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ROADS CAPITAL CONSTRUCTION PROGRAM UPDATE

The Transportation Services Committee recommends:

- 1. Receipt of the presentation by Steve Collins, Manager, Engineering, and Salim Alibhai, Manager, Engineering, Transportation Services - Roads; and**
- 2. Adoption of the recommendation contained in the following report dated April 22, 2010, from the Commissioner of Transportation Services.**

1. RECOMMENDATION

It is recommended that this report be received for information.

2. PURPOSE

This report provides an update on the status of the 2010 Roads Capital Construction Program.

3. BACKGROUND

The Region continues to invest significant resources in the maintenance and expansion of the Road infrastructure in order to maximize service to local communities

The 2010 Roads Capital Budget of \$247.7M consists of \$210.1M allocated to road related construction projects such as road widenings, intersection improvements, road resurfacings and bridge rehabilitation and \$37.6M allocated to road operations capital, including Intelligent Transportation Systems and new patrol yard development.

Of the \$210.1M budgeted for construction projects, approximately \$28M is largely delivered by outside agencies with the Region as a cost-sharing partner.

The overall 2010 – 10 Year Roads Capital Budget (2010 to 2019) is \$1.505B. The 2010 Roads Capital Budget of \$247.7M represents approximately 16.5% of the expenditures in the 2010 – 10 Year Roads Construction Program.

Regional teams strive to balance the timely delivery of projects to meet stakeholder needs with the thorough planning of all aspects including engineering, permits, property acquisition, utility relocations and funding

The approach used for delivery of Roads capital projects is to minimize project costs and risk by carefully planning many details in advance. Projects are often tendered throughout the course of the year because of the number of variables to be coordinated, such as property acquisition and approvals required from external agencies.

Tender calls are scheduled based on the earliest anticipated date for the completion of the design and contract documents and tenders are released once all required permits and properties are acquired, utilities are relocated, and funding (in the case of cost-sharing/recovery from others, front-end financing) is in place. Also, all road and bridge projects are coordinated with any water or wastewater capital infrastructure projects, York Region Transit/VIVA and local municipal initiatives to minimize community disruption and maximize construction efficiencies.

This report describes the status of projects currently underway and the plans for the remaining portion of 2010.

4. ANALYSIS AND OPTIONS

The 2010 Roads Capital Budget is presented in Table 1.

Table 1
2010 Approved Capital Budget

Purpose	Amount
Expansion/Growth related road construction (managed by Regional staff)	\$121.3M
Rehabilitation/Asset Management related road construction	\$40.4M
Intersection Improvements	\$20.4M
Sub-total	\$182.1M *
Expansion/Growth related road construction (delivered by others)	\$28.0M
Road operations capital (ITS, new patrol yard purchase, etc.)	\$37.6M
Total	\$247.7M

Note: * Subject of this report.

The construction of many roads projects was ongoing in 2009 and will be completed in 2010

The following expansion/growth road projects were under construction in 2009 and will be carried over and completed in spring/summer 2010:

- Bathurst Street from Mulock Drive to Davis Drive West, Town of Newmarket and Township of King.
- Ninth Line from Highway 407 to Rose Way, Town of Markham.
- Stouffville Road from McCowan Road to Highway 48, Town of Whitchurch-Stouffville.
- Highway 50 at Highway 7 intersection improvements, City of Vaughan.

Recent tenders for the construction of major roads projects, which have started or will start in early spring 2010

The following road projects have recently been tendered and are scheduled for construction in 2010. These projects are as follows:

- Woodbine Avenue from Ravenshoe Road to Morton Road, Town of Georgina.
- Gamble Road/19th Avenue from Bathurst Street to Linda Margaret Crescent, Town of Richmond Hill.

Upcoming 2010 Construction Tenders

The following projects are planned to be tendered in 2010. The proposed timing of the tenders is noted Table 2.

Table 2
Upcoming 2010 Construction Tenders

Project	Key Issues	Status
Intersection improvements and signalization of Keele Street at 15 th Sideroad, Township of King	• Coordination with monastery property	• Tender Q2 2010 • Anticipated completion fall 2010
Widening and reconstruction of Langstaff Road from Highway 50 to Highway 27, City of Vaughan	• Coordination with MTO/Highway 427 Extension IEA	• Tender Q2 2010 • Anticipated completion summer 2011
Widening and reconstruction of Warden Avenue from 16 th Avenue to Major Mackenzie Drive, Town of Markham	• Permits – new requirements from MNR to address Redside Dace now being an Endangered Species	• Tender Q2 2010 • Anticipated completion summer 2011
9 th Line at Major Mackenzie Drive intersection improvement, Town of Markham	• Property acquisition from Transport Canada	• Tender Q4 2010 • Anticipated completion summer 2011

9 th Line at Elgin Mills Road intersection improvement, Town of Markham	• Property acquisition from Transport Canada	• Tender Q4 2010 • Anticipated completion summer 2011
Widening and reconstruction of Stouffville Road from Highway 404 to Warden Avenue and Stouffville Road from Warden Avenue to McCowan Road, Town of Whitchurch-Stouffville	• Permits – new requirements from MNR to address Redside Dace now being an Endangered Species	• Tender Q3 2010 • Anticipated completion fall 2011
Widening and reconstruction of York/Durham Line from Steeles Avenue to Highway 407, Town of Markham	• Combined with South East Collector contract	• Will be tendered with the South East Collector project

Many rehabilitation/asset management projects will be undertaken in 2010

In addition to the above growth/expansion roads projects, many rehabilitation/asset management capital projects have been tendered or will be tendered and constructed in 2010. The rehabilitation/asset management program includes works such as resurfacing and pavement rehabilitation contracts, minor intersection improvements such as installation or modification of traffic signals and/or illumination and bridge/structure repairs.

Some of the key resurfacing and road rehabilitation projects to be undertaken in 2010 include:

- Pine Valley Drive – Rutherford Road to Major Mackenzie Drive.
- King Road – Dufferin Street to Bathurst Street.
- Jane Street – Langstaff Road to Rutherford Road.
- Leslie Street – 19th Avenue to Bethesda Sideroad.
- Warden Avenue – Major Mackenzie Drive to Stouffville Road.
- McCowan Road – Davis Drive to Herald Road.
- 16th Avenue – 9th Line to Donald Cousens Parkway.

York Region Roads staff are also delivering additional projects funded by the \$26.5M Federal Infrastructure Stimulus Fund contribution

The 2009 Federal budget established a new \$4-billion Infrastructure Stimulus Fund (ISF) that provides funding towards the rehabilitation or construction of provincial, territorial,

municipal and community infrastructure projects. York Region's Transportation Services Roads Branch applied for stimulus funding for several Roads capital projects.

Ten projects were approved for ISF contributions

Six of the ten ISF funded projects were completed in 2009. These projects are as follows:

- Dufferin Street Rehabilitation from Glen Shields Avenue to Langstaff Road, City of Vaughan.
- Bathurst Street Rehabilitation from Steeles Avenue to Centre Street, City of Vaughan.
- Weston Road Rehabilitation from Langstaff Road to Rutherford Road, City of Vaughan.
- Keele Street Rehabilitation from Rutherford Road to Major Mackenzie Drive, City of Vaughan.
- Warden Avenue Rehabilitation from Steeles Avenue to MacPherson Street, Town of Markham.
- Bathurst Street Resurfacing from Major Mackenzie Drive to King Road, City of Vaughan, Town of Richmond Hill and Township of King.

The four remaining ISF funded projects will be completed in 2010. These projects are as follows:

- Old Homestead Road Rehabilitation from Warden Avenue to Station Road, Town of Georgina.
- Davis Drive Rehabilitation from Patterson Street to Woodbine Avenue, Towns of Newmarket and Whitchurch-Stouffville.
- Highway 27 Rehabilitation from Nashville Road to Davis Drive West, City of Vaughan and Township of King.
- Gamble Road Widening from Bathurst Street to Yonge Street, Town of Richmond Hill.

Regional staff continue to improve service delivery to Regional businesses and ratepayers by reviewing current practices

As the needs of local communities, road users and transportation customers evolve and change so does the need for Regional road construction practices and procedures to change. During 2010, with the significant volume of work underway as part of the base program and augmented by the construction of many ISF projects, many lessons were learned that will be incorporated into planning and construction in future years.

Prior to the start of construction on future pavement rehabilitation projects, staff will better inform the surrounding communities of the reasons for and the results expected after the work has been completed

During 2009, significant questions and feedback on the rehabilitation treatments selected for many Regional corridors were received. This was most notable in the areas where

“Double Chip Seal” and “Micro Surfacing” treatments were applied. While these techniques have been in practice in York Region for several years, the change from the original surface to the new surface raised many questions from residents and local municipalities.

In recognition that the evolution of pavement rehabilitation program has progressed significantly over the past three years, it is staff’s intention to convene a workshop with staff from the local municipalities. The intent of this workshop will be to present the minor capital program objectives and explain the types of treatments being used by York Region. It is also intended that staff will discuss how to work closer with the local municipalities to ensure a more comprehensive public and key stakeholder consultation process.

As part of the design and engineering work to develop our minor capital construction contracts, staff engaged the services of industry experts and geotechnical consultants to evaluate the existing condition of our roadways and recommend the preferred rehabilitation treatment. The type of treatment is based on many factors such as existing condition/cracking/distress, subgrade soil types, thickness of asphalt and granular material, traffic volumes, roadside environment (rural or urban), etc. All these elements factor into the selection of a preferred treatment type with the underlying objective to maximize the service life and minimize life cycle cost. This will also be discussed as part of the workshop process to the consultation.

Depending on the results of this workshop, staff will consider next steps including, but not limited to, presentations to local municipal councils, annual meetings with local municipal staff and reinstating public meetings in advance of Regional rehabilitation projects.

Planning and design studies are also underway for a number of future projects

Environmental Assessments and preliminary engineering activities are continuing on a number of key corridors in preparation for future work as approved in the 2010 10-Year Roads Capital Program. These include:

- Western Vaughan Arterial Road Improvements Individual Environmental Assessment.
- Keele Street from Steeles Avenue to Rutherford Road.
- Leslie Street from Wellington Street to Mulock Drive.
- Bathurst Street from Green Lane to Yonge Street.
- 2nd Concession from Green Lane to Queensville Sideroad.
- Doane Road from Yonge Street to Woodbine Avenue.
- Rutherford Road from Highway 400 to Yonge Street.
- Intersection improvements at King/Vaughan Line and Jane Street, Keele Street and Dufferin Street.

Work is also continuing on the Sustainable Travel Choices (STC) study in the Town of Markham.

5. FINANCIAL IMPLICATIONS

There are no financial implications resulting from the recommendations contained in this report.

6. LOCAL MUNICIPAL IMPACT

Regional staff continue to work closely with staff from the local municipalities to ensure local concerns are addressed through the preparation for York Region's projects. Furthermore, requirements for additional municipal infrastructure are routinely incorporated into Regional construction contracts where practical. The successful timely delivery of key infrastructure is critical to meet the needs of current residents and businesses as well as approved future growth in York Region.

7. CONCLUSION

York Region continues to invest significant resources in very large infrastructure programs. In 2010, construction will begin on many complex high profile projects, including Woodbine Avenue from Ravenshoe Road to Morton Road in the Town of Georgina, Langstaff Road from Highway 50 to Highway 27, in the City of Vaughan, Gamble Road/19th Avenue from Bathurst Street to Bayview Avenue, in the Town of Richmond Hill, Warden Avenue from 16th Avenue to Major Mackenzie Drive, in the Town of Markham and Stouffville Road from Highway 404 to McCowan Road, in the Town of Whitchurch-Stouffville.

For more information on this report, please contact Paul Jankowski, General Manager, Roads at extension 5901 in the Transportation Services Department.

The Senior Management Group has reviewed this report.



Roads Capital Construction Program Update

Presentation to Transportation
Services Committee
(Reference Agenda Item D5)

Steve Collins
May 5, 2010

Slide 1

Purpose:

To provide a status update on the 2010 Roads
Capital Construction Program.

- ❑ Recently Completed Projects
- ❑ Recently Tendered Projects
- ❑ Upcoming Tenders
- ❑ Upcoming PCC's



Slide 2

Recently Completed Urbanization Projects:



York Region

Slide 3

Bathurst Street, Town of Newmarket & Township of King (Mulock Drive to Highway 9) - \$4.8M



York Region

Slide 4

9th Line, Town of Markham
(Highway 407 to Roseway) - \$4.9M



York Region

Slide 5

Stouffville Road, Town of Whitchurch-Stouffville
(McCowan Road to Highway 48) - \$8.1M



York Region

Slide 6

Intersection Improvements, City of Vaughan (Hwy. 50 at Hwy. 7) - \$3.15M (YR's share only)

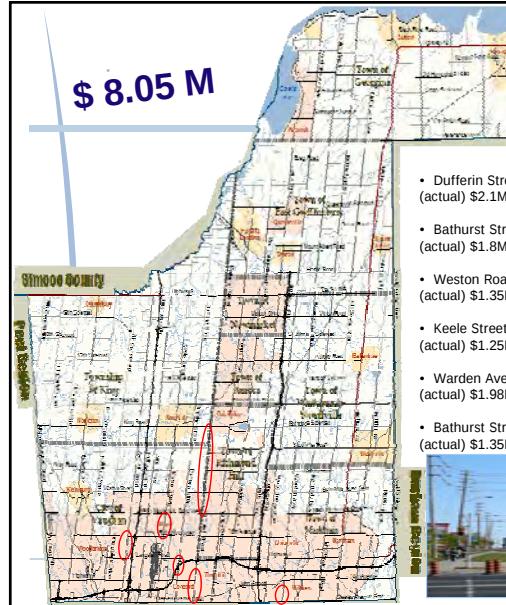


York Region

Slide 7

\$ 8.05 M

Recently Completed ISF Resurfacing Projects:

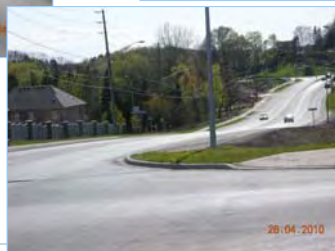


- Dufferin Street – Glen Shields Ave. to Langstaff Rd. - \$2.14M (actual) \$2.1M (eligible)
- Bathurst Street – Steeles Ave. to Centre St. - \$1.65M (actual) \$1.8M (eligible)
- Weston Road – Langstaff Rd. to Rutherford Rd. - \$904K (actual) \$1.35M (eligible)
- Keele Street – Rutherford Rd. to Major Mackenzie Dr. - \$891K (actual) \$1.25M (eligible)
- Warden Avenue – Steeles Ave. to MacPherson St. - \$1.14M (actual) \$1.98M (eligible)
- Bathurst Street – Major Mackenzie Dr. to King Rd. - \$1.32M (actual) \$1.35M (eligible)



Slide 8

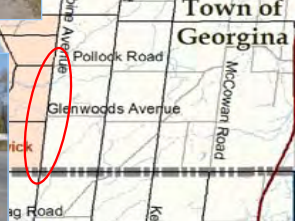
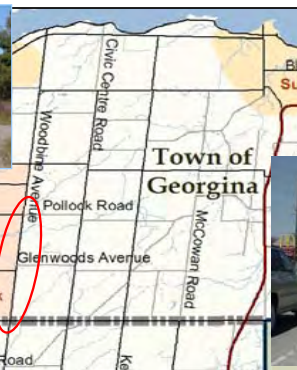
Recently Tendered Projects:



York Region

Slide 9

Woodbine Avenue, Town of Georgina (Ravenshoe Road to Morton Avenue)



\$48.0 Million, Including W.M & Sanitary Sewer

- Roads component: \$21.0 Million
- Start of Construction: April 13, 2010
- Completion: Spring 2012

Just Starting

Gamble Road / 19th Avenue, Town of Richmond Hill
(Bathurst Street to west of Bayview Avenue)



\$6.6 Million

- Start of Construction: May 2010
- Completion: Spring 2011*

Just Starting

Highway 404 Doane Road Interchange, Town of East Gwillimbury



\$14.4 Million, (YR's cost share for the Interchange only)

- Total Cost of Interchange \$25 Million
- Start of Construction: Summer 2010
- Completion: December 2012

Tender to Close May 12, 2010

\$ 15.25 M

“Maintaining the State of Good Repair”

Rehabilitation Projects:

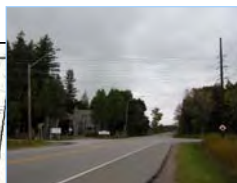
- Davis Drive (ISF) – Patterson Dr. to Woodbine Ave. - \$2.4M (tender) \$2.3M (eligible)
- Highway 27 (ISF) – Nashville Rd. to Hwy. 9 - \$6.45M (tender) \$9.1M (eligible)
- Jane Street – Langstaff Rd. to Rutherford Rd. - \$2.3M (est.)
- Leslie Street – 19th Ave. to Bethesda Sdrrd. - \$1.6M (est.)
- Old Homestead Road (ISF) – Warden Ave. to Station Rd. - \$2.35M (tender) \$1.56M (eligible)
- 14th Avenue – Main St. to Ninth Line - \$150K (tender)

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Upcoming Urbanization Tenders:

Slide 14

Intersection Improvements, Township of King (Keele Street at 15th Sideroad)


\$2.0 Million

- Start of Construction: July 2010
- Completion: December 2010

May 2010 Tender

Langstaff Road, City of Vaughan (Highway 50 to Highway 27)






\$11.7 Million

- Start of Construction: August 2010
- Completion: Fall 2011

June 2010 Tender

Stouffville Road, Town of Whitchurch-Stouffville (Highway 404 to McCowan Road)



\$27.1 Million

- Start of Construction: September 2010
- Completion: September 2012

July 2010 Tender

Warden Avenue, Town of Markham (16th Avenue to Major Mackenzie Drive)

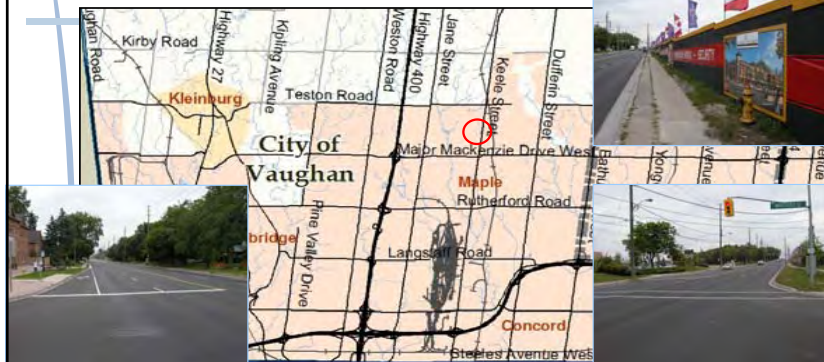


\$11.5 Million

- Start of Construction: October 2010
- Completion – Fall 2011

August 2010 Tender

Intersection Improvements, City of Vaughan (Keele Street at McNaughton Road)



\$1.2 Million

- Start of Construction: September 2010
- Completion: December 2010

August 2010 Tender

9th Line, Town of Markham (Major Mackenzie Drive and Elgin Mills Road)



\$14.6 Million

- Start of Construction: Spring 2011
- Completion – Fall 2011

November 2010 Tender

York-Durham Line, Town of Markham

(Steeles Avenue to Highway 407)



\$6.9 Million

- Start of Construction: Coordinated with South East Collector Sewer

November 2010 Tender*

Bathurst Street Noise Mitigation

(Bloomington Road to St. John's Sideroad)



\$ 1.5 Million

- 44 Benefitting Homes
- Start of Construction: August 2010
- Completion: Spring 2011*

June 2010 Tender

9th Line Noise Mitigation

(Highway 407 to Donald Cousen's Parkway)



\$1.6 Million

- 110 Benefiting Homes
- Start of Construction: October 2010
- Completion: Spring 2011

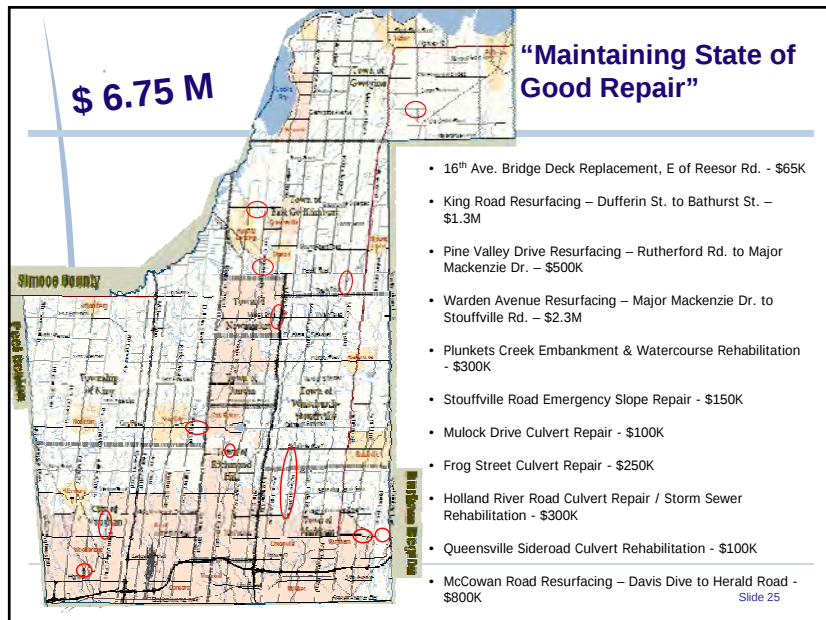
August 2010 Tender

Upcoming Rehabilitation Tenders:



York Region

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Upcoming PCC's:

- ❑ **Highway 50** (PCC No. 1): May 2010
- ❑ **Donald Cousens Parkway** (EA Amendment):
 - ❑ Toronto – May 11th
 - ❑ Markham – May 13th
- ❑ **2nd Concession** (PCC No. 2): June 2010
- ❑ **Carville/Rutherford Road** (PCC No.1): June 8 & 9, 2010
- ❑ **Keele Street** (PCC No. 2): June 2010
- ❑ **King-Vaughan Line Intersection Improvements** (PCC No. 1): July 2010
- ❑ **Doane Road** (PCC No. 3): November 2010

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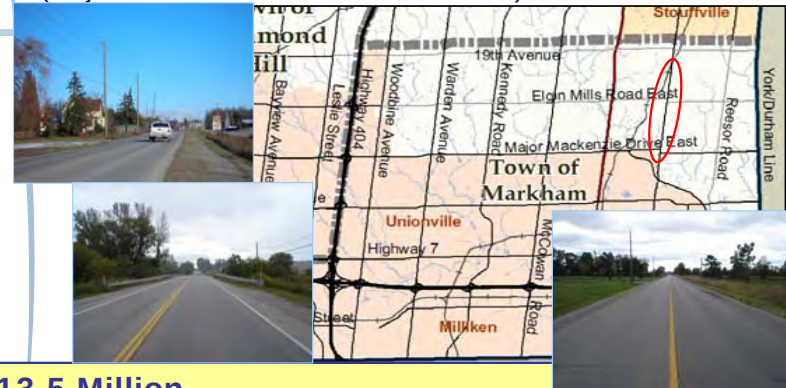
Summary:

- ❑ **4 major urbanization projects completed - \$21 M**
 - ❑ 6 ISF pavement rehab projects completed - \$7.55 M
 - ❑ (since November 2009)
- ❑ **3 major projects under construction - \$42.0 M**
 - ❑ 3 pavement rehab projects underway - \$4.05 M
 - ❑ 3 ISF pavement rehab projects underway - \$11.2 M
- ❑ **9 major projects to be tendered in 2010 - \$76.5 M**
 - ❑ 4 pavement rehab projects to be tendered in 2010 - \$4.9 M
 - ❑ 7 maintenance projects to be tendered in 2010 - \$1.8 M
- ❑ **7 Major EA PCC's to be held in the next few months**



Slide 27

9th Line, Town of Markham (Major Mackenzie Drive to Hoover Park)



\$13.5 Million

- Start of Construction: Spring 2011
- Completion – Summer 2011

November 2011 Tender