MEMORANDUM



Appendix 7 to SRPI.22.075

DATE: MAY 26, 2022

TO: JEFF WALTERS, P.ENG.

CC: WALID ABI AKAR

SUBJECT: UMESP PRELIMINARY RESULTS

Civica Infrastructure Inc. (Civica) was retained by the City of Richmond Hill to update the water and wastewater components of the 2014 Urban Master Environmental Servicing Plan. This memorandum summarizes the preliminary results and compares the amount of linear infrastructure improvements required to support the ultimate buildout scenario to the 2014 Urban MESP results.

1. Introduction

Civica received the updated growth forecast for the City of Richmond Hill beyond the year 2051, the ultimate buildout scenario. Based on the projected growth, Civica conducted a preliminary assessment of the City's water and wastewater system to identify capacity constraints and proposed infrastructure improvements to accommodate the planned growth.

2. Conclusion of the Analysis

Based on the preliminary results, the proposed ultimate growth can be accommodated through infrastructure improvements in specific locations. These infrastructure improvements can be undertaken over the long-term planning horizon. These service improvements are occurring within the City's growth areas, largely through intensification of development. The preliminary results propose a total of 20 wastewater improvement projects, this amounts two more projects compared to the 2014 UMESP. With the additional two projects, the wastewater service improvements will result in a 3% increase in the length of new or upgraded sanitary sewer improvements compared to the 2014 UMESP.

For the water supply, only one improvement project was proposed in the 2014 UMESP which consisted in converting the Yonge Street and Major Mackenzie Drive Area to a different Pressure District (PD7 to PD6). Based on preliminary results for the updated ultimate growth forecast, approximately 8.1 km of watermain upgrades will be required to support the ultimate growth and the updated fire flow requirements based on the landuse from the new Official Plan and information from the new development applications. These upgrades are proposed through 15 water system improvement projects.

3. <u>Next Step</u>

These preliminary results will be further analyzed through on-going work on the UMESP update and once more detailed planning for specific areas are finalized via the Batch 2 and 3 OPA work that the City is undertaking.

Sincerely,

Alan Villalobos Civica Infrastructure

PROJECT NO.: RIC18-0004

FROM: ALAN VILLALOBOS