Report No. INS-2021-049 - Attachment No. 3



Town of Orangeville

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Infrastructure Services

Memo

To: Larysa Russell, MCIP, RPP

Senior Planner

From: Douglas G. Jones, M.E.Sc., P. Eng.,

General Manager, Infrastructure Services

Subject: Allocation of Servicing Capacity, 670-690 Broadway

Date: September 13, 2021

Water Supply Allocation

With this memo, Public Works confirms that a water supply allocation can be made for the 33 townhouse units included in the development at 670-690 Broadway. Using the current average day design demand of 0.60 m³/day per townhouse unit and the 5-year average Maximum Day factor of 1.35, the total projected maximum day demand for the 33 units is approximately 26.7 m³/day.

This water supply allocation is based on the Uncommitted Reserve Capacity that is currently in the Town's water supply system. This capacity is calculated in accordance with MECP Procedure D-5-1 "Calculating and Reporting on the Uncommitted Reserve Capacity at Sewage and Water Treatment Plants." As of January 1, 2020, the Uncommitted Reserve Capacity was 852 m³/day. A copy of those calculations was included as an attachment to report IS-Env-2020-014, which was presented to Council at its September 28, 2020 meeting.

The Uncommitted Reserve Capacity is based on the year over year performance of the wells, and can change if the safe pumping capacity of a well changes. Accordingly, the allocation of water supply capacity to new development is made on a case by case basis.

Sewage Treatment Capacity Allocation

The Town of Orangeville's Sewage Treatment Allocation Policy (the Policy) was adopted by Council in 2007 for two key reasons:

- 2006 had been a very wet year resulting in high flows to the WPCP; and
- There was uncertainty around if, and when an expansion to the WPCP would take place.



Schedule 'A' to the Policy (as revised on March 23, 2009) indicates that "Council shall ensure that, beginning on January 1, 2008, at no time will the aggregate total amount of allocated sewage treatment capacity exceed the equivalent of 600 single detached residential units." This was required to minimize the likelihood that the rated capacity of the WPCP would be exceeded during a wet year, if one were to occur prior to the completion of the WPCP expansion.

The expansion work at the WPCP was substantially complete in June 2018. This increased the available treatment capacity at the WPCP from 14,400 m3/d to 17,500 m3/d. With this increase in available treatment capacity, sanitary servicing is not expected to be a limiting factor when allocating servicing capacity for the foreseeable future.

At its September 28, 2020 meeting, Council received report IS-Env-21020-013 with respect to the Uncommitted Reserve Capacity at the Water Pollution Control Plant. Calculations attached to that report reveal that as of January 1, 2020, the Uncommitted Reserve Capacity of the WPCP is 5,890 m³/day. Using the current average day flow per townhouse unit of 0.66 m3/day (which includes an allowance for infiltration), the total projected average day flow from the 33 units is approximately 21.7 m³/day. Thus providing an allocation of sewage treatment capacity to the 33 townhouse units is appropriate.