



600 Southgate Drive
Guelph ON Canada
N1G 4P6

Tel: +1.519.823.1311
Fax: +1.519.823.1316
E-mail: solutions@rwdi.com

November 17, 2023

Kyle Underwood
2323 Trafalgar Street
London ON N5V 0E1
kyle.underwood@LDSconsultants.ca

Re: Noise Feasibility Study
10915 Longwoods Road, Delaware, Ontario
RWDI Reference No. 2002177

Dear Mr. Underwood,

LDS Consultants Inc. retained RWDI to conduct a noise feasibility study in support of an application to sever the existing lot at 10915 Longwoods Road into eighteen separate lots. It is RWDI's understanding that the proposed uses of the lots include, but are not limited to, contractor's storage area and shops (i.e., plumbers, electricians, cabinet makers, etc.) and retail offices. The intent of the noise feasibility study is to identify where potential incompatible land uses could arise and conceptual recommendations to prevent incompatible land uses.

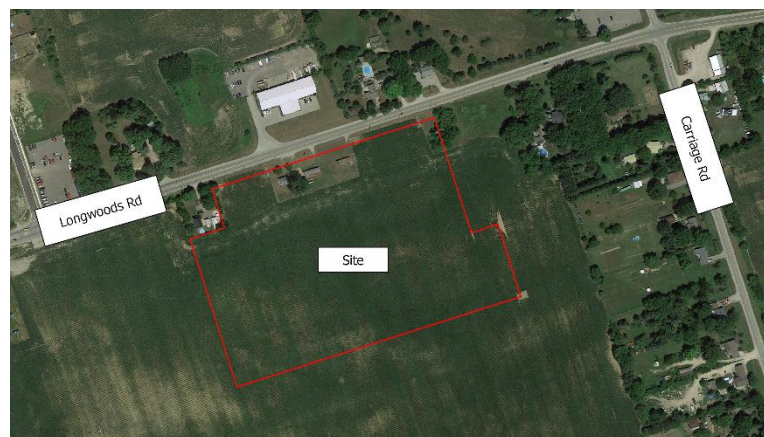


Figure 1: Site Location

The Site plan drawing dated July 20th, 2023 (see Appendix A) was reviewed and serves as the basis for this assessment.

Assessment Criteria

Sound levels from sources at the proposed development were assessed cumulatively at the nearest noise sensitive receptors. The allowable sound level limits at the noise sensitive receptors are established in the Ministry of Environment Conservation Parks (MECP) Publication NPC-300.



Noise sensitive receptors include properties that accommodate a dwelling, sensitive commercial buildings, or sensitive institutional buildings. Vacant lots may be considered sensitive if zoned to allow a sensitive use and accessible. There were no accessible vacant lots identified in proximity to the development. Ten residential dwellings identified through aerial photography surround the proposed development to the west, north and east. No noise sensitive receptors were identified to the south of the proposed development.

Impact Assessment

Modelling of proposed development was carried out using the Cadna/A software package, a commercially available implementation of the ISO 9613 noise propagation algorithms. Sound power level data for noise generating equipment associated with the proposed land uses were obtained from measurements of similar equipment on file at RWDI. The expected noise sources associated with the proposed land uses are as follows:

Offices

- General building HVAC

Plumbing or Electrician

- General building HVAC
- Exhaust fans

Cabinetry Makers or Warehouse

- General building HVAC
- Exhaust fans
- Forklift activity
- Dust collectors

Modelling also assessed five transport trucks arriving and departing the development during a worst-case hour in the daytime (07:00-19:00) and two trucks during the evening (19:00-23:00) and night (23:00-07:00). On-site passenger vehicle activity is generally considered to have negligible noise impacts and was not included in the assessment.

Recommendations

Based on the modelling completed, some restrictions will apply to the type of operations and equipment present on some of the lots. These restrictions are presented in Figure 2 and summarized as follow:

- Blue Lots – most restricted – offices only,
- Green Lots – less restricted – offices or plumber/electrician shops, and
- Red Lots – no restrictions – any of the above uses or cabinetry makers/warehouses.

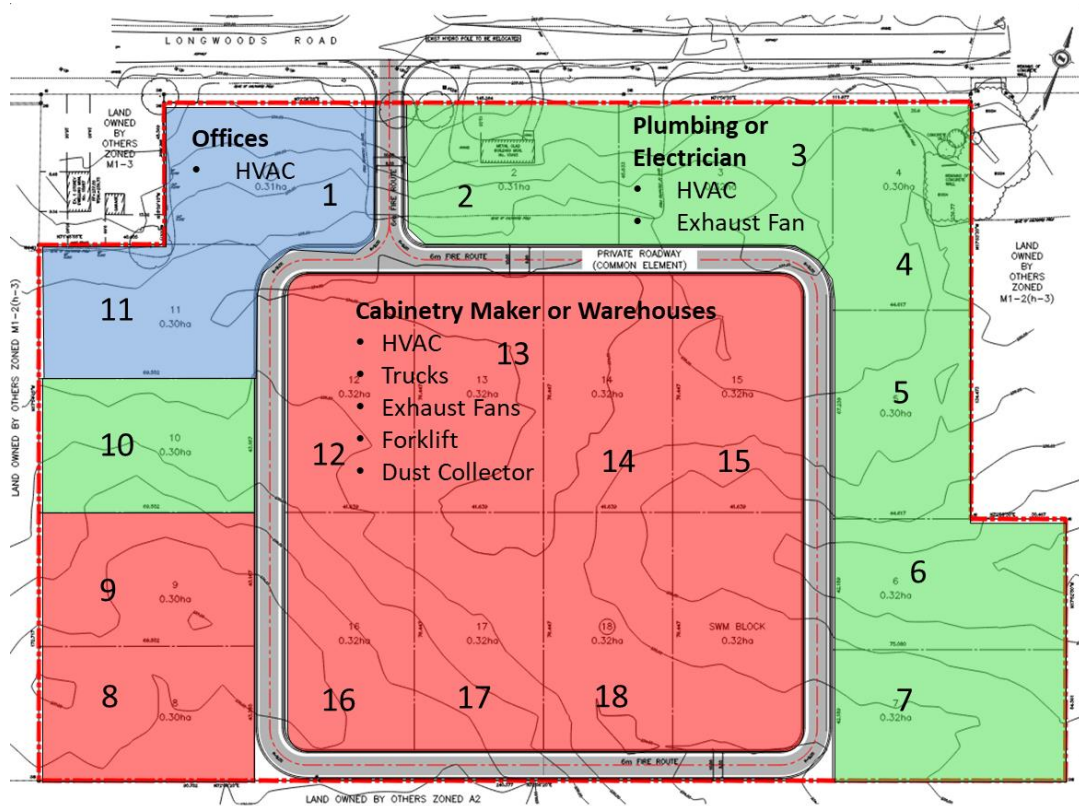


Figure 2: Noise Feasible Configuration

The recommendations listed below are in addition to the restricted uses shown in Figure 2 and will serve as design parameters and should be implemented as detailed design progresses.

1. Noise from forklift activity and the dust collectors should be limited to the southern portions of each lot and behind on-site buildings (where present) to provide adequate screening for northern residential dwellings.
2. Dust collectors, exhausts fans and forklifts are restricted to operate during the daytime period only (07:00 – 19:00).
3. HVAC units for lots 1 and 11 with proposed office uses located on the northwestern corner of the development are required to meet a maximum allowable sound power level of 82 dBA.
4. Dust collectors are required to meet a maximum allowable sound power level of 103 dBA.

Based on the results of this assessment, the proposed development is considered to be feasible provided that the recommendations outlined are implemented. Detailed assessments for each individual lot should be conducted to ensure that individual impacts do not exceed MECP sound level limits.



Kyle Underwood
LDS Consultants
RWDI #2401076
November 17, 2023

Conclusions

RWDI completed a noise feasibility assessment for the severing of 10915 Longwoods Road into eighteen separate lots. Based on the proposed future land uses for the eighteen new lots, a noise feasible configuration was determined and is shown in Figure 2. In addition to this configuration, a number of recommendations are provided. If the configuration and recommendations are implemented, the proposed development is considered feasible.

Yours truly,

RWDI

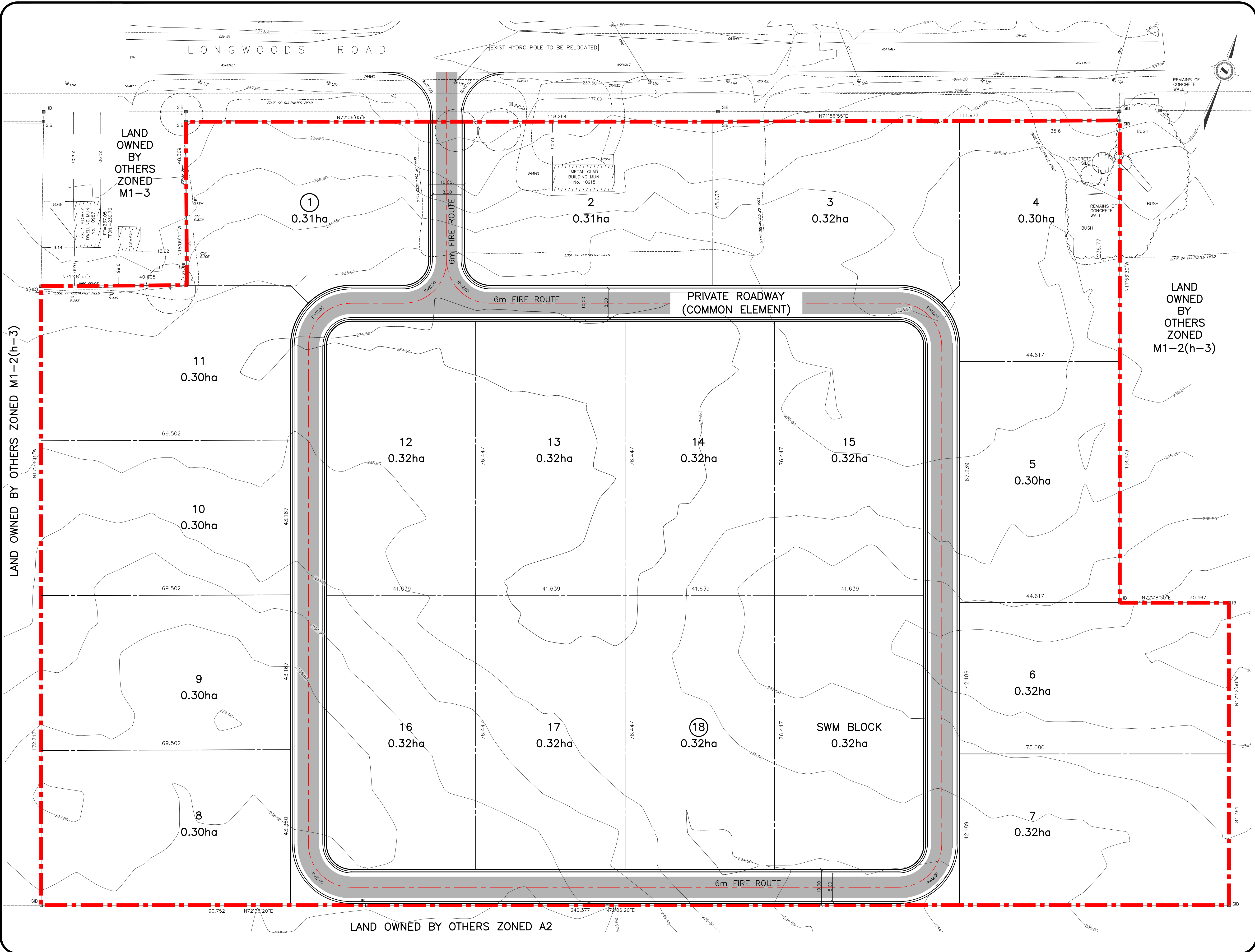
A handwritten signature in black ink, appearing to read 'Khalid Hussein P.Eng', written over the printed name.

Khalid Hussein P.Eng
Project Manager

KAMH/klm

The page features a decorative background with a large, light gray circular shape on the right side and a blue triangular shape on the top left. A white curved line separates the two shapes.

APPENDIX A



DRAFT PLAN OF VACANT LAND CONDOMINIUM

PART OF LOT 6
CONCESSION 1
(GEOGRAPHIC TOWNSHIP
OF DELAWARE)

COUNTY OF MIDDLESEX

KEY PLAN



OWNER'S CERTIFICATE

I HEREBY AUTHORIZE LDS CONSULTANTS INC. TO SUBMIT THIS PLAN FOR APPROVAL.

DATE: _____
I have the authority to bind the Corporation
GUY RIOPELLE
PRESIDENT
10919 LONGWOODS ROAD INC.

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED ON THIS PLAN AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DATE: _____
TBD
ONTARIO LAND SURVEYOR

ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT R.S.O. 1990, c.P. 13

- | | | |
|---------------------|---------------------------------|------------------------|
| A. AS SHOWN | B. AS SHOWN | C. AS SHOWN |
| D. LIGHT INDUSTRIAL | E. AS SHOWN | F. AS SHOWN |
| G. AS SHOWN | H. MUNICIPAL WATER | I. SAND, SILT AND CLAY |
| J. AS SHOWN | K. MUNICIPAL WATER SERVICE ONLY | L. AS SHOWN |

LAND USE SCHEDULE

SITE AREA: 6.664 ha. (66442.68 sq.m.)
TOTAL NUMBER OF UNITS: 18 LIGHT INDUSTRIAL UNITS
PARKING SPACES: 0 TOTAL
BUILDING COVERAGE: _____
DENSITY: 2.7 INDUSTRIAL UNITS / ha.

DESCRIPTION	UNITS	NUMBER OF UNITS	AREA (ha.)
LIGHT INDUSTRIAL	1 - 18	18	5.60
ROAD CORRIDOR			0.72
SWM POND			0.32
TOTAL		18	6.64

SCALE 1:500
DRAWN: _____ DATE: _____

