



CITY OF KELOWNA

MEMORANDUM

Date: August 30, 2019
File No.: Z19-0110
To: Suburban and Rural Planning (WM)
From: Development Engineering Manager (JK)
Subject: 1085 McCurdy Rd A1 to I2

Development Engineering Department have the following comments and requirements associated with this application. The road and utility upgrading requirements outlined in this report will be a requirement of this development. The Development Engineering Technologist for this project is Aaron Sangster.

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 are Development Engineering comments/requirements and are subject to the review and requirements from the Ministry of Transportation (MOTI) Infrastructure Branch.

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.**

The Geotechnical report must be submitted prior to submission of Engineering drawings or application for subdivision approval.

- i. Area ground water characteristics, including any springs and overland surface drainage courses traversing the property. Identify any monitoring required.
- ii. Site suitability for development.

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

3) Water

- a) The developer's consulting engineer will determine the domestic and fire protection requirements of this proposed development and establish hydrant requirements and service needs. The bylaw requirement for industrial zone is 225l/s and is available at the site. If it is determined that upgrades to any other existing water distribution system must be made to achieve the required fire flows, additional bonding will be required.
- b) A water meter is mandatory for this development and must be installed inside a building on the water service inlet as required by the City Plumbing Regulation and Water Regulation bylaws. The developer or building contractor must purchase the meter from the City at the time of application for a building permit from the Inspection Services Department, and prepare the meter setter at his cost.
- c) This property is located within the Black Mountain Irrigation District (BMID) service area. The water system must be capable of supplying domestic and fire flow demands of the project in accordance with the Subdivision, Development & Servicing Bylaw. The developer is responsible, if necessary, to arrange with BMID staff for any service improvements and the decommissioning of existing services. Only one water service will be permitted per lot.

4) Sanitary Sewer

- a) 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 this development. The applicant, at his cost, will arrange for the removal and disconnection of the existing services and the installation of one new larger service.

5) 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 City Storm Water Management Policy and Design Manual. 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.

- b) Provide a detailed Stormwater Management Plan for this development as per the Subdivision, Development and Servicing Bylaw #7900.
- c) There is a possibility of a high water table or surcharging of storm drains during major storm events. This should be considered in the design of the onsite system.

6) Roads

- a) MuCurdy Rd fronting this development has already been upgraded. No further upgrades are needed at this time.

7) Road Dedication and Subdivision Requirements

- a) Grant Statutory Rights of Way if required for utility services.
- b) The ultimate width of McCurdy Road at Hwy 97C is established as a 4 lane arterial, complete with a 30.0m right of way (R.O.W). The R.O.W. in the front of the subject property is deficient. It is recommended that a dedication that aligns with 1049 McCurdy Rd frontage.
- c) If any road dedication affects lands encumbered by a Utility right-of-way (such as BC Hydro Gas, etc.) please obtain the approval of the utility prior to application for final subdivision approval. Any works required by the utility as a consequence of the road dedication must be incorporated in the construction drawings submitted to the City's Development Manager.

8) Power and Telecommunication Services and Street Lights

- a) All proposed distribution and service connections are to be installed underground. Existing distribution and service connections, on that portion of a road immediately adjacent to the site, are to be relocated and installed underground.
- b) LED Streetlights must be installed on all roads.
- c) Remove existing poles and utilities, where necessary. Remove aerial trespass (es).

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 Development Engineering 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.
- c) Engineering and Inspection Fee: 3.5% of construction value (plus GST)

Ryan O'Sullivan for James Kay

James Kay, P.Eng.
Development Engineering Manager

AS

