MEMORANDUM

Date: September 15, 2020

File No.: Z20-0081

To: Urban Planning Management (KB)

From: Development Engineering Manager (JK)

Subject: 605 Gerstmar Rd RU1 to RU2

The Development Engineering Department has the following comments and requirements associated with this application to rezone the subject property from RU1 (Large-lot housing) to RU2 (Medium-lot housing) to support a two-lot subdivision. The road and utility upgrading requirements outlined in this report will be a requirement of this development. The Development Engineering Technician for this project is Sarah Kelly.

1. General

- a) These are Development Engineering Branch comments/requirements and are subject to the review and requirements from the Ministry of Transportation and Infrastructure (MoTI).
- b) The following requirements are valid for two (2) years from the reference date of this memo, or until the PLR and/or 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.

2. <u>Domestic Water and Fire Protection</u>

- a) The subject lot is within the Rutland Waterworks District (RWD) water service area. The developer is required to make satisfactory arrangements with RWD for all water and fire protection-related issues. All charges for service connection and upgrading costs, as well as any costs to decommission existing services, shall be the responsibility of the developer.
- b) The developer's consulting mechanical engineer will determine the domestic and fire protection requirements of this proposed development and establish hydrant requirements and service needs. All fire flow calculations approved by RWD are to be shared with the Development Engineering Branch upon submittal of off-site civil engineering drawings.
- c) Provide an adequately sized domestic water and fire protection system complete with individual lot connections. The water system must be capable of supplying domestic and fire flow demands of the project in accordance with the Subdivision, Development & Servicing Bylaw No. 7900.



3. Sanitary Sewer

- Each legal lot shall require only one individual sanitary service connection complete with an inspection chamber (SS-S7) and Brooks Box (SS-S9), to be installed at the applicant's cost.
- b) The existing lot is currently serviced with a 100-mm sanitary service. If the existing service connection is to remain it will be required to be completed with an inspection chamber and Brooks box.

4. Storm Drainage

- a) See item 5a for public storm drainage infrastructure requirements.
- b) 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.
- 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; and
 - iii. An Erosion and Sediment Control Plan.

5. Subdivision Requirements

a) Grant statutory rights-of-way if required for utility services.

6. Electric Power and Telecommunication Services

All proposed service connections are to be installed underground. It is the developer's responsibility to make a servicing application with the respective electric power, telephone and cable transmission companies to arrange for these services, which would be at the applicant's cost.

7. Road Improvements

a) Gerstmar Rd is classified as a Major Collector under the City of Kelowna's 20-Year Major Road Network. The section of Gerstmar Rd must be upgraded to a collector standard along the full frontage of this proposed development, including sidewalk, curb and gutter, pavement removal and replacement, boulevard landscaping, drainage infrastructure (catch basins, perforated storm pipe, and drywell), and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction. The road cross section to be used is SS-R6.

<u>NOTE:</u> Pipe and drywell inverts to consider eventual connection to existing storm main at Gerstmar Rd and Tataryn Rd – DWG A-2482-4.



- b) The developer is requested, at the City's cost, to arrange for the design and construction of frontage upgrades, detailed above, continuing north along Gerstmar Rd. Based on the developer's Consulting Civil Engineers cost estimate, the City will agree to pay for frontage upgrades beyond the limits of the subject lot. The details of this arrangement are to be formalized at the time of drafting the servicing agreement for the required works and services. Contact the Development Technician (Sarah Kelly, skelly@kelowna.ca) for more information.
- c) Graham Rd must be upgraded to a local standard along the full frontage of this proposed development including curb and gutter, pavement removal and replacement, boulevard landscaping and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction. The existing catch basin is to be relocated to the new gutter line. The road cross section to be used is a modified SS-R3.
- d) The estimated cost of this construction, for performance security purposes, is to be submitted by the Developer's Consulting Engineer.

8. <u>Geotechnical Report</u>

- (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.
- (b) The Geotechnical reports must be submitted to the Development Services Department (Subdivision Approving officer) 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.

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

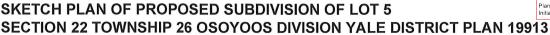
- (a) A Servicing Agreement is required for all works and services on City lands in accordance with the Subdivision, Development & Servicing Bylaw No. 7900. The applicant's Engineer, prior to preparation of Servicing Agreements, must provide adequate drawings and estimates for the required works. The 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.

12. Charges and Fees

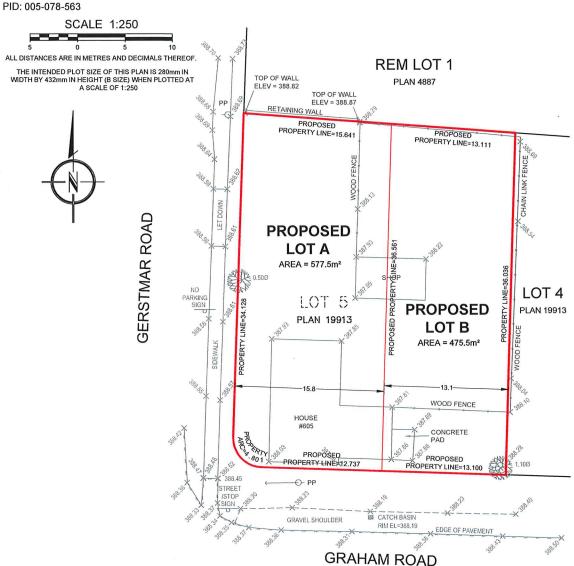
- a) Development Cost Charges (DCC's) are payable.
- b) Fees per the "Development Application Fees Bylaw" include:
 - i) Survey Monument Fee: \$50.00 per newly created lot (GST exempt).
 - ii) Survey Monument, Replacement Fee: \$1,200.00 (GST exempt) only if disturbed.
 - iii) Engineering and Inspection Fee: 3.5% of construction value (plus GST).

James Kay, P.Eng.

Development Engineering Manager



CITY OF KELOWNA
CIVIC ADDRESS: 605 GERSTMAR ROAD
PID: 005 078 563



ZONING: RU1 (TO BE REZONED RU2)

ELEVATIONS ARE TO CVD28 GEODETIC DATUM, AND ARE DERIVED FROM DUAL-FREQUENCY GNSS OBSERVATIONS PROCESSED USING THE SMARTNET REAL-TIME NETWORK SERVICE.

PROPERTY DIMENSIONS SHOWN ARE DERIVED FROM: PLAN 19913 & PLAN KAP69955

OFFSETS TO PROPERTY LINES ARE NOT TO BE USED TO DEFINE BOUNDARIES.

REFER TO CURRENT CERTIFICATE(S) OF TITLE FOR ADDITIONAL, EXISTING OR PENDING CHARGES.

THIS PLAN SHOWS THE LOCATION OF VISIBLE FEATURES ONLY, AND DOES NOT INDICATE BURIED SERVICES THAT MAY EXIST ON OR AROUND THE SUBJECT SITE.

FEATURES SHOWN WITHOUT DIMENSIONS SHOULD BE CONFIRMED WITH BENNETT LAND SURVEYING LTD.

BUILDING LOCATION BASED ON SURVEY TIES TO VISIBLE EXTERIOR SURFACES UNLESS OTHERWISE NOTED.

TREE SPECIES AND DIMENSIONS SHOULD BE CONFIRMED BY A QUALIFIED ARBORIST. SHADED AREA IS NOT AN INDICATION OF DRIP LINE LOCATION UNLESS SPECIFICALLY LABELED.



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FIELD SURVEY COMPLETED ON AUGUST 14, 2020.