

Engineering Department 10 Year Capital Program 2006-2015

General Committee
February 20, 2006

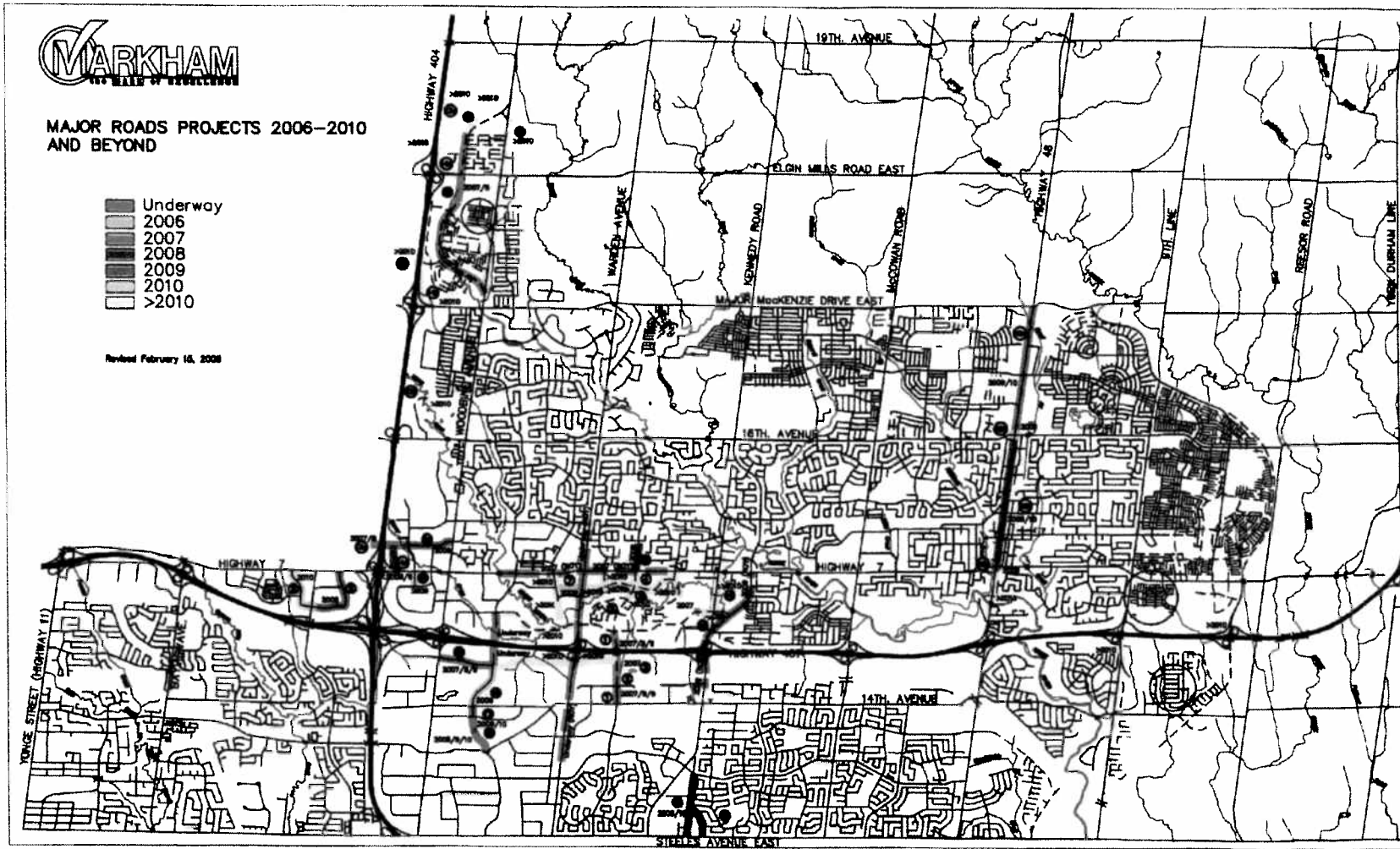
Background

- Concurrence on a 10 year capital construction program is required to enable staff to schedule the necessary steps to implement such (ie, EA's, property acquisition, design, approvals, agreements, construction).
- The road/structure 10 year Capital program has been approved by Council on an annual basis.
- A 5 year Capital program has been developed for sidewalks and illumination.
- A 10 year Capital program for Watercourse Erosion Restoration is underway and will be submitted to Committee in Spring 2006.

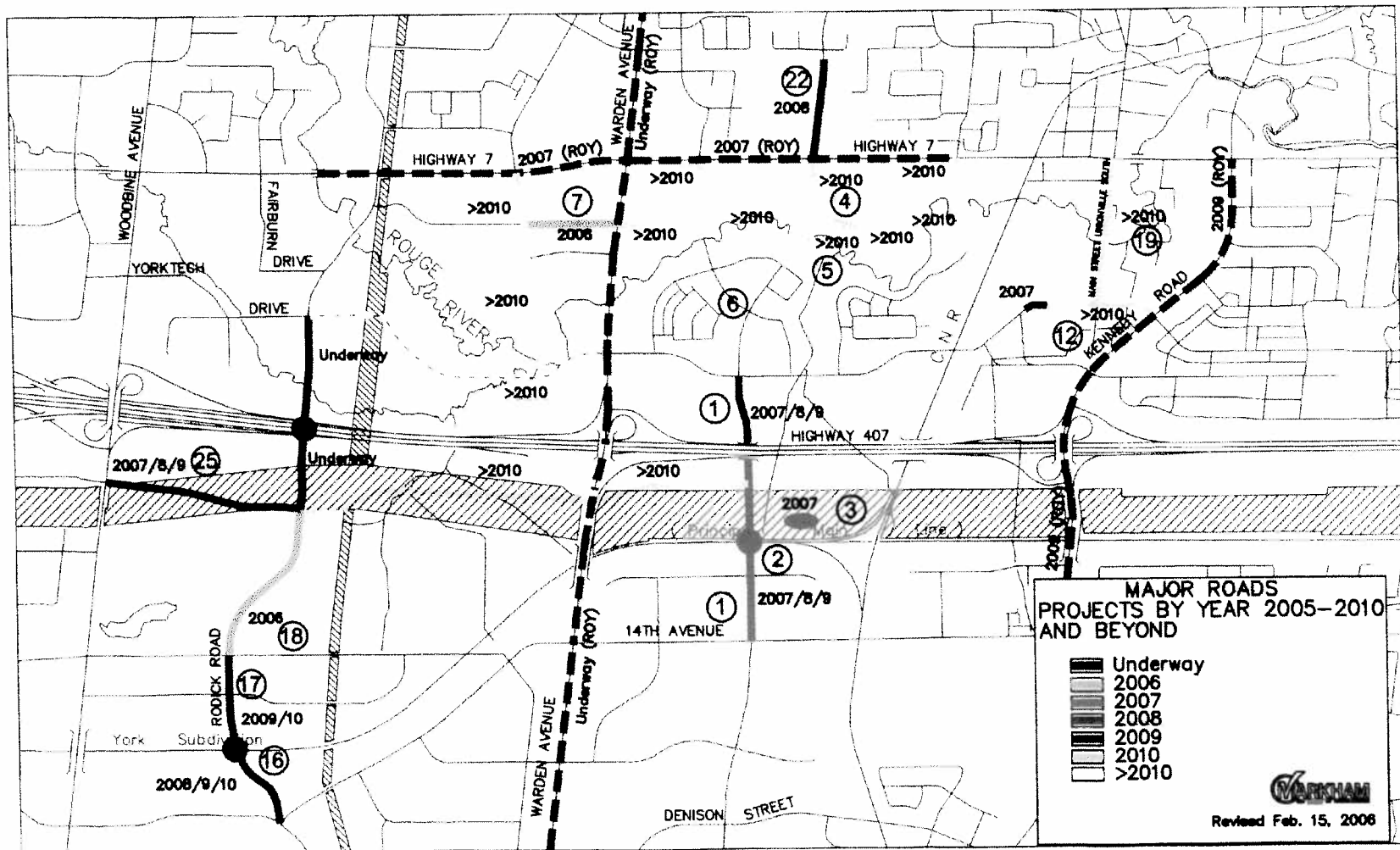
A) Roads/Structures

- The updated road/structure 10 year program (2006 to 2016) has been developed based on:
 - Anticipated development phasing;
 - Anticipated demand for infrastructure (traffic volumes);
 - Approval process timeframes;
 - Property acquisition timeframes;
 - The Region of York's 10 Year Capital Program;
 - Available staff resources.
- Program to be modified based on Council input and the Finance Department's Cash Flow Analysis
- Projects within 5 years (2006 to 2010) have detailed timeframes for construction
- Timeframes for projects beyond 2010 will be finalized in subsequent years based on above criteria and Council's input
- The Town Wide and ASDC bylaw to be updated in 2006 to incorporate new projects (i.e. Hwy 404 crossings) and new cost estimates
- The 5 year program requires funding of \$151 million of which \$114 million is development charges, \$21.5 non growth, and \$15.5 million from developers

Map A: Town Wide 10 Year Capital Program



Map B: Markham Centre 10 Year Capital Program



Proposed Changes to the 2006 to 2010 Road Capital Program

A) Advanced Projects

- Highway 404 Mid Block Crossing and Hwy 404 ramp extension north of Hwy 7, **advanced** to 2007/2008 to provide relief in the Hwy 7 corridor
- Centurian Drive reconstruction (Woodbine to Allstate Parkway), **new project** scheduled for construction 2009
- Midland Avenue extension from Steeles Avenue to Old Kennedy Road, **advanced** to 2009/2010 (subject to available property and financing)

A) Advanced Projects (continued)

- Rodick Road extension and CN bridge **advanced** 1 year to 2008/2009/2010
- Miller Avenue (Woodbine to Rodick) **new project** scheduled for 2007/2008/2009
- Commerce Valley Drive (East and West) **advanced** 2 year to 2009/2010

Proposed Changes to the 2006 to 2011 Road Capital Program - Continued

B) Deferred Projects

- Birchmount (14th to Enterprise Drive), **delayed** 1 year to 2007/2008/2009 to enable staff to secure approvals and property in 2006
- Clegg Road extension to Warden Avenue, **delayed** 1 year to 2006 to accommodate development
- Hwy 7 ramp extension from Hwy 404 **delayed** 2 year to 2008/2009 to match Hwy 404 bridge schedule
- Birchmount/Rouge bridge and Birchmount extension to Hwy 7 **deferred** beyond 2010 to match anticipated development
- Old Kennedy Road (Steeles to Gorvette Dr) deferred to 2009/2010 to match anticipated demand
- Existing Woodbine Avenue (By-pass to By-pass through Victoria Square) **deferred** to beyond 2010 to coincide with Phase 3 of the Woodbine By-pass

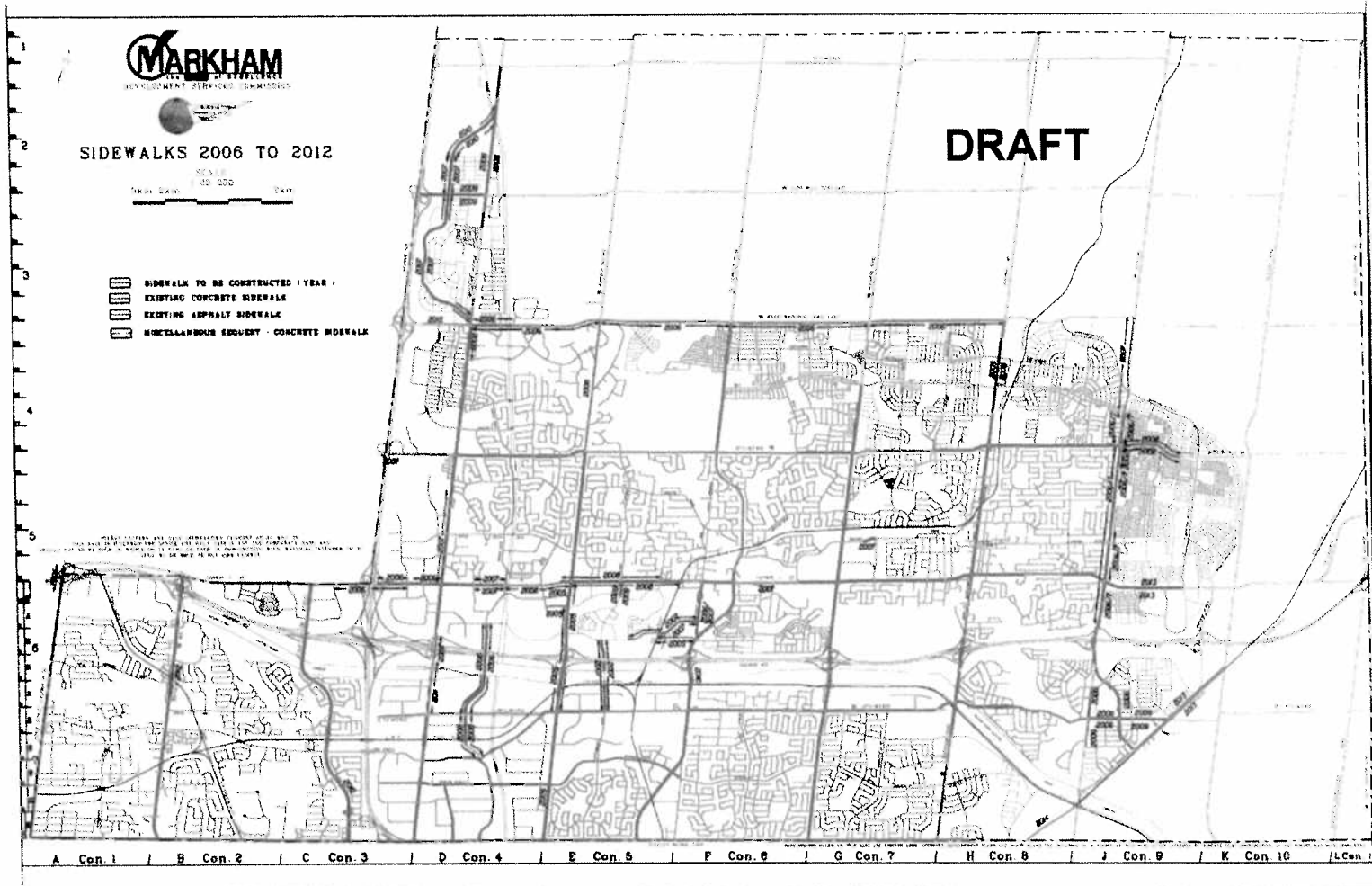
Proposed Changes to the 2006 to 2011 Road Capital Program - Continued

- Enterprise Phase 2(a) (Rivis Drive to temporary school entrance), **deferred** 2 years (2006 to 2008)
- Enterprise Phase 2(b) - (temporary school entrance to Kennedy Road), **deferred** to 2010/2011 when East Precinct to develop.
- Main Street Unionville (Hwy 7 to Enterprise Drive), **deferred** to 2010/2011 to match Enterprise Phase 2(b) schedule
- The proposed schedule for Enterprise/Main Street is based on;
 - Sufficient capacity available on YMCA Blvd to accommodate projected traffic volume to 2011
 - Property acquisition issues (to be discussed in camera)
 - Assist in cash flow constraint by deferring \pm \$8.5 million in development charges for Enterprise and \pm \$1.5 in tax rate for Main Street improvements
- As outlined at the February 7, 2006 Development Services Committee three options are available to accommodate the High School development in the East Precinct;
 - Main Street only access to 2011
 - Extend Enterprise to Kennedy Road
 - Interim access to Enterprise at Rivis Drive
- Staff are finalizing their evaluation and will report back to Committee on March 7, 2006 as part of the site plan report for the High School

B) Sidewalks

- The sidewalk 5 year program has been developed based on:
 - Development phasing
 - Anticipated demand for infrastructure (pedestrian volume)
 - Council/Public input
 - Coordination with Markham/Region/MTO/407 ETR/Toronto road construction projects
 - Available property
 - Available platform to build a sidewalk
 - Anticipated funding
 - Available staff resources to manage the projects
- Specific dates for sidewalk construction have been finalized for the next 5 years (2006-2010).
- Specific dates beyond 2010 will be finalized in future years when there is certainty of development phasing and the Regional/Town Road Capital Program.
- A \$200,000 allowance (development charges related) is proposed each budget year to address any unforeseen sidewalk requirements

Map: Sidewalk 5 Year Program



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Specific Council/Public Sidewalk Requests

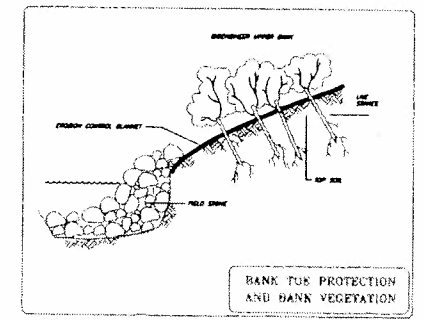
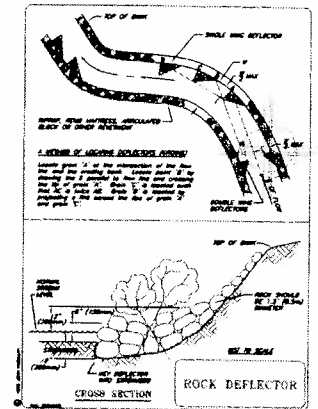
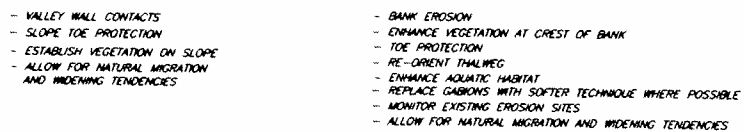
- Yonge Street at Hwy 407
 - To be undertaken in 2006 with Hwy 407 work
- Hwy 7 east of Kennedy Road
 - Analysis of structure modifications to accommodate SW over Rouge River in 2006. Construction 2007
- Hwy 48 north of 16th Avenue
 - 16th to McDonald plaza - 2006
- 9th Line south of 14th Avenue
 - 2006

C) Illumination

- The 5 Year (2006 to 2010) Illumination Program has been developed based on:
 - Public safety
 - Development phasing
 - Council/Public input
 - Coordination with Markham/Region/MTO/407 ETR/Toronto road construction projects
 - Anticipating funding
 - Available staff resources to manage the projects
- Upgrades to existing local streets (tax rate) budgeted through Operations and Asset Management
- Specific dates for illumination have been finalized for the next 5 years (2006-2010).
- Specific dates beyond 2010 will be finalized in future years when there is certainty of development phasing, and the Region's/Town's Capital Road program
- Average \$1.5 million/year over 5 years budgeted
- An \$125,000 allowance (development charges related) included in yearly budget for unforeseen requirements

D) Watercourse Erosion

- \$44.6 million included in 2004 Development Charges Town Wide By-law
- Funded by development charges (\$17.95 million), non growth (\$15.74 million) and local developers cost (\$10.95 million)
- Implementation Plan to prioritize erosion works and stormwater management pond retrofit currently being finalized for Committee consideration this spring



PROJECT:

TOWN OF MARKHAM
EROSION RESTORATION
IMPLEMENTATION PLAN



WATERCOURSE: EAST DON RIVER
REACH: ED-1 FIGURE: 3
AQUAFOR PROJECT NO.: 64550

LOCATION: BAYVIEW AVENUE TO
DOWNSTREAM CONFLUENCE

SCALE 1:5,000



Next Steps

- Council's input requested on the;
 - The 5 Year (2006 - 2010) Roads/Structure Capital Program;
 - The 5 Year (2006 – 2010) Sidewalk Program;
 - The 5 Year (2006 - 2010) Illumination Program;
- Staff to report back on the Erosion Restoration Implementation Program in Spring 2006
- The Finance Department to prepare cash flow analysis on the 5 year capital program and report back to General Committee