

Engineering Department

Capital Program Update


Presentation to

Development Services Committee

Monday, April 26th, 2010



Schedule Assumptions

- Public / development needs
- Traffic / pedestrian / cyclist demands
- Property acquisitions
- Capital funding approvals
- Agency approvals and permits
- Staff resources
- Program to be updated upon the completion & approval of the growth management study & MSTP 

Funding summary

- **Engineering Capital Works section manages \$30 to \$40 million capital programs each year**
- **With initiatives from the Centre of Excellence and the E3 process, Engineering Capital Works section will manage an additional \$9± million capital programs from Asset Management and Operations each year**



Projected Expenditure Summary

- 34 million in 2010
- 27 million in 2011
- 36 million in 2012
- 24 million in 2013
- 15 million in 2014
- 105 million beyond 2014



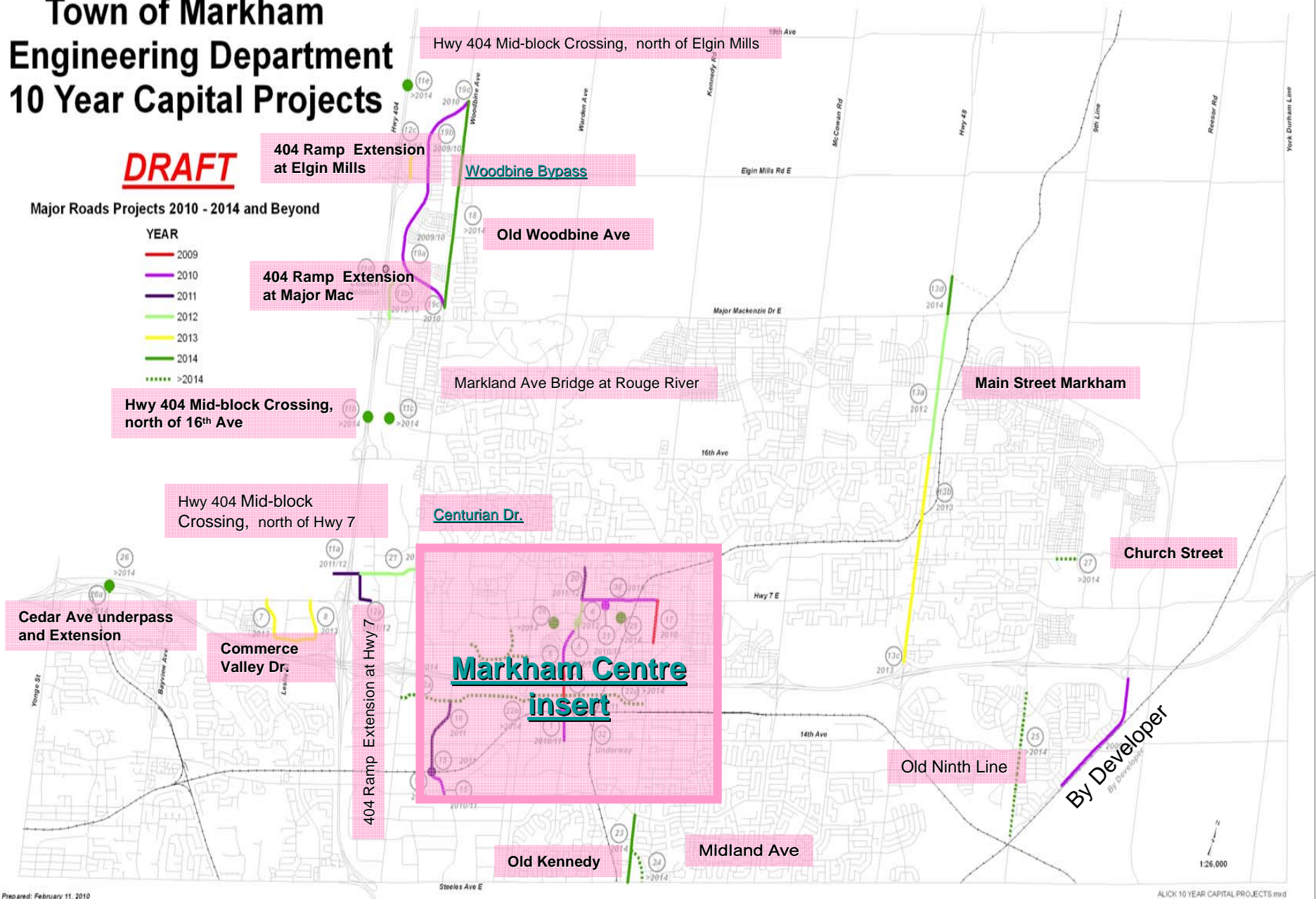
Town of Markham Engineering Department 10 Year Capital Projects

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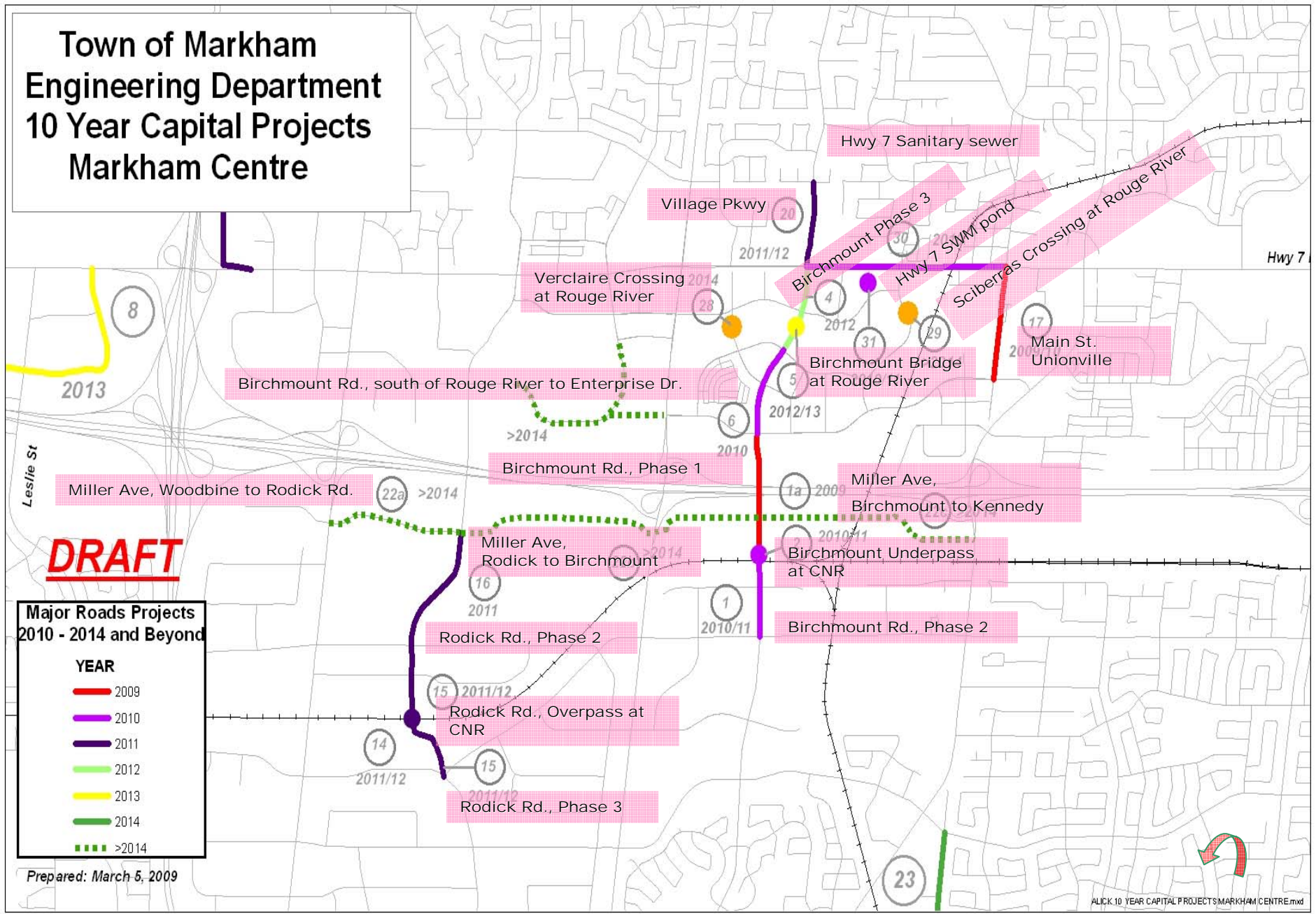
Major Roads Projects 2010 - 2014 and Beyond

YEAR

- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- >2014



Town of Markham Engineering Department 10 Year Capital Projects Markham Centre



1, 2 Birchmount Road, Phase 2

- **Extension of Birchmount Road from 14th Avenue to CN Rail with a CN grade separation**
- **Tendering late spring of 2010**
- **Construction in 2010 and 2011**
- **Utility relocation at 14th Ave in 2010**
- **Completion and open to traffic early 2012**
- **CN flagging and coordination**
- **Temporary track division of the CN rail in 2010**
- **Reinstate the CN rail alignment in 2011**



1a Birchmount Road, Phase 1

- **Birchmount Road extension from Enterprise Drive to CN rail including a grade separation under Hwy 407**
- **Construction completed in 2009 with minor cleanups in the spring of 2010**
- **Markham District Energy plant is under construction on the west side**
- **Road will not be opened to traffic until it has been extended south of the proposed CN grade separation in 2012**



4, 5

Birchmount Phase 3 & Bridge at Rouge River

- **The Class EA of Birchmount Road extension from 14th Avenue to Hwy 7 was completed in May 1996**
- **A Class EA addendum is currently underway to look at the details of the Rouge River crossing. The first public information centre (PIC) was held on February 25th of 2010**
- **The bridge is scheduled to be constructed in 2012/2013**
- **Birchmount Road extension from Rouge River to Hwy 7 will be constructed by the developer (Times Group) as part of the subdivision process in 2011/2012**



6 Birchmount Road, Rouge River to Enterprise Dr.

- **Birchmount Road extension from Rouge River to Enterprise Drive is being constructed by the developer (Remington Group) as part of the development construction**
- **The southern portion is complete**



7, 8 Commerce Valley Dr. Widening

- **Initiate Class Environment Assessment (EA) late 2011 / early 2012 to review the widening in order to accommodate an extra traffic lane and also a bike lane**
- **Detailed design in 2012**
- **Construction in 2013**



11a Hwy 404 Mid-block Crossing, north of Hwy 7

- Finalizing the tri-party agreement with the Region and the Town of Richmond Hill for the design phase
- Engage the design consultant in mid 2010
- Design and approvals (including approval from MTO) in 2010/2011
- Amendment to the tri-party agreement with the Region and Town of Richmond Hill for the construction phase in late 2010/2011
- Construction tender to be issued in 2011/2012 subject to funding commitment by the Region and the Town of Richmond Hill
- Completion and open to traffic by the end of 2013



11b, c Hwy 404 Mid-block Crossing, north of 16th Ave & Markland Ave Bridge at Rouge River

- **The Region will initiate the Class Environmental Assessment (EA) in 2010 to review this mid-block crossing**
- **Construction of the mid-block crossing is beyond 2014 depending on the Region and Richmond Hill funding and property**
- **Construction of the Markland bridge at Rouge River is also beyond 2014**



11e Hwy 404 Mid-block Crossing, north of Elgin Mills

- **The feasibility and Class Environmental (EA) study are to be initiated by the Region**
- **A deadline of December 31, 2011 has been provided to the Region to complete their study or staff will recommend to Council to lift the “holding” status on the developer’s land**
- **There is no proposed schedule for the construction of this mid-block crossing**



12a Hwy 404 Ramp Extension at Hwy 7

- **This ramp extension will be designed and constructed together with the Hwy 404 mid-block crossing north of Hwy 7**
- **RFP to engage a consultant to perform the design to be released in late spring of 2010 with the Mid-block Crossing**
- **Award the design in the summer of 2010**
- **Design and approvals (including approval from MTO) in 2010/2011**
- **Construction tender to be issued in 2011/2012**
- **Completion and open to traffic end of 2013**



12b Hwy 404 Ramp Extension at Major Mac

- **Class Environmental Assessment (EA) completed in 2009**
- **Hire the design consultant in the summer of 2010**
- **The initial 20m road right-of-way required to be dedicated under the Planning Act as part of the adjacent subdivision**
- **Further property acquisitions (in 2011) will be required to accommodate the grading**
- **Construction in 2012/2013 subject to the developer funding their share of the local road contribution**
- **Open to traffic in 2014**



12c Hwy 404 Ramp Extension at Elgin Mills

- **Class Environmental Assessment (EA) underway**
- **2nd Public Information Centre in the fall of 2010**
- **Filing of the Class EA document end of 2010 / early 2011**
- **Detailed Design in 2011**
- **Property Acquisition in 2012 including extra land required for the new on-ramp to Hwy 404**
- **Construction in 2013/2014 subject to the developer funding their share of the local road contribution**
- **Open to traffic in 2015**



13 Main Street Markham

- **Second Public Information Centre (PIC) on April 28th, 2010 and the filing of the Class EA in the summer of 2010**
- **Engage a design consultant in the fall of 2010 for the section from 16th Avenue to Major Mackenzie with construction in 2012**
- **Phased Design of the section from Hwy 7 to 16th in 2010/2011 with construction in 2013**
- **Design of the section south of Hwy 7 in 2011 with construction in 2013**
- **Design of the section north of Major Mackenzie in 2012 with construction in 2014 subject to the Region completing the Donald Cousens Parkway at Markham Road**



14, 15 Rodick Road Phase 3 with CN Grade Separation

- **Construction of a CN Grade Separation and a new road from 14th Avenue to Esna Park Drive/Alden Road intersection**
- **Requires several land acquisitions including expropriations of between one to four properties**
- **Design is 85% complete**
- **Utility relocations at the intersection of Esna Park Drive in early 2011**
- **Construction tender in the fall of 2011**
- **Completion and open to traffic by the end of 2013**



16 Rodick Road, Phase 2

- **To widen the existing 2 lane rural road to a 4 lane urban road from Miller Avenue to 14th Avenue**
- **Class environmental assessment (EA) completed in February 2003**
- **Project was on hold in 2007 to resolve the storm water management (SWM) pond with Miller Development and mutual servicing issues which now has been resolved**
- **Detailed design was awarded in March 2010**
- **Construction in the fall of 2011**
- **Completion and open to traffic end of 2013**



17 Main Street Unionville, south of Hwy 7

- **This project is currently under construction**
- **Main Street Unionville reconstruction from 4 lanes to 2 lanes with parking bays and enhanced streetscape (from Hwy 7 to Enterprise Drive)**
- **Remaining work to be completed in the fall of 2010**



18 Old Woodbine Avenue

- **Existing Woodbine Avenue reconstruction will undergo Class Environmental Assessment (EA) in 2013**
- **Detailed Design in 2014**
- **Construction to be finalized beyond 2014**



19 Woodbine Bypass

- **Funded by Cathedral and 404 North Developers under the tri-party agreement**
- **80% complete with 50% opened to traffic including the access to Honda Blvd from Elgin Mills Road**
- **The outstanding phases are 1A (South end) and 3B (North end) to be tendered spring 2010**
- **Completion and open to traffic by the end of 2010**
- **Cost \$18 million**



20 Village Pkwy Reconstruction

- **Reconstruct Village Parkway to an urban cross section from Hwy 7 to Landmark Court**
- **The Class Environmental Assessment (EA) has been initiated and to be filed by end of 2010**
- **Construction by developer in 2011/2012**



21

Centurian Drive Reconstruction

- Widening of the existing the road to accommodate a centre left turn lane.
- This will facilitate the mid-block crossing over Hwy 404, north of Hwy 7
- Design is 60% complete.
- Construction in 2012 subject to property acquisitions
- Construction will be coordinated with the mid-block crossing over Hwy 404, north of Hwy 7
- Completion and open to traffic by the end of 2013



22a Miller Avenue, Woodbine to Rodick

- **Class environmental assessment (EA) has been initiated together with the section from Rodick to Birchmount**
- **Widen existing Miller Avenue from 2 lane rural cross section to 4 lane urban cross section**
- **Construction is to be finalized beyond 2014**



22b Miller Avenue, Rodick to Birchmount

- **Class environmental assessment (EA) has been initiated together with the section from Woodbine to Rodick**
- **Ongoing discussion with rapid transit to share an alignment in order to avoid the existing hydro transmission towers (located just south of Hwy 407)**



22c

Miller Ave, Birchmount to Kennedy

- **Feasibility study underway to investigate the costs associated with various options**
- **Preliminary estimates to extend Miller Ave to Kennedy Road is estimated at \$40 million**
- **Miller extension intersecting Kennedy Road will be a major challenge**




23 Old Kennedy Rd. improvement

- **Old Kennedy Road improvement (Steeles Avenue to Denison Street) Class Environmental Assessment (EA) in 2012/2013 to improve drainage and narrowing from 4 to 2 lanes (south of Aldergrove Drive)**
- **The Class EA should be performed in conjunction with the Class EA of Midland Avenue extension (Steeles Avenue to Old Kennedy Road)**
- **Construction should proceed after the Midland Avenue extension (beyond 2014)**



24 Midland Avenue

- **Midland Avenue extension (Steeles Avenue to Old Kennedy Road) Class Environmental Assessment (EA) in 2012/2013**
- **The Class EA should be performed in conjunction with the Class EA of Old Kennedy Road (Steeles Ave to Denison Street)**
- **Construction is to be finalized beyond 2014** 

25 Old Ninth Line Improvements

- **Old Ninth Line Improvements from Ninth Line Bypass to Donald Cousens Parkway to be reconstructed beyond 2014**
- **A Class Environmental Assessment (EA) has to be carried out to confirm the future cross section of the road (i.e. urbanized with sidewalk, illumination and streetscape)**



26, 26a

Cedar Ave underpass & extension

- **Cedar Avenue extension from Langstaff Road to the Town of Richmond Hill including an underpass at Hwy 407 and also at Hwy 7**
- **Construction to be finalized beyond 2014 and will be required as part of phase 1 of Langstaff Gateway**



27 Church Street - Ninth Line to Bur Oak

- **Adding a centre left turn lane and bike lanes onto an existing 2 lane section, east of Country Glen Road**
- **Transforming an existing 4 lanes section into a 2 lane cross section with bike lanes and centre left turn lane, west of Country Glen Road**
- **A Class Environmental Assessment (EA) to be carried out in 2013**
- **Estimated construction in 2016/2017 subject to the completion of the hospital expansion**



28 Verclaire Gate Bridge at Rouge River

- **The Class EA of Verclaire Gate Bridge at Rouge River is currently underway**
- **The first public information centre (PIC) was held on February 25th of 2010**
- **Construction is to be finalized beyond 2014**



29 Sciberras Crossing at Rouge at Rouge River

- **Part of the Markham Centre developments to have additional collector road connecting onto Hwy 7**
- **The bridge construction is to be finalized beyond 2014**



30 Hwy 7 sanitary sewer

- **Phase 1 (Main Street Unionville south of Hwy 7) is complete**
- **Phase 2 along Hwy 7 from Village Pkwy to Main Street Unionville has been designed**
- **The developers group will construct the sewer in 2010/2011**
- **The developer group is also front ending the cost of the required land acquisition at the GO rail crossing**



31 Hwy 7 stormwater management pond

- **Property and easement have been acquired by the Town from the Sheridan Nursery**
- **Developer to construct the pond in 2010/2011**

