Date May 14th, 2019

To Chair and Members
Committee of the Whole – Operations and Administration

From E. (Beth) Goodger
General Manager, Public Works

1.0 Type of Report
Consent Item [X]
Item For Consideration [ ]

2.0 Topic Project Update – Transportation Master Plan and Master Servicing Plan [Financial Impact – None]

3.0 Recommendation
THAT Report 2019-269 “Project Update - Transportation Master Plan and Master Servicing Plan” BE RECEIVED.

4.0 Purpose and Overview
To update Council on the status of the projects currently underway to update both the Transportation Master Plan (TMP) and Master Servicing Plan (MSP) projects.

5.0 Background
The Transportation Master Plan (TMP) and Master Servicing Plan (MSP) are both currently being updated, in coordination with the Official Plan (OP) review, to incorporate the City of Brantford’s 2017 Boundary adjustment lands and to address growth targets set by the province. The TMP and MSP were last updated in 2014. Both the TMP and MSP are informed by the OP review and therefore are following closely behind the OP review work with regard to
In April 2019 the OP team brought a report to Council asking for endorsement of the Preferred Settlement Area Boundary Expansion as identified in Council Report number 2019-184 so that all three projects can confidently proceed with technical work based on the endorsed settlement area.

The TMP and MSP set out the requirements for municipal infrastructure to support the growth plan and targets of the OP. The TMP encompasses all aspects of transportation including roads, transit and active transportation. The MSP includes water, wastewater and stormwater infrastructure requirements.

To date the MSP technical analysis has fed the OP project work by informing the selection of the preferred growth option as further outlined in Committee of the Whole – Community Development Report 2019-184. The detailed technical analysis will now commence with the approval of this report.

**2019-184 entitled Official Plan Review – Preferred Settlement Area Boundary Expansion.** Detailed technical analysis will commence upon receipt of Council approval to proceed with the following recommendations:

a. THAT Staff Report 2019-184 regarding the Official Plan Review – Preferred Settlement Area Boundary Expansion BE RECEIVED; and

b. THAT the preferred option for Settlement Area boundary expansion, illustrated as Option 1 in Appendix A to Report 2019-184, BE ENDORSED and that Staff BE DIRECTED to continue the ongoing Official Plan Review work, including the refinement of the draft land use and transportation plan and servicing strategies for the Boundary Adjustment Lands, on the basis of Settlement Area Boundary Expansion Option 1; and

c. THAT Staff and Consultant BE DIRECTED to continually seek ways to take in more land

On May 2, 2019 the Minister of Municipal Affairs and Housing released an updated Provincial Growth Plan, which takes effect on May 16, 2019. Staff are reviewing the new plan and potential impacts on the Official Plan, Master Servicing Plan and Transportation Master Plan update.

### 6.0 Corporate Policy Context

Completing the review and implementation of the Transportation Master Plan and the Master Servicing Plan in conjunction with the Official Plan are Strategic Actions identified within the Community Strategic Plan.

This initiative would meet the goals of the City’s Community Strategic Action Plan. In particular, the following goals are applicable:

### 6.1 Shaping our Future: Brantford’s Community Strategic Plan 2014-2018

Managed Growth and Environmental Leadership – Transportation Master Plan -
Review and implement the Transportation Master Plan in conjunction with the Official Plan taking into consideration both balance and fairness for all neighborhoods.

Managed Growth and Environmental Leadership – Water and Wastewater - Review and implement the Water, Wastewater and Stormwater Master Servicing Plan in conjunction with the Official Plan taking into consideration both balance and fairness for all city neighborhoods.

7.0 **Input From Other Sources**

Staff from Public Works continue to work closely with staff in staff from Community Development.

Within Public Works, the following groups play a key role in this process: Transportation Services and Continuous Improvement. In Community Development the Long Range Planning group plays a key role.

All three projects (the TMP, MSP and OP) have sought out input from staff across the organization through technical advisory committee meetings and steering committee meetings. Additionally, stakeholders and public has been consulted throughout the process.

8.0 **Analysis**

8.1 **Planning Process**

The TMP and MSP build on the decisions made through the Official Plan process with regard to settlement area, land use as well as population and employment projections. Based on these inputs, the TMP and MSP are able to determine what improvements need to be made to infrastructure in order to accommodate the growth projected in the Official Plan.

8.2 **Coordinated Schedules**

Staff responsible for the successful delivery of the OP, MSP and TMP meet frequently to facilitate communication, optimize resources, and ensure that all three projects are able to proceed as quickly as possible in a coordinated effort. To date, all public information centers have been formatted such that residents and other interested parties can attend one venue to participate in and get information about all three projects. These planning initiatives are being updated concurrently, using the same growth information and best planning practices to inform how the City will grow and develop (to 2041).

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1 Growth Plan for the Greater Golden Horseshoe, Ministry of Municipal Affairs and Housing
**Table 1** summarizes significant project milestones that have already completed, as well as future, planned milestones. Appendix A contains a Gantt chart which brings together and displays coordinated milestone events for all 3 planning initiatives. The timelines are subject to change pending the staff review of the recently released Provincial Growth Plan.

**Table 1 OP, MSP & TMP Project Milestones (subject to change)**

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIC #1 – Study Introduction (OP, TMP, MSP)</td>
<td>September 2017</td>
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<tr>
<td>PIC #2 – Notice of Study Commencement</td>
<td>November 2017</td>
</tr>
<tr>
<td>PIC #3 – Presentation of results of Municipal Comprehensive review &amp; proposed alternative targets for intensification</td>
<td>May 2018</td>
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<tr>
<td>PIC #4 – Visioning Workshop for Boundary Expansion Lands</td>
<td>June 2018</td>
</tr>
<tr>
<td>PIC #5 – Official Plan Review Settlement Area Expansion &amp; Land Use Options</td>
<td>January 2019</td>
</tr>
<tr>
<td>Boundary Lands Task Force Meeting #1</td>
<td>March 2019</td>
</tr>
<tr>
<td>Boundary Lands Task Force Meeting #2 – Phasing &amp; Servicing (tentative)</td>
<td>Q2/Q3 2019</td>
</tr>
<tr>
<td>Public Meeting #6 – Preferred Land Use Plan for Boundary Expansion Lands</td>
<td>Q2/Q3 2019</td>
</tr>
<tr>
<td>Boundary Lands Task Force Meeting #3 – OP Document Review (tentative)</td>
<td>Q3/Q4 2019</td>
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<tr>
<td>Statutory Public Meeting &amp; Council Presentation – Official Plan</td>
<td>Q3 2019</td>
</tr>
<tr>
<td>Public Meeting #7 - Presentation of Transportation &amp; Servicing Constraints &amp; Opportunities (Alternatives)</td>
<td>Q4 2019</td>
</tr>
<tr>
<td>COW-OA Report, Transportation &amp; Servicing Constraints &amp; Opportunities (tentative)</td>
<td>Q4 2019</td>
</tr>
<tr>
<td>Report to Council - Final Official Plan</td>
<td>Q1 2020</td>
</tr>
<tr>
<td>Public Meeting #8 – Presentation of Preferred Transportation &amp; Servicing Options</td>
<td>Q1 2020</td>
</tr>
<tr>
<td>COW-OA Report – Transportation &amp; Servicing Preferred Options</td>
<td>Q2 2020</td>
</tr>
</tbody>
</table>
8.3 Transportation Master Plan Status

8.3.1 General Update

The 2014 Transportation Master Plan (TMP) is currently being updated to incorporate the 2017 Boundary Adjustment as well as updated growth target for 2041 set by the Provincial Growth Plan for the Greater Golden Horseshoe (2017). The MP Update kicked off in September of 2017. Background work has been completed. Important inputs to the update include a confirmed settlement area for the boundary expansion identified through the OP Review process, which was endorsed by Council in April of 2019. Now that Council had endorsed the preferred settlement area for the boundary expansion lands, detailed technical work can begin on the Street Network Capacity Analysis including travel demand forecasting, which will identify future network needs, growth areas and system pressure points, forecast future needs and start to assess challenges and opportunities.

The findings from this stage of the study will be presented at a Public Meeting that will be held to seek feedback from stakeholders and members of the public. The Public Meeting is planned for October of 2019. Feedback from the Public Meeting will be taken into consideration in the next step of the study that will review Key Transportation Issues.

An interim report will be produced outlining Transportation Issues and potential solutions (alternatives). This Transportation Issues Assessment Report is expected to be complete by April 2020. A draft Transportation Master Plan will then be developed and presented at a Public Meeting for feedback prior to finalization. The draft Master Plan will identify the individual projects, estimated costs, timing and actions required to implement the TMP. The draft plan will be taken to Council in May of 2020 for review and feedback by Council. Input from Council will be

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<tr>
<td>Final TMP &amp; MSP files completed &amp; submitted to MOECP^2</td>
<td>Q3 2020</td>
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<tr>
<td>TMP &amp; MSP Projects added to 10 year capital forecast, Development Charges Background Study &amp; By-Law</td>
<td>Q3 2020</td>
</tr>
</tbody>
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^2 Ontario Ministry of Environment, Conservation & Parks
incorporated and the Final Transportation Master Plan is planned to be finalized in June 2020.

8.3.2 Update on TMP Projects

8.3.2.1 Veterans Memorial Parkway Widening and Extension
A Feasibility Study for the Veterans Memorial Parkway (VMP) Widening and Extension was brought to Council in June of 2018 (Report # PW2018-039). The report recommended that because of the challenges this project presents, specifically the high cost estimates that the City not move forward with an EA for this project right away, but rather explore options through the TMP Update with and without the VMP Widening and Extension.
A recommendation was added by Council directing staff to report back with interim actions that can be taken to improve traffic safety at the intersection of Conklin and Mount Pleasant as well as recommendations that can improve travel times between West Brant and the Highway 403 interchanges. A report outlining interim measures will be coming forward to Council in June 2019.

8.3.2.2 Oak Park Road Extension
A feasibility Study for the Oak Park Road Extension from Hardy Road to Colborne St West is currently underway. This study is expected to be completed by the end of June 2019. A report will be brought forward to Council with the outcomes of this study in August 2019. The feasibility study is intended to provide background to an environmental assessment (EA) which would need to be completed prior to constructing the extension.

8.3.2.3 Joint Strategic Transportation Plan – with Brant County
The City of Brantford and The County of Brant will be working together on a Joint Strategic Transportation Plan. The plan will provide a framework for identifying the strategic needs and opportunities for transportation in the broader region as well as a tool for understanding the implementation impacts and concerns for a regional multi-modal system. This project is expected to start in the summer of 2019 and wrap up with the TMP in July of 2020.

8.4 Master Servicing Plan Status

8.4.1 General Update
The City of Brantford is completing a Master Servicing Plan for Water, Wastewater and Stormwater services. The study will build on the 2014 analysis to develop a comprehensive plan that incorporates all facets of
the management, expansion and funding of the City’s water, Wastewater and storm systems to the year 2041.

The resulting MSP will provide the City of Brantford with strategies necessary to manage infrastructure improvements and growth in the most effective and efficient manner. The MSP will also identify the individual projects required to complement these strategies, estimated cost and prioritize these projects based on need and required timing. The Water, wastewater and stormwater upgrades/ projects required to service projected growth numbers both within the City’s current and extended urban boundary will be identified and used to inform the City’s next Development Charges background study and by-law and Water Wastewater Financial Sustainability Plan.

The format for the study will define existing problems and opportunities, consider and evaluate solutions and identify preferred water, wastewater and stormwater servicing strategies. The Master Servicing Plan is being completed as a Class Environmental Assessment study, separate from the Transportation Master Plan, in accordance with the requirement of the Municipal Engineers Association (MEA) Class Environmental Assessment (EA) process for master planning (MEA, June 2000 as amended in 2007 and 2011). The study is being undertaken based on Phases 1 and 2 of the Class EA processes for Master Plans.

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c. THAT Staff and Consultant BE DIRECTED to continually seek ways to take in more land
8.4.1.1 County Water and Wastewater Supply Agreement & Servicing

The Councils for the City of Brantford and the County of Brant formally approved the Boundary Adjustment Agreement (the “Boundary Agreement”) for the transfer of 2,720 gross hectares of land from the County of Brant to the City of Brantford on June 28, 2016. The Agreement also committed the City to entering into a Water and Wastewater Supply Agreement with the County to provide wastewater servicing capacity for the Airport Lands and water and wastewater servicing capacity of the Cainsville Lands.

City and County staff continue to work together to ensure that the technical analysis and the City’s updated MSP will reflect the provision of services to each of these areas in alignment with Brant County growth and development plans.

8.4.1.2 Subwatershed Planning

As part of the urban boundary expansion, OP update and future development staff, are undertaking subwatershed planning for the City’s new northern boundary lands and the area known as Tutela Heights (to the south).

Watershed planning supports the implementation of policy amendments to the four provincial land use plans (Growth Plan for the Greater Golden Horseshoe, Niagara Escarpment Plan, Oak Ridges Moraine Conservation Plan, Greenbelt Plan), which strengthen requirements for watershed planning. It also supports the Provincial Policy Statement which identifies the watershed and subwatershed as the ecologically meaningful scale for integrated and long-term planning.

Watershed planning is an opportunity for municipalities and other planning authorities to work collaboratively towards watershed objectives by creating a framework for the management of human activities, land, water, aquatic life and resources within a watershed, and for the assessment of cumulative, cross-jurisdictional and cross-watershed impacts. Provincial land use plans that are applicable within the Greater Golden Horseshoe area provide direction for municipalities to ensure that watershed planning is undertaken to inform municipal policy and decision-making. Policies in the Growth Plan and Greenbelt Plan require that upper and single tier municipalities, in partnership with conservation authorities, as appropriate, shall ensure that watershed planning is undertaken to support a comprehensive, integrated, and long-term approach to the protection, enhancement or restoration of the quality and quantity of water within a watershed.

A subwatershed plan identifies streams, wetlands, forests, groundwater recharge areas, and other natural areas. It includes an inventory of plants, animals, birds, and other species. Information on stream flows, water
quality, groundwater movement and other natural features goes into the
plan. The plan lists the policies and actions that will protect environmental
features and functions when the area is developed, or actions that can be
taken now to improve the health of the area.

Watershed planning is an ongoing process involving the development,
implementation and regular updating of a watershed plan, and will
generally involve the following steps:

**Phase 1 Existing Conditions** (currently underway as part of OP & MSP)
- Outline the location, extent, sensitivity and significance of all
  components of the natural systems;
- Examine current land uses and extent of pervious/impervious
  cover;
- Identify land/water features, linkages, and processes

**Phase 2 Impacts, Scenarios, and Directions**
Involve undertaking watershed planning elements specific to requirements
outlined in the Growth Plan. Elements include (but are not limited to):
- Water quantity, budget and conservation plans;
- Water quality & nutrient load assessment;
- Natural hazards, systems, & climate change;
- Assessment of land use and management

**Phase 3 Watershed Plan Implementation**
Development and implementation of a plan and policy that will provide:
- areas to be protected, enhanced and rehabilitated;
- various types/intensities of proposed development and
development criteria;
- water, wastewater and stormwater servicing requirements (existing
  and future) and related water supply and assimilative capacity
  needs;
- land and water use management practices and performance
  measures;
- targets for protection and restoration of riparian areas;
- best management practices and designs for the management of the
  quantity and quality of surface water and ground water; and
- an implementation strategy to guide development, those
  responsible for designing and building recommended works at what
time, and responsibilities and requirements for cost-sharing, future
  studies, monitoring and maintenance;
- direction for implementation in municipal official plan policies,
  informing land use planning and decision-making, and other
  implementation considerations; and
- a strategy for adaptive management, including ongoing monitoring.
Phase I work is currently underway as part of the urban boundary expansion and OP review project and the MSP update. Phases II and III will be undertaken as separate projects which have been identified and budgeted for through the City’s annual Estimates Committee process. It is currently expected that Phase II will commence this year (2019) and Phase III in 2020/21, subject to budget approval.

As joint stewards of the Grand River Watershed all field work, planning, and policy development work will be undertaken in close cooperation with staff from the Grand River Conservation Authority. Where practical and possible the City will look to coordinate study effort, particularly fieldwork, with the GRCA to take advantage of potential cost savings and accelerated schedules.

9.0 Financial Implications

There are no direct financial implications as a result of this report. This report provides an update on a number of projects and studies that were funded as part of the annual capital budget. The updated TMP and MSP projects will ultimately recommend new projects as well as updates to existing projects.

The 2019-2028 Capital Budget forecast currently includes $165.24M for TMP Projects ($126.7M for Roads Projects, $3.55M for Active Transportation, $11.67M for Transit and $23.25M for New Downtown Parking Facility) and $115M for MSP projects. These are expected to increase once the plans are updated.

Council will be made aware of potential cost implications as staff bring forward transportation and servicing scenarios and preferred options at project milestones in Table 1. Total lifecycle costs (capital costs plus total lifecycle operating and maintenance costs) will be taken into consideration as part of the scenario evaluation and selection of preferred options for both the TMP and MSP.

Upon approval of the TMP and MSP the 10 year capital forecast will be updated for the 2021-2030 Capital Budget to reflect project timing, scheduling/phasing and appropriate cost allocation between new growth and benefit to existing (BTE). BTE cost allocations will be used to inform the next Development Charges Background Study and subsequent By-Law.

10.0 Conclusion

Growth related infrastructure improvements have a direct impact on the City’s capital planning and Development Charges process. The results of the Master Plans will further allow the Public Works Commission to identify an optimized capital investment forecast based on priority and timing using a coordinated TMP and MSP approach.
The Master Plans will subsequently allow the City to engage the development community and other stakeholder groups around identifying adequate revenue/re-investment levels and funding sources such as development charges that are required to deliver the projects and meet future servicing needs.

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Manager Continuous Improvement, Public Works Commission

Attachments

Appendix A – TMP / MSP Schedule with Milestone

By-law required  
[ ] yes  [X] no

Agreement(s) or other documents to be signed by Mayor and/or City Clerk  
[ ] yes  [X] no

Is the necessary by-law or agreement being sent concurrently to Council?  
[ ] yes  [X] no