

**CITY OF KELOWNA**  
**MEMORANDUM**

**SCHEDULE** \_\_\_\_\_ **A**  
This forms part of application  
# Z19-0061  
Planner Initials **SS**  
City of Kelowna  
DEVELOPMENT PLANNING



**Date:** May 23, 2019  
**File No.:** Z19-0061  
**To:** Planning & Development Services Department (SS)  
**From:** Development Engineer Manager (JK)  
**Subject:** 2840 Fenwick Rd., Lots B, Plan 22142      A1 – I2

Development Engineering has the following comments and requirements associated with this application rezone the subject property from A1 to I2 are as follows:

**1. General**

- a. Where there is a possibility of a high water table or surcharging of storm drains during major storm events, non-basement buildings may be required. This must be determined by the engineer and detailed on the Lot Grading Plan required in the drainage section.
- b. Provide easements as may be required.
- c. The Fire Department and Environment Division requirements and comments are addressed separately.
- d. These Development Engineering comments and requirements and are subject to review and or revision for approval by the Ministry of Transportation (MOTI) Infrastructure.

**2. Geotechnical Study**

- a. Provide a geotechnical report prepared by a Professional Engineer competent in the field of geotechnical engineering to address the items below: NOTE: The City is relying on the Geotechnical Engineer's report to prevent any damage to property and/or injury to persons from occurring as a result of problems with soil slippage or soil instability related to this proposed subdivision.
- b. The Geotechnical report must be submitted prior to submission of Engineering drawings or application for subdivision approval.
- c. Area ground water characteristics, including any springs and overland surface drainage courses traversing the property. Identify any monitoring required.
- d. Site suitability for development.

- e. Site soil characteristics (i.e. fill areas, sulphate content, unsuitable soils such as organic material, etc.).
  - f. Any special requirements for construction of roads, utilities and building structures.
  - g. Recommendations for items that should be included in a Restrictive Covenant.
  - h. Recommendations for roof drains, perimeter drains and septic tank effluent on the site.
  - i. Any items required in other sections of this document.
- viii. Additional geotechnical survey may be necessary for building foundations, etc.

### **3. Sanitary Sewer System**

- a) This property is currently not serviced. The developer's consulting mechanical engineer will determine the development requirements of this proposed development and establish the service needs. Only one service will be permitted for each lot. The applicant, at his cost, will arrange for the removal and disconnection of the existing services and the installation of one new larger service if necessary. Any service improvement and decommissioning works may be included in an offsite servicing design package submission including an estimate for bonding purposes.
- b) A flow analysis check is required by the developer's civil engineering consultant to determine if there are any downstream impacts to the sewer system, from this development to the sewage waste water treatment plant, triggered by this development.
- c) Developers Civil engineer will have to design Sanitary service crossing Mill Creek.

### **4. Domestic Water and Fire Protection**

- a) This development is within the service area of the Black Mountain Irrigation District (BMID). The developer is required to make satisfactory arrangements with the BMID for these items. All charges for service connection and upgrading costs, as well as any costs to decommission existing services are to be paid directly to BMID.
- b) The developer must obtain the necessary permits and have all existing utility services disconnected prior to removing or demolishing the existing structures.

### **5. Storm Drainage**

- a) The developer must engage a consulting civil engineer to provide a storm water management plan for the site, which meets the requirements of the Subdivision, Development and Servicing Bylaw No. 7900. The storm water management plan must also include provision of lot grading plan, minimum basement elevation (MBE), if applicable, and provision of a storm drainage service for the development and / or recommendations for onsite drainage containment and disposal systems. Only one service will be permitted for this development. The applicant, at his cost, will arrange the installation of one overflow service if required.

b) Provide the following drawings:

- i. A detailed Storm water Management Plan for this development; and,
- ii. An Erosion and Sediment Control Plan.

## **6. Road Improvements**

- a.) Fenwick Rd frontage will be required completing Cul-de-sac up to rail trail corridor with Curb, Gutter and asphalt with let-downs.
- b.) Fenwick driveway is to be constructed to commercial Lane standard with SS-R2 standard detail.
  - i) Proposed new Bridge must be design and constructed to latest Engineering best practices and Section 11 Permits must be approved with MOE.
  - ii) A new bridge or multiplate culvert at the creek crossing.
  - iii) Minimum 3.5m driving lanes with 1 no-post barriers and 0.6m shoulders.
  - iv) If the development remains as strata the internal road system and design standards is subject to the approval of the Approving Officer. All maintenance of roads and utilities becomes the responsibility of the strata including Bridge structure.

## **7. Road Dedication and Subdivision Requirements**

- (a) Grant Statutory Rights Of Way if required for utility services.
- (b) If any road dedication or closure affects lands encumbered by a Utility right-of-way (such as Hydro, Telus, Gas, etc.) please obtain the approval of the utility. Any works required by the utility as a consequence of the road dedication or closure must be incorporated in the construction drawings submitted to the City's Development Manager.

## **8. Power and Telecommunication Services**

The services to this development are to be installed underground. It is the developer's responsibility to make a servicing application to the respective utility companies. The utility companies are then required to obtain the city's approval before commencing their works.

## **9. Design and Construction**

- a) Design, construction supervision and inspection of all off-site civil works and site servicing must be performed by a Consulting Civil Engineer and all such work is subject to the approval of the City Engineer. Drawings must conform to City standards and requirements.
- b) Engineering drawing submissions are to be in accordance with the City's "Engineering Drawing Submission Requirements" Policy. Please note the number of sets and drawings required for submissions.
- c) Quality Control and Assurance Plans must be provided in accordance with the Subdivision, Development & Servicing Bylaw No. 7900 (refer to Part 5 and Schedule 3).


- d) A "Consulting Engineering Confirmation Letter" (City document 'C') must be completed prior to submission of any designs.
- e) Before any construction related to the requirements of this subdivision application commences, design drawings prepared by a professional engineer must be submitted to the City's Works & Utilities Department. The design drawings must first be "Issued for Construction" by the City Engineer. On examination of design drawings, it may be determined that rights-of-way are required for current or future needs.

**10. Servicing Agreements for Works and Services**

- (a) A Servicing Agreement is required for all works and services on City lands in accordance with the Subdivision, Development & Servicing Bylaw No. 7900. The applicant's Engineer, prior to preparation of Servicing Agreements, must provide adequate drawings and estimates for the required works. The Servicing Agreement must be in the form as described in Schedule 2 of the bylaw.
- (b) Part 3, "Security for Works and Services", of the Bylaw, describes the Bonding and Insurance requirements of the Owner. The liability limit is not to be less than \$5,000,000 and the City is to be named on the insurance policy as an additional insured.

**11. Charges and Fees**

- a) Development Cost Charges (DCC's) are payable
- b) Fees per the "Development Application Fees Bylaw" include:
  - i) Street/Traffic Sign Fees: at cost if required (to be determined after design).
  - ii) Survey Monument, Replacement Fee: \$1,200.00 (GST exempt) – only if disturbed.
  - iii) Engineering and Inspection Fee: 3.5% of construction value (plus GST).



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James Kay, P. Eng.  
Development Engineering Manager  
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