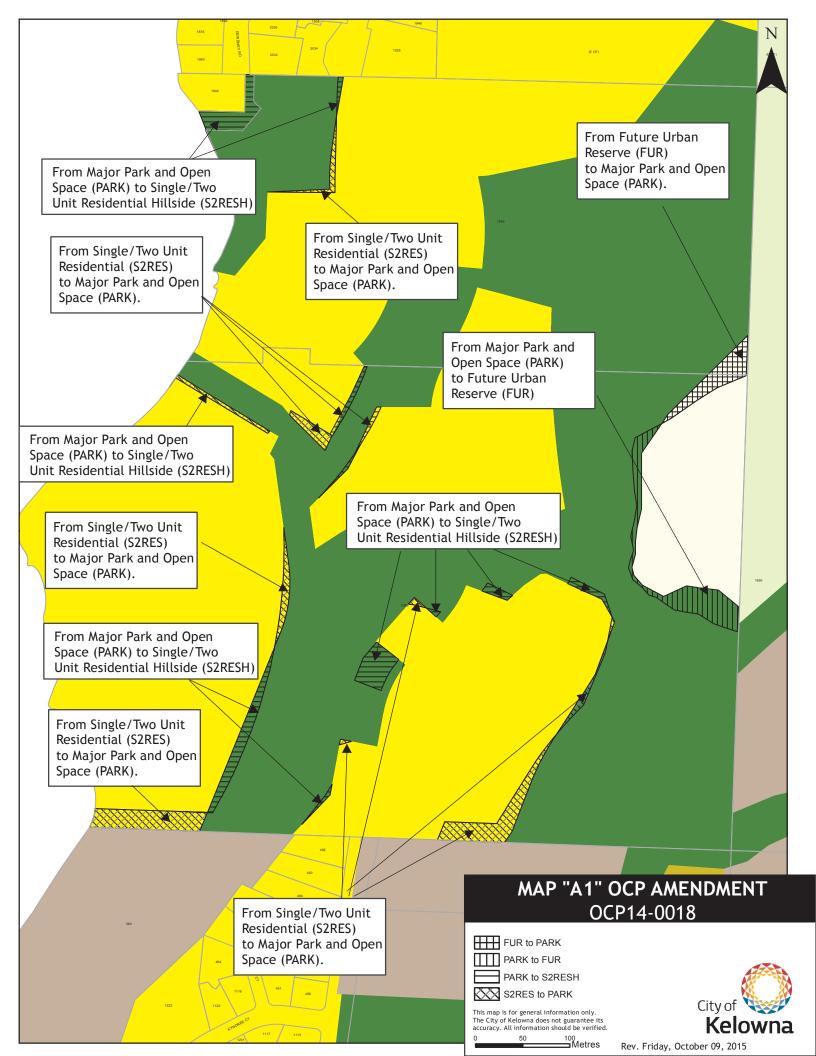
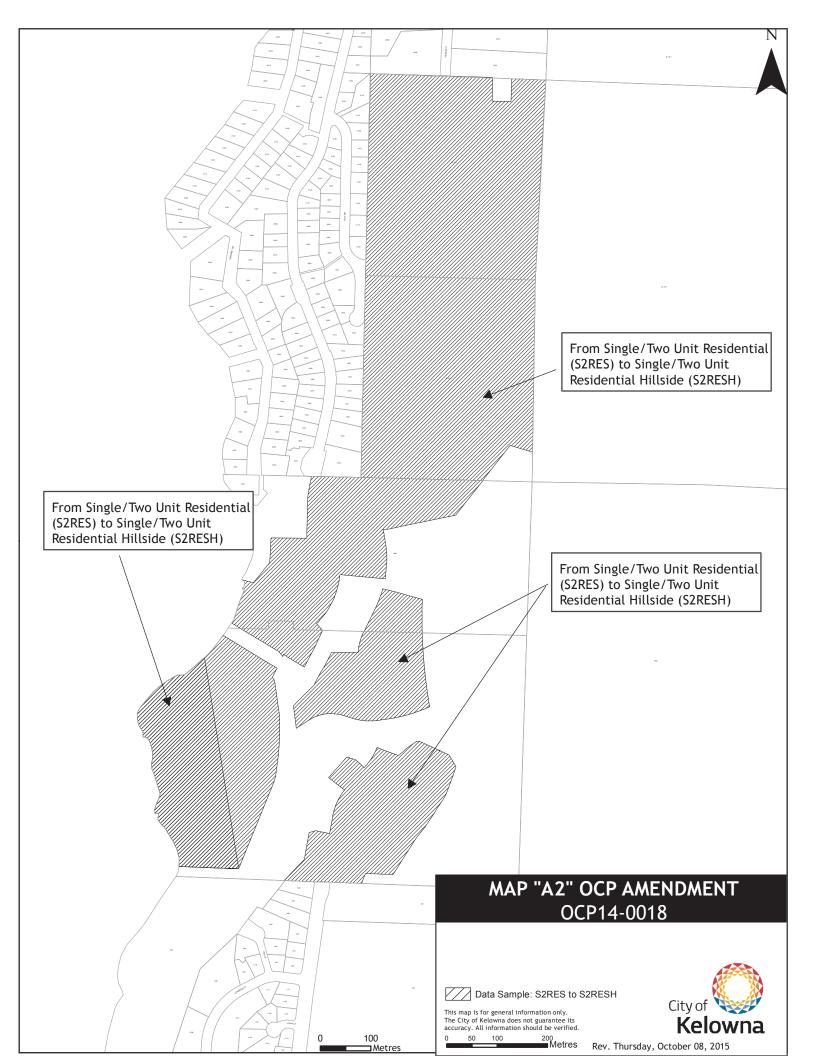
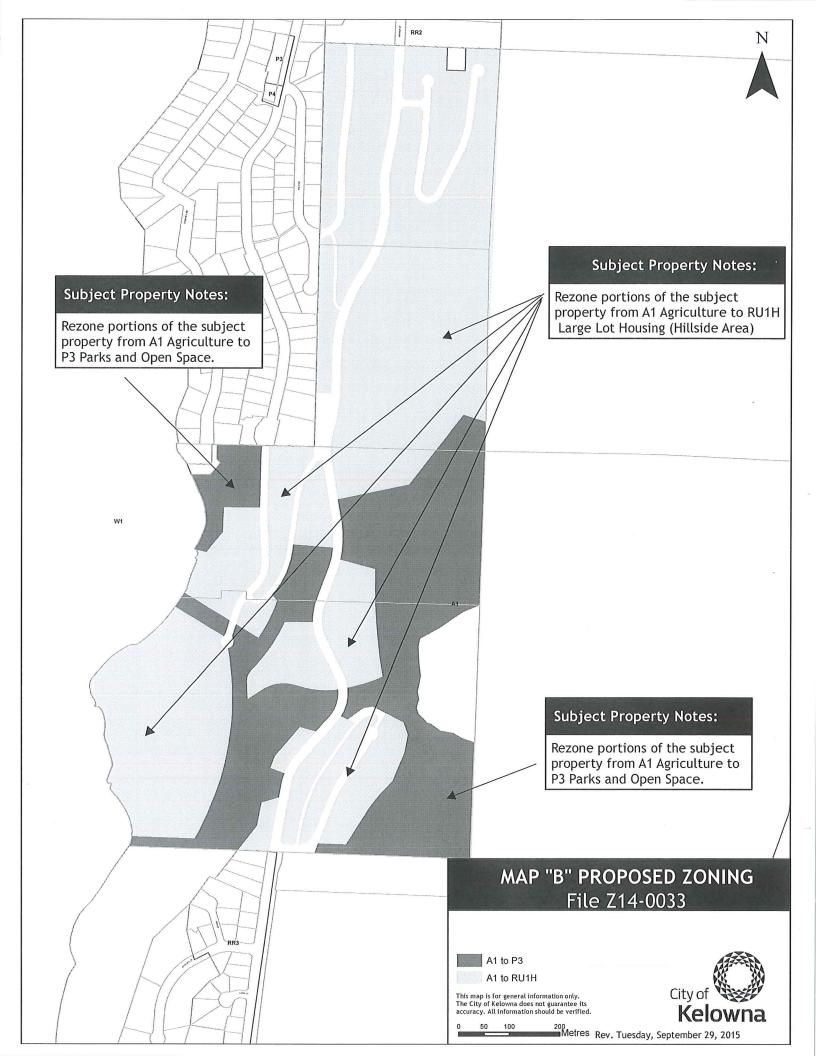


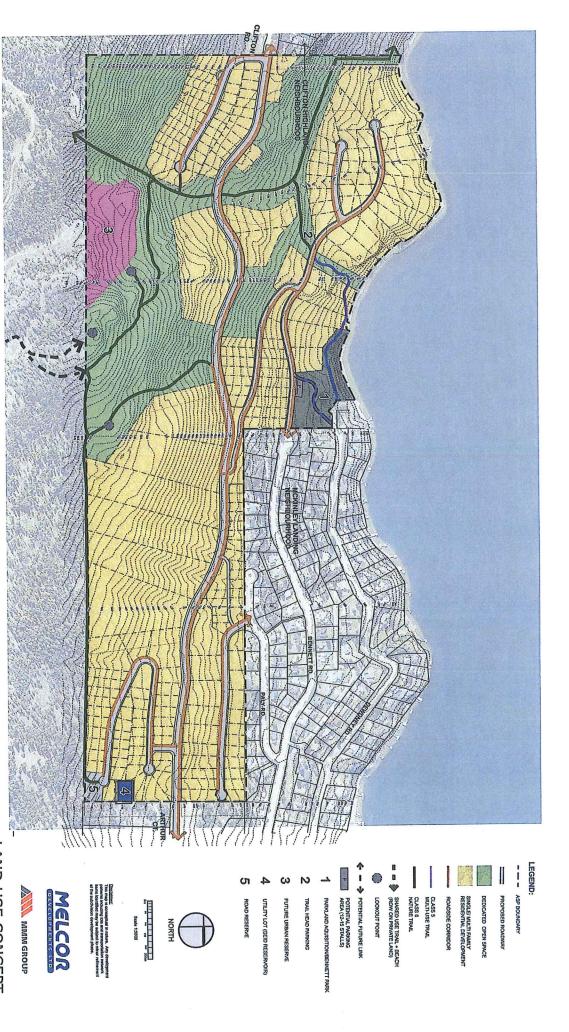
Certain layers such as lots, zoning and dp areas are updated bi-weekly. This map is for general information only.

The City of Kelowna does not guarantee its accuracy. All information should be verified.









NORTH CLIFTON ASP - KELOWNA, BC

MARCH 2014

+ TRAIL NETWORK

FIGURE 3.11

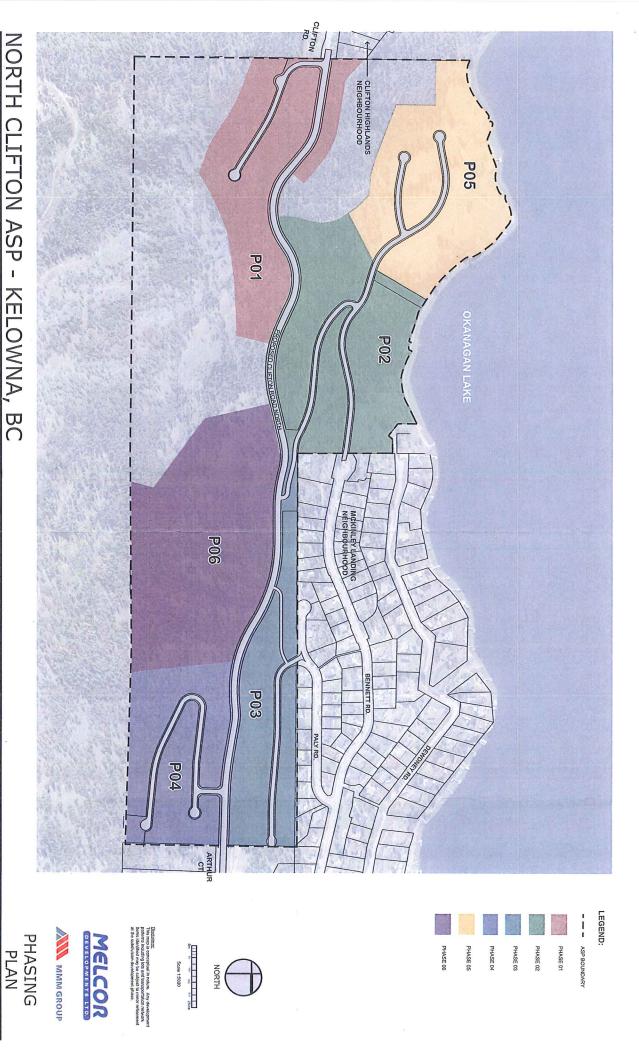


FIGURE 3.12

# CITY OF KELOWNA

# **MEMORANDUM**

Date:

September 30, 2014

File No.:

Z14-0033

To:

Planning and Development Officer (JM)

From:

**Development Engineering Manager** 

Subject:

Rezoning Application - Engineering Comments

LOCATION:

North Clifton

APPLICANT:

MMM Group

Lakeside Communities

Melcor Developments

SCHEDULE

Permit # Z14 -0033/

This forms part of development

LEGAL:

Lots 1 & 2 Plan 65503 & S1/2 NE1/4 N1/2 NE1/4 Sec 17 TP 23 ODYD

The Development Engineering Branch comments and requirements regarding this application to rezone from A1, P4 to RU!H and P3 are as follows:

The Development Engineering Technologist for this project is John Filipenko. AScT

### .1) General

- a) The subject land area under this rezoning application is very large consisting of approximately 79.90 hectares of land generally from existing McKinley Landing neighbourhood to the north, Clifton North neighbourhood to the south, Widen development to the east and the Lake Okanagan shoreline to the west.
- b) This application is to achieve a comprehensive rezone of the entire site. With timing projected over 10 to 15 years, it is acknowledged that minor adjustments to zoning boundaries may be requested as each subdivision phase is submitted. Further review of offsite requirements will also be required to address servicing and traffic issues. The subject application has been submitted concurrently with an application for Natural Environment Development Permit
- c) The North Clifton Area Structure Plan process has set the maximum yield for this application to 200 lots / units

### .2 Geotechnical Report

- a) Prior to initial consideration, provide a Geotechnical report (3 copies to be submit to the Planning and Development Services Department, Planning & Development Officer) prepared by a Professional Engineer competent in the field of hydro-geotechnical engineering to address the following:
  - (i) Confirm that each development node (cluster) is suitable for the proposed land use.
  - (ii) Identify lands that should not be developed such as environmentally sensitive or hazardous conditions areas.
- b) Further detailed reports will be required for each subdivision or development phase as they progress.

#### .3 Water

- a) The land area parcels under this application are currently located within Future City of Kelowna service area and Future GEID service area. The developer has indicated that the subject parcels under application will all be served by the City of Kelowna water supply system due to the available system pressure and distribution system capacities.
- b) A service boundary amendment will be required.
- c) Provide an adequately sized domestic water and fire protection system. 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 development to confirm this. Ensure every building site is located at an elevation that ensures water pressure is within the bylaw pressure limits.
- d) An extension of the existing 250mm diameter water system within Clifton Road will provide servicing to the subject parcels.
- e) A Servicing Plan shall be provided to identify the water system requirements to support each subdivision phase. Detailed design drawings will be required at the time of subdivision

#### .4 Sanitary Sewer

- a) Provide an adequately sized sanitary sewer system that is in accordance with the Subdivision, Development & Servicing Bylaw No.7900..
- b) Provide sanitary routing design complete with calculations ensuring the downstream infrastructure is capable of supporting this rezoning
- c) Off-site Sanitary System requirements will include the construction of force mains and gravity sewer mains within the Clifton Road right-of-way. A new sanitary main will also be installed that will bypass the existing Hillsborough lift station and tie into the existing 250mm diameter main on Clifton Road.
- d) An on Site Servicing Plan shall be provided to identify the sanitary sewer system requirements to support each subdivision phase. Detailed design drawings will be required at the time of subdivision.

### .5 Drainage and Lot Grading

- a) A requirement of this rezoning application will be to prepare a comprehensive storm water management plan and design to comply complete with the City's drainage design and policy manual. Detailed Site Grading Plans including erosion and sedimentation controls will be required at time of subdivision.
- b) Show details of dedications, rights-of-way, setbacks and non-disturbance areas on the lot Grading Plan.
- c) Outlet to Okanagan Lake require review and approval from Provincial Authorities and the City's. Environmental Manager.

#### .6) Roads

- a) A Traffic Impact Assessment (TIA) was completed and submitted by the developer to assist in evaluating the potential for off-site road impacts.
- b) In addition to the TIA, a Road Safety Audit was also conducted by the developer to investigate safety implications associated with the proposed development and existing Clifton Road and McKinley Road network.
- c) The required sanitary sewer construction on Clifton Road also provides a opportunity to implement road improvements within that sector of road. The City is willing to participate in the additional road construction costs to provide improved pedestrian connectivity and bike lanes.
- d) At the time of subdivision, written confirmation that all proposed internal road alignments, profiles, and design criteria satisfy the Subdivision, Development, and Servicing Bylaw and are able to access each node/neighbourhood will be required. Identify all roads (or components of roads) where the minimum criteria is proposed to be compromised.

### .7) Power and Telecommunication Services and Street Lights

- 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.
- b) If the existing area is served by overhead wiring, the service connections may be provided overhead provided that there are no new poles required and service trespasses will not be created. If either of these conditions is not satisfied, then underground service will be required for that lot.
- Streetlights must be installed on all roads. Design drawings must be submitted.
- d) 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.

e) Before making application for approval of your subdivision plan, please make arrangements with FortisBC for the pre-payment of applicable charges and tender a copy of their receipt with the subdivision application for final approval.

# .8) 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.

### .9) Security and Levy Requirements

Bonding To be determined

Bonding amounts are comprised of estimated construction costs escalated to include engineering design and contingency protection. The developer's consulting civil engineer shall provide detailed designs and obtain actual tendered construction costs. Bonding for required off-site construction must be provided and may be in the form of cash or an irrevocable letter of credit, in an approved format. The owner must also enter into a servicing agreement in a form provided by the City.

An administration charge will be assessed for processing of this application, review and approval of engineering designs and construction inspection. The administration charge is calculated as (3% of Total Off-Site Construction Cost plus GST)

### .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) Other Engineering Comments

- 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 B.C. 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.

Steve Muenz, P.Eng.
Development Manager