



Infrastructure and Engineering Services Department

Noise Study Requirements

A Noise Study determines the projected sound exposures for a proposed development both from and to adjacent uses, for stationary and transportation related noise sources, and any mitigation measures needed. A Noise Study must be completed by a registered professional engineer qualified in acoustical engineering and experienced in the preparation of noise studies.

A Noise and Vibration Study should at a minimum contain:

Introduction

- Address of the subject property
- General site location of the subject property
- Project Name (if applicable)
- Applicant and owner's contact information
- Author name, title, qualifications, company name and appropriate stamp
- Brief description of the proposed development, site plan, and site location.

Proposal Description and Context

- A description of the proposal, development stats (such as number of units, site area) type of development proposed, height, parking areas, access points, location of amenity areas, specified receptor location(s), proposed phasing.
- A description of the existing on-site conditions as well as surrounding areas, roads, natural areas, buildings, parking areas.
- Concept Plan for the development including building location, parking, access, amenity areas, grading, natural features and any natural hazards, proposed streets.

Investigation/Evaluation

- Identification of the noise source(s)
- Noise Impact Study
 - Description of the sound level guidelines/standards applied (methodology and approaches)

- Identification of both Transportation and Stationary noise source(s), all the assumptions related to the stationary noise sources should be clearly documented in the report.
- Data collection (e.g., ultimate AADT, truck percentage, reference sound power data, noise measurement, etc.)
- Receptor selection process
- Noise impact assessment (including low frequency noise impacts)
- Unmitigated and mitigated noise level forecasts (e.g., tables showing ultimate road traffic and predicted unmitigated sound energy exposures outdoors)
- The report must be stamped, dated, and signed by a Professional Engineer.

Impacts and Mitigation Measures

- Indoors: architectural requirements, ventilation requirements
- Outdoors: at source requirements, sound barriers (i.e., description and a site plan depicting noise mitigation)
- Warning clauses as per Section C8 of Environmental Noise Guideline – Stationary and Transportation Sources – Approval and Planning (NPC-300) by the Ministry of the Environment, Conservation and Parks (MECP).

Recommendations

- Summary and conclusions of the supporting studies and how they support the development and any special considerations or conditions that should be imposed.
- Any recommendations, or conditions that should form part of a decision on the matter.
- Please note that the inclusion of Warning Clauses will be required for any agreements between the City and the applicant.
- A cost estimate for mitigation measures may also be required for inclusion in future agreements.

Additional Resources:

Ontario Ministry of the Environment, Conservation and Parks (MECP) [Environmental Noise Guideline](#)