

R. BOUWMEESTER & ASSOCIATES

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Development Engineering • Environmental Noise Studies • Shadow Impact Studies • Sun Position Analyses

File: A20020

October 23, 2020

“BY E-MAIL ONLY”

970 Maplevue Inc.
c/o Fernbrook Homes
2220 Highway 7 West, Unit 5
Concord, ON L4K 1W7

Attention: Harjit Bhatti

Dear Mr. Bhatti :

**Re: Traffic Noise Study - Addendum
Proposed Residential Development
970 Maplevue Inc.
City of Barrie**

This letter report is an addendum to our *LM Barrie* noise study dated February 14, 2017. It addresses the addition of lands at 932 Maplevue Drive East resulting in the creation of four new lots (560 to 563) and the general renumbering of the lots in the Draft Plan (formerly LM Barrie Subdivision). The four new lots are located at the southwest corner of the Draft Plan lands.

A copy of the revised Draft Plan, dated July 22, 2020, by the Jones Consulting Group is attached.

This addendum is based on the noise criteria, traffic data and methodology per our 2017 report.

We have determined the sound levels at the 2nd floor south-facing windows on Lot 560 to be 61 dBA daytime and 54 dBA at night. The outdoor living area (rear yard) of Lot 560 will be exposed to a predicted sound level of 57 dBA.

See attached Figure 2A for test locations and Attachment ‘A’ for sound level calculations.

In summary, the following recommendations relate to the four new lots (560 to 563):

1. Lots 560 and 561 require Warning Clauses ‘A’, ‘B’ and ‘C’ (see Notes to Table 4 in our 2017 report for wording) registered on title and included in all Development Agreements and Agreements of Purchase and Sale or Lease. See Figure 3 attached for the location of the units to which this applies.
2. The dwelling units identified above require forced air heating systems sized for the future installation of central air conditioning at the dwelling owners’ option and expense. See Figure 3 attached for the location of the units to which this applies.

For ease of reference, an updated TABLE 4 - Summary of Noise Controls and Figure 3 – Noise Control Plan are attached. We have also attached supplementary Figure 2A – Receptor Plan.

I trust you will find this addendum acceptable and suitable for submission to the City.

Yours very truly,

R. BOUWMEESTER & ASSOCIATES



Ralph Bouwmeester, P. Eng.
Principal



Attachments:

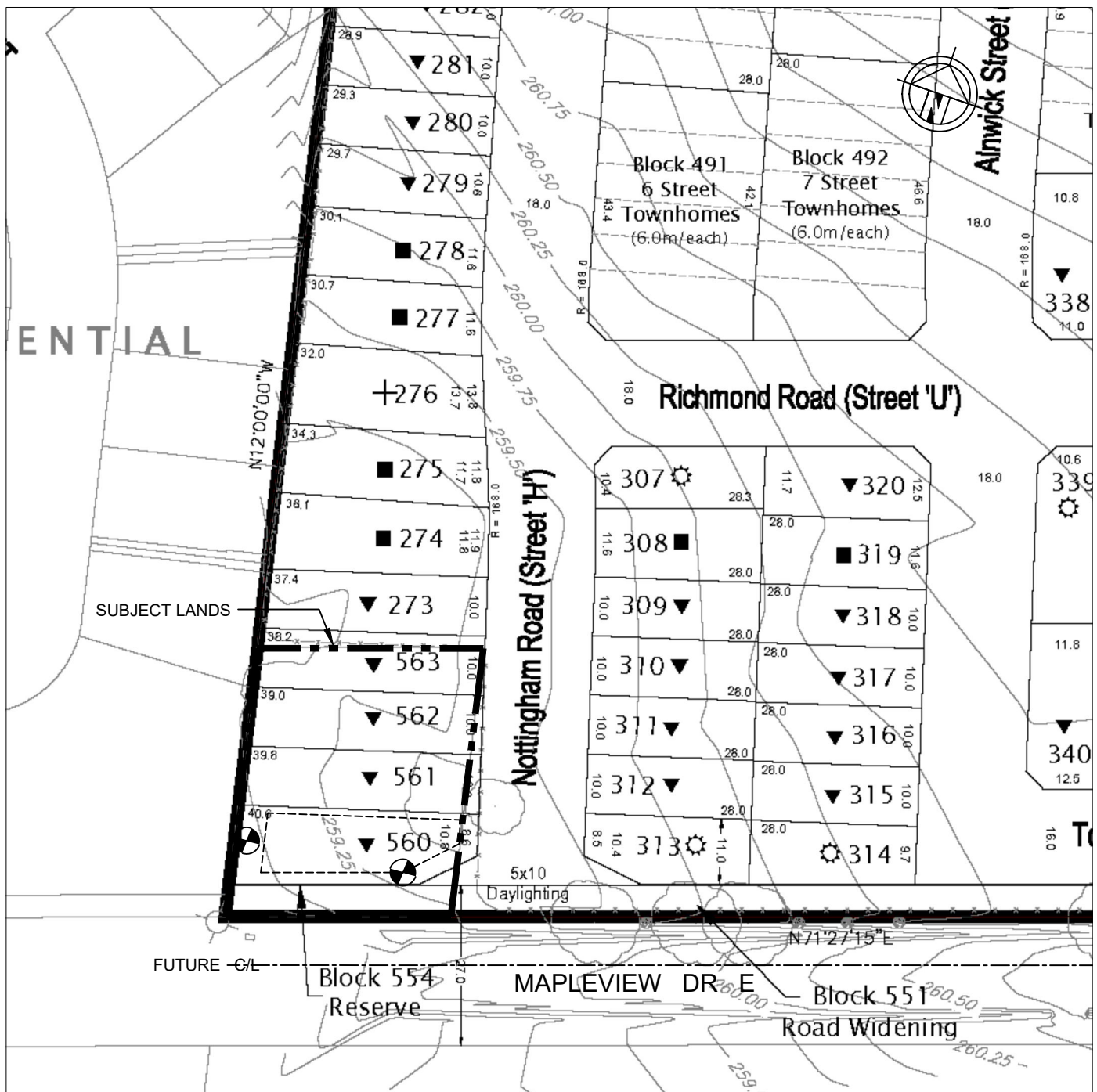
- Table 4 - Summary of Noise Controls – Updated Oct 23/20
- Figure 2A – Receptor Plan
- Figure 3 – Noise Control Plan (REV October 2020)
- Attachment 'A' – Sample Sound Level Calculations
- Attachment 'B' – Draft Plan (dated July 22, 2020, Jones Consulting)

TABLE 4 - Summary of Noise Controls – Updated Oct 23/20

Lot / Block	Central Air Conditioning	Exterior Windows, Walls and Doors	Acoustic Barrier	Warning Clauses^{1.}
312 – 315, 340, 497 532 – 535, 560, 561	Provision for Adding	OBC	No	A + B + C
1 – 236, 238 – 252 273 – 311, 316 – 339 341 – 496, 498 – 531 538 – 547, 562, 563	No acoustic requirements			
536, 537	Detailed Noise Studies Required at Site Plan Stage			
237, 253 – 272 548 – 559	Not Residential			

Notes:

1. For Warning Clause wording, see Notes to Table 4 in our 2017 report.



LEGEND



Building envelope and Receptor Location

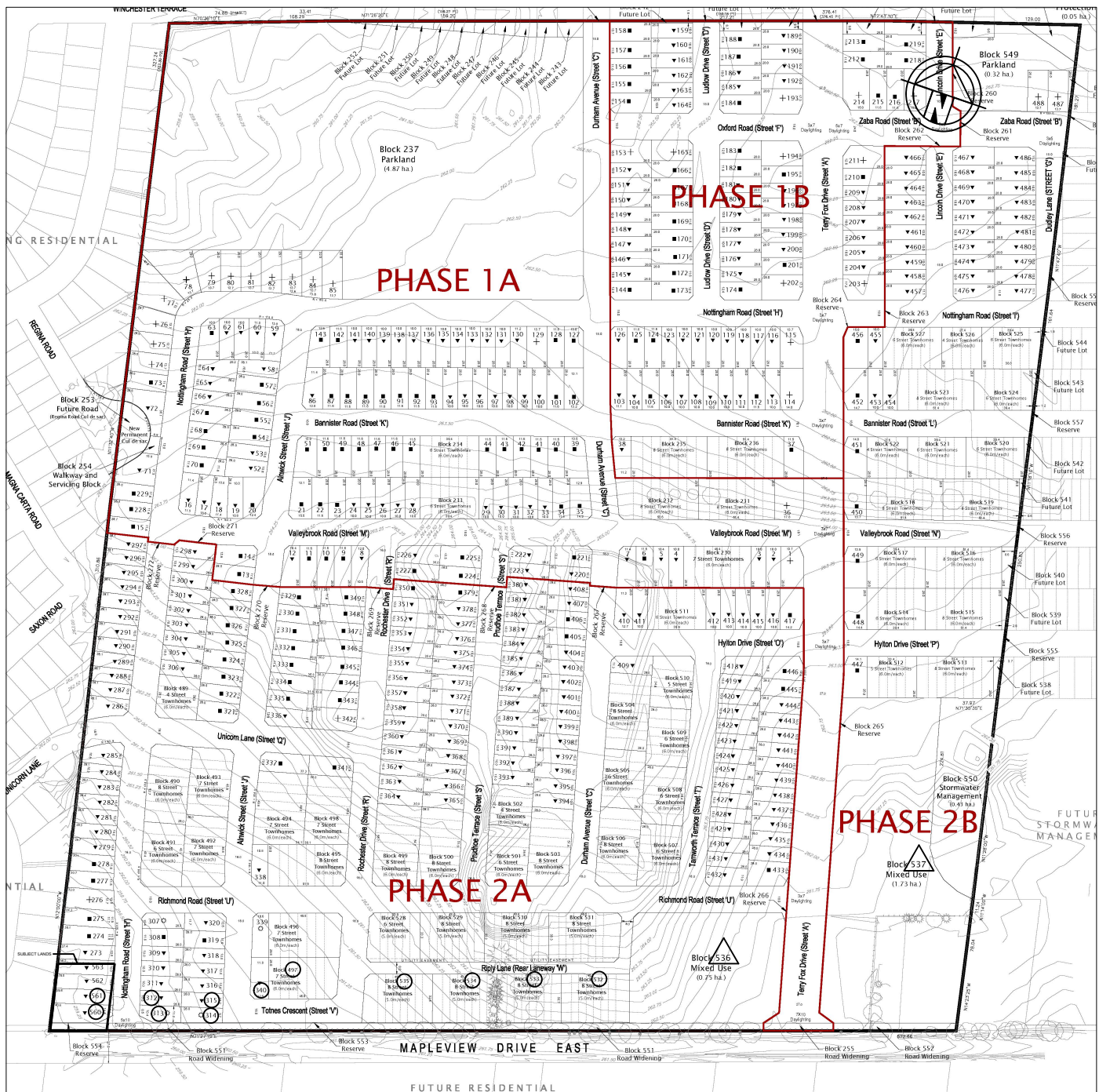
Receptor Plan

Scale: 1 : 1000

FIG. 2A

October 2020

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LEGEND

- Dwellings requiring forced air heating + Warning Clauses
- △ Detailed Noise Studies Required at Site Plan Stage

Noise Control Plan

Scale: 1 : 4000

FIG. 3

REV October 2020

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Draft Plan source: Jones Consulting

ATTACHMENT 'A'

SAMPLE SOUND LEVEL CALCULATIONS

STAMSON 5.0 NORMAL REPORT Date: 23-10-2020 11:51:09
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 020560dn.te Time Period: Day/Night 16/8 hours
Description: Lot 560 day/night at wall

Road data, segment # 1: Maplevue (day/night)

Car traffic volume : 4925/547 veh/TimePeriod *
Medium truck volume : 76/8 veh/TimePeriod *
Heavy truck volume : 76/8 veh/TimePeriod *
Posted speed limit : 60 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5373
Percentage of Annual Growth : 5.00
Number of Years of Growth : 1.00
Medium Truck % of Total Volume : 1.50
Heavy Truck % of Total Volume : 1.50
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Maplevue (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 15.70 / 15.70 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Maplevue (day)

Source height = 1.11 m

ROAD (0.00 + 60.51 + 0.00) = 60.51 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.58	62.14	0.00	-0.31	-1.32	0.00	0.00	0.00	60.51

Segment Leq : 60.51 dBA

Total Leq All Segments: 60.51 dBA

Results segment # 1: Maplevue (night)

Source height = 1.09 m

ROAD (0.00 + 53.86 + 0.00) = 53.86 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.58	55.50	0.00	-0.31	-1.32	0.00	0.00	0.00	53.86

Segment Leq : 53.86 dBA

Total Leq All Segments: 53.86 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 60.51
(NIGHT): 53.86

Filename: 020560o.te Time Period: 16 hours
Description: Lot 560 OLA

Road data, segment # 1: Maplevuew

Car traffic volume : 4925 veh/TimePeriod *
Medium truck volume : 76 veh/TimePeriod *
Heavy truck volume : 76 veh/TimePeriod *
Posted speed limit : 60 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Maplevuew

Angle1 Angle2 : -90.00 deg -24.00 deg
Wood depth : 0 (No woods.)
No of house rows : 1
House density : 95 %
Surface : 1 (Absorptive ground surface)
Receiver source distance : 21.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Maplevuew

Car traffic volume : 4925 veh/TimePeriod *
Medium truck volume : 76 veh/TimePeriod *
Heavy truck volume : 76 veh/TimePeriod *
Posted speed limit : 60 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: Maplevuew

Angle1 Angle2 : -24.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 21.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Mapleview

Source height = 1.11 m

ROAD (0.00 + 43.17 + 0.00) = 43.17 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-24	0.66	62.14	0.00	-2.43	-6.44	0.00	-10.10	0.00	43.17

Segment Leq : 43.17 dBA

Results segment # 2: Mapleview

Source height = 1.11 m

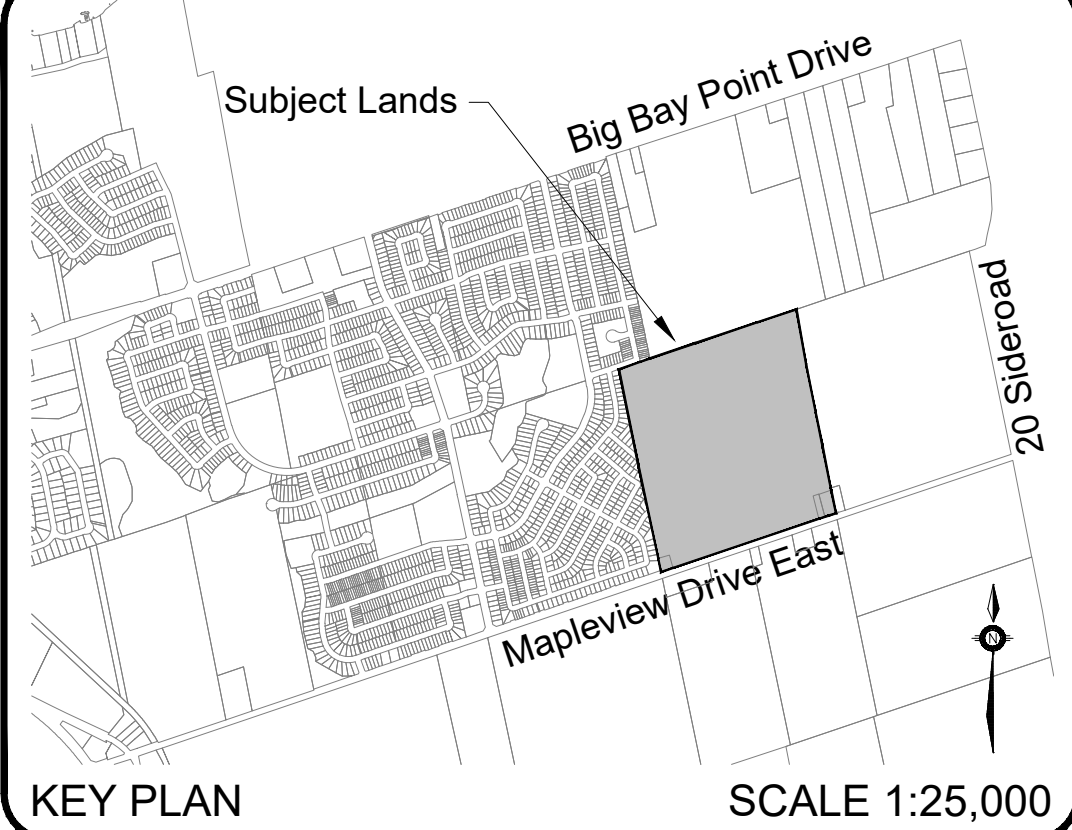
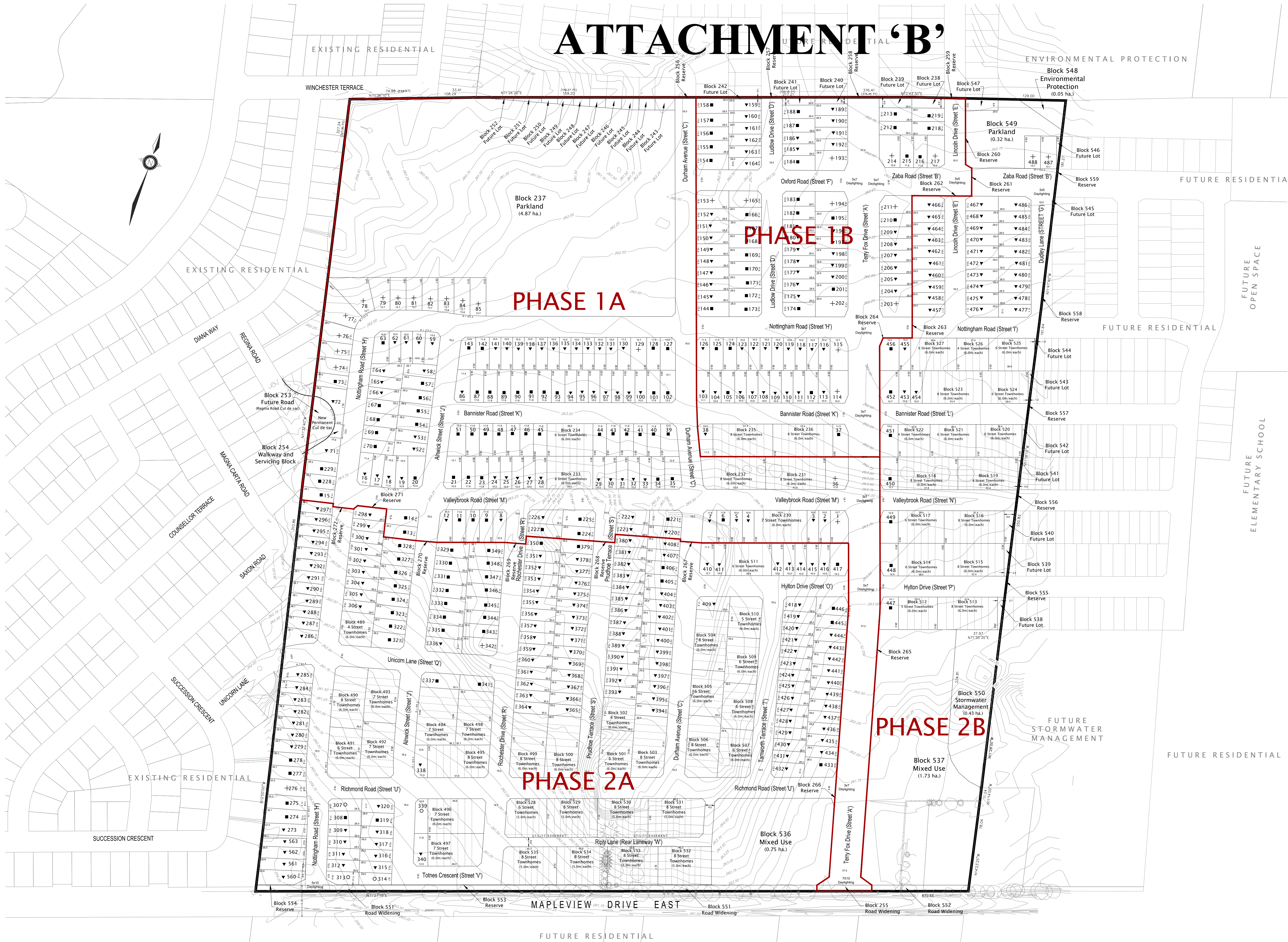
ROAD (0.00 + 56.60 + 0.00) = 56.60 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-24	90	0.66	62.14	0.00	-2.43	-3.11	0.00	0.00	0.00	56.60

Segment Leq : 56.60 dBA

Total Leq All Segments: 56.79 dBA

TOTAL Leq FROM ALL SOURCES: 56.79



Proposed Draft Plan of Subdivision Part of Lot 19, Concession 12 City of Barrie 2020

OWNER'S CERTIFICATE
I, THE UNDERSIGNED, BEING THE REGISTERED OWNER OF THE SUBJECT LANDS, HEREBY AUTHORIZE THE JONES CONSULTING GROUP LTD., AND 970 MAPLEVIEW INC. TO PREPARE THIS DRAFT PLAN OF SUBDIVISION AND TO SUBMIT SAME TO THE CITY OF BARRIE FOR APPROVAL.

DATE DANNY SALVATORE
970 MAPLEVIEW INC.

DATE SEYMOUR SAITOWITZ
970 MAPLEVIEW INC.

SURVEYOR'S CERTIFICATE
I CERTIFY THAT THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AND THEIR RELATIONSHIP TO ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DATE PIER DE ROSA, OLS, OLIP
J.D. BARNES LIMITED
ONTARIO LAND SURVEYORS

ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT
a) SHOWN ON DRAFT PLAN
b) SHOWN ON DRAFT PLAN
c) SHOWN ON KEY PLAN
d) RESIDENTIAL, SWM, EP MIXED USE, OPEN SPACE
e) SHOWN ON DRAFT PLAN
f) SHOWN ON DRAFT PLAN
g) SHOWN ON DRAFT PLAN
h) MUNICIPAL PIPED WATER TO BE PROVIDED
i) SANDY CLAY LOAM
j) SHOWN ON DRAFT PLAN
k) ALL MUNICIPAL SERVICES TO BE PROVIDED
l) SHOWN ON DRAFT PLAN

STATISTICS RESIDENTIAL LOT BREAKDOWN				
13.7m Singles +	30 units	30 units	47 units	
11.6m Singles +	134 units	135 units	208 units	
10.0m Singles +	281 units	276 units	244 units	
9.6m Singles +	4 units	4 units	8 units	
Semi Detached Units	n/a	n/a	n/a	
SUB TOTAL				
Street Townhomes (6.0m)	14.30 ha. 449 units	445 units	507 units	
Street Townhomes (5.0m)	5.74 ha. 317 units	317 units	184 units	
Mixed Use	1.15 ha. 62 units	62 units	62 units	
Future Lots and Road	2.48 ha. 67 units	67 units	67 units	
Environmental Protection	0.38 ha. 8 units	8 units	8 units	
Open Space & Parkland	0.05 ha.			
Stormwater Management & Servicing Block	5.19 ha.			
Reserves & Widening	0.44 ha.			
Roads	0.34 ha.			
TOTAL	41.71 ha. 903 units	899 units	828 units	

MPPlan Phasing Boundary
SCALE = 1:1500 (A1)
970 MAPLEVIEW INC.
Proposed Draft Plan of Subdivision

970 MAPLEVIEW INC.
CITY OF BARRIE

SCHEDULE OF REVISIONS		
DATE	DESCRIPTION	DRAWN
19.03.20	LOTING CHANGES	m.c.r.
19.11.28	LOTING CHANGES AND PHASE LIMIT REVISION	m.c.r.
19.12.19	REVISE LOCAL TO MAJ. COLLECTOR DAYLIGHTING	m.c.r.
20.05.14	REVISE LOCAL TO ARTERIAL DAYLIGHTING	m.c.r.
20.07.22	ADDITION OF 932 MAPLEVIEW DRIVE EAST/RELOTING/UPDATE STATS	m.c.r.

DATE ISSUED: MARCH, 20, 2019
Checked By: RD
Project No.: LAW-12157
Drawn By: m.c.r.
Drawing Name: LAW-12157-TF-DP-3a.dwg

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