



ENGINEERING DEPARTMENT MEMORANDUM

TO: MAYOR J. LEHMAN AND MEMBERS OF COUNCIL

FROM: T. REEVE, SENIOR INFRASTRUCTURE PLANNING PROGRAM COORDINATOR

NOTED: B. ARANIYASUNDARAN, P. ENG., PMP, DIRECTOR OF ENGINEERING

A. BOURRIE, RPP, GENERAL MANAGER OF INFRASTRUCTURE AND GROWTH MANAGEMENT (ACTING)

M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RE: INFRASTRUCTURE MASTER PLANS FINAL DRAFT REPORTS

DATE: APRIL 15, 2019

The purpose of this Memorandum is to provide members of Council with an update concerning the Infrastructure Master Plans.

On March 5, 2019, during the a presentation to the City Building Committee about the Infrastructure Master Plans, the Committee requested sufficient time be provided for members of Council to review the Infrastructure Master Plan reports prior to discussion at General Committee and City Council. Typically members of Council only receive the staff reports and the associated documents a few days prior to the General Committee meeting. Because of the size and complexity of the Infrastructure Master Plans, this was not deemed to be sufficient time. This memo is to inform Council that the final drafts of Infrastructure Master Plans are now available on the City's website for review by Council and the public. The staff report recommending that Council approve the Infrastructure Master Plans is scheduled to go to General Committee and Council on May 6, 2019 and May 13, 2019 respectively. Questions or comments received on the Master Plans will be collected and considered by staff prior to May 6, 2019.

In addition to informing Council of the availability of the Draft Master Plans for review, this memo also seeks to provide a guide to the documents to facilitate a time effective review of these large documents.

Overview of Master Plans

Master Plans are long range plans which integrate infrastructure requirements for existing and future land use with Municipal Class Environmental Assessment (Class EA) planning principles. These plans examine an infrastructure system or groups of related projects in order to outline a framework for planning of subsequent projects.

Key features of Master Plans following the Class EA process are highlighted below:

- a) Include the key principles of successful environmental planning:
 - i. consultation
 - ii. consideration of a reasonable range of alternatives
 - iii. consideration of effects on all aspects of environment ("Environment" is applied in a broad sense and includes the natural, social, cultural, built and economic environments)
 - iv. systematic evaluation
 - v. clear documentation
 - vi. traceable decision-making
- b) Address the first two phases of the Municipal Class Environmental Assessment and lay the ground work to cover the remaining steps for future projects.
- c) Allow for an integrated process with other planning initiatives.
- d) Provide a strategic level assessment of various options to better address overall system needs and potential impacts and mitigation.
- e) Are long term focused.
- f) Takes a system wide approach to planning.

- g) Recommend an Infrastructure Master Plan which can be implemented through the implementation of separate projects.

Public Consultation Summary

As part of the Master Plan project the consultation requirements of the Municipal Class EA process is followed. This included four Public Information Centres (PIC) held as follows:

- a) Drainage Master Plan PIC#1 – November 2, 2017 at the Dorian Parker Centre.
- b) Drainage Master Plan PIC#2 – April 17, 2018 at the South Shore Centre.
- c) Water and Wastewater Master Plans PIC – November 1, 2018 at the South Shore Centre.
- d) Transportation Master Plan – November 13, 2018 at the South Shore Centre.

In addition to these Public Information Centres, some agencies and residents have engaged with City staff throughout the project.

Infrastructure Master Plans

There are six Infrastructure Master Plans which plan for the City's major infrastructure requirements to the 2041 planning horizon. The City is anticipated to grow from 147,000 to 253,000 population and 74,000 to 129,000 jobs by 2041:

Drainage Master Plan:

The 2019 Drainage Master Plan represents the first time the City has undertaken a single Drainage Master Plan to cover multiple watersheds across the City. The scope of the study is to identify drainage improvements required to meet current City standards and prepare for the intensification and development occurring in Barrie. The Drainage Master Plan study area does not include Sophia Creek or the Salem and Hewitts Secondary Plan areas which are being addressed through different studies. The Drainage Master Plan addresses flooding, drainage and water quality concerns through recommendations on storm sewers, culverts, stormwater ponds and low impact development infrastructure.

Transportation Master Plan:

The Transportation Master Plan is an update to the 2014 Multi-Modal Active Transportation Master Plan. The Transportation Master Plan covers road network improvements, active transportation improvements (pedestrian and cycling networks), trails, and transit.

Water Supply Master Plan:

The City of Barrie gets its water from Kempenfelt Bay and groundwater wells. This Water Supply Master Plan looks at the infrastructure that brings water from these two sources to supply all the zones in the City.

Water Storage and Distribution Master Plan:

The City's water system consists of pipes, reservoirs and pump stations. This water system provides water to residents and supplies water to fight fires. The Water Storage and Distribution Master Plan analyzes the future demands and recommends the infrastructure required to meet the target levels of service for the City.

Wastewater Collection Master Plan:

Wastewater is collected from across the City and conveyed to the treatment plant through pipes and pump stations. The Wastewater Collection Master Plan recommends future infrastructure required to meet increased flows as well as make recommendations on reducing extraneous sources of wastewater into the system.

Wastewater Treatment Master Plan:

Prior to being discharged to Lake Simcoe, the City's wastewater must be treated to a high standard to protect this sensitive environment and meet provincial regulations. The Wastewater Treatment Master Plan looks at the processes and infrastructure at the wastewater treatment facility and recommends what is required to continue to meet our objectives.



Summary

Overall the Master Plans provide a strategic assessment of the City's infrastructure needs going forward. They do not commit the City to expenditures or implementation of any particular project but are key inputs to the City's capital plan. In most cases, further environmental assessments and engineering design is required to deliver the projects. These steps would include additional communication and consultation.

The Master Plans provide key inputs to the Development Charge Background Study on which the City will base its development charges for the next 5 years. It is important for the Master Plans to outline realistic costs. This allows the City to collect sufficient funds to deliver the required projects.

Closing

Additional information regarding the Master Plans and next steps will be provided in the staff report that recommends Council approval of these Master Plans. The staff report is planned for the May 6 General Committee meeting.

Navigation of the Master Plan reports is aided through the description of each section on the website. All main reports and appendices are available here: www.barrie.ca/eastudies