Engineering Department

Major Capital Project Update Presentation to General Committee August 28, 2006

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Major Road & Structure Projects

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Project – Enterprise Drive – GO Rail Separation

	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/ Actions
Previous status (update report April 28, 2006	Completed	completed	Completed	Completed	Completed and open to traffic mid November 2005 in maintenance period	\$24.7 million	 Recovery of funds from Region and MDE Finalize bridge maintenance agreements with Region & GO
Current Status	Completed	Completed	Completed	Completed	Maintenance period expires November 2006	Projected to be less than \$24.7 million	•Cost recoveries •Maintenance agreement with Region and GO •Resolution of Greenbelt VW claim

Project – Enterprise Phase 2

	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/ Actions
Previous status (Update Report April 28 th 2006)	Completed	50% completed design to be completed	Region of York, MOE and TRCA approvals required	Quan property acquisition negotiations ongoing	Scheduled for 2010/2011	Estimated 10.6 million	Acquisition of Quan property
Current status	Completed Design underway to be completed in 2006/2007	Region of York, MOE and TRCA approvals required	Region of York, MOE and TRCA approvals required	Expropriation of Quan property underway	Scheduled for 2010/2011	Estimated \$10.6 million	Acquisition of Quan property

Project Main Street Unionville Reconstruction – Hwy 7 to Enterprise Drive

	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/ Actions
Previous status (Update report April 28, 2006)	Completed	Design to be completed	Region of York, MOE and TRCA approvals required	None identified	Scheduled for 2010/2011	Estimated \$2.1 million	 Construction timing Funding for streetscape and bridge improvements
Current Status	Completed	Design underway to be completed in 2006/2007	Region of York, MOE and TRCA approvals required	None identified	Scheduled for 2010/2011 in conjunction with Enterprise Drive	Estimated \$2.1million	 Construction timing incl. coordination of Hwy 7 sanitary sewer Funding for streetscape & bridge improvements

Rodick Road – Rodick Road/Hwy 407

Overpass

	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/ Actions
Previous status (Update Report April 28, 2006)	Completed	Completed	Completed	•ORC property transfer outstanding •Magna expropriation costs to be finalized	 Overpass construction underway Schedule accelerated Completion scheduled October 2006 	\$12.8 million + delay claim (confidential)	• Resolution of delay claim
Current Status	Completed	Completed	Completed	 Balance of ORC property acquisition underway Magna expropriation costs to be finalized 	 Overpass construction completed, roadwork underway Schedule accelerated Completion schedule early October 2006 	 \$12.8 million + delay claim (confidential) Projected to be less than current budget 	•Resolution of delay claim

Rodick Road Reconstruction - Miller Avenue to 14th Avenue

	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/ Actions
Previous status (Update report April 28, 2006	Completed	 Road and servicing revisions to accommodate Miller development Ongoing 	MOE and TRCA approvals required	•75% complete •Balance of acquisition ongoing	Scheduled summer/fall 2006	Estimated \$5.5 million	 Local services to accommodate Miller Development added to contract Agreement with Miller re front end financing Servicing requirements to be finalized
Current Status	completed	 Road and servicing revisions to accommodate Miller development ongoing Completion Oct. 2006 	MOE and TRCA approvals required	•75% complete •Balance of acquisitions ongoing	Tender January 2007 Construction spring 2007	Estimated \$7.5 million due to inclusion of local servicing costs	 Local services to accommodate Miller development added to contract Agreement with Miller re front end financing required Utility relocation costs & schedules

Rodick Road – Phase 3

Project	Rodick F	Road Reco	nstruction	–14 th Avenue	to Esna Park i	ncl. CN O	verpass
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions
previous status (Update Report April 28 th 2006)	completed	Scheduled 2007	To be applied for when design complete	 Major acquisition of Esna Park property completed Balance scheduled for acquisition in 2007 	Scheduled 2008/2009/2010	Estimated \$5.2	 negotiation of CN Rail Crossing Agreement realignment of Esna Park/Alden Road intersection
Current status	completed	Scheduled 2007	CN Rail and MOE approvals required	 Major acquisition of Esna Park property completed Balance scheduled for acquisition in 2007 	Scheduled 2008/2009/2010	Estimated \$5.2	 negotiation of CN Rail Crossing Agreement realignment of Esna Park/Alden Road intersection

Hwy 404 Grade Separation at Centurian Drive Extension

	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/ Actions	
Previous status (Update Report April 28, 2006)	Completed	 Consultant selection underway Design to be completed fall 2007 	Preliminary discussions with MTO, TRCA, 407 ETR underway. Final applications when design complete	 Negotiations underway with Markham property owners Negotiations with Richmond Hill owners pending 	Scheduled 2007/2008 /2009	Estimated \$17.4 million	•Town of Markham to act as project lead for design & construction •Negotiation of cost sharing agreement	
Current Status	Completed	•Consultant selection underway •Design to be completed fall 2007	Preliminary discussions with MTO, TRCA, 407 ETR underway. Final applications when design complete	 Negotiations underway with Markham property owners Negotiations with Richmond Hill owners pending 	Scheduled 2007/2008 /2009	Estimated \$17.4 million		

404 Ramp Extension – Highway 7 to Centurion Drive Extension

	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/ Actions
Previous status (Update report April 28, 2006	EA scheduled 2006/2007	Scheduled 2007/2008	To be applied for when design complete	Property Acquired from Seneca in 2004	Scheduled 2009	Estimated \$3.1 million	MTO design requirements
Current status	Consultant selection underway	Scheduled 2007/2008	 Preliminary discussions with MTO underway Final applications when design complete 	Property acquired from Seneca 2004	Scheduled 2009	Estimated \$3.1 million	•MTO design requirements •Completion of EA required before December 2007

Woodbine Bypass

Projec	t Wood	bine Avenue B	ypass (Pha	se 1 & 2)			
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions
previous status (Update Report April 28 th 2006)	Completed by Region of York	Design underway scheduled completion October 2006	Region of York, MTO, TRCA and MOE approvals required	Property requirements being finalized	Scheduled start April 2007 completion fall 2008	EA estimate \$14.3 million	 Funding for Phase 1 & 2 Coordination of servicing & grading designs with surrounding developments Details of watercourse crossing Scheduling of Phase 3 design & construction
Current status	Completed by Region of York	 Design underway 30% design submission mid August, scheduled completion October 2006 hydrogeological testing underway 	Permit to Take Water received from MOE Region of York, MTO, TRCA and MOE approvals required	Property requirements finalized	Scheduled start April 2007 completion fall 2008	estimate \$14.3 million	 Finalization of Tri Party agreement Dewatering impact on Victoria Square Coordination of servicing & grading designs with surrounding developments Scheduling of Phase 3 design & construction

Birchmount Road Extension

Project	Birchm	ount Road E	xtension – 1	4 th Avenue	to Enterprise	Drive	
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions
previous status (Update Report April 28 th 2006)	completed	 Original design complete Town to complete design for Birchmount north of Hwy 407 	 Approval in principle received from MTO,TRCA & 407 ETR Negotiations ongoing with all agencies 	 Appraisals complete Offers of Purchase to be presented to majority of owners late April 2006 	Scheduled start spring 2007 completion late 2009	Estimated \$23.5 million Cost of constructing roadway on Remington lands north of Hwy 407 added to contract	 Timing of property acquisition, approvals and agreements Value of ORC lands Design & construction of Birchmount on Remington lands north of Hwy 407 added to Town contract
Current status	completed	 Original design complete design for Birchmount north of Hwy 407 underway 	 Approval in principle received from MTO,TRCA & 407 ETR Negotiations ongoing with all agencies CN Rail approval pending resolution of CN request to construct underpass structure 	 Appraisals complete Offers of Purchase presented to majority of owners Expropriation of holdout properties underway ORC negotiations ongoing 	 Tender spring/summer 2007 Construction start fall 2007 completion spring 2010 	 Estimated \$23.5 million Cost of constructing roadway on Remington lands north of Hwy 407 added to contract 	 Timing of property acquisition, approvals and agreements Value of ORC lands CN request to construct underpass structure Coordination with GO Transit Hagerman project

Major Servicing Projects

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GO Transit – Hagerman Grade Separation

Project	Project GO Transit - Hagerman Grade Separation – Servicing Relocation									
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Acti ons			
previous status (Council report June 27 th 2006)	Completed (GO Transit)	Underway by GO Transit design/build contractor	to be determined when preliminary design work complete	to be determined when preliminary design work complete	Scheduled summer 2006 to December 2007	Estimated \$3.6 million	 Incorporatio n of Town's preferred designs into contract Negotiation of Town costs with GO design/build contractor Funding of Town services 			
Current status	Completed (GO Transit)	 By GO Transit design/build contractor Negotiations underway with GO, Region of York and City of Toronto to coordinate servicing relocations 	Memorandum of Understanding signed with GO Transit	GO Transit responsible for all property acquisitions Negotiations with property owners underway	Completion accelerated to fall 2007	 Estimated \$3.6 million Front end financing to be provided by GO Transit, repayment plan finalized 	 Negotiation of Town costs with GO design/build contractor Confirmation of final design details and costing 			

Highway 7 Trunk Sanitary Sewer

Project	Highwa	y 7 Trunk S	Sanitary Sev	wer – Village	Parkway to Y	DSS @ Main	Street Unionville
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions
previous status (Update Report April 28 th 2006)	Completed June 2003	Scheduled summer/fall 2006 pending approval of consultant RFP	Region of York, MOE, TRCA, CN Rail & GO Transit approvals required	Easements may be required depending on final sewer alignment	Scheduled spring/fall 2007	Estimated \$2.7 million	 Coordination with Region's reconstruction of Highway 7 Review of alternate alignments to avoid Rouge River crossing Negotiations with developers regarding front end financing
Current status	 Completed June 2003 EA amendment required to address Main Street South alignment 	- Consultant retained, -design underway -Scheduled completion late 2006	Region of York, MOE, TRCA, CN Rail & GO Transit approvals required	Easements may be required depending on final sewer alignment	Scheduled spring/fall 2007	Estimated \$3.3 million	 reconstruction of Highway 7 deferred to allow sewer construction to proceed Main Street South alignment selected to avoid Rouge River crossing, Negotiations with developers regarding front end financing

Highway 7 Stormwater Management Facility

Project	Highwa	y 7 Corrido	r Stormwat	er Manageme	ent incl. Sher	idan SWM	Pond
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions
previous status (Update Report April 28 th 2006)	Draft completed	Scheduled summer/fall 2005	Applications to be submitted when design complete	Property required from Sheridan Nurseries and Lonsmount Construction	Fall 2006	Estimated \$4.1 million	 Property acquisition Coordination with Region's reconstruction of Highway 7
Current status	Completed February 2005	Design work on hold pending resolution of Sheridan property acquisition and testing	Region of York, MOE &TRCA, approvals required	 Negotiations with Sheridan Nurseries ongoing Agreement expected September 2006 	Fall 2007	Estimated \$6.4 million increased costs due to property acquisition	 Property acquisition Coordination with Region's reconstruction of Highway 7 Phased construction of pond Resolution of TRCA issues Front end financing by developers

14th Avenue Watermain

Project	Project 14 th Avenue Trunk Watermain - McCowan Road to Boxwood Ave										
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions				
previous status (Update Report April 28 th 2006)	Not required	completed	Approvals received	Property acquisitions completed	Start July 2006 completion January 2007	\$5.9 million (based on tender prices)	 Work restrictions within roadway Traffic control & lane closures Weekend & night work DC by-law to include updated cost 				
Current status	Not required	completed	Approvals received	Property acquisitions completed	Construction to commence August 2006 completion March 2007	\$5.9 million (based on tender prices)	 Clearance from existing utilities incl. hydro lines Traffic control & lane closures Weekend & night work DC by-law to include updated cost 				

Woodbine Bypass/404 North Employment Lands Trunk Sewer

Project	Woodbi	ne Bypass/4	04 North E	mployment	Lands Trunk	Sanitary	Sewer
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions
previous status (Update Report April 28 th 2006)	not required	Design underway scheduled completion August 2006	TRCA and MOE approvals required	None required Will be constructed within Bypass ROW	Scheduled start September 2006 completion December 2006	Estimated \$2.6 million	 Extent of dewatering and dewatering impacts Construction methods
Current status	not required	 Design underway scheduled completion August 2006 	TRCA and MOE approvals required Initial Permit to Take Water received	None required Will be constructed within Bypass ROW	 Scheduled start December 2006 completion summer 2007 	Estimated \$2.6 million	 Extent of dewatering and impact on Victoria Square Construction methods Servicing of adjacent lands

Transportation		
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Bike Path System

No Proj	ect Bicy	cle Route Study					
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions
previous status (Update Report April 28 th 2006))	Not required	Design of Phase 1 complete Phase 2 completion scheduled fall 2006	Not required for Phase 1 Region approval required for Phase 2	Not required	Phase 1 scheduled summer 2006	\$600,000	 Incorporation into Region's Pedestrian & Cycling Master Plan Cost sharing negotiations
Current status	Not required	Public Open House held June 29 and comments being received from public and stakeholders until Sept. 1, 2006	Council approval required for Cycling Master Plan fall 2006	Not required	 'Spine network' scheduled for fall 2006 tendered June 2006 no bidders submissions reformatting tender to obtain bids 	Est. \$25 million over 15 years	 implementation plan and financing required Coordination with Region and Town Obtaining contractor to undertake Phase 1 Fall 2006

Travel Demand Management

Project	Travel Der	nand Manageme	ent				
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions
previous status (Update Report April 28 th 2006)	Not required	Transportation Management Association (TMA) formed in August 2005 Town commuter options program on-going Elementary School program framework established Secondary School program framework established Community based TDM program launch scheduled for Fall of 2006		Not applicable	Not applicable	\$100,000	 Ongoing support for program beyond March 2007 Development of policy framework to support & sustain Markham employee commuter options program Discussions with York School Board regarding support for TDM programs
Current status	Not required	GO Transit Markham Stations access Study and carpool pilot project CMHC Study to support introduction of a Community Based TDM program	GO Transit approval required Council approval required	Not applicable	Not applicable	\$50,000	 Working with GO Transit to introduce a ride share (carpool) pilot program Community based TDM program to be developed Telework Pilot Project under review
		Telework Feasibility study conducted for Town employees	Under review with CCC				

Environmental

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Pomona Mills Creek Erosion & Habitat Enhancement Study

Project	Pomona Cr	eek Envir	onmental Study	/			
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions
previous status (Update Report April 28 th 2006)	Consultant retained	Not applicable	1 st Public Information Meeting scheduled July 2006 2 nd PIC scheduled October 2006 EA completed November 2006	Requirements will be identified as part of EA	Not applicable	EA costs \$104,000	 Discussions with YRTP regarding proposed transit maintenance facility proposed for lands adjacent to creek in Langstaff area Coordination with Langstaff planning & servicing studies
Current status	 Substantially complete 1st Public Meeting end of August TBD meeting #2 with Task Force on Sept. 6 to discuss Alts 	Not applicable	 Task Force to review and approve list of Alts. Council to approve study recommendatio ns (Nov. 2006) 	Requirements will be identified as part of EA	Not applicable	\$104,000	 Funding sources Toronto Ladies Golf Course update water status Recreational Trail Master Plan – provide update on Master Plan Glynnwood Pond and storm sewer surcharge issues

Flood Emergency Response Plan

Project	Emergency	y Response	Plan					
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions	
previous status (Update Report April 28 th 2006)	Consultant retained	Draft response for Phase 1 (100 year storm event) completed and circulated internally	To be determined	To be determined	Not Applicable	To be determined	Subsequent Study Phases in 2006/2007 will review impact of other storms and identify remedial works	
Current status Phase 1 Completed	Consultant retained	Flood data/ maps for stage 5 provided to fire and emergency Services	 approval for \$85,000 to start Phase 2 required 	Not Applicable	Not Applicable	 Phase 1 and 2 = \$130,250 Phase 3 to be determine d at the end of Phase 2 	 Additional properties falling with Regional flood lines. Coordination and prioritization of capital program to mitigate flood damages (to be determined in Phase 3) 	

Water Course Erosion Implementation Plan

Project	Water C	Water Course Erosion Implementation Plan								
	Environmental Assessment	Design	Approvals	Property Acquisition	Construction	Total Project Costs	Key Issues/Actions			
previous status (Update Report April 28 th 2006)	Consultant retained		To be determined	To be determined	Not Applicable	1st Public Information Meeting deferred to May 18, 2006 Update to Committee of the Whole on April 25, 2006	 Report back to Committee in the Fall 2006 with guidelines on private property and final implementat ion plan 			
Current status	• EA completion fall 2006	 Conceptual designs for top 30 sites incl. in EA Consultant to be retained fall 2006 for detailed design of top 6 sites 	 TRCA Council approval Fall 2006 	 To be determined Construction easements may be required 	6 sites scheduled in 2007	To be finalized	 Guidelines for work on private property to be developed Update to Council on policies Fall 2006 			