# COMMITTEE OF THE WHOLE (WORKING SESSION) - SEPTEMBER 14, 2009

## REGION OF YORK WATER, WASTEWATER AND TRANSPORTATION MASTER PLAN UPDATES

#### **Recommendations**

The Commissioner of Engineering and Public Works recommends:

- 1. That the presentation by Region of York staff on the draft Water, Wastewater and Transportation Master Plan Update Reports be received;
- 2. That Council endorse the Region of York Draft Water, Wastewater and Transportation Master Plan Update Reports subject to the staff comments contained in this report; and
- 3. That a copy of this report be forwarded to the Region of York.

#### **Contribution to Sustainability**

The Region of York Draft Water, Wastewater and Transportation Master Plan Update Reports integrate Regional sustainability objectives including the preservation and enhancement of the natural environment, economic vitality and healthy communities, while providing safe and efficient services for the residents of the Region.

The major elements of the Region's sustainable transportation system include:

- Rapid transit corridors that move more people faster and more efficiently from place to place;
- Local transit services that are connected to and complement rapid transit corridors in order to serve more communities within the Region;
- Innovative technologies, such as universal transit signal priority and Smartcards, that improve the speed and reliability of transit operations;
- A road system that supports existing and future sustainable transportation enhancements through queue jump lanes, cycling-only lanes, exclusive transit lanes and High Occupancy Vehicle (HOV) lanes; and
- Efficient use of the road network.

#### Economic Impact

There are no immediate economic impacts resulting from the adoption of this report.

#### **Communications Plan**

The Region of York will be apprised of any resolution passed by Council relating to this item before the end of the statutory 30-day Master Plan Update public review period.

In addition, all draft Master Plan Update reports and relevant background information / documents are available for public review on the Region's website by following the links noted below:

Water & Wastewater Master Plan Update: ww.york.waterwastewatermasterplan.ca

Transportation Master Plan Update: www.york.ca/Services/Regional+Planning/Infrastructure/TMP\_Overview.htm

#### Purpose

The purpose of this report is to provide Council with a high level overview of the conclusions and recommendations of York Region's Draft Water, Wastewater and Transportation Master Plan Update Reports that are specific to the City of Vaughan.

#### **Background - Analysis and Options**

Over the past several years, the Region of York has reportedly been the fastest growing region in the Greater Toronto Area and in all of Canada. Looking forward, the provincial government has forecasted that York Region's population will grow to approximately 1.5 million persons by 2031. Economic growth is expected to almost double over the same period, increasing from 462,000 jobs in 2006 to 799,000 jobs by 2031 and potentially reaching over 950,000 jobs by 2051.

This growth will put tremendous pressure on the Region's environment and its infrastructure, eventually exceeding existing water, wastewater and transportation infrastructure system capacities. Accordingly, York Region has undertaken comprehensive and concurrent Water, Wastewater and Transportation Master Plan Updates in accordance with the requirements of the Municipal Class Environmental Assessment process. These Master Plan updates will guide the Region's infrastructure needs for water, sewer and transportation related infrastructure for the next twenty-five years and beyond.

The Master Plan Updates incorporate the Province's population and employment forecasts, changes in land use planning and environmental policies, in addition to the Region's growth management initiatives.

As part of the Region's Master Plan Update process, three rounds of public consultation were completed using a combination of communications strategies including newsletters, public consultation centres and a web-portal. Staff, together with representatives from all other local municipalities, stakeholders, and residents were involved and provided input at several key points during each study process. The overall process and resulting Master Plan Updates address the requirements of Phases 1 and 2 of the Municipal Class Environmental Assessment process for specific projects identified in each plan.

The recommended policies and projects are based on the study findings and incorporate comments from the public and from each study Technical Advisory Committee which included staff representatives from the Region, local municipalities, the Province and conservation authorities.

The Region's final Master Plan Update documents will become the framework for the City's local Master Plan Updates which are being prepared in conjunction with Vaughan's on-going Growth Management Strategy and City-Wide Official Plan Review process.

#### Regional Water And Wastewater Master Plan Update

Water and wastewater servicing within York Region is a multi-jurisdictional responsibility based on the Region's geographic location (between Lake Ontario and Lake Simcoe) and the current two-tier municipal governance structure.

The sources for the Region's drinking water include both surface waters, namely Lakes Ontario and Simcoe, and groundwater from Regional aquifers. The current Regional water distribution system is comprised of two parts: the York Water System, which serves the larger urban communities in York Region; and, individual water systems serving smaller communities such as Kleinburg-Nashville. The Kleinburg-Nashville Community is currently serviced by two Regional communal water wells while the remainder of the rural areas in the City are on private wells. In both cases, the Region acts as the water "wholesaler" supporting bulk supply, treatment, storage, pumping and transmission mains, while local municipalities distribute the water to local customers.

Responsibility for wastewater servicing in York Region is also shared between area municipalities responsible for local wastewater collection and pumping, and the Region responsible for major pumping stations, trunk sewers and treatment facilities. The Regional wastewater system is also divided into two distinct components, the York-Durham Sewage System to serve York Region's larger urban communities, and individual wastewater systems serving smaller communities such as the existing Kleinburg-Nashville Water Pollution Control Plant.

Based on public input, four top priorities for York Region's long-term water and wastewater servicing needs were identified. These priorities were translated into evaluation criteria which included consideration for:

- Certainty of supply;
- Water quality and Ontario Drinking Water Standards;
- Air quality; and
- System reliability.

As part of this Master Plan Update, various water and wastewater servicing alternatives were assessed that would effectively accommodate the Region's long-term growth. Based on the physical, hydrological and topographical characteristics of the Region, and considering the location(s) of existing water and wastewater system components, two alternatives were carried forward. These include a Lake Ontario-based servicing scheme and a Lake Simcoe-based servicing scheme. A comparative evaluation of both alternatives resulted in a consensus to proceed with the Lake Ontario-based alternative for the following reasons:

- It best meets the Region's sustainability principles while supporting future growth;
- It protects Lake Simcoe by reducing nutrient discharges;
- It protects Lake Ontario through the advanced treatment afforded by the Duffin Creek Water Pollution Control Plant in Durham Region and the Lakeview Water Pollution Control Plant in Peel Region;
- It supports the Great Lakes water balance by returning flow to Lake Ontario;
- It supports the major investment in Lake Ontario oriented infrastructure already in place; and
- It allows for better water supply system security and operational flexibility.

The City of Vaughan, excluding the Kleinburg-Nashville Community, is connected to a lake based water system (Lake Ontario via supply from Peel Region and the City of Toronto). The majority of the City's wastewater flows from urban areas are directed to the Duffin Creek Water Pollution Control Plant in Durham (York-Durham Sewage System) which outlets to Lake Ontario. The majority of the Kleinburg-Nashville Community's sanitary flows are directed to the existing Kleinburg-Nashville Water Pollution Control Plant and ultimately to Lake Ontario via the Humber River. The remaining rural areas of the City are connected to private septic systems.

#### Implementation Strategy

A priority setting framework has been developed in order to best determine timing and rationale for construction of water and wastewater projects together with implementation of supporting policies and programs. The main issues considered in the priority setting framework were:

- Need to meet existing servicing demands;
- Ability to meet forecast future needs;
- Requirement to comply with regulations;
- Contribution to existing Regional strategies and policies;

- · Contribution to York Region's overall sustainability strategy; and
- Contribution to York Region's water and wastewater sustainability principles.

Three levels of priority were determined and applied to the recommended projects, policies and programs comprising the preferred alternative:

- Priority projects / activities require immediate action to ensure continued water and wastewater system safety and security. These high priority activities are not driven by new growth, but are needed to address existing conditions and ensure compliance with existing regulatory requirements.
- 2. Strategic projects / actions are considered necessary to accommodate forecast future growth as well as potential future changes in regulatory regime.
- 3. Future Growth projects / actions are needed to address forecast future growth over the longer term. These projects are generally subsequent phases of Strategic projects when on-going growth and demand approaches system capacity. In order to make appropriate accommodations, York Region will monitor population and employment growth and adjust the timing of these actions as necessary.

#### Water Projects Within Vaughan

The City's water distribution system is serviced by Regional Water Pressure Districts (PD) 4 through 9 and the Kleinburg Pressure District. Individual projects currently identified in the Region's draft Master Plan Update directly benefiting Vaughan (together with implementation priority and construction timing) are summarized in Table 1 below.

No.	Proposed Water Projects	Implementation Priority	Completion Timeframe
1	PD5 North Kleinburg Reservoir / Huntington Watermain	Strategic	2011-2012
2	PD5 East Woodbridge Pumping Station Decommissioning	Strategic	2011-2016
3	Kleinburg PD6 Booster Station And Existing Well Decommissioning	Strategic	2009-2011
4	Kleinburg PD6 Huntington Road Watermain	Strategic	2009-2011
5	Kleinburg PD6 Reservoir / Huntington Watermain	Future Growth	2022-2026
6	PD7 South Maple Pumping Station Upgrade	Strategic	2009-2011
7	PD7 Reservoir / Jane Street Watermain	Strategic	2011-2016
8	PD8 North Maple Pumping Station Upgrade	Strategic	2009-2011
9	PD8 Reservoir & Connecting Watermain	Strategic	2022-2026
10	PD9 Pumping Station & Watermain	Strategic	2011-2016
11	PD9 Elevated Tank & Connecting Watermain	Future Growth	2022-2026

# TABLE 1

Attachment No. 1 graphically illustrates York Region's overall proposed water projects to the build-out horizon of 2031.

#### Wastewater Projects Within Vaughan

In order to accommodate the currently designated urban areas and planned intensification areas within Vaughan, two new Regional collector sewers are proposed in addition to the West Rainbow Creek Trunk improvements and the Kleinburg Water Pollution Control Plant upgrades currently underway. These wastewater projects specific to Vaughan are summarized in Table 2 below and graphically illustrated in Attachment No. 2.

#### TABLE 2

No.	Proposed Wastewater Projects	Implementation Priority	Completion Timeframe
1	West Rainbow Creek Trunk Improvements	Strategic	2009
2	Kleinburg Water Pollution Control Plant Expansion	Strategic	2009-2011
3	North West Vaughan Collector – Along Highway 27	Strategic	2017-2021
4	North East Vaughan Collector – Along Jane Street	Strategic	2022-2026

The estimated completion timeframes for all planned water and wastewater projects will continue to be monitored by the Region in conjunction with input from staff and the area municipalities. Adjustments may be made as required based on development approvals and the outcome and recommendations of the City's overall Growth Management Strategy, City-Wide OP Review and servicing related Master Plan updates.

#### Servicing Capacity Allocation

Servicing capacity linked to specific infrastructure triggers continues to be distributed by the Region to the area municipalities for allocation on a yearly basis. The draft Water and Wastewater Master Plan updates have carried forward and reaffirmed the need and timing for critical infrastructure projects required to sustain projected growth throughout the Region. One of the key objectives of the combined Master Plan updates is to ensure both water and wastewater system capacities remain in step with projected growth.

Specific Regional infrastructure triggers applicable to the City continue to include the expansion of the Duffin Creek and Kleinburg Water Pollution Control Plants, the Southeast Collector sewer twinning and improvement works, and the Kleinburg Pressure District 6 watermain improvements.

The City will continue to allocate available servicing capacity in an effective and strategic manner in accordance with the current 'Servicing Capacity Distribution Protocol'. In addition, close cooperation with Regional staff will continue to ensure future capacity requirements will be met.

#### Transportation Master Plan Update

In 2002, York Region approved an innovative Transportation Master Plan (TMP) that defined the Region's long-term transportation vision and provided a framework upon which transportation decisions would be made through the year 2031. Since then, the transportation landscape has changed significantly, and now more than ever, the benefits of sustainable transportation choices are being recognized and given priority over simply building new, or expanding existing roadways.

In 2006, York Region initiated an update of its TMP to address future transportation needs in a sustainable and integrated manner to respond to new Provincial initiatives and additional growth in the Region. An innovative study process was developed that allows for the implementation of progressive transit, roadway and policy recommendations that support York Region's Vision of a more sustainable transportation system. The fast paced growth projected to 2031 will be complemented by a transportation system that preserves the environment, enhances the

Region's economic viability, seamlessly integrates with new and existing developments, and offers more reliable travel choices for residents and employees.

#### Transportation Master Plan Process

In support of York Region's Vision to develop its transportation system in a more sustainable manner, the Region identified four key objectives (Four "R's") to reduce single-occupant vehicle (SOV) travel. The four objectives are:

- 1. Develop initiatives and strategies that **R**educe the need to travel;
- 2. Provide more convenient and reliable alteRnative modes;
- 3. Enhance public tRansit by improving existing infrastructure and services; and
- 4. Optimize **R**oads to accommodate all modes of travel, and expand roadways only when necessary.

The TMP process was integrated and coordinated with the Growth Management Initiative, Sustainability Strategy Study, Water and Wastewater Master Plan Study, Pedestrian and Cycling Master Plan, 25-Year Fiscal Impact Study, Environmental Analysis and Land Use Analysis. In addition to the above studies, the TMP process used a set of sustainability principles to guide selection of the preferred solution, a transit-first approach to address capacity deficiency to meet growth demands and ensure that residents and stakeholders were engaged throughout the study.

#### Transit Network Improvements Within Vaughan

The Region's overall recommended transit network improvements encompass all services and infrastructure that would foster transit use. Transit policies and strategies have also been identified and developed to complement the proposed network improvements. The planned transit improvements, policies and strategies with immediate impacts to Vaughan include:

- 1. A Go Transit rail extension from Steeles north through Woodbridge and Kleinburg;
- 2. The Spadina Subway extension to the Vaughan Metropolitan Centre;
- 3. The Yonge Subway extension to the Richmond Hill Centre;
- 4. Bus Rapid Transit (BRT) or Light Rail Transit (LRT) within dedicated rights-of-way along portions of Bathurst Street / Dufferin Street, Highway 7, Jane Street, Steeles Avenue and Major Mackenzie Drive providing efficient transit connectivity between major Regional Centres including Vaughan Metropolitan Centre, Richmond Hill Centre and Markham Centre;
- 5. Transit priority corridors that may include HOV / transit lanes, transit signal priority measures and/or queue jump lanes to ensure more efficient transit operations along portions of Major Mackenzie Drive, Rutherford Road, Highway 27, Weston Road, Keele Street, and Bathurst Street; and
- 6. A special transit network improvements study area identified as the "Bathurst Street / Dufferin Street North-South Rapid Transit Corridor Study" to determine the rapid transit route alignment in the Bathurst Street and Dufferin Street Corridor based on more detailed transit ridership forecasts, network connectivity and area development potential.

The overall 2031 transit network plan identifies proposed Regional Centres / Anchor Hubs (including Vaughan Metropolitan Centre, Richmond Hill Centre and Markham Centre). These hubs are consistent with the strategic growth centres indentified in Metrolinx's plan and are focal areas for directing significant high density population and employment growth, major transit infrastructure, and a mix of land uses to act as anchors for the regional transportation system.

Attachment No. 3 graphically illustrates York Region's overall transit network improvements plan to 2031.

## Regional Road Network Improvements Within Vaughan

Proposed road improvements include infrastructure and technology enhancements to improve general traffic flow and goods movement and to facilitate the movement of local and rapid transit services. The types of improvements proposed through to 2031 generally include:

- Arterial road widening projects of select two-lane roads to accommodate new population and employment in emerging growth areas;
- New mid-block collector road crossings of 400-series highways thereby improving local traffic connectivity, providing better transit service coverage, improving walking and cycling opportunities;
- New regional road segments designed to complete the arterial grid system;
- Provincial highway improvements to facilitate goods movement and inter-regional travel;
- New or improved interchanges, road/rail grade separations and major arterial road jog eliminations; and,
- Arterial road improvements for select four-lane roads to accommodate rapid transit and transit priority networks which promote transit use and carpooling.

#### Transit / Road Network Improvements Phasing Plan

The Region has developed a TMP phasing plan through 2031 to ensure appropriate strategies and policies are in place prior to completing some of the more significant infrastructure improvements. The goal of the proposed phasing plan is to ensure that the Region's Four "R's" are met.

Some of the projects currently being implemented in York Region with immediate impacts to Vaughan include:

#### Transit Environmental Assessments (EA), Studies & Design Assignments

- Yonge Subway Extension
- Spadina Subway Extension
- Highway 7 Transitway
- MTO 407 Transitway Class EA
- YRT Maintenance and Storage Facility at 8300 Keele Street
- Canadian Environmental Assessment Act (CEAA) approval for Viva projects
- York Region's Priority Network, Currently Warranted Network and Methodology Report

#### Pedestrian and Cycling Master Plan Implementation

- Municipal Partnership Program
- Local Outreach and Promotions
- Planning and Design Guidelines
- Inclusion of bike facilities in road construction programs

#### Travel Demand Management (TDM) Initiatives

- Development of Conditions for TDM Initiatives in Blocks 11, 12 and 18
- Bike racks on buses and at stops
- Support of TMA's, events, and projects
- Establishment of Transit Oriented Development (TOD) Guidelines and TDM checklists

# Proposed Phasing: Rapid Transit Corridors

The planned transit network improvements within Vaughan have been summarized in Table 3 below.

TABLE	3
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Short-Term (0 – 5 years)				
•	<ul> <li>VivaNext Bus Rapid Transit Corridors on Highway 7 and Yonge Street <ul> <li>Highway 7 from Pine Valley Drive to Kennedy GO Station</li> <li>Yonge Street from Highway 7 to 19<sup>th</sup> Avenue</li> </ul> </li> <li>Spadina Subway Extension (to the Vaughan Metropolitan Centre)</li> <li>Yonge Street Subway Extension (to the Richmond Hill Centre)</li> <li>Transit Priority Network along portions of Major Mackenzie Drive, Rutherford Road, Keele Street, Dufferin Street, and Bathurst Street</li> </ul>			
Mid-Term	(10 years)			
• • •	Major Mackenzie Drive Rapid Transit Corridor (Weston Road to Ninth Line) Jane Street Rapid Transit Corridor (Steeles Avenue to Major Mackenzie Drive West) Highway 7 Rapid Transit Corridor (west of Pine Valley Drive) Transit Priority Network along portions of Major Mackenzie Drive, Rutherford Road, Highway 27, Weston Road, Keele Street, Dufferin Street, and Bathurst Street			
Long-Terr	n (20 years)			
• • •	Steeles Avenue Rapid Transit Corridor (Highway 27 to York-Durham Boundary) Bathurst – Dufferin Street Rapid Transit Corridor (Steeles Avenue to Gamble Road/19 <sup>th</sup> Avenue) Transit Priority Network along portions of Highway 27 and Rutherford Road Rapid Transit Corridors recommended for conversion from Bus Rapid Transit (BRT) to Light Rail Transit (LRT) on Yonge Street from Highway 7 to Davis Drive, Highway 7 from Yonge Street to Reesor Road, and Jane Street from Highway 7 to Major Mackenzie Dive			

# Proposed Phasing: Roadways

The planned road network improvements within Vaughan have been summarized in Table 4 below.

# TABLE 4

Short-Term (0 – 5 years)		
• • • • • • • • • • • • • • • • • • • •	Highway 50 improvement to 6 lanes (from Rutherford Road to Mayfield Road) Langstaff Road improvement for capacity (from Highway 27 to Highway 50) New mid-block collector roads crossing Highway 400 (Portage Parkway Overpass and North Maple Bridge) Langstaff Road Missing Link Transportation Needs Study East-west mid-York Transportation Needs Study Improvements to the Highway 400 / Highway 7 interchange Road/rail grade separations	

## Mid-Term (10 years)

- Improvements for capacity along portions of Highway 27, Pine Valley Drive, Teston Road, Langstaff Road and Dufferin Street
- New mid-block collector roads crossing Highway 427 north of Langstaff Road
- New mid-block collector roads crossing Highway 400 north of Rutherford Road
- Teston Road missing link between Keele Street and Dufferin Street
- Road/rail grade separations

### Long-Term (20 years)

- Highway 50 improvements to 6 lanes (from Steeles Avenue to Highway 7)
- Improvements for capacity along portions of Weston Road, Jane Street, Dufferin Street and King-Vaughan Road
- New mid-block collector roads crossing Highway 400 north of Kirby Road
- Improvements to the Highway 400 / Steeles Avenue West interchange
- Road/rail grade separations

## Provincial and Local Road Network Improvements Within Vaughan

In addition to the above noted Regional road network improvements, the following is a summary of other recommended major road network improvements which fall within provincial or local municipal jurisdiction.

#### Highway 407

Partial interchange at Martin Grove Road Partial interchange at Centre Street

#### **GTA West Corridor**

(Highway 400 and West into Peel Region)

### Highway 427 Extension to GTA West Corridor

(Highway 7 to Major Mackenzie Drive) (Major Mackenzie Drive to GTA West Corridor)

Mid-York East-West Corridor / King-Vaughan Road Improvements

(Highway 400 to Bathurst Street)

## Mid-Block Collector Road Crossings of 400 Series Highways

Block 59 - Highway 427 Crossing Block 30 - Portage Parkway Crossing of Hwy 400 Block 33 - Canada Drive / America Avenue Crossing of Hwy 400 Block 35 - Highway 400 Crossing north of Kirby Road Block 32 – Highway 400 north of Rutherford Road

It is important to note that the Block 32 Highway 400 overpass across the Highway 400 corridor between Rutherford Road and Major Mackenzie Drive was identified in Official Plan Amendment 600. Further, on December 16, 2002, Council directed staff to bring forward an amendment to OPA 600 for the purpose of deleting the Highway 400 overpass from Block 32. As a result, on January 13, 2003, Official Plan Amendment 603 was adopted by Council thereby deleting the Highway 400 overpass in Block 32 from OPA 600. Notwithstanding this, the Region of York has carried forward the need to protect for this overpass. The draft Regional Master Plan update

identifies these roadway components to be beneficial for improving local traffic connectivity, providing better transit service coverage, and improving walking and cycling opportunities.

#### Western Vaughan Individual Environmental Assessment

The Region is currently undertaking the Western Vaughan Transportation Improvements Individual Environmental Assessment Study to identify transportation deficiencies in western Vaughan, develop alternatives to address the problems and obtain environmental approvals for the preferred alternative. The preferred alternative could consist of a number of transportation and transit improvements that will be needed to satisfy east-west and north-south travel demands by the year 2031 and may perhaps superceed the draft Transportation Master Plan recommendations identified within the Western Vaughan study area.

#### Langstaff Road Missing Link Transportation Needs Study

The Langstaff Road Missing Link Transportation Needs Study is one of four special studies identified within the road network improvements component of the Region's Master Plan Update. This study is required to examine the potential benefits and costs for constructing the Langstaff Road missing link over the CN Rail Yards. The transportation capacity implications in the area include travel demands along Highway 7, Highway 407 and Rutherford Road. Major intersection operational requirements impacting this east-west corridor throughout Vaughan will also be assessed as part of this study. The opportunities for diversion of goods movements between Highway 400 and Jane Street on Highway 7 should be examined as well.

As the conclusions and recommendations of this study may have significant impacts on the required transportation network to efficiently service the proposed Vaughan Metropolitan Centre (one of the most significant Regional Centres / Anchor Hubs within the Region and the terminus point for the Spadina Subway Extension scheduled to be in service by 2015), it is recommended that this study be commenced immediately.

Subsequent implementation of any resulting transportation network improvements identified in this study will be one of the key driving factors to facilitate significant high density population and employment growth with a mix of land uses within the Vaughan Metropolitan Centre by 2015.

#### Conformance with the Metrolinx Regional Transportation Plan (RTP)

The approved Metrolinx RTP contains policies that require municipal plans to conform to the RTP. Enabling legislation is currently being developed to put these policies into effect. York Region's Transportation Master Plan Update is closely aligned with the Metrolinx plan with its focus on sustainability and non-auto modes of travel, transit network recommendations, and policies and initiatives.

The majority of the recommended rapid transit lines in York Region's plan are also included in the Metrolinx 25-year network plan. However, York Region has undertaken a more thorough analysis of its needs and taken a more aggressive approach to sustainable transportation. The proposed Bathurst-Dufferin rapid transit line is not identified in the Metrolinx 25-year network plan. Also, the Major Mackenzie Drive line is identified by Metrolinx as needed beyond the 25-year timeframe, whereas the Region has determined that this will be a vital corridor in the more immediate future. These slight network differences are likely the result of variation in the base assumptions of future conditions for growth projections and development phasing.

#### Vaughan's Growth Management Strategy

The City's Growth Management Strategy is now well underway. This process includes a City-Wide Official Plan review and consolidation in order to meet Provincial and Regional growth targets to the horizon year of 2031. A number of local master plan updates will be required in support of this on-going planning review exercise. The City's environmental master plan, 'Green Directions Vaughan', has recently been completed and endorsed by Council. The City's Transportation Master Plan is also well underway. Staff is currently finalizing Terms of Reference for the City's Water, Wastewater and Storm Water Management Master Plan Updates which will be brought forward for endorsement by Council in the near future.

The Regional Master Plan Update documents will be used as the framework for the City's local master plan updates. Reconciliation of both the City and Regional Master Plans will be required once the City's Growth Management Strategy process has been completed.

## Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of this report will contribute to:

- Enhancing and ensuring community safety, health and wellness;
- The pursuit of excellence in service delivery;
- Leadership and promotion of environmental sustainability;
- Planning and managing growth and economic vitality; and,
- Promoting effective governance.

Specific Strategic Plan Initiatives applicable to the recommendations made in this report include Vaughan's corporate priorities to:

- Develop a city-wide Master Phasing and Servicing Allocation Plan;
- Work with other levels of government to continue to support the expansion of the Go Rail System, local transit and the Subway;
- Continue to support the Highway 427 extension;
- Support and plan high capacity transit at strategic locations throughout the City; and
- Develop a strategy on completing the Langstaff, Teston and Kirby Road missing links.

This report is therefore consistent with the priorities previously set by Council.

#### **Regional Implications**

The Region of York has issued the statutory public notice of study completion for the Water, Wastewater and Transportation Master Plan Updates for a minimum period of 30 days. The draft reports are currently on public record to allow for final public and stakeholder consultation until September 30, 2009. Any comments regarding the Master Plan Updates must be directed to the Region of York on or before this date. All comments received during the 30-day public review period will be considered and incorporated into the final study reports. It is anticipated that final Reports will be prepared and presented to Regional Council for endorsement later this year.

#### Conclusion

In June 2009, the Region of York issued the statutory public notice of study completion for the Water, Wastewater and Transportation Master Plan Updates. The draft reports are currently on public record to allow for final public and stakeholder consultation until September 30, 2009. The Regional Master Plans will support the planned growth to 2031 and beyond, and will be used as the framework for the City's on-going Growth Management Strategy and Master Plan Updates. Accordingly, it is recommended that Council endorse the Region of York draft Water, Wastewater and Transportation Master Plan Update Reports subject to the staff comments contained in this report.

#### **Attachments**

- 1. York Region Water Projects 2031
- 2. York Region Wastewater Projects 2031
- 3. York Region 2031 Transit Network
- 4. York Region 2031 Road Network
- 5. City of Vaughan Master Plan Update Comments

#### Report prepared by:

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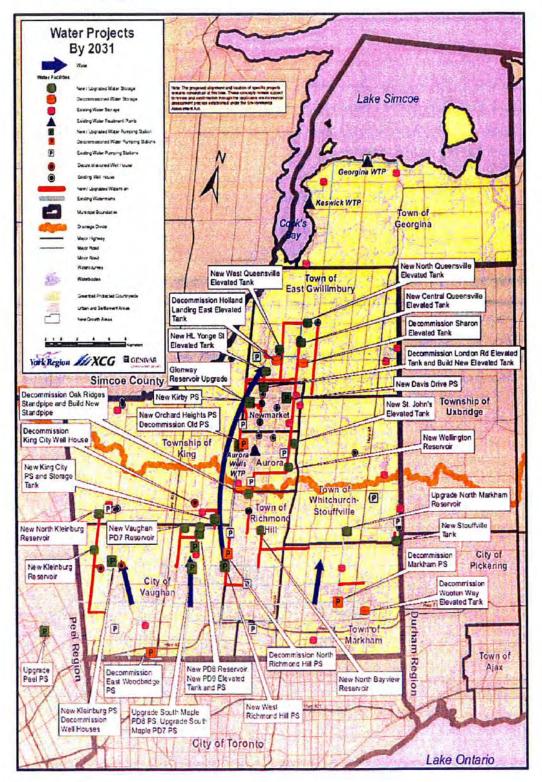
Respectfully submitted,

Bill Robinson, P.Eng. Commissioner of Engineering and Public Works Andrew Pearce, C.E.T. Director of Development/ Transportation Engineering



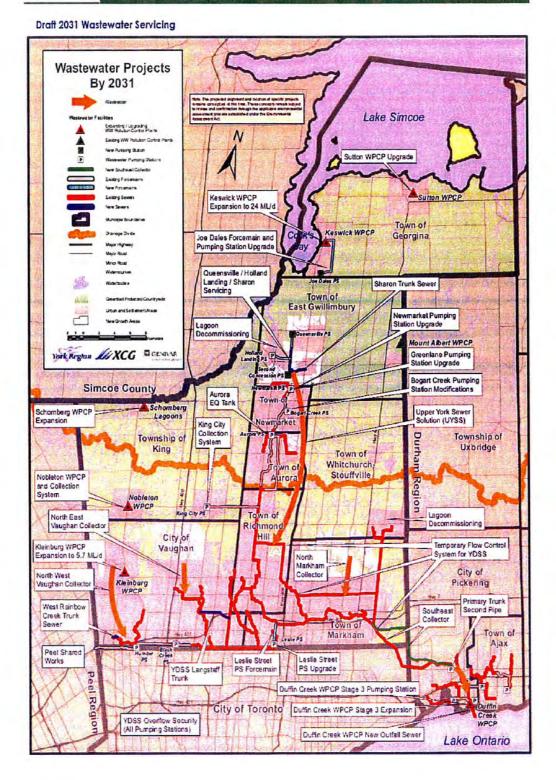
# Water and Wastewater Master Plan Update

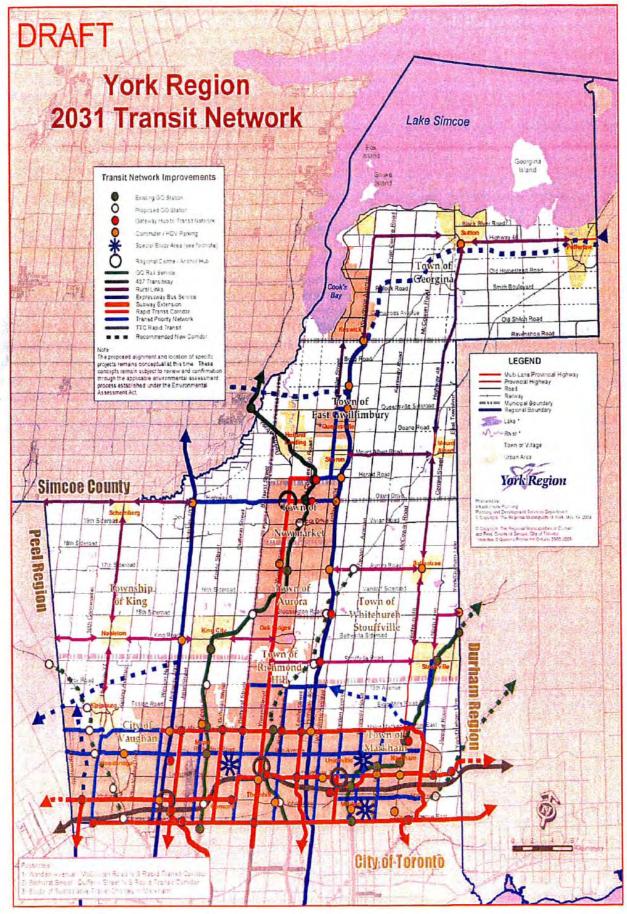
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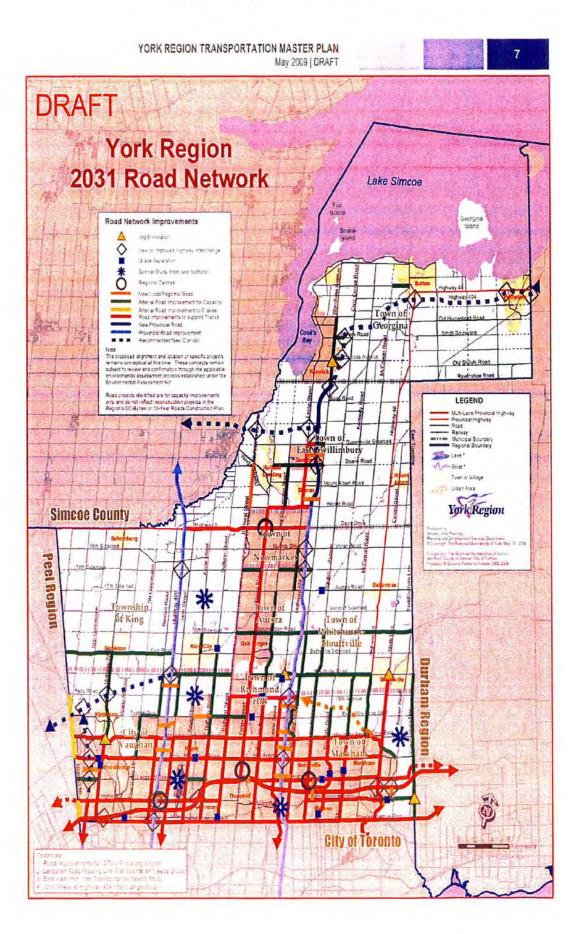


York Region

Water and Wastewater Master Plan Update









# CITY OF VAUGHAN COMMENTS YORK REGION DRAFT WATER, WASTEWATER AND TRANSPORTATION MASTER PLAN UPDATE

## Water And Wastewater Master Plan Comments

- 1. Alternative alignments for the proposed Northwest Vaughan Collector and Northeast Vaughan Collector sewers shall be considered and coordinated with local trunk sewers as required to service approved and future growth areas.
- The estimated construction timing for the Northwest and Northeast Vaughan Collectors should be advanced from the current 2016-2021 timeframe to 2011-2016. It is anticipated that these sewers will be required sooner in order accommodate currently approved urban development areas including the West Vaughan Enterprise Zone (Regional OPA 19) and the Highway 400 North Employment lands (City OPA 637).
- 3. Confirmation is required as to the available capacity of the existing Black Creek Sanitary Pumping Station and Forcemain. It is expected that significant transit oriented developments tributary to this pumping station may proceed within the timeframe of 2011-2016. These development areas include Vaughan's OPA 620 lands (including the Steeles West Subway Station and York Regional Bus Terminal) and the Vaughan Metropolitan Centre lands (including the VMC Subway Station). As the VMC is considered a significant Regional Centre and the Spadina Subway extension is on schedule for completion by 2015, adequate system capacity to the Black Creek Pumping Station is required.
- 4. Additional clarification is required on the timing for the on-going YDSS diversion to Peel and future additional capacity from the Peel system. How will this issue be addressed? How will this impact the proposed Northwest Vaughan Collector and the anticipated development timing for the West Vaughan Enterprise Zone (ROPA 19), and the intensification targets within the Woodbridge Core and Kleinburg-Nashville areas.
- 5. There appear to be inconsistencies in the timing and description of required servicing works between the detailed tables and maps in Appendix 4 and the main body of the Master Plan Update report.
- The mapping presented in Appendix 4 of the proposed water system improvements are not legible at the current scale. Mapping for individual municipalities should be provided at a more appropriate scale for use in preparation of local water system master plan updates.
- 7. Additional clarification should be provided on the current and proposed water supply system capacities from Peel Region and the City of Toronto, including the identification of any limitations to water supply that may impact the availability of servicing capacity for individual municipalities. Is the timing and availability of water supply in step with the an proposed system capacities for wastewater?



 Improvements to the Region's 300 mm diameter watermains within Kleinburg have not been addressed in order to support the planned intensification within the Kleinburg-Nashville area.

## Transportation Master Plan Comments

1. The Langstaff Road Missing Link Transportation Needs Study is one of four special studies identified within the road network improvements component of the Region's Master Plan Update. This study is required to examine the potential benefits and costs for constructing the Langstaff Road missing link over the CN Rail Yards. The transportation capacity implications in the area include travel demands along Highway 7, Highway 407 and Rutherford Road. Major intersection operational requirements impacting this eastwest corridor throughout Vaughan will also be assessed as part of this study. The opportunities for diversion of goods movements between Highway 400 and Jane Street on Highway 7 should be examined as well.

As the conclusions and recommendations of this study may have significant impacts on the required transportation network to efficiently service the proposed Vaughan Metropolitan Centre (one of the most significant Regional Centres / Anchor Hubs within the Region and the terminus point for the Spadina Subway Extension scheduled to be in service by 2015), it is recommended that this study be commenced immediately.

Subsequent implementation of any resulting transportation network improvements identified in this study will be one of the key driving factors to facilitate significant high density population and employment growth with a mix of land uses within the Vaughan Metropolitan Centre by 2015.

2. The East-West Mid-York Transportation Needs Study (bounded to the north by Highway 9 and to the south by Teston Road) is proposed to examine the arterial road capacity requirements to serve current and future east-west travel demand between Highway 400 and Highway 404. The study is envisioned as the east extension of the GTA West Corridor to Bathurst Street. The Teston Road missing link between Dufferin Street and Keele Street has been indentified as part of the Draft 2021 Road Network as one of the options for the mid-York East-West corridor solution as well as improvements on King Vaughan Road.

This study should take a broader look at the transportation issues in the area including the missing arterial roads links (Kirby Road, Teston Road and Langstaff Road) in the central part of York. The study should also examine an east-west corridor to properly distribute inter-regional traffic. The Ontario Ministry of Transportation (MTO) has initiated an Environmental Assessment (EA) Study for the GTA West Corridor to examine long-term transportation problems and opportunities to the year 2031 and to consider alternative solutions to provide better linkages between Urban Growth Centres in the GTA West Corridor Preliminary Study Area including the Vaughan Metropolitan Centre.

3. It is important to note that the Block 32 Highway 400 overpass across the Highway 400 corridor between Rutherford Road and Major Mackenzie Drive was identified in Official Plan Amendment 600. Further, on December 16, 2002, Council directed staff to bring forward an amendment to OPA 600 for the purpose of deleting the Highway 400 overpass from Block 32. As a result, on January 13, 2003, Official Plan Amendment 603 was adopted by Council thereby deleting the Highway 400 overpass in Block 32 from OPA 600.



General Comments

1. The City's Growth Management Strategy is now well underway. This process includes a City-Wide Official Plan review and consolidation in order to meet Provincial and Regional growth targets to the horizon year of 2031. A number of local master plan updates will be required in support of this on-going planning review exercise. The City's environmental master plan, 'Green Directions Vaughan', has recently been completed and endorsed by Council. The City's Transportation Master Plan is also well underway. Staff is currently finalizing Terms of Reference for the City's Water, Wastewater and Storm Water Management Master Plan Updates. It is anticipated that a report will be brought forward in the near future requesting endorsement of these terms thereby allowing the projects to commence. The Regional Master Plan Updates. Reconciliation of both the City and Regional Master Plans will be required once the City's Growth Management Strategy process has been completed.