

# Noise Control Study

## Terms of Reference

### 1. Description

Environmental noise is characteristic of many human activities, and the proliferation of this noise has potential to negatively affect quality of life and human health.

The goal of environmental noise control is to provide design guidance that mitigates noise levels between land uses that are noise sensitive and land uses that are sources of noise such as roads, railways, employment areas and equipment for building facilities. In this way, land use decisions can be better informed and there will be less need to retrofit buildings and neighbourhoods with noise attenuation measures in the future.

Stationary sources of noise are defined as all sources of sound and vibration, whether fixed or mobile, that exist or operate on a premises, property or facility, the combined sound and vibration levels of which are emitted beyond the property boundary of the premises, property or facility, unless the source(s) is (are) due to construction.

A Vibration Study, if required, could be combined with a Noise Control Study to be submitted under one report title.

### 2. When Required

Development proposals for a new or expanded noise sensitive land-use shall require a noise feasibility study and/or detailed noise study pursuant to the Environmental Noise Control Guidelines in the following locations:

Transportation Noise Sources		
a)	Within 100 m of:	<ul style="list-style-type: none"> <li>i. The right-of-way of an existing or proposed arterial road or collector or major Collector Street identified on Schedules C4; or</li> <li>ii. The right-of-way of a rapid transit or transit priority corridor identified on Schedule C2;</li> </ul>
b)	Within 250 m of:	<ul style="list-style-type: none"> <li>i. The right-of-way of an existing or proposed provincial highway, of Ottawa Highway 174, or of a secondary main railway line.</li> </ul>
c)	Within 500 m from:	<ul style="list-style-type: none"> <li>i. The right-of-way of a 400-series Provincial highway; or</li> <li>ii. A Principal Main railway line;</li> </ul>



Stationary Noise Sources		
d)	Within 100 m of:	<ul style="list-style-type: none"> <li>i. Lands designated as Industrial and Logistics or Mixed Industrial identified on the B-series of schedules, or lands zoned for industrial use; or</li> <li>ii. from an existing stationary noise source described in an applicable provincial approval under the Environmental Protection Act (as amended from time to time).</li> </ul>
e)	Within 300 m of:	<ul style="list-style-type: none"> <li>i. a Pit licensed under the Aggregate Resources Act or</li> <li>ii. lands with a Sand and Gravel Resource Overlay;</li> </ul>
f)	Within 500 m of:	<ul style="list-style-type: none"> <li>i. A quarry licensed under the Aggregate Resources Act; or</li> <li>ii. Lands with a Bedrock Resource Overlay.</li> </ul>

Airport/Aircraft Noise Source	
g)	Within the 25 line (composite of 25 NEF/NEP) as shown on Schedule C14.
h)	Between the 35 Line and the boundary of the Airport Operating Influence Zone, as shown on Schedule C14.

Studies are required to identify applicable warning clauses and any additional requirements associated with Schedule C14/Airport Operating Influence Zone.

Vibration Analysis		
i)	Within 75 m of	<ul style="list-style-type: none"> <li>i. A rail right-of-way</li> <li>ii. An existing or proposed light rail corridor</li> </ul>
j)	Within 750 m of	<ul style="list-style-type: none"> <li>i. A TransCanada Pipeline compressor Station</li> </ul>

Development proposals that introduce new sources of stationary noise in proximity to existing noise sensitive land uses shall require a noise feasibility study and/or noise control detailed study if within the following proximities of noise sensitive land uses:

Stationary Noise Sources		
k)	Within 100 m for	<ul style="list-style-type: none"> <li>i. New stationary noise source</li> <li>ii. Lands to be zoned for new industrial use</li> </ul>
l)	Within 300 m for	<ul style="list-style-type: none"> <li>i. A pit to be licensed under the Aggregate Resources Act;</li> </ul>
m)	Within 500 m for	<ul style="list-style-type: none"> <li>i. A quarry to be licensed under the Aggregate Resources Act</li> </ul>



The table below outlines which location criteria apply to specific application types:

Application Type	Environmental Noise Control Location criteria	Vibration Analysis Location criteria
Consent Site Plan Control Draft Plan of Subdivision	a) to h) and k) to m)	i) and j)
Official Plan Amendment Zoning Bylaw Amendment	d) to h) and k) to m)	i) and j)

A combined Environmental Noise and Vibration Analysis can be provided in cases where applicable.

### 3. Contents

The contents of the study can vary depending on the site and proposed uses. In general, the study should identify all relevant sources of noise or vibration, applicable receptors, site constraints, site factors that can influence control measures, noise or vibration criteria, summary of the assessment, calculation of future sound levels for each receptor, proposed mitigation measures or applicable warning clauses, where applicable vibration mitigation measures.

The Qualified Professional should review the below resources for detailed guidance on study contents.

### 4. Roles and Responsibilities / Qualifications

The City does not prescribe specific technical methods; the qualified author shall select appropriate methods consistent with the City of Ottawa Noise Control Guidelines (July 2017) and good engineering practice.

The qualified author shall be a Professional Engineer (P.Eng.) or Limited License Holder (LLH) registered in Ontario, with a minimum of 5 years of experience in preparing noise and/or vibration studies for land use planning projects.

### 5. Resources / Background

- [City of Ottawa Environmental Noise Control Guidelines, July 2017](#), as revised
- Guidelines for [new development in proximity to railway operations](#), May 2013, as revised.



- The Ministry of the Environment and Climate Change (MOECC) [Environmental Noise Guideline](#) – Stationary and Transportation Sources – Approval and Planning (NPC-300), August 2013
- [Professional Engineers Providing Acoustical Engineering Services in the Land-use Planning Process \(2024\)](#), as amended.
- City of Ottawa – Official Plan (November 4<sup>th</sup>, 2022) Section 10.2.1, 10.2.2 and 10.2.3

The latest version of the above references should be referenced.

