

COMMITTEE OF THE WHOLE - SEPTEMBER 5, 2006

REQUEST FOR NOISE EXEMPTION

Recommendation

The Commissioner of Legal and Administrative Services and the Senior Manager of Enforcement Services recommend that the request for a Noise Exemption be granted.

Economic Impact

N/A

Purpose

This report is to provide information related to a request for a long term noise exemption to By-law 96-2006.

Background - Analysis and Options

The City of Vaughan passed a new Noise Control By-law (96-2006) in April 2006. The Noise Control By-law delegated authority to grant noise exemptions for construction purposes up to eleven days, to the Department Head of Enforcement Services.

In April 2006, McNally/Aecon wrote to the City of Vaughan Engineering Department requesting an exemption to the Noise By-law for the Bathurst Collector/Langstaff Trunk Sewer Project. The request was subsequently forwarded to Enforcement Services in June 2006.

The request for exemption to the Noise Control By-law was for a period from October 2006 to August 2008 essentially 24 hours per day. The noise source was described by the Applicant as a stationary crane used to excavate the shafts being constructed. The Applicant further advised that the crane would be fitted with a muffling device in order to reduce noise to below 85dba.

As the delegated authority under the Noise Control By-law is only eleven days, the Applicant would require a specific amendment to the By-law.

The Applicant's package has been attached to this report. The locations of the activity is identified in the map included in the applicant's package.

Relationship to Vaughan Vision 2007

This report is consistent with the priorities previously set by Council.

The necessary resources have been allocated and assigned.

Conclusion

This request for a Noise Exemption under the Noise Control By-law, 96-2006, exceeds the delegated authority. A specific by-law amendment would be required to permit this construction project to proceed as planned.

Attachments

Information package from McNally/Aecon.

Report prepared by:

Tony Thompson
Senior Manager, Enforcement Services

Respectfully submitted,

Tony Thompson
Senior Manager, Enforcement Services

Janice Atwood-Petkovski
Commissioner of Legal & Administrative Services



The City Above Toronto



Date: June 21, 2006

To: Tony Thompson
Senior Manager of Enforcement Services

Re: Request for Exemption to Noise By-Law
Bathurst Collector/Langstaff Trunk Sewer Project
Regional Municipality of York

Please find attached a copy of a request for exemption to noise by-law from McNally International/Aecon Constructors Joint Venture, letter dated April 27, 2006 and submitted by Laura McNally, P.Eng., with respect to the Bathurst Collector/Langstaff Trunk Sewer Project for your review and comments/approval. All the background information, scope of work etc. is detailed in the attached submission.

I trust the information provided is complete and satisfactory. Please feel free to contact me with any additional questions or concerns.

Tony Artuso, C.E.T.
Engineering Assistant, Planning and Studies

/ta

cc. File

memorandum

RECEIVED

JUN 21 2006
CITY OF VAUGHAN
ENFORCEMENT
SERVICES

McNally / AECOM

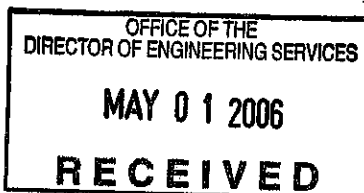
- joint venture



JOB SITE
2 BEVERLEY GLEN BLVD
VAUGHAN ON
TELEPHONE:
FAX:

TORONTO OFFICE
1544 THE QUEENSWAY
TORONTO ON M8Z 1T5
TELEPHONE: 416-252-6321
FAX: 416-252-3015

E-Mail: B-L@mcnallycorp.com



CITY OF VAUGHAN ENGINEERING DEPARTMENT RECEIVED APR 28 2006	
REFER TO:	NOTED
FILE NAME:	

April 27, 2006

City of Vaughan
Engineering Department
2141 Major Mackenzie Drive
Vaughan, ON L6A 1T1

Attention: Mr. G. Carrol, P.Eng.
Director of Engineering Services

**Re: Request for Exemption from By-law to Control Noise
Bathurst Collector/Langstaff Trunk Sewer Project
Regional Municipality of York**

Dear Sir:

The Region of York has initiated the process to award the construction of the Bathurst Collector /Langstaff Trunk Sewer Project to McNally International /Aecon Constructors Joint Venture. The Bathurst Collector will convey sewage from developments west of Bathurst Street and north of Langstaff Road (Blocks 10, 11, 12, 13, 18, 19 and 20) to the York Durham Sewage System at Steeles Avenue. The Langstaff Trunk will extend from the Maple Collector Relief Sewer to the Bathurst Collector providing relief to the Maple Collector to allow additional development in Maple and areas further west in the City of Vaughan. The sanitary sewer is to be constructed in tunnel with surface works in six (6) locations. Tunneling will take place at (2) shaft locations, from which construction is to be carried out in shifts, necessitating an exemption to the City's Noise Control By-Law.

We have enclosed an Application and supporting documentation for a noise by-law exemption for the project and respectfully request that you review the submittal. We would be pleased to meet with the appropriate City committee and Council, if necessary, to more fully explain this application. Please feel free to contact me or the Project Manager, Tim Cleary, if you require additional information.

Yours truly,

Laura McNally, P.Eng.
Project Engineer

[Enclosure]

cc: Mr. T. Hrkac, Region of York
Mr. P. Magowan, Marshall Macklin Monaghan
Mr. S. Holden, MacViro Consultants
Mr. T. Cleary, McNally International / Aecon Constructors Joint Venture

APPLICATION FOR EXEMPTION
BY-LAW NO. 270-81 AND AMMENDMENTS
BY-LAW TO CONTROL NOISE

This application is made in accordance with Clause 9 of By-law No. 270-81.

Applicant

McNally International/Aecon Constructors Joint Venture
1855 Barton Street East
P.O. Box 3338, Station C
Hamilton, Ontario L8H 7L8

Mr. Tim Cleary
Project Manager

Phone: (416) 252-6321
Fax: (416) 252-3015

Noise Source

The noise source will be stationary crane(s) operating at ground surface adjacent to shaft(s). The crane will be operating to excavate the shaft or the tunnel being constructed between shafts and to provide material for the sewer construction.

Area(s) of By-Law Exemption

Exemption is sought from Clause 3, Table 3-1, Item 16 to allow the operation of equipment and personnel as follows:

Location	Duration/Time/Reason
Beverly Glen Blvd/Bathurst Street	<ul style="list-style-type: none">• October 2006 to August 2008• 1900 – 0200 hours to permit 2 shifts for tunneling• 0200 – 0700 hours to permit a shift for maintenance
Langstaff Road/CNR	<ul style="list-style-type: none">• December 2006 to May 2008• 1900 – 0200 hours to permit 2 shifts for tunneling• 0200 – 0700 hours to permit a shift for maintenance

Project

Bathurst Collector/Langstaff Trunk Sewers

Construction of a 2770 mm diameter sanitary sewer along Bathurst Street from Steeles Avenue to Autumn Hill Blvd. approximately 5.1 km, and along Langstaff Road/Maple Sugar Lane from the CNR crossing to Bathurst Street, approximately 3.5 km, see plan attached. Sewer is generally 10 to 30 metres deep with construction being done in tunnel between shafts.

Reason for Exemption

The noise by-law exemption is being sought to allow shaft and tunnel excavation and construction to proceed in a timely and efficient manner for the construction of the Bathurst/Langstaff Trunk Sewer project. A contract has been executed by McNally International /Aecon Constructors Joint Venture for the construction of the project. The contract includes milestone completion dates for completion of parts of the system. The completion dates are based on the contractor working three shifts per day for tunnel excavation and maintenance.

By-law Compliance

Mitigation measures will be made to limit the noise generated and measures will be implemented to mitigate noise. The primary source of noise will be a crane operating at ground surface. The crane will be fitted with an efficient muffling device to reduce noise to less than 85 dBA in accordance with Publication NPC-115. Furthermore, the area where the cranes will operate will be enclosed by hoarding 3.5 m high adjacent to residential area and 2.4 m on other sides.

Further, lights required inside the working area will be shrouded and directed inward towards the working area.

SUPPLEMENTARY INFORMATION

**APPLICATION FOR EXEMPTION
BY-LAW TO CONTROL NOISE**

BATHURST/LANGSTAFF TRUNK SEWER PROJECT

S1. Working Compound Locations

Attached to the Application is a Project Plan, which indicates the working compound locations where the exemptions to the noise by-law are required. Each of these areas will be enclosed with hoarding and gated to mitigate noise.

Details of each of the Working (Mining) Compounds are as follows:

Compound	Location	Proximity to Residential Areas
Beverly Glen Blvd./Bathurst Street	Northwest corner of Beverly Glen & Bathurst Street	50 metres East
Langstaff Road/CNR (C5)	Southwest corner of Langstaff Road at CNR crossing	Commercial/Industrial Area

S2. Background Information

Tunneling work for the construction of sewers, subways or watermains has traditionally been carried out in shifts, around the clock because the majority of the work is conducted underground. This practice is consistent around the world and related to the nature of the work being underground. Many examples can be cited where local Councils have grant exemptions to noise control by-laws.

Hours of work have not been a concern previously and McNally can provide examples of tunnel projects in downtown Toronto, Markham and North York residential areas where the tunneling operations were successfully completed. Success on these projects is dependent on public information, communication, equipment maintenance, and conscientious work habits.

S3. Description of Operation

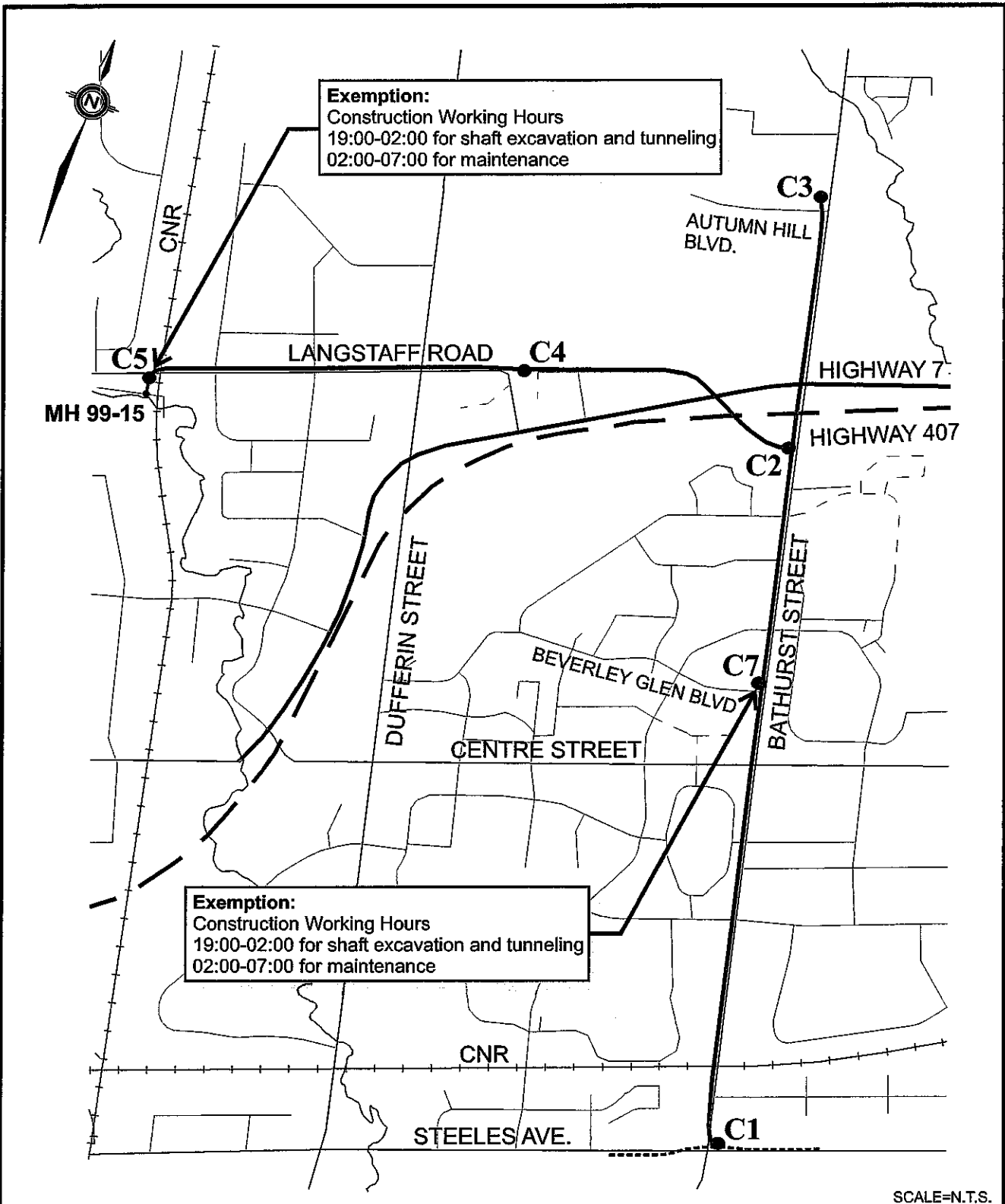
The works that will be conducted during the evening and night-time hours will typically be the removal of excavated material at shafts, supply of materials to the workers below ground and maintenance of underground equipment. This work is all done using a crane located adjacent to the access shaft.

During the night-time, work will be confined to the working compound areas. Excavated material will neither be removed nor will supplies be received at the sites at night.

Power supply for the equipment will be from Hydro's overhead hydro lines to the working compounds.

S4. Description of Equipment

Make	Northwest	Northwest	Northwest
Type	Crane	Crane	Crane
Model	190	9570	9570
Unit Number	61077	61074	64038
Year Manufactured	1985	1992	1973
Height of noise source	4.5m	4.3m	4.3m
Noise level reading (dBa)			
At source	91.5	91.5	91.5
50 ft. away	66.0	82.0	82.0
Type of muffler	Riley-Beaird Maxim Silencer	AMF-Beaird Maxim Silencer	AMF-Beaird Maxim Silencer
Model Number	6M51	4MT41	4MT41
Serial Number	224398-01-2	215904-04-19	215904-04-19
Engine	Jimmy 1272	Murphy 224-AT	Murphy 224-AT



SCALE=N.T.S.

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MacViro



**BATHURST COLLECTOR/
 LANGSTAFF TRUNK SEWERS
 NOISE BY-LAW EXEMPTION
 PROJECT PLAN**