

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

Date: March 1, 2022
File No.: DP22-0054
To: Urban Planning Management (WM)
From: Development Engineer Manager (NC)
Subject: 630 Boynton Place

The Development Engineering comments and requirements regarding the form and character for this Development Permit application will required at Building Permit.

.1) General

- a) The following requirements are valid for two (2) years from the reference date of this memo, or until the application has been closed, whichever occurs first. The City of Kelowna reserves the rights to update/change some or all items in this memo once these time limits have been reached.
- b) This proposed development may require the installation of centralized mail delivery equipment. Please contact Arif Bhatia, Delivery Planning Officer, Canada Post Corporation, 530 Gaston Avenue, Kelowna, BC, V1Y 2K0, (250) 859-0198, arif.bhatia@canadapost.ca to obtain further information and to determine suitable location(s) within the development.
- c) Provide easements as may be required.
- d) Traffic Calming items and Boulevard landscaping will be required for entire frontage.
- e) Access lane must have cul-de-sac or hammer head at end to turn a MSU truck.
- f) The proposed Development triggers a Traffic Impact Assessment (TIA). Prior to initiation of the TIA, Terms of Reference (TOR) must be established. The applicant's consulting transportation engineer shall contact the Development Engineering Technician for this development who, in collaboration with the City's Integrated Transportation Department, will determine the terms of reference for the study. Recommendations from the Traffic Impact Analysis (TIA) will become requirements of this development.

.2) Geotechnical Report

- a) Provide a comprehensive geotechnical report (3 copies), 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 Planning and Development Services Department (Planning & Development Officer) for distribution to the Works & Utilities Department 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) Suitability of on-site disposal of storm water and sanitary waste, including effects upon adjoining lands.
- (vi) Slope stability, rock fall hazard and slippage including the effects of drainage and septic tank effluent on the site.
- (vii) Identify slopes greater than 30%.
- ii) Top of bank assessment and location including recommendations for property line locations, septic field locations, building setbacks, and ground water disposal locations.
- iii) Recommendations for items that should be included in a Restrictive Covenant.
- iv) Any special requirements that the proposed subdivision should undertake so that it will not impact the bank(s). The report must consider erosion and structural requirements.
- v) Any items required in other sections of this document.
- vi) Recommendations for erosion and sedimentation controls for water and wind.
- vii) Recommendations for roof drains and perimeter drains.

.3) Water

- (a) The property is located within the City of Kelowna service area.
- (b) The subject property is currently serviced with a 200 mm water service. The developer will need to determine the domestic and fire protection requirements of this proposed development. Only one service will be permitted for this development. The applicant will arrange for the disconnection of the existing services and the installation of a new larger service. The disconnection of the existing small diameter water service and the tie-in of a larger new service can be provided by City forces at the developer's expense. One master water meter will supply the development. The applicant will be required to sign a Third Party Work Order for the cost of the water service upgrades.
- (c) Landscaped boulevards, complete with underground irrigation systems, must be integrated with the on-site irrigation system.

.4) Sanitary Sewer

- (a) Our records indicate that this proposed development site is connected with a two 150mm diameter sewer services. One of these 150mm service will need to be removed. 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.

.5) Drainage

- a) Provide an adequately sized drainage system complete with individual lot connections. The Subdivision, Development and Servicing Bylaw requires that each lot be provided with an individual connection; however, the City Engineer may permit use of individual ground water disposal systems, where soils are suitable. For on-site disposal of drainage water, a hydro geotechnical report will be required complete with a design for the disposal method (i.e. trench drain / rock pit). The Lot Grading Plan must show the design and location of these systems for each lot.
- b) This lot is serviced with a 200mm storm service
- c) Provide the following drawings:
 - i) A detailed Lot Grading Plan (indicate on the Lot Grading Plan any slopes that are steeper than 30% and areas that have greater than 1.0 m of fill);
 - ii) A detailed Stormwater Management Plan for this development; and,
 - iii) An Erosion and Sediment Control Plan.
- d) Show details of dedications, rights-of-way, setbacks and non-disturbance areas on the lot Grading Plan.
- e) Identify clearly on a contour map, or lot grading plan, the top of bank(s). Provide cross sections along the top of the bank at each property corner and at locations where there are significant changes in slope. Cross sections are to be perpendicular to the contour of the slope. Show the proposed property lines on the cross sections. Not all areas have a clear top of bank; and therefore, field reconnaissance by City staff and the applicant may be needed to verify a suitable location for property lines.

- f) Where ditches are provided, they must be adequately lined and protected for the design flows.

.6) 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) Street lights must be installed on all roads.
- c) Before making application for approval of your subdivision plan, please make arrangements with Fortis BC for the pre-payment of applicable charges and tender a copy of their receipt with the subdivision application.
- d) 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.

e)

.7) 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 application commences, design drawings prepared by a professional engineer must be submitted to the City's Development Services 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.

.8) 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.

.9) Other Engineering Comments

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

.10) CHARGES AND FEES

- a. Development Cost Charges (DCC's) are payable.
- b. Fees per the "Development Application Fees Bylaw" include:
 - i) Street Marking/Traffic Sign Fees: at cost (to be determined after detailed design completed).
 - ii) Survey Monument Fee: \$50.00 per newly created lot (GST exempt).
 - iii) Survey Monument, Replacement Fee: \$1,200.00 (GST exempt) – only if disturbed.
 - iv) Hydrant Levy Fee: \$250 per newly created lot (GST exempt).
 - v) Engineering and Inspection Fee: 3.5% of construction value (plus GST).


Nelson Chapman, P.Eng.
Development Engineering Manager

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