REGIONAL DISTRICT OF NORTH OKANAGAN

BYLAW No. 2930

A bylaw to amend the Subdivision Servicing Bylaw No. 2600, 2013

WHEREAS Section 506 (7) [Subdivision servicing requirements] of the Local Government Act, states that when there is no community water system, the Regional Board may, by bylaw, require that each parcel to be created by the subdivision have a source of potable water having a flow capacity at a rate established in the bylaw;

AND WHEREAS there are areas of known groundwater supply concerns within Electoral Area "C";

AND WHEREAS the Regional Board desires additional information regarding flow capacity and impact on neighbouring wells from a Qualified Professional for proposed subdivisions within Electoral Area "C":

NOW THEREFORE, the Board of the Regional District of North Okanagan, in open meeting assembled hereby, ENACTS AS FOLLOWS:

CITATION

1. This Bylaw may be cited as the "Regional District of North Okanagan Subdivision Servicing Amendment Bylaw No. 2930, 2022".

AMENDMENTS

Regional District of North Okanagan Subdivision Servicing Bylaw No. 2600, 2013 be amended as follows:

- 2. Section 406.1 <u>Dug Wells</u> by inserting ", except Electoral Area "C"" after "all Electoral Areas".
- 3. Section 406.2 <u>Drilled Wells</u> by inserting ", **except Electoral Area** "C"" after "all Electoral Areas".
- 4. Section 406.2.c, by removing "C" in the list of Electoral Areas.
- 5. By adding a new Section 406.4 as follows:
 - 4. Proof of Water requirements for Electoral Area "C"

Where connection to a community water system is not required and a drilled or dug well is proposed as a source of potable water for a parcel created by subdivision within Electoral Area "C", proof of water shall consist of the following:

- a. For each well that is proposed to be used as a water supply, at least one year of continuous groundwater level monitoring must be conducted and the results analyzed and interpreted by the **Qualified Professional** and documented in the hydrogeological report.
- b. A site plan must be provided indicating the location of the well. The well must be constructed in compliance with the minimum construction requirements of the BC Groundwater Protection Regulation (GWPR) and sited in accordance with the minimum setback distances from property boundaries, other wells and potential sources of contamination, as outlined in applicable legislation including the BC GWPR, BC Health Hazards Regulation (HHR), Sewerage

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System Regulation (SSR) and Municipal Wastewater Regulation (MWR). A survey of existing water supply wells on adjacent properties within a radius of 300 m from the proposed **parcel** must be undertaken and indicated on the site plan.

- c. A **well yield test** can not be used to demonstrate sustainable well yield in Electoral Area "C"
- d. The well must be assessed with a pumping test that has been conducted by a Qualified Well Driller, Qualified Well Pump Installer or a person working under the direct supervision of a Qualified Well Driller, a Qualified Well Pump Installer, or Qualified Professional and a hydrogeological report must be prepared by the Qualified Professional and submitted to the Regional District.
- e. The hydrogeological report must demonstrate that the well can provide at least 6,550 litres of water per day (1.0 Imperial Gallon per Minute) per **parcel**. The report must demonstrate that the use of the well will not negatively impact the use of neighbouring wells.
- f. Pumping tests are to be conducted in the dry part of the year when groundwater levels are lowest (no exceptions). The dry time of the year is-from August 1st to March 1st; however, the seasonal low water levels must be confirmed by the results of the continuous groundwater level monitoring required in Section 406.4.a.
- g. Prior to conducting the **pumping test**, the static water level in the pumping well and observation well(s) should be monitored for a minimum of one week to assess pre-test trends and to provide the basis to estimate what the static water level is expected to be at the end of the testing period (i.e., projected to the end of the testing period to account for an increasing or decreasing trend).
- h. **Pumping tests** shall also be conducted for a duration of at least 48 hours for a well completed in an unconfined aquifer and at least 72 hours for a well completed in a bedrock aguifer.
- i. Water level recovery must be monitored for a period not less than the pumping test. Wells that have not achieved 100% recovery relative to what static is projected to be at the end of the test (based on the pre-test monitoring data described in Section 406.4.a.) must be further assessed by the Qualified Professional.
- j. At least one observation well must be monitored in the same aquifer and within the same fracture network (for bedrock wells), during the **pumping test** and recovery period. The observation well must be located on the same property as the pumping well or adjacent property(ies) and within 100 m of the pumping well.
- k. Where more than one parcel would be created by a subdivision, the **pumping tests** must be conducted simultaneously for each well proposed to service each parcel each at a pumping rate that is at least the minimum required rate.

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I. The long-term sustainable yield of a well, which must be estimated based on the results of the pumping test and cannot be greater than the rate that was applied for the pumping test, shall be documented in a hydrogeological report that is signed and stamped by the Qualified Professional and submitted to the Regional District.

- m. The "Qualified Professional Proof of Water" form attached to and forming part of this Bylaw as Schedule A must be signed and stamped by a **Qualified Professional** confirming that all requirements in Section 406.4 have been completed and submitted to the Regional District.
- All hydrogeological reports, pumping tests, and Qualified Professional Proof
 of Water reports must be dated not more than five (5) years prior to the date of
 subdivision application.
- 6. By adding the following as Section 407.1 and renumbering the following sections accordingly:
 - 1. No Proof of Water exemptions apply to proposed subdivision of properties located within Electoral Area "C" that are not serviced by a community water system.
- 7. By adding the following as Section 102 and renumbering the following sections accordingly:

102 Schedules

Kevin Acton

The following schedules are attached to and form part of this Bylaw:

Schedule A – Qualified Professional – Proof of Water

8. By adding Schedule A, *Qualified Professional – Proof of Water*, attached to and forming part of this Bylaw as Schedule A attached to and forming part of Subdivision Servicing Bylaw No. 2600, 2013.

Read a First Time	this	20th	day of	July, 2022
Read a Second Time	this		day of	, 2022
Read a Third Time	this		day of	, 2022
ADOPTED	this		day of	, 2022
Chair	Deputy Corporate Officer			

Ashley Bevan



Qualified Professional – Proof of Water (Subdivision Servicing Bylaw No. 2600 – Schedule A)

<u>NOTE</u>: This form must be filled out by a Qualified Professional (a person who is registered or licensed as Professional Engineer or Professional Geoscientist under the *Engineers and Geoscientists Act* of British Columbia)

- Crambia,				
Name of Property Owner(s):	Phone	e #:		
Address of Property:	f Property: Total Prope		erty Size (Ha):	
Name of Qualified Professional:	Phone) #:		
Email of Qualified Professional:				
Qualified Professional - Please complete the checklist below. All be accepted by the Regional District. Unstamped/Unsealed or use A Qualified Professional must supervise the well pumping tests evidence of sufficient potable water for drilled and dug wells.	nsigne	d forms will	not be acce	pted.
A survey of existing water supply wells on adjacent properties within a radius of 300 m from the proposed parcel was undertaken and the results are presented on a site plan.			Yes□	No □
At least one year of continuous groundwater level monitoring was conducted and the results analyzed to demonstrate that seasonal low groundwater levels have been characterized.			Yes□	No □
The well must be constructed in compliance with the minimum construction requirements of the BC Groundwater Protection Regulation (GWPR) and sited in accordance with the minimum setback distances from property boundaries, other wells and potential sources of contamination, as outlined in applicable legislation including the BC GWPR, BC Health Hazards Regulation (HHR), Sewerage System Regulation (SSR) and Municipal Wastewater Regulation (MWR).			Yes□	No □
Prior to conducting the pumping test, the static water level in the pumping well and observation well(s) were monitored for a minimum of one week to assess pre-test trends.			Yes□	No □
Date pumping test was conducted:				
A pumping test was conducted during the dry season (defined as August 1st to March 1st however, must be confirmed by the results of the continuous groundwater level monitoring discussed above) and in accordance with the criteria outlined in the British Columbia Guide to Conducting Pumping Tests (BC Guide), and was at least 48-hours in duration for a well completed in an unconfined aquifer and 72-hours in duration for a well completed in a bedrock aquifer. (Note: A well yield test cannot be used to demonstrate sustainable well yield in Electoral Area "C".)			Yes□	No □
The well pumping test demonstrates a sustainable yield of at least 6,550 litres of water per day (1.0 Imperial Gallon per Minute) per parcel.			Yes□	No □

Water level recovery was monitored for a period not less than the particle water level did not achieve 100% recovery relative to what state be at the end of the text (based on the pre-test monitoring data describe was further assessed.	tic was projected to	Yes□	No □				
At least one observation well which is completed in the same aquifer (a fracture network for bedrock wells) was monitored during the pumping period. The observation well(s) should be located on the same property(ies) and within 100 m of the pumping well.	Yes□	No □					
What is the address of the property that the observation well was mor	nitored on?	•					
Where more than one parcel would be created by a subdivision, the pumping tests must be conducted simultaneously for each well proposed to service each parcel. (For example, if a subdivision application is for three properties, where each property would consist of one dwelling and one potable water well, the pumping test program must be designed such that the three water wells are pumped at the same time, for the same duration, and each at the minimum required rate.) Did you test all wells in accordance with the above?			No □				
I confirm that I supervised the well pumping testing on the property in accordance with Regional District of North Okanagan Subdivision Servicing Bylaw No. 2600, 2013 – Section 406.4 - Proof of Water Requirements for Electoral Area "C"							
Signature of Qualified Professional:	Stamp/Seal:						

REGIONAL DISTRICT OF NORTH OKANAGAN

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