standard at the Dominion Lands Office, [Website 22]

§6.196 In 125 years the concept of accuracy has not changed that much. Section 11(2) of the Surveys Act includes the following with respect to standard of measure:

Standard of measure

11(2) A surveyor shall verify
(a) all tapes used by the surveyor by comparison with a subsidiary standard of a type approved for that purpose by the Director or by a person authorized in writing by the Director, and

(b) all electronic linear measuring devices used by the surveyor by comparison with calibration base lines established by the Minister for that purpose.

§6.197 To assist in calibrating measuring equipment the Province has established four calibration base lines for EDM [Website 23]. There are also two GPS validation networks, one in the Edmonton region and the other in the Calgary region. Both networks were established on a co-operative basis between the Province, Geomatics Canada, and the Cities of Edmonton and Calgary [Website 24].

§6.198 Land surveyors have used, and still use, the ratio of the error of closure to the length of the traverse to help control the accuracy (in most cases the word should be precision) of their work. The ratios 1:7,500 (for new surveys closing on the surveyor’s own work) and 1:5,000 (for closing on work performed by other surveyors) are the current standards for legal surveys. While the ratio can give a general indication of accuracy, it is dependent on the proper calibration of the measuring device, unless perhaps the closure is on another survey that is known to be accurate. The error of closure is certainly useful in indicating the existence of blunders. However, for a very long survey traverse, the allowable error may be great enough to conceal errors.

§6.199 Current needs for accuracy are different now than at the time of the original township surveys. Integrated survey systems, global, national and provincial survey control systems, and development of land-related information systems, have made it necessary to re-evaluate how one deals with controlling surveys for accuracy. The traditional measure of accuracy—conformity of closeness of a measurement to the true value, may become less relevant for legal surveys as the need to integrate legal surveys with control survey systems, such as the Alberta Survey Control System, evolves.

§6.200 When land survey measurements are integrated into a survey control system, it is no longer sufficient to assess the accuracy (again, in most cases the word should be precision) of a legal survey in terms of the ratio of the error of closure in one’s own work. Accuracy, in terms of closeness to a position, a published position of survey control, is becoming more important. This closeness to a position can be measured by the concept of confidence region.

§6.201 The concept of confidence region used for control surveys since the early 1970s was expanded to cadastral surveys for Canada Lands in 1996 [CLS Manual: D1.63]. In 1999, provisions were added to Part C, Section 1 of the MSP which allowed the measure of accuracy for cadastral surveys to be determined by either the ratio of error of closure or the confidence region.
Integrated Surveys – The Alberta System

Historical Background

§6.202  Geodetic spatial referencing systems to which property and other surveys can be tied have existed for well over a century in Europe and in other parts of the world. While Canada early in its surveying history did not embark on such a national system, other Commonwealth countries, such as New Zealand and South Africa, did. Yet the idea of integrated surveys is not new in Canada or Alberta.

§6.203  In a presentation to the Alberta Land Surveyors’ Association, at its Annual General Meeting in March 1970, Ernie Tessari ALS of the Surveys Branch, Department of Highways and Transportation, quoted from a brief submitted by the Dominion Land Surveyors’ Association to the Minister of the Interior, dated March 1886:

The Dominion has arrived at the stage where the wants of the country demand a more exact system of survey than has been in vogue in the past. The increase in value of real property – the boundaries of which in the older provinces are in most cases entirely dependent for their stability on the durability of a piece of wood, a few marks on trees or the testimony of a few of the oldest inhabitants, thus often leading to the expensive litigation, of which the result is dependent mainly on the preponderance of evidence on one or the other side, which may be, and is often wrong – increases also the necessity for such a survey. Now, were the boundaries, especially those of larger areas such as concessions, townships and counties, connected with and defined by a geodetic survey similar to that made by the countries mentioned herein, all doubt as to their true position would be forever set at rest. [Tessari: 1970:14]

§6.204  In Alberta, during the 1970s and 1980s, great advances were made in implementing control surveys in the cities of Calgary and Edmonton, and in designating Survey Control Areas for specific areas of the province. The long-term objective was to have the entire survey system in Alberta integrated to Alberta Survey Control. This objective was initiated in 1976 by the Survey Control Regulation, AR 74/76. This regulation required connections to control for surveys in Survey Control Areas, connections to control outside survey control areas for surveys within one kilometre of survey control monuments, and outlined provisions regarding control for non-monumented subdivision surveys control under section 36.1 of the Surveys Act, RSA 1970, c.358. The objective was given a huge boost in 1988, eighteen years after Tessari’s presentation, when legislation was proclaimed that for all intents and purposes provided for the current integrated survey system of Alberta. The list of duties given to the Director of Surveys, under section 5 of the Surveys Act, SA 1987 c S-29.1, included several duties pertaining to integrated surveys, including:
(b) co-ordinate the establishment and maintenance of a geographical positioning system for Alberta,

(c) co-ordinate the establishment and maintenance of a mapping system for Alberta,

(d) co-ordinate the development and maintenance of a land-related information systems network for Alberta,

(e) maintain the network of survey control markers and controlled photographic diapositives that are the physical elements of the geographical positioning system.

§6.205 Regulations under the Surveys Act outlined the requirements for the integration of surveys to the Alberta Survey Control Network.

§6.206 The concept of integration promoted in the 1970s included much more than the integration of surveys. It was believed that the real benefit would accrue when all spatially definable data was related to a common coordinate system. These benefits are now being realized. Several municipalities in Alberta integrate municipal spatial data into the coordinate system and it is readily available to users in digital form. In the future there should be even more benefit. Virtually unlimited electronic processing power and data storage are available, and spatial data can be easily transformed from one system to another. With modern technology, such as global positioning systems, total stations and photogrammetric mapping, the collection and integration of spatial data is immensely easier now than it was just a few decades ago. A vision for the future is one data base, spatially referenced on a common coordinate reference system, for particular themes of information, maintained by one and shared by all.

The Alberta Geodetic Spatial Referencing System

§6.207 The term integrated survey, as used by Alberta Land Surveyors and defined in the MSP, is: Any survey, the data from which forms part of the geographical positioning system. The geographic positioning system in Alberta includes the geographic positions of the Alberta Survey Control (ASC) network which consists of approximately 29,500 Alberta Survey Control Markers (ASCMs) [Website 25].

§6.208 The recognized horizontal datum for spatially-referenced data in Alberta is the North American Datum, 1983 (NAD83), using the GRS 80 ellipsoid. CGVD28 (Canadian Geodetic Vertical Datum 1928) is the vertical datum recommended for spatially-referenced data in Alberta [SRD: 2005].

§6.209 The published values of ASCMs are NAD83, either on the 3-degree Transverse Mercator (3TM) projection or the Universal Transverse Mercator (UTM) projection.
§6.210 The locations of integrated ASCMs are shown on index maps produced by the Geodetic Control Unit, Dispositions and Technical Services Branch, Alberta Sustainable Resource Development [Website 25]. There are two sets of maps: urban index and rural index. The urban index maps have a scale of 1:20,000 and use the 3TM projection system.

§6.211 The rural index maps comprise all areas within Alberta that are not included in the urban index maps. They have a scale of 1:250,000 and use the UTM projection system.

§6.212 The Geodetic Control Unit publishes two documents dealing with the establishment and maintenance of the ASC System. “Standards, Specifications and Guidelines for Alberta Survey Control 1993-09-01” is a useful reference for control surveys, including accuracy and monumentation requirements. “Standards, Specifications & Guidelines for Establishment and Maintenance of Alberta Survey Control using GPS” is a primary reference for municipalities and contractors who wish to establish and integrate survey control markers into the Alberta geodetic spatial referencing system [Website 24].

**Integrating Surveys to Alberta Survey Control**

§6.213 Part C, Section 5 of the MSP deals with Integrated Surveys. Section 5.1 states which surveys require integration:

5.1 Every survey, a plan of which is to be registered under the Land Titles Act, shall be integrated with survey control if 2 or more monuments found or placed by the survey are each within 1 kilometre of any 2 survey control markers.

§6.214 Section 5.2 outlines what constitutes integration:

5.2 For the purposes of Section 5.1, integration with survey control means obtaining sufficient measurements from survey control markers into the survey to permit the derivation of grid bearings and the computation of a closure starting at a survey control marker and proceeding along the shortest path through the survey to another survey control marker.

§6.215 There is an exception to the above. Under section 5.4, integration with survey control is optional for a new survey if it is within the bounds of a previous survey that has already been integrated.

§6.216 Section 5.6 provides for a situation where only a surveyed tie to a survey control marker is required:
5.6 On every survey other than surveys meeting the requirements of Section 5.1, the surveyor shall make field measurements connecting the survey to all survey control markers situated within 1 kilometre of any monument found or placed by the survey.

§6.217 One needs to know whether the survey to be integrated is within the area covered by an urban index map or is in the remainder of the province, so that when requesting ACSM ID Cards, the appropriate map projection coordinates (3TM or UTM) are obtained.

§6.218 There are two important things to know for calculations in integrating surveys to survey control. One is that the combined scale and elevation factor must be applied to measured distances, so that distances are on the 3TM or UTM mapping plane. The combined factor will be shown on the ACSM ID Card for each control point. As a general rule for projects, the difference in combined factors between ACSMs is not great, so an average combined factor can be used for the project.

§6.219 The other important point is that grid bearings are required. In the sample ACSM ID Card (see Figure 2), grid bearings are shown to adjacent markers. However, in some cases astronomic bearings are shown. If they are, it will be necessary to calculate the (grid) bearing by inversing the coordinates of the two ACSMs to be used for the bearing reference. Further information is available on grid bearings and astronomic azimuths on Fact Sheet 09, and on mapping planes in Alberta on Fact Sheet 10 published by the Dispositions & Technical Services Branch, Geodetic Control Unit. They are available on line [Website 26].

Figure 6-2. Sample ACSM ID Card

Source: Website 27
§6.220 Other provisions in Part C, Section 5 of the MSP deal with accuracy requirements. Part C, Section 5 also deals with surveys under Section 47 (non-monumented surveys) of the Surveys Act, covered in Chapter 3.

§6.221 Part D, Section 1, General Requirements for Plans, also applies to integrated surveys. Section 1.2 outlines requirements for bearing accuracy, angular ties to control, legend requirements and additional requirements if the survey is in unsurveyed territory.

The Future

§6.222 What does the future hold for integrated surveys? One can rest assured that a few surveyors will not feel content until every property corner and survey monument in the world has a position referenced to one global coordinate system to an accuracy of one centimetre or better. In the meantime, government agencies and surveyors around the globe are using hundreds of coordinate control systems, based on a multitude of datums, reference ellipsoids and methods of adjustments. In addition, factors such as earthquakes and continental drift make the task even more challenging. Garry Rogers, a seismologist with the Geological Survey of Canada, wrote in a Globe and Mail article:

If we bang a nail in the ground in Toronto, and put a GPS station there. And bang a nail on Vancouver Island, which we have done, we can see that Vancouver Island is slowly moving towards Toronto [Rogers 2004:F9]

§6.223 Entire textbooks have been written on the subject of coordinate systems, datums, etc. The following few points of many that could be listed are intended to capture in a nutshell some of the initiatives in the evolution towards a national coordinate system.

1. In Alberta, surveys are integrated to the geodetic spatial referencing system, which is a system containing over 29,500 control markers. Coordinates are 1983 (NAD83). There are local distortions and the accuracy in rural areas is generally in the ±0.5 metre range.

2. NAD83 (CSRS) is gaining recognition as the national coordinate system in Canada. Further information on NAD83 (CSRS) is available on Fact Sheets 05 and 06 published by the Dispositions & Technical Services Branch, Geodetic Control Unit. They are available on-line [Website 26].

3. The difficulty in maintaining physical survey control markers is one incentive for using systems that use the Canadian Base Network (CBN) and more local systems that use local High Precision Networks (HPN). One such system is the Canada-wide Differential Global Positioning System (CDGPS). It is a wide-area real-time differential GPS system in which sub
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metre positioning information is obtained via satellite. CDGPS is referenced to NAD83 (CSRS) [Website 28].

§6.224 To some people, all this may sound somewhat complicated. The important thing to keep in mind is that, for cadastral surveys in Alberta, boundaries are defined by cadastral monuments or by some relationship to cadastral monuments. Even oil and gas surveys in unsurveyed territory are laid out with reference to base line monuments of the township system. In that context, a control survey system or positioning system should be considered a tool to facilitate the surveyed connection. Ease of use and accuracy are important immediate considerations. However, a key to future usefulness has to be the integration of cadastral monuments. The Alberta geodetic spatial referencing system, even with some limitations in accuracy, has reaped dividends for the Province. New systems, promising greater accuracy, when implemented (with the integration of cadastral monuments) will reap even greater dividends.

Real Property Reports

Historical Background

§6.225 Mortgage lending companies have probably always required some sort of assurance that the property for which they are providing the mortgage contains the improvements purported to be on the property and that there are no encroachments. In recent times, mortgage companies also require assurance that major improvements comply with set-backs and other municipal requirements. Surveyors provide that assurance.

§6.226 Although Alberta Land Surveyors had been certifying the location of improvements on property for mortgage purposes for many years, it was not until 1983 that the Alberta Land Surveyors’ Association adopted a good practice resolution, called “Minimum Standards for Building Location Certificates”.

§6.227 It was intended, after a trial period, to present the standard again to the membership for approval prior to being submitted to the government as a regulation under the Land Surveyors Act. Eventually, after a tumultuous four-year debate, the membership at the 1987 Annual General Meeting passed the “Improvement Certification Regulation,” as it was then called. It was submitted to the government but was never adopted as a regulation. However, the same 1987 meeting adopted it as a good practice resolution to be effective from September 1, 1987. Implementation of the resolution provoked considerable adverse reaction from lawyers, lenders and the public. After a period of press coverage, addressing several groups, distributing
brochures, and fielding telephone calls, the Real Property Report as it was called had gained at least some acceptance [Report of Council Proceedings 1988:11].

§6.228 The MSP, which contained the provisions of the good practice resolution, was adopted at the 1989 Annual General Meeting. Today, over 15 years later, with only a few changes to its provisions, the Real Property Report is well recognized and accepted.

§6.229 A surveyor’s Real Property Report (RPR) is a statement by an Alberta Land Surveyor in the form of a plan that shows improvements in relationship to the property boundaries. The improvements include buildings, decks, fences and swimming pools, as well as encroachments upon or from adjacent properties. The plan also identifies and gives the dimensions of utility rights-of-way and easements that affect the extent of title.

§6.230 Usually a RPR will be required by a mortgage lender when a property is being purchased and a mortgage is involved. While the mortgage lender may not be concerned with minor problems it does want to be assured that permanent buildings are on the property and that there is compliance with municipal bylaws. RPRs are therefore submitted to municipalities for certification that development on a property meets municipal requirements. This has also led to municipalities specifying additional requirements for RPRs.

§6.231 While the mortgage lender may only be interested in having problems identified on a RPR that could affect their investment, purchasers may wish to know about encroachments or other problems that could affect the value of the property or their future relationship with neighbours.

§6.232 An RPR represents the property on the date of the survey; therefore it is important that the survey be carried out close to the date of the sale or mortgage of the property. Often an older RPR can be updated at a lower cost than preparing a new one. While this will save some survey work it still requires an inspection of the property, determining and measuring any changes to improvements, checking the title for changes and preparing a new updated report. To assist the public in finding out if RPRs have been carried out on particular property, the Alberta Land Surveyors’ Association has a RPR Index which lists survey firms that have performed RPRs on individual properties. Registration in the Index is voluntary and not all land surveyors register their records. The Index is available on the Internet and can be accessed by the public [Website 29].

§6.233 The subject of real property reports would not be complete without at least a few words about title insurance. While title insurance may be useful for certain types of transactions and for certain situations, its use as a substitute for a real property report is a concern. The Canadian Council of Land Surveyors has stated that the major flaw in
title insurance is that it advocates masking potential title and boundary problems, rather than identifying and addressing them before a property is purchased [CCLS 1994:24]. Purchasers obtaining a property, not being aware of encroachments, bylaw infractions, and other problems, will likely be faced with rectifying them in the future, perhaps when they in turn wish to sell the property. The subject of title insurance is dealt with in greater detail in Chapter 4.

**Survey Standards**

§6.234 Part D, Section 7 of the MSP contains standards for Real Property Reports. The requirement to define the boundaries of the parcel in accordance with the *Surveys Act* is outlined in Part D, Sections 7.3 and D7.4 of the Manual.

7.3 A surveyor performing a survey to prepare an Alberta Land Surveyor’s Real Property Report shall locate and confirm sufficient survey monuments to define the boundaries of the parcel in accordance with the *Surveys Act* excepting thereout the provisions of Sections 44(3) and 46(3).

7.4 When conducting a survey for an Alberta Land Surveyor’s Real Property Report, a surveyor shall perform sufficient research to identify the parcel boundaries. A copy of the Certificate of Title that reflects the status of the property on the date of survey is to be retained in the file.

§6.235 Boundary definition requirements for rural Real Property Reports in Part D, Section 7.7 are slightly different:

7.7

.1 Locate and confirm evidence to define the perimeter boundaries of the parcel. If this is not practical, locate and confirm sufficient evidence to define a minimum of:

- one boundary for parcels greater than eight hectares.
- two boundaries on different sides for parcels greater than one hectare but less than eight hectares, or

.2 Critical boundaries, with encroachments or improvements close to minimum setback or sideyard requirements, must be defined in accordance with the *Surveys Act*.

§6.236 The business of providing Real Property Reports is competitive. Often clients are homeowners who are willing to take the time to shop around for the best price. Property lawyers or real estate professionals, acting on behalf of their clients, may make standing arrangements with surveyors for delivery of Real Property Reports with price being the main criterion. The requirement to locate and confirm sufficient survey monuments to define the boundaries of the parcel in accordance with the *Surveys Act* is
a part of the surveyor’s work requiring diligence, thoroughness and good judgment. Regrettably, some surveyors on occasion have compromised standards resulting in discipline cases, some of which have gone to court [Discipline Hearings].

§6.237 Another issue that arises more than occasionally is what improvements should be shown on the plan. It is no better described than by Bill Hunter in *ALS News*, Winter 1988:

3. When faced with the decision of what improvements should be shown on the plan, the surveyor should view the problem through the eyes of the purchaser. Encroachments, incorrectly placed fences and unauthorized occupation can result in boundary disputes and litigation. Anything that might affect the value of the land being purchased or affect the future peaceful use and enjoyment of the land is of concern to the prospective owner. [Hunter: 1988:33]

§6.238 While it may not be in the interest of a seller or mortgage company to show a minor encroachment upon or from the property, it may be significant to the purchaser. A consistent standard of practice, good communication and objective reporting are paramount.

§6.239 In at least one situation, encroachments do not require a legal agreement. In 1990, the *Electrical Statutes Amendment Act*, SA 1990, c. 19 amended the *Hydro and Electric Energy Act*, the *Municipal Government Act* and the *Water, Gas and Electric Companies Act* to allow cross arms and power lines that are part of a transmission line or an electric distribution system to project into the airspace of private property without entitlement to any remedy of damages or other compensation. This amendment followed the decision in *Didow v Alberta Power Ltd.*, [1988] 5 W.W.R. 606. In that case, the court held that the projection infringed on the rights of the landowner to the air space above his land and therefore constituted a trespass.

**Other Surveys**

**Introduction**

§6.240 Surveys in this part fall within the non-exclusive area of the practice of surveying. Topographic and site surveys, construction layout surveys, as-built surveys and deformation surveys do not need to be carried out by an Alberta Land Surveyor. However, any client engaging an Alberta Land Surveyor to undertake this work is assured that the surveyor is professionally responsible, and that all the provisions of the *Land Surveyors Act* apply with regard to practice review and discipline.
§6.241 These types of surveys, particularly construction surveys, have a great potential for liability claims. Unlike legal subdivision surveys, boundary surveys and the like where consistently poor work will result in a breakdown in the property rights system of a country having long term social consequences, errors in construction layout surveys are likely to result in immediate expensive costs if pilings, foundations, etc. are built in incorrect positions. Errors in topographic and site surveys, as-built surveys and deformation surveys, if undetected, may not cause immediate problems, but they also carry a potential for liability claims.

Topographic and Site Surveys

§6.242 Topographic surveys and site surveys are generally carried out to locate and map the position and nature of topographic features. Features may include: land use, buildings and other structures, hydrography such as river, lakes and sloughs, roads and other transportation routes, relief (contours), and land cover such as forests and other vegetation. Political, resource, zoning and property boundaries may also be shown.

§6.243 The information from topographic or site surveys is generally used to support and assist in planning and design for construction projects.

§6.244 A description of the various methods that can be applied in carrying out topographic or site surveys is beyond the scope of this chapter. It is sufficient to say that, for small areas, data may be gathered using basic survey equipment such as total station instruments. Controlled photomapping and remote sensing may be used for larger areas. Data is often provided in hard copy and in digital format. Digital information is increasingly used by planners, architects and engineers to design projects in a digital environment.

§6.245 Since the data collected is used for design work, it is very important that the work be carried out to user specifications and collected in a manner that has sufficient checks so that errors do not occur. Errors in mapping, if discovered while the project is being laid out, or even worse discovered after construction work has started, can result in major loss.

Construction Layout Surveys

§6.246 The previous section discussed topographic and site surveys which are carried out to support the design of construction projects. The next stage is to stake (lay out) reference points to be used by the contractor in laying out forms for building foundations, pile locations, curbs and gutters, utility lines, etc. If these are constructed in incorrect locations, rectification can be very expensive. In fact, no other part of a
surveyor’s work has resulted in as many insurance claims as construction layout surveys. Past insurance statistics shows that in Alberta the number of construction claims is approximately double the number of title claims.

§6.247 Standards of practice for construction layout surveys are included in Part D, Section 9 of the MSP.

§6.248 Homeowners may also obtain the services of a land surveyor to stake out the location of a fence or a garage. In addition to ensuring that the property boundaries are established correctly, the surveyor will make certain that the development conforms to municipal side-yard, set-back and elevation restrictions. The surveyor can also identify restrictive covenants, caveats, easements or other rights-of-way on the land that may limit development.

As-built Surveys

§6.249 As-built surveys are required to show the location of improvements, such as buildings and utilities (gas lines, telephone lines, power lines, etc.), after they have been built. They may also be used for grade certifications. As-built plans may be required by municipalities, other government departments and utility companies to ensure that construction has complied with bylaws, specifications and various agreements. Another purpose of the as-built plan is to retain a record of the location of the improvement. This is particularly important for underground utility lines. It should be noted that the Real Property Report discussed earlier in this chapter has in many respects the characteristic of an as-built.

§6.250 Standards of practice for as-built surveys are not included in the MSP. Surveyors carrying out such surveys are most often guided by client specifications and their own practices.

§6.251 Notwithstanding the lack of an Alberta Land Surveyor standard for as-built surveys, there are certain basic commonsense practices which, while perhaps not practicable in all cases, need to be considered:

- As-builds should be tied into ASC and to nearby legal survey monuments. It is a good idea to tie underground utility lines to nearby permanent physical features, such as buildings that can be used as a reference for future location.

- The elevation of as-builds, in particular underground utilities, should be determined from ASC or other recognized bench marks. As well, leaving elevations on nearby stable physical features, such as tops of fire hydrants, foundations, sidewalk corners, etc., will be helpful as a reference for future location.
• Besides showing the location and describing the as-built, plans should show all the ties mentioned above. In the event that the improvement is not visible, the plan should include a statement identifying how the utility was located. This is particularly important if, for example, an underground utility was only visible in certain locations when it was tied in.

§6.252 It is one thing to survey a recently-placed utility line for an as-built as mentioned above. However, locating old buried underground utilities (gas lines, telephone lines, power lines, etc.) is another matter.

§6.253 For construction or other projects, Alberta One Call will arrange for the telephone company, the gas company or the city water department to locate their buried pipes and cables. Over 190 companies/owners of buried facilities in Alberta belong to the system [Support Alberta One Call 1992:21]. The companies themselves will dispatch representatives to the site to mark or flag the buried lines. For some buried facilities, surveyors may be able to obtain as-built drawings, although they should be relied on with caution, as they may show few ties to physical features, such as survey monuments or control monuments, and often the information they show is not clear or accurate. In addition, utility lines are often not where they are purported to be, and in several instances have been found not even within their own right-of-way. Once the general location is determined, a pipe or cable locater may be used to further pinpoint the utility. If it is necessary to expose the utility, extreme care must be taken to avoid damage.

§6.254 The surveyor, in placing survey monuments in his or her day-to-day work, also needs to be aware of buried utility lines. A standard size survey monument is longer than the depth of many utility lines. In an article in the September 1992 issue of ALS News, Robert W. Foster says:

Buried utilities are like land mines to the surveyor. [Foster 1992:15]

§6.255 This can be a dilemma for the land surveyor. To have to summon One Call to flag every site where a monument may be placed is not reasonable. Some other authorities, for example the Pipeline Act, require that prior approval be obtained before any ground disturbance is undertaken in rights-of-way. This can also present a dilemma; pipelines may not completely fall within the right-of-way and one has to consider whether or not placing a survey post on a right-of-way boundary constitutes a disturbance. Of course, it is good insurance to use a pipe or cable locater if buried utilities are suspected in an area.

Deformation Surveys

§6.257 The purpose of a deformation survey is to determine whether or not movement is taking place. This could range from measuring continental drift to measuring movement in retaining walls.

§6.258 To help predict earthquakes, the U.S. National Science Foundation recently committed $100 million to set up a network of 800 GPS stations and 200 strain meters to better monitor changes in the Earth’s Crust [Hume 2004].

§6.259 Land surveyors are more likely to be involved in deformation surveys to monitor movement of land in areas susceptible to landslides, or where there are embankments or retaining walls. Any movement can then be analyzed to see if it is due to seasonal factors, moisture levels, weight, daily variances, etc. The findings may then be used to determine future movement.

§6.260 Accuracies required for deformation surveys depend on many factors but generally are very high.

§6.261 It has been determined that detailed standards or specifications are not possible, owing to the different approaches taken by practitioners and their proprietary methodology [Standards Committee 1997:19]. However, Section 7, Part D of the MSP does contain “Geometric Deformation Survey Guidelines” which, although only a checklist, should be very useful to any practitioner conducting a deformation survey project.
Case Studies

Case Study A: Defining Strata Space

The boundaries of a strata space consist of vertical, horizontal or inclined planes or curved surfaces. Strata space boundaries are independent of physical structures and are determined by planes or curved surfaces having defined geodetic elevation. Section 45 of the Surveys Act requires a surveyor to relate the boundary lines of the horizontal, vertical or inclined planes or curved surfaces of the strata space, and the boundary lines of the parcel within which the strata spaces lies, to at least two monuments of known elevation in the geographical positioning system.

In many respects this is similar to defining boundaries by coordinates, a concept that has been debated in Alberta for decades as a method of defining boundaries, compared with the traditional method of using physical features such as natural boundaries, monuments, etc. or, as in the case of condominiums, surfaces of building walls.

**Discussion Point 1:** Should there be an option to define strata space boundaries by reference to physical features?

**Discussion Point 2:** What could be the long-term consequence of using coordinates to define strata space?
Case Study B: Dimensioning Descriptive Plans

To a great extent, the art and science of writing boundary descriptions for land titles in Alberta has been replaced by the preparation of descriptive plans. In many respects, a descriptive plan can be considered a graphical depiction of a written land description.

One of the cardinal rules in description writing, which also applies to descriptive plans, is the avoidance of ambiguities. Taking redundant measurements, as a general rule, is good survey practice to avoid errors; showing redundant measurements on a descriptive plan only has the effect, or possible effect, of creating ambiguity.

Consider the following examples taken from the “Inspector’s Column” in the 1991 May issue of ALS News.

Example 1

Consider how a metes and bounds description of the illustrated parcel would be written.

“That portion of the South East Quarter of Section 2, Township 59, Range 4 West of the 5th Meridian described as follows:

Commencing at the South West corner of the said quarter section;

Thence Easterly along the South boundary of the said quarter section a distance of 300.0 metres;

Thence Northerly parallel to the West boundary of the said quarter section a distance of 150.0 metres;

Thence Westerly parallel to the said South boundary to a point on the said West boundary;

Thence Southerly along the said West boundary to the point of commencement.

Discussion Point 1: On the diagram which dimensions are redundant? Discuss how they could create an ambiguity.
Example 2

**Figure 6-4. Illustration 2 for Case Study B**

**Discussion Point 1:** Assuming the intersection of the ¼ Section boundaries with the road are marked by monuments, what is the likelihood of the distance between them measuring 804.67? On the diagram which dimension(s) are redundant? Discuss how it/they could create an ambiguity.

**Source:** This case study is based on report in the “Inspector’s Column” of ALS News [Wolley-Dod 1991:27].
Case Study C: Marking Descriptive Plan Boundaries on the Ground

Section D6.2 of the MSP requires one of the following statements on a descriptive plan:

No field inspection was carried out, and boundaries have not been established or marked on the ground.

A field inspection was carried out on the ____day of ______, 20__, and boundaries have not been established on the ground.

Discussion Point 1: Why do you think the standard requires one or the other of the above statements on the plan?

Discussion Point 2: Discuss the pros and cons of placing some sort of mark, such as lath or nails, at the boundary corners.

Discussion Point 3: Does placing laths or nails at the lot corners defined by descriptive plans constitute marking on the ground? If so, does it contravene the MSP?

Discussion Point 4: Why not monument the corners and prepare a plan of survey?
Case Study D: Priority of: Descriptive Plan, Subdivision Survey, Real Property Report

Lot 6, having a southerly frontage of approximately 100 metres and a depth of approximately 300 metres, was one of many lots in a block surveyed in 1946.

A descriptive plan was prepared for a parcel that was alienated from Lot 6 in 1989. The descriptive plan showed the parcel as all that part of Lot 6 lying south of a line drawn from a point on the east boundary of lot 6, 164.8 metres north from the southeast corner thereof to a point on the west boundary 143.4 metres north from the southwest corner.

Figure 6-5. Illustration for Case Study D

In 1995 a subdivision survey was carried on the remainder of lots 6. At that time it was intended to make the south boundary of the remainder of Lot 6 coincide with the north boundary of the parcel alienated by the descriptive plan in 1989.

In 2000 a surveyor was engaged to prepare a Real Property Report for the parcel alienated in 1989. The surveyor used monuments placed in the 1995 subdivision survey. The Real Property Report showed a dimension of 161.55 metres for the east limit of the parcel, 3.25 metres shorter than that shown on the descriptive plan and for the west limit, showed a dimension of 142.56 metres, 0.84 metres shorter than that shown on the descriptive plan.

Discussion Point 1: What was wrong with the Real Property Report?

Source: This case study is based (with modifications) on a report in the “spr corner” of ALS News [Pratt: 2003b:34].
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