

# Award of Tender 072-T-14 West Thornhill – Phase 1A Storm Sewer and Watermain Replacement

## General Committee Meeting

June 16, 2014

## Purpose

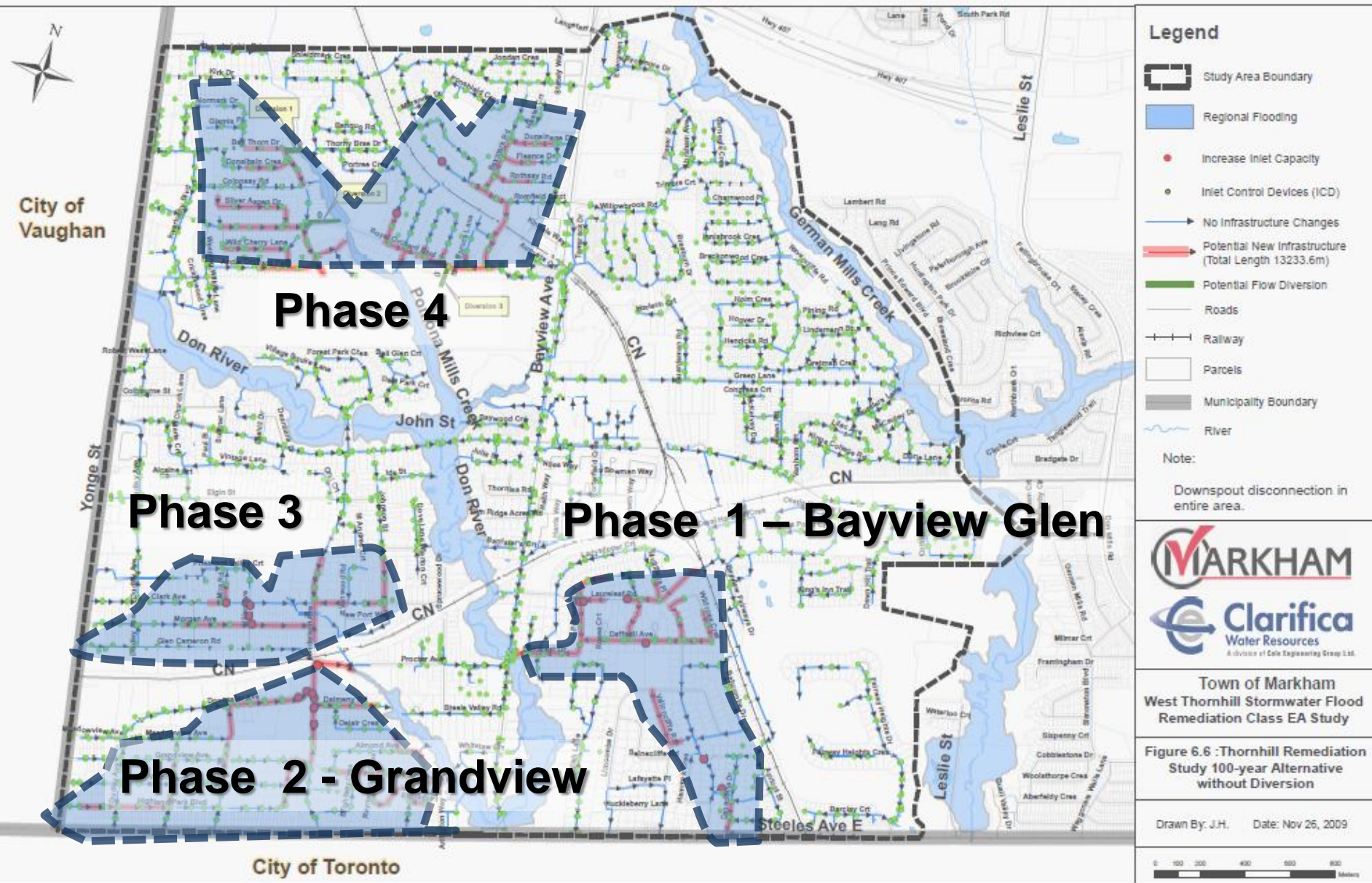
- To award the contract for the West Thornhill – Phase 1A Storm Sewer and Watermain Replacement;
- To award the contract administration and inspection services; and
- To increase the stormwater fee rates to address the revised cost estimate for the overall Flood Control Program from \$186M to \$234M as outlined in report.

## Background

- The City-wide Flood Control Program is a 30 year program with an estimated cost of \$186M based on 2009 and 2010 Class EA cost estimates.
- To support the program, on November 26, 2013 Council approved stormwater fee rates (starting in 2015) of:
  - ❑ \$36 per unit/year for residential and multi-residential properties
  - ❑ \$21/\$100,000 CVA/year for non-residential properties.
- The West Thornhill area (Phase 1 & 2) is proposed to be completed in the first 5 year period by 2018 (see map).

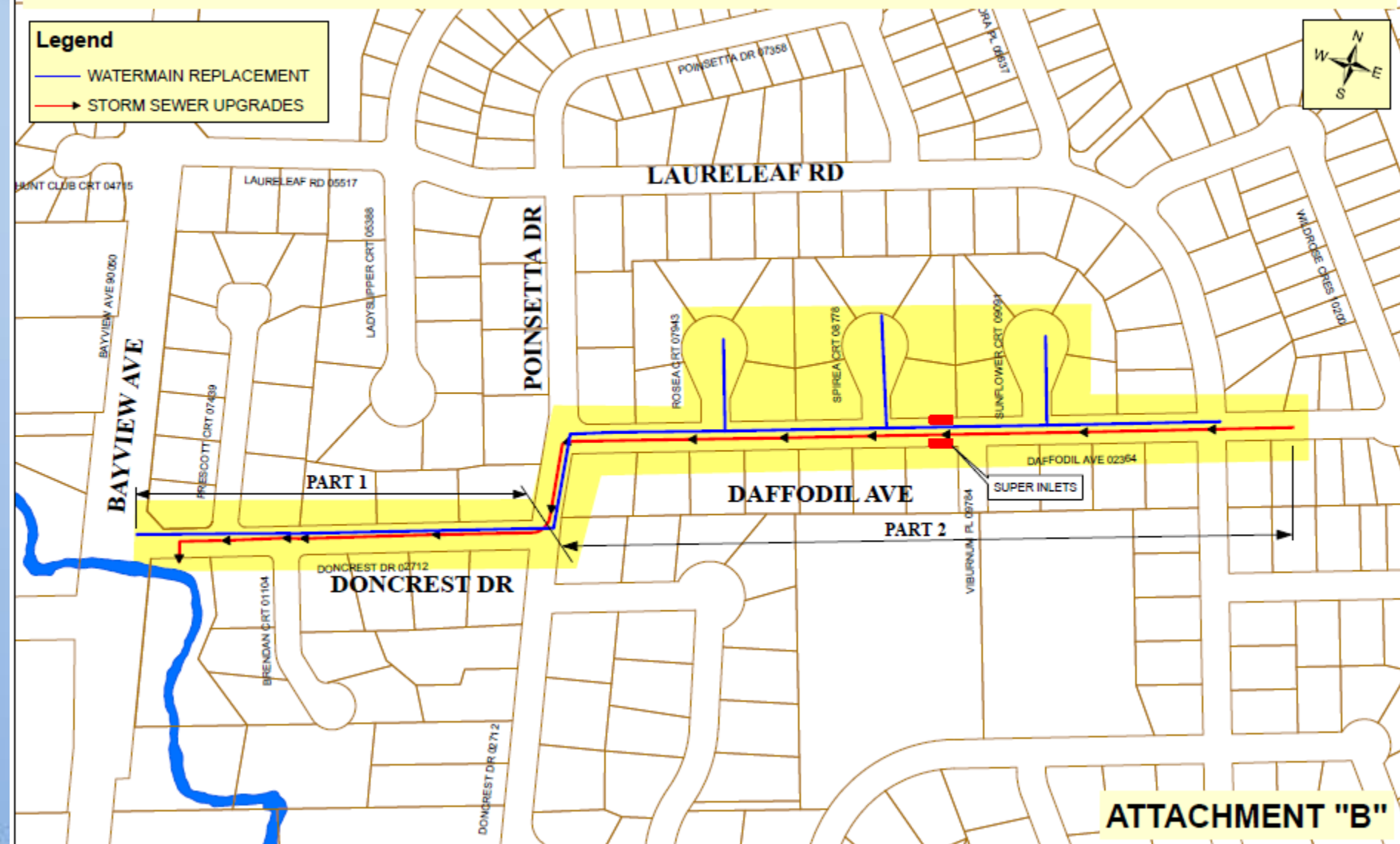


# West Thornhill Implementation Phases



**Legend**

— WATERMAIN REPLACEMENT  
→ STORM SEWER UPGRADES





## Phase 1A Improvements

- New storm outfall to Don River on Doncrest Drive, east of Bayview Avenue;
- New storm sewers along Doncrest Drive and Daffodil Avenue, and along portions of Poinsetta Drive and Wildrose Crescent (proposed sewers are large diameter and up to 7 metres deep);
- New watermain on streets noted above and on Rosea Court, Spirea Court, and Sunflower Court;



# Doncrest Drive



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# Storm Sewer Installation

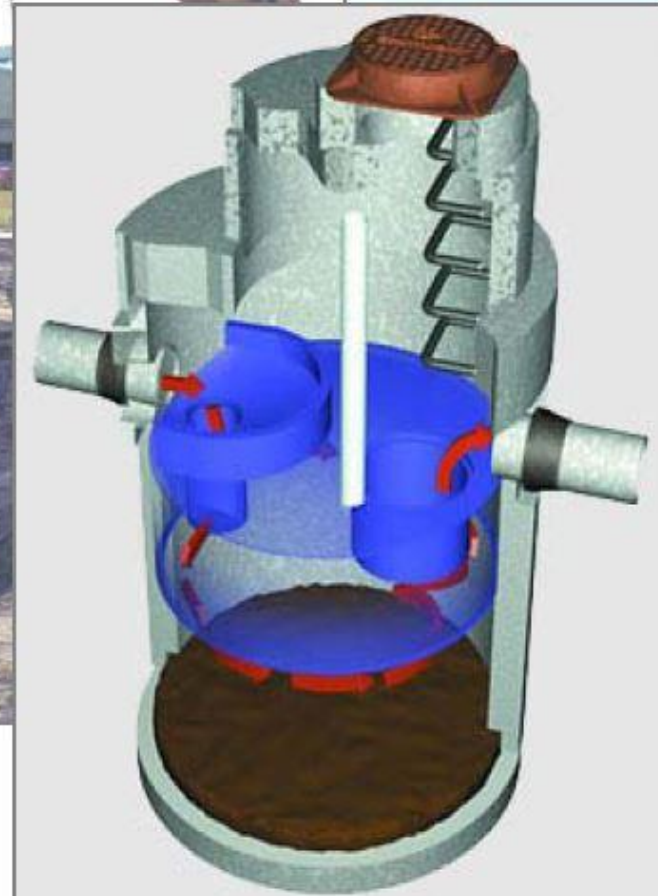




# Stormwater Quality Treatment



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*Journey to Excellence*



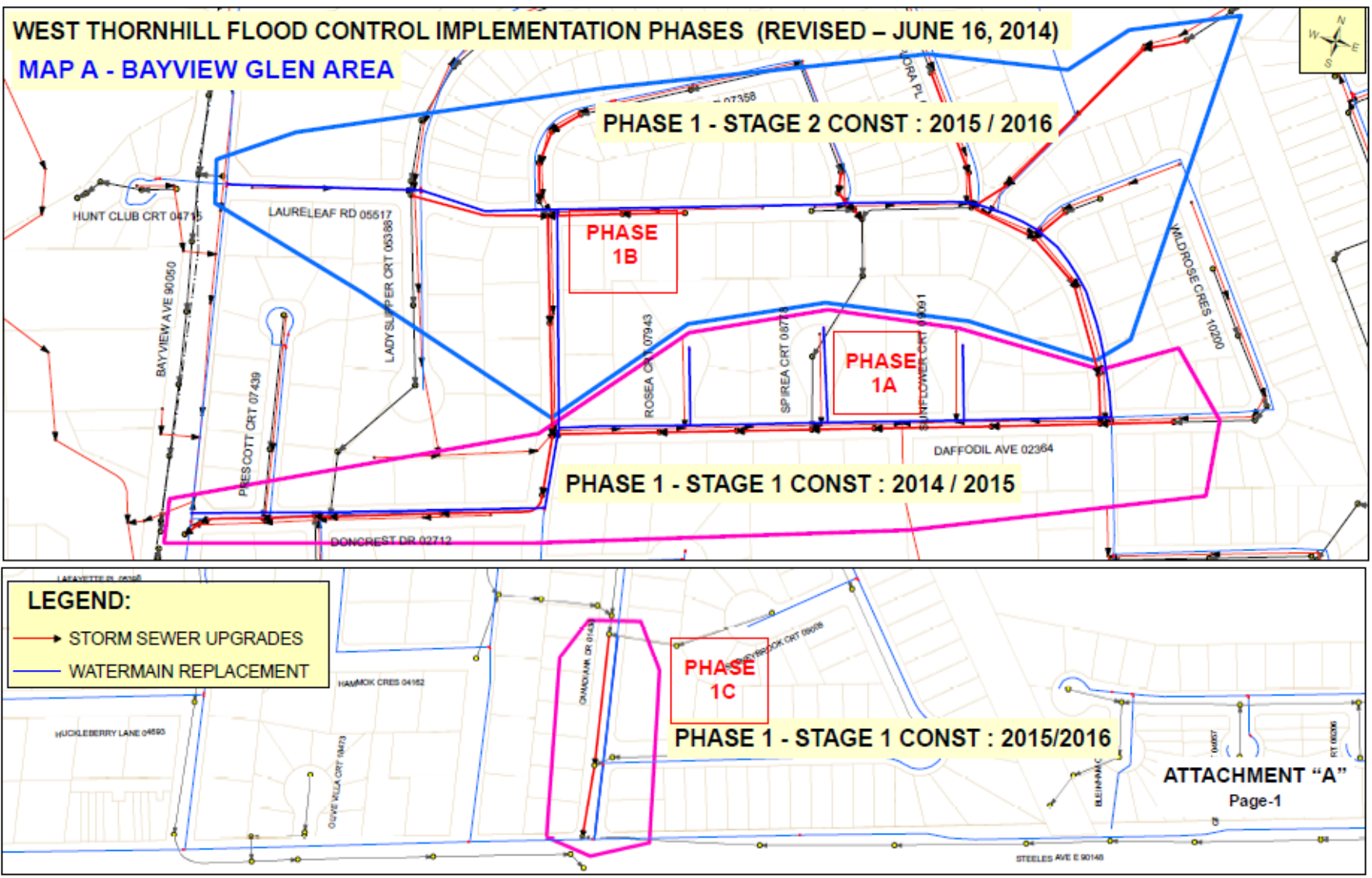
## Phase 1A Improvements (Continued)

- ☐ Storm water quality treatment device on Doncrest Drive;
- ☐ Reconstruction of roads along Doncrest Drive, Poinsetta Drive, and Daffodil Avenue;
- ☐ Roadway resurfacing of Rossea Court, Spirea Court and Sunflower Court.

## Phase 1A Construction Tender

- Phase 1 (Bayview Glen Area) was divided into 3 areas (1A, 1B, 1C). Phase 1A has proceeded to tender.
- The Phase 1A construction tender package was sent to six prequalified contractors on April 24, 2014.
- Five contractors picked up the bid document and one submitted a bid. The bid price is \$11,051,079.47.
- Staff negotiated a cost reduction of \$571,810.38 (approx. 5.2% reduction)
- The revised price is \$10,479,269.09.
- The available budget for construction is \$5,673,965.58 .
- The budget shortfall is \$6,153,329.16.





# Reasons for Budget Shortfall

- Detailed design refinements to EA recommendations based on value engineering
- Challenging soil and ground water conditions identified through field investigations
- Most complicated, difficult phase to implement due to large drainage area, and large sewers in deep excavations that require extensive dewatering

# Revised Flood Control Program

- The cost estimate of the 30 years Flood Control Program has been revised from \$186M to \$234M (2014 dollars).
- The revised cost estimate reflects:
  - ☐ Phase 1A budget shortfall
  - ☐ Phase 1A tender-based unit prices applied to the remainder West Thornhill future phases
  - ☐ New preliminary design quantities for West Thornhill Phases 1B, 1C and 2 works
  - ☐ Updated program administration costs



## WEST THORNHILL FLOOD CONTROL IMPLEMENTATION PHASES (REVISED - JUNE 16, 2014)

### MAP B - GRANDVIEW AREA

#### LEGEND:

- STORM SEWER UPGRADES
- WATERMAIN REPLACEMENT

**PHASE 2 - STAGE 2**  
CONST: 2016/2018

**PHASE 2B**

**PHASE 2 - STAGE 1**  
CONST: 2016/2017

**PHASE 2A**

## Options Evaluated To Address Funding Shortfall

- Option 1: Cancel the tender and re-tender in July 2014
  - ☐ Not recommended, potentially no bids, will not recover shortfall from design refinements
- Option 2: Cancel the tender and re-tender in Nov/Dec 2014
  - ☐ Not recommended, no guaranteed of lower price, delays, will not recover shortfall from design refinements
- Option 3: Award the Contract and maintain the approved stormwater fee rates and extend the collection of fees from 30 to 41 years
  - ☐ Not recommended, to collect beyond 30 year period

## Options Evaluated To Address Funding Shortfall

- Option 4: Increase stormwater fee rates to align with revised Flood Control Program costs as follows:

Sector	Stormwater Fee Rates (November 26, 2013)	Stormwater Fee Rates (Option 4)
Residential and multi-residential	\$36 per unit/year	\$47 per unit/year
Non-residential	\$21/\$100,000 CVA/year	\$29/\$100,000 CVA/year

- Recommended: fiscally prudent, align fee rates with revised program costs
- Updates to rates within five years to reflect updated project costs estimates, market condition, Gas Tax allocation, inflation, growth, administration costs, and revenue collection



## Recommendation

- Award construction tender and contract administration
- Increase stormwater fee rates

Sector	Stormwater Fee Rates (November 26, 2013)	Stormwater Fee Rates (Option 4)
Residential and multi-residential	\$36 per unit/year	\$47 per unit/year
Non-residential	\$21/\$100,000 CVA/year	\$29/\$100,000 CVA/year

## Next Steps

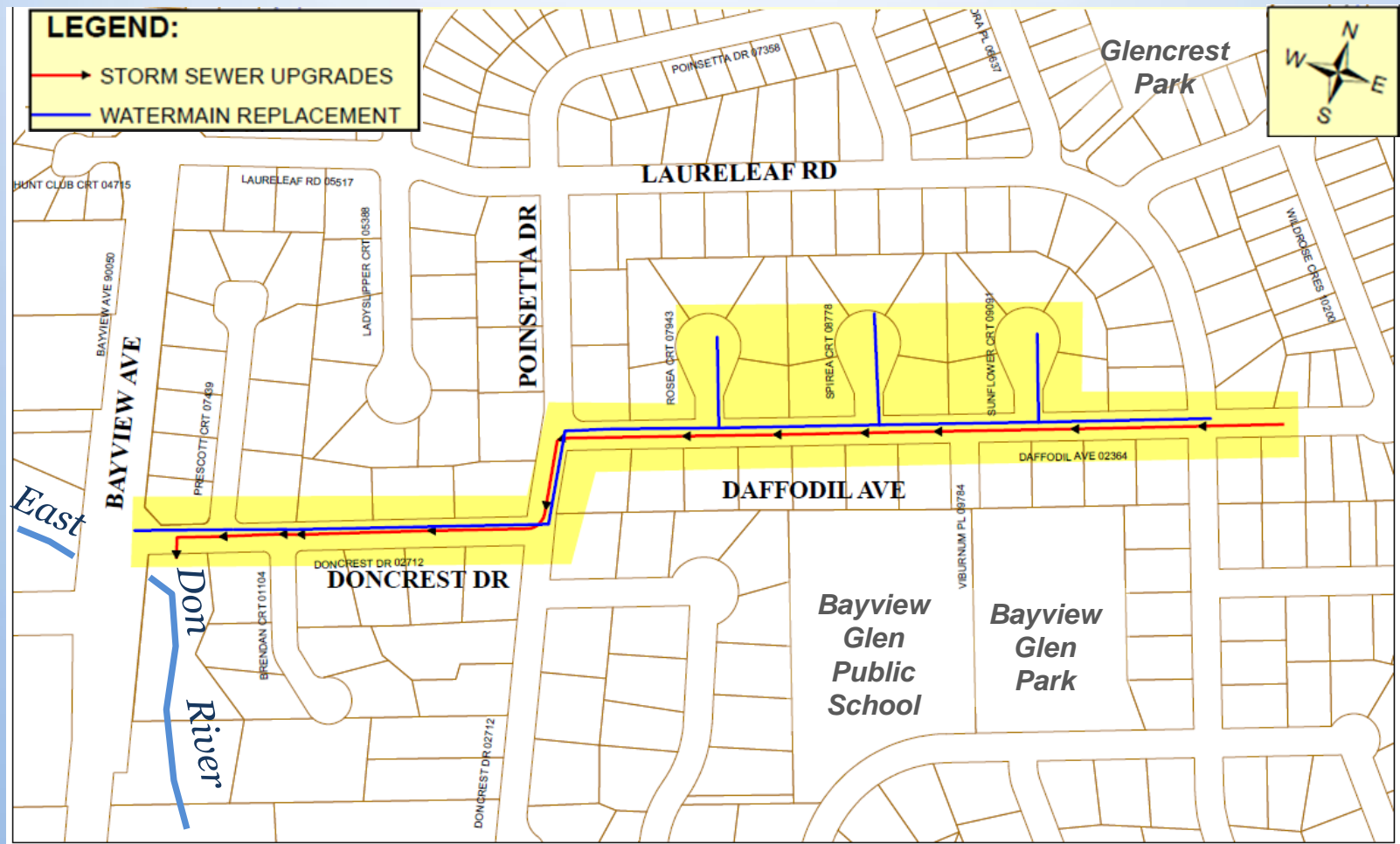
- Award Phase 1A Contract
- Project Communications:
  - Regular updates to stakeholders in construction areas
  - Phase 1A project updates on Markham website



# Questions



# Phase 1A Area



# Managing Traffic During Construction

- Road closure is required during construction.
  - ☐ Doncrest Drive will be closed at Bayview for up to 6 weeks (summer 2014).
  - ☐ Laureleaf Road will be designated as detour route.
- Roads will remain open to local traffic.
  - ☐ Residents will be able to access their driveways at all times although there may be delays during working hours.
  - ☐ Access for emergency vehicles will be maintained.
  - ☐ Provisions will be made for collection of solid waste and recycling materials

