



CITY OF KELOWNA

MEMORANDUM Initials

Planner

LB

Date:

December 8, 2016

File No.:

Z16-00075-01

To:

Community Planning (LB)

From:

Development Engineering Manager(SM)

Subject:

(E of) Upper Caynon Dr.

RU1h to RU4h and P3

Development Engineering Department have the following comments and requirements associated with this rezoning 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 Ryan O'Sullivan

1. General

a) This proposed subdivisions may require the installation of centralized mail delivery equipment. Please contact Rick Ould, Delivery Planning Officer, Canada Post Corporation, 530 Gaston Avenue, Kelowna, BC, V1Y 2K0 (250-763-3558 ext. 2008) to obtain further information and to determine suitable location(s) within the development.

2. Geotechnical Report

Provide a comprehensive 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.

- (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.
- Suitability of on-site disposal of storm water and sanitary waste, including effects upon adjoining lands.

- (vi) Recommendations for items that should be included in a Restrictive Covenant.
- (vii) Any items required in other sections of this document.
- (viii) Recommendations for erosion and sedimentation controls for water and wind.
- (ix) Recommendations for roof drains and perimeter drains.
- (x) Recommendations for construction of detention or infiltration ponds if applicable.

3. Domestic Water and Fire Protection

- a) The property is located within the City Water service area.
- b) For offsite works a Predesign Report is required complete with costs. Performance security and a Servicing Agreement will be required for offsite works. See comments in the "General" section.
- 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. Provide water calculations for this subdivision to confirm this.

4. <u>Sanitary Sewer</u>

- a) Provide a downstream sanitary sewer main flow analysis check for the proposed development.
- b) For offsite works, a construction cost estimate, performance security and a servicing agreement will be required.
- c) Provide an adequately Sanitary system connection complete with individual lot connection with flow demands of the project area in accordance with the Subdivision, Development & Servicing Bylaw.

5. Storm 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) Confirm if offsite works are required and how drainage will be handled on site.
- c) Confirm locations and sizes of any detention facilities if required.

- d) A Predesign report is required that addresses how Storm water Management will be dealt with. For offsite works, performance security and a Servicing Agreement will be required prior to rezoning. See comments in the "General" section.
- e) 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 subdivision; and,
 - iii) An Erosion and Sediment Control Plan.
- f) Show details of dedications, rights-of-way, setbacks and non-disturbance areas on the lot Grading Plan.
- g) 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.

6. Road Improvements

- h) Private access and internal roads must be constructed and paved to the City standard min SS-R2.
- i) Verify that physical driveway access will satisfy City requirements for all lots. For steeper lots (15%), show driveways on the lot grading plan with grades or profiles. Where lots are serviced by onsite sewage disposal systems, show limits of cut and fill lines.
- j) Re-locate existing poles and utilities, where necessary.
- k) Temporary asphalt cul-de-sacs or turn-a-round will be required at each terminal end of roads and emergency access road that will be extended in the future. Additional dedication or a Statutory Right-of-Way may be needed.

7. Subdivision

- (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. <u>Electric Power and Telecommunication Services</u>

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 "Capri Landmark Urban Centre".

- b) Street lights must be installed on all fronting roads as per bylaw requirements. Design drawings to include level of illumination plan.
- c) 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.
- d) Re-locate existing poles and utilities, where necessary. Remove aerial trespass (es).

9. Engineering

Road and utility construction design, construction supervision, and quality control supervision of all off-site and site services including on-site ground recharge drainage collection and disposal systems, must be performed by an approved consulting civil engineer. Designs must be submitted to the city engineering department for review and marked "issued for construction" by the city engineer before construction may begin.

10. 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.

11. 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.

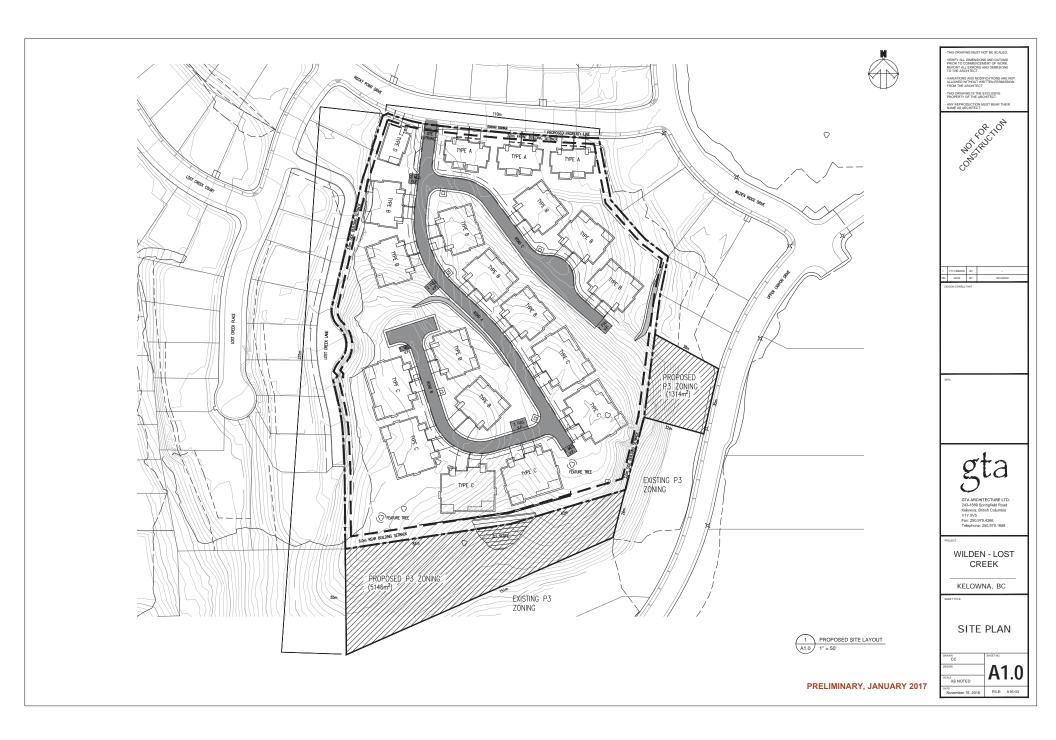
Part 3, "Security for Works and Services", of the Bylaw, describes the Bonding and Insurance requirements of the Owner. The liability limit is not to be less than \$5,000,000 and the City is to be named on the insurance policy as an additional (b) insured.

12. Development Permit and Site Related Issues

- Access and Manoeuvrability (a)
 - An SU-9 standard size vehicle must be able to manoeuvre onto and off (i) the site without requiring a reverse movement onto public roadways.
 - Direct the roof drains into on-site rock pits or splash pads. (ii)
 - Indicate on the site, the locations of loading bays as well as the garbage (iii) and recycle bins.

Steve Muenz, P./Eng./ Development Engineering Manager

RO









BUILDING B EXTERIOR
A3.10 N.T.S.







BUILDING D EXTERIOR
A3.10 N.T.S.

- THIS DRAWING MUST NOT BE SCALED.
- VERIFY ALL DIMENSIONS AND DATUMS
PRIOR TO COMMENCEMENT OF WORK.
REPORT ALL ERRORS AND OMMISIONS
TO THE ARCHITECT.

 VARIATIONS AND MODIFICATIONS ARE N ALLOWED WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT.

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SEAL

gta

GTA ARCHITECTURE LTD. 243-1889 Springfield Road Kelxwas, British Columbia V1Y 5V5 Fax: 250.979.4366 Telephone: 250.979.1688

OJECT

WILDEN - LOST CREEK

KELOWNA, BC

SHEET TITLE

BUILDING COLOUR ELEVATIONS

| CC | DESIGN | A3.10 | A3.10 | DATE | November 16, 2016 | FILE: A16-03

PRELIMINARY, JANUARY 2017