

Update on Whistle Cessation on Stouffville GO Line in the City of Markham

Project Update - January 2016

**Development Services Committee
January 25, 2016**

Background

- Council at its meeting in September 2015 requested staff to develop a work plan and implementation plan for the grade crossing safety program and report back to Council no later than January 30, 2016
- On November 16, 2015 staff provided a written progress update to Development Services Committee

Progress since September Council Meeting

1. Safety audit by AECOM – awaiting final comments from Metrolinx and York Region on anti-whistling measures
2. Retained Naish Transportation Consulting to carry on an independent safety assessment – final draft report received and to be reviewed with York Region and Metrolinx
3. Cost sharing principles – principles proposed by City staff and awaiting confirmation of funding from Metrolinx and York Region
4. Markham Staff held various meetings with Metrolinx and York Region in October 2015
5. Meeting between Mayor and Metrolinx in December 2015



Work Schedule

- Finalize safety reports and receive York Region, Metrolinx and Transport Canada final concurrence on crossing upgrades – by **March 2016**
- Prepare design terms of reference and consult with Metrolinx and York Region – **January to May 2016**
- Negotiate partnership and funding principles for design – by **April 2016**
- Execute agreements or memoranda of understanding (MOU) for design with partners – by **May 2016**
- Tender design – **May 2016**
- Award design – **August 2016**
- Complete detailed design – by **early 2017**
- Execute agreements or MOU for construction – by **early 2017**
- Tender construction – by **early 2017** (subject to funding)
- Construction – **Spring 2017 to Summer 2018**

AECOM Report Summary (Preliminary)

- AECOM reviewed the grade crossings based on the new Federal Grade Crossing Regulations and new Grade Crossing Standards
- The new Grade Crossing Regulations also specify what additional measures are required for anti-whistling
- It is important to note that trains will whistle for emergency situations and the train bells will continue to operate at stations and crossings as regulated
- AECOM report identified upgrades for both general safety and for anti-whistling, including: (a) for general safety: road signage, pavement markings, approach road grades, sidewalk grades, trimming for vegetation for visibility, operations of vehicular barriers, general visibility issues at grade crossings, proximity of driveways and intersections, 2 pedestrian gates at McCowan (west side) and 2 pedestrian gates at Eureka Street, (b) for anti-whistling: maze barriers, anti-whistling signage

Safety Assessment by Naish Consulting (Preliminary)

- Council requested independent safety assessment on safety, risk and liability
- Naish Transportation Consulting retained in November 2015 to provide an independent safety assessment above and beyond the Federal regulations
- Additional recommendations beyond AECOM report:
 - Provide 2 pedestrian gates at 16th Avenue (Regional) and 4 pedestrian gates at Bur Oak Avenue (City) and 2 pedestrian gates at McCowan (east side) (Regional)
 - Mitigation of trespassing in south of Highway 7, Main Street Unionville
 - Improve advisory warning for private crossing at Hydro Corridor south of Highway 407
 - Communication and Education program
- Staff are following up with Metrolinx and York Region to confirm acceptance of these recommendations as shown in the following slides

Summary of Anti-whistling Works (Preliminary) (1 of 2)

Crossings	Anti-whistling Works		Comments
	Maze Barriers	Pedestrian Gates	
Kennedy (South)	4		
Denison	2		Only sidewalk on south side
Highway 7	4		
Eureka Street			<ul style="list-style-type: none"> - Major design require because of sightline concerns - Need further discussion with Metrolinx and AECOM
Main St. Unionville	4		
Kennedy (North)	4		

Summary of Anti-whistling Works (Preliminary) (2 of 2)

Crossing	Anti-whistling Works		Comments
	Maze Barriers	Pedestrian Gates	
McCowan Road	2	2	2 pedestrian gates on east side for anti-whistling (2 pedestrian gates on west side for general safety)
Sinder	4		
Main St. Markham			Pedestrian gates already in place, additional minor signage only
16 th Ave	2	2	Pedestrian gates on north side only
Bur Oak		4	Existing maze barriers to be replaced by pedestrian gates
Castlemore			Maze barriers already in place, additional minor signage only
Major Mackenzie	2		Sidewalk on south side only
Total =	26	8	

Funding Principles under Negotiation

- Staff developed funding principles based on the type of upgrades
- Funding Principles are under negotiation with Metrolinx and York Region
- Preliminary cost estimate to upgrade 13 urban crossings is a combination of (a) upgrades for new regulations and (b) upgrades for anti-whistling
- The combined estimate is about \$5.1-\$6.0M which does not include any property costs or costs for communication/education plan and trespassing mitigation strategies
- The breakdown of the estimate is shown in the next slide
- Metrolinx and York Region have yet to confirm cost sharing
- Staff will update Council in June/September 2016 on final cost sharing



Preliminary Cost Estimates for 13 Crossings

Share	Upgrades for New Regulations (\$)	Upgrade for Anti-whistling (Note 1) (\$)	Sub-total (\$)
Markham	0.2-0.3M	1.6-1.7M	1.8-2.0M
York Region	0.1-0.2M	1.7-2.1M	1.8-2.3M
Metrolinx	1.5-1.7M	0.0M	1.5-1.7M
Total	1.8-2.2M	3.3-3.8M	5.1-6.0M

* The above cost includes 30% soft costs + 1.76% tax impact. It does not include property acquisition costs, communication/education plan and trespassing mitigation costs.

Note 1: The anti-whistling upgrades include 8 pedestrian gates and 26 maze barriers and anti-whistling signage.

Issues being Addressed that Impact Anti-whistling Implementation Schedule

- Metrolinx's Regional Express Rail (RER)
- Metrolinx double tracking the Stouffville Line (part of RER)
- Metrolinx's grade separation/road closure study (part of RER)
- Metrolinx's requirement to upgrade its grade crossings to meet new Federal regulations by 2021 at the latest
- Availability and timing of funding from Markham, Region and Metrolinx
- Indemnification Agreement between Metrolinx and road authorities (York Region and City)
- City's operation and maintenance costs

Detailed Design

- Notwithstanding the various issues being finalized between the parties, staff recommend to proceed with detailed design in order to meet a spring 2017 start of construction
- Staff start preparation of the terms of reference for joint design of crossing upgrades for the 13 crossings in the urban area for both Anti-whistling and improvements for new regulations
- Staff will request funding from York Region and Metrolinx. If funding is not secured by the time of design award, staff recommend Markham upfront the design costs with subsequent reimbursement from both parties

Recommendations / Next Steps

It is Recommended that:

- Staff Presentation be received
- Metrolinx and York Region be requested to agree to safety reports and associated crossing upgrades
- Staff be authorized to start the detailed design process
- Staff be authorized, if necessary, to front-end the full cost of the design process estimated at \$550-\$660k for all 13 crossings
- Mayor & Clerk be authorized to enter into agreements or memoranda of understanding with Metrolinx and York Region for funding partnership for detailed design up to a limit of \$660k (including staff administration fees and tax impact)
- Staff provide a further progress update in June/September 2016