CITY OF KELOWNA

MEMORANDUM

Date: November 25, 2015

File No.: DP15-0266

To: Community Planning (RR)

From: Development Engineering Manager

Subject: 1010 Ellis Street Industrial Development

Development Engineering has the following comments and requirements associated with this application. The road and utility upgrading requirements outlined in this report will be a requirement of this development.

1. Domestic Water and Fire Protection

- a) 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.
- b) The existing lots are currently serviced with small diameter services (19mm on 990 Ellis St and a 25mm, 38mm & 150mm on 1010 Ellis St). Only one service will be permitted for this development. The applicant, at his cost, will arrange for the installation of one new water service and the disconnection of the small existing services.
- c) A water meter is mandatory for this development and must be installed inside the building on the water service inlet as required by the City Plumbing Regulation and Water Regulation bylaws. The developer or building contractor must purchase the meter from the City at the time of application for a building permit from the Inspection Services Department, and prepare the meter setter at his cost. Boulevard landscaping, complete with underground irrigation system, must be integrated with the on-site irrigation system.

2. <u>Sanitary Sewer</u>

a) Our records indicate the existing lots are serviced multiple 100mm diameter sewer services (2-100mm on 990 Ellis St and 3-100mm on 1010 Ellis St). 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.

3. Storm Drainage

a) The developer must engage a consulting civil engineer to provide a storm water management plan for these sites which meets the requirements of the City Subdivision Development and Servicing Bylaw 7900. The storm water management plan must also include provision of lot grading plans, minimum basement elevations (MBE), if applicable, and provision of a storm drainage

- service and recommendations for onsite drainage containment and disposal systems.
- b) Our records indicate the subject property is currently serviced with a 100mm storm sewer service. On site storm drainage systems and overflow service(s) for the site will be reviewed and approved by Engineering when a site servicing design is submitted. The applicant, at his cost, will arrange for the installation of one new storm service and the disconnection of the small existing services if required.

3. Road Improvements

- a) Ellis Street must be upgraded to current urban standards along the full frontage of this proposed development, including curb and gutter which is in a deteriorated state, replacement for the existing curb letdowns, a separate sidewalk, landscaped boulevard and drainage system including catch basins, manholes and pavement removal and replacement, street lighting and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction.
- b) Manhattan Drive must be upgraded to an urban standard along the full frontage of this proposed development, including short section of sidewalk, landscaped boulevard complete with street trees and pavement removal and replacement, street lighting and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction.

5. Road Dedication and Subdivision Requirements

- a) Provide a highway allowance tapered widening along the frontage of the Manhattan Drive.
- b) Lot Consolidation.
- c) If any road dedication or closer affects lands encumbered by a Utility right-of-way (such as 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 or closer must be incorporated in the construction drawings submitted to the City's Development Manager.
- d) Provide all necessary Statutory Rights-of-Way for any utility corridors required, including those on proposed or existing City Lands.

6. Electric Power and Telecommunication Services

- a) All proposed distribution and service connections are to be installed underground.
- b) Streetlights must be installed on all roads.
- 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 utilities, where necessary.

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 subdivision application commences, design drawings prepared by a professional engineer must be submitted to the City's Development Engineering 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. <u>Servicing Agreements for Works and Services</u>

- 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. Geotechnical Report

As a requirement of this application and building permit approval the applicant must provide a comprehensive geotechnical report prepared by a Professional Engineer qualified in the field of hydro-geotechnical survey to address the following:

- a) Area ground water characteristics, including water sources on the site.
- b) Site suitability for development; i.e. unstable soils, foundation requirements etc.
- c) Drill and/or excavate test holes on the site and install pisometers if necessary. Log test hole data to identify soil characteristics, identify areas of fill if any. Identify unacceptable fill material, analyse soil sulphate content, identify unsuitable underlying soils such as peat, etc. and make recommendations for remediation if necessary.
- List extraordinary requirements that may be required to accommodate construction of roads and underground utilities as well as building foundation designs.
- e) Additional geotechnical survey may be necessary for building foundations, etc.

10. <u>Development Permit and Site Related Issues</u>

Access and Manoeuvrability

- (i) The proposed driveway access to the site will be permitted from Ellis St and Manhattan Drive. The existing driveway access (Industrial Ave) can remain.
 - (ii) An SU-9 standard size vehicle must be able to manoeuvre onto and off the site without requiring a reverse movement onto public roadways.
 - (iii) Indicate on the site, the locations of loading bays as well as the garbage and recycle bins.

Stave Muenz, P. Eng

Steve Muenz, P. Eng. Development Engineering Manager

SS

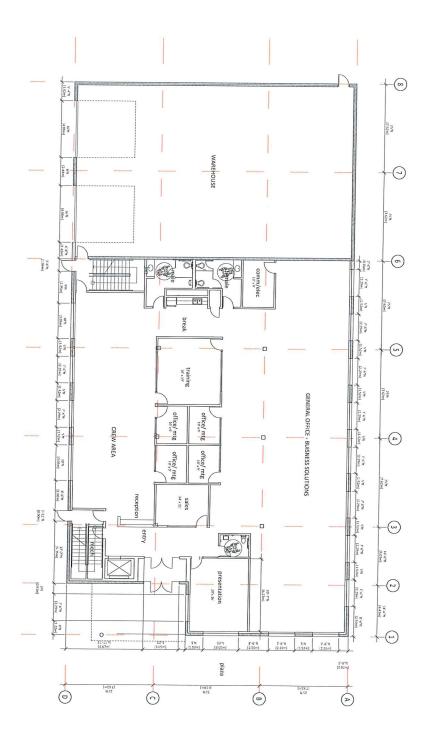


Hugh j bitz Architect

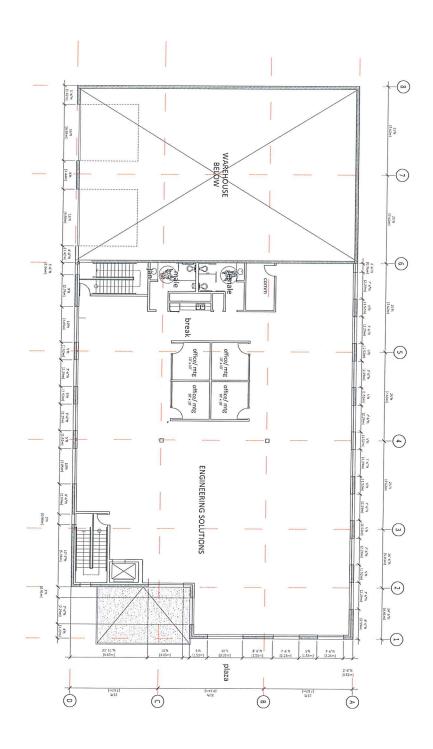
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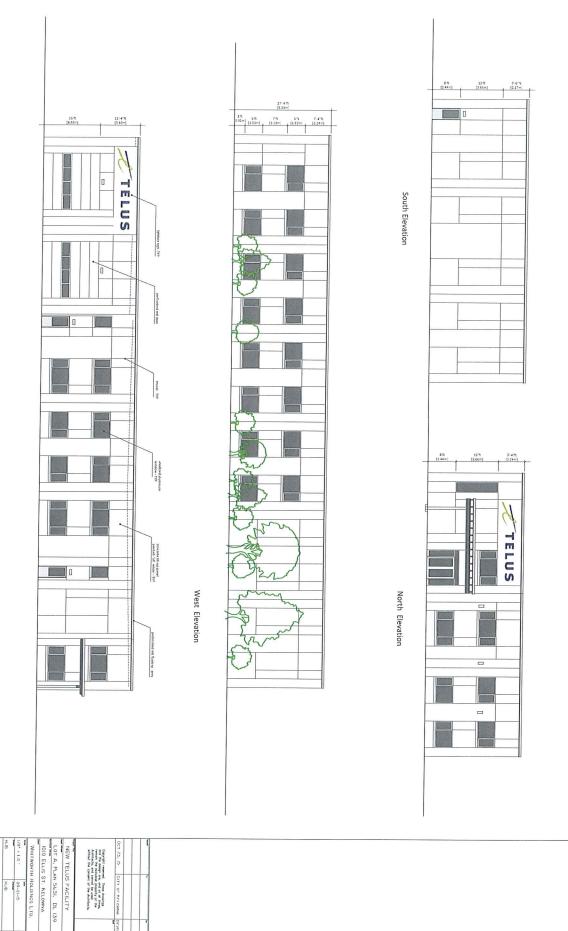
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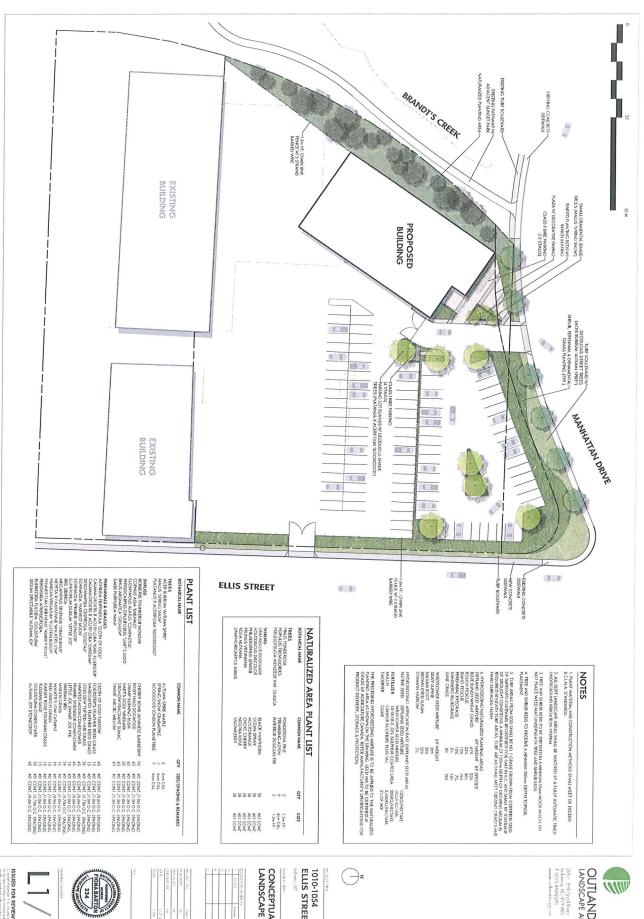
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N. 1339	WAN DESCRIPTION PRIMARY	Architect



East Elevation

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hugh j bitz Architect





OUTLAND DESIGN LANDSCAPE ARCHITECTURE

1010-1054 ELLIS STREET

CONCEPTUAL LANDSCAPE PLAN



