
CITY OF KELOWNA
MEMORANDUM

Date: March 31, 2023
File No.: Z23-0016
To: Urban Planning Manager (JB)
From: Development Engineering Manager (NC)
Subject: 4305 Hazell Rd



Rezoning RU1 to RU4

The Development Engineering Department has the following comments associated with this Rezoning Application to rezone the subject property from RU1 (Large Lot Housing) to RU4 (Duplex Housing) and subdivide into a 2-lot subdivision (S23-0013). The following Works and Services will be a requirement of the proposed land use.

The Development Engineering Technician for this file is Chris Pedersen (cpedersen@kelowna.ca).

1. GENERAL

- a. The following comments and requirements are valid for a period of one (1) year 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 modify some or all items in this memo if subdivision is not registered within this time.
- b. This proposed development may require the installation or modification 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 determine requirements.
- c. All City Trees must be protected as per Bylaw 8042 Schedule C – Tree Barrier and Installation Policy requirements. Removal of City Trees will require prior approval of the City’s Urban Forestry Supervisor and may be subject to replacement, at a minimum two for one ratio, and compensation payment as per the City of Kelowna Equitable Compensation as defined in Section 8.2 of Bylaw 8042.
- d. There is a possibility of a high groundwater table or surcharging of storm drains during major storm events. Non-basement buildings may be required. This should be considered in the design of the onsite system, lot grading, and minimum basement elevations.

2. SITE-SPECIFIC REQUIREMENTS

- a. Only one driveway, of maximum 6.0m width, will be permitted per parcel.
- b. The existing oversized driveway must be reduced to a maximum width of 6.0m.

3. DOMESTIC WATER AND FIRE PROTECTION

- a. The subject property is located within the City of Kelowna Water Supply Area. Our records indicate that this property is currently serviced with a 19 mm diameter water service off Hazell Rd. Only one service connection will be permitted per lot.
- b. The Developer, at their cost, will arrange for the removal of the existing service, if required, and the installation of one water service per legal lot.
- c. The Developer's Consulting Engineer will determine the domestic water and fire protection requirements of this proposed development and establish hydrant requirements and service needs. The bylaw requirement for duplex residential is 60 L/s.
- d. If it is determined that upgrades to any existing water distribution system must be made to achieve the required fire flows, the applicant must upgrade the existing system at their cost.
- e. The watermain fronting the subject property is 100mm diameter and is not anticipated to be able to provide adequate fire flow to the proposed land use. Please contact the Development Technician for this file to determine required upgrades.

4. SANITARY SEWER SYSTEM

- a. Our records indicate that this property is currently serviced with a 100 mm diameter sanitary service off Young Rd. Only one service connection will be permitted per lot.
- b. The Developer, at their cost, will arrange for the removal of the existing service, if required, and the installation of one sanitary service per legal lot.
- c. Service connections are to be completed with an inspection chamber (c/w Brooks Box) as per SS-S7 and may not be extended at an angle that exceeds 45° from perpendicular to the main. Connection from mains within rear yard right-of-ways will not be permitted. Existing sanitary services are to have inspection chambers added if they do not already exist.

5. STORM DRAINAGE

- a. The subject property is located within the City of Kelowna drainage service area. The City Engineer may permit use of individual ground water disposal systems, where soils are suitable. For on-site disposal of drainage water, a hydrogeotechnical 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. The Developer must engage a Consulting Engineer to provide a combined Lot Grading Plan, Stormwater Management Plan, and Erosion and Sediment Control Plan to meet the requirements of Bylaw 7900. Indicate on the plan the building elevations, finished grade slopes and elevations throughout the site, perimeter grades to match existing grades, overland flow routes, onsite stormwater retention if required, and erosion and sediment control measures.

6. ROADWAY AND STREETScape

- a. Hazell Road is classified in the 2040 OCP as a Suburban Local Road and must be upgraded to a modified SS-R3 urban standard along the full frontage of the subject property. Required upgrades to include 1.8m separated sidewalk, curb and gutter, LED street lighting, landscaped and irrigated boulevard, curb bulb-outs, and replacement and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction.
- b. Young Road is classified in the 2040 OCP as a Suburban Local Road and must be upgraded to a modified SS-R3 urban standard along the full frontage of the subject property. Required upgrades to include 1.8m separated sidewalk, curb and gutter, LED street lighting, landscaped and irrigated boulevard, curb bulb-outs, and replacement and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction.
- c. All Landscape and Irrigation plans require design and inspection by a Qualified Professional registered with the BCSLA and the IIABC.
- d. Streetlights must be installed on all public roads. All streetlighting plans are to include photometric calculations demonstrating Bylaw 7900 requirements are met and require approval by the Development Engineering Branch at the same time as other “issued for construction” drawings.

7. POWER AND TELECOMMUNICATION SERVICES

- a. 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. Utility companies are required to obtain the City’s approval before commencing construction.

8. GEOTECHNICAL STUDY

- a. Provide a Geotechnical Report prepared by a Professional Engineer competent in the field of geotechnical or hydrogeological engineering as applicable at time of Subdivision Application and prior to the City’s review of Engineering drawings. Geotechnical Report to address, at a minimum, any of the applicable items below:
 - i. Site suitability for development;
 - ii. Area ground water characteristics, including any springs and overland surface drainage courses traversing the property, as well as any monitoring required;
 - iii. Site soil characteristics (i.e., fill areas, 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 erosion and sedimentation controls for water and wind;
 - vii. Any items required in other sections of this memo;
 - viii. Recommendations for roof drains, perimeter drains, and septic tank effluent on the site;

9. **DESIGN AND CONSTRUCTION OF OFFSITE WORKS**

- a. Offsite Works and Services are required of this development as outlined above. The Developer must Design and enter into a Servicing Agreement and provide security for the Construction of the Works prior to subdivision approval.
- b. Design of all offsite works and site servicing must be completed in accordance with Subdivision, Development, and Servicing Bylaw No. 7900 and is subject to the approval of the City Engineer prior to construction or execution of a Servicing Agreement.
 - i. See Bylaw 7900 Sections 6.0, 7.0, and 9.0, as well as Schedule 4 for procedural guidance, approval requirements, and design standards.
 - ii. Design must be completed by a suitably qualified and experience Consulting Engineer.
 - iii. Engineering drawing submissions are to be in accordance with *Council Policy 265 – Engineering Drawing Submission Requirements*. Drawings must be submitted digitally in PDF format and sealed in accordance with EGBC Guidelines.
- c. A Servicing Agreement is required for all Works and Services on City lands (Offsite Works).
 - i. The Servicing Agreement must be in the form of Schedule 2 of Bylaw 7900.
 - ii. The Developer’s Consulting Engineer, prior to preparation of a Servicing Agreement, must provide adequate drawings and estimates for the Works to the City Engineer.
 - iii. Bylaw 7900, Part 3 – Security for Works and Services, Sections 7.1 - 7.2, describes the Security requirements of an Owner for entering into Servicing Agreements. Security must be in the form of an irrevocable letter-of-credit, bank draft, or certified cheque.
- d. Construction of the required Works and Services must be completed in accordance with Bylaw 7900 requirements and is subject to several approvals prior to work commencing. These include, but are not necessarily limited to, the following:
 - i. Before any construction of the Works commences, design drawings must be reviewed and approved for construction by the City Engineer.
 - ii. A “Consulting Engineering Confirmation Letter” (City template provided upon request) must be executed by the Owner and Consulting Engineer and provided to the City.
 - iii. The Developer’s Consulting Engineer must undertake adequate inspections during construction of the Work, as outlined in EGBC’s *Guide to the Standard for Documented Field Reviews During Implementation or Construction*. A Quality Control and Assurance Plan acceptable to the City Engineer must be submitted prior to construction approval. Refer to Bylaw 7900, Schedule 3.
 - iv. Insurance requirements are outlined in Bylaw 7900, Section 7.3. A compliant Certificate of Insurance must be provided prior to construction approval.
 - v. Contractor must provide a current WorkSafe BC Clearance Letter.
- e. Construction completion, maintenance period, and return of Performance Security requirements are outlined in Bylaw 7900, Sections 9.5 - 9.7 and Sections 10.0 - 10.4.


10. CHARGES, FEES, AND SECURITIES

a. Engineering and Inspection Fee:

3.5% of Construction Value	\$	TBC
GST (5%)	\$	TBC
TOTAL	\$	TBC

b. Fees per the “Development Application Fees Bylaw” include:

- i. Street/Traffic Sign Fees: at cost (to be determined after design).
- 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.



Nelson Chapman, P.Eng.
Development Engineering Manager
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