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Regional Clerk's Office
Corporate Services Department

February 27, 2008

Ms. Sheila Birrell
Town Clerk
Town of Markham
101 Town Centre Boulevard
Markham, Ontario
L3R 9W3

Dear Ms. Birrell:

**Re: Anti-Whistling Policy For Trains
At Road/Rail Crossings**

The Council of The Regional Municipality of York, at its meeting held on Thursday, February 21, 2008, referred Clause No. 6, Report No. 2 of the Transportation and Works Committee back to Committee on the following basis:

Clause 6 regarding the Anti-Whistling Policy for Trains at Road/Rail Crossings be referred back to staff for further discussion with the local municipalities and the submission of a report to the April 9, 2008 Committee meeting.

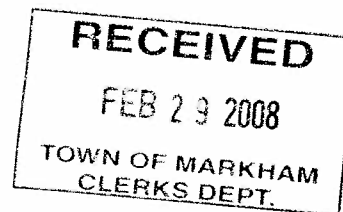
A copy of Clause No. 6, Report No. 2 of the Transportation and Works Committee, is attached for your information.

Sincerely,

A handwritten signature in cursive script, appearing to read "Denis Kelly".

Denis Kelly
Regional Clerk
B. Bridle
Attachment

Copy to: Commissioner of Transportation Services



Clause No. 6 in Report No. 2 of the Transportation and Works Committee was adopted, as amended, by the Council of The Regional Municipality of York at its meeting on February 21, 2008.

6

ANTI-WHISTLING POLICY FOR TRAINS AT ROAD/RAIL CROSSINGS

(Regional Council at its meeting on February 21, 2008 referred the following Clause back to staff for further discussion with the local municipalities and the submission of a report to the April 9, 2008 Committee meeting.)

The Transportation and Works Committee recommends the following:

1. The presentation by Brian Harrison, Director, Operations, Roads Branch, be received;
2. The recommendations contained in the following report, January 25, 2008, from the Commissioner of Transportation Services, be adopted.

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council adopt the attached policy to deal with requests from local municipalities wishing to enact by-laws prohibiting train whistling at railway crossings of Regional roads.
2. The Regional Clerk forward this report to the Clerk of each local municipality.

2. PURPOSE

This report recommends adopting a policy on anti-whistling at railway crossings of Regional roads (*see Attachment 1*).

3. BACKGROUND

Requests to implement anti-whistling at level railway crossings throughout the Region are received on a regular basis.

On May 2, 2007, a report to the Region's Transportation and Works Committee proposed that anti-whistling not be considered at that time. The report recommended that the Regional Chair be authorized to send a letter to the Minister of Transport Canada of the federal government requesting that York Region rail crossings be included in ongoing pilot tests for the use of automated horn systems that are intended as an option to replace the train whistle.

Staff are continuing to receive requests for anti-whistling. This report recommends the adoption of a policy on anti-whistling with criteria to consider future requests for the implementation of anti-whistling.

4. ANALYSIS AND OPTIONS

Recent requests for anti-whistling and automated horn systems

Most recently, staff received a request from a resident group in Aurora to implement anti-whistling at Regional road railway crossings in the Town of Aurora. Staff responded to the resident group indicating that Regional Council is not in support of anti-whistling.

Concerns have also been raised pertaining to the train whistling on the same line used by GO Transit and CN Rail within the neighbouring Town of Newmarket. As a result of many requests from the residents in Aurora and Aurora Council, staff attended a public meeting in October 2007 arranged by the Town of Aurora to discuss this issue. On October 19, 2007, staff also met with representatives from GO Transit, CN and Transport Canada.

Automated horn systems are not recommended as an alternative to the train whistles at this time

An automated horn system is a rail signalling device that is permanently mounted at the at-grade railway crossing and delivers a longer more consistent audible warning to motorists and pedestrians in the vicinity of the crossing than a train whistle. This automated system eliminates the noise pollution created by the sounding of the whistle on the train approaching the crossing as it travels past the neighbourhoods. A detailed description of the operation of the automated horn system is appended to this report as *Attachment 4*.

As a result of the meetings and discussions regarding train whistling, it was determined that the automated horn system may not be a viable solution for at-grade railway crossings at this time. Currently, the use of automated horn systems has not been approved for use. There are no standards for these systems and no criteria for their use. It would be very difficult to implement this horn system without established standards and criteria to enable design and construction of an automated horn system.

Existing locations within York Region with anti-whistling provisions

There is currently one location in Pefferlaw in the Town of Georgina that involves two low volume Regional roads where anti-whistling is in effect. This anti-whistling was implemented in 2001 and at that time the Region's position on this issue was neutral.

There is also an anti-whistling by-law in the Town of Richmond Hill, which was passed in 1987, and involves both Regional and Town roads. The Town of Richmond Hill passed this by-law without consultation with the Region. Since the Town of Richmond

Hill does not have jurisdiction over Regional roads, this by-law would not be valid since Regional Council was not consulted on the matter and did not endorse it.

The Town of Markham has an anti-whistling by-law which was passed in 1966 and prior to the formation of The Regional Municipality of York. Staff attended a meeting on November 23, 2007 with Town of Markham staff to discuss anti-whistling and the existence of their anti-whistling by-law; however, the Town of Markham staff were not aware of the existence of any anti-whistling by-laws specific to Regional roads within the Town's geographic jurisdiction.

Impact of rail authorities policy on the Newmarket and Aurora rail line

GO Transit has indicated that where a train stops at a station, for example at Wellington Street in the Town of Aurora, the train operator is required to sound the whistle as part of GO Transit policy consequently, GO Transit has indicated that the implementation of an anti-whistling by-law would therefore not be obeyed by commuter trains operated by GO Transit at crossings in close proximity to passenger stations as their established policy requires sounding of the train whistle.

On the Newmarket and Aurora rail line between Wellington Street and Green Lane, there are currently at grade crossings at Wellington Street, St. John's Sideroad, Mulock Drive, Davis Drive and Green Lane (*see Attachments 2 and 3*). On this line, GO Transit is obligated to sound the whistle, even if an anti-whistling by-law was in place, at Wellington Street, Davis Drive and at Green Lane due to the presence of passenger stations.

The affected residents in Aurora are mostly concerned with train whistles through the night, mainly by freight trains. GO Transit does not operate their trains on the Newmarket and Aurora line during the night. The first GO train leaves Newmarket at 6:17 a.m. each weekday en route to Union Station in Toronto. Theoretically, freight trains using this rail line during the night could pass through the crossings without sounding the train whistle if there was an anti-whistling by-law in place. It is staffs' understanding that freight trains do not have the same requirements as GO trains, to whistle at crossings in close proximity to stations.

All day anti-whistling by-law may significantly increase the Region's liability

Regional Legal Services and Regional Policy, Risk and Treasury staff have investigated liability and insurance issues related to the potential implementation of anti-whistling at rail crossings in Aurora. The conclusions are as follows:

i) The Brockville Experience

In March, 1999, the City of Brockville passed a by-law prohibiting train whistles within the City, at any time of the day. Tragically, in February, 2005, 2 pedestrian children were hit by a train at a level crossing. In response, train whistles were once again permitted in Brockville 24 hours per day. However, in May, 2006, whistling was again prohibited, but only between the hours of 10:00 p.m. and 6:00 a.m. and after the installation of

pedestrian safety gates and other safety devices at level crossings. In doing so, the City struck a balance between addressing the noise concerns of residents and protecting pedestrian and vehicular traffic during peak traffic hours.

ii) Impact on Liability Insurance Premiums

In response to concerns that an anti-whistling by-law would result in higher liability insurance premiums, Policy, Risk and Treasury staff contacted the Region's insurer to investigate this issue. Staff determined that there would be no specific identifiable increase in premiums, although this was a possibility. By way of example, staff were able to determine that a similar by-law in Milton, Ontario had resulted in increased premiums of \$900.00 per level crossing within the Town. It is not known whether this would be representative of potential costs to the Region for increased premium costs, as several factors which are not known at this time must be taken into account, including proposed design of the crossing, sight-line issues, traffic volume, etc.

It is, however, virtually certain that the Region's insurance premium costs would increase significantly in the event of an accident at a level crossing during a period while anti-whistling was in effect. As well, more liability for the accident itself would be shifted to the Region from the rail authority, as GO Transit and CN would both require indemnification agreements from the Region during the process of approving any anti-whistling by-law.

In consideration of balancing the concerns of the residents of the Region with pedestrian and vehicular safety issues, Regional staff recommend it may be appropriate to adopt a policy to support local municipal anti-whistling by-laws for the night time (i.e. 10:00 p.m. – 6:00 a.m.) as is experienced in Brockville.

Proposed process and criteria for approval of an anti-whistling by-law at specific Regional road rail crossings

In considering all of the information and issues, staff from Roads and Legal and Risk Management have developed a proposed process to address the anti-whistling issue and to create criteria to assist Regional Council and local Councils in considering requests for anti-whistling at specific locations. The following is the recommended anti-whistling criteria:

1. Local municipalities must make a formal request to the Region for support of an anti-whistling by-law for each individual location where a rail crosses a Regional Road at-grade.
2. An anti-whistling by-law could be considered if the following conditions are satisfied and all costs are incurred by the local municipality:
 - a. A safety audit is completed by a specialized safety consultant.
 - b. The safety audit is approved by Transport Canada.
 - c. If there are pedestrians in the area of the crossing, pedestrian gates must be installed.
 - d. An education program is developed for the affected area.

- e. The whistling prohibition be implemented only between the hours of 10:00 p.m. and 6:00 a.m.

Impact of proposed criteria on the Newmarket and Aurora rail line

The Town of Aurora has already retained a specialized consultant to conduct a safety audit at the crossings within their jurisdiction. If an anti-whistling by-law is supported on this line, the Town of Aurora would need to have their safety audit approved by Transport Canada, install pedestrian gates at each location and develop an education program.

The Town of Newmarket is interested in anti-whistling; however, at this time Regional staff is not aware of any safety audits conducted at their crossings.

5. FINANCIAL IMPLICATIONS

In accordance with this policy, any costs related to the implementation of anti-whistling would be the responsibility of the local municipality. These costs include:

- The completion of a safety audit by a specialized safety consultant
- The installation of pedestrian gates if there are pedestrians in the area
- An education program for area residents and users

6. LOCAL MUNICIPAL IMPACT

The creation of a policy regarding implementing anti-whistling at rail crossings of Regional roads will provide a guideline for Regional staff to consider future requests from residents and local municipalities. This policy will also allow staff of the local municipalities a reference which can be used to consider future requests within their own jurisdiction.

Any costs to implement anti-whistling are the responsibility of the local municipality. According to Transport Canada, depending on location, geometrics of the road and railway and specific setup, the cost to install a pedestrian gate and mast arm range from \$60,000 to \$100,000 per location. Federal grants provide up to 80% of the funding for the installation of railway safety devices.

In comparison, other costs, such as the completion of a safety audit and the creation of an education program are minimal. For example, the approximate cost to conduct safety audits of the at-grade rail crossings in the Town of Aurora were \$3,000 per location. The cost to create an education program, including items such as the mailing of information brochures to area residents, posting of notices in local newspapers and hosting public meetings range from \$2,500 to \$5,000. In accordance with the Regional policy "Public Notice Requirements", notice of a public meeting must be published in a newspaper at least two weeks prior to the date of the meeting.

Even if a local municipality enacts an anti-whistling by-law at a location, the train operator still has discretionary use of the train whistle. Any local by-laws are superseded by the rail authority's policies.

7. CONCLUSION

Staff receive requests to implement anti-whistling at railway crossing of Regional roads. This report recommends adopting a policy to consider requests for the implementation of anti-whistling that can be used by Regional staff to review any future requests.

This policy requires local municipalities to make a formal request to the Region for support of an anti-whistling by-law for each individual location. The Region would consider supporting an anti-whistling if the following conditions are satisfied and all costs are incurred by the local municipality:

- A safety audit is completed by a specialized safety consultant.
- The safety audit is approved by Transport Canada.
- If there are pedestrians in the area of the crossing, pedestrian gates must be installed.
- An education program is developed for the affected area.
- The whistling prohibition is implemented only between the hours of 10:00 p.m. and 6:00 a.m.

For more information on this report, contact Brian Harrison, Director, Operations, Roads Branch at extension 5205 in the Transportation Services Department.

The Senior Management Group has reviewed this report.

(The attachments referred to in this clause are attached to this report.)



STATUS

Council Approved: Y N

CAO Approved: Y N

TITLE: Anti-Whistling Warrant Criteria	NO.: Effective Date: Latest Revision Date:
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POLICY STATEMENT:

This policy provides a set of criteria when local municipalities request York Region support for a local municipal anti-whistling by-law at railway crossings of Regional roads.

APPLICATION:

The criteria provide a consistent approach to deal with requests from area municipalities for the implementation of anti-whistling within York Region.

PURPOSE:

The purpose of this policy is to provide a set of criteria for area municipalities to follow when requesting support of an anti-whistling by-law at locations on Regional roads.

DESCRIPTION:

This policy contains criteria for implementing anti-whistling on Regional roads that intersect railway lines.

Criteria

1. Local municipalities must make a formal request to the Region for support of an anti-whistling by-law for each individual location where a railway crosses a Regional road at-grade.

APPROVAL INFORMATION**Council Minutes:**

Clause No.: _____ of Report No.: _____

Of the: _____ Date: _____

OR

CAO Approval Date: _____

2. An anti-whistling by-law could be considered if the following conditions are satisfied and all costs are incurred by the local municipality:
 - a. A safety audit is completed by a specialized safety consultant.
 - b. The safety audit is approved by Transport Canada.
 - c. If there are pedestrians in the area of the crossing, pedestrian gates must be installed.
 - d. An education program is developed for the affected area.
 - e. The whistling prohibition be implemented only between the hours of 10:00 p.m. and 6:00 a.m.

CONTACT:

Director, Operations, Roads Branch, Transportation Services Department



LOCATION PLAN

Anti-Whistling Policy
Newmarket/Aurora Line
Town of Newmarket

York Region

TRANSPORTATION AND WORKS



LOCATION PLAN

Anti-Whistling Policy
Newmarket/Aurora Line
Town of Aurora

York Region

TRANSPORTATION AND WORKS

AUTOMATED HORN SYSTEM

Sound Comparison: Train Horn vs. AHS™

Locomotive engineers are required by law and the railroad's code of operating rules and regulations to sound the train's horn 1/4 mile in advance of the crossing. They are also required to continue to sound the horn until the train arrives at the crossing.

If the train horn is to be an effective warning device for the motorist, it must provide a sound level capable of initiating a response from the driver when the train is approaching the crossing. Unfortunately the sound level required to achieve that response and the location of the train relative to the crossing creates a significant noise impact on the community.

The two noise footprints below depict the area impacted by the sound of the train horn and AHS™ respectively. The comparison of the train horn and AHS™ shows a dramatic difference between the areas that are impacted at specific decibel levels. By examining the 80 decibel contour on the two footprints it can be seen that the area impacted by the AHS™ is a fraction of the size of the 80 decibel contour produced by the train horn.

AHS™ is an innovative railroad signaling device that significantly improves safety for motorists and pedestrians and dramatically reduces the amount of noise pollution created by train horns along rail corridors in populated areas.

The AHS™ is mounted at the crossing, rather than on the locomotive, to deliver a longer, louder, more consistent audible warning to motorists and pedestrians while **eliminating noise pollution in neighborhoods for more than 1/2 mile** along the rail corridor.

AHS™ sounds like a train horn because the tone modules in the AHS™ horns were digitally recorded from an actual locomotive horn. After receiving the signal from the railroad's track circuit warning system, AHS™ mimics the train horn warning by cycling through the standard railroad whistle pattern until the train reaches the crossing.

Once the train has entered the crossing AHS™ stops sounding its horn. A confirmation signal notifies the locomotive engineer that the AHS™ is functioning properly.

When the locomotive engineer sees that the confirmation signal is flashing, he will not be required to sound his horn unless he detects an unsafe condition at the grade crossing.

Coordination with the railroad operating company is essential since the AHS™ is directly connected to the railroad's crossing signal-warning system. The railroad operating company must issue instructions to their train crews regarding the sounding or non-sounding of the train's horn.

