

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

Date: December 18, 2019
File No.: Z19-0135
To: Community Planning (HR)
From: Development Engineering Manager (JK)
Subject: 2340 Pandosy Street
RU1 to HD3

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.

2) Road Dedication and Subdivision Requirements

- a) Access to the development shall only be from Christleton Ave.
- b) A road dedication of 2.4m from the Pandosy Street Frontage is needed for future road widening.
- c) Provide a 6m radius rounding at the SE corner.

3) Geotechnical Study.

- a) Provide a geotechnical report prepared by a Professional Engineer competent in the field of hydro-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 reports must be submitted to the Development Services Department for distribution to the Development Engineering Branch and Inspection Services Division 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.

Additional geotechnical survey may be necessary for building foundations, etc

4) Water

- a) The property is located within the City of Kelowna service area. The existing lot is serviced with a 19mm diameter water service. Only one service will be permitted to the site or per property. The applicant, at his cost, will arrange for the removal of the existing service and the installation of one new larger metered water service if needed.
- b) 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 commercial zoning is 150l/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.

- c) An approved backflow protection device must also be installed on site as required by the City Plumbing Regulation and Water Regulation bylaws.

- d) 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

5) 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 service and the installation of one new larger service.

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6) 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.

7) Roads

- a) Pandosy Street is designated an 2-lane arterial road. Frontage improvements have already been completed for the existing condition. No further upgrades are needed at this time.
- b) Christleton Ave must be upgraded to an urban standard along the full frontage of this proposed development, including curb and gutter, separated sidewalk, irrigated landscaped boulevard, drainage system including catch basins, manholes and pavement removal and replacement and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction
- c) Curb-bulb out required at the SW corner. Similar to Pandosy St. and Francis Ave.

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 as the subject properties are within the “City Center Urban Center”.
- b) Make servicing applications to the respective Power and Telecommunication utility companies. The utility companies are required to obtain the City’s approval before commencing construction.
- c) Re-locate existing poles and utilities, where necessary. Remove aerial trespass (es).

9) Design and Construction

- d) 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.
- e) 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.
- f) 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).

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- g) A "Consulting Engineering Confirmation Letter" (City document 'C') must be completed prior to submission of any designs.
- h) 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) Other Engineering Comments

- a) Provide all necessary Statutory Rights-of-Way for any utility corridors required, including those on proposed or existing City Lands, if required.
- b) If any road dedication affects lands encumbered by a Utility right-of-way (such as Terasen, 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.

11) Servicing Agreements for Works and Services

- b) 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.
- c) 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.

12) 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).

James Kay

James Kay, P.Eng.
Development Engineering Manager
AS

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