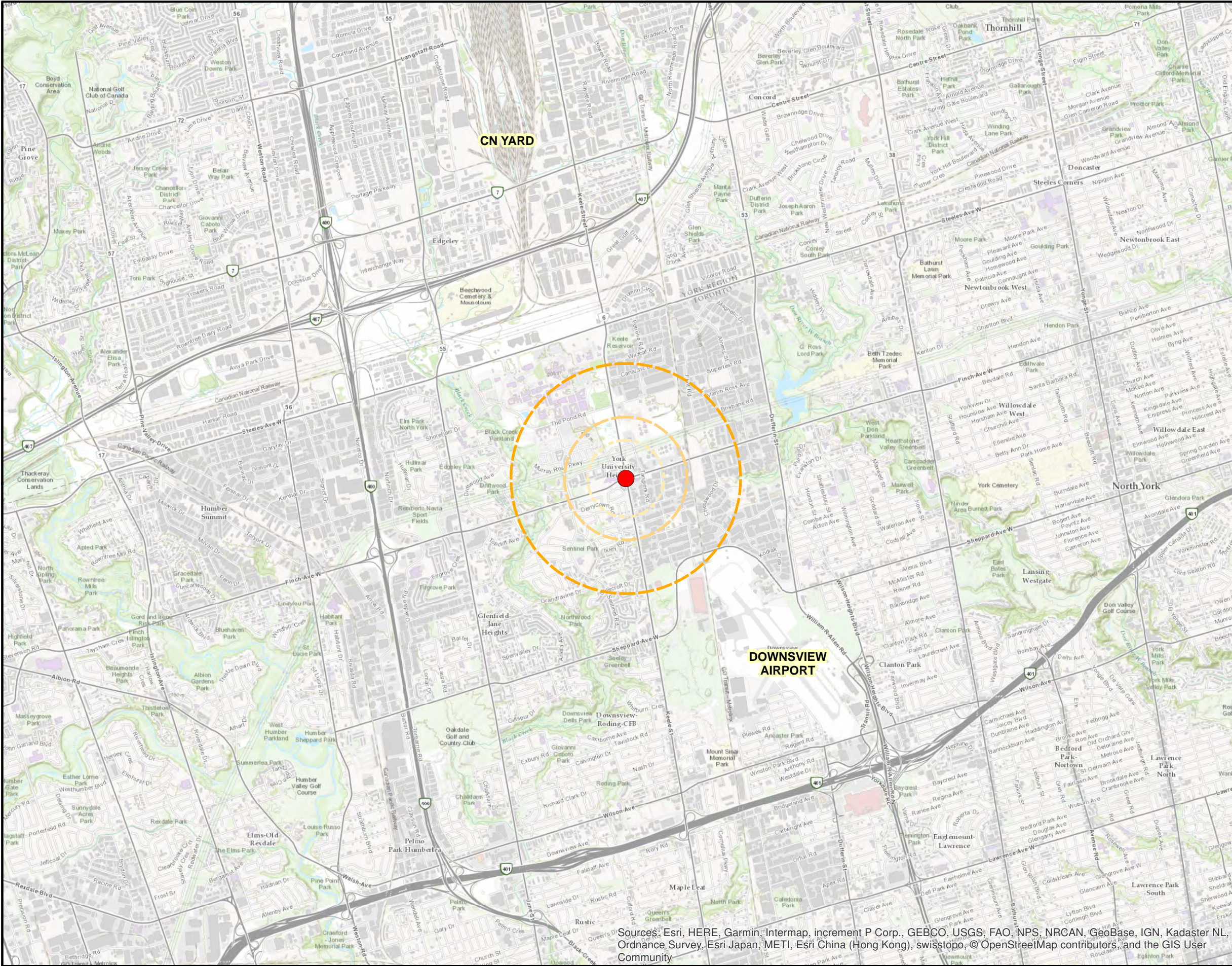


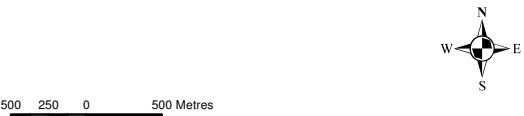
FIGURES





126 DON HILLOCK DRIVE, UNIT 2
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- LEGEND**
- KEELE FINCH INTERSECTION
 - 500 m STUDY AREA
 - 800 m STUDY AREA
 - 1500 m STUDY AREA (PHASE 2)



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
CITY OF TORONTO

PROJECT:
KEELE FINCH PLUS

PROJECT NO:
17M-01905-16

DATE:
DECEMBER 2019

DESIGNED BY:

DRAWN BY:
T.P.

CHECKED BY:

FIGURE NO:
1

SCALE:
1:50,000

TITLE:

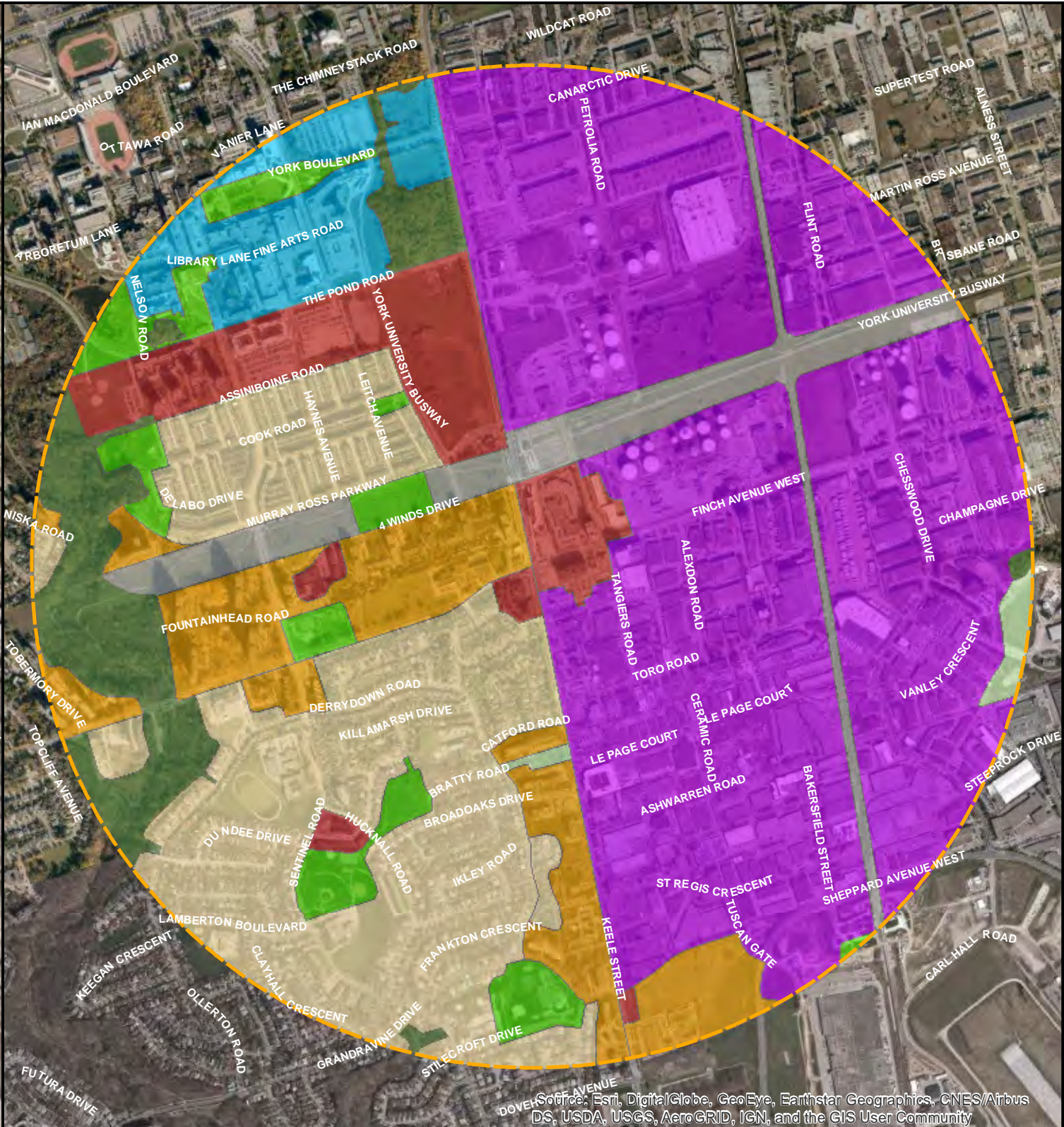
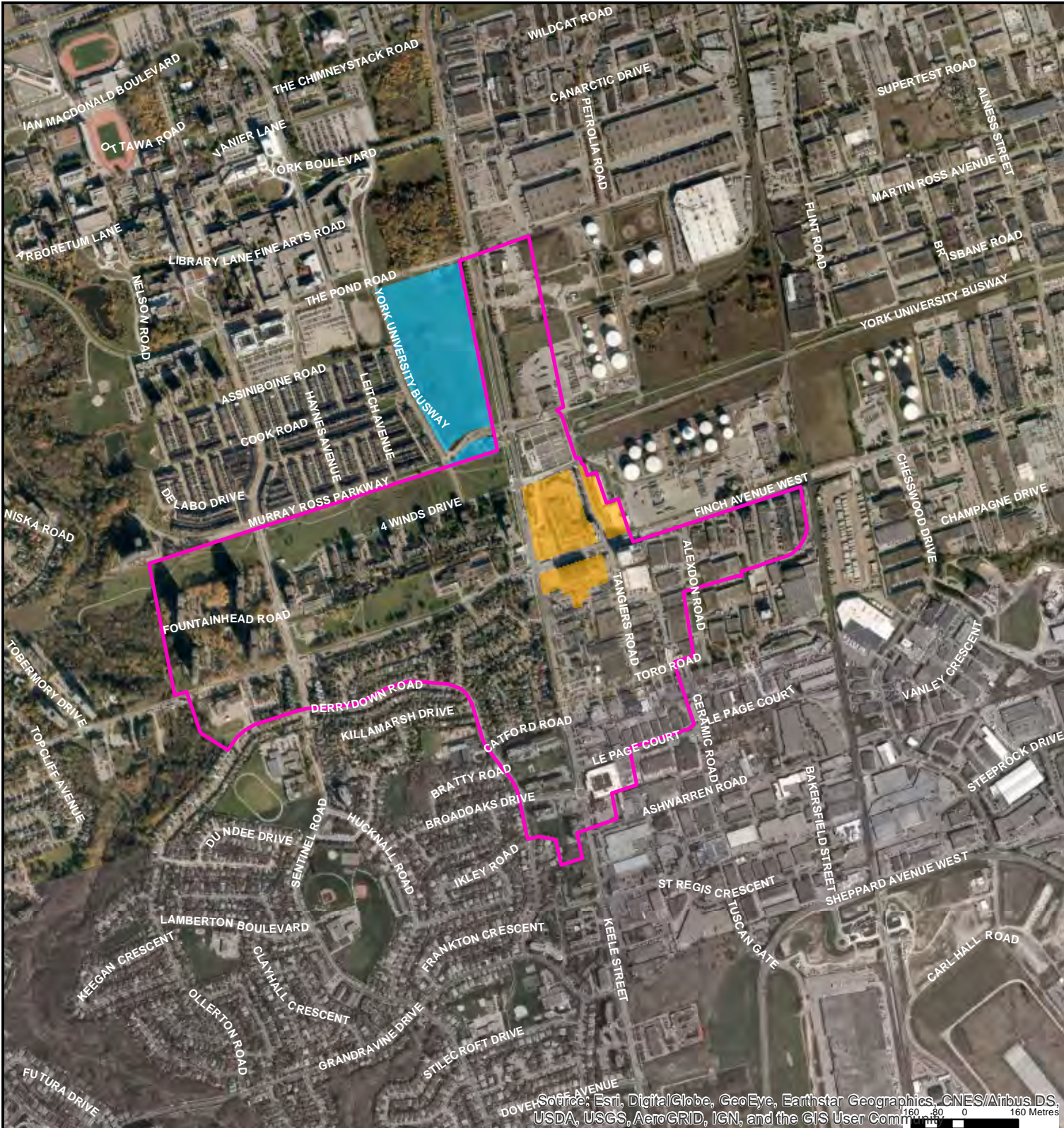
AREA MAP SHOWING SITE LOCATION

DISCIPLINE:
ENVIRONMENT

ISSUE:

REV.:

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

- KEELE FINCH PLUS STUDY AREA
- MIXED USE AREA OF SPECIFIC CONCERN - AREA 1
- MIXED USE AREA OF SPECIFIC CONCERN - AREA 2
- 1500 m STUDY AREA (PHASE 2)
- NEIGHBOURHOODS
- APARTMENT NEIGHBOURHOODS
- MIXED USE AREAS
- NATURAL AREAS
- PARKS
- OTHER OPEN SPACE AREAS
- INSTITUTIONAL AREAS
- EMPLOYMENT AREAS
- UTILITY CORRIDORS

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.



CLIENT:

CITY OF TORONTO

PROJECT:

KEELE FINCH PLUS

PROJECT NO:

17M-01905-16

DESIGNED BY:

-

DRAWN BY:

TP

CHECKED BY:

-

SCALE:

AS SHOWN

DATE:

DECEMBER 2019

TITLE:

AREAS OF SPECIFIC INTEREST
WITHIN THE KEELE FINCH PLUS
STUDY AREA

DISCIPLINE:

ENVIRONMENT

ISSUE:

-

FIGURE NO:

2

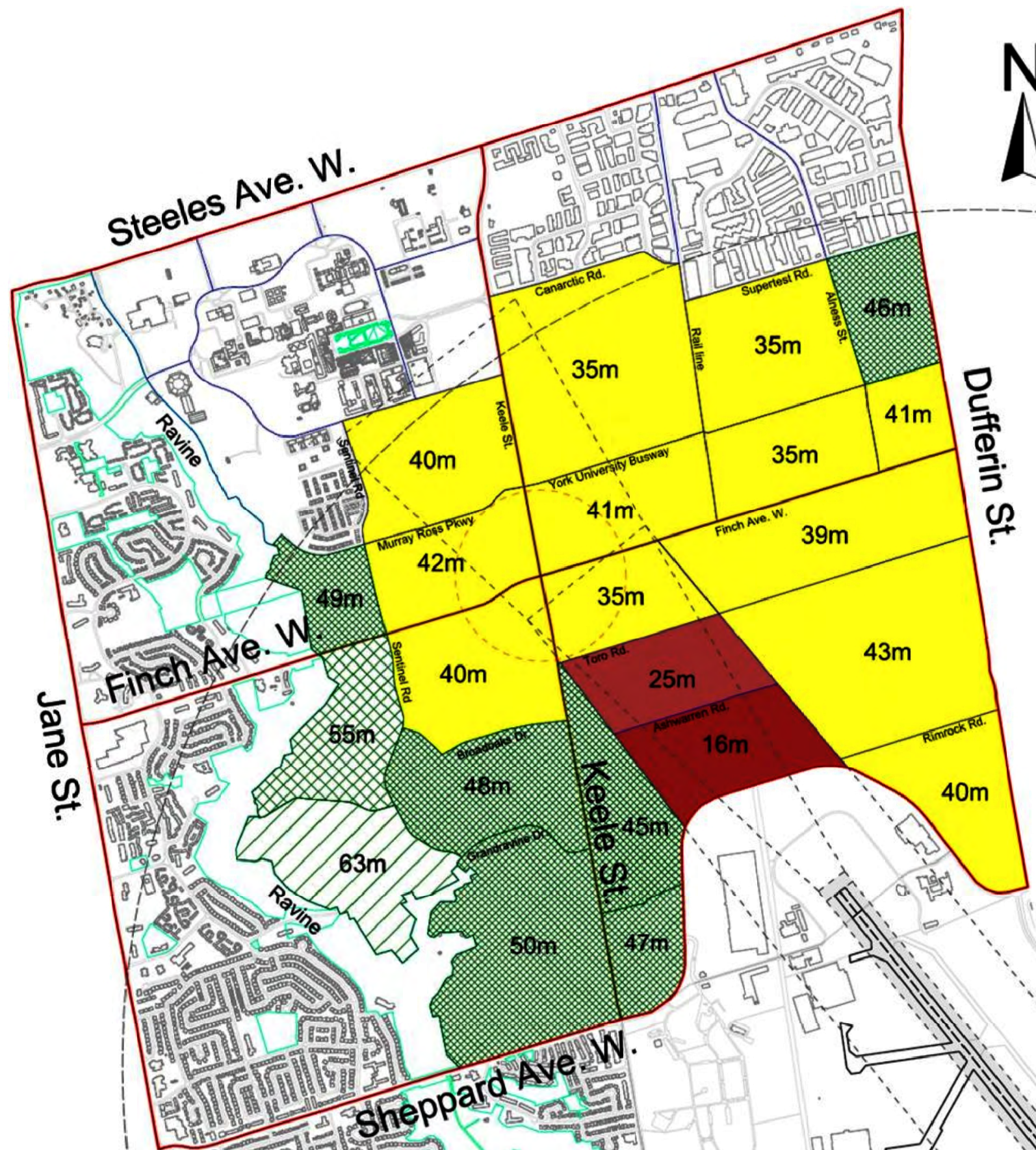


Figure 14 Diagram Maximum Buildable Height (in meters), By Block



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LEGEND

CLIENT:
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PROJECT:
KEELE FINCH PLUS

PROJECT NO:
17M-01905-16

DATE:
DECEMBER 2019

DESIGNED BY:
-

DRAWN BY:
T.P.

CHECKED BY:
-

FIGURE NO:
3

SCALE:

TITLE:
MAXIMUM BUILDABLE HEIGHT
(REPRODUCED FROM ARUP
REPORT, NOVEMBER 2016)

DISCIPLINE:
ENVIRONMENT

ISSUE:

REV.:
-





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- LEGEND**
- RECEPTORS
 - 2045 BUILDING OUTLINE



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:

CITY OF TORONTO

PROJECT:

KEELE FINCH PLUS

PROJECT NO: 17M-01905-16	DATE: DECEMBER 2019
-----------------------------	------------------------

DESIGNED BY: -

DRAWN BY: T.P.

CHECKED BY: -

FIGURE NO: 5	SCALE: 1:8,000
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TITLE: STUDY AREA MAP SHOWING THE POINTS OF RECEPTION

DISCIPLINE: ENVIRONMENT

ISSUE:	REV.:
	-

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

- RAIL SOURCES
- ROAD SOURCES
- INDUSTRIAL COMMERCIAL LINE SOURCES
- TRANSPORTATION REFERENCE POINTS (TRP)
- STATIONARY REFERENCE POINTS (SRP)
- INDUSTRIAL COMMERCIAL POINT SOURCES



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
CITY OF TORONTO

PROJECT:
KEELE FINCH PLUS

PROJECT NO: 17M-01905-16	DATE: DECEMBER 2019
-----------------------------	------------------------

DESIGNED BY:
-

DRAWN BY:
T.P.

CHECKED BY:
-

FIGURE NO: 6	SCALE: 1:13,000
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TITLE:
STUDY AREA MAP SHOWING THE
MAJOR TRANSPORTATION

DISCIPLINE:
ENVIRONMENT

ISSUE:	REV.:
	-

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

- RECEPTORS
- RAIL SOURCES
- ROAD SOURCES
- 40 dB
- 45 dB
- 50 dB
- 55 dB
- 60 dB
- >60 dB



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
CITY OF TORONTO

PROJECT:
KEELE FINCH PLUS

PROJECT NO:
17M-01905-16

DATE:
DECEMBER 2019

DESIGNED BY:
-

DRAWN BY:
T.P.

CHECKED BY:
-

FIGURE NO:
7

SCALE:
1:12,500

TITLE:
PREDICTED EQUIVALENT
SOUND LEVEL CONTOURS -
2018 DAYTIME (4.5 M)

DISCIPLINE:
ENVIRONMENT

ISSUE:
-

REV.:
-

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

- RECEPTORS
- RAIL SOURCES
- ROAD SOURCES
- 35 dB
- 40 dB
- 45 dB
- 50 dB
- 55 dB
- 60 dB
- >60 dB



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:

CITY OF TORONTO

PROJECT:

KEELE FINCH PLUS

PROJECT NO:

17M-01905-16

DATE:

DECEMBER 2019

DESIGNED BY:

DRAWN BY:

T.P.

CHECKED BY:

FIGURE NO:

8

SCALE:

1:12,500

TITLE:

PREDICTED EQUIVALENT
SOUND LEVEL CONTOURS -
2018 NIGHTTIME (4.5 M)

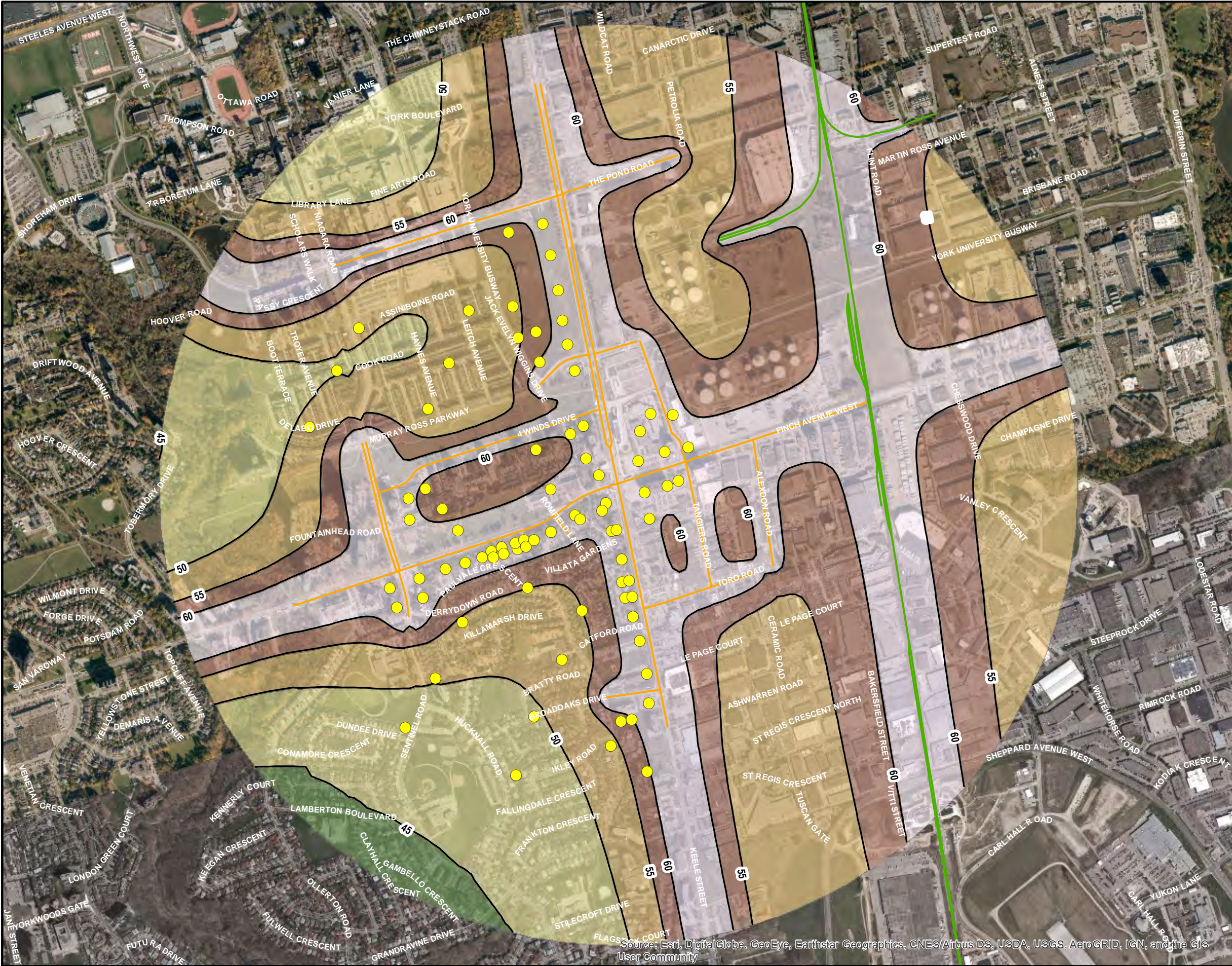
DISCIPLINE:

ENVIRONMENT

ISSUE:

REV.:

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

- RECEPTORS
- RAIL SOURCES
- ROAD SOURCES
- 40 dB
- 45 dB
- 50 dB
- 55 dB
- > 55 dB



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
CITY OF TORONTO

PROJECT:
KEELE FINCH PLUS

PROJECT NO:
17M-01905-16

DATE:
DECEMBER 2019

DESIGNED BY:

DRAWN BY:
T.P.

CHECKED BY:

FIGURE NO:
9

SCALE:
1:12,500

TITLE:
PREDICTED EQUIVALENT
SOUND LEVEL CONTOURS -
2045 NO-BUILD DAYTIME (4.5 M)

DISCIPLINE:
ENVIRONMENT

ISSUE:

REV.:

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

- RECEPTORS
- RAIL SOURCES
- ROAD SOURCES
- 35 dB
- 40 dB
- 45 dB
- 50 dB
- 55 dB
- >55 dB



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
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PROJECT:
KEELE FINCH PLUS

PROJECT NO:
17M-01905-16

DATE:
DECEMBER 2019

DESIGNED BY:

DRAWN BY:
T.P.

CHECKED BY:

FIGURE NO:
10

SCALE:
1:12,500

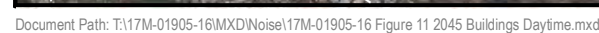
TITLE:
PREDICTED EQUIVALENT
SOUND LEVEL CONTOURS -
2045 NO-BUILD NIGHTTIME (4.5 M)

DISCIPLINE:
ENVIRONMENT

ISSUE:

REV.:

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community





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LEGEND

- RECEPTORS
- RAIL SOURCES
- ROAD SOURCES
- 30 dB
- 35 dB
- 40 dB
- 45 dB
- 50 dB
- 55 dB
- >55 dB



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
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PROJECT:
KEELE FINCH PLUS

PROJECT NO:
17M-01905-16

DATE:
DECEMBER 2019

DESIGNED BY:

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CHECKED BY:

FIGURE NO:
12

SCALE:
1:12,500

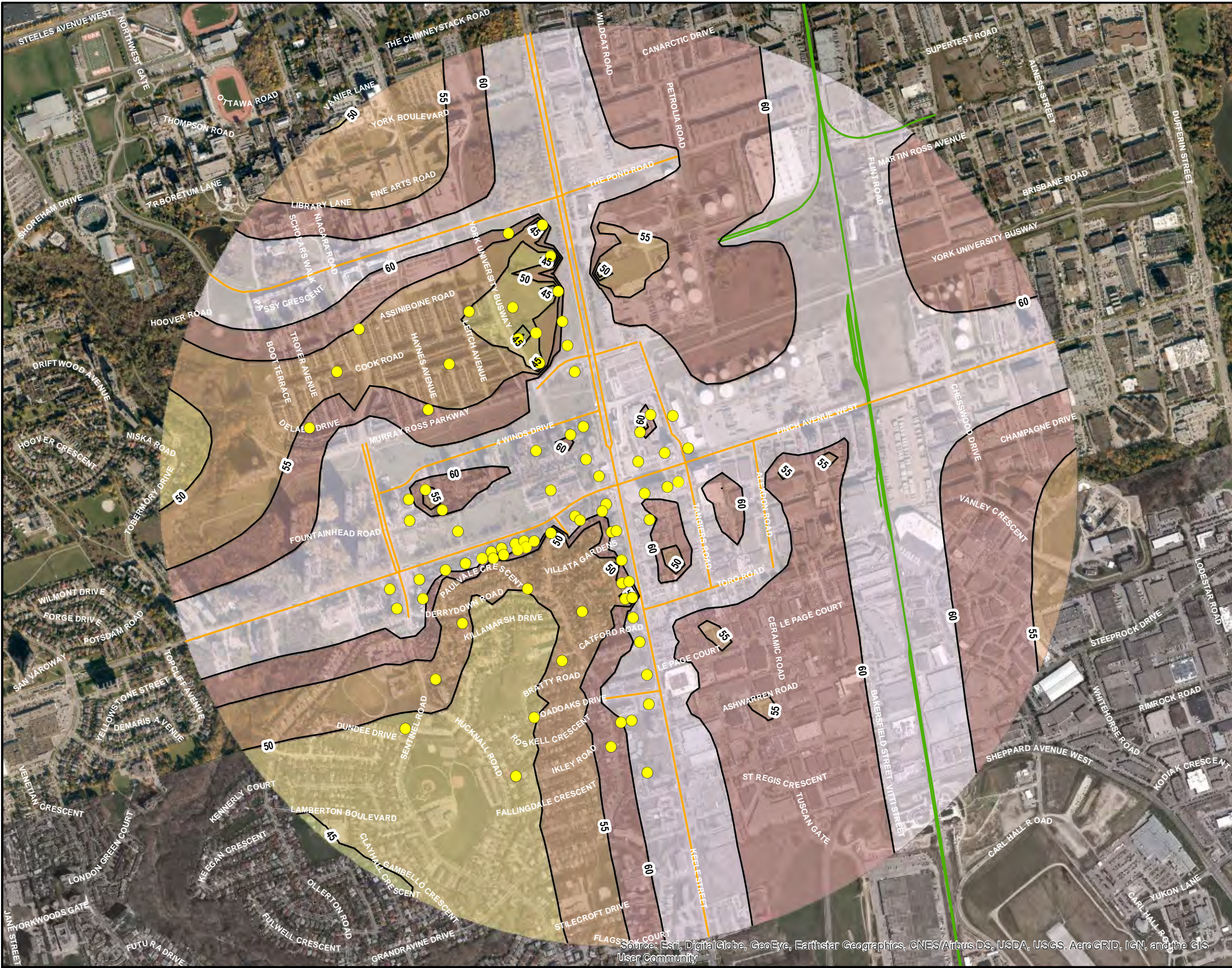
TITLE:
PREDICTED EQUIVALENT
SOUND LEVEL CONTOURS -
2045 FULL-BUILD NIGHTTIME (4.5 M)

DISCIPLINE:
ENVIRONMENT

ISSUE:

REV.:

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

- RECEPTORS
- RAIL SOURCES
- ROAD SOURCES
- 35 dB
- 40 dB
- 45 dB
- 50 dB
- 55 dB
- >55 dB



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
CITY OF TORONTO

PROJECT:
KEELE FINCH PLUS

PROJECT NO:
17M-01905-16

DATE:
DECEMBER 2019

DESIGNED BY:

DRAWN BY:
T.P.

CHECKED BY:

FIGURE NO:
13

SCALE:
1:12,500

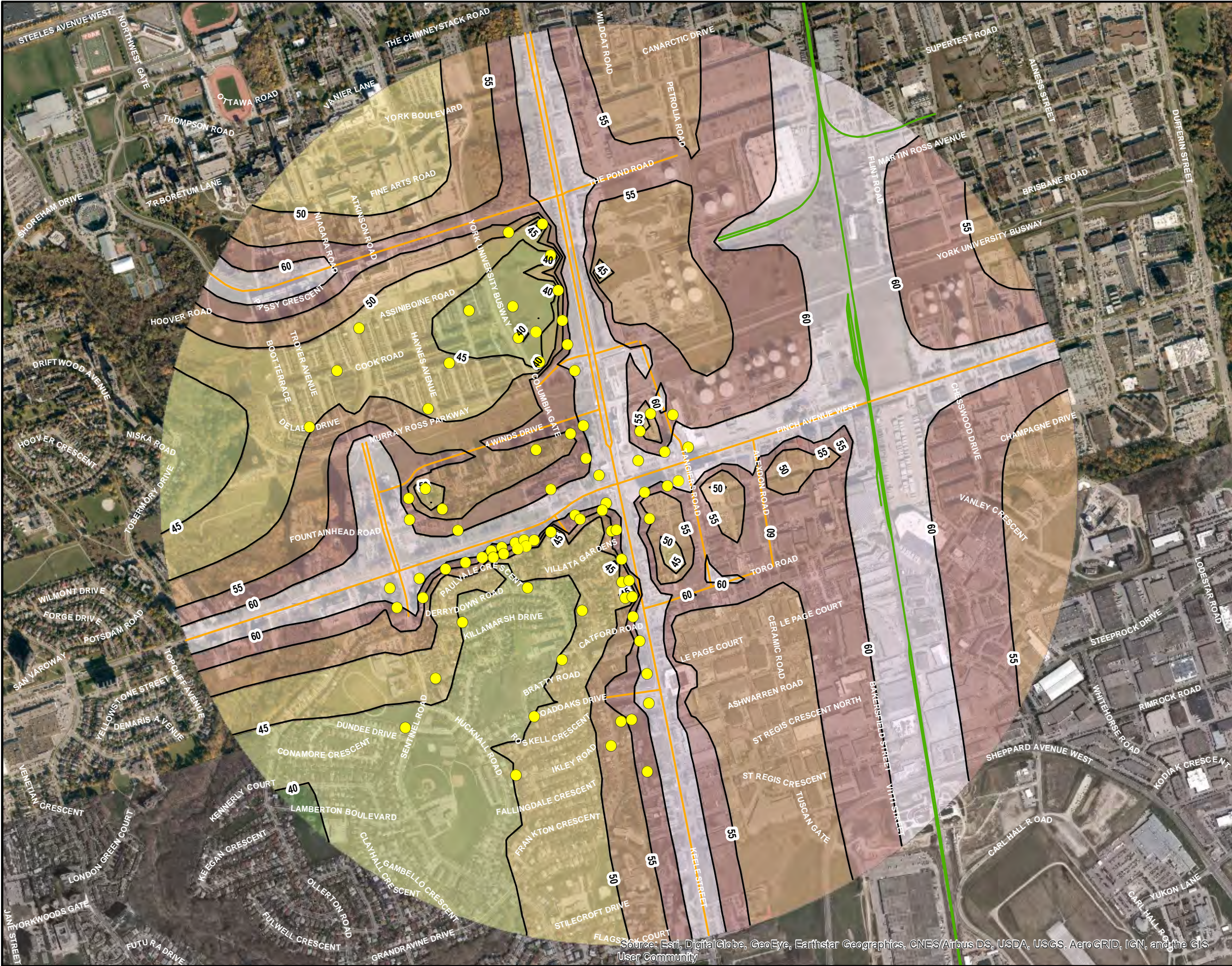
TITLE:
PREDICTED EQUIVALENT
SOUND LEVEL CONTOURS -
2045 FULL-BUILD DAYTIME (16.5 M)

DISCIPLINE:
ENVIRONMENT

ISSUE:

REV.:

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

- RECEPTORS
- RAIL SOURCES
- ROAD SOURCES
- 35 dB
- 40 dB
- 45 dB
- 50 dB
- 55 dB
- >55 dB



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
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PROJECT:
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PROJECT NO:
17M-01905-16

DATE:
DECEMBER 2019

DESIGNED BY:

DRAWN BY:
T.P.

CHECKED BY:

FIGURE NO:
14

SCALE:
1:12,500

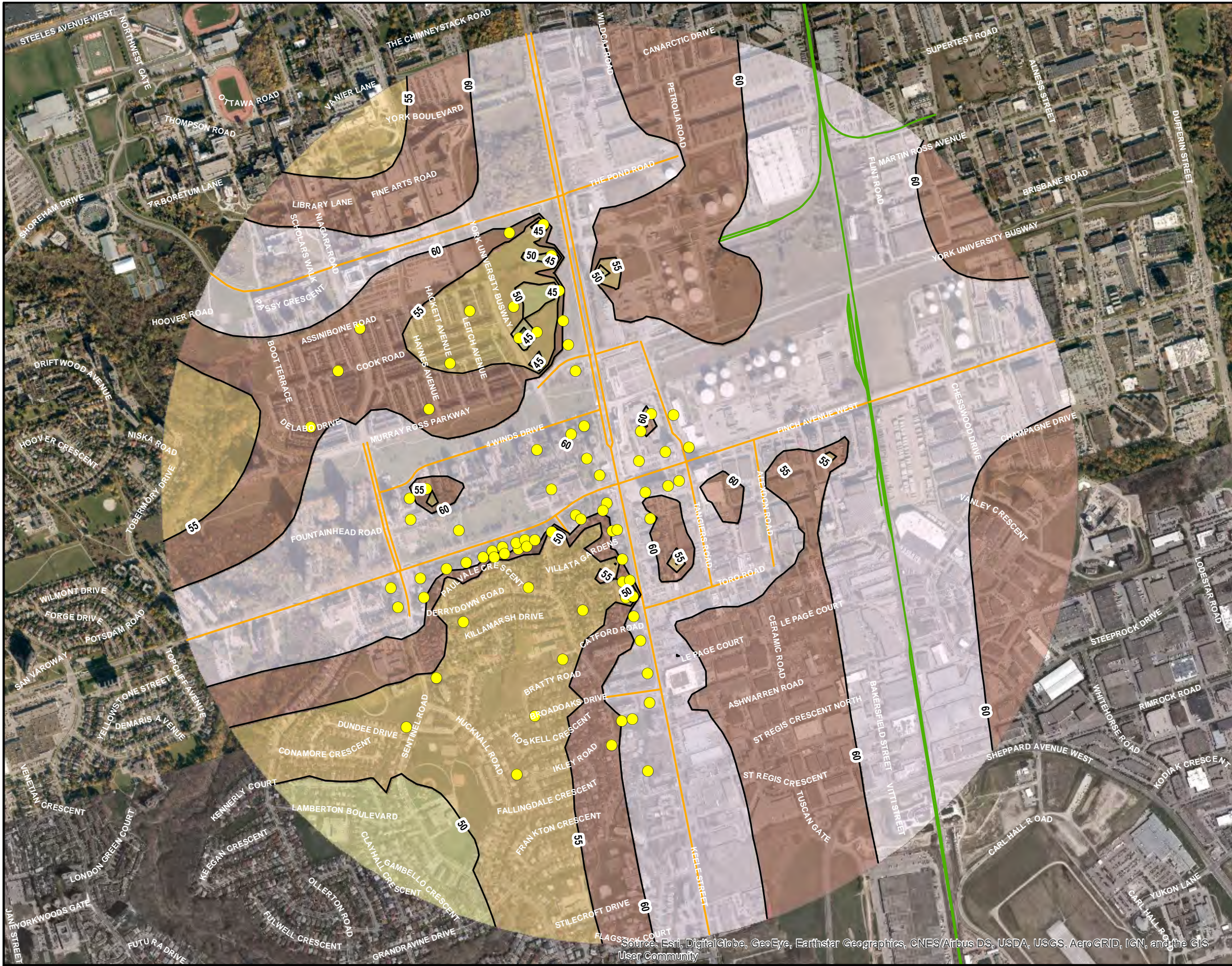
TITLE:
PREDICTED EQUIVALENT
SOUND LEVEL CONTOURS -
2045 FULL-BUILD NIGHTTIME (16.5 M)

DISCIPLINE:
ENVIRONMENT

ISSUE:

REV.:

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

- RECEPTORS
- RAIL SOURCES
- ROAD SOURCES
- 40 dB
- 45 dB
- 50 dB
- 55 dB
- >55 dB



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
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PROJECT:
KEELE FINCH PLUS

PROJECT NO:
17M-01905-16

DATE:
DECEMBER 2019

DESIGNED BY:

DRAWN BY:
T.P.

CHECKED BY:

FIGURE NO:
15

SCALE:
1:12,500

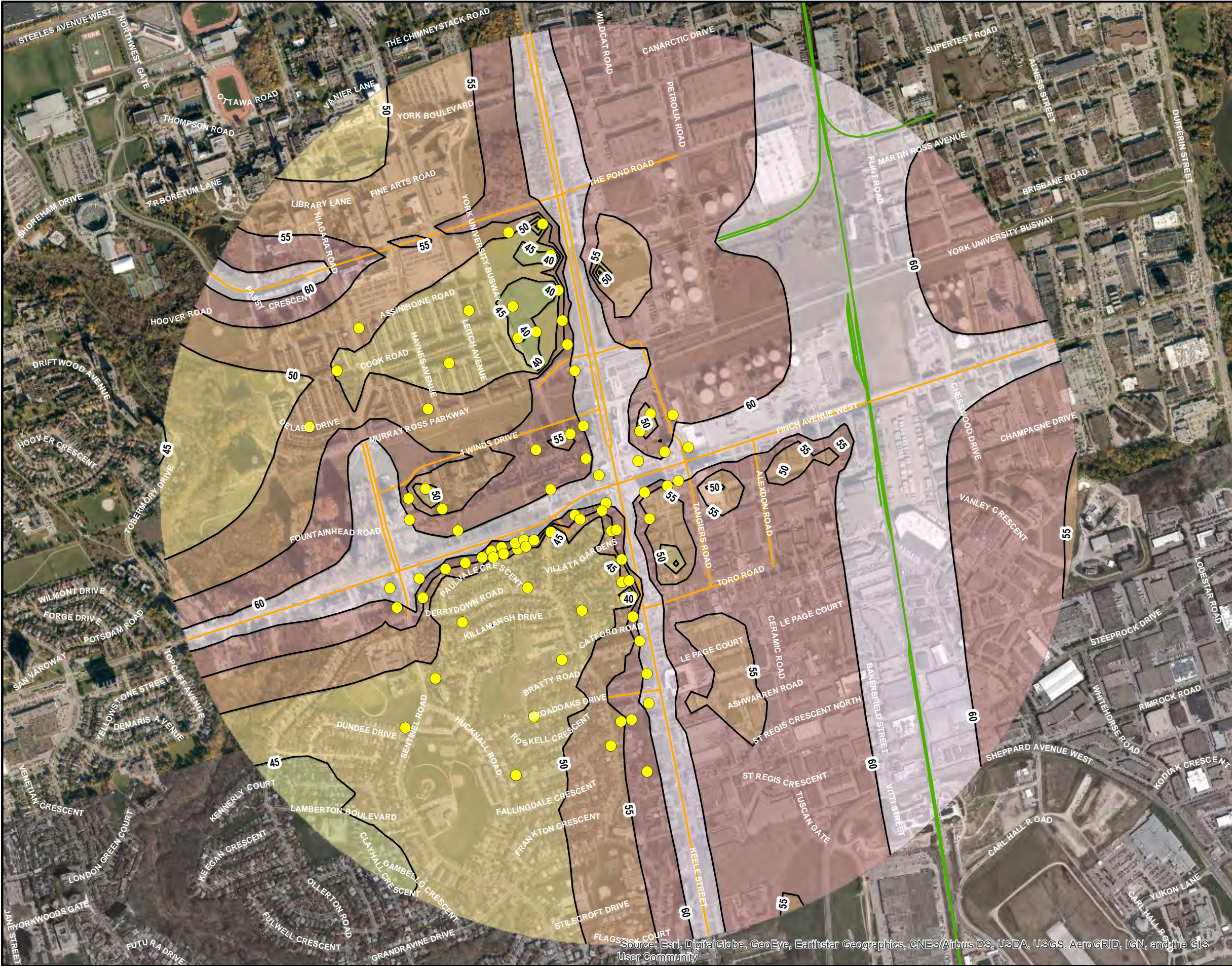
TITLE:
PREDICTED EQUIVALENT
SOUND LEVEL CONTOURS -
2045 FULL-BUILD DAYTIME (31.5 M)

DISCIPLINE:
ENVIRONMENT

ISSUE:

REV.:

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

- RECEPTORS
- RAIL SOURCES
- ROAD SOURCES
- 35 dB
- 40 dB
- 45 dB
- 50 dB
- 55 dB
- >55 dB



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
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PROJECT:
KEELE FINCH PLUS

PROJECT NO:
17M-01905-16

DATE:
DECEMBER 2019

DESIGNED BY:

DRAWN BY:
T.P.

CHECKED BY:

FIGURE NO:
16

SCALE:
1:12,500

TITLE:
PREDICTED EQUIVALENT
SOUND LEVEL CONTOURS -
2045 FULL-BUILD NIGHTTIME (31.5 M)

DISCIPLINE:
ENVIRONMENT

ISSUE:

REV.:

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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- LEGEND
- 2045 BUILDING OUTLINE
 - 78/67 MAXIMUM DAY / NIGHT SOUND LEVEL



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
CITY OF TORONTO

PROJECT:
KEELE FINCH PLUS

PROJECT NO: 17M-01905-16	DATE: DECEMBER 2019
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DESIGNED BY: -

DRAWN BY: T.P.

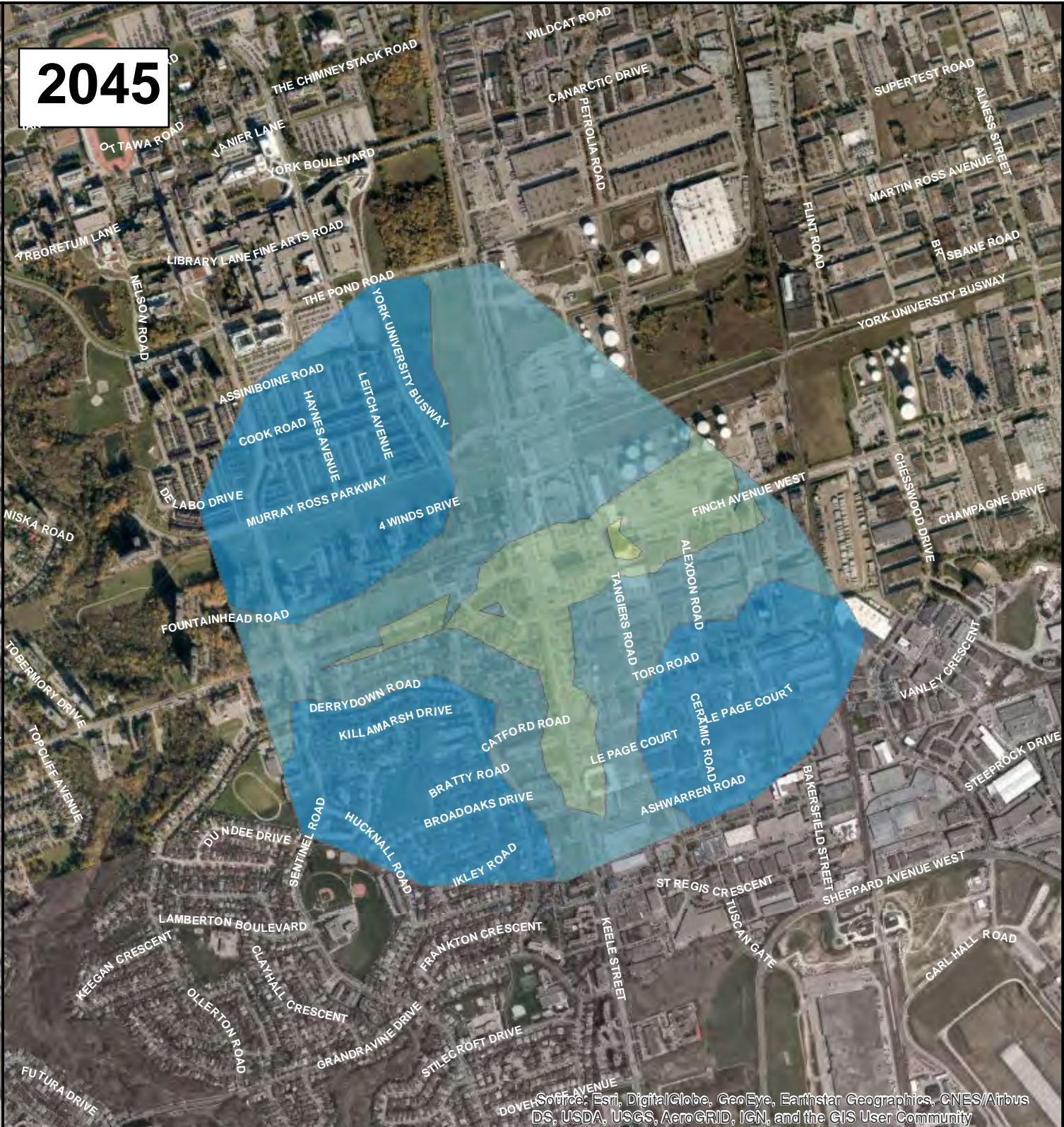
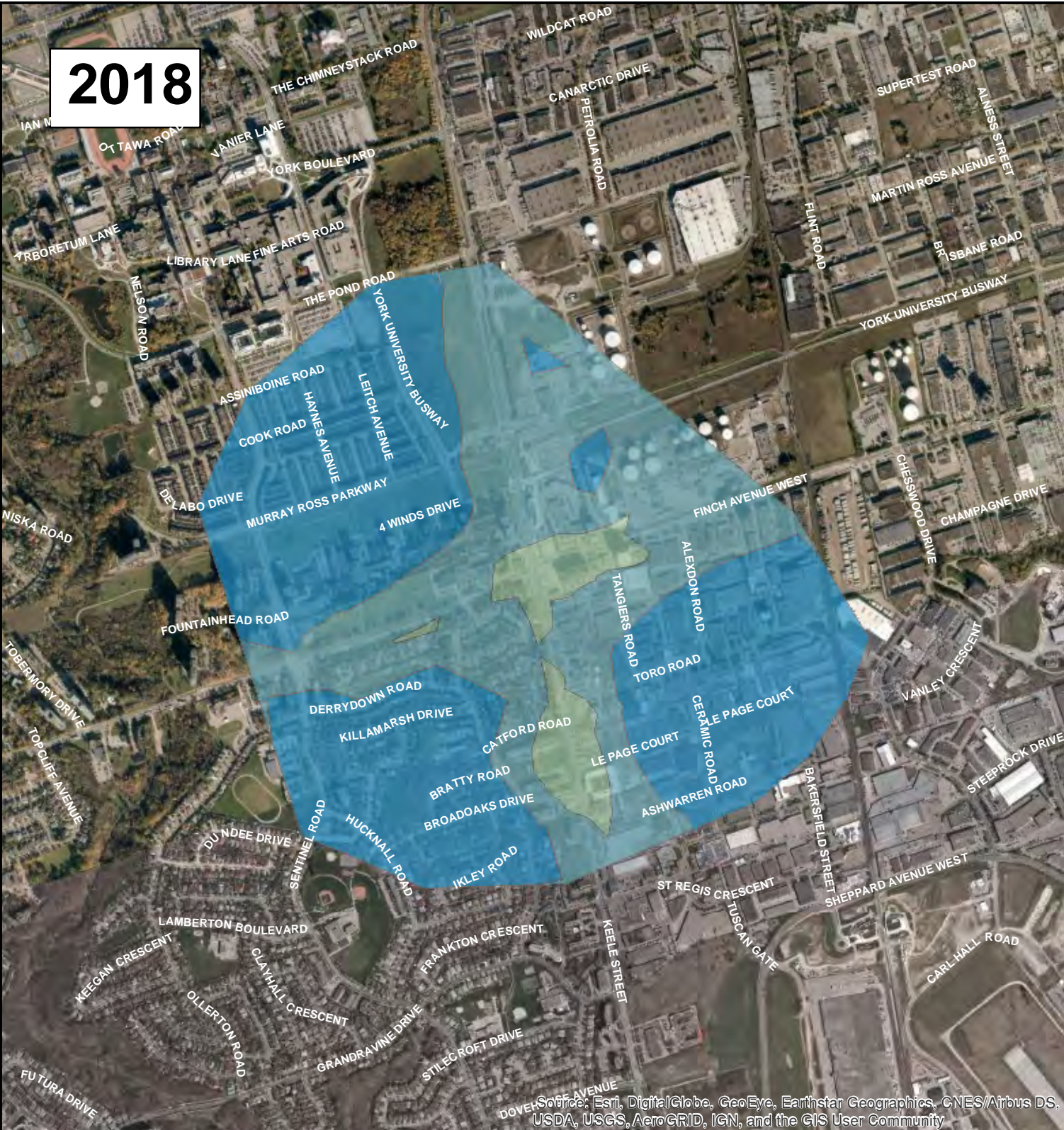
CHECKED BY: -

FIGURE NO: 17	SCALE: 1:8,000
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TITLE:
2045 SCENARIO SHOWING THE MAXIMUM
SOUNDS LEVEL AT SELECTED FACADES

DISCIPLINE:
ENVIRONMENT

ISSUE:	REV.:
	-



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND



µg/m³

160 80 0 160 Metres



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:

CITY OF TORONTO

PROJECT:

KEELE FINCH PLUS

PROJECT NO:

17M-01905-16

DESIGNED BY:

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DRAWN BY:

TP

CHECKED BY:

-

SCALE:

AS SHOWN

DATE:

DECEMBER 2019

TITLE:

PREDICTED CONCENTRATIONS FOR
PM_{2.5} 24 HOUR AVERAGE IN
2018 (A) AND 2045 (B)

DISCIPLINE:

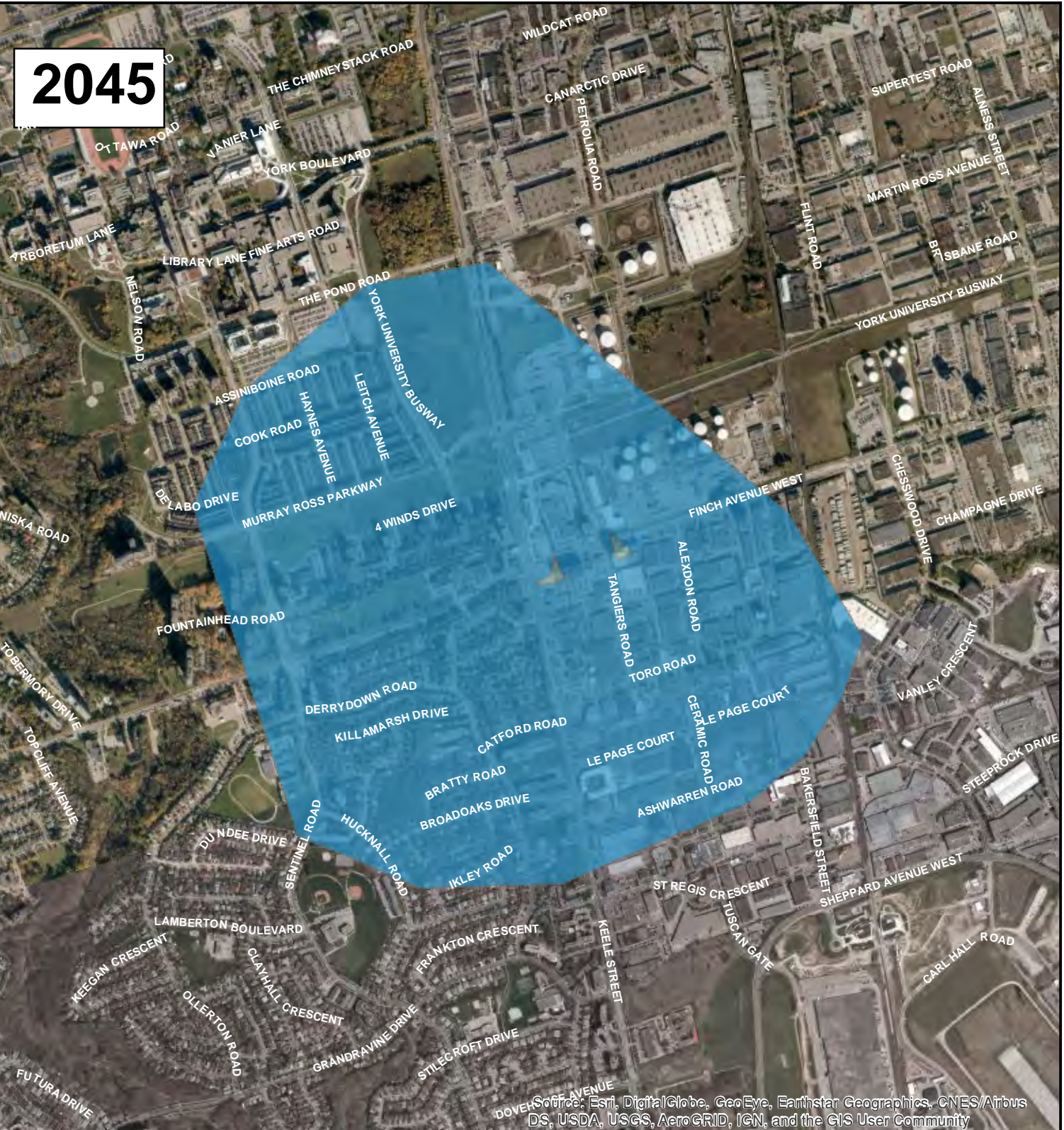
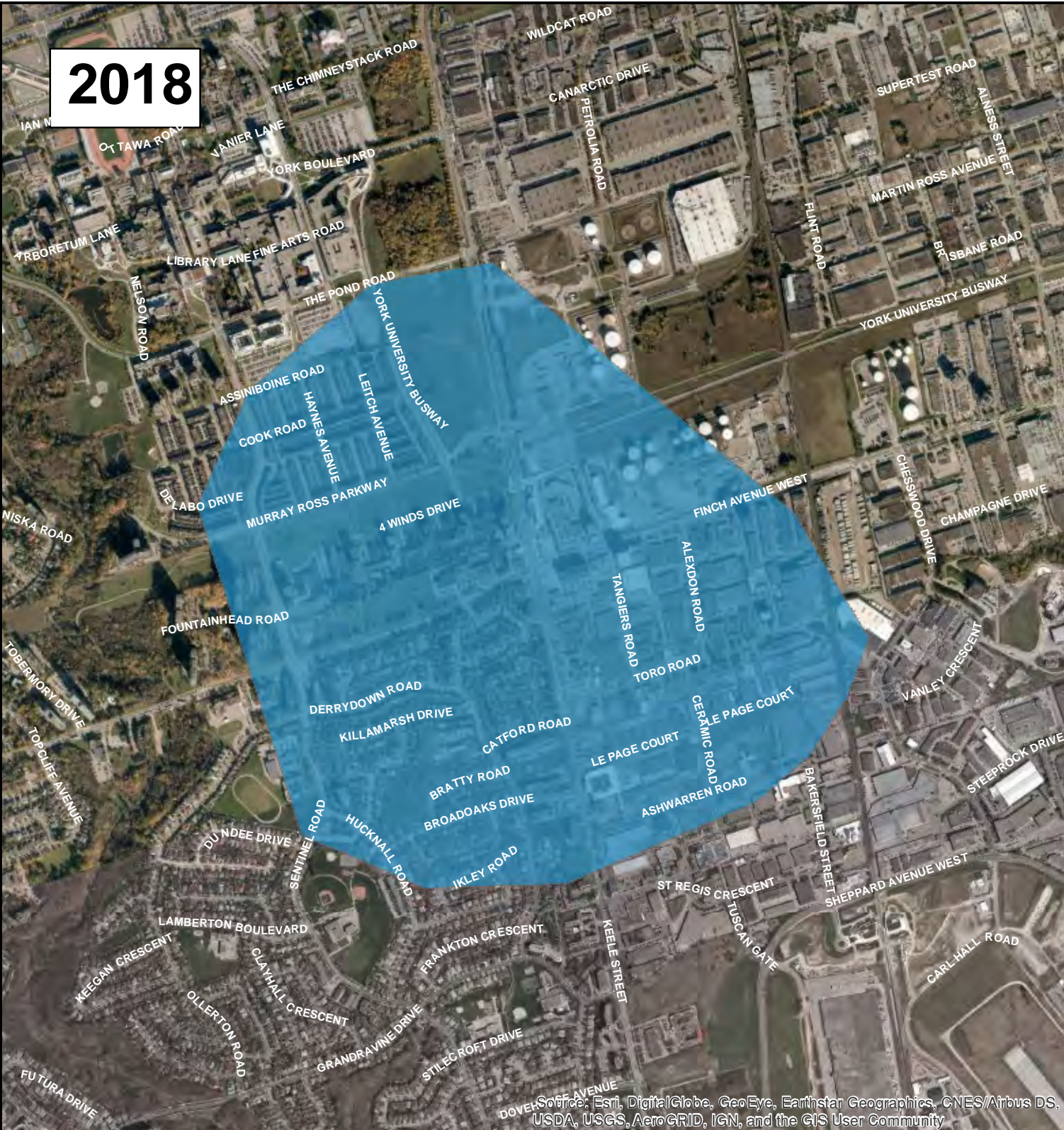
ENVIRONMENT


ISSUE:

-

FIGURE NO:









19






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LEGEND

	1		5
	2		7
	3		8
	4		8.8

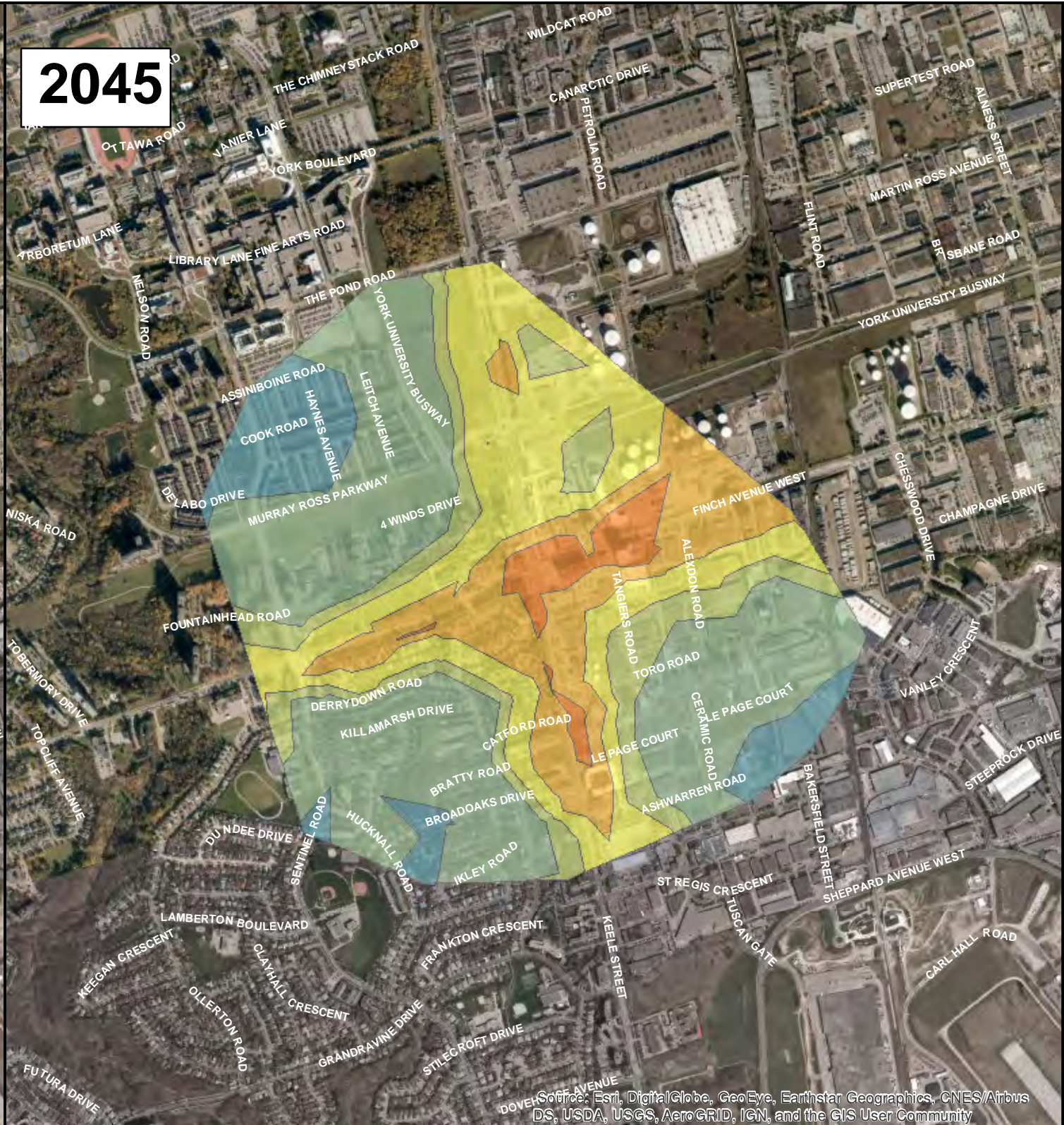
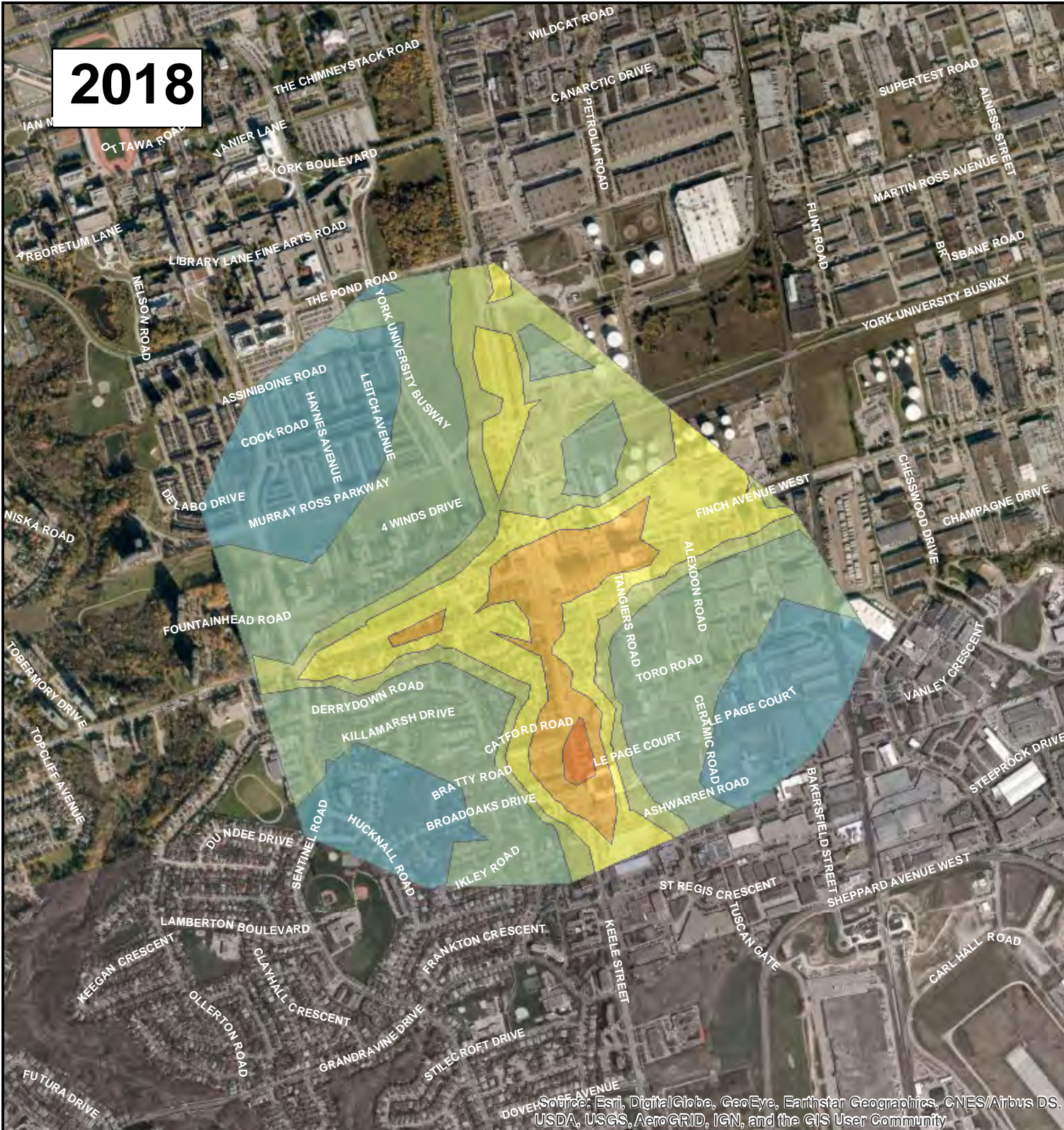
$\mu\text{g}/\text{m}^3$

160 80 0 160 Metres



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:	CITY OF TORONTO		PROJECT NO:	17M-01905-16	DATE:	DECEMBER 2019	TITLE:		PREDICTED CONCENTRATIONS FOR PM _{2.5} ANNUAL AVERAGE IN 2018 (A) AND 2045 (B)	
PROJECT:	KEELE FINCH PLUS		DESIGNED BY:	-						
			DRAWN BY:	TP						
			CHECKED BY:	-						
			SCALE:	AS SHOWN						
			DISCIPLINE:	ENVIRONMENT			ISSUE:	-		
						FIGURE NO:			20	



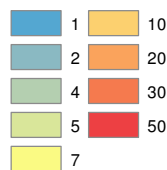
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND



µg/m³

160 80 0 160 Metres



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:

CITY OF TORONTO

PROJECT:

KEELE FINCH PLUS

PROJECT NO:

17M-01905-16

DATE:

DECEMBER 2019

DESIGNED BY:

-

DRAWN BY:

TP

CHECKED BY:

-

SCALE:

AS SHOWN

TITLE:

PREDICTED CONCENTRATIONS FOR
PM₁₀ 24 HOUR AVERAGE IN
2018 (A) AND 2045 (B)

DISCIPLINE:

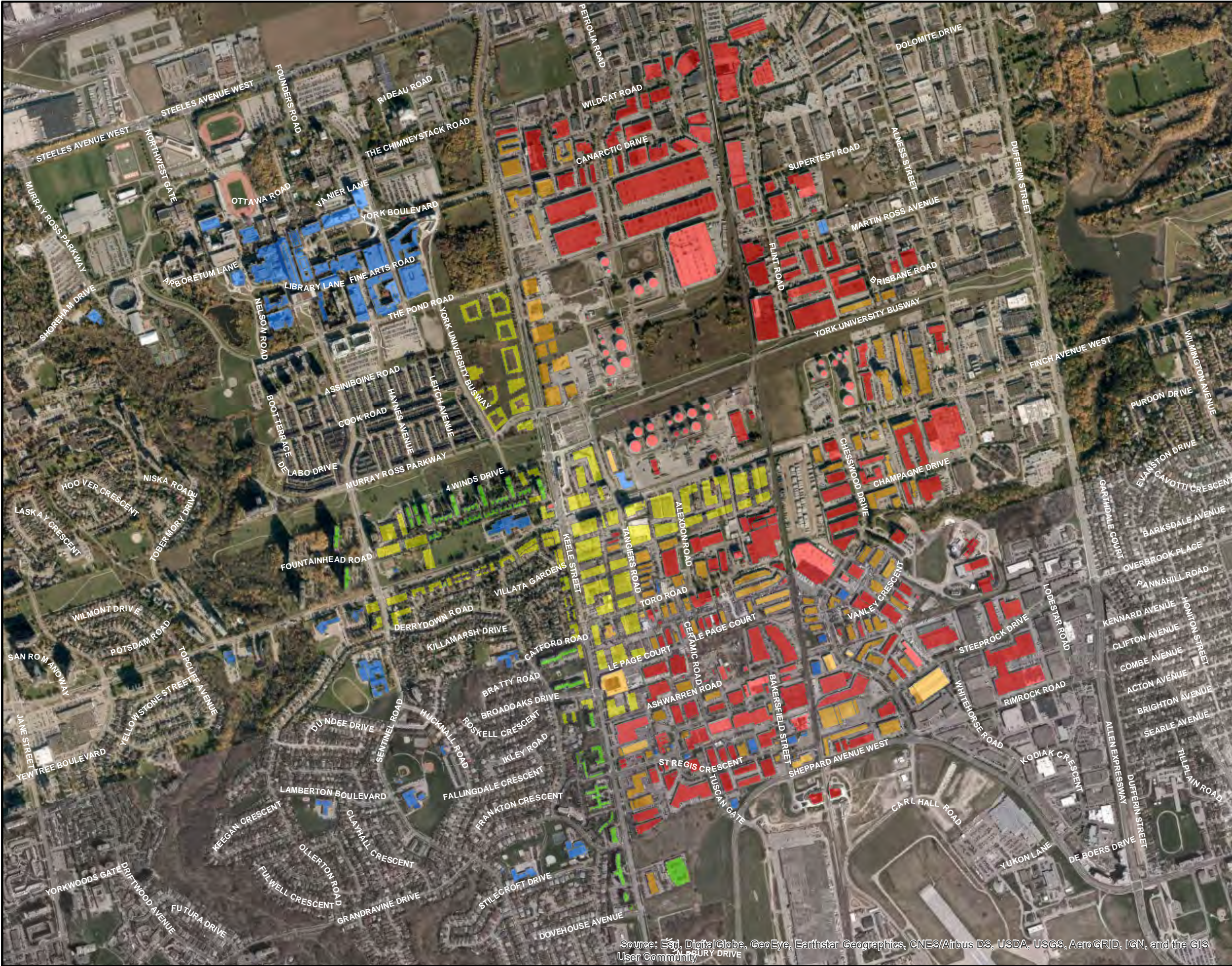
ENVIRONMENT

ISSUE:

-

FIGURE NO:

21



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LEGEND

BUILDING TYPE

- RESIDENTIAL
- INSTITUTIONAL
- INDUSTRIAL
- COMMERCIAL
- FUTURE BUILDINGS / RECEPTORS



100 50 0 100 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
CITY OF TORONTO

PROJECT:
KEELE FINCH PLUS

PROJECT NO: 17M-01905-16	DATE: DECEMBER 2019
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DESIGNED BY: -	
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DRAWN BY: T.P.	
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CHECKED BY: -	
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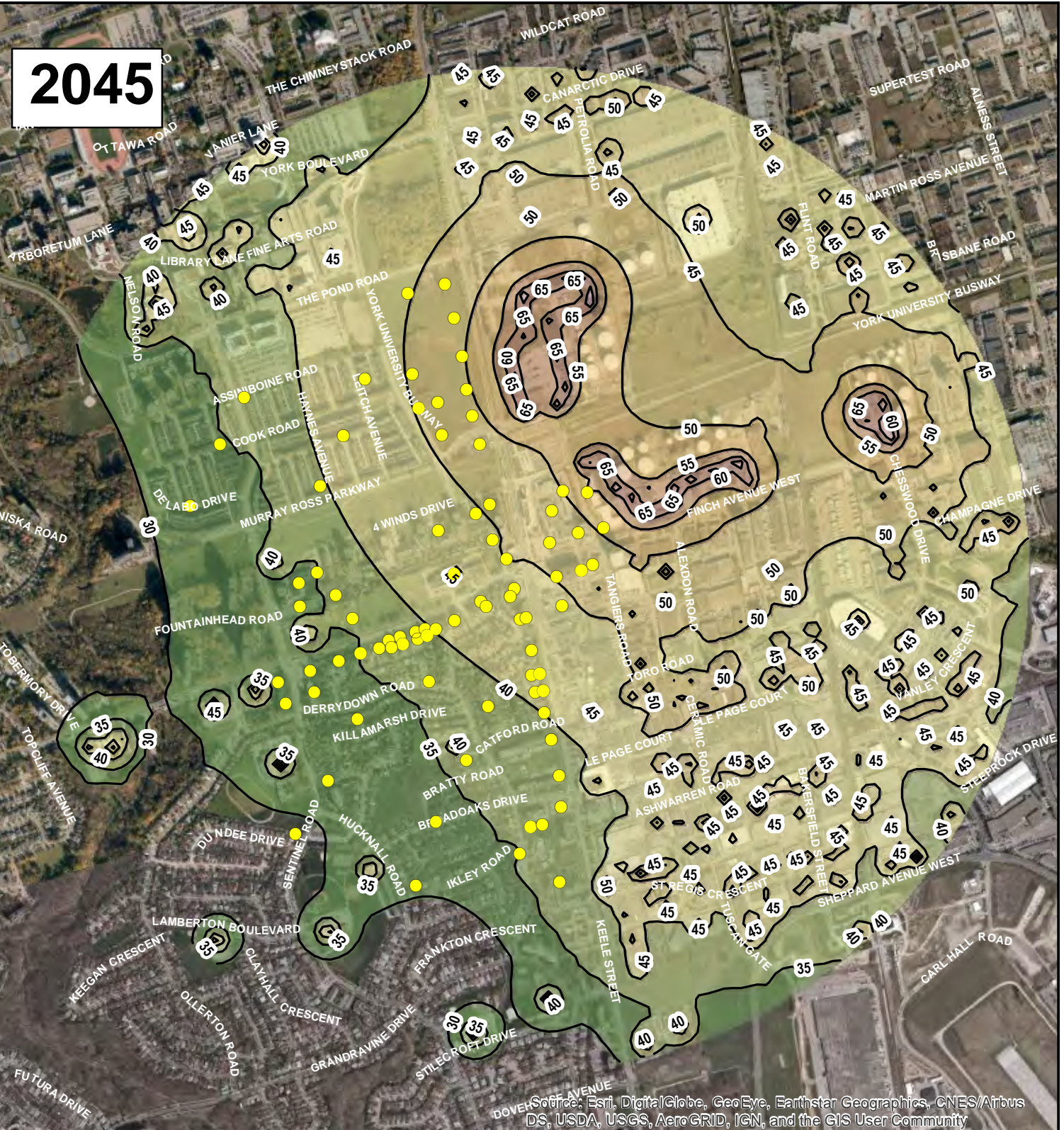
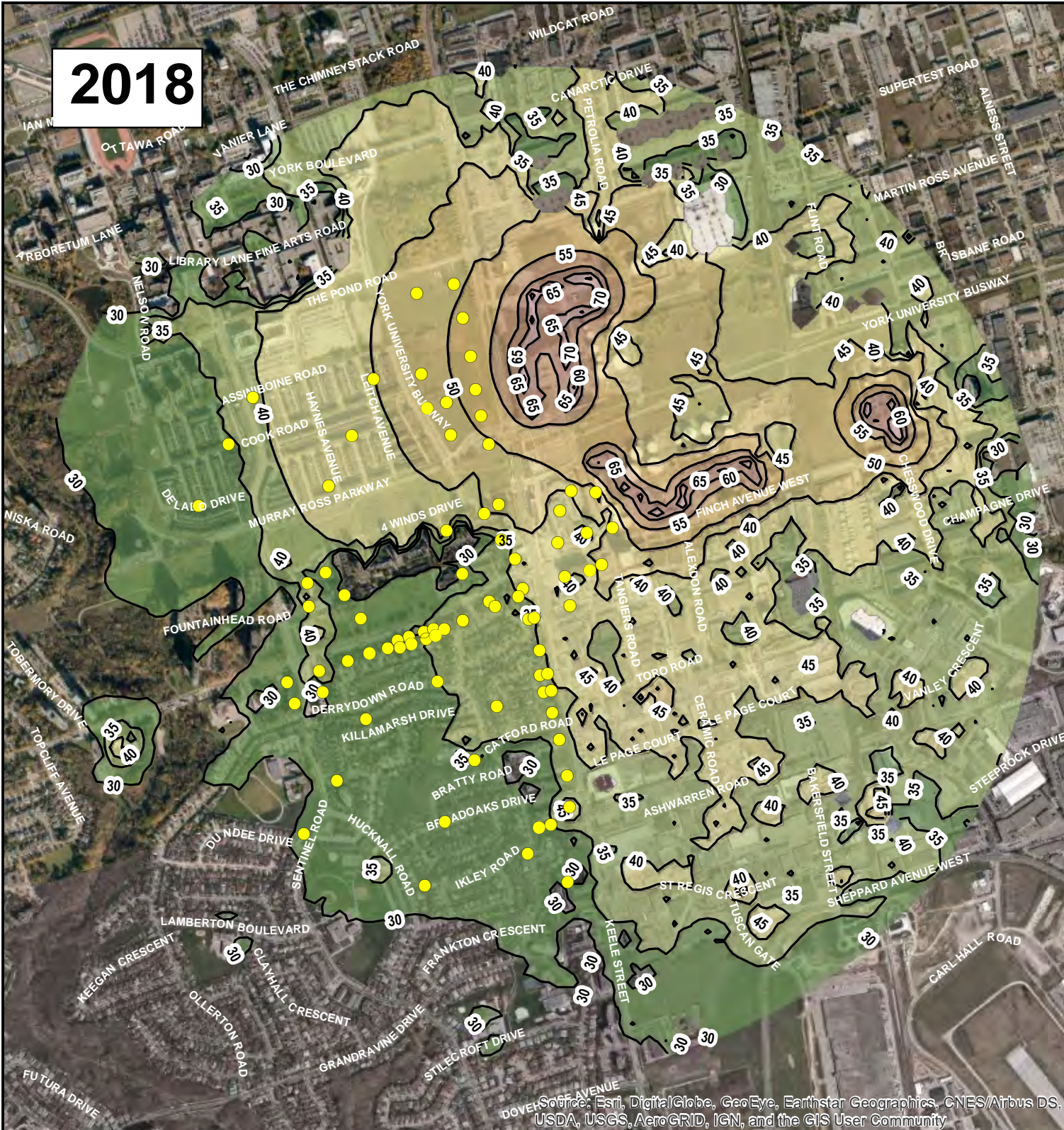
FIGURE NO: 24	SCALE: 1:15,000
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TITLE: STUDY AREA MAP SHOWING BUILDINGS IN POTENTIAL FUTURE LAND USE

DISCIPLINE: ENVIRONMENT

ISSUE: -	REV.: -
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

35 dB	60 dB
40 dB	65 dB
45 dB	70 dB
50 dB	75 dB
55 dB	RECEPTORS

160 80 0 160 Metres



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:

CITY OF TORONTO

PROJECT:

KEELE FINCH PLUS

PROJECT NO:

17M-01905-16

DATE:

DECEMBER 2019

DESIGNED BY:

-

DRAWN BY:

TP

CHECKED BY:

-

SCALE:

AS SHOWN

TITLE:

EQUIVALENT SOUND
LEVEL CONTOURS CURRENT
AND FUTURE INDUSTRIAL
OPERATIONS (DAYTIME)

DISCIPLINE:

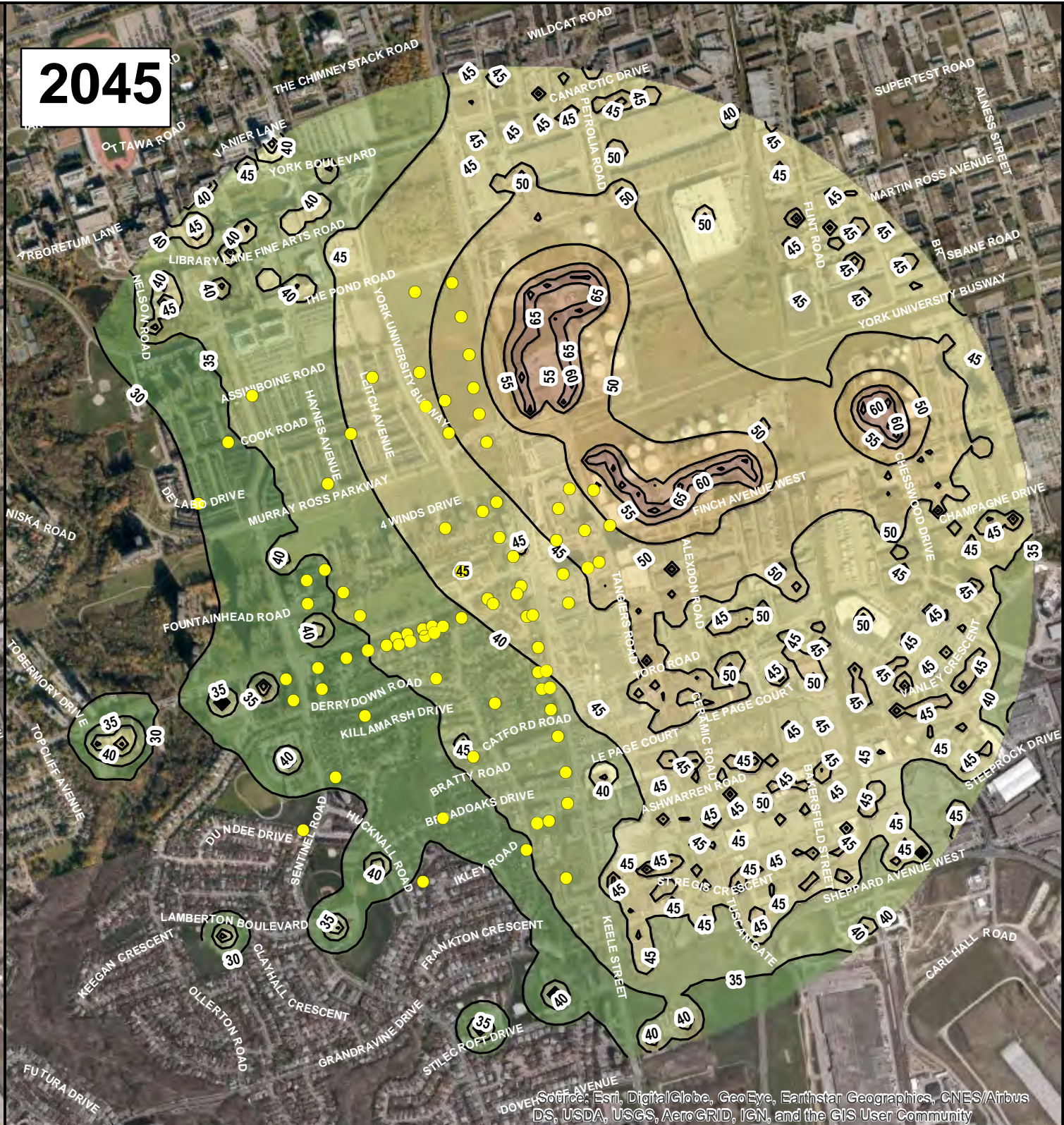
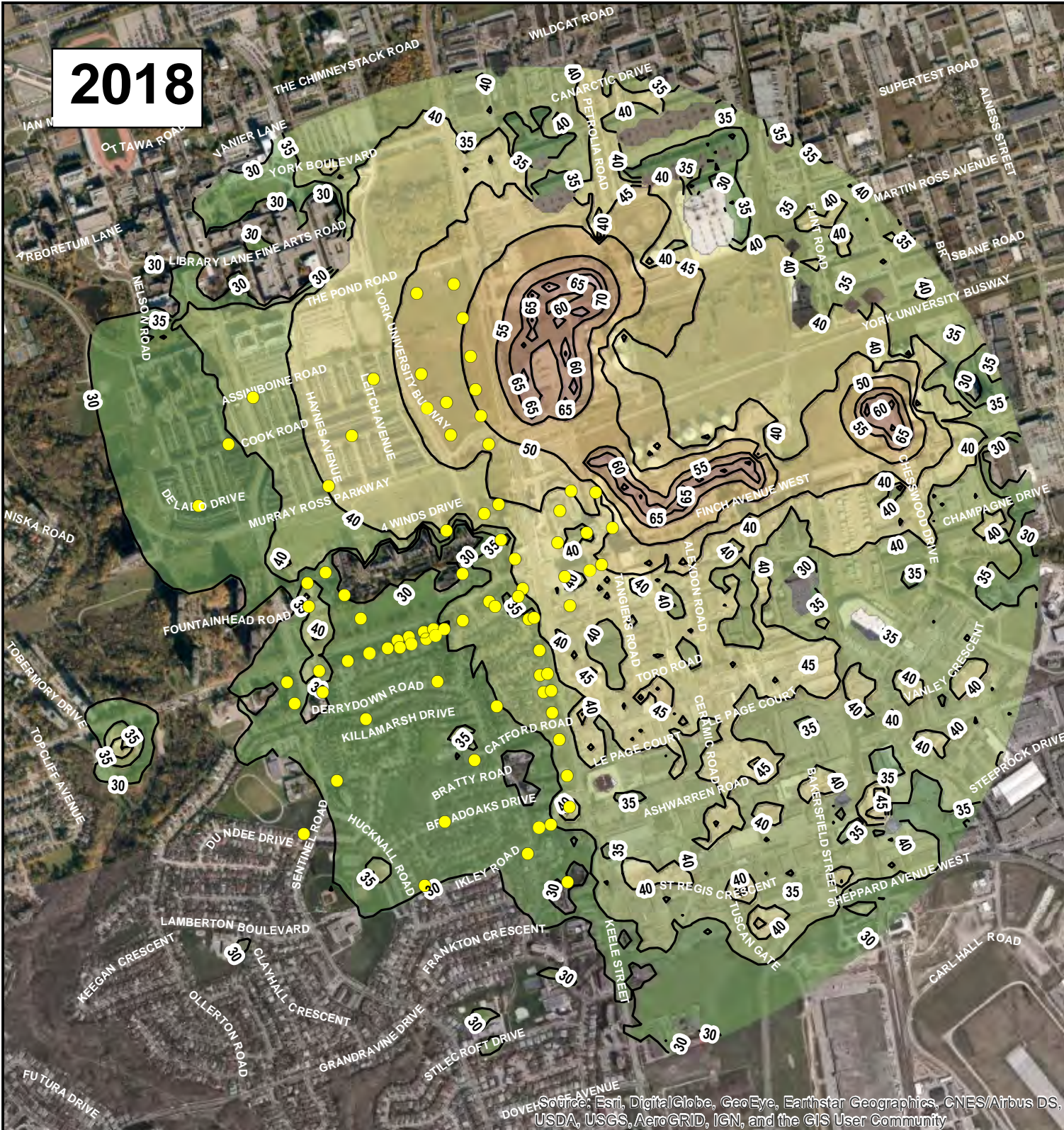
ENVIRONMENT

ISSUE:

-

FIGURE NO:

25



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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LEGEND

35 dB	60 dB
40 dB	65 dB
45 dB	70 dB
50 dB	75 dB
55 dB	RECEPTORS

160 80 0 160 Metres



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:

CITY OF TORONTO

PROJECT:

KEELE FINCH PLUS

PROJECT NO:

17M-01905-16

DATE:

DECEMBER 2019

DESIGNED BY:

-

DRAWN BY:

TP

CHECKED BY:

-

SCALE:

AS SHOWN

TITLE:

EQUIVALENT SOUND LEVEL
CONTOURS CURRENT AND
FUTURE INDUSTRIAL OPERATIONS
(NIGHTTIME)

DISCIPLINE:

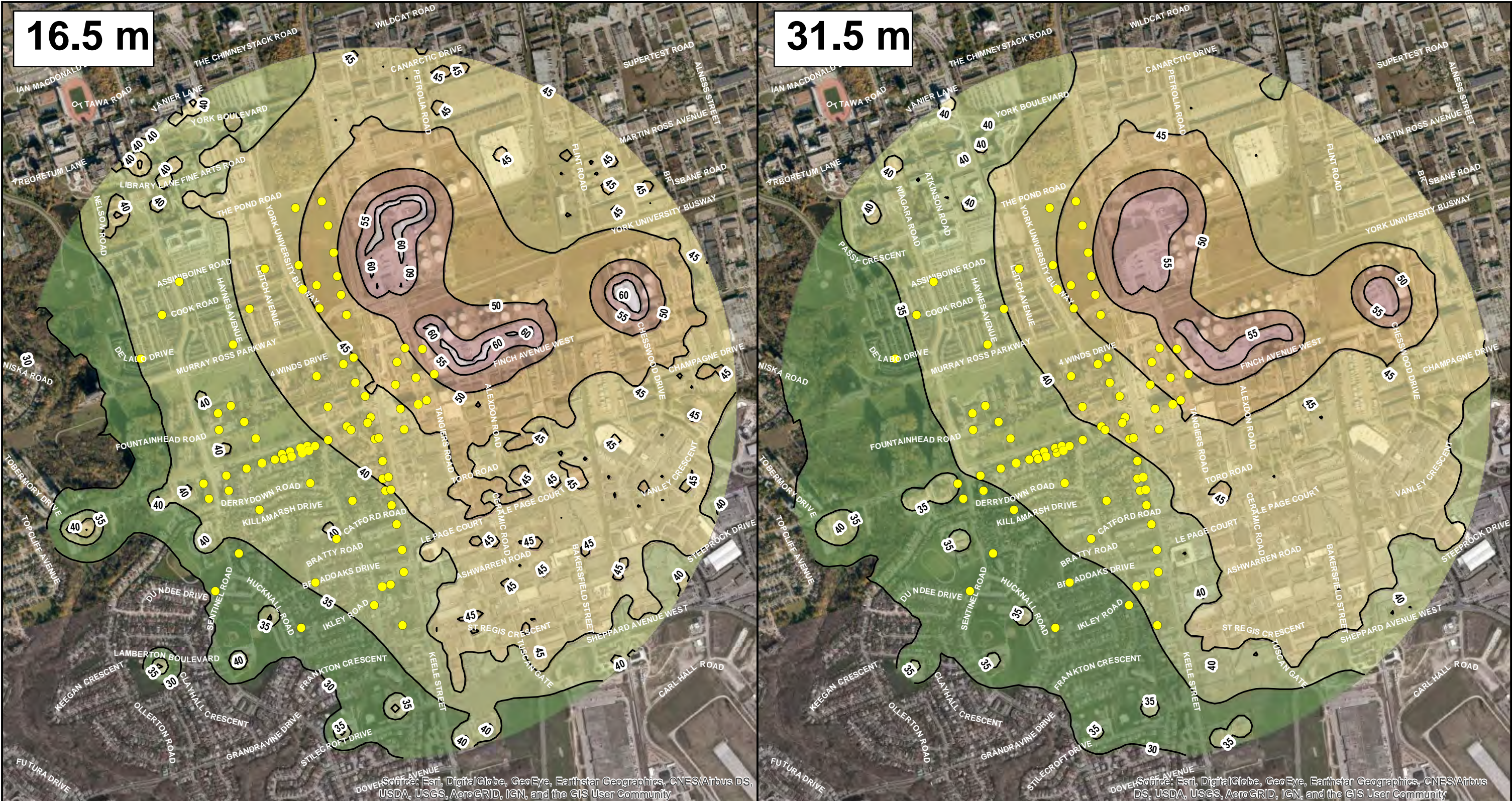
ENVIRONMENT


ISSUE:

-

FIGURE NO:

26






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LEGEND

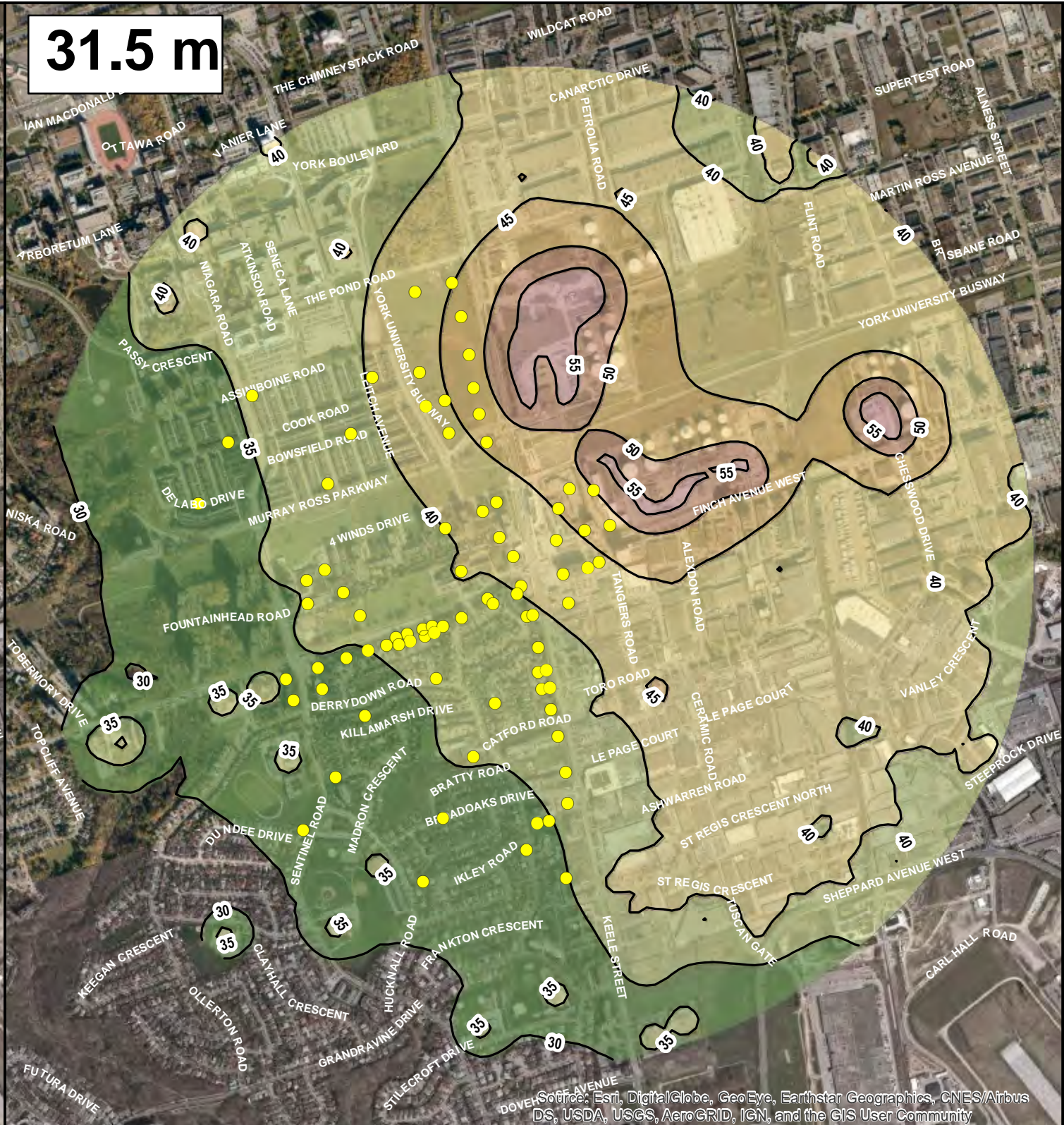
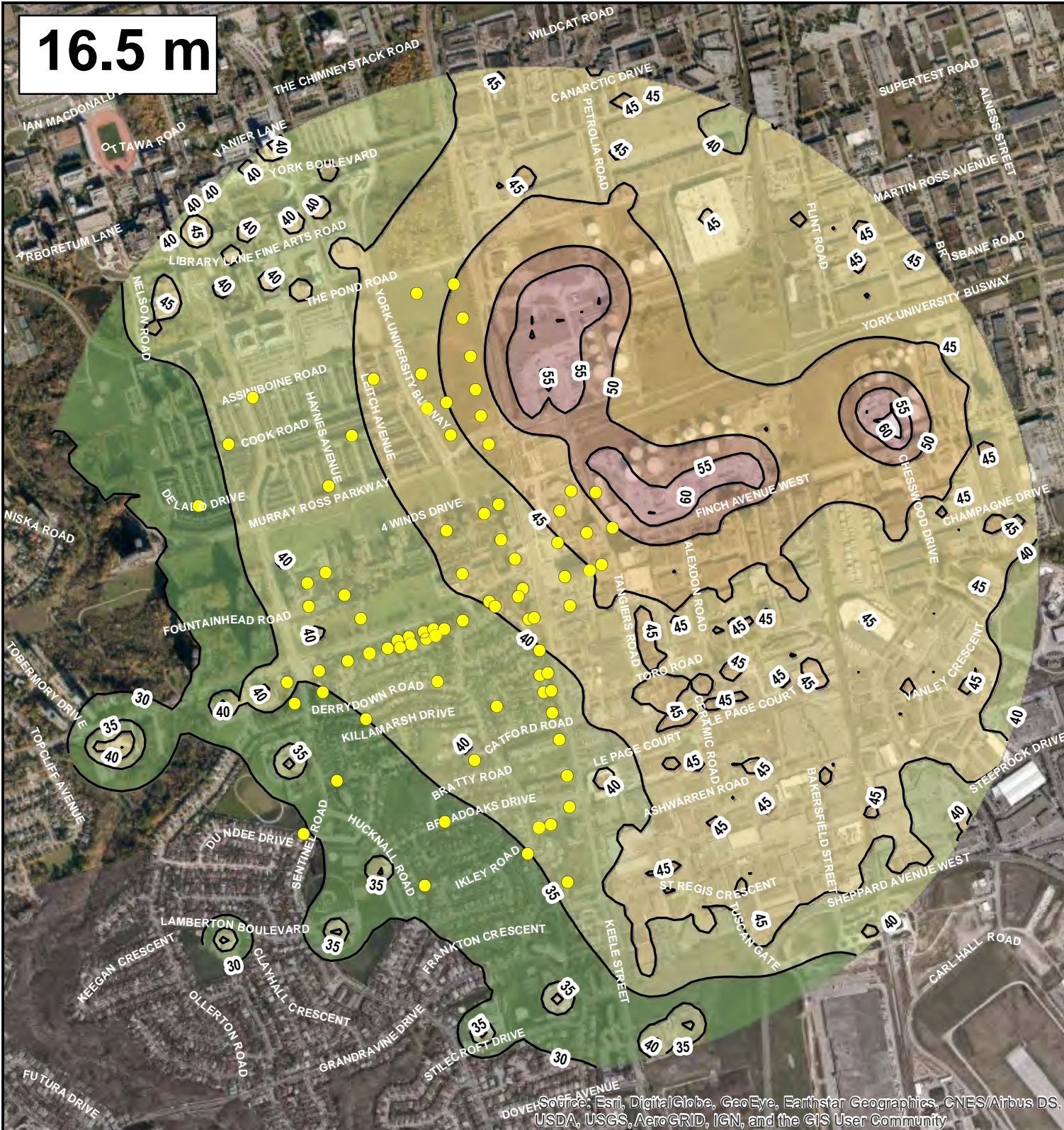
35 dB	55 dB
40 dB	60 dB
45 dB	65 dB
50 dB	RECEPTORS

160 80 0 160 Metres



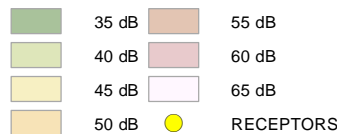
Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:	CITY OF TORONTO		PROJECT NO:	17M-01905-16	DATE:	DECEMBER 2019	TITLE:		EQUIVALENT SOUND LEVEL CONTOURS FUTURE INDUSTRIAL OPERATIONS (2045, DAYTIME, 16.5 M AND 31.5 M)	
PROJECT:	KEELE FINCH PLUS		DESIGNED BY:	-						
			DRAWN BY:	TP						
			CHECKED BY:	-						
			SCALE:	AS SHOWN						
			DISCIPLINE:		ENVIRONMENT		ISSUE:		FIGURE NO:	
							-		27	



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LEGEND



160 80 0 160 Metres



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:

CITY OF TORONTO

PROJECT:

KEELE FINCH PLUS

PROJECT NO:

17M-01905-16

DATE:

DECEMBER 2019

DESIGNED BY:

-

DRAWN BY:

TP

CHECKED BY:

-

SCALE:

AS SHOWN

TITLE:

EQUIVALENT SOUND LEVEL
CONTOURS CURRENT AND
FUTURE INDUSTRIAL OPERATIONS
(2045, NIGHTTIME, 16.5 M AND 31.5 M)

DISCIPLINE:

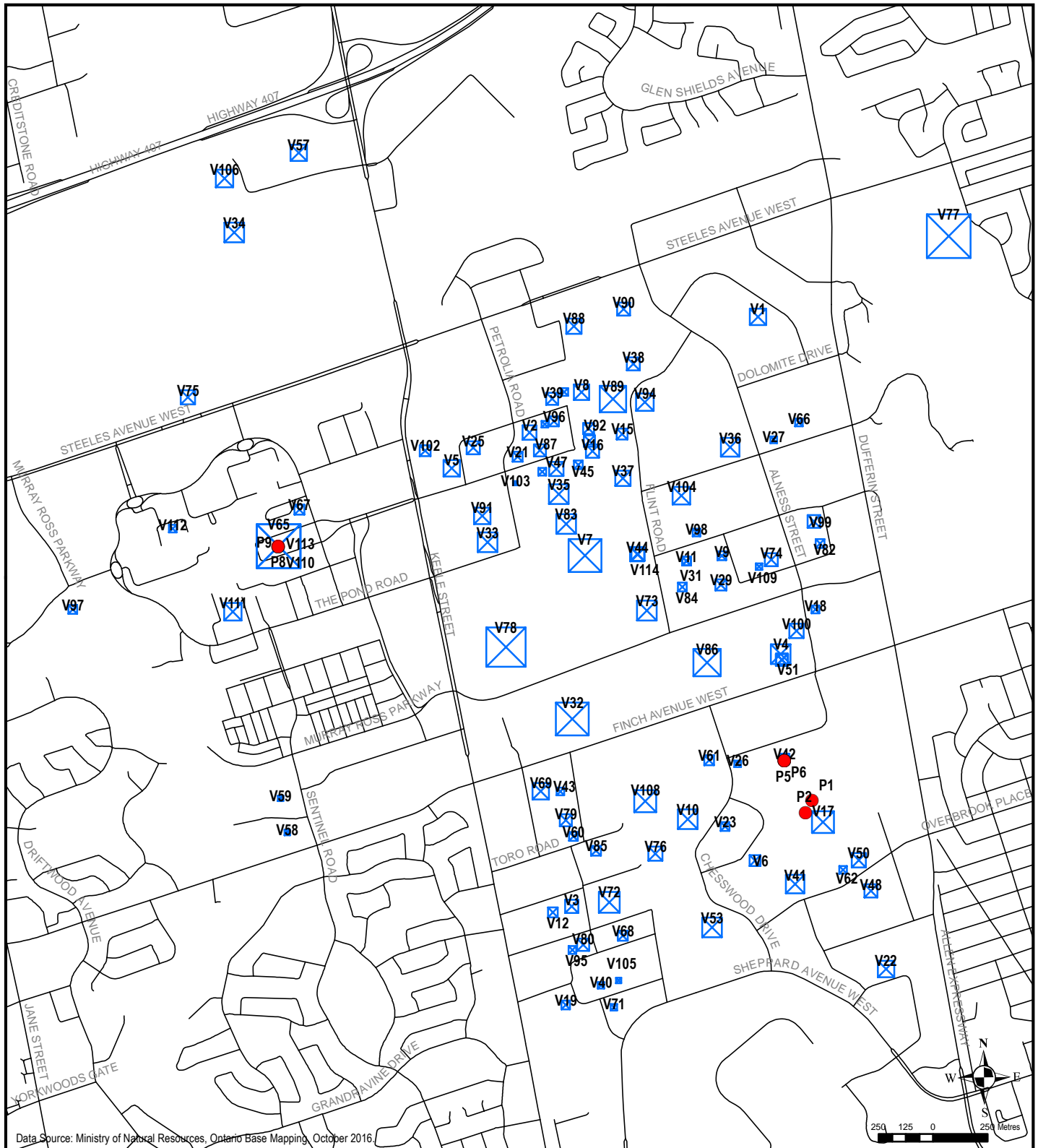
ENVIRONMENT

ISSUE:

-

FIGURE NO:

28



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.



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PROJECT:

KEELE FINCH PLUS

TITLE:

STATIONARY SOURCE LOCATIONS (AIR QUALITY)

CLIENT:

CITY OF TORONTO

SCALE:

1:25,000

DRAWN BY:

TP

CHECKED BY:

-

PROJECT NO:

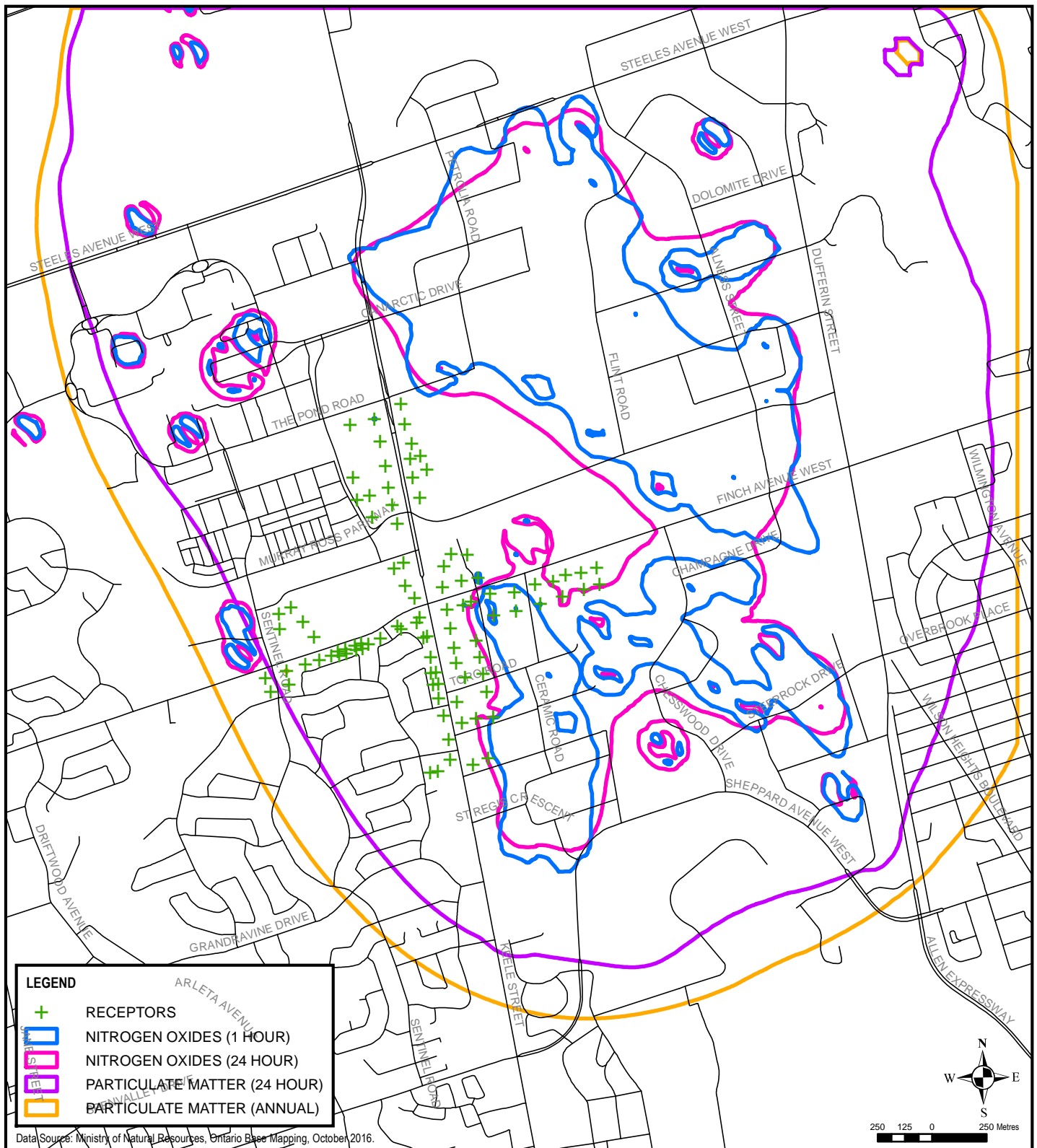
17M-01905-16

DATE:

DECEMBER 2019

FIGURE NO:

29



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PROJECT:

KEELE FINCH PLUS

TITLE:

AIR QUALITY IMPACT ZONES

CLIENT:

CITY OF TORONTO

SCALE:

1:25,000

DRAWN BY:

TP

CHECKED BY:

-

PROJECT NO:

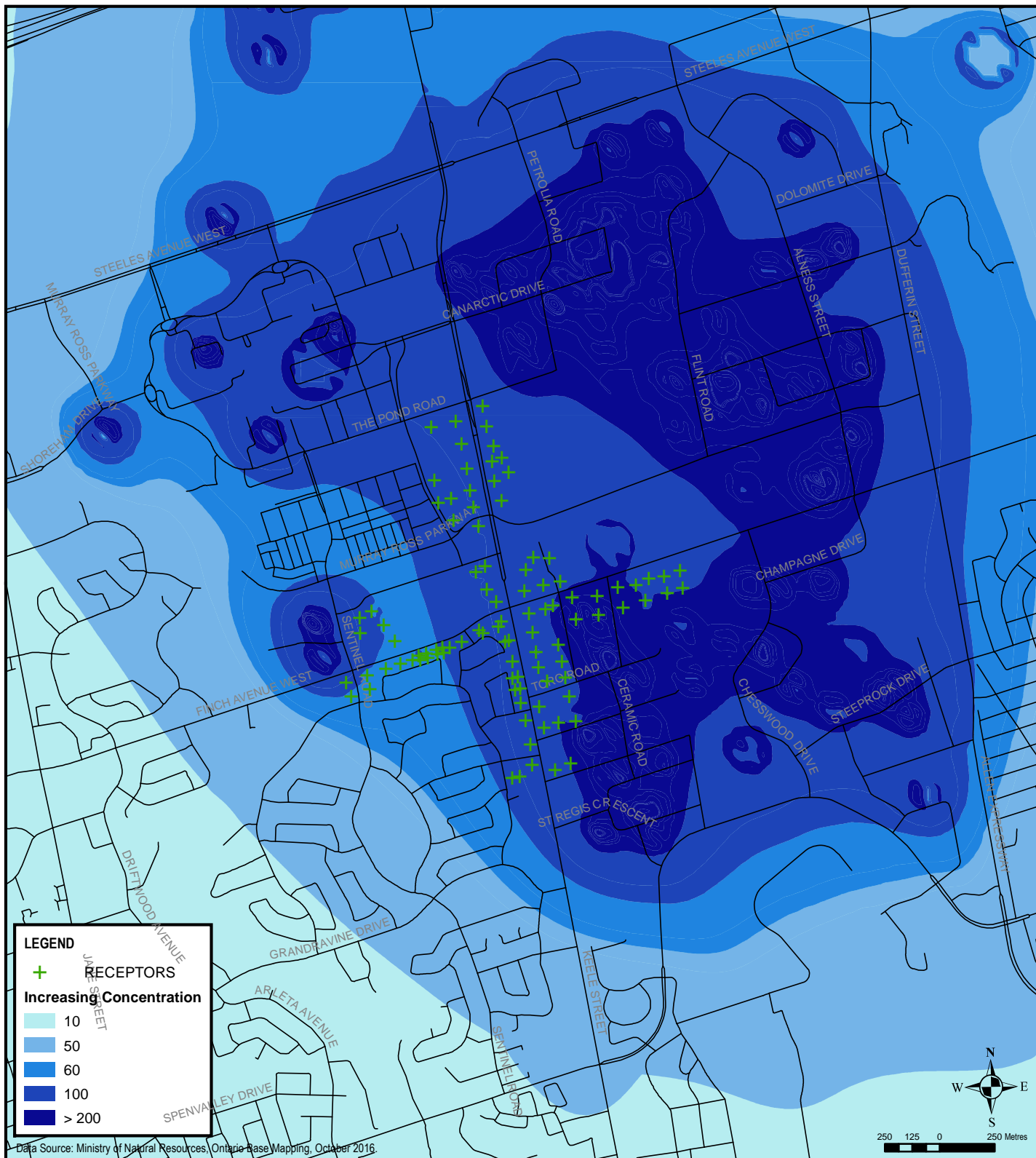
17M-01905-16

DATE:

JANUARY 2020

FIGURE NO:

30



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.



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PROJECT:

KEELE FINCH PLUS

TITLE:

NITROGEN OXIDES (24 HOUR)

CLIENT:

CITY OF TORONTO

SCALE:

1:25,000

DRAWN BY:

TP

CHECKED BY:

-

PROJECT NO:

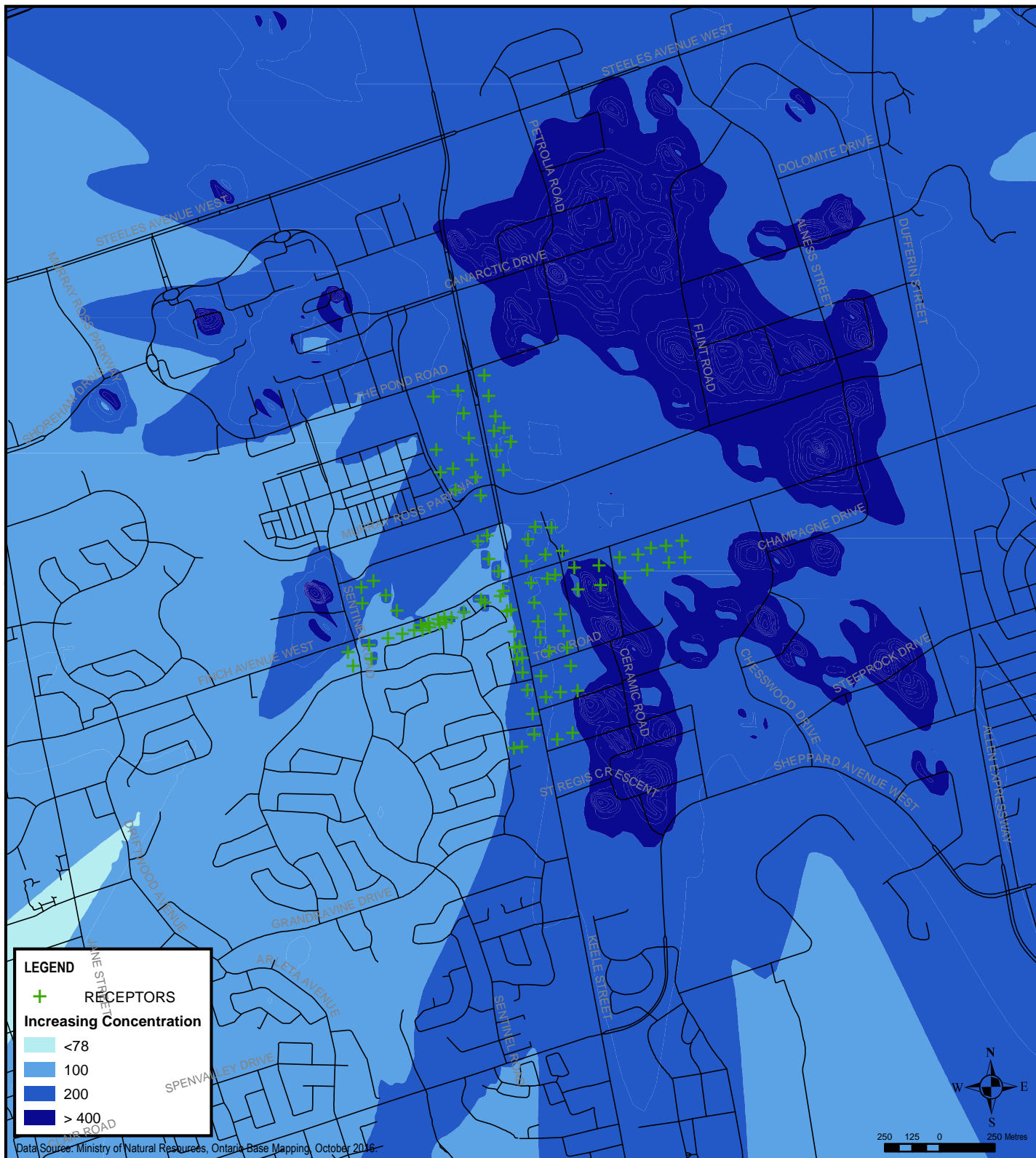
17M-01905-16

DATE:

DECEMBER 2019

FIGURE NO:

31



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.



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AURORA, ONTARIO CANADA L4G 0G9
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PROJECT:

KEELE FINCH PLUS

TITLE:

NITROGEN OXIDES (1 HOUR)

CLIENT:

CITY OF TORONTO

SCALE:

1:25,000

DRAWN BY:

TP

CHECKED BY:

-

PROJECT NO:

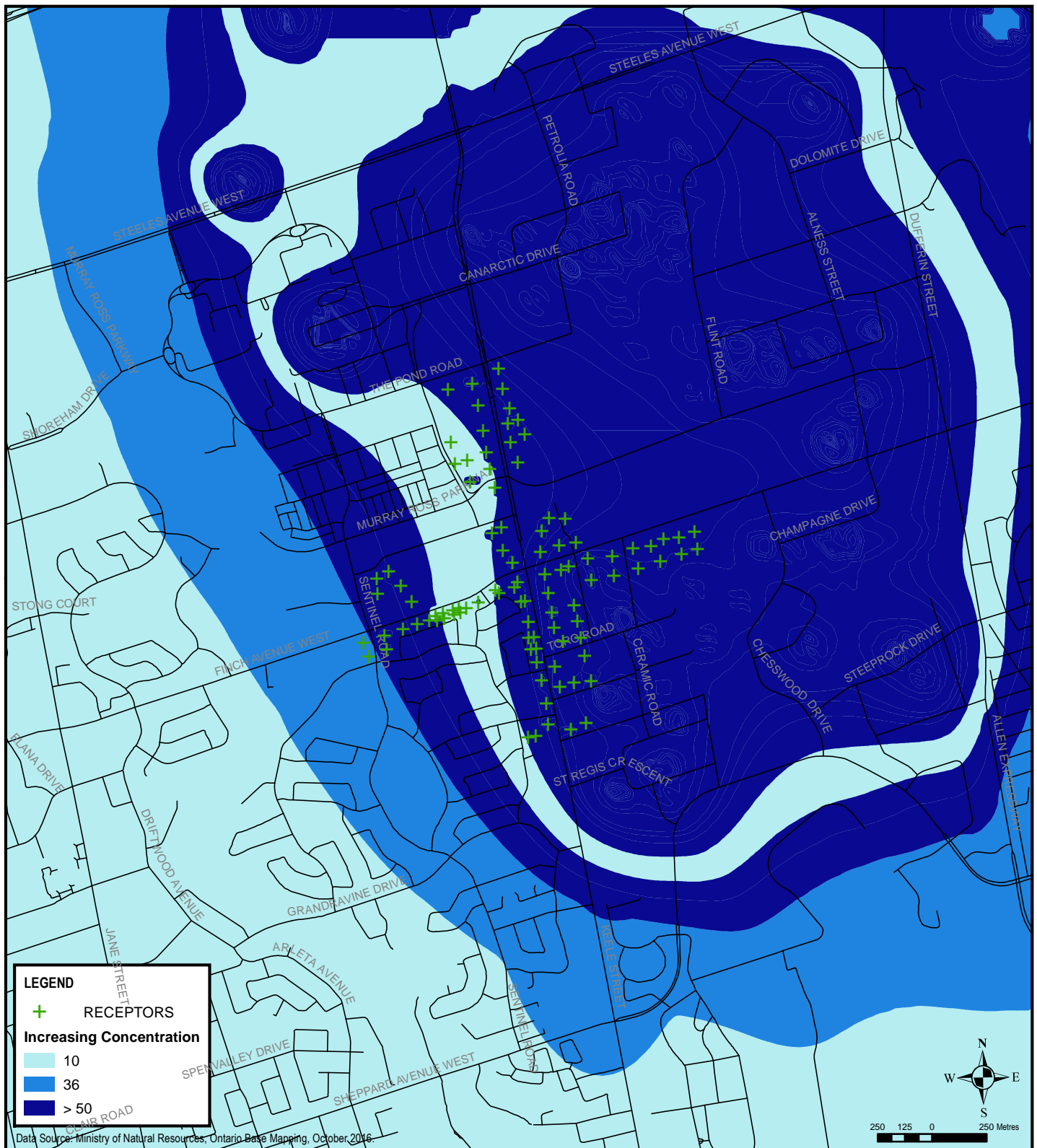
17M-01905-16

DATE:

DECEMBER 2019

FIGURE NO:

32



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.



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PROJECT:

KEELE FINCH PLUS

TITLE:

PARTICULATE MATTER (24 HOUR)

CLIENT:

CITY OF TORONTO

SCALE:

1:25,000

DRAWN BY:

TP

CHECKED BY:

-

PROJECT NO:

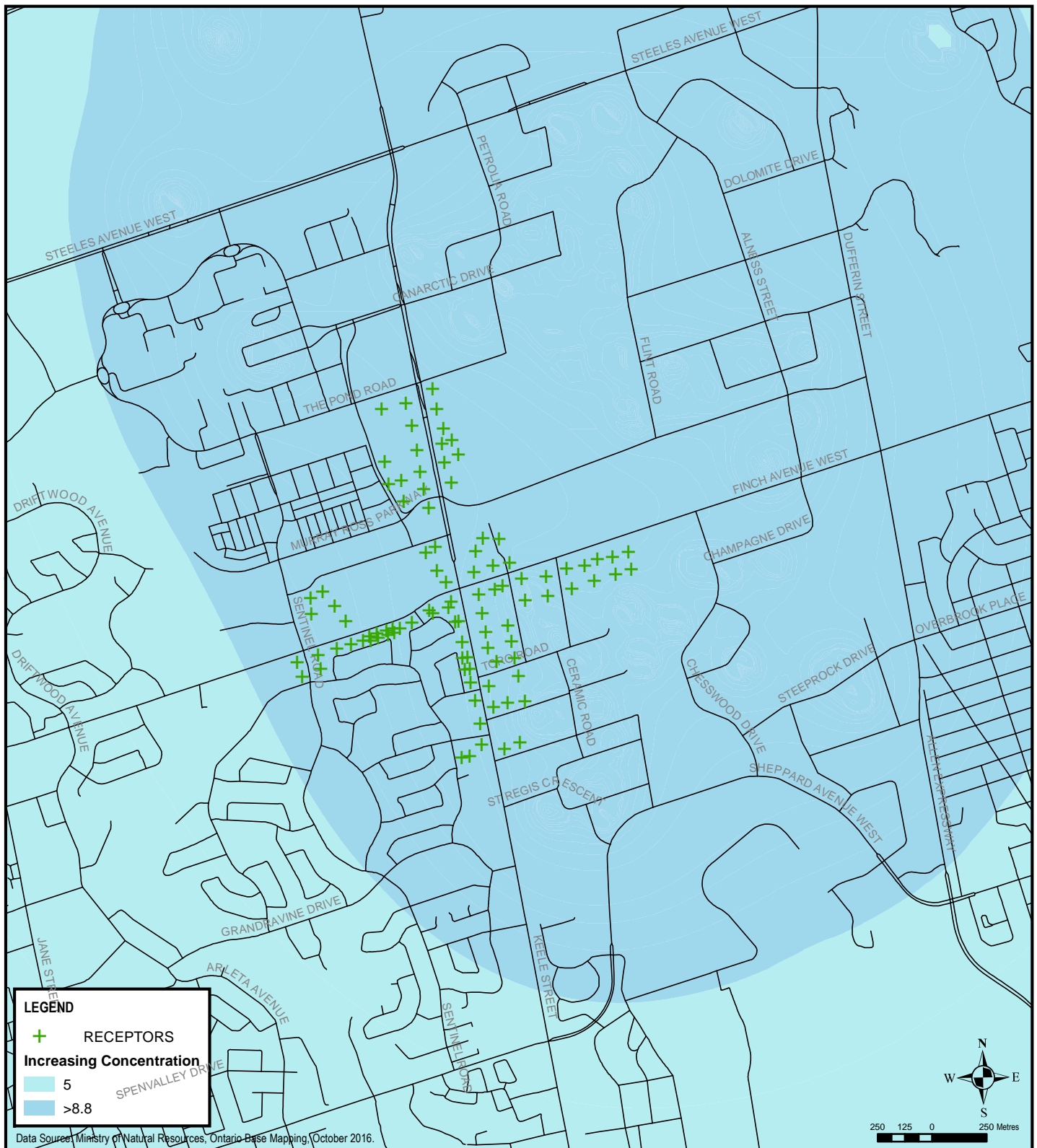
17M-01905-16

DATE:

DECEMBER 2019

FIGURE NO:

33



126 DON HILLOCK DRIVE, UNIT 2
AURORA, ONTARIO CANADA L4G 0G9
TEL.: 905-750-3080 | FAX: 905-727-0463 | WWW.WSP.COM

PROJECT:

KEELE FINCH PLUS

TITLE:

PARTICULATE MATTER (ANNUAL)

CLIENT:

CITY OF TORONTO

SCALE:

1:25,000

DRAWN BY:

TP

CHECKED BY:

-

PROJECT NO:

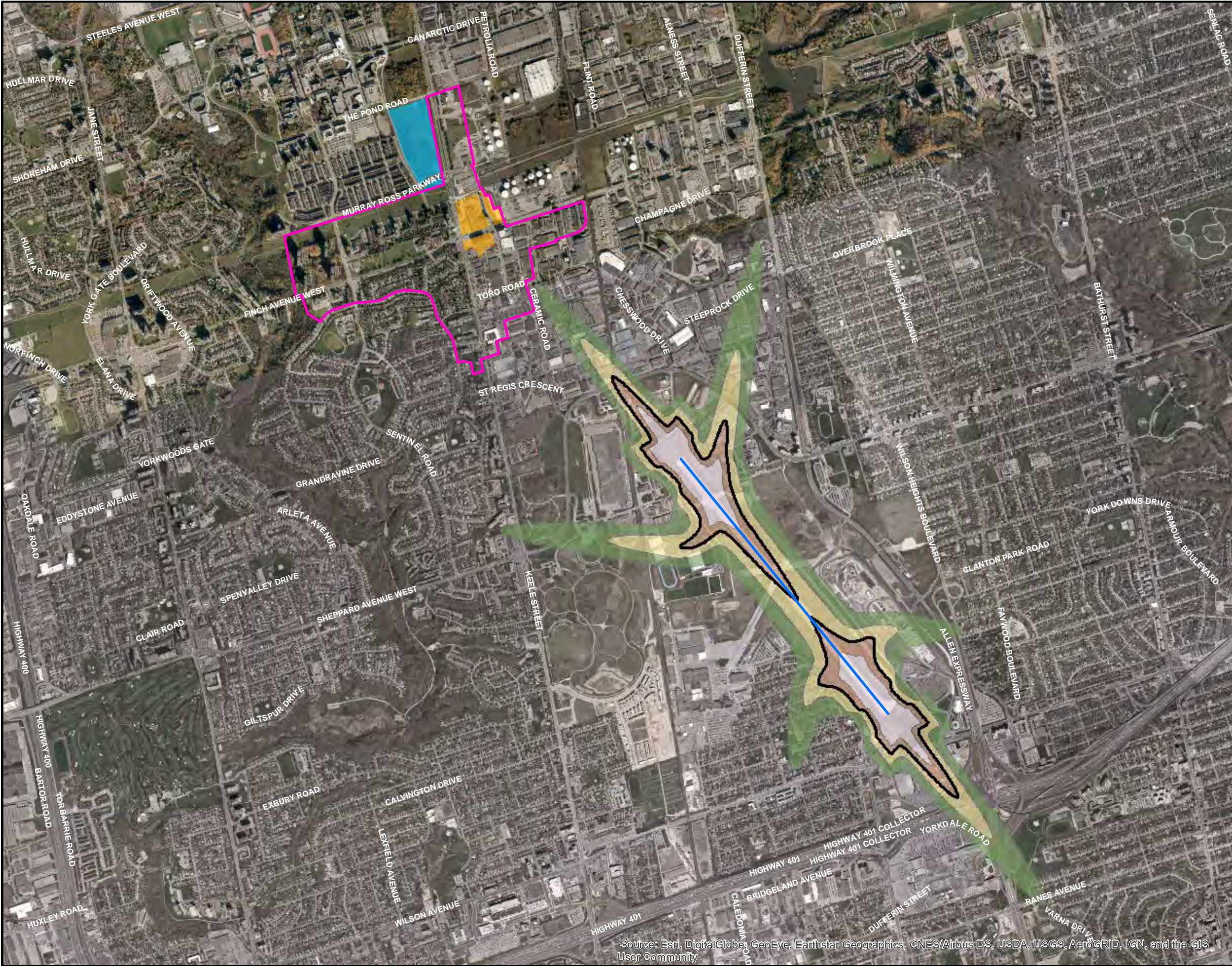
17M-01905-16

DATE:

DECEMBER 2019

FIGURE NO:

34



126 DON HILLOCK DRIVE, UNIT 2
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- LEGEND**
- KEELE FINCH PLUS STUDY AREA
 - MIXED USE AREA OF SPECIFIC CONCERN - AREA 1
 - MIXED USE AREA OF SPECIFIC CONCERN - AREA 2
 - RUNWAY 15
 - NEF >20
 - NEF >25
 - NEF >30
 - NEF >35



10050 0 100 Metres
Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
CITY OF TORONTO

PROJECT:
KEELE FINCH PLUS

PROJECT NO:
17M-01905-16

DATE:
DECEMBER 2019

DESIGNED BY:
-

DRAWN BY:
T.P.

CHECKED BY:
-

FIGURE NO:
35

SCALE:
1:25,000

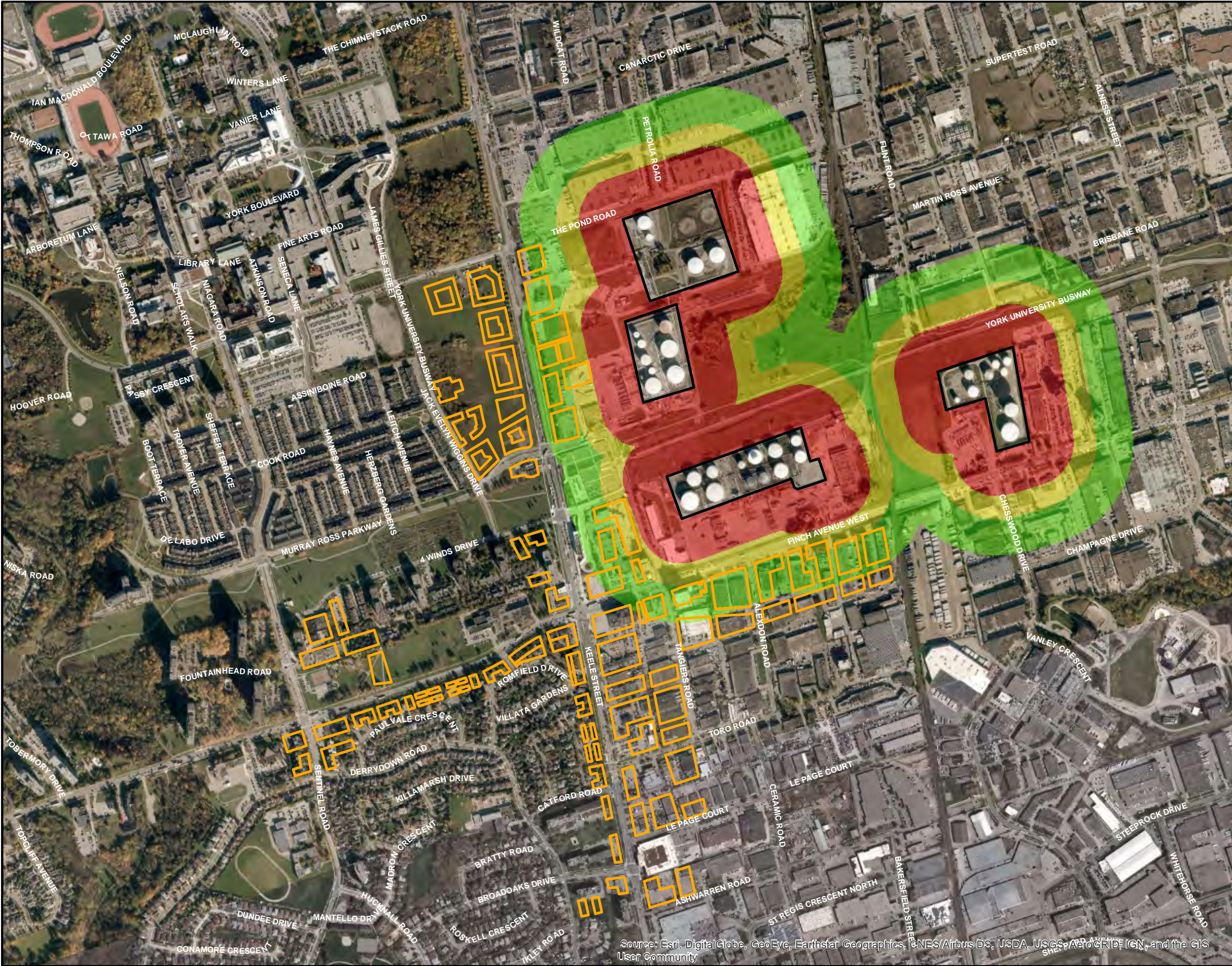
TITLE:
FUTURE CONDITIONS - NEF CONTOURS

DISCIPLINE:
ENVIRONMENT

ISSUE:
-

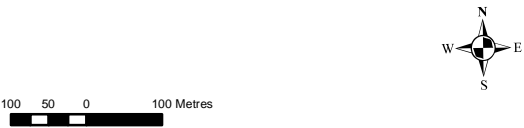
REV.:
-

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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- LEGEND**
- 2045 BUILDING OUTLINE
 - FUEL STORAGE TANKS
 - AEGL-3 IMPACT ZONE
 - AEGL-2 IMPACT ZONE
 - AEGL-1 IMPACT ZONE



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:
CITY OF TORONTO

PROJECT:
KEELE FINCH PLUS

PROJECT NO:
17M-01905-16

DATE:
JANUARY 2020

DESIGNED BY:
-

DRAWN BY:
T.P.

CHECKED BY:
-

FIGURE NO:
36

SCALE:
1:10,000

TITLE:
SAFETY IMPACT CONTOURS -
TOTAL RELEASE SCENARIO

DISCIPLINE:
ENVIRONMENT

ISSUE:
-

REV.:
-

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

APPENDIX

A

RECEPTORS AND
SUMMARY
RESULTS

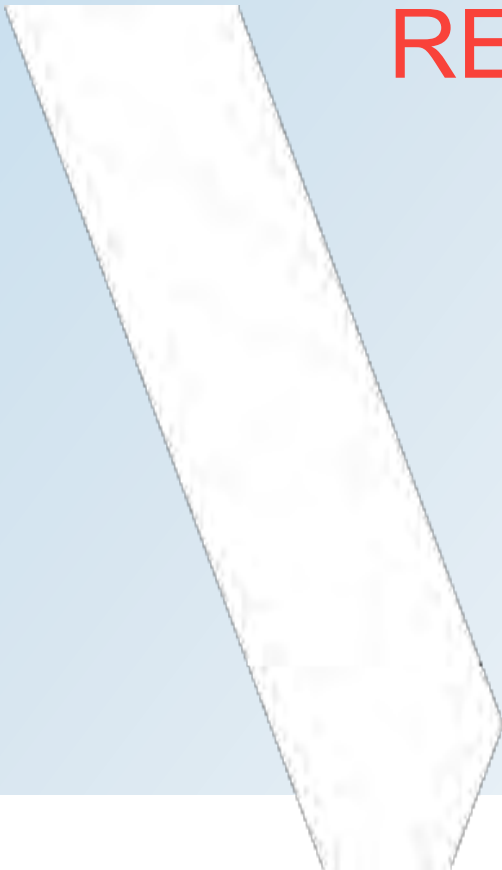


TABLE A1: POR's and Summary of Results for Transportation Sources

Results									Analysis			
POR ID	Existing Conditions		Future Conditions		Future Conditions		Future Conditions		Future [2045] Maximum Sound Level [dBA] Day/Night	Sound Level Criteria [dBA] Day/Night	Type of mitigation	Remarks
	(2018) [dBA]		(2045) [dBA]		(2045) [dBA]		(2045) [dBA]					
	At 4.5m Height		At 4.5m Height		At 16.5m Height		At 31.5m Height					
	Day	Night	Day	Night	Day	Night	Day	Night				
G1_001	n/a_18	n/a_18	57	52	62	56	64	58	64 / 58	Ref Table 3.2	Force Air Ventilation, Building meeting OBC	To be addressed at ZPA/SPA**
G1_002	n/a_18	n/a_18	64	58	68	61	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_003	n/a_18	n/a_18	64	58	68	61	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_004	n/a_18	n/a_18	64	58	68	62	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_005	n/a_18	n/a_18	54	49	60	54	62	56	62 / 56	Ref Table 3.2	Force Air Ventilation, Building meeting OBC	To be addressed at ZPA/SPA**
G1_006	n/a_18	n/a_18	55	50	60	54	62	57	62 / 57	Ref Table 3.2	Force Air Ventilation, Building meeting OBC	To be addressed at ZPA/SPA**
G1_007	n/a_18	n/a_18	57	51	62	56	64	58	64 / 58	Ref Table 3.2	Force Air Ventilation, Building meeting OBC	To be addressed at ZPA/SPA**
G1_008	n/a_18	n/a_18	64	58	68	61	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_009	n/a_18	n/a_18	61	54	64	58	65	59	65 / 59	Ref Table 3.2	Force Air Ventilation, Building meeting OBC	To be addressed at ZPA/SPA**
G1_010	n/a_18	n/a_18	65	59	68	62	69	62	69 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_011	n/a_18	n/a_18	67	60	69	63	69	63	69 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_012	n/a_18	n/a_18	62	56	66	60	67	61	67 / 61	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_013	n/a_18	n/a_18	62	56	67	61	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_014	n/a_18	n/a_18	67	61	70	64	70	64	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_015	n/a_18	n/a_18	67	61	70	64	70	64	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_016	n/a_18	n/a_18	66	60	67	61	67	61	67 / 61	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_017	n/a_18	n/a_18	70	63	71	65	70	64	71 / 65	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_018	n/a_18	n/a_18	67	60	70	64	70	64	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_019	n/a_18	n/a_18	66	60	69	63	69	63	69 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_020	n/a_18	n/a_18	67	61	70	64	70	63	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G1_021	n/a_18	n/a_18	62	56	67	60	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_030	n/a_18	n/a_18	62	55	66	60	67	61	67 / 61	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_031	n/a_18	n/a_18	59	52	64	57	65	59	65 / 59	Ref Table 3.2	Force Air Ventilation, Building meeting OBC	To be addressed at ZPA/SPA**
G2_032	n/a_18	n/a_18	63	56	67	61	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_033	n/a_18	n/a_18	58	52	63	57	65	59	65 / 59	Ref Table 3.2	Force Air Ventilation, Building meeting OBC	To be addressed at ZPA/SPA**
G2_034	n/a_18	n/a_18	63	57	67	61	68	61	68 / 61	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_035	n/a_18	n/a_18	70	63	72	65	71	64	72 / 65	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_036	n/a_18	n/a_18	68	62	70	63	69	63	70 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_037	n/a_18	n/a_18	69	62	71	65	70	64	71 / 65	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_038	n/a_18	n/a_18	65	59	68	62	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_039	n/a_18	n/a_18	68	61	70	63	69	63	70 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_040	n/a_18	n/a_18	68	61	69	63	69	62	69 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_041	n/a_18	n/a_18	67	61	69	63	69	62	69 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_042	n/a_18	n/a_18	70	63	70	64	69	63	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_043	n/a_18	n/a_18	65	59	68	62	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_044	n/a_18	n/a_18	70	63	70	64	69	63	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_045	n/a_18	n/a_18	65	59	68	62	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_046	n/a_18	n/a_18	65	59	68	62	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_047	n/a_18	n/a_18	70	63	70	64	69	63	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_048	n/a_18	n/a_18	70	63	70	64	69	63	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_049	n/a_18	n/a_18	65	59	68	62	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_050	n/a_18	n/a_18	67	61	69	63	69	62	69 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_051	n/a_18	n/a_18	68	61	70	63	69	63	70 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_052	n/a_18	n/a_18	68	62	70	64	69	63	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**

TABLE A1: POR's and Summary of Results for Transportation Sources

Results									Analysis			
POR ID	Existing Conditions		Future Conditions		Future Conditions		Future Conditions		Future [2045] Maximum Sound Level [dBA] Day/Night	Sound Level Criteria [dBA] Day/Night	Type of mitigation	Remarks
	(2018) [dBA]		(2045) [dBA]		(2045) [dBA]		(2045) [dBA]					
	At 4.5m Height		At 4.5m Height		At 16.5m Height		At 31.5m Height					
	Day	Night	Day	Night	Day	Night	Day	Night				
G2_053	n/a_18	n/a_18	65	59	69	62	69	62	69 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_054	n/a_18	n/a_18	61	55	66	59	67	61	67 / 61	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_055	n/a_18	n/a_18	65	59	68	62	69	62	69 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_056	n/a_18	n/a_18	63	57	67	61	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_057	n/a_18	n/a_18	68	62	71	64	70	64	71 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_058	n/a_18	n/a_18	68	62	71	64	70	64	71 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_059	n/a_18	n/a_18	66	59	69	63	69	63	69 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_060	n/a_18	n/a_18	65	58	68	62	68	62	68 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_061	n/a_18	n/a_18	67	61	69	63	69	63	69 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_062	n/a_18	n/a_18	68	62	70	63	69	63	70 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_063	n/a_18	n/a_18	66	60	69	62	68	62	69 / 62	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_064	n/a_18	n/a_18	71	64	71	65	70	64	71 / 65	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_065	n/a_18	n/a_18	66	60	69	63	68	62	69 / 63	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_066	n/a_18	n/a_18	71	64	71	65	70	64	71 / 65	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_067	n/a_18	n/a_18	68	62	70	64	69	63	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_068	n/a_18	n/a_18	69	63	70	64	70	63	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_069	n/a_18	n/a_18	70	63	71	65	70	64	71 / 65	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_070	n/a_18	n/a_18	68	62	70	64	69	63	70 / 64	Ref Table 3.2	Central AC, Selected Building Component	To be addressed at ZPA/SPA**
G2_071	n/a_18	n/a_18	58	52	63	57	64	58	64 / 58	Ref Table 3.2	Force Air Ventilation, Building meeting OBC	To be addressed at ZPA/SPA**
G2_072	n/a_18	n/a_18	60	54	65	58	65	60	65 / 60	Ref Table 3.2	Force Air Ventilation, Building meeting OBC	To be addressed at ZPA/SPA**
G3_100	46	43	51	46	n/a	n/a	n/a	n/a	n/a	n/a	Changes are less than 5dB without shielding by provided by buildings along Keele or Finch	n/a
G3_101	49	46	51	47	n/a	n/a	n/a	n/a	n/a	n/a		
G3_102	46	43	50	45	n/a	n/a	n/a	n/a	n/a	n/a		
G3_103	49	44	51	46	n/a	n/a	n/a	n/a	n/a	n/a		
G3_104	48	45	51	46	n/a	n/a	n/a	n/a	n/a	n/a		
G3_105	50	46	52	47	n/a	n/a	n/a	n/a	n/a	n/a		
G3_107	56	51	58	52	n/a	n/a	n/a	n/a	n/a	n/a		
G3_108	61	55	62	56	62	56	62	56	n/a	n/a	Changes are less than 5dB without shielding by provided by buildings along Keele or Finch	n/a
G3_111	53	48	55	50	n/a	n/a	n/a	n/a	n/a	n/a		
G3_112	52	47	54	49	n/a	n/a	n/a	n/a	n/a	n/a		
G3_113	53	49	55	50	n/a	n/a	n/a	n/a	n/a	n/a		
G3_114	50	47	52	48	n/a	n/a	n/a	n/a	n/a	n/a		
G3_115	48	44	50	45	n/a	n/a	n/a	n/a	n/a	n/a		
G3_116	47	45	50	45	n/a	n/a	n/a	n/a	n/a	n/a		
G3_117	45	42	48	43	n/a	n/a	n/a	n/a	n/a	n/a		
G3_118	45	43	48	44	n/a	n/a	n/a	n/a	n/a	n/a		
G3_119	50	47	54	49	n/a	n/a	n/a	n/a	n/a	n/a		
G3_120	49	47	59	53	n/a	n/a	n/a	n/a	n/a	n/a		

Notes:

n/a_2018 represents that it is currently not a receptor, but a future receptor

n/a - represent it is not a receptor currently or future(in G3 group 16.5 m and 31.5 m receptors are not applicable to two story buildings and therefore an "n/a" is provided

** there are minor to major exceedances noted; both of these can be addressed during ZPA/SAP with a refined site specific study; major exceedances appear to be related to trucking activities, which can in most cases addressed with a barrier or appropriate site plan.

TABLE A2: POR's and Summary of Results for Stationary Sources

Results									Analysis		
POR ID	Existing Conditions		Future Conditions		Future Conditions		Future Conditions		Future [2045] Maximum Sound Level [dBA] Day/Night	Sound Level Criteria [dBA] Day/Night	Remarks
	(2018) [dBA]		(2045) [dBA]		(2045) [dBA]		(2045) [dBA]				
	At 4.5m Height		At 4.5m Height		At 16.5m Height		At 31.5m Height				
	Day	Night	Day	Night	Day	Night	Day	Night			
G1_001	n/a_18	n/a_18	45	44	44	43	44	43	45 / 44	60 / 55	Class 4 Limits
G1_002	n/a_18	n/a_18	47	46	46	45	46	45	47 / 46	60 / 55	Class 4 Limits
G1_003	n/a_18	n/a_18	48	47	48	47	48	47	48 / 47	60 / 55	Class 4 Limits
G1_004	n/a_18	n/a_18	50	48	49	48	49	48	50 / 48	60 / 55	Class 4 Limits
G1_005	n/a_18	n/a_18	45	44	45	44	45	43	45 / 44	60 / 55	Class 4 Limits
G1_006	n/a_18	n/a_18	45	44	45	43	44	43	45 / 44	60 / 55	Class 4 Limits
G1_007	n/a_18	n/a_18	47	45	46	45	46	45	47 / 45	60 / 55	Class 4 Limits
G1_008	n/a_18	n/a_18	49	48	49	48	49	48	49 / 48	60 / 55	Class 4 Limits
G1_009	n/a_18	n/a_18	46	45	45	44	45	44	46 / 45	60 / 55	Class 4 Limits
G1_010	n/a_18	n/a_18	49	48	49	47	48	47	49 / 48	60 / 55	Class 4 Limits
G1_011	n/a_18	n/a_18	48	47	47	46	47	46	48 / 47	60 / 55	Class 4 Limits
G1_012	n/a_18	n/a_18	50	49	50	49	49	47	50 / 49	60 / 55	Class 4 Limits
G1_013	n/a_18	n/a_18	48	47	48	47	47	45	48 / 47	60 / 55	Class 4 Limits
G1_014	n/a_18	n/a_18	46	45	46	45	45	44	46 / 45	60 / 55	Class 4 Limits
G1_015	n/a_18	n/a_18	48	47	48	47	47	46	48 / 47	60 / 55	Class 4 Limits
G1_016	n/a_18	n/a_18	53	52	53	52	51	50	53 / 52	60 / 55	Class 4 Limits
G1_017	n/a_18	n/a_18	51	50	51	50	49	48	51 / 50	60 / 55	Class 4 Limits
G1_018	n/a_18	n/a_18	45	44	45	43	43	42	45 / 44	60 / 55	Class 4 Limits
G1_019	n/a_18	n/a_18	47	45	46	45	45	44	47 / 45	60 / 55	Class 4 Limits
G1_020	n/a_18	n/a_18	47	46	47	46	45	44	47 / 46	60 / 55	Class 4 Limits
G1_021	n/a_18	n/a_18	44	43	44	42	42	41	44 / 43	60 / 55	Class 4 Limits
G2_030	n/a_18	n/a_18	34	33	38	37	36	35	38 / 37	50 / 45	Class 1 Limits
G2_031	n/a_18	n/a_18	34	33	38	37	37	36	38 / 37	50 / 45	Class 1 Limits
G2_032	n/a_18	n/a_18	34	33	37	36	36	35	37 / 36	50 / 45	Class 1 Limits
G2_033	n/a_18	n/a_18	38	37	38	37	37	36	38 / 37	50 / 45	Class 1 Limits
G2_034	n/a_18	n/a_18	38	37	38	37	37	36	38 / 37	50 / 45	Class 1 Limits
G2_035	n/a_18	n/a_18	33	33	36	35	35	34	36 / 35	50 / 45	Class 1 Limits
G2_036	n/a_18	n/a_18	33	32	36	35	35	34	36 / 35	50 / 45	Class 1 Limits
G2_037	n/a_18	n/a_18	33	32	36	35	35	34	36 / 35	50 / 45	Class 1 Limits
G2_038	n/a_18	n/a_18	32	32	36	35	35	34	36 / 35	50 / 45	Class 1 Limits
G2_039	n/a_18	n/a_18	33	33	37	36	36	35	37 / 36	50 / 45	Class 1 Limits
G2_040	n/a_18	n/a_18	36	35	37	36	36	35	37 / 36	50 / 45	Class 1 Limits
G2_041	n/a_18	n/a_18	38	37	38	37	37	35	38 / 37	50 / 45	Class 1 Limits
G2_042	n/a_18	n/a_18	39	37	38	37	37	36	39 / 37	50 / 45	Class 1 Limits
G2_043	n/a_18	n/a_18	38	37	38	37	37	36	38 / 37	50 / 45	Class 1 Limits
G2_044	n/a_18	n/a_18	39	38	39	37	37	36	39 / 38	50 / 45	Class 1 Limits
G2_045	n/a_18	n/a_18	39	38	38	37	37	36	39 / 38	50 / 45	Class 1 Limits
G2_046	n/a_18	n/a_18	39	38	39	38	38	36	39 / 38	50 / 45	Class 1 Limits
G2_047	n/a_18	n/a_18	40	38	39	38	38	37	40 / 38	50 / 45	Class 1 Limits
G2_048	n/a_18	n/a_18	40	39	39	38	38	37	40 / 39	50 / 45	Class 1 Limits
G2_049	n/a_18	n/a_18	40	39	39	38	38	37	40 / 39	50 / 45	Class 1 Limits
G2_050	n/a_18	n/a_18	40	39	40	38	38	37	40 / 39	50 / 45	Class 1 Limits

G2_051	n/a_18	n/a_18	41	40	40	39	39	38	41 / 40	50 / 45	Class 1 Limits
G2_052	n/a_18	n/a_18	42	41	41	40	40	39	42 / 41	50 / 45	Class 1 Limits
G2_053	n/a_18	n/a_18	42	41	41	40	40	39	42 / 41	50 / 45	Class 1 Limits
G2_054	n/a_18	n/a_18	45	44	44	43	43	42	45 / 44	50 / 45	Class 1 Limits
G2_055	n/a_18	n/a_18	46	44	45	44	44	43	46 / 44	50 / 45	Class 1 Limits
G2_056	n/a_18	n/a_18	45	43	44	43	43	42	45 / 43	50 / 45	Class 1 Limits
G2_057	n/a_18	n/a_18	45	44	44	43	43	42	45 / 44	50 / 45	Class 1 Limits
G2_058	n/a_18	n/a_18	43	42	43	42	42	40	43 / 42	50 / 45	Class 1 Limits
G2_059	n/a_18	n/a_18	43	42	42	41	41	40	43 / 42	50 / 45	Class 1 Limits
G2_060	n/a_18	n/a_18	42	41	42	41	40	39	42 / 41	50 / 45	Class 1 Limits
G2_061	n/a_18	n/a_18	43	42	42	41	41	40	43 / 42	50 / 45	Class 1 Limits
G2_062	n/a_18	n/a_18	42	41	41	40	40	39	42 / 41	50 / 45	Class 1 Limits
G2_063	n/a_18	n/a_18	41	40	40	39	39	38	41 / 40	50 / 45	Class 1 Limits
G2_064	n/a_18	n/a_18	41	40	40	39	39	38	41 / 40	50 / 45	Class 1 Limits
G2_065	n/a_18	n/a_18	40	39	40	39	38	38	40 / 39	50 / 45	Class 1 Limits
G2_066	n/a_18	n/a_18	41	40	40	39	39	38	41 / 40	50 / 45	Class 1 Limits
G2_067	n/a_18	n/a_18	40	39	40	39	38	37	40 / 39	50 / 45	Class 1 Limits
G2_068	n/a_18	n/a_18	40	39	39	38	38	37	40 / 39	50 / 45	Class 1 Limits
G2_069	n/a_18	n/a_18	39	38	38	38	37	36	39 / 38	50 / 45	Class 1 Limits
G2_070	n/a_18	n/a_18	38	37	38	37	36	36	38 / 37	50 / 45	Class 1 Limits
G2_071	n/a_18	n/a_18	37	36	37	36	35	35	37 / 36	50 / 45	Class 1 Limits
G2_072	n/a_18	n/a_18	37	36	37	36	36	35	37 / 36	50 / 45	Class 1 Limits
G3_100	40	38	38	37	n/a	n/a	n/a	n/a	38 / 37	50 / 45	Class 1 Limits
G3_101	45	44	43	42	n/a	n/a	n/a	n/a	43 / 42	50 / 45	Class 1 Limits
G3_102	35	34	33	32	n/a	n/a	n/a	n/a	33 / 32	50 / 45	Class 1 Limits
G3_103	33	32	31	30	n/a	n/a	n/a	n/a	31 / 30	50 / 45	Class 1 Limits
G3_104	43	42	41	40	n/a	n/a	n/a	n/a	41 / 40	50 / 45	Class 1 Limits
G3_105	41	40	40	39	n/a	n/a	n/a	n/a	40 / 39	50 / 45	Class 1 Limits
G3_107	41	39	43	42	n/a	n/a	n/a	n/a	43 / 42	50 / 45	Class 1 Limits
G3_108	54	54	56	56	45	45	42	41	56 / 56	50 / 45	Class 1 Limits
G3_111	35	34	37	36	n/a	n/a	n/a	n/a	37 / 36	50 / 45	Class 1 Limits
G3_112	33	32	32	31	n/a	n/a	n/a	n/a	32 / 31	50 / 45	Class 1 Limits
G3_113	36	35	39	38	n/a	n/a	n/a	n/a	39 / 38	50 / 45	Class 1 Limits
G3_114	34	33	37	36	n/a	n/a	n/a	n/a	37 / 36	50 / 45	Class 1 Limits
G3_115	32	31	31	30	n/a	n/a	n/a	n/a	31 / 30	50 / 45	Class 1 Limits
G3_116	32	31	32	31	n/a	n/a	n/a	n/a	32 / 31	50 / 45	Class 1 Limits
G3_117	30	29	30	29	n/a	n/a	n/a	n/a	30 / 29	50 / 45	Class 1 Limits
G3_118	31	30	30	30	n/a	n/a	n/a	n/a	30 / 30	50 / 45	Class 1 Limits
G3_119	32	31	35	35	n/a	n/a	n/a	n/a	35 / 35	50 / 45	Class 1 Limits
G3_120	31	30	37	36	n/a	n/a	n/a	n/a	37 / 36	50 / 45	Class 1 Limits

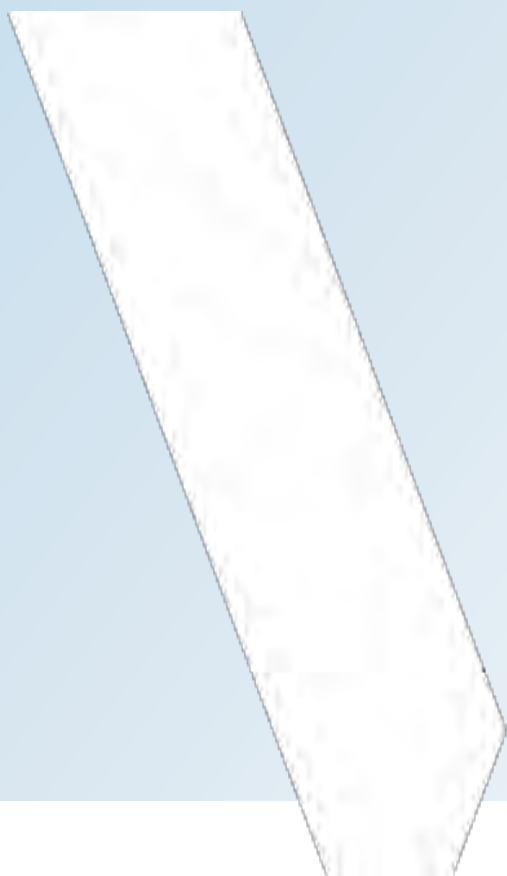
Notes:

n/a_2018 represents that it is currently not a receptor, but a future receptor

n/a - represent it is not a receptor currently or future(in G3 group 16.5 m and 31.5 m receptors are not applicable to two story buildings and therefore an "n/a" is provided

APPENDIX

B TRAFFIC NOISE



APPENDIX B: Traffic Data

City of Toronto - Traffic Counts
Time Period : 8 Hour Sum

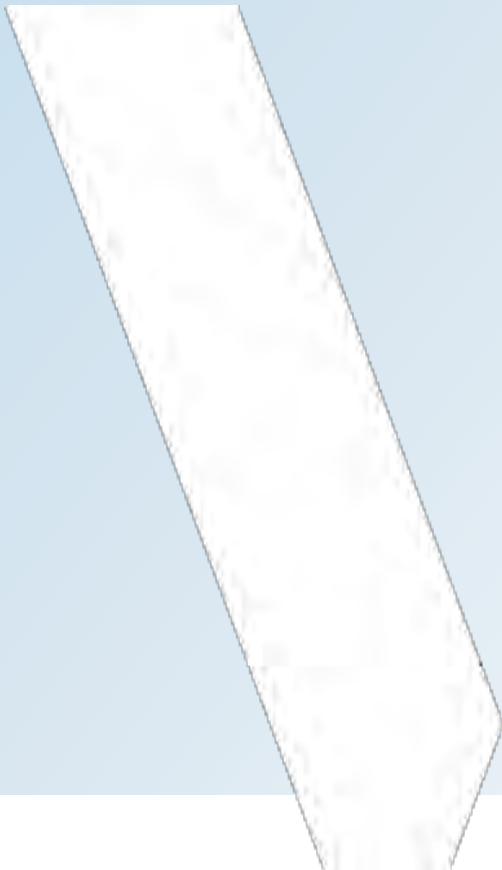
Intersection	Time Period	Survey Date	Northbound				Eastbound				Southbound				Westbound			
			Total Cars	Total Trucks	Total Buses	TOTAL	Total Cars	Total Trucks	Total Buses	TOTAL	Total Cars	Total Trucks	Total Buses	TOTAL	Total Cars	Total Trucks	Total Buses	TOTAL
Alexdon Road at Finch Ave W	8 Hour Sum	6-Jul-16	2043	141	nil	2184	5723	427	137	6287	nil	nil	nil	nil	7494	451	144	8089
Romfield Lane at Finch Ave W	8 Hour Sum	23-Feb-16	367	nil	nil	367	4250	300	119	4669	nil	nil	nil	nil	4048	303	120	4471
Sentinel Road at Finch Ave W	8 Hour Sum	6-Jul-16	2830	56	49	2935	7413	351	112	7876	4158	70	57	4285	4270	284	109	4663
Tangiers Road at Finch Ave W	8 Hour Sum	23-Feb-16	1655	171	95	1921	4092	312	118	4522	2895	204	47	3146	6251	445	162	6858
Four Winds Dr at Sentinel Rd	8 Hour Sum	27-Apr-17	2659	48	59	2766	0	nil	nil	nil	3175	52	66	3293	992	nil	nil	992
Broadoaks Dr at Keele St	8 Hour Sum	23-Feb-16	6276	233	77	6586	2242	26	nil	2268	5530	266	75	5871	647	nil	nil	647
Finch Ave W at Keele St	8 Hour Sum	27-Feb-16	2869	22	nil	2891	3922	117	98	4137	3198	48	71	3317	3506	96	90	3692
Four Winds Dr at Keele St	8 Hour Sum	6-Jul-16	3052	127	nil	3179	574	nil	nil	574	2918	246	77	3241	nil	nil	nil	nil
Murray Ross Pkwy at Keele St	8 Hour Sum	23-Feb-16	2979	91	nil	3070	1956	32	34	2022	4795	331	102	5228	3136	256	132	3524
The Pond Rd at Keele St	8 Hour Sum	27-Feb-16	3917	113	86	4116	1332	nil	nil	1332	3770	74	92	3936	659	35	nil	694
Toro Rd at Keele St	8 Hour Sum	23-Feb-16	5374	202	98	5674	nil	nil	nil	nil	3425	198	98	3721	2491	95	nil	2586
Tangiers Road at Toro Road	8 Hour Sum	8-Feb-12	nil	nil	nil	nil	1510	95	nil	1605	1144	69	nil	1213	1658	135	nil	1793

Note: nil - means traffic data is less than 20 vehicles; the total value represent all vehicles

APPENDIX

C

ACOUSTIC
BASELINE



NOISE MONITORING

WSP conducted an environmental baseline study to assess and quantify the existing acoustic environment (acoustics), at and around the Keele-Finch Plus area. This baseline data was used to calibrate the existing condition/baseline model.

A combination of long-term automated measurements, short term spot measurements and traffic noise predictions were used to quantify baseline data (or acoustical environment). Both long-term automated and short-term spot check measurements were taken within the study area. These data were used to calibrate traffic noise modelling that was conducted using the current traffic volume data.

Baseline sound levels were found to be dominated by anthropogenic source in the study area (in the industrial/commercial area).

LONG TERM SOUND LEVEL MONITORING PROGRAM

WSP conducted long term noise monitoring at six (6) receptor locations in the Keele Finch Plus study area; however, one of the measurement locations, LTM2 had background noise interferences, so was deemed unusable. These noise monitoring locations were identified on Figure C1 below. Long term monitoring was conducted to quantify temporal variation (i.e. time varying nature of the sound) in existing acoustical environment (i.e. baseline acoustical conditions). The monitoring was conducted between March 21st and April 12th, 2018.

Figure C1: Measurement locations



Long term measurements 1 and 2 were conducted between March 26th and April 6th, 2018. These were chosen along Tangiers near Keele and Finche in the industrial/commercial area to quantify road traffic noise. Long term measurement 3 and 4 were conducted between March 21st and 24th, 2018. These were chosen close to Keele Street

and Finch Avenue to quantify the road traffic noise. The last long-term measurements 5 and 6 were conducted between April 6th and April 11th, 2018. These were conducted in the residential area just southwest of Keele and Finch Intersection and along Finch across from commercial area. The long-term measurements provide an insight into the time varying nature of the sound in the area. The long-term measurements were used to calibrate traffic noise modelling.

Type 1 Larson Davis Model sound level meters were used for the background sound level monitoring program. The monitors were deployed in a weather-proof case with the accompanying microphone fitted into a weather-protection unit with a windscreen fitted over it. During measurement periods, data was collected for equivalent sound level (Leq). The calibration of the background sound level monitors was verified before and after each monitoring period to maintain measurement accuracy. A handheld GPS unit was used to record the location of each monitored locations.

Measurements were performed in accordance with the procedures outlined in the MOECC Publication NPC-103 (procedures) (MOE, 2003). The weather conditions were appropriate for outdoor measurement. The minute-long measurements were used to establish 16-hour (daytime), 8-hour (nighttime) and 1-hour equivalent sound levels (Leq). The results of the background sound level monitoring at these six locations are summarized in graphs in Figures C2 to C7.

Figure C2 – Measured 1-hour, 8-hour and 16-hour Leq Sound Levels at Monitoring Location LTM1

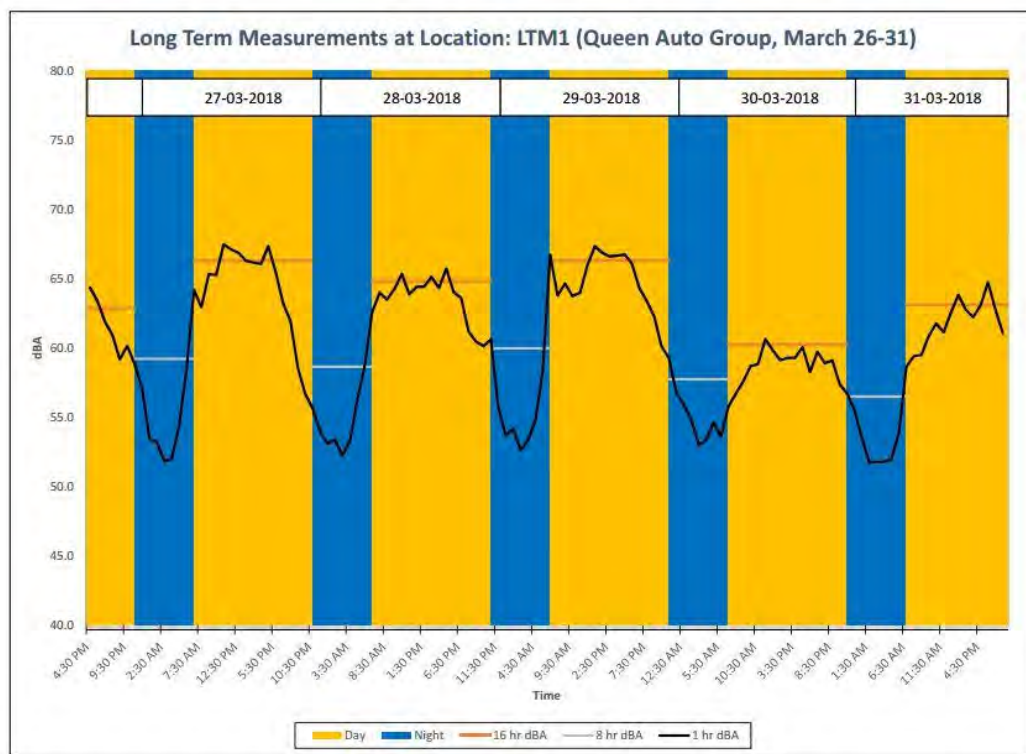


Figure C3 – Measured 1-hour, 8-hour and 16-hour Leq Sound Levels at Monitoring Location LTM3

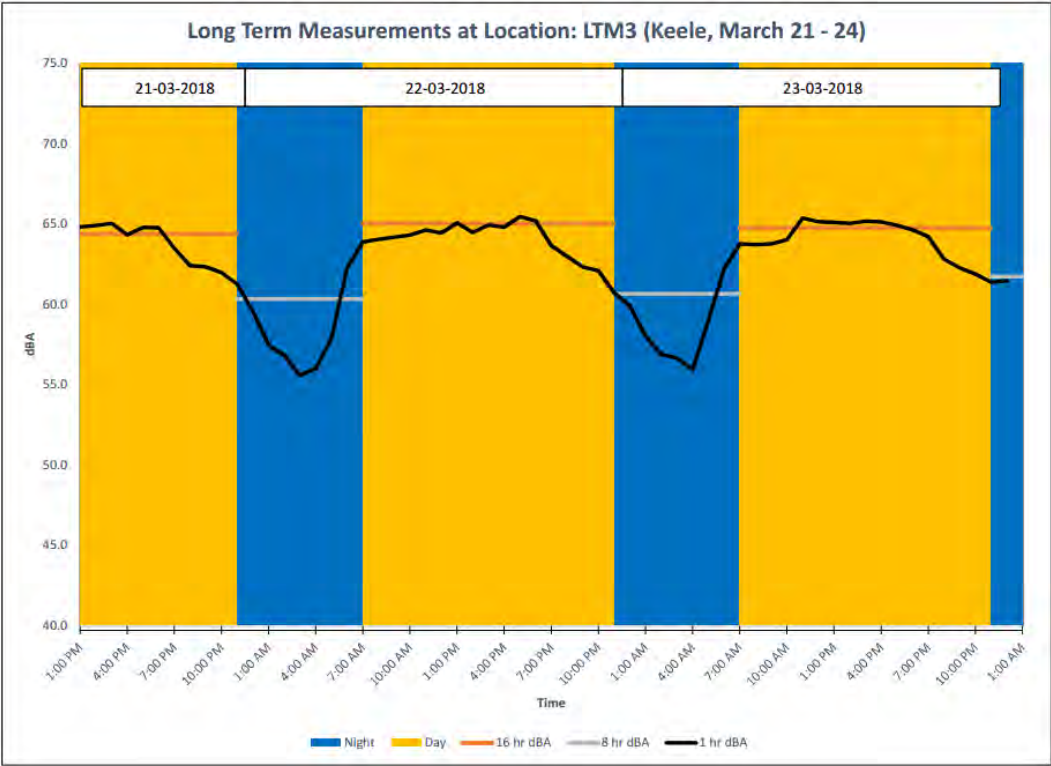


Figure C4 – Measured 1-hour, 8-hour and 16-hour Leq Sound Levels at Monitoring Location LTM4

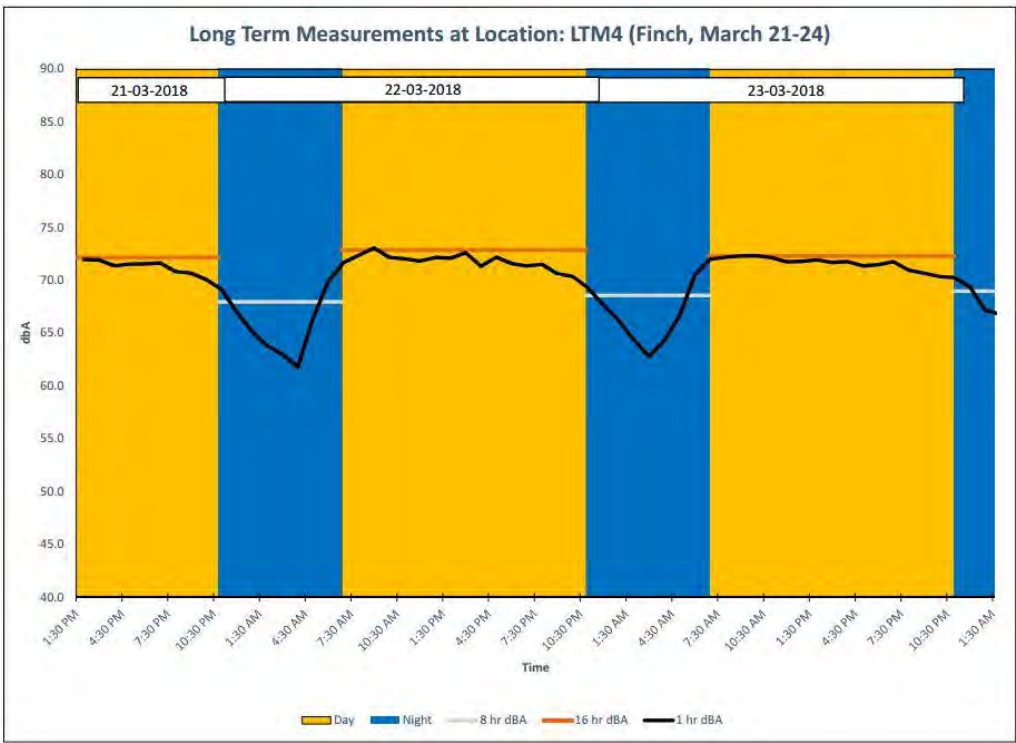


Figure C5 – Measured 1-hour, 8-hour and 16-hour Leq Sound Levels at Monitoring Location LTM5

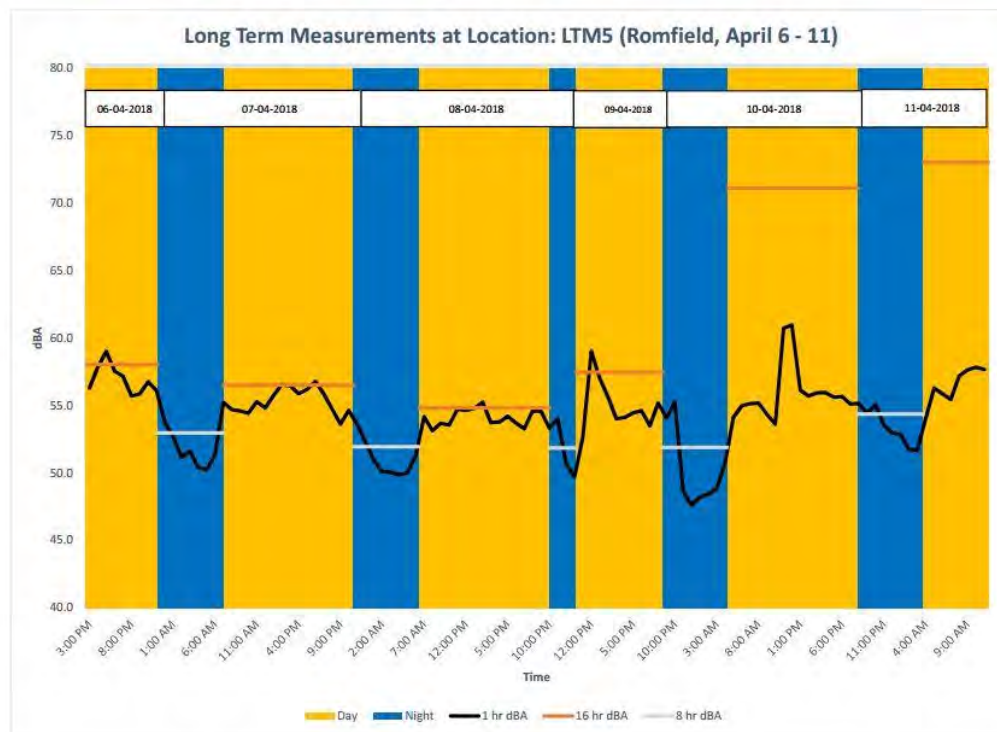
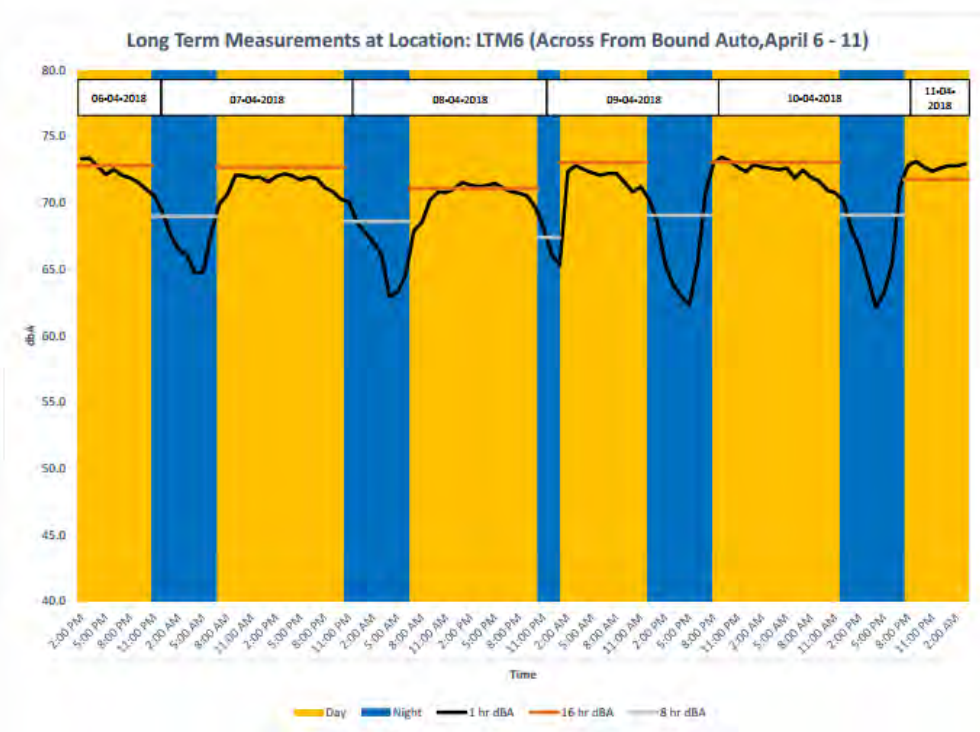


Figure C6 – Measured 1-hour, 8-hour and 16-hour Leq Sound Levels at Monitoring Location LTM6



For all five locations, hourly equivalent sound levels were observed to decrease during the night-time hours. The daytime sound level is found to be dominated by traffic noise. The results of the background sound level monitoring

at these locations show a decrease in sound level during the night-time hours consistent with a decrease in traffic volume.

The following Table provides a comparison of measured sound level and predicted baseline sound level. It shows that the acoustic model predicted within measurement and prediction tolerance acceptable to MECP.

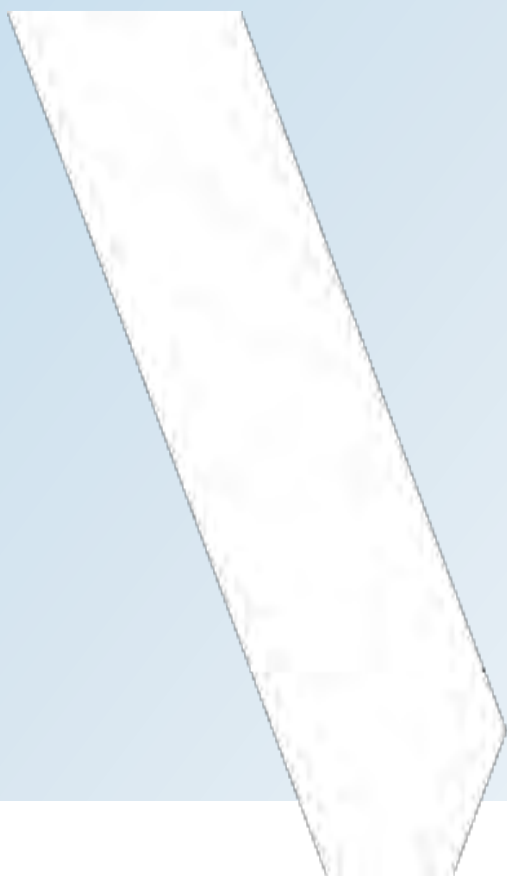
Table C1: Calibration Summary using Long Term Measurements

Location	Average Measured Sound Level [dBA]		Predicted Sound Level [dBA]	
	Day	Night	Day	Night
LTM1	72	69	69	63
LTM3	58	54	67	90
LTM4	64	58	70	64
LTM5	57	52	59	53
LTM6	73	69	75	68

APPENDIX

D

REGULATORY
APPROVALS DATA



Appendix D - Summary of Facilities with an ECA

Facility	Address	Source Information
Cappola Food	25 Lepage Court	Natural Gas Fired Boiler
		Natural Gas Fired Boiler
		Natural Gas Fired High Pressure Wash Water Heater
		Natural Gas Fired Hot Water Heater
		Mortadella Oven
		Ham Oven
		Exhaust System - Serving Aging Room
		Cooling Tower Processing 2525 L/min of water
		Exhaust System - Serving Shrink Tunnel
		Exhaust System - Serving Wash Up / Tempering Room
		Drying Room - Schedule "A" - Stack 27
		Drying Room - Schedule "A" - Stack 28
		Drying Room - Schedule "A" - Stack 29
		Drying Room - Schedule "A" - Stack 30
		Drying Room - Schedule "A" - Stack 31
		Drying Room - Schedule "A" - Stack 32
		Fermentation Room - Schedule "A" - Stack 33
Sky Windows Technologies	40 St. Regis Crescent N	Fermentation Room - Schedule "A" - Stack 34
		Fermentation Room - Schedule "A" - Stack 35
		Fermentation Room - Schedule "A" - Stack 36
		Ventilation for 6 hot oil presses (values are per)
		Thermal Fluid Heater
		Wisconsin Oven - 3 natural gas fired burners (values are per)
		Wisconsin Oven - 1 exhaust fan
Ram Iron & Metal Inc.	60 Ashwarren Road	Wisconsin Oven - 1 oven discharge canopy hood
		Natural Gas Fired Unit Heaters (13 combined heat input, emit through 13 stacks) - 12 stacks
Saad's Garage	130 Lepage Court	1 Stack
Keele Street Collision	126 Lepage Court	200 tonnes of metal recycled/day
Stim Canada Inc.	85 Toro Road	oxy-fuel metal cutting & torching of 1 tonne/hr steel with paint residue and 4 tonnes/hr unpainted steel
MMA Auto Ltd.	80 Toro Road	1 Paint Spray Booth
Carstar Downsview	1221 Finch Avenue West	1 Paint Spray Booth
Vitafoam Products Canada Limited	150 Toro Road	1 Paint Mix Room
Esso (Imperial Oil) Finch Avenue Complex	1150 Finch Avenue West	1 Exhaust System - Emissions from Soldering Machine (#1)
Shell Canada Products Keele Terminal	3975 Keele Street & 3985 Keele Street	1 Exhaust System - Emissions from Soldering Machine (#2)
Suncor Metro Depot	1138 Finch Avenue West	1 Paint Spray Booth Exhaust
Vision Autobody Repair & Repaint Inc.	51 Toro Road, Unit 2	1 Paint Spray Booth - Natural Gas Fired Air Make-up Unit
Inkas Security Services Ltd	830 Flint Road	Combined Spray Booth and Drying Oven
Zenan Custom Cresting Inc.	430 Flint Road	Combined Spray Booth and Drying Oven - Burner
		20 million kg of polyurethane foam products/year
		Storage Tanks
		Storage Tanks and Distribution
		Paint Spray Booth
		Paint Spray Booth
		General Ventilation Exhaust Fans Discharging Fugitive Emissions from the Plant Building
		Exhaust Fan Serving 1 Paint Testing Station
Stayana International Trading	325 Flint Road	Stack Serving 1 Electric Pretreatment Oven - Printing Line
		Stack Serving 1 Electric Curing Oven - Printing Line
		Stack Serving Natural Gas Infrared Curing Oven
E. Myatt & Co. Inc.	101 Brisbane Road	Stack Serving Natural Gas Infrared Catalytic Preheat Oven
		Stack Serving Paint Spray Booth 2
		Stack Serving Paint Spray Booth 1
Yoplait Liberte Canada Co.	60 Brisbane Road	Natural Gas Fired Heaters & Air Make-up Units
Regency Plastics Company Limited **ECA Link broken**	50 Brisbane Road	Exhaust System Serving Extrusion Operation (Stack S1)
Metrolinx - Steeprock Facility	200 Steeprock Drive	Natural Gas Metal Furnace Used to Heat Metal Parts
		Exhaust Fan Serving the Paint Dipping Room
		Welding Operations
		3600 tonnes of yogurt dairy products per year
		Exhaust Fan (EF-39) Serving Bus Washing Area
Conquest Vacations Company	85 Brisbane Road	Exhaust Fan (EF-40) Serving Bus Washing Area
		Exhaust Fan (WEF-1) Serving Bus Area for Welding
		Exhaust Fan (WEF-2) Serving Body Shop for Welding
		Exhaust Fan (WEF-3) Serving Dynamometer for Welding
		Standby Diesel Generator

Appendix D - Summary of Facilities with an ECA

Facility	Address	Source Information
Johnvince Foods Ltd.	555 Steeprock Drive	Roaster 1-Combustion (12)
		Roaster 1-Combustion (13)
		Roaster 1-Cooling (16)
		Roaster 2-Combustion (88)
		Roaster 2-Combustion (89)
		Roaster 2-Cooling (15)
		Dry Roaster-Combustion (J1)
		Dry Roaster-Cooling (J2)
		Big Daddy Roaster-Combustion(J4)
		Big Daddy Roaster-Cooling (J6)
		Big Daddy Roaster-Cooling (J7)
		Boiler (B1)
		Boiler (B2)
		Roaster Power Washer (J8)
		Roaster Power Washer (J9)
		Wash Bay Power Washer (J10)
		Washer Booster Heater (J11)
		Saaco Combustion (J18)
		Saaco Combustion (J19)
KGA Custom Kitchens Limited	590 Steeprock Drive	Paint Booth - S1
		Paint Booth - S2
		Paint Booth - S3
Greater Toronto Transit Authority - Steeprock Bus Facility	200 Steeprock Drive	Natural Gas Fired Air Replacement Unit
		Standby Diesel Generator- 500 kW Rating
Mountain View Estates Coffee Company Ltd.	400 Steeprock Drive	Natural Gas Fired Thermal Oxidizer for Coffee Roasters (S1)
		Cyclone Serving the Coffee Cooling Process (S2-A)
		Cyclone Serving the Coffee Cooling Process (S2-B)
		Green Coffee Bean Loader (S3)
		Dust Collector (S4) - air-to-cloth ratio of 0.76 cm/sec to inside building
Timothy's Coffee of the World Inc.	400 Steeprock Drive	Thermal Oxidizer
		Stack Serving Cooling Cyclones (1)
		Stack Serving Cooling Cyclones (2)
		Exhaust Serving Coffee Bean Handling Process
		Exhaust Serving Above Roasters Area
Ladoga Auto Service	1100 Finch Avenue West, Unit 302	Comfort Heating
Maaco Auto Painting & Bodyworks	1100 Finch Avenue West, Unit 11A	Paint Spray Booth
		Spray Booth Exhaust
		Spray Booth Drying Chamber Exhaust
Alpina Auto	1100 Finch Avenue West, Unit 2B	Spray Booth Curing Oven
Lunal Auto Centre Ltd.	1100 Finch Avenue West, Unit 7	Paint Spray Booth
City of Toronto (Dufferin Organics Processing Facility)	35 Vanley Crescent	Paint Spray Booth
		One enclosed, 4 cells, down-flow biofilter
		One Flare to Burn Biogas Originating from Anaerobic Disgestion
		Dual-Fuel Fired Boiler (1)
Lamar Auto Centre Ltd.	1100 Finch Avenue West, Unit 206-207	Dual-Fuel Fired Boiler (2)
Tremcar Industries Inc.	20 Alness Street	Paint Spray Booth
		Paint Spray Booth (SPB-1-1)
		Paint Spray Booth (SPB-1-2)
		Exhaust Serving Paint Mixing Table (A-1-1)
		Dust Collector Serving Sand Blasting Operations (DC-1)
		Exhausts (EF-3-1 to EF-3-20) x 20
		General Exhausts (B-1-1)
		General Exhausts (B-1-2)
		General Exhausts (B-1-3)
Formglas Inc.	2 Champagne Drive	EDSM Report, up to 20,500 kg total product per year
Halcyon Waterspring Inc.	355 Champagne Drive	Glue Spray Booth (1)
		Glue Spray Booth (2)
		Glue Spray Booth (3)
		Glue Spray Booth (4)
Ching Auto Collision Inc.	375 Champagne Drive	Paint Spray Booth
Modern Custon Cabinets LTd.	4490 Chesswood Drive, unit 5	Paint Spray Booth
Aluminum Mould & Pattern Ltd	15 Vanley Crescent	EDSM Report, up to 500 moulds/year
Albany Packaging Inc.	45 Lepage Court	Exhaust System - Offset Powder Spray System
Jane and 7 Auto Collision Limited	4 Vanley Crescent	Paint Spray Booth
		Natural Gas Fired Air Make-Up Unit
Built Rite Fiberglass Manufacturing Co. Ltd.	4460 Chesswood Drive	Paint Spray Booth (B-1)
		Finishing Paint Spray Booth (B-2)
		Dust Adsorbing Booth (B-3)
		Space Heater (H-2)
		Space Heater (H-5)
		Space Heater (H-7)
		Space Heater (H-8)
		Space Heater (H-9)
		Space Heater (H-10)
		Space Heater (H-11)
		Space Heater (H-12)

Appendix D - Summary of Facilities with an ECA

Facility	Address	Source Information
Pattern Casting Ltd.	1 Vanley Crescent	Canopy Hood Exhaust Serving 2 Aluminum Furnaces (Ex-1)
		General Wall Exhaust Serving Furnace Room (Ex-2)
		Mixing Exhaust Serving Plastic Mixer (Ex-3)
		General Wall Exhaust Serving Mixing Area (Ex-4)
		General Exhaust Serving the Casting Area (Ex-5)
		Natural Draft Oven Exhaust (Ex-6)
		Natural Draft Oven Exhaust (Ex-7)
Leggett & Platt Canada Co.	4040 and 4050 Chesswood Drive	Aluminum/ Zinc Furnaces, unit & water heaters, no stack info
		Exhaust System for Coiling Line 1 (Stack 1)
		Exhaust System for Coiling Line 2 (Stack 2)
		Exhaust for Annealing Oven 1 (Stack 3A)
		Exhaust for Annealing Oven 1 (Stack 3B)
		Exhaust for Annealing Oven 2 (Stack 4A)
R.L. Components Ltd	99A Tuscan Gate	Exhaust for Annealing Oven 2 (Stack 4B)
Limen Masonry Limited	85 Bakersfield Street	Exhaust Serving the Soldering Reflow/Soldering Process
		Exhaust Serving the Bake Oven
		Stand-by Diesel Generator Set (Stack 1)
Gooddeal Coating Inc.	100 St. Regis Crescent S, No. 5 & 6	Paint Spray Booth Exhaust (Stack 2)
		Exhaust Serving Welding Operation (Stack 3)
		Exhaust Serving Parts Curing Oven (Source-1)
Howell Printing Company Ltd.	132 Alexdon Road	Exhaust Serving Grinding/Sanding Booth (Source-4) EDM Report
		Exhaust Serving Printing Press (Stack 1)
Polar Magnetics Inc.	82 St. Regis Crescent N	Exhaust Serving the Computer to Plate Process (Stack 2)
		Laser Cutting Exhaust System (LS-1)
		Laser Cutting Exhaust System (LS-2)
		Paint Spray Booth
Toronto and Region Conservation Authority	5 Shoreham Drive	Fugitive Emissions from the Laser Printing, Laminating, and Mounting
1 Fountainhead Road Inc.	1 Fountainhead Road	Stand-by Diesel Generator Set - EDM
470 Sentinel Road Inc.	470 Sentinel Road	Stand-by Diesel Generator Set
Plenary Properties York GP Inc.	134 Ian Macdonald Boulevard	Stand-by Diesel Generator Set
Pharmeng Technology Inc	4700 Keele St.	EDSM
York University (ECA 4)	4700 Keele St.	Laboratory Fume Hood
York University (ECA 3)	4700 Keele Street	Paint Spray Booth
		Exhaust for Laboratory Fume Hood (SF-1)
		Exhaust for Laboratory Fume Hood (SF-2)
York University - York Research Tower	74 York Blvd	Exhaust for Laboratory Fume Hood (SF-3)
York University - Osgoode Hall Law School	92 Scholars Walk	
York University - Science Building	6 Thompson Road	Exhaust System Serving Fume Hood 1
		Exhaust System Serving Fume Hood 2
		Exhaust System Serving Fume Hood 3
		Exhaust System Serving Fume Hood 4
		Exhaust System Serving Fume Hood 5
		Exhaust System Serving Fume Hood 6
		Exhaust System Serving Fume Hood 7
		Exhaust System Serving Fume Hood 8
York University - Science Building (ECA 2)	100 Campus Walk Life Science Building	Exhaust System Serving Fume Hood 9
Tuscan Woodworks Inc.	4801 Keele Street	EDSM
Global Contract Inc.	555 & 565 Petrolia Road	Paint Spray Booth
		Air Make-Up Unit (S1)
		AC Units (S2-S7 & S23) x 7
		AC Units (S8-S17) x 10
		AC Units (S18-S22) x 5
		AC Units (S24-S25) x 2
		AC Units (S26-S31) x 6
		Washer Tank Burner Exhaust (S32-S33) x 2
		Washer General Exhaust (S34)
		Dry-off Oven Exhaust (S36)
		Cure Oven Exhaust (S37)
		Common Exhaust for Manual and Robot Welding (S38)
		Spray Booth Exhaust Building 1 (S39)
		Casegoods Relocated Dust Collector (S40)
		Casegoods Relocated Dust Collector (S41)
		Air Make-Up Unit (S42)
		AC Units (S43-S51) x 9
		AC Units (S52)
		AC Units (S53)
		Washer Tank Burner (S54)
		Washer General Exhaust (S55)
		Dry-off Oven (S57)
		Cure Oven (S58)
		Welding Station Exhaust (S59)
		Spray Booth Exhausts (S60-S65) x 5
		Gas-Fired Radiant Heaters (RH1-RH52 & RH53-RH95) x 95
		Gas-Fired Radiant Heaters (RH96 & RH97)
		Gas-Fired Radiant Heaters (RH98 - RH132)
Global Wood Concepts Ltd	1300 Flint Road	Baghouse Dust Collector

Appendix D - Summary of Facilities with an ECA

Facility	Address	Source Information
City Metal Manufacturing Inc	565 Canarctic Drive	Stack Serving Welding Station 1
		Stack Serving Welding Station 2
		Stack Serving Welding Station 3
		Exhaust Serving Phosphate Washing Station 1 (1)
		Exhaust Serving Phosphate Washing Station 1 (2)
		Exhaust Serving Phosphate Washing Station 2
		Stack Serving Natural Gas Fired Washer Oven
		Stack Serving Natural Gas Fired Drying Oven
Teknion Limited	1150 Flint Road	Stack Serving Natural Gas Fired Curing Oven
		EDSM Report, limit of 12,000 panels per day
Teknion Soft Sealing	1625 Flint Road	Unit Heater (UH1-UH6) x 6
		Radiant Heater (RH1)
		Radiant Heater (RH2)
		Oven Exhaust (EF10)
		Sanding Booth (EF2)
		Tone Booth (EF3)
		Stain Booth (EF4)
		Seal Coat Booth (EF5)
		Top Coat Booth (EF6)
		Clean Air Topcoat Booth (EF7)
		Foam Adhesive Booth (EF11)
		Foam Adhesive Booth (EF12)
		Foam Adhesive Booth (EF13)
		Seating Model Shop Exhaust (EF1)
		General Flash Off Exhaust (EF8)
Global Upholstery Co. Inc.	900 Flint Road	EDSM Report
Univar Canada Ltd	777 Supertest Road	EDSM Report, Limit up to 1,672 million litres of chemicals shipped/yr
Toronto Public Library	120 Martin Ross Avenue	Stand-by Diesel Generator, rating of 300 kW
Candor Industries Inc	125 Martin Ross Avenue, No. 4-9	Exhaust Serving Print Drying Oven (Stack 3)
		Packed Bed Scrubber (Stack 4)
		Packed Bed Scrubber (Stack 5)
		Baghouse Dust Collector (Stack 6)
		Natural Gas Fired Hot Water Boiler (Stack 7)
		Exhaust Fan Serving Multi-Layer Lamination Process (Stack 8)
		Exhaust Fan Serving Solder Oven Process (Stack 9A)
		Exhaust Fan Serving Solder Oven Process (Stack 9B)
		Exhaust Fan Serving Developer Process (Stack 10)
		Baghouse Dust Collector (Stack 11)
		Packed Bed Scrubber (Stack 12)
		Exhaust Serving Waste Water Treatment Area (Stack 15)
		Exhaust Serving Automatic Coating Line Curing Ovens (Stack 16)
		Exhaust Serving Manual Coating Line/Copper Line Curing Oven (Stack 17)
		General Exhaust Serving Metal Lines (Stack 18)
Ellis Fine Cabinetry Inc	125 Martin Ross Avenue, No. 10	Paint Spray Booth
Crimp Circuits Inc	675 Petrolia Road	Stack Serving Dust Collection, Drilling, Scoring Etc (E1)
		Stack Serving a Plate Through Holes Process Line (E2)
		Stack Serving Laminator, Ammonia Developer & Dry Film (E3)
		Stack Serving Copper & Tin Electroplating (E4)
		Stack Serving Etching Development and Electric Drying (E5)
		Stack Serving Etching (E6)
		Stack Serving Tin Stripping Bath (E8)
		Stack Serving Pre-Solder Masking Chemical Cleaning Bath (E9)
		Stack Serving Solder Masking Machines (E10)
		Stack Serving Wash Booths (E11a)
		Stack Serving Wash Booths (E11b)
		Stack Serving Electric Curing & Drying Ovens (E12)
		Stack Serving Electric Curing & Drying Ovens (E13)
		Stack Serving Electric Curing & Drying Ovens (E14)
		Stack Serving Chemical Bath (E15)
		Stack Serving Electric Bake Oven (E16)
		Stack Serving Acidic Cleaning Spray Area (E17)
		Stack Serving Hot Air Levelling for tin/lead Soldering (E18)
		Stack Serving UV Light Curing Oven (E19)
		Stack Serving Oxide Line Chemical Bath (E20)
		Stack Serving Dark Room Film Unit (E21)
		Stack Serving Circuit Board Press (E22)
		Stack Serving Carbon Treatment Tank (E24)
		Stack Serving Wastewater Treatment Tank (E25)
		Stack Serving Bath of Nickel-Gold Plating (E26)
		Stack Serving Air Scrubber for Plasma Unit (E28)
New Image Kitchens Inc	85 Wildcat Road	Paint Spray Booth (Booth A)
		Paint Spray Booth (Booth B)
		Paint Spray Booth (Booth C)
Inter-Spray Enterprises Ltd	557 Canarctic Drive	Natural Gas Fired Dry Off Oven (Paintronik Stack)
		Natural Gas Fired Curing Oven (RIX Stack)
		Natural Gas Fired Curing Oven (RF Mote Stack)

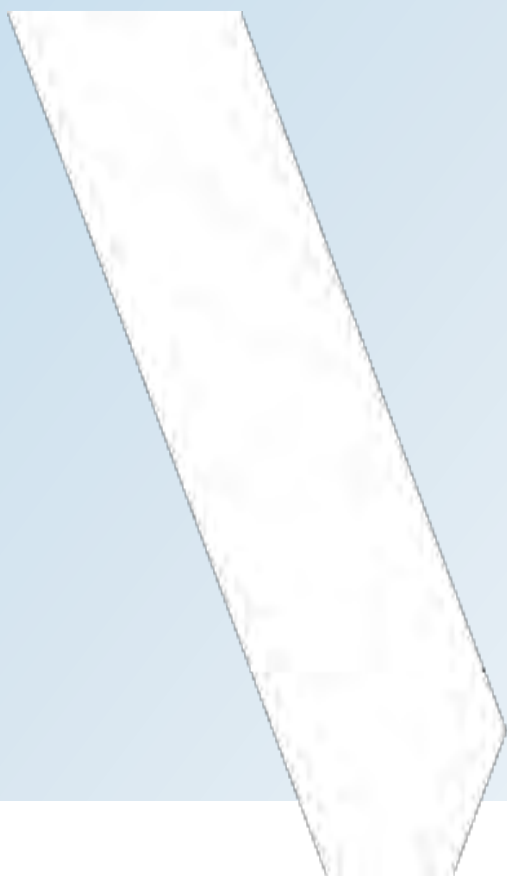
Appendix D - Summary of Facilities with an ECA

Facility	Address	Source Information
Talfourd - Jones Inc	390 Canarctic Drive	Stack Serving Polyurethane Moulding Machine
Driangle Inc	60 Wildcat Road	EDSM Report, Gas Fired Dehumidifier
Global Wood Custom Manufacturing	72 & 74 Wildcat Road	Baghouse Dust Collector
Dalton Chemical Laboratories Inc	349 - 355 Wildcat Road	Stack Serving GMP Manufacturing Lab (Stack 1)
		Stack Serving Hydrogenation Room (Stack 5)
		Stack Serving Hydrogenation Room Fume Hood (Stack 6)
		Stack Serving Analytical Lab (Stack 2)
		Stack Serving Synthetic Lab 1 (Stack 4)
		Stack Serving Synthetic Lab 2 (Stack 3)
		Stack Serving Solvent Storage Room (Stack 7)
		Stack Serving Solvent Storage Room (Stack 9)
		Stack Serving Column Prep Room (Stack 10)
		Stack Serving Column Prep GMP Room (Stack 12)
Dalton Chemical Laboratories Inc	349 Wildcat Road	Stack Serving Laboratory 1 Fume Hoods (EF1)
		Stack Serving Laboratory 2 Fume Hoods (EF2)
		Stack Serving Laboratory 3 Fume Hoods (EF3)
		Stack Serving Laboratory 4 Fume Hoods (EF4)
		Stack Serving Laboratory 4 Fume Hoods (EF24)
		Stack Serving Manufacturing Room 3 (EF9)
		Stack Serving Manufacturing Room 3 (EF10)
		Cyclone Dust Collector (EF26)
		Fluid Bed Dryer Exhaust (EF28)
Alros Products Limited	350 Wildcat Road	EDSM Report for Rest
		Exhaust Serving Bag Cutting and Sealing Process
		Exhaust Serving Printing Press
		Exhaust Serving Forklift Battery Charging Station
		Plastic Extrusion Lines x 12
Adhesive Tape Printers Inc	707 Petrolia Road	Corona Treatment Systems x 7
		Exhaust (EX1) Serving 3 Printing Presses
The Nystrom Group	75 Wildcat Road	Heat Cleaning Oven (Stack A)
		Prewash Steam Exhaust (Stack B)
		Paint Dryer (Stack C)
		Prewash Heater (Stack D)
		Prewash Heater (Stack E)
		Wash Dryer (Stack F)
		Heating and Air Conditioning Unit (Stack HAC)
Janes Family Foods Ltd	401 Canarctic Drive	Hood and Oil Mist Mesh Screen Separator (Stack EX-3)
		Natural Gas Burners (Stack EX-4)
		Electrically Heated Laboratory Oven (Stack EX-1)
		Exhaust Serving Carbon Dioxide Refrigeration System (Stack EX-8)
		Exhaust Serving Maintenance Welding Operations (Stack EX-2)
		Natural Gas Fired Boiler (EX-9)
		Natural Gas Fired Unit Heaters (Stack UH-2, UH-4, UH-6, UH-7)
		Natural Gas Fired Make-up Air Unit (MAU-1)
Arts Metal Finish Ltd	555 Canarctic Drive	Natural Gas Fired Make-up Air Unit (MAU-2)
		Planting Line Exhaust Stack 1
		Planting Line Exhaust Stack 2
		Planting Line Exhaust Stack 3
		Planting Line Exhaust Stack 4
Custom Rapid Solutions Inc.	377 Canarctic Drive	ESDM Report, Up to 2,100,000 Circuit Boards per year
Stamptek	555 Petrolia Road	Stack Serving 2 Welding Stations (WSEF5)
		Stack Serving 5 Welding Stations (WSEF6)
		Stacks Serving 8 Natural Gas Fired Radiant Heaters (RH-15 - RH-22) x 8
		Stacks Serving 21 Natural Gas Fired Unit Heaters (UH-1 - UH-21) x 21
		Stacks Serving 7 Natural Gas Fired HVAC Units (AC-1 - AC-7) x 7
		Natural Gas Fired Air Make-Up Unit
Estee Lauder Cosmetics Ltd.	550 Petrolia Road	ESDM Report
Teknion Limited (575 Canarctic Dr)	575 Canarctic Drive	Paint Spray Booth
Teknion Limited (570 Petrolia)	570 Petrolia Rd	ESDM Report, Up To 15,552 Soft Seating Chairs, Up to 285,720 task seating/yr
Teknion Limited (607 Canarctic Dr.)	607 Canarctic Drive	ESDM Report, Up to 325,000 parts/year
Apollo Health and Beauty Care	1 Apollo Place	ESDM Report, Up to 148,000 tonnes of health and beauty products/year

APPENDIX

E

EMISSION
ESTIMATES



Appendix E - Emission Rates



Table E1: Emission Rates of Existing Conditions 2018

Pollutant Names	Auto			Truck			Bus		
	Idle (g/v-hr)	Speed 50km/hr (g/VMT)	Speed 60km/hr (g/VMT)	Idle (g/v-hr)	Speed 50km/hr (g/VMT)	Speed 60km/hr (g/VMT)	Idle (g/v-hr)	Speed 50km/hr (g/VMT)	Speed 60km/hr (g/VMT)
Total PM10	0.497332	0.065631	0.053445	2.205892	0.341315	0.271192	2.548587	0.361843	0.322446
Total PM2.5	0.137752	0.019600	0.017215	1.039158	0.155573	0.132526	1.204270	0.162170	0.156384
Oxides of Nitrogen (NOx)	1.941018	0.279369	0.261489	28.555565	3.578333	3.379064	69.412375	6.530690	6.201430
Carbon Monoxide (CO)	12.016344	2.743205	2.500907	12.151484	2.064957	1.610403	53.636375	11.032000	10.935500
Acrolein	0.001519	0.000159	0.000146	0.020664	0.001505	0.001748	0.040050	0.002993	0.002640
Benzene	0.008019	0.001208	0.001097	0.024918	0.002388	0.002106	0.149348	0.020970	0.018182
1,3-Butadiene	0.001551	0.000179	0.000162	0.007530	0.000603	0.000642	0.016164	0.001500	0.001344
Acetaldehyde	0.010004	0.001092	0.000996	0.117785	0.008695	0.009944	0.324981	0.045519	0.039679
Formaldehyde	0.021001	0.002257	0.002067	0.287492	0.021108	0.024192	1.807638	0.252770	0.232256
Benzo(a)pyrene	2.70E-05	4.79E-06	4.40E-06	1.35E-04	9.49E-06	8.07E-06	1.42E-04	3.41E-05	2.93E-05

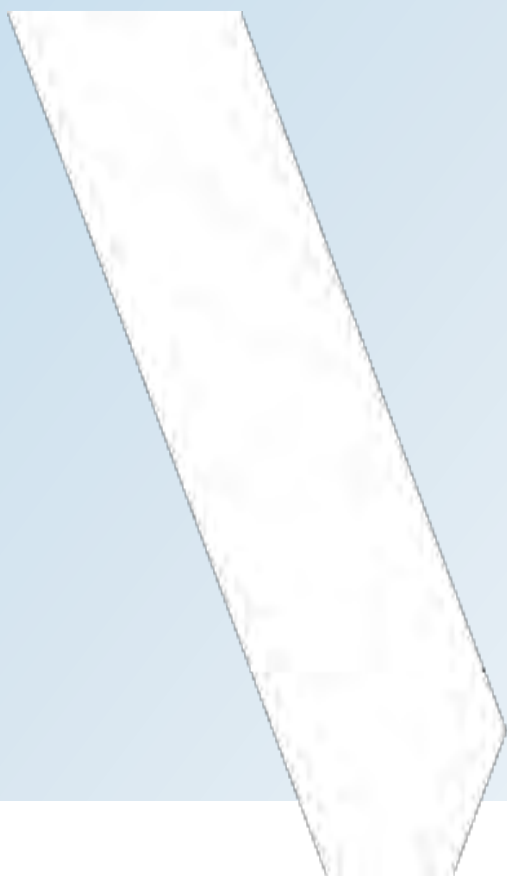
Table E2: Emission Rates of Future Conditions 2045

Pollutant Names	Auto			Truck			Bus		
	Idle (g/v-hr)	Speed 50km/hr (g/VMT)	Speed 60km/hr (g/VMT)	Idle (g/v-hr)	Speed 50km/hr (g/VMT)	Speed 60km/hr (g/VMT)	Idle (g/v-hr)	Speed 50km/hr (g/VMT)	Speed 60km/hr (g/VMT)
Total PM10	0.425550	0.055074	0.043692	1.348874	0.200833	0.159731	1.579082	0.234443	0.195420
Total PM2.5	0.068627	0.009240	0.007648	0.256188	0.036777	0.030614	0.297364	0.041471	0.036448
Oxides of Nitrogen (NOx)	0.220197	0.031106	0.029573	7.179611	0.906683	0.827818	11.221625	1.086900	1.014790
Carbon Monoxide (CO)	2.523729	0.715690	0.666963	3.266587	0.514609	0.432837	2.937238	0.261802	0.244124
Acrolein	0.000242	0.000025	0.000023	0.005127	0.000382	0.000411	0.005691	0.000423	0.000373
Benzene	0.000793	0.000157	0.000146	0.006614	0.000542	0.000530	0.007341	0.000545	0.000481
1,3-Butadiene	1.89E-05	1.83E-06	1.68E-06	4.10E-04	3.05E-05	3.28E-05	4.55E-04	3.38E-05	2.99E-05
Acetaldehyde	0.001687	0.000177	0.000163	0.035529	0.002649	0.002845	0.039437	0.002929	0.002586
Formaldehyde	0.005247	0.000538	0.000495	0.111456	0.008303	0.008927	0.123716	0.009188	0.008113
Benzo(a)pyrene	5.00E-06	9.34E-07	8.74E-07	2.30E-07	4.40E-07	2.68E-08	2.63E-07	3.09E-08	3.07E-08

APPENDIX

F

ASSUMPTIONS



Stationary Air Quality Assumptions:

- NPRI and ChemTRAC data are provided as an annual emission value. For sites with NPRI and/or ChemTRAC data the following rules were used: for sources of NO_x (*i.e.*, comfort heating equipment, boilers, etc.) emissions were assumed to be occurring 24 hours/day, 365 days/year, for all other sources (*i.e.*, VOCs, metals, etc.) attributed to facility operations emissions were assumed to be occurring for one eight hour shift, five days per week, 52 weeks per year;
- For facilities with ECA data, US EPA AP-42 emission factors and MOECC guidance values were used to estimate potential emissions from common industrial sources (*e.g.*, emergency generators, dust collectors, welding, etc.);
- For facilities without publicly available air emission data, emissions from a similar facility (*e.g.*, Auto Body shops assumed to have similar emissions to any with regulatory approvals) were averaged and weighted, according to physical facility size, to estimate the expected emissions from the sites;
- Emissions of NO_x, lead, iron, cobalt, nickel, manganese, chromium, hexavalent chromium, PM, toluene, formaldehyde, benzene, dichloromethane, chloroform, vinyl chloride, trichlorofluoroethane, petroleum, and perchloroethylene were estimated where information was available. Where facilities did not have contaminant specific data, and the nature of the facility operations was known, total metals and total VOCs were estimated where applicable (*e.g.*, car part manufacturer emits metals; plastic manufacturer emits VOCs);
- Since it is not possible to predict the individual increase or decrease in facility production, and the introduction of new contaminant emissions or the removal of contaminant emissions from individual facilities into the future, the emission estimates based on existing information in 2018 are being used in the Future Condition (2045) assessment. Changes in air emissions can vary greatly due to many factors such as: the economy, future zoning changes in the industrial lots, improvement in equipment technologies, government grants, and the supply vs. demand trends per sector. A status quo on air emissions was assumed due to the study area being identified for future development related to a transportation hub; and,