

Memo



Date: June 18, 2010

To: City Manager

From: Community Sustainability Division

File No: OCP10-0001/Z10-0002 **Applicant:** DE Pilling & Associates Ltd.
(Dawn Miletto)

At: 1800 Crosby Road **Owner:** DRS Ventures Ltd.

Purpose: TO AMEND THE FUTURE LAND USE DESIGNATION FOR A PORTION OF THE SUBJECT PROPERTY FROM THE EXISTING "PARK - MAJOR PARK/OPEN SPACE" DESIGNATION TO THE PROPOSED "MRL - MULTIPLE UNIT RESIDENTIAL - LOW DENSITY" DESIGNATION TO PERMIT A 40 TOWNHOUSE UNIT DEVELOPMENT.

TO REZONE A PORTION OF THE SUBJECT PROPERTY FROM THE EXISTING "A1 - AGRICULTURE 1" ZONE TO THE PROPOSED "RM3 - LOW DENSITY MULTIPLE HOUSING" ZONE TO PERMIT DEVELOPMENT OF 40 TOWNHOUSE UNITS.

Existing Zone: A1 - Agricultural 1

Proposed Zone: RM3 - Low Density Multiple Housing

Existing Future Land Uses: Major Park/Open Space,
Multiple Unit Residential (Low Density)
Single/Two Unit Residential

Proposed Future Land Use: Major Park/Open Space,
Multiple Unit Residential (Low Density)
Single/Two Unit Residential

Report Prepared by: Greg Sauer

1.0 RECOMMENDATION

THAT OCP Bylaw Amendment No. OCP10-0001 to amend Map 19.1 of the Kelowna 2020 - Official Community Plan Bylaw No. 7600 by changing the Future Land Use designation of a part of the Southeast ¼ Section of Section 5 Township 23 Osoyoos Division Yale District Except Plan 896, located at 1800 Crosby Road, Kelowna, B.C., from the current Park - Major Park/Open Space designation to the proposed Multiple Unit Residential - Low Density designation, as shown on Map "A" attached to the report of Land Use Management Department, dated June 18, 2010, NOT be considered by Council;

AND THAT Rezoning Application No. Z10-0002 to amend the City of Kelowna Zoning Bylaw No. 8000 by changing the zoning classification of a part of the Southeast ¼ Section of Section 5 Township 23 Osoyoos Division Yale District Except Plan 896, located at 1800 Crosby Road, Kelowna, B.C., from A1 - Agriculture 1 to the RM3 - Low Density Multiple Housing zone as shown on Map "B" attached to the report of Land Use Management Department, dated June 18, 2010, NOT be considered by Council.

2.0 SUMMARY:

A handwritten signature in blue ink, appearing to be the initials "RS".

The applicant is proposing to develop a 40-unit multiple dwelling residential development on a portion of the subject property in the Glenmore area.

As the future land use in the Official Community Plan for the proposed 2.07 hectare development parcel is Major Park/Open Space, application has been made to change the Future Land Use designation (of the proposed development site only) to the "Multiple Unit Residential - Low Density" designation. Further, as the entire site is presently zoned A1- Agriculture 1, a concurrent application has been made and which seeks to rezone this portion of the parcel to the RM3 - Low Density Multiple Housing zone to allow the proposed multiple unit housing use.

3.0 ADVISORY PLANNING COMMISSION (APC)

At a meeting held on April 27, 2010, the Advisory Planning Commission passed the following recommendation with respect to the OCP amendment and rezoning applications:

THAT the Advisory Planning Commission NOT support Rezoning Application No. Z10-0002, for 1800 Crosby Road; to rezone a portion of the subject property from A1 - Agriculture 1 to RM3 - Low Density Multiple Housing to permit development of 40 townhouse units.

A significant number of residents from the Crosby Road area attended the Advisory Planning Commission meeting and 57 letters of opposition were received from residents and many of those in attendance took the opportunity to publicly note their opposition. Residents cited concerns with the loss of parkland, loss of wildlife corridor, increased traffic and safety.

The Advisory Planning Commission did not support this application because they did not feel that converting designated park and open space to a multi-family use is appropriate. The well-defined edge of the park designation is defensible, and a pocket of multi-family would be an intrusion on this hillside location. Furthermore, the Commission felt that the proposal to place a Multiple Unit Residential Low Density development in a currently designated park and open space zone is not appropriate.

4.0 BACKGROUND

The subject property at 1800 Crosby Road is located in the northern region of the City in the OCP Sector "Glenmore - Clifton - Dilworth". The subject property is a hillside property in the area commonly referred to as Glenmore and is 35.75 hectares in size. Much of the site is topographically challenged with elevations ranging between approximately 423 metres at the low point located near the terminus of existing Crosby Road along the eastern boundary, and approximately 571 metres in the northwest corner. This significant difference (148 meters) in elevation means that steep slopes are prevalent throughout the property with approximately 23.3 hectares (65% of the area) in excess of 30% slopes. Coarse and fine talus, exposed bedrock and rocky outcrops resulting in hazardous conditions and the sensitive habitats synonymous with steep slopes are dispersed throughout the site. Other natural features on the subject property include three distinct wetlands which encompass approximately 1.15 hectares or 3.2% of the site area.

The Glenmore Highlands Area Structure Plan (ASP) was developed in 2000 for a 720 hectare subject area dominated by hillside terrain and containing a primarily coniferous woodland forest. The subject property was included in the Glenmore Highlands Area Structure Plan which also includes the Wilden developments.

The Area Structure Plan addressed a modest level of detail with respect to the hillside development and contemplated two forms of residential development on this parent property in

the form of clustered single family development at five units per hectare (5uph), and clustered single/multi-family at 10 units per hectare (10uph) density. The Plan broadly considered potential locations for residential development and natural parks and open space at a coarse scale with detailed studies not having been completed. Notably, the portion of the parcel under application was specifically designated as Parks and Open Space, and accordingly the Area Structure Plan has since become the basis for the line work used to generate the Future Land Use Map (Map 19.1) in the current Official Community Plan.

Glenmore Road is the major north/south arterial in this region and would facilitate the majority of traffic movement generated by this development. The subject property is located directly adjacent to an existing, well established community in Glenmore with homes having been established and occupied since the late 1970's. The subject property is presently only accessible from Crosby Road via Glenmore with no access from the west.

4.1 Site Context

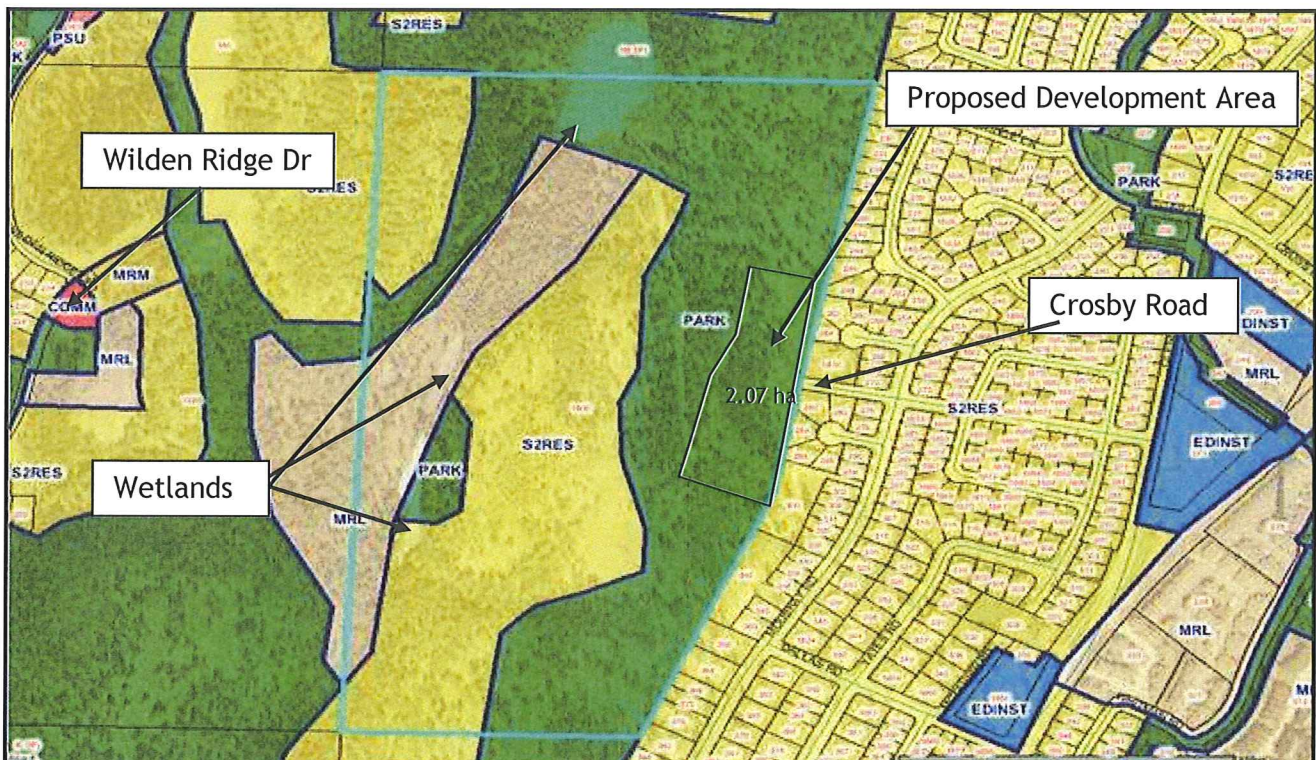
The subject property is located between the established neighbourhoods of Glenmore and Wilden, within the Glenmore, Clifton, Dilworth Sector.

The immediate adjacent zones and uses are as follows:

Orientation	Zoning	Land Use
North	P3 - Parks & Open Space	Open Space
East	RU1 - Large Lot Housing RU2 - Medium Lot Housing	Single Family Neighbourhood
South	A1 - Agricultural 1	Open Space
West	RU2H - Medium Lot Housing (Hillside) A1 - Agricultural 1	Single Family Neighbourhood

Site Location Maps

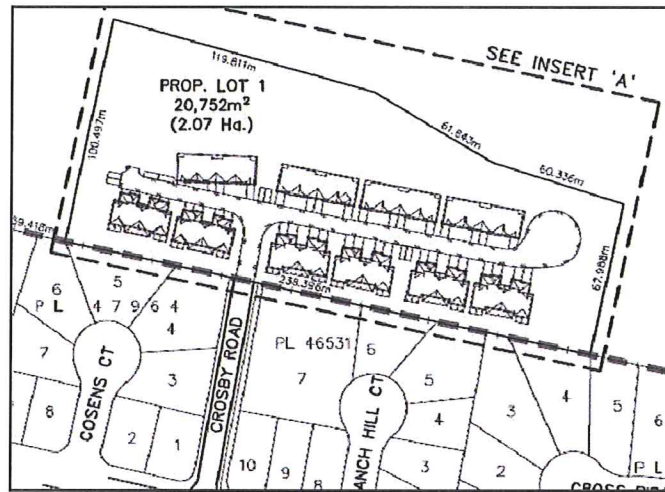
Subject property: 1800 Crosby Road Illustrating Future Land Uses



4.2 The Proposal

The applicant is proposing to rezone, subdivide and develop a 2.07 hectare portion of the 35.75 hectare subject property. The intent is to develop the site as a 40 unit multi-family strata development. As the OCP future land use for the proposed development parcel is not consistent with the proposed use, the primary consideration is the amendment of the future land use designation to multiple unit residential use from major park/open space. The proposed lot configuration and proximity to existing established low density residential development is illustrated below.

Location and Configuration of Proposed Lot and Dwelling Units



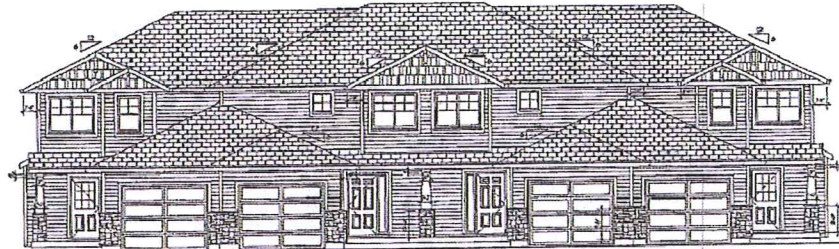
The applicants have undertaken a number of studies in support of their applications including geotechnical and environmental studies. An environmental assessment was conducted in 2007 for the parent parcel and quantifies the environmentally sensitive areas on the property. The Environmentally Sensitive Area (ESA) results are showed in the table below.

Environmental Sensitivity	Area (hectares)	Percentage
Very High	1.15	3.2%
High	20.09	55.4%
Moderate	14.09	38.9%
Low	0.91	2.5%

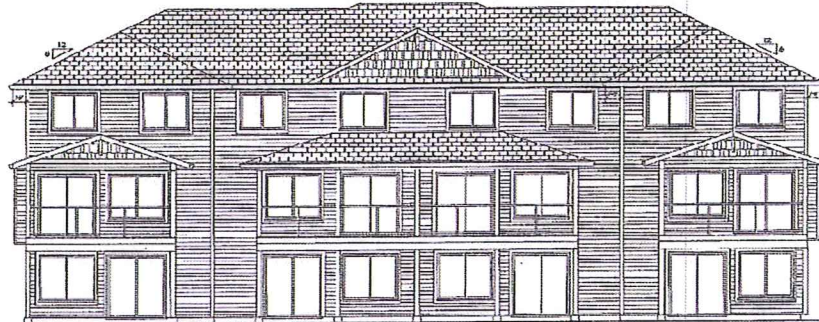
The environmental assessment conclusions correlate with the City’s Sensitive Ecosystem Inventory and Wetland mapping. As proposed, a portion of the townhouse development is sited on the only area that has a ‘low’ environmental sensitivity rating. However, the development proposes to encroach on an area of high environmental sensitivity.

The housing type proposed includes ten fourplex (i.e. 40) housing units in the configuration illustrated above. The proposal calls for four variations of fourplex with slight differences depending on topography. While the applicant has not submitted Form & Character Development Permit drawings at this time, conceptual elevations have been provided to illustrate the form. Fourplex units are consistent with the RM3 - Low Density Multiple Housing zone.

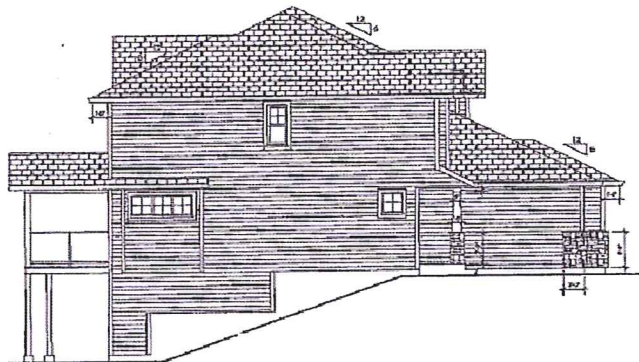
Proposed Fourplex Front Elevation



Proposed Fourplex Rear Elevation



Proposed Fourplex Side Elevation



5.0 CURRENT DEVELOPMENT POLICY

5.1 Kelowna Official Community Plan

The Kelowna Official Community Plan designates the location of the proposed development on the subject property as Major Park & Open Space. Application OCP10-0001 has been made to change the OCP designation to facilitate the proposed residential development.

7.1 Hillside Policies¹

7.1.1 Hazardous Condition Review. Ensure that all development and activities in hillside areas are reviewed for compliance with City engineering standards, safety and protection and refer applications to the Province in accordance with applicable requirements.

7.1.2 Alternative Hillside Standards. Consider, within the context of a Hazardous Condition Development Permit, alternative hillside development standards within Zoning Bylaw 8000 and the Subdivision, Development and Servicing Bylaw 7900. The intent is to minimize the

¹ City of Kelowna Official Community Plan - Environment; p. 7-1.

effects of development on the natural environment of hillside areas, defined as lands in their natural state that have a slope angle of 10% and greater for a minimum height of 6 metres while preserving areas with slopes of 30% and greater. Effects to be minimized may include cuts and fills, tree cutting, regrading and the visual impact in general of urban development on hillsides;

7.10 Natural Environment Policies²

7.10.10 Maintaining Biodiversity. Seek to maintain ecological linkages and biodiversity, including wildlife movement corridors and aquatic and terrestrial pathways, in all land use and development decisions;

7.10.12 Retention of Natural Areas. Encourage all development and infrastructure projects to conserve wetlands, wildlife habitat, trees or other indigenous vegetation. Encourage alternative development methods, such as considering increasing density, narrowing right-of-ways, or cluster housing;

8.1 Housing Policies³

8.1.18 Housing Agreements. Support the use of housing agreements to assist in creating affordable and special needs housing.

8.1.32 Higher Density for Affordable Housing. Consider support for development of land involving an OCP amendment to increase the density by no more than two increments to a maximum density designation of Multiple Unit Residential (Medium Density) for proposals where 75% of the housing meets the City's definition of affordable housing and/or core needs housing as defined in the OCP (8.1.16 & 8.1.17). The development must meet the following conditions:

- the density of the development can be sensitively integrated into the surrounding neighbourhood;
- where a lot line abuts a lower density residential land uses designation, buildings facing this lot line within the development shall be stepped back such that there is no more than a one-storey height gain between these building frontages and the height permitted within the land uses assigned to adjacent parcels; and
- height must be determined by the City as appropriate within the context of the adjacent land use designations; and
- supporting infrastructure and park land is sufficient to accommodate the proposed development (or the developer is prepared to upgrade the necessary infrastructure and park land); and
- a housing agreement must be entered into with the City and registered on title to secure the affordable dwellings for the long term.

14.1 Parks and Leisure Policies⁴

14.1.1 Parks and Open Space. Endeavour to provide a variety of parks and open spaces to meet the diverse needs of the community;

14.1.28 Dedication of Natural Areas. At time of subdivision or rezoning, encourage landowners, where appropriate, to dedicate any significant natural areas / features for preservation or for public use;

² City of Kelowna Official Community Plan - Environment; p. 7-13.

³ City of Kelowna Official Community Plan - Housing; pp. 8-3, 8-4, 8-5.

⁴ City of Kelowna Official Community Plan - Parks and Leisure; pp. 14-1, 14-4.

5.2 Glenmore Highlands Area Structure Plan (2000)

- Section 2.1.3 Wildlife⁵

Wildlife Movement Corridors: the ASP area wildlife movement occurs primarily in a north-south direction between two areas of substantial habitat that are adjacent to the ASP area. Knox Mountain Park is located to the south and Stephen's Coyote Ridge Regional Park is situated to the north. The maintenance of continuous vegetated corridors between these large reserves of natural habitat is critical to the maintenance of biodiversity and ecological viability within the ASP area.

6.0 TECHNICAL COMMENTS

6.1 Infrastructure Planning - Parks & Open Spaces

- a. The proposed development contemplates a land use for the subject property at 1800 Crosby Road that is inconsistent with the Official Community Plan and Glenmore Highland's Area Structure Plan. These two documents provide clear direction that the eastern portion of the property adjacent to Crosby Road should be designated as future parkland and which would ensure that the area is protected as natural open space.
- b. The future land use designation as natural open space parkland was established using the following rationale:
 - Establishes a consistent urban growth boundary on the western side of the Glenmore Valley together with the City owned land off Granger Road (proposed to be parkland in the Official Community Plan update).
 - Ensures the protection of steep slopes and sensitive environmental areas.
 - Facilitates public use for trails, staging areas, view points, park facilities, etc.
 - Provides easily accessible parkland for residents from the end of Crosby Road.
- c. Some of the consequences with amending the Official Community Plan to allow for residential development include:
 - An inconsistent urban growth boundary in the Glenmore Valley.
 - An irreversible loss of future parkland for Glenmore Valley residents.
 - Reduced community value of the remaining natural open space area.
 - Erodes confidence in the Official Community Plan and Area Structure Plan.
 - A precedent would be set that other future designated parkland can be amended to satisfy development proposals by private developers.
 - Places pressure on the City to provide other natural area park for Glenmore Valley residents in an area with very few alternatives.
- d. The long term environmental and community benefits are far greater than the private development interests of the applicant. This Official Community Plan amendment application represents a major change in land use designations with consequences that are too significant to effectively mitigate.

6.2 Policy and Planning

- a. The ASP assigns a fairly specific number of units and density types to each section and phase of the overall plan. The overall plan provides for 2725 residential units and the OCP includes 2200 of those units within the 2020 planning horizon. The Servicing Plan and Financing Strategy were based on that number and the distribution over the entire ASP area, including a phasing plan. The ASP indicates that development within this specific parcel would be low density hillside residential units at a density of 5 units per hectare

⁵ Glenmore Highlands Area Structure Plan, Section 2 Context & Existing Conditions; p. 21.

and low density clustered residential units at a density of 10 units per hectare. Proposed zoning within the clustered residential area was identified as RU4, RU5, RU6 and RM1. Generally, RM3 / RM4 / RM5 zones were allocated to the Village Centre area.

- b. There is a concern that the unit mix and number could be significantly higher than originally intended. A higher number of units and in a different location will likely have an impact on the servicing plan, including the financial plan. In order to reduce the risk to the servicing plan and financing strategy it would be appropriate to reduce the number of units on other portions of this site in order to allow a higher density elsewhere within the site.
- c. The location of this specific project is perched above existing development located on the valley floor. This site would be highly visible and it would be important to integrate the proposed buildings into the hillside environment in as an unobtrusive manner as possible. Clusters of smaller buildings (4 units) would be preferable to one or two larger horizontal buildings. The OCP Cluster Residential designation with RM1 zoning may be more appropriate for this site rather than the Multiple Unit Residential - low density designation that would provide for RM3 zoning.
- d. Development of this site should not be supported unless there is a reduction of potential development units elsewhere within this parcel in order to maintain the unit counts utilized for the 20 Year Servicing Plan and Financing Strategy.

6.3 Glenmore Ellison Improvement District (GEID)

- a. Water for agricultural purposes is available from GEID's existing 150mm main on Crosby Rd. to the existing 10 acres of "A" grade lands along the east boundary of the property. However, the elevation of the site, along with the proposed multi-family nature of the development may constrain GEID's ability to service the development.
- b. At this time, GEID is committed to substantial multifamily fire flows in the Union Road Reservoir pressure zone (PZ479). The maximum elevation of any building in the pressure zone (apart from a few near the reservoir who do not suffer significant pressure drops under fire flow conditions) is approximately 425m. As the lowest elevations on the subject property are approximately 430m, buildings constructed on the subject property would likely be the highest elevation structures in the pressure zone. This creates a concern as GEID must maintain a residual pressure of 20 PSI at all service connections under fire flows. Servicing higher elevations sites could thus require more residual pressure in PZ479, correspondingly reducing available fire flows in the entire pressure zone, which is not possible due to existing commitments. Any development on the subject property must not interfere with existing fire flow commitments, or constrain existing fire flows in any manner.
- c. See attached letter for full comments.

6.4 Fire Department

- a. The location and volume of the hydrants supplying the properties must meet the requirements of the City of Kelowna Subdivision Bylaw 7900.
- b. Maximum road grades to meet the requirements of the City of Kelowna Subdivision Bylaw 7900.
- c. Wildfire mitigation is required and a 25 meter defensible buffer adjacent to the development is to be provided. Fuel mitigation is to meet FireSmart guidelines. In

priority 1 locations, fuels must be removed within 10 meters of buildings. In priority 2 zones, fuel modifications begin at 10 meters and extend to 30 meters from a building. In most cases ground fuels are required to be removed.

- d. Additional information is required for slopes of this development and access for emergency vehicles.

6.5 Development Engineering Branch

- a. See attached memorandum for full comments.

7.0 LAND USE MANAGEMENT DEPARTMENT:

The Glenmore Highlands Area Structure Plan (ASP) encompasses the subject property and provides the framework for land use on the subject property (Ekistics, 2000). The original ASP for the parent parcel identified different land uses for the property including park, single family residential, and multi-family residential. The location of the proposed development is perched above existing development located on the valley floor and this site would be highly visible along a well established urban single family vs. open space boundary.

The current future land use map for this portion of the property assigns Major Park /Open Space land use. From this perspective, the requested amendment may result in a loss of future parkland for Glenmore Valley residents and create pressure on the City to locate and acquire replacement land to offset this loss. Notably, large tracts of parks and open space provide an invaluable ecological and recreational asset to City residents.

Staff have been working with the Applicant team and reviewing potential development areas since 2007. Of greatest significance is the Official Community Plan's present designation of the proposed development area as Major Park/Open Space. The proposal to develop this easily accessible portion of a hillside property into a townhouse residential form competes with many of the land use policies and parks objectives that are reiterated in the ASP and OCP documents.

Staff acknowledge the landowners expectation that portions of the parent parcel would be developed as identified in the Area Structure Plan and Official Community Plan. Staff recognize the proposed development area is the most suitable location for residential development from a development perspective, taking into consideration the ease of access, existing services, and the comparatively low environmental sensitivity rating. However, this area is also the most suitable for an easily accessible park and staging area.

At the onset of discussions, the Environmental Assessment report (authored in 2007) recommended an alternative area within the parent parcel for replacement park land. As the remainder of the site is not under application, there is no security that alternative park sites will be secured through future phases of development. In the absence of securing alternative parkland and functional wildlife corridors, Staff cannot support the loss of functional parks and open space without adequate provision for replacement land of equal or higher functional value.

Support for policy amendments is generally considered in terms of the net impact of the development and consistency with other relevant policies. Accordingly, the proposed development must represent a clear benefit to the City and its residents and must be justifiable. In its present state, this application does not satisfy concerns regarding natural areas for preservation, or in demonstrating a net benefit to residents, and park users in particular.

In sum, Staff have significant concern with the 2.07 hectare proposed development parcel being considered in isolation from the remaining 33.68 hectare parent property. The nature of the subject property is best characterized as a challenging hillside with significant ecological, aesthetic and recreational areas to be comprehensively considered.

8.0 ALTERNATE RECOMMENDATION:

THAT OCP Bylaw Amendment No. OCP10-0001 to amend Map 19.1 of the Kelowna 2020 - Official Community Plan Bylaw No. 7600 by changing the Future Land Use designation of a part of the Southeast ¼ Section of Section 5 Township 23 Osoyoos Division Yale District Except Plan 896, located at 1800 Crosby Road, Kelowna, B.C., from the current Park - Major Park/Open Space designation to the proposed Multiple Unit Residential - Low Density designation, as shown on Map "A" attached to the report of Land Use Management Department, dated June 18, 2010, be considered by Council;

AND THAT Rezoning Application No. Z10-0002 to amend the City of Kelowna Zoning Bylaw No. 8000 by changing the zoning classification of a part of the Southeast ¼ Section of Section 5 Township 23 Osoyoos Division Yale District Except Plan 896, located at 1800 Crosby Road, Kelowna, B.C., from A1 - Agriculture 1 to the RM3 - Low Density Multiple Housing zone as shown on Map "B" attached to the report of Land Use Management Department, dated June 18, 2010, be considered by Council;


AND THAT OCP Bylaw Amendment No. OCP10-0001 and zone amending bylaw be deferred from a Public Hearing until Staff's comprehensive review of the environmental, parks, and development engineering requirements have been fully assessed;

AND THAT Council considers the APC public process to be appropriate consultation for the purpose of section 879 of the *Local Government Act*, as outlined in the report of the Community Sustainability Division dated June 16, 2010

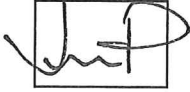
AND THAT final adoption of the zone amending bylaw be considered in conjunction with Council's consideration of a Form & Character Development Permit for the proposed development;

AND THAT final adoption of the zone amending bylaw be considered after the issuance of a Natural Environment Development Permit;

AND FURTHER THAT final adoption of the zone amending bylaw be considered subsequent to the requirements of the Development Engineering Branch, Environment & Land Use Management, Infrastructure Planning and Glenmore Ellison Improvement District being completed to their satisfaction.


for _____
Shelley Gambacort
Director of Land Use Management

Approved for Inclusion
Jim Paterson
General Manager, Community Sustainability



SG/DN/gs

Attachments

Subject Property Map
Proponent's OCP Amendment Plan - Map "A"
Proponent's Rezoning Plan - Map "B"
Proponent's Preliminary Lot Layout Plan
Development Impact Assessment Map
Development Engineering Comments
Glenmore Ellison Improvement District Comments

Date Application Accepted

January 25, 2010



FIGURE 4 Development Impact Assessment

Project: Environmental Assessment
 Location: Kelowna, BC
 Project No.: 07-175
 Prepared for: DRS Ventures Ltd.
 Drawn by: ECOSCAPE Environmental Consultants Ltd.
 Checked by: RW
 Projection: JS
 Date: NAD83-UTM Zone 11
 December, 2007

LEGEND

- Study Area
- Development Boundary
- Edge of Disturbance
- Road
- Building
- Setbacks
- Trail

Environmental Sensitivity Outside Edge of Disturbance

- Very High
- High
- Moderate
- Low

Environmental Sensitivity Within Edge of Disturbance

- Very High
- High, Within
- Moderate, Within
- Low, Within



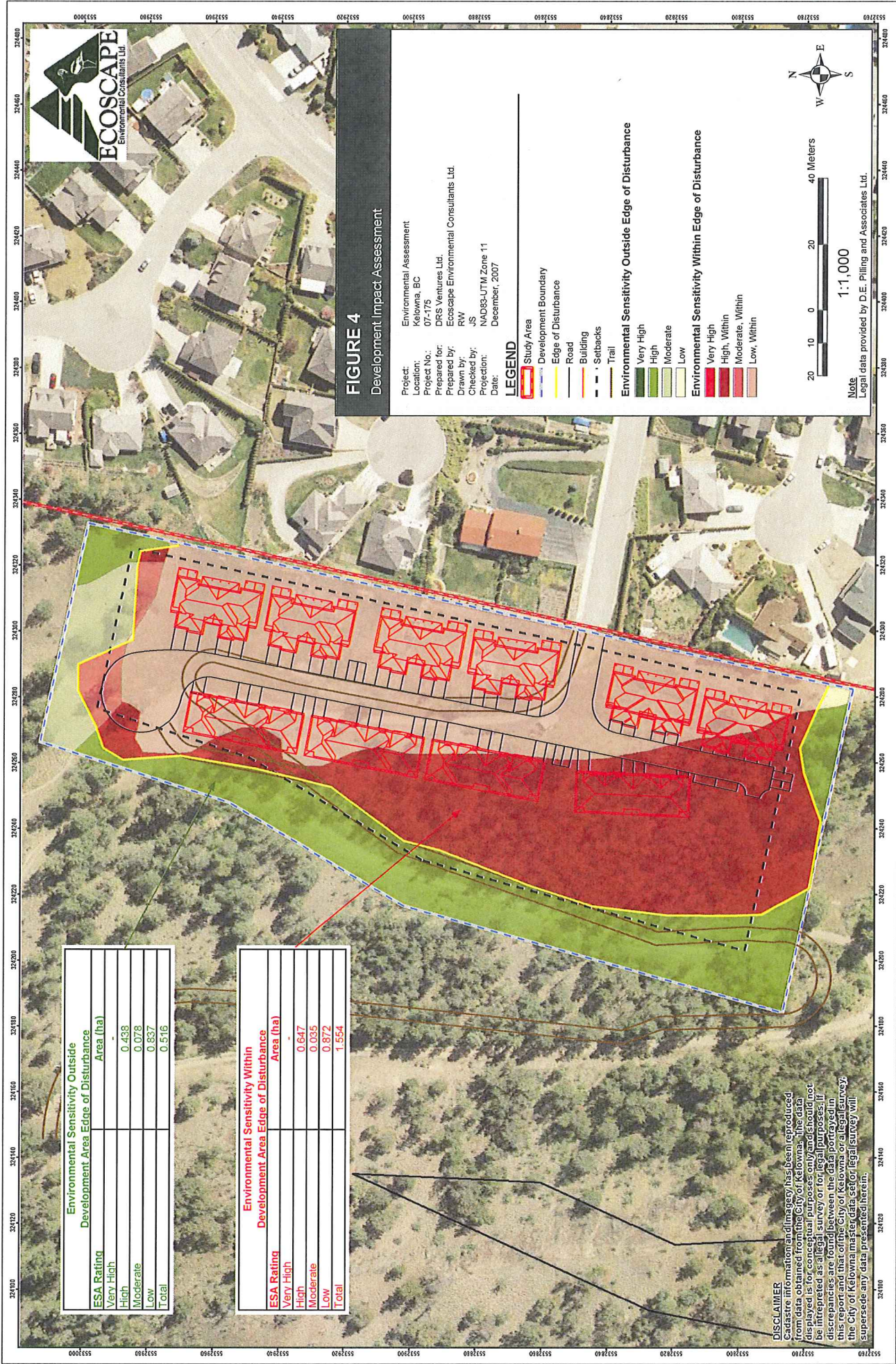
20 10 0 20 40 Meters
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Note: Legal data provided by D.E. Pilling and Associates Ltd.

Environmental Sensitivity Outside Development Area Edge of Disturbance	
ESA Rating	Area (ha)
Very High	-
High	0.438
Moderate	0.078
Low	0.837
Total	0.516

Environmental Sensitivity Within Development Area Edge of Disturbance	
ESA Rating	Area (ha)
Very High	-
High	0.647
Moderate	0.095
Low	0.872
Total	1.554

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CITY OF KELOWNA

MEMORANDUM

Date: March 2, 2010
File No.: Z10-0002

To: Land Use Management (GS)

From: Development Engineering Manager

Subject: 1800 Crosby Rd. 40 multi family units

The Development Services Department has the following comments and requirements associated with this rezoning for the proposed Residential Development. The following Works & Services are required for this application:

.1) General

.2) Geotechnical Report

- a) Prior to initial consideration, provide a Geotechnical report prepared by a Professional Engineer competent in the field of hydro-geotechnical engineering to address the following:
 - (i) Confirm that each development node (neighbourhood) 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 property is located within the Glenmore Ellison Irrigation District (GEID) service area. The developer is required to make satisfactory arrangements with the GEID for these items. All charges for service connection and upgrading costs are to be paid directly to the GEID.
- b) 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. Note: Private pumps are not acceptable for addressing marginal pressure.

.4) Sanitary Sewer

- a) Provide an adequately sized sanitary sewer system.

- b) Provide sanitary routing design complete with calculations ensuring the downstream infrastructure is capable of supporting this rezoning

.5) Drainage

- a) Provide an adequately sized drainage system. The Subdivision, Development and Servicing Bylaw require 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 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) 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 rezoning; and,
 - iii) An Erosion and Sediment Control Plan.
- c) Show details of dedications, rights-of-way, setbacks and non-disturbance areas on the lot Grading Plan.
- d) Significant banks are located on the subject property. The slopes appear to be sensitive to erosion; temporary and permanent measures must be taken to prevent erosion and sediment transport.

.6) Roads

- a) Submit a road network plan for review.
- b) Provide traffic control and street name signs where required. The City will install all signs and traffic control devices at the developer's expense.
- c) Provide a Street Sign, Markings and Traffic Control Devices Drawing.
- d) Grade the fronting road boulevards in accordance with the standard drawing and provide a minimum of 50 mm of topsoil. Major cut/fill slopes must start at the property lines.
- e) Temporary asphalt cul-de-sacs or turn-a-round will be required at each terminal end of roads that will be extended in the future. Additional dedication or a Statutory Right-of-Way may be needed.

.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) Street lights 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.

.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) 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.

.10) 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 Terasen, 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.

.11) Charges and Fees

- a) Development Cost Charges (DCC's) are payable
- b) Fees per the "Development Application Fees Bylaw" include:
 - i) Street/Traffic Sign Fees: at cost if required (to be determined after design).
 - ii) Survey Monument, Replacement Fee: \$1,200.00 (GST exempt) – only if disturbed.
 - iii) Engineering and Inspection Fee: 3% of construction value (plus GST).
 - iv) Latecomer Processing Fee: \$1,000.00 (plus GST) per agreement (no charge for 1 day agreements).
- c) Sewer Specified Area Administration Fee of \$250.00 to amend service boundary.

Steve Muenz, P.Eng.
Development Engineering Manager

DC



Glenmore-Ellison Improvement District

445 Glenmore Road
Kelowna, BC V1V 1Z6

Email: glenmore.ellison@shaw.ca
Website: www.glenmoreellison.com

Phone: 250-763-6506

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March 1, 2010

City of Kelowna
1435 Water Street
Kelowna, BC
V1Y 1J4

Attention: Greg Sauer (via email to bnelmes@kelowna.ca)

Re: Rezoning Application Z10-0002 & OCP 10-0001
Lot SE ¼, Sec 5, Twp 23 - 1800 Crosby Rd.

Glenmore-Ellison Improvement District (GEID) has reviewed the proposed rezoning and OCP applications for the subject property to permit a 40 unit multi-family development and provides the following comments.

The property is within the GEID servicing area and is assessed with 10 acres of "A" grade (land with water rights) and 75 acres of "D" grade (land with no water rights).

According to the submission as shown on the D.E. Pilling & Associates Drawing No 1927-Z4 dated July 7, 2009, the proposed development areas include 3.2 ha along the east border of the property (Crosby Rd), with another 9.1 ha, divided into four separate areas, stretching along a ridge on the west side of the property and near a proposed extension of Hepner Road.

Water for agricultural purposes is available from GEID's existing 150mm main on Crosby Rd. to the existing 10 acres of "A" grade lands along the east border of the property. However, the elevation of the site, along with the proposed multifamily nature of the development may constrain GEID's ability to service the development.

At this time, GEID is committed to substantial multifamily fire flows in the Union Road Reservoir pressure zone (PZ479). The maximum elevation of any building in the pressure zone (apart from a few near the reservoir who do not suffer significant pressure drops under fire flow conditions) is approximately 425m. As the lowest elevations on the subject property are approximately 430m, buildings constructed on the subject property would likely be the highest elevation structures in the pressure zone. This creates a concern as GEID must maintain a residual pressure of 20 PSI at all service connections under fire flows. Servicing higher elevation sites could thus require more residual pressure in PZ479, correspondingly reducing available fire flows in the entire pressure zone, which is not possible due to existing commitments. Any development on the subject property must not interfere with existing fire flow commitments, or constrain existing fire flows in any manner.

Rezoning Application Z10-0002 & OCP 10-0001
March 1, 2010

Servicing of the site would require a review using the water system model that is maintained by GEID's engineer, Agua Consulting. The applicant will be given a cost estimate and be required to submit a deposit for the engineering review prior to GEID directing Agua to complete the work.

In regard to the 9.1 ha along the west side of the property, supply of GEID water to those lands is cost-prohibitive due to the nature of the proposed development and the elevation of the lands. These lands may be more suitable for servicing from the City of Kelowna water system in the Wilden development to the southwest rather than from GEID. The applicant's engineer should consult with the City of Kelowna Engineering Department to determine whether the City can supply water to the area and how best to service the property.

If it is determined that the City can supply water to the 9.1 ha, the applicant will need to apply for subdivision and then apply for boundary amendment to exclude the upper property that GEID cannot service, and to include it within the City of Kelowna servicing boundaries. Boundary amendments can only be changed through an Order in Council from the Lieutenant Governor in Council (BC Provincial Cabinet) and require various local approvals, taking approximately eight months for the entire process.

Sincerely,

Glenmore-Ellison Improvement District



Darren Schlamp, B.Sc.
Manager Engineering & Development

c.c. dawnm@pilling.ca