
CITY OF KELOWNA

MEMORANDUM

Date: July 31, 2018
File No.: Z18-0086
To: Urban Planning Management (TA)
From: Development Engineering Manager (JK)
Subject: 360 Penno Rd. P3 to I2

The Development Engineering Department has the following comments and requirements associated with this application to rezone the subject property from P3 to I2. 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) These are Development Engineering comments/requirements and are subject to the review and requirements from the Ministry of Transportation (MOTI).
- b) Provide easements as may be required.
- c) The Fire Department and Environment Division requirements and comments are addressed separately.

2. Domestic Water and Fire Protection

This development is within the service area of the Black Mountain Irrigation District (BMID). The developer is required to make satisfactory arrangements with BMID for these items. All charges for service connection and upgrading costs, as well as any costs to decommission existing services are to be paid directly to BMID. Only one service is permitted for this development.

3. Sanitary Sewer

- a) This property is currently not serviced. 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 services and the installation of one new larger service if necessary. Any service improvement and decommissioning works may be included in an offsite servicing design package submission including an estimate for bonding purposes.

4. Storm 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 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.

- b) Provide the following drawings:
 - i. A detailed Stormwater Management Plan for this development; and,
 - ii. An Erosion and Sediment Control Plan.

5. 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.

6. Road Improvements

- a) Penno Rd must be upgraded to an urban collector along the full frontage of this proposed development including curb and gutter, street lights, landscaped & irrigated boulevard, monolithic sidewalk, drainage system including catch basins, pavement removal and replacement, and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction. Road cross section to be used is a SS-R5.
- b) Norris Rd connection through 360 Penno Rd must be designed and built to a modified urban collector through the middle of this development including curb and gutter, sidewalk, street lights, landscaped & irrigated boulevard, drainage system including catch basins, and replacement and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction. Road cross section to be used is a modified SS-R5.

7. Road Dedication and Subdivision Requirements

- 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 BC Hydro Gas, 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.
- c) The corridor between Penno Rd to Norris Rd must be dedicated for the construction of the Norris Rd connection.

8. Geotechnical Report

- a) 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.

The Geotechnical report must be submitted 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) Any items required in other sections of this document.
- (vii) Recommendations for erosion and sedimentation controls for water and wind.
- (viii) Recommendations for roof drains and perimeter drains.
- (ix) Recommendations for construction of detention or infiltration ponds if applicable.

9. Design and Construction

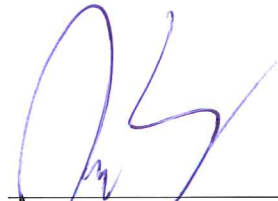
- (a) Design, construction supervision and inspection of all off-site civil works and site servicing must be performed by a Consulting Civil Engineer and all such work is subject to the approval of the City Engineer. Drawings must conform to City standards and requirements.
- (b) Engineering drawing 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.

11. Charges and Fees

- a) Development Cost Charges (DCC's) are payable.
- b) Fees per the "Development Application Fees Bylaw" include:
 - i) Engineering and Inspection Fee: 3.5% of construction value (plus GST).



James Kay, P.Eng.
Development Engineering Manager

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