

NATIONAL EXAMINATIONS – DECEMBER 2019

**16-CIV-B6, Urban and Regional Planning**

3 Hours Duration

Notes:

1. If doubt exists as to the interpretation of any question, the candidate is urged to submit with the answer paper, a clear statement of any assumptions made.
2. Candidates may use one of two calculators, the Casio or Sharp approved models.
3. This examination is CLOSED BOOK. No aid other than an electronic calculator (see 2 above) is permitted.
4. The first TWO (2) questions plus FIVE (5) of the remaining questions constitutes a complete paper. Additional questions which are answered will not be marked. The first two questions are worth 25 marks each. The remaining questions are worth 10 marks each.
5. Either SI or English units may be used.
6. Most questions require an answer in essay format. Clarity and organization of the answer are important.

MARKS

PART A:

CANDIDATES MUST ATTEMPT ALL SECTIONS OF  
QUESTIONS 1 and 2

1. You are the Chief Engineer in the Town of Cannatta, a community of about 100,000 people that is proposed to grow rapidly in the next 5-10 years due to a new Bricklin electric car plant and related manufacturing. In the four years you have lived in Cannatta growth has been steady and manageable within the existing comprehensive land use plan (Official Community Plan or Official Plan). However, the City Council has accepted the Chief Planner's recommendation to review and update the Plan.
- 5 (a) Why does the projected growth cause Council to request a review and therefore probably revisions to the comprehensive land use plan?
- 10 (b) List five (5) aspects of the Plan are of particular importance to you, as Chief Engineer, and state why each is of interest?
- 5 (c) What is the relationship between the comprehensive land use plan and Cannatta's Zoning By-law?
- 5 (d) How would the Zoning By-law be affected by revisions to the comprehensive land use plan (Official Community Plan)?
2. You have just been hired by NNN Associates, a multi-disciplinary company providing planning, engineering and environmental services. Your first project is for an established client of the firm, whose development application has been appealed. The site was formerly a community shopping centre and gasoline station, both of which have been abandoned. The surrounding area includes some rental apartments, a place of worship, a seniors' housing complex and a high school. The proposed redevelopment is mixed-use residential/commercial, including retail, a multiplex theatre, and condominium and assisted housing. The municipality supports the application, but it is strongly opposed by some local residents. The project is important to your client so he asks that you prepare a comprehensive report in preparation for the upcoming hearing.
- 5 (a) What would you look for when you visited the site of the proposed re-development?
- 5 (b) What types of engineers would you consult and what contribution would each make?
- 10 (c) List ten (10) pieces of information you would collect for the report and briefly state why each is important.
- 5 (d) In your report, how would you address the not-in-my-back-yard (NIMBY) concerns of local residents?

MARKS

PART B: ANSWER FIVE (5) OF THE FOLLOWING QUESTIONS  
ALL QUESTIONS ARE OF EQUAL VALUE

- 10 3. Around small to medium-sized communities throughout Canada, prime agricultural land is rapidly being developed. Discuss this situation, explaining why it is happening, the role planners play, why losing agricultural land is an issue and what might be done to mitigate this loss.
- 10 4. Select TWO (2) planning issues in the community where you live that are of interest to you and discuss each briefly. For each issue selected, present arguments for and against the issue
- 10 5. In *Planning Canadian Communities*, Hodge recommends that citizens be extensively involved in the preparation of community plans. How can this objective be accomplished in large and small communities?
- 10 6. To communicate effectively planners must have sufficient familiarity with other specialities and draw upon their expertise. Briefly describe why each of the following fields is important to urban and regional planning.
- (a) law (d) land surveying  
(b) ecology (e) landscape architecture  
(c) architecture
- 10 7. The effective movement of people and goods is an integral requirement of any successful urban centre. Discuss transportation options to improve mobility and reduce congestion. Provide examples from communities you know.
- 10 8. The growth and changes to a community's population are important to the planning of that community. Explain why virtually all planning studies address population, historically and well into the future. How is future population estimated?
- 10 9. Urban and regional planning requires familiarity with many related subjects and areas of planning activity. Discuss TWO (2) of the following planning issues:
- (a) solar power (d) greyfield redevelopment  
(b) sprawl repair (e) aging population  
(c) intensification (f) active transportation
- 10 10. For new suburban residential developments, a draft plan of subdivision is generally prepared. Explain the purpose of this plan and the types of information that must be shown on the plan.