

**Alberta Land Surveyors' Association
Professional Examinations
Fall 2008**

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

Time Limit: 3 hours

Note: This exam consists of 14 questions on 4 pages. Marks total 100.

Marks Question

- 1. TILMA**
- (2) (a) What does the acronym TILMA stand for?
- (2) (b) What document was signed by the ALSA regarding TILMA at this year's (2008) AGM?
- (1) (c) What date does TILMA come into effect?
- (2) (d) What will be required after TILMA is passed for a British Columbia Land Surveyor (BCLS) to become an Alberta Land Surveyor? (What is the process?)
- 2. Corner Recordation Index**
- (2) (a) Why was this index created? Do we not already store monuments placed in many different public sites?
- (2) (b) Where can you access the data recorded in the Corner Recordation Index?
- 3.** Surveyor B, while in the field, 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 ¼ 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 N¼ pin is not affecting anyone as one landowner owns all the ¼ 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 Laws being broken? Explain.
- (2) (d) How many ¼ sections are being affected by this mis-posted monument?
- (2) (e) In this scenario, if you were Surveyor B, what would you do (be specific on how you would get this resolved)?
- (2) (f) In this scenario, if you were Surveyor A, what would you do (be specific on how you would get this resolved)?

- 4. The Future of the Association**
- (2) (a) What is “Made to Measure” – Science in a Crate all about?
- (2) (b) Why is it important to the future of the Association?
5. A client comes to you with subdivision approval from the local municipality. Their ¼ section has never been previously subdivided and the client requests that you prepare a descriptive plan. Only Land Titles has authority to grant the use of a descriptive plan.
- (3) (a) Name three (3) things that Land Titles considers prior to giving permission to proceed with a descriptive plan (from the Land Titles Procedures Manual)?
- (1) (b) What is the maximum number of new parcels that can be created by a descriptive plan?
- (1) (c) How can a descriptive plan be created if the subdivision approval requires a certain area of the subdivision to be dedicated for Environmental Reserve?
- (1) (d) What does the MSP state regarding descriptive plans for:
- (1) (1) field inspection statements?
- (1) (2) natural boundaries?
- 6. Monuments and Plan Registration**
- (1) (a) What is the maximum 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) (b) Is a PLA sketch done for Sustainable Resource Development a form of a non-monumented survey plan as defined in Section 47 of the Surveys Act? Why or why not?
- (1) (c) When does a PLA sketch need to be monumented, according to the Pipeline Act?
- (1) (d) What is the time frame to register a plan showing a re-establishment of a Part 2 monument?
- (1) (e) Where are plans to be registered if surveyed within the boundaries of a Métis Settlement?
- (1) (f) Can a Section 47 plan be done within the boundary of a Métis Settlement?
- (1) (g) What is the maximum distance a delayed posting monument under a Section 47 Plan can be from Internal Survey Control?
7. In the June 2003 *ALS News*, G.K. Allred, ALS wrote an article called “*Dormant Plans – Professional Liability or Financial Liability - or both?*”
- (2) (a) What is a dormant plan?
- (2) (b) Describe what portions of the Code of Ethics apply to individual land surveyors that allow their dormant plans to not be addressed?
- (2) (c) What is the liability to individual surveyors for their dormant plans?
- 8. Definitions**
- Please define the following terms?
- (2) (a) Accuracy
- (2) (b) Integrated Survey
- (2) (c) Surveyed Lines
- (2) (d) Re-establish
- (2) (e) Right bank of a river or stream

9. In June 2008 *ALS News*, Councillor Brian Ross, discusses the issue of the SPR Process and the ALSA revenues. This article was written due to the discussions and votes at the 2008 AGM regarding the Association's cost and revenue.
- (2) (a) How does the Association generate its revenue to fund the SPR?
 - (2) (b) What is the largest single expenditure of the SPR Budget?
 - (1) (c) What happened in the past year that caused the ALSA to be concerned with this year's budget?
 - (2) (d) What was approved at this year's AGM that could help the ALSA in future year's budget shortfalls?

10. In the same article by Brian Ross (*ALS News* June 2008), he talks about bid work and gives his opinion of the practice and feels that it pushes our profession to reduce the service aspect to our clients and he feels it puts us in a poor light with our clients. Mr. Ross makes a point to say, "If you don't overcharge your clients when the industry is booming, why would you undercharge them when times are slower?"

Scenario: A client of yours has approached you to provide a bid on work. You know that this bid is also being submitted to some of your competitors. This is a main client of your firm and you obviously want to keep working for them. The work environment is competitive and margins are tight (very low profit margins).

- (a) You approach all your competitors to discuss this bid.
 - (2) (1) Your competitors and you decided to put in the same price for the program, with the same deliverables and timelines (pretty much the same proposal being put forward). Why is this wrong? Explain
 - (2) (2) Are there things you can discuss with your competitors about their bid that would be legal and ethical?
- (b) Your competitors do not wish to discuss their bids with you and they are going to submit their bids because they would like to land this client for future work. You decide to go aggressively after this work and come in quite low (you figure you will lose only 10% of the total cost of the project, if everything goes well).
 - (2) (1) Is there any part of the code of ethics you are violating (please explain)?
 - (2) (2) When putting any bid together for your client, name two things you should outline in your proposal to protect yourself as it relates to the work involved?

11. In the December 2007 *ALS News* an SPR message on surveying public lands in unsurveyed territory was written by Fred Cheng, ALS.
- (a) If a client of yours wants to bring public land in unsurveyed territory into the freehold regime (assume a straight forward subdivision):
 - (2) 1. Who (which departments) needs to give approval for the work?
 - (2) 2. What types of plans will need to be prepared for approval or registration and for whom (what departments or organizations)?
 - (b) Under the MSP, what must be done when doing work in Unsurveyed Territory as it relates to:
 - (2) 1. Ties to existing surveys.
 - (2) 2. Derived bearings?

- (2) 12. An Alberta Land Surveyor may be asked to appear in court as an expert witness. Name two (2) qualities an expert witness should possess.
13. The Safety Committee's mandate is to educate the membership as to acts and regulations that could impact them and their businesses. There have been numerous updates from this committee in *ALS News*.
- (2) (a) Whether you are a large corporation or a sole practitioner, a safety program is a necessary document of your organization. Please name one (1) certifying partner that you should approach in respect to your safety program?
- (2) (b) Why is Bill C-45 important in respect to your firm's safety program or to you as an Alberta Land Surveyor?
- (2) (c) What should be your company's number one goal with respect to safety?
- (2) (d) Working near underground facilities is always a safety issue due to the fact that you can not really see what is below the ground where you are working. Please describe two (2) things you could do to prevent an incident from occurring when placing survey monuments in potentially dangerous situations?
- (3) (e) As a minimum, what three (3) basic things would you recommend that every field crew have to ensure the highest level of safety for you and your staff?
14. In April 2008, the Standards Committee put forward a recommendation to amend the Manual of Standard Practice that would have the effect of allowing an Alberta Land Surveyor to register a plan for public land disposition at Public Lands (SRD) and not at Land Titles. Council requested a legal opinion from its lawyer (Shores, Belzil and Jardine) to address whether there is a statutory requirement that a monument or statutory iron post, when placed by a land surveyor, must be registered at Land Titles. The final report from the solicitor was received by the ALSA on April 16th, 2008, and distributed to the membership.
- (3) (a) According to the report, when you place a statutory monument, you are required to register a plan at Land Titles. What are their reasons for this?
- (2) (b) According to the report, what is the difference between a monument and a statutory monument?
- (2) (c) According to the report, are RPRs and Well Site Plans, Surveys that need to comply with the Surveys Act? Please explain your answer.