

**Alberta Land Surveyors' Association
Professional Examinations
Spring 2010**

**The Surveying Profession
(Closed Book Exam)**

***Time Limit: 3 hours
Total Marks: 100***

Note: This exam contains 16 questions on 4 pages.

- | <u>Marks</u> | <u>Question</u> |
|---------------------|--|
| (4) | 1. The Council of the Alberta Land Surveyors Association is regulated by the Land Surveyors Act. Our by-laws allow us to name offices of Council. According to our by-laws, name the 4 offices that are elected to council, and their regulated time limits/terms? |
| (2) | 2. What is the role and purpose of the ALSA and its Council? |
| | 3. In the June 2007 <i>ALS News</i> SPR Corner article, Fred Cheng, ALS, writes about the need to scrutinize survey monuments. Within the Manual of Standard Practice there are definitions for the following that relate to survey evidence evaluations. Please define: |
| (1) | (a) Lost monument |
| (1) | (b) Obliterated Monument |
| (1) | (c) Disturbed Monument |
| (1) | (d) The Hierarchy of Evidence |
| | 4. The Director of Surveys' policy "Dual Registration of Public Lands Surveys" issued on August 1, 2009 (via weekly emails from the ALSA office) outlines the requirements to register monuments placed on plans of surveys on public lands (i.e. PLA, EZE, and so on) at SRD and not at Land Titles. |
| (3) | (a) What are the Director's reasons as to why registration at LTO is not required on public lands? |
| (3) | 5. Alberta Land Surveyors typically survey boundaries represented as the line between posted monuments (known as artificial boundaries). These artificial boundaries are found on a variety of plans. Give 3 examples of different types of <i>non-monumented</i> boundaries in use in Alberta. <i>Non-monumented</i> is used in the same sense as monuments do not govern the boundary. |
| (5) | 6. What is title insurance? What or whose interest does it protect? Please answer the two questions as if you are talking to a client that is considering title insurance because it would be cheaper for them to do so. Make sure to include a comparison of a real property report to title insurance. |
| (4) | 7. What is the difference between an azimuth and a bearing? |

8. A March 2007 *ALS News* article by Fred Cheng, ALS talked about Right of Entry for Land Surveyors.
- (1) (a) A right of entry for surveying on private property is laid out in the Surveys Act. Under what terms is this right granted?
 - (2) (b) Name 2 other Alberta statues that give a right of entry for Alberta Land Surveyors?
 - (2) (c) There has been a number of complaints by the public to the ALSA on surveyors' apparent misuse of this right and/or damage to property. Please provide 4 strategies that would limit your exposure to potential liability?
9. **Systematic Practice Review (SPR)**
- (2) (a) What is the purpose of the SPR?
 - (1) (b) Where does the ALSA get the funds to operate the SPR?
 - (1) (c) Chris Everett is the current Director of Practice Review. What group does he present his findings to?
 - (1) (d) What phase of the SPR is currently being completed?
10. **Monuments and Plan Registration**
- (1) (a) According to the Surveys Act, what is the definition of a monument?
 - (3) (b) The main type of monument used by an Alberta Land Surveyor is a statutory iron post. According to the MSP, if a statutory iron post is not practical to place, name 3 things an ALS can do?
 - (1) (c) What is the recommended monumentation (according to the MSP) for well site and related facilities?
 - (1) (d) What is the time frame for monuments to be placed at the boundary corners represented on the plan done under Section 47 of the Surveys Act (non-monumented survey plan)?
 - (1) (e) On a Section 47 plan, what is the maximum distance a non-monumented corner can be from internal survey control?
 - (1) (f) What is the time frame to register a plan showing a re-establishment of a Part 2 monument?
 - (2) (g) During the course of your survey you come across a destroyed ASCM. What is the name of the report you fill out and who does it get sent to?
11. **Natural Boundaries** (water bodies)
- (2) (a) What, according to the Surveys Act, defines a natural boundary of a body of water?
 - (1) (b) Define riparian rights.
 - (3) (c) Name 3 pieces of information you would you to help determine whether a natural boundary has moved?
 - (1) (d) When determining whether a person has gained (accretion) or loss (erosion) land along a natural (river) boundary, what terms are generally used in surveying and law to describe how the erosion/accretion must take place?
 - (1) (e) Who owns the bed and shore of rivers in Alberta?

12. While in the field, Surveyor B has measured between monuments shown on a registered plan of Surveyor A, and notices that Surveyor A forgot to include the road allowance when he re-established a lost monument (N $\frac{1}{4}$ pin) by proportion (the distances shown on the registered plan are correct, the pin was set incorrectly). Surveyor B phones Surveyor A to discuss the matter. Surveyor A is now retired, and asks Surveyor B to move the pin for him. His (Surveyor A) reasons for this request are:
- the mis-posting of this N $\frac{1}{4}$ pin is not affecting anyone as one landowner owns all the $\frac{1}{4}$ sections affected by this monument;
 - Surveyor A believes there has been no other activity in the area believes no other Surveyors have relied on this pin;
 - the plan is registered and he does not want to make a correction to the plan, and besides he does not have any resources to get the work done (equipment, truck, crew, drafting skills, and so on).

Surveyor B moves the pin for Surveyor A based on the phone call and sends Surveyor A an invoice for the work he has performed for him.

- (2) (a) What section(s) of the Code of Ethics, if any, is surveyor A contravening?
- (2) (b) What section(s) of the Code of Ethics, if any, is surveyor B contravening?
- (2) (c) Are any portions of the Surveys Act being broken? Explain.
- (1) (d) How many $\frac{1}{4}$ sections are being affected by this mis-posted monument?
- (3) (e) In this scenario, if you were Surveyor B, what would you do (be specific on how you would get this resolved)?
- (3) (f) In this scenario, if you were Surveyor A, what would you do (be specific on how you would get this resolved)?

13. In the December 2009 issue of *ALS News*, President Don George wrote an article titled “In accordance with the Surveys Act – WHY?” This article is his view as to why some surveyors have given some types of surveys a higher standard of effort, diligence and tolerances over other types. He gives an example “subdivisions and other surveys registered at the Land Titles Office (LTO) ... appear to be done by some members, to a higher degree than well sites, real property reports and the lowly fence line survey.”

- (3) (a) What is the article’s opinion of the view of different types of surveys as they apply to the Surveys Act?
- (2) (b) Does a well site survey in Alberta create a boundary? Explain.
- (3) (c) What is the purpose of an RPR? Explain.
- (2) (d) When doing a fence line survey to mark the boundary of a property, do the placed lath constitute monuments? Explain.
- (e) What defines the boundary of a lot within a subdivision done under Section 47 of the Surveys Act:
 - (1) (1) Prior to the land surveyor filing proof of placing the monuments at Land Titles.
 - (1) (2) After the land surveyor has filed proof of placing the monuments and the Registrar accepts it and amends the plan accordingly.

14. **Articling Pupils – Examination and Training Regulations**

If your articles commenced on February 4, 2010:

- (2) (a) What date is your 2010 affidavit of service due?
- (2) (b) What would be the latest date you could submit your first report by?
- (2) (c) What would be the latest date you could submit your second report by?
- (3) (d) Under what circumstances are you (and possibly your principal) required to meet with the Registration Committee (there are 3 different circumstances)?
- (1) (e) What is the maximum time frame for you to complete your articles?

15. **Descriptive Plans**

- (2) (a) The Registrar at Land Titles has the final decision on whether they (LTO) will accept a descriptive plan for registration. Name 2 factors the Registrar considers when asked to allow a descriptive plan?
- (2) (b) What statement does the MSP require to be shown on a descriptive plan?

16. **Scenario**

- Firm Name: True Line Survey Corp. This is a corporation under the Business Corporation Act.
 - There are two land surveyors in the firm - yourself and John Doe. You take care of the oilfield side of the practice and John Doe takes care of the residential and land development side.
 - John Doe takes on a project for a multi-family complex. He puts a proposal forward outlining the scope of work and quoted price for each part of the project.
 - With 80% of the project scope to be completed, John Doe, ALS resigns from the corporation (medical reasons) and retires from the Association.
 - You are now the sole ALS in the business (and the sole ALS of the Corporation) and the only people with land development experience in your firm are the crew chief working on this project and two junior drafting technicians.
 - The project has proceeded to the 50% completed stage for survey work and your cost is now at 100% of the quoted price.
- (a) Your client has been anxiously awaiting completion of the project, which is currently 2 weeks past the deadline. Your client calls you with concerns he is having with respect to your missed timelines. His total project cost is starting to escalate and other trades have been delayed, all due to your missed timeline.
 - (2) (1) How would you advise the client at this point?
 - (2) (2) What other course of action would you take if your client starts talking about litigation and professional impropriety?
 - (4) (b) Assume the same scenario as above but that you approached your client when your partner left the practice and told them you will not be able to complete the project, due to technical inexperience. Do you feel that this is negligence in contract? Explain with reference to compensation for work completed to date and ways to help the client get his job finished. Please write this as a high level action plan.