



City of Langford

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Staff Report to Council

Date: May 7, 2018
Department: Land Development
Application No.: DVP18-0005
Subject: Application for Development Variance Permit to allow the use of a temporary booster pump station without backup power to supply water to sprinkler systems

Purpose

Jim Hartshorne has applied for a development variance permit on proposed lots 19-33 of McCormick Meadows Phase 4 to allow the use of a temporary booster pump station without backup power to supply water to sprinkler systems permitted by Bylaw 1000 s.8.15.5.

Commentary

The CRD Integrated Water Services identified in their May 7th, 2015 subdivision referral comments that a hydraulic grade line exists at McCormick Meadows. This means that the minimum domestic water pressure cannot be provided at elevations greater than approximately 85m. The applicant's engineer provided a Temporary Water Booster Station Design Brief on April 18, 2016 that stated sufficient fire flows from hydrants were adequate for preliminary FUS calculations for single family homes within McCormick Meadows, and that a temporary booster pump station without backup power would increase the domestic water pressure to meet the CRD's Bylaw requirements. The temporary water booster pump station without backup power was accepted by the City Engineer on March 15th, 2016 and installed along with the Phase 2 works.

Fire flow demand in the City of Langford is determined in accordance with the current Water Supply for Public Fire Protection published by the Fire Underwriters Survey (FUS). The FUS calculation allows for the demand fire flow to be reduced for lots that have an adequately designed sprinkler system. The applicants engineer provided a FUS calculation for Phase 4 of McCormick Meadows on June 20th, 2017 that requires sprinklers to be installed on lots 19 to 33. The sprinkler systems are served by the domestic water pressure which is boosted by the temporary water pump station that does not have backup power. This means that the sprinklers may not function as designed in the case of a power outage or maintenance on the temporary water booster pump station. The developer's engineer confirmed in a memo dated April 26th, 2018 that sprinklers will not be required in any of the homes once the next phase of McCormick Meadows is constructed and the water main is looped.

Options

Option 1

That Council:

1. Direct staff to proceed with consideration of the following variance for 1067 Braeburn Avenue:

a) That Section 8.15.5 of Subdivision and Development Servicing Bylaw No. 1000 be varied such that in the case of fire sprinkler systems that rely on booster pump stations for normal operation, the pump station is not required to be equipped with an auxiliary supply of electricity.

Subject to the following terms and conditions:

i) That a s.219 covenant be registered on lots 19-33 that notifies the owners that domestic water pressure is provided by a temporary water booster pump station that does not contain backup power generation which means that domestic pressure may drop and the sprinkler systems may not work as designed in the case of a power outage to or maintenance of the temporary water booster pump station.

OR Option 2

2. Reject this application for development variance permit.

Respectfully submitted,

Submitted by:	James Oliver, Senior Land Development Technologist
Concurrence:	Matthew Baldwin, MCIP, RPP Director of Planning
Concurrence:	Michelle Mahovich, P.Eng, P.Geo, Director of Engineering
Concurrence:	Leah Stohmann, MCIP, RPP, Deputy Director of Planning
Concurrence:	Michael Dillabaugh, CPA, CA, Director of Finance
Concurrence:	Braden Hutchins, Director of Corporate Services
Concurrence:	Darren Kiedyk, Chief Administrative Officer

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