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MEMORANDUM

To: Rino Mostacci
From: Harold Reinthaler
Date: August 18, 2021
Our File: 10170
Subject: Alliston East

As requested, we have conducted a high-level review of available water supply and wastewater servicing for the subject site which is located at the northwesterly corner of 15th Sideroad and 14th Line, just east of the built area of the village of Alliston, Town of New Tecumseth, as shown in the attached Figure 1.

Water Supply

For water supply, we reviewed the 2016 *Water Supply, Distribution and Storage Master Plan* for the Town of New Tecumseth. In that report, the Mowder Reservoir and Pump Station are indicated close to the westerly boundary of the subject site, as shown in Figure 1. This reservoir is filled by water from the Alliston main distribution zone. Currently, a booster pump station is being constructed on 14th Line, as shown in Figure 1, to supplement the effort to supply water to the Mowder Reservoir. The booster pump station is being constructed by the land developer of the development in which the Mowder reservoir is located, Belterra Estates Development (Treetops). This is being done by a Development Charges Front-Ending Agreement.

For servicing capacity, the 2011 *Belterra Estates Development Master Servicing Report* was reviewed. Some excess capacity is in the system, as can be seen in the attached excerpt from that report, however, it is unknown if there is sufficient excess capacity to service the subject site. Expansion of the system could be incorporated in future works associated with future development charges.

It should be noted that the reservoir is at grade at the top of the hill, i.e. not an elevated tank. The local distribution system actually requires a pump station (located at the reservoir site), to service the local network around the reservoir since there isn't a "gravity" head from an elevated tank. If development proceeded for the subject site, an additional pump station would likely be required for any distribution system within the same elevation range of the community currently being served by the pump station at the Mowder Reservoir.

Wastewater

Originally, as per a 2005 Class Environmental Assessment, effluent from the Village of Tottenham was to be pumped to an expanded Regional Wastewater Treatment Plant (WWTP), which is located on 14th Line, on the same property where the water supply booster pump station is currently being constructed, as previously discussed, and as shown in Figure 1. However, that expansion of the WWTP is no longer needed for Tottenham as a new state-of-the-art WWTP was constructed in 2015 to serve Tottenham by applying a no net increase in phosphorous loading in the receiving watercourse, Beeton Creek.

Plans for expansion of the Regional WWTP have however not ceased, as plans for its expansion are still included in the *2018 Town of New Tecumseth Development Charges Background Study* (DCBS). Plans are in the works for phased expansion well past the required capacity in 2031, as shown in the attached excerpt from the DCBS. Overall, the DCBS has allocated \$ 143.86 Million in expansion of the WWTP.

The existing development to the west of the subject site, Belterra Estates Development (Treetops) has two pump stations to convey flows to the Regional WWTP. This is primarily due to the requirement of crossing under the Nottawasaga River by forcemains along 14th Line to access the Regional WWTP. Any development of the subject lands will also require sanitary pumping stations and forcemains on 14th Line for the same reason.

Summary

For both water supply and sanitary treatment, key infrastructure is in place that can be accessed with the construction of necessary conveyance infrastructure, such as pump stations and forcemains. Some expansion of existing key infrastructure will also be required. Naturally, a bureaucratic process will be required to achieve approval since the subject lands were not within the servicing envelope which would have been in place when the key infrastructure was designed. Also, further refined analyses will be necessary to support any draft plans of subdivision.