aercoustics

Aercoustics Engineering Ltd.
1004 Middlegate Road, Suite 1100
Mississauga, ON L4Y 0G1

Tel: 416-249-3361
Fax 416-249-3613
aercoustics.com

NOISE IMPACT STUDY – **Project: 22568.00**

Proposed Elgin Road Pit
Noise Impact Study

Municipality of Thames Centre, Ontario

Prepared for:

Esher Planning
3003 Page Street, London,
Ontario N5V 4J1

Prepared by:

[redacted]

Kohl Clark, B.Eng.

[redacted]

LICENSED PROFESSIONAL ENGINEER
Feb 16, 2023
D. R. FLAKE
100166100
PROVINCE OF ONTARIO

Derek Flake, M.A.Sc., P.Eng.

February 16, 2023

Revision History

Version	Description	Author	Reviewed	Date
- -	Initial Report	KC	DF	February 16, 2023

Important Notice and Disclaimer

This report was prepared by Aercoustics Engineering Limited (Aercoustics) solely for the client identified above and is to be used exclusively for the purposes set out in the report. The material in this report reflects the judgment of Aercoustics based on information available to them at the time of preparation. Unless manifestly incorrect, Aercoustics assumes information provided by others is accurate. Changed conditions or information occurring or becoming known after the date of this report could affect the results and conclusions presented. Unless otherwise required by law or regulation, this report shall not be shared with any Third Party without the express written consent of Aercoustics. Aercoustics accepts no responsibility for damages, if any, suffered by any Third Party which makes use of the results and conclusions presented in this report.

Table of Contents

1 Introduction

Brantam Excavating is applying for a Category 1 Class A licence for the proposed Elgin Road Pit located at Part Lot 13 and 14, Concession 1, Municipality of Thames Centre, County of Middlesex, Ontario. The proposed extraction area comprises approximately 17.8 HA.

Aercoustics Engineering Limited (Aercoustics) has been retained to prepare a Noise Impact Study (NIS) for the proposed pit to support the licence application. The purpose of this study is to provide noise control recommendations for the aggregate pit operations to satisfy the Ministry of the Environment, Conservation, and Parks (MECP) noise guidelines.

Sound level limits for the aggregate pit noise on the nearby noise-sensitive receptors were first established based on the noise guidelines of the MECP as outlined in the MECP guideline NPC-300 *"Stationary and Transportation Sources – Approval and Planning"* (August 2013). Where the predicted sound levels were found to exceed the applicable MECP sound level limits, noise control measures were recommended to satisfy these limits.

Figure 1 provides a key plan showing the proposed location of the aggregate pit. Figure 2 shows the site plan of the proposed aggregate pit, including the critical noise sensitive receptors. Noise control recommendations are provided in Appendix A and are illustrated in Figures 3 through 12.

2 Site Description

The proposed aggregate pit is located at Part Lot 13 and 14, Concession 1, Municipality of Thames Centre, County of Middlesex, Ontario. The site is bound by Dundas Street to the north, by Elgin Road to the east. The surrounding land uses are agricultural to the north and south, Extractive Industrial, and Agricultural to the east, and by Environmental Protection and Wetland areas to the west. There is a CBM Pit with licence No. 2159 located nearby at the southeast corner of Dundas Street and Elgin Road.

Dundas Street and Elgin Road are both active roadways and are major sources of noise for receptors in the area.

Figure 1 provides a key plan showing the location of the proposed Elgin Road Pit and the surrounding area.

The existing single-family dwellings in the vicinity of the proposed pit are identified as Receptors R01 through R14. There are no vacant lots permitting sensitive uses that are situated more closely to the site than existing receptors; a demonstration of compliance with the sound level limits at nearby receptors is an indication of compliance at those situated further from the site. The location of each receptor is identified in Figure 2.

3 Noise Criteria

3.1 Acoustical Classification

The appropriate noise criteria for the receptors in the vicinity of the proposed Elgin Road Pit were based on the MECP Noise Pollution Control document NPC-300.

Points of Reception R01 through R14 have an acoustical environment consistent with the Class 2 (Semi-Urban) designation as defined in NPC-300. In a Class 2 area, the background sound levels during the daytime (07:00 – 19:00) and evening time (19:00 – 23:00) are defined by man-made sounds, such as those from Dundas Street and Elgin Road, with nighttime (23:00 – 07:00) being dominated by natural sounds.

During Aercoustics' site visit on January 18, 2023, road traffic noise from Dundas Street and Elgin Road was observed to be clearly audible and dominant at all receptor locations.

3.2 MECP Sound Level Limits

The applicable limits for noise from a stationary source at a noise-sensitive point of reception (receptor) in a Class 2 (Semi-Urban) area are outlined in Table 1.

Table 1: NPC-300 Exclusion Limits for Stationary Sources - Hourly L_{AEQ}

Time of Day	Class 2 (Semi-Urban) MECP Exclusion Limits (dBA)	
	Plane of Window	Outdoor Point of Reception
Daytime (07:00 – 19:00)	50*	50*
Evening (19:00 – 23:00)	50*	45*
Nighttime (23:00 – 07:00	45*	-

* or background sound level, if higher

The noise from a stationary source should not exceed these limits during any one-hour period.

At some points of reception in the vicinity of the proposed Elgin Road Pit, the lowest background sound level is expected to be higher than the exclusion limits listed above. Noise level calculations were performed in accordance with the MECP Guidelines and by the Guidelines of the Ontario Road Noise Analysis Method for Environment and Transportation (ORNAMENT). Calculations were conducted using the MECP's Road and Rail Traffic Noise Prediction Model STAMSON to establish predicted ambient noise levels in the vicinity of the noise-sensitive receptors.

Road traffic predictions were based on annual average daily traffic (AADT) numbers provided by Middlesex County; the minimum hourly background sound level was determined based on the provided AADT values and in consideration of an hourly traffic breakdown of the Institute of Transportation Engineers (ITE), as well as Aercoustics' onsite observations.

The traffic information provided by Middlesex County did not include a percentage of heavy and medium vehicles. In lieu of this information, existing heavy truck traffic in the worst-case (lowest-volume) daytime hourly period was based on observations during Aercoustics' site visit on January 18, 2023 where more than 40 heavy vehicles were observed during the 10:00 – 11:00 hour[1] on both Dundas Street and Elgin Road. As a measure of conservatism, a baseline heavy vehicle volume of 20 was assumed for Dundas Street and Elgin Road.

Calculations were performed for receptors R02 through R05 and R07 through R10 which show that these receptors are subject to ambient sound levels which exceed the MECP exclusion limits provided in Table 1. Other receptor locations may experience elevated background sound levels from road traffic, however for simplicity and conservatism the MECP exclusion limits have been applied.

Sample calculations of the road traffic predictions are provided in Appendix B.

A summary of the applicable sound level limits used in this environmental noise impact study is provided in Table 2.

Table 2 - Applicable Sound Level Limits for Stationary Sources - Hourly LAEQ

Receptor	Receptor Height (m)	Sound Level Limit during Pit Operating Times[1] (dBA)
R01	4.5	50
R01g	1.5	50
R02	4.5	60
R03	4.5	60
R04	4.5	60
R05	4.5	59
R06	1.5	50
R07	1.5	57
R08	3.0	55
R09	1.5	52
R10	1.5	60
R11	4.5	50
R11g	1.5	50
R12	1.5	50
R12g	1.5	50

[1] Based on the sample traffic distribution provided by the Institute of Transportation Engineers, the two hours between 09:00 and 11:00 are typically the lowest-volume daytime hours.

Receptor	Receptor Height (m)	Sound Level Limit during Pit Operating Times[1] (dBA)
R13	4.5	50
R14	4.5	50

1 – Proposed operating time includes the daytime hours only, 07:00 – 19:00

4 Aggregate Pit Operations

The site plans for the proposed Elgin Road Pit outline the phases of extraction as well as the direction of operations in each phase. In general terms, the nature of the work consists of the following:

- site preparation and rehabilitation
- extraction and processing; and
- shipment off-site.

4.1 Hours of Operation

The proposed hours of operation are from 07:00 to 19:00, Monday to Friday and 07:00 to 12:00 Saturdays, with no operations on Sundays or statutory holidays. At no time shall extraction, processing, or shipping take place on a statutory holiday. Equipment maintenance may take place outside of these normal operating hours. The proposed hours of operation are summarized below in Table 2

Table 2: Operating Hours of Proposed Elgin Road Pit

Time of Day	Day of Week	Operations
07:00 – 19:00	Monday to Friday	Full Operation – Extraction, Processing, Loading & Shipping
07:00 – 12:00	Saturday	

4.2 Site Preparation and Rehabilitation

Site preparation includes the construction of berms and visual screens specified on the site plan. Topsoil and overburden will be removed. This work will be done primarily with bulldozers, scrapers, trucks, loaders, and excavators. Rehabilitation phases will involve similar equipment in establishing the final grade of the site.

The site preparation and rehabilitation work described above is not part of the daily operation of the pit and are of short duration. These construction activities are not considered in the noise control analysis. The equipment used for these activities must satisfy the noise emission requirements of the MECP document NPC-115 *"Construction Equipment"*. By defining a maximum permissible noise emission for construction equipment, rather than directly limiting the noise impact at a sensitive point of reception, the MECP recognizes that construction is a temporary and largely unavoidable source of noise.

In order to minimize the noise impact associated with the construction activities, it is suggested that operations should be restricted to the daytime hours. When possible, site preparation should be conducted during the fall, winter or spring months when there is a reduced level of extraction and when residential windows are more likely to remain closed.

4.3 Extraction, Processing, and Transport

The maximum annual tonnage to be removed from the proposed Elgin Road Pit is 500,000 tonnes per year. The aggregate pit will operate with a portable processing plant which will be situated in a designated Processing Area as illustrated in Figure 3 and indicated on the Operation Plan. Processing equipment will generally consist of a single screen and portable crusher which will follow working face in the direction of extraction.

The worst-case noise impact scenarios were evaluated based on the operation of both a screen and crusher operating simultaneously with extraction materials, except where otherwise noted in the applicable noise controls (See Appendix A).

Aggregate material will be extracted using one extraction loader at the working face, or, for below-water operations, using a drag line with an associated surge pile loader. Material will be transported into the portable processing plant either by a conveyor system or by off-road trucks[2]. Processed materials will be stored in stockpiles in the vicinity of the processing area or in the form of temporary storage berms as noted on the operation plan. One shipping loader will be used in the Processing Area to load highway trucks with finished aggregate product for transport to market.

4.4 Equipment

The extraction, processing, and shipment equipment operating in the proposed pit is limited to:

- One Shipment Loader
- One Extraction or Surge Pile Loader
- One Drag Line
- One Processing Plant (Crusher and Screen)
- One Screen
- 15 Off-road Truck Trips/hr (30 Passes/hr)
- 20 Highway Truck Trips/hr (40 Passes/hr)

The single Processing Plant may consist of multiple pieces of equipment for purposes such as crushing, screening, and washing. Since the noise predictions considered a single worst-case location for all the plant equipment, the distribution of the plant equipment is

[2] The noise impact associated with offroad trucks was evaluated to be more significant than that of conveyors and has been considered in this study; the use of conveyors is expected to result in a lower predicted noise impact.

permitted at various locations. However, the combined sum sound power from all equipment locations must be less than or equal to the permitted sound power for the Processing Plant, and any local noise controls specific to the Processing Plant shall apply at each location.

5 Noise Prediction and Controls

5.1 Noise Prediction Methodology

The proposed aggregate pit operations, as described above, have been modelled using DataKustik's noise prediction software CadnaA. This modelling is based on established noise prediction methods outlined in the ISO 9613-2 standard entitled "Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method and calculation".

The noise predictions are based on the predictable worst-case noise impact for each of the aggregate pit operation areas at each noise-sensitive receptor. This represents a design case where the pit is operating at full capacity with all of the equipment operating simultaneously and at locations where the noise impact is highest for each receptor. It is expected that a majority of the pit operations would occur in other areas of the site, resulting in lower associated noise impacts.

Noise levels were predicted using existing topography under conditions of downwind propagation, generally with hard ground modelled in the pit area and soft ground conditions elsewhere. Appendix C contains sample stationary noise source calculations.

Where noise predictions have indicated the potential of exceedance of the applicable sound level limits, noise control measures have been established to satisfy these limits.

5.2 Aggregate Pit Noise Sources

The reference sound levels used for the aggregate pit equipment are outlined in Table 3. The assumed sound levels for the pit equipment were based on Aercoustics' measurements of similar equipment at other aggregate operations.

Table 3: Reference Sound Pressure Levels of Aggregate Pit Equipment

Equipment	Reference Sound Pressure Level at 30m (dBA)
Processing Plant	80
Drag Line / Excavator	73
Shipping Loader / Surge Pile Loader	67[1]
Extraction Loader	70
Highway Truck – 20 km/h	71
Off-road Truck – 30 km/h	80

1 – The shipment loader was assumed to operate at a 50% duty cycle

5.3 Recommended Noise Controls

The recommended noise controls presented in this section and in Appendix A have been determined, through noise impact predictions, to be effective in limiting the noise impact from the aggregate pit activities to levels which comply with the MECP sound level limits. It should be noted that there may be other effective noise controls that could replace or revise those put forth in this report. Prior to the implementation of any changes to the noise controls, appropriate studies should be undertaken to demonstrate that the MECP Sound level limits will be satisfied.

An acoustic barrier is required to be solid, with no gaps or openings, and shall satisfy a minimum area density of 20 kg/m^2. Such a barrier may take the form of a pit face, stockpile, acoustic fence, ISO container(s), some combination of these, or any other construction satisfying the requirements of an acoustic barrier.

Refer to Figures 3 to 11 for requirements for requirements in Areas 1 and 2. These requirements include an illustration of the timing and implementation of noise controls such as local processing plant acoustical barriers as well as perimeter barriers. Refer to Appendix A for a comprehensive summary of the recommended noise controls for the proposed Elgin Road Pit.

5.4 Predicted Sound Levels with Controls

The predicted worst-case noise levels produced by operations within the proposed Elgin Road Pit area are summarized in Table 4 below. The predictable worst-case operation in Areas 1 and 2 are associated with simultaneous processing and extraction in close proximity to Receptors R01, R06, and R12 as illustrated in Figures 3, 4, 7, 8, and 9.

Table 4: Elgin Road Pit - Worst Case Predicted Sound Levels and Criteria - Hourly L_{AEQ} (dBA)

Receptor	Extraction, Processing, and Shipping Operations (07:00 – 19:00)	
	Daytime Sound Level Limit	Maximum Predicted Sound Level
R01	50	50
R01g	50	50
R02	60	50

Receptor	Extraction, Processing, and Shipping Operations (07:00 – 19:00)	
	Daytime Sound Level Limit	Maximum Predicted Sound Level
R03	60	56
R04	60	56
R05	59	55
R06	50	49
R06g	50	50
R07	57	56
R08	55	52
R09	52	49
R10	60	53
R11	50	47
R11g	50	47
R12	50	49
R12g	50	50
R13	50	46
R14	50	49

6 Truck Traffic Noise on Haul Route

The noise impact of truck traffic on public roadways is not addressed by the MECP in their noise guidelines. However, the MECP requires consideration of the noise impact in choosing the off-property haul route.

This study includes a preliminary analysis of the potential off property haul routes. The aggregate material from the proposed Elgin Road Pit will be shipped to market Elgin Road, with approximately 80% of outbound trucks moving north towards Dundas Street and the remaining 20% of outbound trucks traveling south on Elgin Street towards Highway 401.

It was assumed that the average truck traffic generated by the proposed Elgin Road Pit in the peak summer months is 20 one-way trips per hour (roughly 10 trucks). Predictable worst-case shipping truck traffic of 40 one-way trips per hour (20 trucks) was assumed to be the peak hour traffic for the proposed pit.

The haul route assessment and other traffic calculations were based on road traffic information provided in the form of an annual average daily traffic (AADT) volume by Middlesex County, the ITE traffic distribution, and on-site observations as noted in Section 3.2.

Based on this traffic information and noted assumptions, it is estimated that the sound levels from road traffic along Dundas Street as well as Elgin Road will increase by 1 dBA

with the proposed average truck traffic of 20 one-way trips per hour and by 2 dBA with the proposed peak truck traffic of 40 one-way trips per hour. See Appendix B for road traffic data and sample calculations.

The Ministry of Transportation (MTO) considers an increase in road traffic sound levels of 1-3 dBA “insignificant”. Mitigation measures are not recommended.

With this, the proposed haul route is not expected to cause an objectionable increase in road traffic noise and is considered the preferred haul route in the context of noise impact.

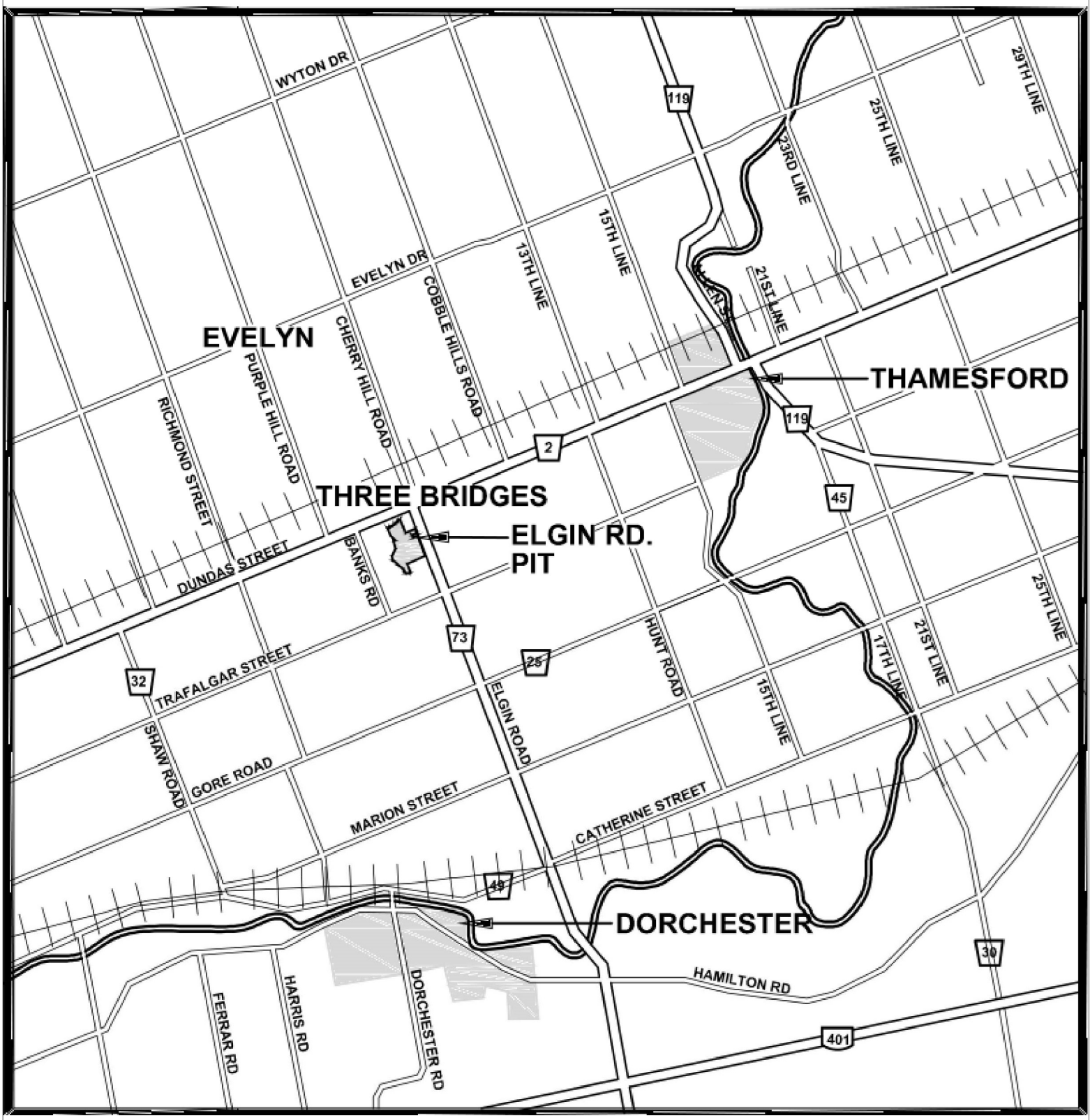
7 Conclusion

Aercoustics has conducted a noise impact study for the proposed Elgin Road Pit. The purpose of this noise impact study was to provide noise control recommendations for the pit operations to satisfy the MECP noise guidelines. Figure 2 provides a site plan outlining the aggregate pit areas and the locations of nearby receptors.

Sound level limits were developed based on the MECP noise guidelines. Calculations were then carried out to determine the worst-case noise impact for each phase of the aggregate pit operation, at each noise-sensitive receptor. Where noise predictions indicated the potential of exceedance of the MECP sound level limits, noise control recommendations were provided.

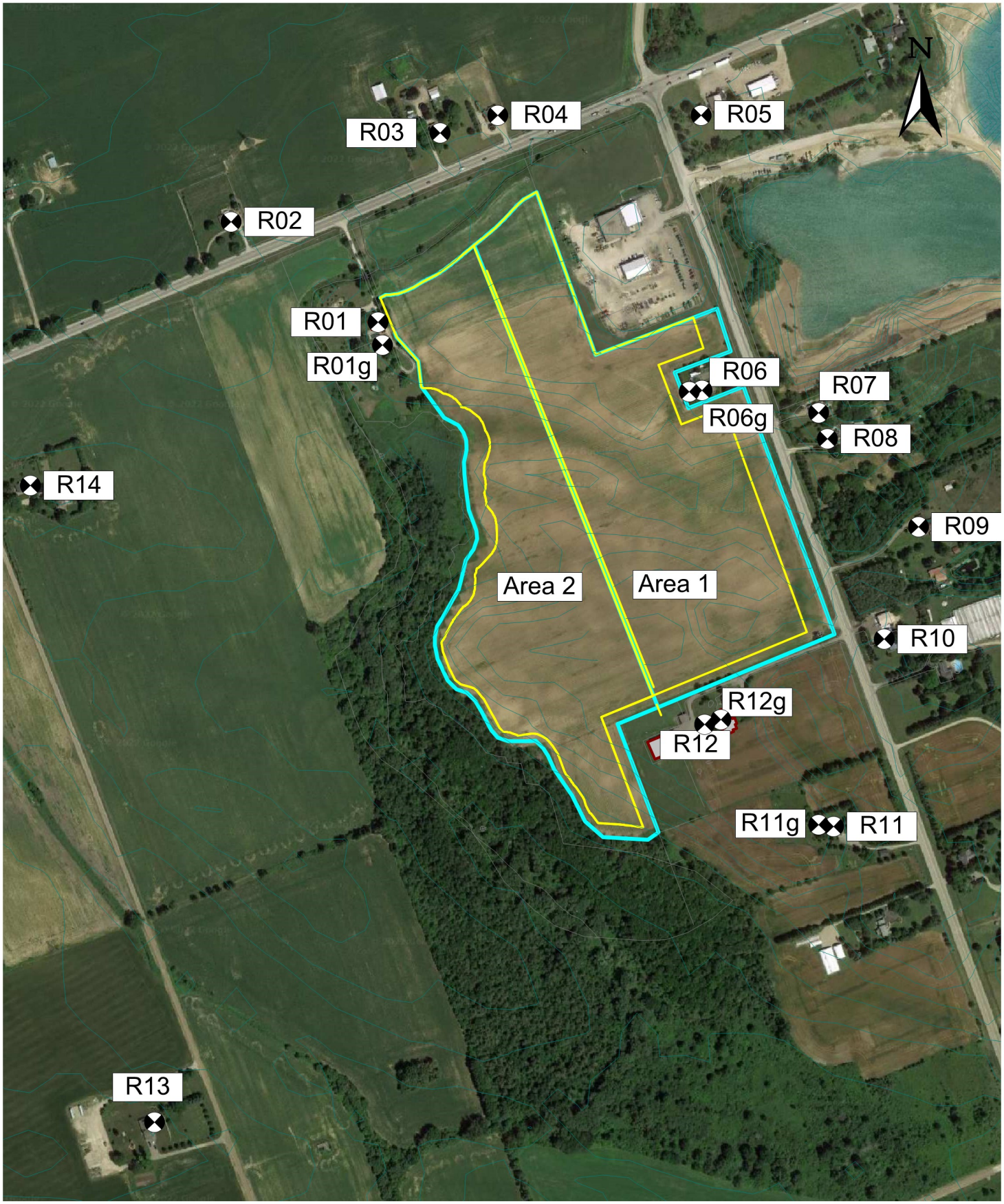
Appendix D provides a summary of the qualifications of the authors.

With the implementation of the recommended noise controls, the proposed aggregate pit operation is predicted to satisfy the MECP noise guidelines.



aercoustics	Project ID: 22568.00 Scale: NTS Drawn by: KC Reviewed by: DF Date: Feb 14, 2023 Revision: 1	**Project Name** Proposed Elgin Road Pit - Noise Impact Study **Figure Title** Key Plan Showing Site Location

Figure 1



aercoustics

Project ID: 22568.00

Scale: As Indicated
Drawn by: KC
Reviewed by: DF
Date: Feb 14, 2023
Revision: 1

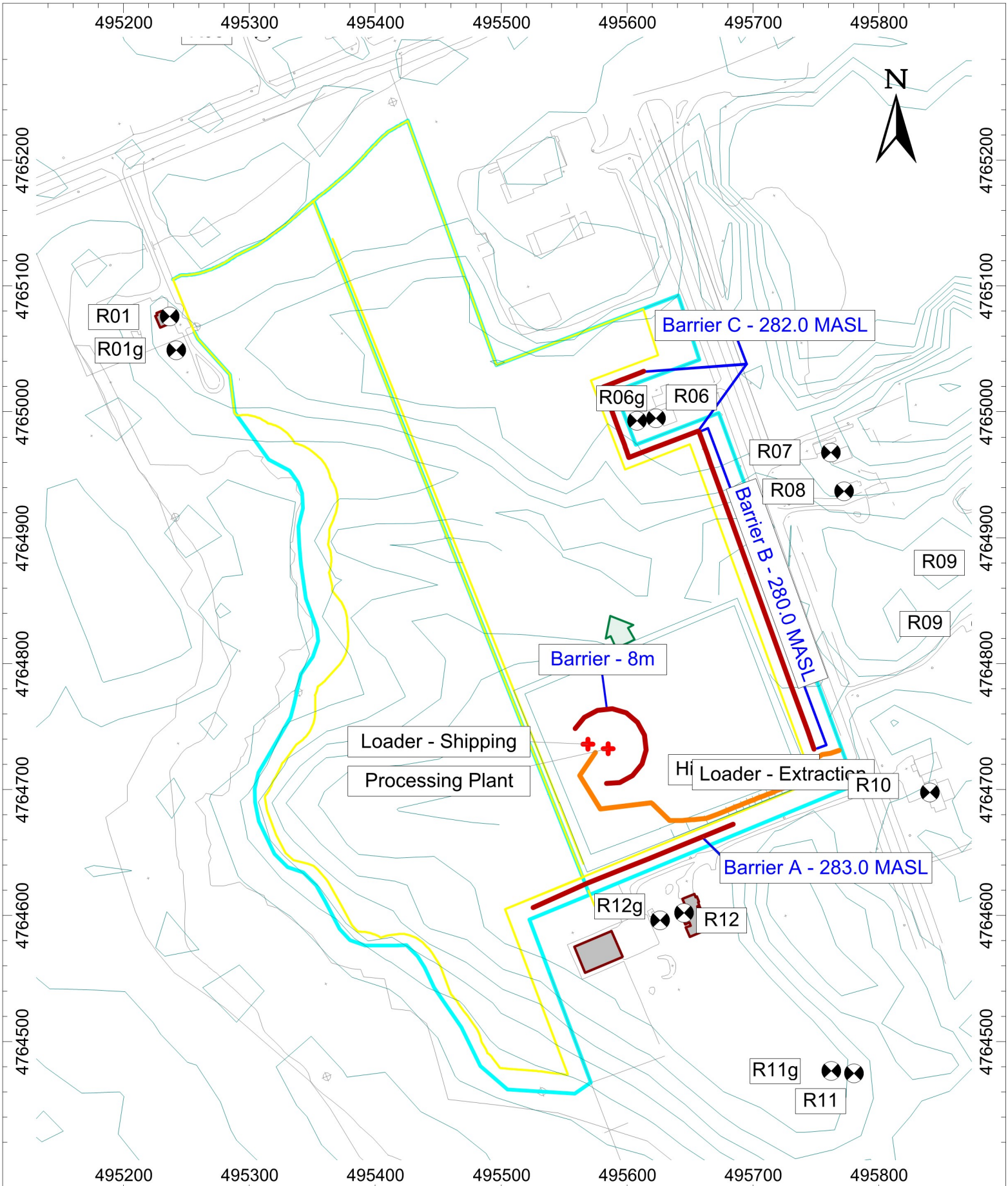
Project Name

Proposed Elgin Road Pit - Noise Impact Study

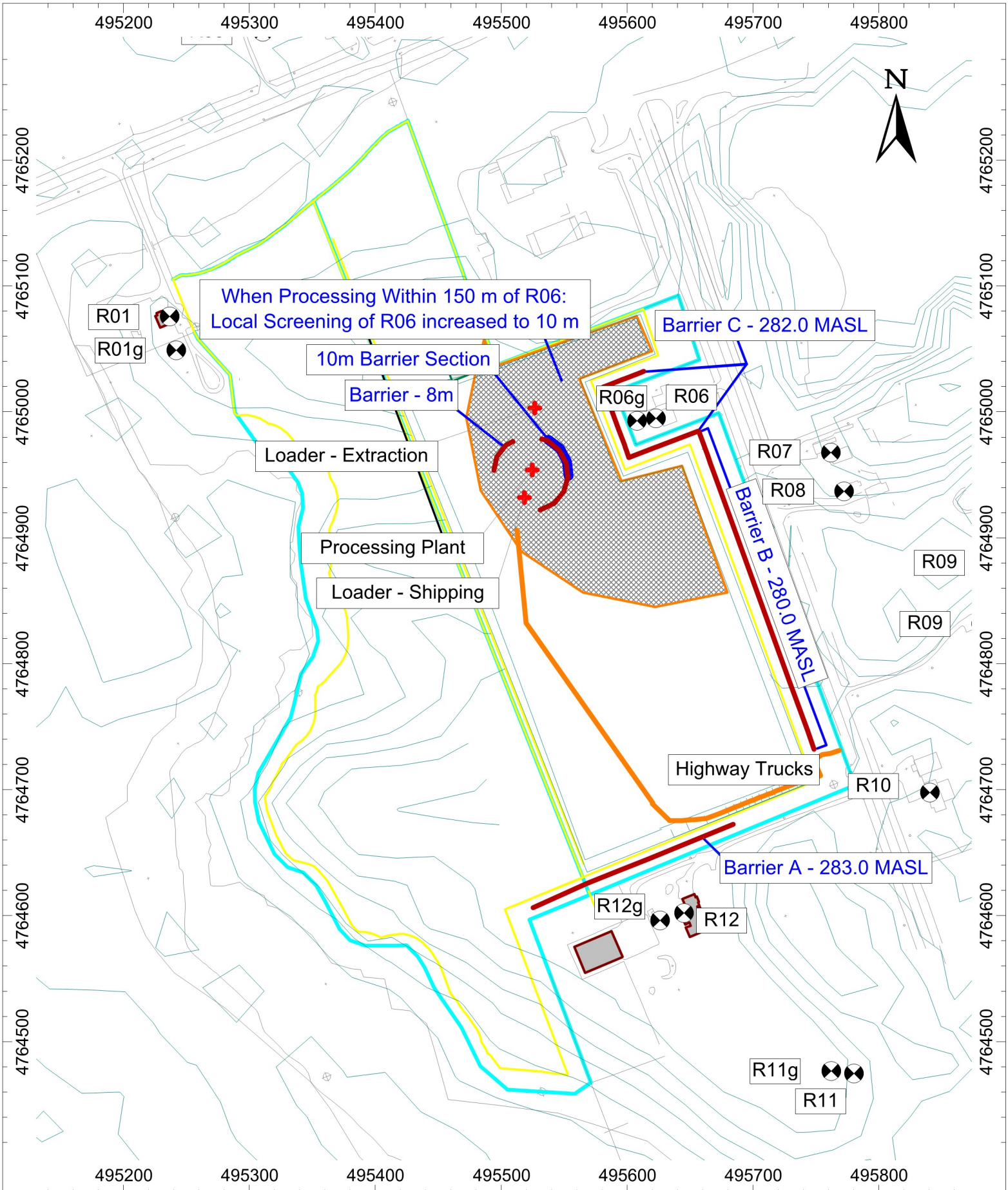
Figure Title

Noise Sensitive Receptors

Figure 2



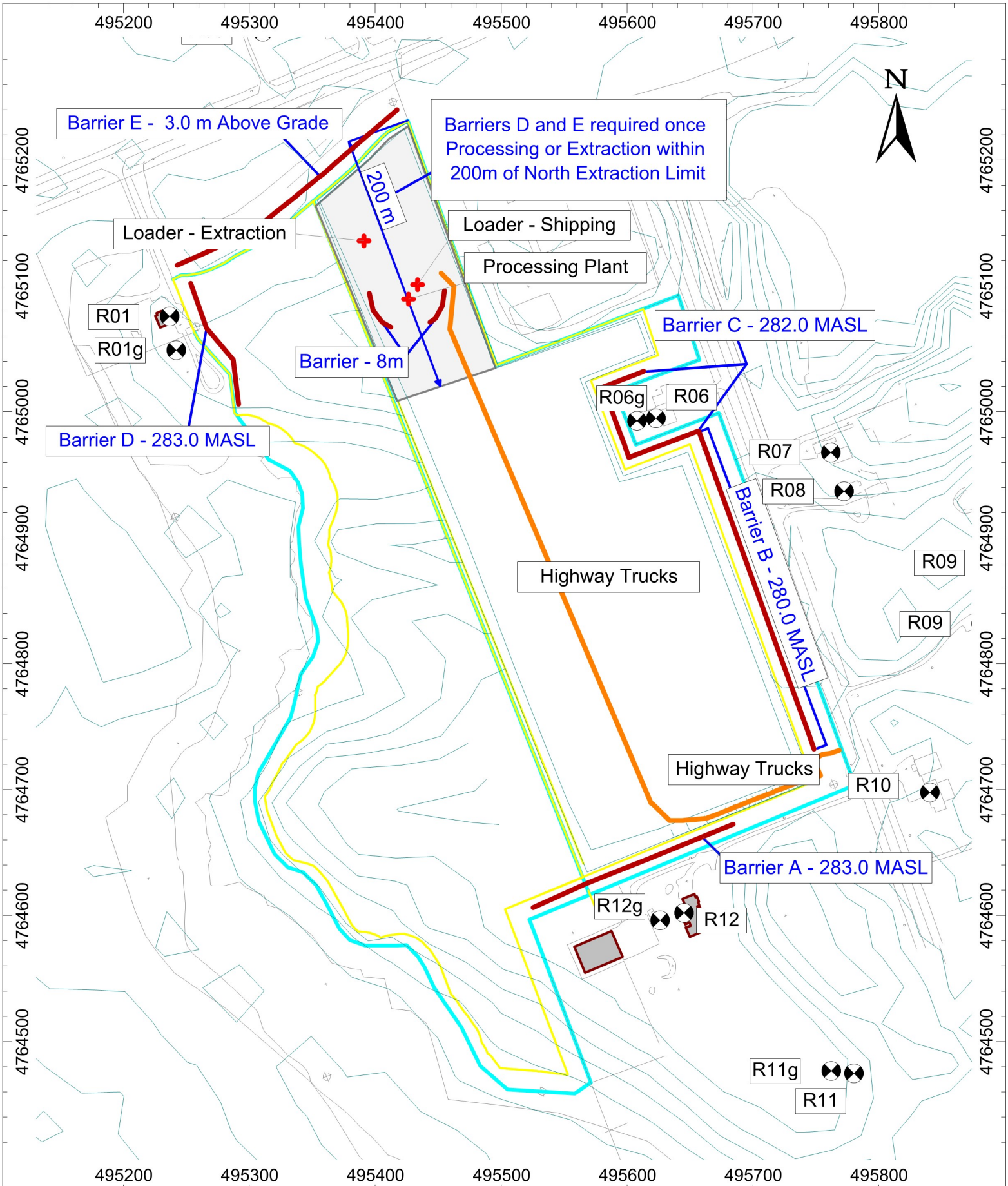
aercoustics	Project ID: 22568.00 Scale: As Indicated Drawn by: KC Reviewed by: DF Date: Feb 14, 2023 Revision: 1	**Project Name** Proposed Elgin Road Pit - Noise Impact Study **Figure Title** Implimentation of Noise Controls - Above Water Extraction at First Lift in Area 1	**Figure 3**



aercoustics

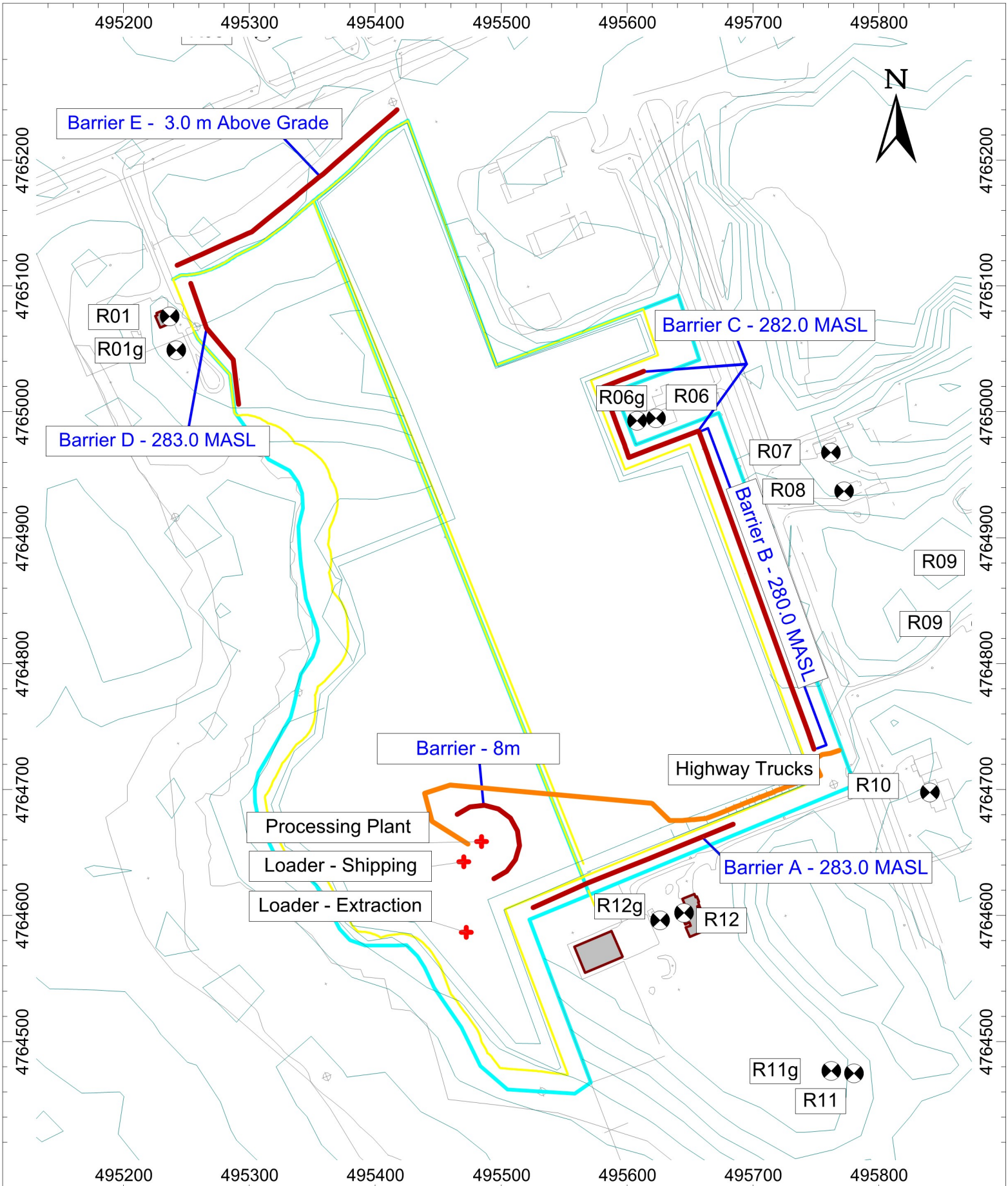
Project ID: 22568.00	**Project Name**
Scale: As Indicated Drawn by: KC Reviewed by: DF Date: Feb 14, 2023 Revision: 1	Proposed Elgin Road Pit - Noise Impact Study
	Figure Title Implimentation of Noise Controls - Above Water Extraction at First Lift in Area 1

Figure 4

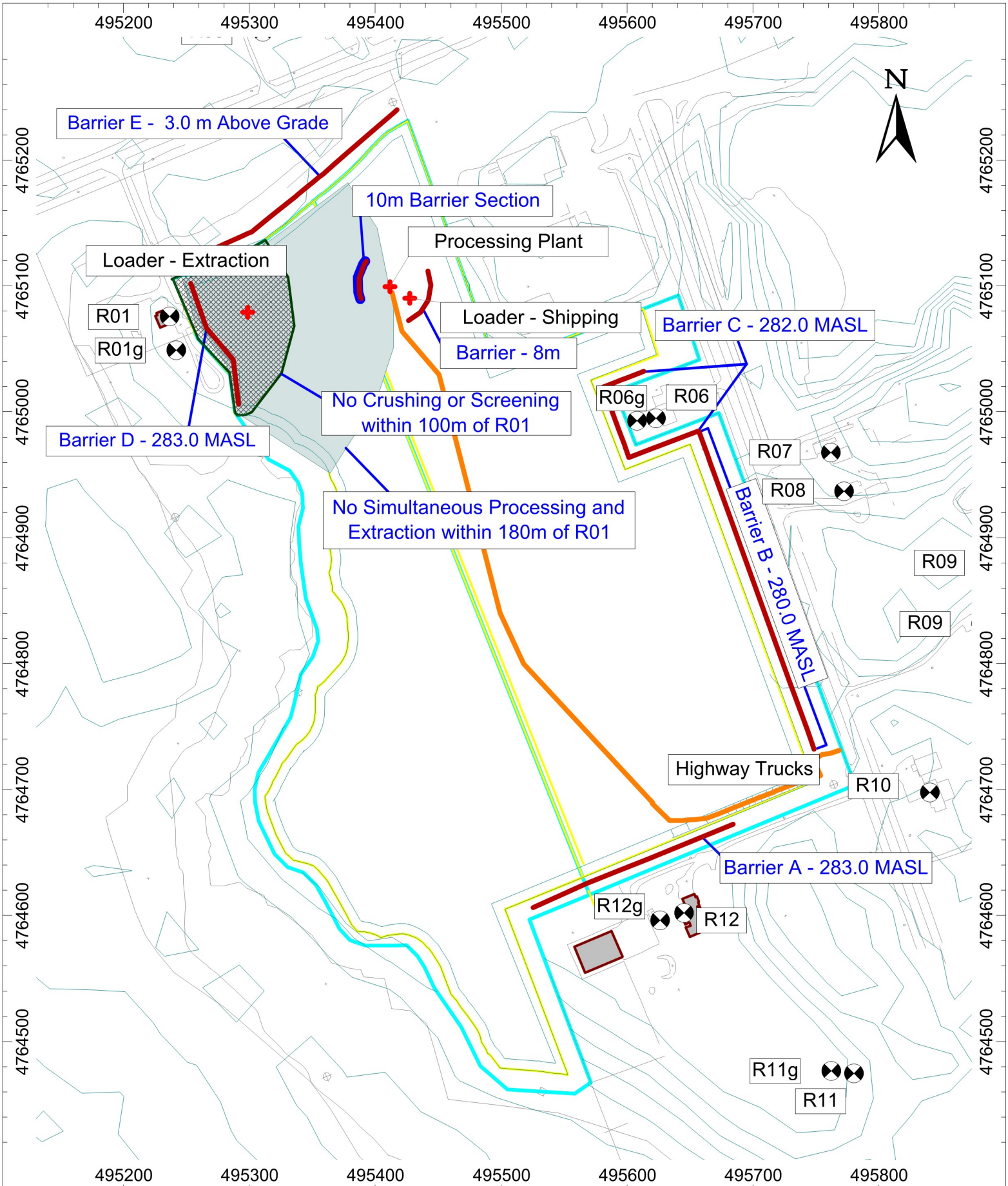


aercoustics	Project ID: 22568.00 Scale: As Indicated Drawn by: KC Reviewed by: DF Date: Feb 14, 2023 Revision: 1	**Project Name** Proposed Elgin Road Pit - Noise Impact Study **Figure Title** Implimentation of Noise Controls - Above Water Extraction at First Lift in Area 1

Figure 5



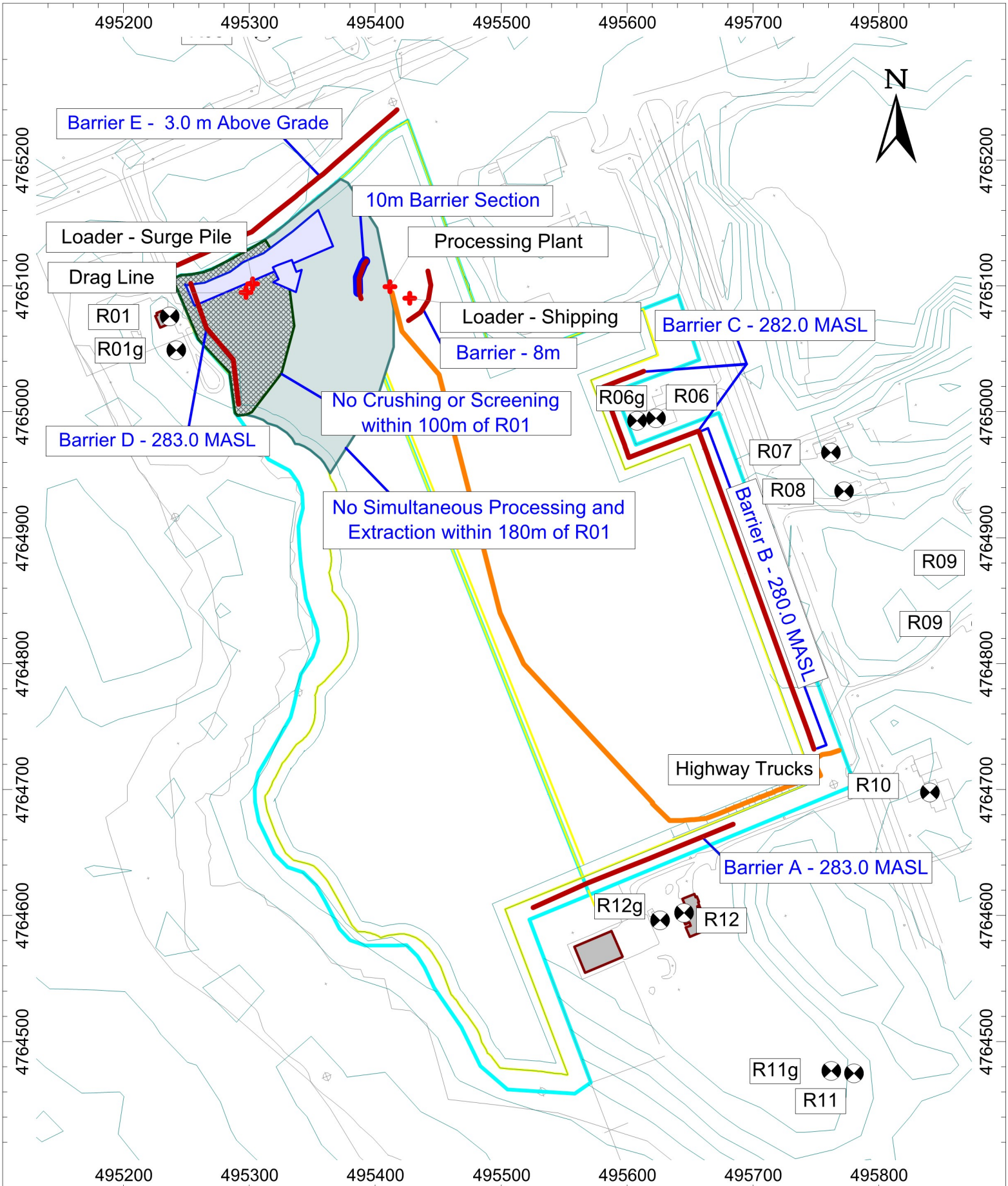
aercoustics	Project ID: 22568.00 Scale: As Indicated Drawn by: KC Reviewed by: DF Date: Feb 14, 2023 Revision: 1	**Project Name** Proposed Elgin Road Pit - Noise Impact Study **Figure Title** Implimentation of Noise Controls - Above Water Extraction at First Lift in Area 2	**Figure 6**



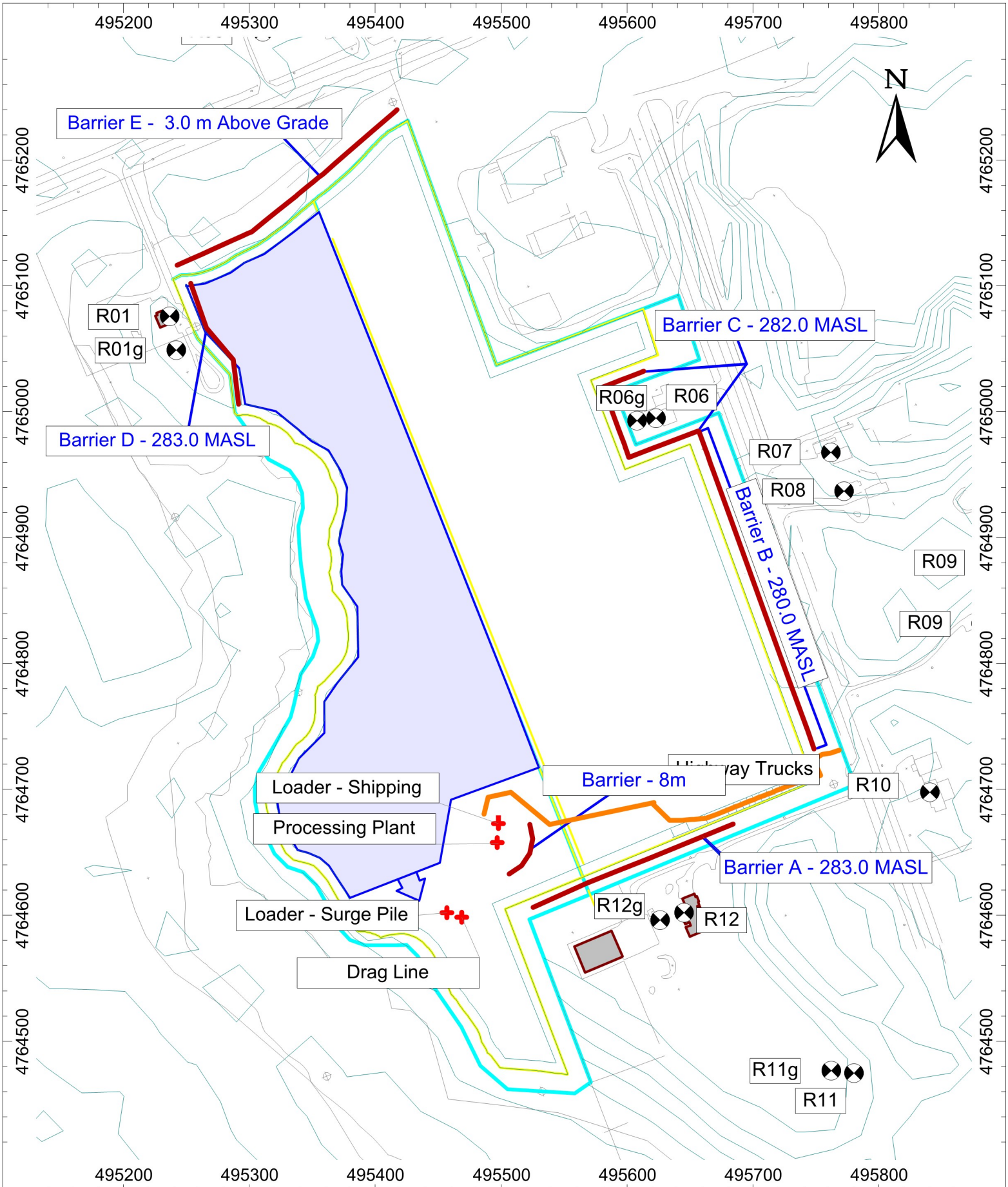
aercoustics

Project ID: 22568.00	**Project Name**
Scale: As Indicated Drawn by: KC Reviewed by: DF Date: Feb 14, 2023 Revision: 1	Proposed Elgin Road Pit - Noise Impact Study
	Figure Title Implimentation of Noise Controls - Above Water Extraction at First Lift in Area 2

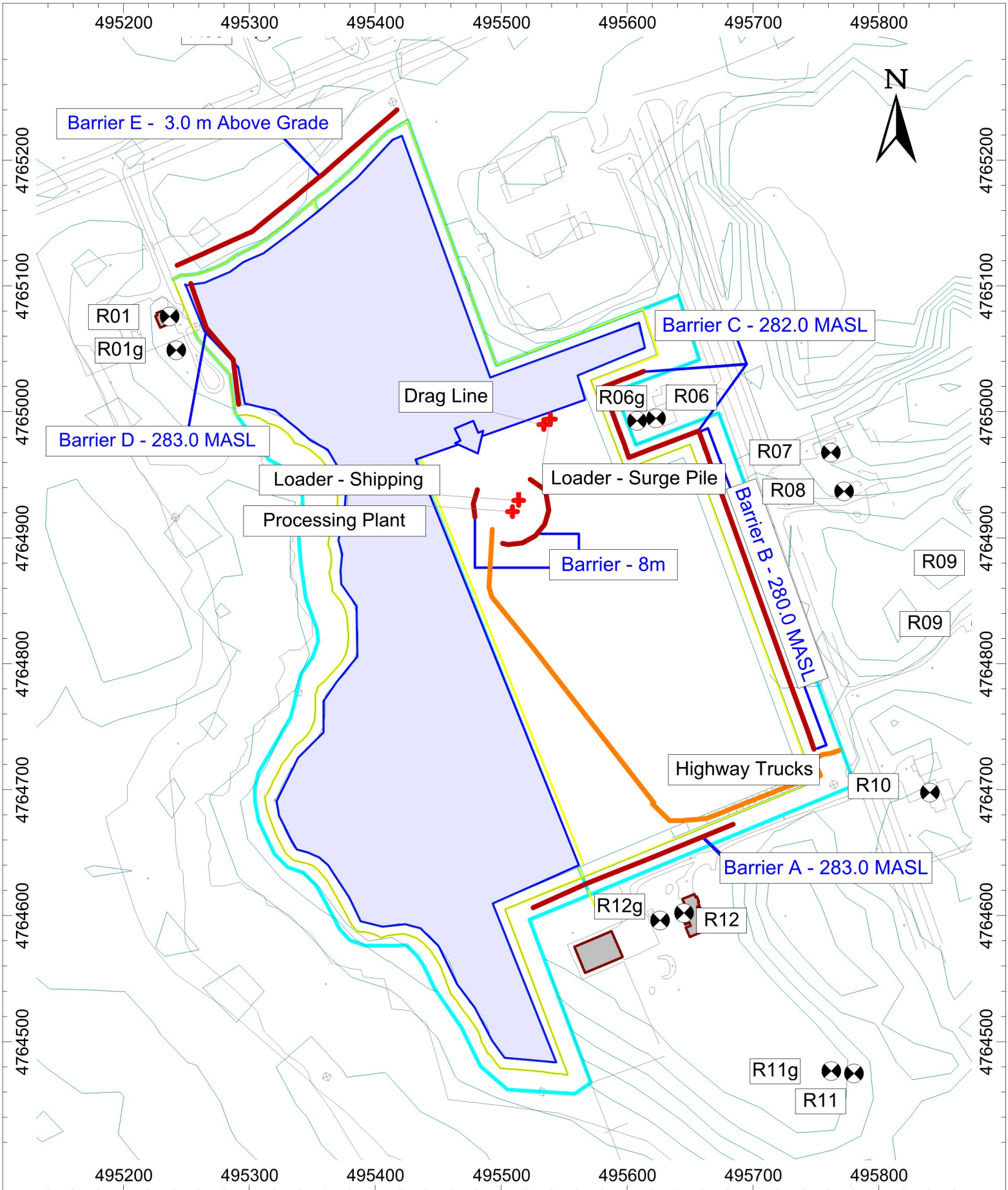
Figure 7



aercoustics	Project ID: 22568.00 Scale: As Indicated Drawn by: KC Reviewed by: DF Date: Feb 14, 2023 Revision: 1	**Project Name** Proposed Elgin Road Pit - Noise Impact Study **Figure Title** Implimentation of Noise Controls - Below Water Extraction at in Area 2	**Figure 8**

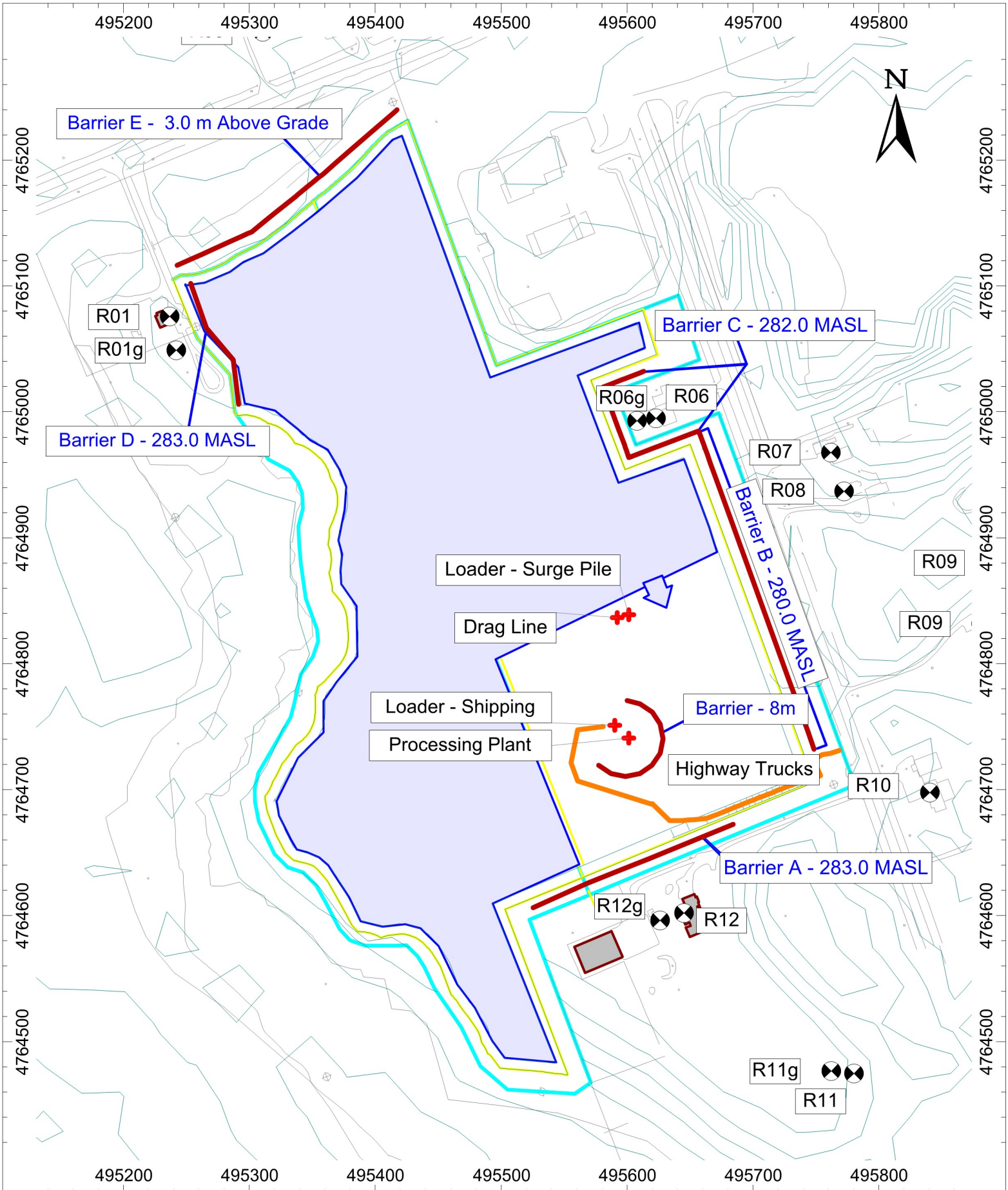


aercoustics	Project ID: 22568.00 Scale: As Indicated Drawn by: KC Reviewed by: DF Date: Feb 14, 2023 Revision: 1	**Project Name** Proposed Elgin Road Pit - Noise Impact Study **Figure Title** Implimentation of Noise Controls - Below Water Extraction at in Area 2	**Figure 9**



aercoustics	Project ID: 22568.00 Scale: As Indicated Drawn by: KC Reviewed by: DF Date: Feb 14, 2023 Revision: 1	**Project Name** Proposed Elgin Road Pit - Noise Impact Study **Figure Title** Implimentation of Noise Controls - Below Water Extraction at in Area 1

Figure 10



aercoustics	Project ID: 22568.00 Scale: As Indicated Drawn by: KC Reviewed by: DF Date: Feb 14, 2023 Revision: 1	**Project Name** Proposed Elgin Road Pit - Noise Impact Study **Figure Title** Implimentation of Noise Controls - Below Water Extraction at in Area 1	**Figure 11**

Appendix A
Noise Control Recommendations

General:

1. The proposed hours of extraction, processing, and shipping operations shall be limited to the daytime hours only (07:00 to 19:00).

2. The extraction, processing, and shipping equipment operating in the pit is limited to:

    - One Extraction Loader or Surge Pile Loader
    - One Drag Line or Excavator
    - One Shipment Loader
    - One Processing Plant (crushing and screening)
    - Highway Trucks
    - Off-road Trucks

3. The aggregate pit equipment shall satisfy the noise emission levels listed in Table A:

Table A: Reference Sound Pressure Levels of Aggregate Pit Equipment

Equipment	Reference Sound Pressure Level at 30m (dBA)
Processing Plant	80
Drag Line	73
Shipping Loader / Surge Pile Loader	67[2]
Extraction Loader	70
Highway Truck – 20 km/h	71
Off-road Truck – 30 km/h	80

1 – The shipment and Surge Pile loaders were assumed to operate at a 50% duty cycle.

4. The sound emissions of all construction equipment involved in site preparation and rehabilitation activities shall comply with the sound level limits specified in the MECP publication NPC-115 “Construction Equipment”.

5. New equipment technology or different configurations may allow proposed changes to any portion of the extraction and processing operations including additional equipment to operate on the site, equipment to be substituted, and/or different berm heights, while still meeting the applicable sound level limits. Changes may be permitted to the site operations and noise controls provided that the changes still meet the sound level limits, as confirmed through documentation prepared by a Professional Engineer specializing in noise control.

6. An acoustic barrier is required to be solid, with no gaps or openings, and shall satisfy a minimum area density of 20 kg/m^2. It could take the form of a working

face, stockpile, acoustic fence, ISO containers, a combination of these, or any construction satisfying the requirements of an acoustic barrier.

7. Prior to Extraction operations, the following acoustical barriers shall be established as noted below and as shown on the Operation Plan. These barriers shall remain in place for the lifetime of the pit.

    - **Barrier A** – top-of-barrier elevation of 283 MASL with approximate length of 175 m
    - **Barrier B** – top-of-barrier elevation of 280 MASL with approximate length of 275 m
    - **Barrier C** – top-of-barrier of elevation 282 MASL with approximate length of 150 m

8. Prior to extraction or processing operations within 200 m of the northmost extraction limit, the following acoustical barriers shall be established as noted below and as shown on the Operation Plan. These barriers shall remain in place for the lifetime of the pit.

    - **Barrier D** - top-of-barrier elevation of 283 MASL with approximate length of 100 m
    - **Barrier E** – relative height of 3 m with respect to existing grade, with approximate length of 215 m

9. An acoustical barrier shall be established within 30 m of the Processing Plant, breaking the line of sight to the receptor listed in Table A2, with a minimum height based on the Receptor's distance from the Processing Plant as specified in Table A2:

Table A2: Processing Equipment Local Barrier Summary

Receptor	8 m Shielding Required	10 m Shielding Required
R01	Within 400 m	Within 180 m
R06	Within 400 m	Within 150 m
R07 – R11	Within 400 m	Never
R12	Within 400 m	Never

10. The Processing Plant shall not operate within 100 m of Receptor R01.

11. Extraction operations and processing operations may not occur simultaneously within 180 m of Receptor R01.

Appendix B
Sample Road Traffic Calculations

Kohl Clark

From: Nicholas Zomparelli
Sent: Wednesday, January 4, 2023 8:29 AM
To: Kohl Clark; Derek Flake
Subject: FW: Road Traffic Data Request - Dundas St & Elgin Rd

Hello Derek/Kohl,

Please see email below for road traffic data pertaining to the Elgin road pit noise study.

Thanks,

aercoustics | Experience the sound. Feel the silence.

Nicholas Zomparelli, M.Eng., EIT
Dir: (647) 931-4260 | nicholasz@aercoustics.com

Aercoustics Engineering Ltd.
1004 Middlegate Rd Suite 1100, Mississauga, ON L4Y 0G1
Tel: (416) 249-3361 | www.aercoustics.com

From: Rick Tweddle <rtweddle@middlesex.ca>
Sent: January 4, 2023 7:47 AM
To: Nicholas Zomparelli <NicholasZ@aercoustics.com>
Cc: Ryan Hillinger <rhillinger@middlesex.ca>
Subject: FW: Road Traffic Data Request - Dundas St & Elgin Rd

Hello Nicholas

I would like to apologize as the previous email was sent incomplete by mistake. Please find this the completed email.

Note the available road traffic data the County has for both directions of Dundas St and Elgin Rd in this area.

- Ultimate AADT and hourly breakdowns(Not Available)
  Dundas St. East of Elgin Road – 10946 AADT
  Dundas St. West of Elgin Road – 12566 AADT
  Elgin Rd. South of Dundas St. – 3617 AADT
- Day/night split(Not Available)
- Percentage of trucks (Not Available)
- Heavy/medium truck ratio (Not Available)
- Maximum speed
  Dundas St. East of Elgin Road – 80 kph
  Dundas St. West of Elgin Road – 80 kph
  Elgin Rd. South of Dundas St. – 90Kph AADT

Please note that Cherryhill Road north from the intersection is under Thames Centre jurisdiction and we have no information at all for it.

Rick Tweddle
Engineering Tech II
County of Middlesex
Email rtweddle@middlesex.ca
Phone 519-434-7321

From: Rick Tweddle
Sent: Wednesday, January 4, 2023 7:39 AM
To: Nicholas Zomparelli <NicholasZ@aercoustics.com>
Cc: Ryan Hillinger <rhillinger@middlesex.ca>
Subject: RE: Road Traffic Data Request - Dundas St & Elgin Rd

Hello Nicholas

We require road traffic data for both directions of Dundas St and Elgin Rd in this area. In particular, the following road traffic data is needed:

- Ultimate AADT and hourly breakdowns
  Dundas St. East of Elgin Road – 10946 AADT
  Dundas St. West of Elgin Road – 12566 AADT
  Elgin Rd. South of Dundas St. – 3617 AADT
- Day/night split(Not Available)
- Percentage of trucks (Not Available)
- Heavy/medium truck ratio (Not Available)
- Maximum speed
  Dundas St. East of Elgin Road – 80 kph
  Dundas St. West of Elgin Road – 80 kph
  Elgin Rd. South of Dundas St. – 3617 AADT

From: Ryan Hillinger <rhillinger@middlesex.ca>
Sent: Tuesday, January 3, 2023 11:35 AM
To: Jarrod Craven <JCraven@thamescentre.on.ca>; Nicholas Zomparelli <NicholasZ@aercoustics.com>; Rick Tweddle <rtweddle@middlesex.ca>
Subject: RE: Road Traffic Data Request - Dundas St & Elgin Rd

Rick can you please help Nicholas out with what he may require.

From: Jarrod Craven <JCraven@thamescentre.on.ca>
Sent: Thursday, December 22, 2022 1:58 PM
To: Nicholas Zomparelli <NicholasZ@aercoustics.com>
Cc: Ryan Hillinger <rhillinger@middlesex.ca>
Subject: RE: Road Traffic Data Request - Dundas St & Elgin Rd

Hi Nicholas,

Both of these roads (CR#2 and CR#73) are under Middlesex County jurisdiction.

I've copied their Engineering Supervisor, Ryan Hillinger who might be able to assist you with this request.

Thanks,

Jarrod Craven
Director of Public Works
Municipality of Thames Centre | jcraven@thamescentre.on.ca
4305 Hamilton Road, | Dorchester, Ontario, N0L 1G3
Tel: 519.268.7334 Ext. 245 | Fax: 519.268.3928

From: Nicholas Zomparelli <NicholasZ@aercoustics.com>
Sent: Thursday, December 22, 2022 1:37 PM
To: Jarrod Craven <JCraven@thamescentre.on.ca>
Subject: Road Traffic Data Request - Dundas St & Elgin Rd

Hello Jarrod,

My name is Nicholas Zomparelli from Aercoustics Engineering Ltd. My company has been hired to carry out a noise study for a site to be located near Dundas St and Elgin Rd, between London and Thamesford.

We require road traffic data for both directions of Dundas St and Elgin Rd in this area. In particular, the following road traffic data is needed:

- Ultimate AADT and hourly breakdowns
- Day/night split
- Percentage of trucks
- Heavy/medium truck ratio, and
- Maximum speed

Would you happen to have this data? Or know who I can contact to get this information?

Thank you,

```
STAMSON 5.0        NORMAL REPORT        Date: 26-01-2023 11:03:27
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: R02_5.te             Time Period: 1 hours
Description: Impact at R02-R05 from Dundas St


Road data, segment # 1: Dundas St
---------------------------------
Car traffic volume  :   515 veh/TimePeriod
Medium truck volume :    11 veh/TimePeriod
Heavy truck volume  :    21 veh/TimePeriod
Posted speed limit  :    80 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Dundas St
-------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  45.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: Dundas St
------------------------------

Source height = 1.40 m

ROAD (0.00 + 59.75 + 0.00) = 59.75 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.66  69.12   0.00  -7.92  -1.46   0.00   0.00   0.00  59.75
-------------------------------------------------------------------------------

Segment Leq : 59.75 dBA

Total Leq All Segments: 59.75 dBA

TOTAL Leq FROM ALL SOURCES:       59.75
```

```
STAMSON 5.0        NORMAL REPORT        Date: 27-01-2023 16:09:45
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r06_8.te             Time Period: 1 hours
Description: Impact at R07 from Elgin Street


Road data, segment # 1: Elgin Road
----------------------------------
Car traffic volume  :   163 veh/TimePeriod
Medium truck volume :     4 veh/TimePeriod
Heavy truck volume  :    20 veh/TimePeriod
Posted speed limit  :    90 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Elgin Road
--------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  57.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: Elgin Road
-------------------------------

Source height = 1.81 m

ROAD (0.00 + 57.16 + 0.00) = 57.16 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.65  68.17   0.00  -9.57  -1.44   0.00   0.00   0.00  57.16
-------------------------------------------------------------------------------

Segment Leq : 57.16 dBA

Total Leq All Segments: 57.16 dBA

TOTAL Leq FROM ALL SOURCES:       57.16
```

```
STAMSON 5.0        NORMAL REPORT        Date: 26-01-2023 11:11:21
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: R06_8.te             Time Period: 1 hours
Description: Impact at R08 from Elgin Rd


Road data, segment # 1: Elgin Road
----------------------------------
Car traffic volume  :   163 veh/TimePeriod
Medium truck volume :     4 veh/TimePeriod
Heavy truck volume  :    20 veh/TimePeriod
Posted speed limit  :    90 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Elgin Road
--------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  75.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: Elgin Road
-------------------------------

Source height = 1.81 m

ROAD (0.00 + 55.19 + 0.00) = 55.19 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.65  68.17   0.00 -11.54  -1.44   0.00   0.00   0.00  55.19
-------------------------------------------------------------------------------

Segment Leq : 55.19 dBA

Total Leq All Segments: 55.19 dBA

TOTAL Leq FROM ALL SOURCES:       55.19
```

```
STAMSON 5.0        NORMAL REPORT        Date: 26-01-2023 11:14:36
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: R06_8.te             Time Period: 1 hours
Description: Impact at R09 from Elgin Rd

Road data, segment # 1: Elgin Road
----------------------------------
Car traffic volume  :   163 veh/TimePeriod
Medium truck volume :     4 veh/TimePeriod
Heavy truck volume  :    20 veh/TimePeriod
Posted speed limit  :    90 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Elgin Road
--------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 123.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: Elgin Road
-------------------------------

Source height = 1.81 m

ROAD (0.00 + 51.64 + 0.00) = 51.64 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.65  68.17   0.00 -15.08  -1.44   0.00   0.00   0.00  51.64
-------------------------------------------------------------------------------

Segment Leq : 51.64 dBA

Total Leq All Segments: 51.64 dBA

TOTAL Leq FROM ALL SOURCES:       51.64
```

```
STAMSON 5.0        NORMAL REPORT        Date: 26-01-2023 11:11:01
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: R06_8.te             Time Period: 1 hours
Description: Impact at R10 from Elgin Rd


Road data, segment # 1: Elgin Road
----------------------------------
Car traffic volume  :   163 veh/TimePeriod
Medium truck volume :     4 veh/TimePeriod
Heavy truck volume  :    20 veh/TimePeriod
Posted speed limit  :    90 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Elgin Road
--------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  41.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: Elgin Road
-------------------------------

Source height = 1.81 m

ROAD (0.00 + 59.52 + 0.00) = 59.52 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.65  68.17   0.00  -7.21  -1.44   0.00   0.00   0.00  59.52
-------------------------------------------------------------------------------

Segment Leq : 59.52 dBA

Total Leq All Segments: 59.52 dBA

TOTAL Leq FROM ALL SOURCES:       59.52
```

```
STAMSON 5.0        NORMAL REPORT        Date: 30-01-2023 14:53:34
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r06_8.te             Time Period: 1 hours
Description: Peak Haul Route Impact on Elgin Rd (Evaluated at R07)

Road data, segment # 1: Elgin Road
----------------------------------
Car traffic volume  :   163 veh/TimePeriod
Medium truck volume :     4 veh/TimePeriod
Heavy truck volume  :    36 veh/TimePeriod
Posted speed limit  :    90 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Elgin Road
--------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  57.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: Elgin Road
-------------------------------

Source height = 2.05 m

ROAD (0.00 + 59.21 + 0.00) = 59.21 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.64  70.17   0.00  -9.53  -1.43   0.00   0.00   0.00  59.21
-------------------------------------------------------------------------------

Segment Leq : 59.21 dBA

Total Leq All Segments: 59.21 dBA

TOTAL Leq FROM ALL SOURCES:       59.21
```

```
STAMSON 5.0        NORMAL REPORT        Date: 30-01-2023 14:52:23
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: hr_dund.te           Time Period: 1 hours
Description: Peak Haul Route Impact on Dundas St - (Evaluated at R02)


Road data, segment # 1: Dundas St
---------------------------------
Car traffic volume  :   515 veh/TimePeriod
Medium truck volume :    11 veh/TimePeriod
Heavy truck volume  :    52 veh/TimePeriod
Posted speed limit  :    80 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Dundas St
-------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  45.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: Dundas St
------------------------------

Source height = 1.73 m

ROAD (0.00 + 62.26 + 0.00) = 62.26 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.65  71.59   0.00  -7.89  -1.44   0.00   0.00   0.00  62.26
-------------------------------------------------------------------------------

Segment Leq : 62.26 dBA

Total Leq All Segments: 62.26 dBA

TOTAL Leq FROM ALL SOURCES:       62.26
```

Appendix C
Stationary Noise Sample Calculations

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Source ID	Source Name	Point of Reception R01		Point of Reception R01g		Point of Reception R02		Point of Reception R03		Point of Reception R04		Point of Reception R05	
		Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day
D09_DRAGLINE	Drag Line	64	46	72	43	257	40	207	39	242	39	397	39
D09_HwyTrk	Highway Trucks	276	36	287	33	493	32	451	36	403	35	408	33
HwyTrk	Highway Trucks	605	28	584	27	817	25	724	29	706	29	632	27
D09_FELS	Loader - Shipping	191	40	190	37	381	32	242	41	237	41	303	35
D09_FELSP	Loader - Surge Pile	71	44	80	41	259	35	201	36	234	36	389	36
D09_Crusher	Processing Plant	177	44	177	41	363	43	226	55	226	55	307	52
Total Level [dBA]			**50**		**47**		**45**		**55**		**56**		**52**

Source ID	Source Name	Point of Reception R06		Point of Reception R06g		Point of Reception R07		Point of Reception R08		Point of Reception R09		Point of Reception R10	
		Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day
D09_DRAGLINE	Drag Line	341	38	327	37	482	38	501	37	640	34	673	34
D09_HwyTrk	Highway Trucks	161	35	148	35	284	40	299	37	435	34	425	37
HwyTrk	Highway Trucks	310	29	313	30	276	36	249	36	220	37	132	43
D09_FELS	Loader - Shipping	218	28	205	29	356	26	378	25	522	22	570	21
D09_FELSP	Loader - Surge Pile	338	36	324	35	479	35	498	34	639	31	673	31
D09_Crusher	Processing Plant	236	43	223	42	374	43	396	41	540	38	587	38
Total Level [dBA]			**45**		**45**		**46**		**45**		**43**		**45**

Source ID	Source Name	Point of Reception R11		Point of Reception R11g		Point of Reception R12		Point of Reception R12g		Point of Reception R13		Point of Reception R14	
		Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day
D09_DRAGLINE	Drag Line	786	33	774	32	603	35	597	35	1027	25	521	28
D09_HwyTrk	Highway Trucks	584	32	552	31	294	34	307	34	953	25	655	29
HwyTrk	Highway Trucks	233	35	227	34	112	40	131	38	938	21	904	26
D09_FELS	Loader - Shipping	710	21	699	20	535	21	533	21	1071	25	640	31
D09_FELSP	Loader - Surge Pile	788	30	776	29	606	32	600	32	1035	24	528	28
D09_Crusher	Processing Plant	725	38	715	36	549	47	547	47	1073	39	629	34
Total Level [dBA]			**42**		**40**		**48**		**48**		**40**		**38**

Receiver: R01

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	50

Receiver Name	Receiver ID	X	Y	Z
R01	R01	495236.77 m	4765075.95 m	280.50 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	47.1	0.0	-1.9	16.1	0.8	0.0	0.0	0.0	0.0	0.0	46
D09_HwyTrk	Highway Trucks	495462.7	4764982.3	272.4	0	76	19.9	A	58.8	0.0	-3.1	8.5	1.2	0.0	0.0	0.0	0.0	0.0	30
D09_HwyTrk	Highway Trucks	495487.0	4764887.7	272.4	0	76	19.9	A	60.9	0.0	-3.2	6.2	1.5	0.0	0.0	0.0	0.0	0.0	30
D09_HwyTrk	Highway Trucks	495435.9	4765046.9	272.4	0	76	16.6	A	57.1	0.0	-2.7	9.9	1.0	0.0	0.0	0.0	0.0	0.0	27
D09_HwyTrk	Highway Trucks	495417.7	4765078.2	272.4	0	76	14.6	A	56.2	0.0	-2.8	10.5	0.9	0.0	0.0	0.0	0.0	0.0	25
D09_HwyTrk	Highway Trucks	495569.1	4764744.8	272.4	0	76	21.8	A	64.4	0.0	-3.0	4.6	2.1	0.0	0.0	0.0	0.0	0.0	29
D09_HwyTrk	Highway Trucks	495508.9	4764819.3	272.4	0	76	16.3	A	62.5	0.0	-2.7	5.2	1.7	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495626.9	4764682.2	272.4	0	76	12.9	A	65.9	0.0	-3.2	4.4	2.4	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	66.9	0.0	-3.6	4.8	2.7	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495638.9	4764675.5	272.4	0	76	10.1	A	66.1	0.0	-3.2	4.5	2.5	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	66.4	0.0	-3.4	4.6	2.5	0.0	0.0	0.0	0.0	0.0	16
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	56.6	0.0	-2.7	9.2	1.0	0.0	0.0	0.0	0.0	0.0	40
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	48.0	0.0	-1.8	13.4	0.5	0.0	0.0	0.0	0.0	0.0	44
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	55.9	0.0	-2.7	20.1	1.0	0.0	0.0	0.0	0.0	0.0	44

Receiver: R01g

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	47

Receiver Name	Receiver ID	X	Y	Z
R01g	R01g	495241.98 m	4765048.94 m	277.90 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	48.2	0.0	-0.8	17.1	0.8	0.0	0.0	0.0	0.0	0.0	43
D09_HwyTrk	Highway Trucks	495462.7	4764982.3	272.4	0	76	19.9	A	58.3	0.0	-1.5	11.5	1.1	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495487.0	4764887.7	272.4	0	76	19.9	A	60.3	0.0	-1.3	8.8	1.4	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495435.9	4765046.9	272.4	0	76	16.6	A	56.8	0.0	-1.8	13.1	1.0	0.0	0.0	0.0	0.0	0.0	23
D09_HwyTrk	Highway Trucks	495569.1	4764744.8	272.4	0	76	21.8	A	64.0	0.0	-1.2	4.3	2.0	0.0	0.0	0.0	0.0	0.0	28
D09_HwyTrk	Highway Trucks	495417.3	4765079.5	272.4	0	76	15.0	A	56.0	0.0	-2.0	14.0	0.9	0.0	0.0	0.0	0.0	0.0	22
D09_HwyTrk	Highway Trucks	495503.1	4764831.8	272.4	0	76	12.7	A	61.6	0.0	-0.8	4.6	1.6	0.0	0.0	0.0	0.0	0.0	21
D09_HwyTrk	Highway Trucks	495508.6	4764819.8	272.4	0	76	8.9	A	61.9	0.0	-0.8	4.5	1.6	0.0	0.0	0.0	0.0	0.0	17
D09_HwyTrk	Highway Trucks	495514.0	4764808.1	272.4	0	76	12.6	A	62.2	0.0	-0.9	4.2	1.7	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495626.9	4764682.2	272.4	0	76	12.9	A	65.5	0.0	-1.4	4.3	2.3	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495665.4	4764678.2	275.4	0	76	7.8	A	66.0	0.0	-1.3	0.0	2.5	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495655.7	4764676.5	275.4	0	76	7.6	A	65.9	0.0	-1.4	0.0	2.4	0.0	0.0	0.0	0.0	0.0	16
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	56.6	0.0	-2.1	11.6	1.0	0.0	0.0	0.0	0.0	0.0	37
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	49.1	0.0	-0.9	14.5	0.5	0.0	0.0	0.0	0.0	0.0	41
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	56.0	0.0	-1.6	21.8	1.0	0.0	0.0	0.0	0.0	0.0	41

Receiver: R02

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	45

Receiver Name	Receiver ID	X	Y	Z
R02	R02	495061.55 m	4765195.85 m	280.66 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	59.2	0.0	0.1	7.2	2.2	0.0	0.0	0.0	0.0	0.0	40
D09_HwyTrk	Highway Trucks	495454.7	4765013.4	272.4	0	76	13.7	A	63.7	0.0	-2.3	4.8	2.0	0.0	0.0	0.0	0.0	0.0	21
D09_HwyTrk	Highway Trucks	495468.6	4764959.3	272.4	0	76	19.5	A	64.5	0.0	-2.5	4.8	2.1	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495486.4	4764890.2	272.4	0	76	17.3	A	65.4	0.0	-2.4	4.8	2.3	0.0	0.0	0.0	0.0	0.0	23
D09_HwyTrk	Highway Trucks	495496.1	4764852.1	272.4	0	76	13.9	A	65.9	0.0	-1.9	4.8	2.4	0.0	0.0	0.0	0.0	0.0	18
D09_HwyTrk	Highway Trucks	495569.1	4764744.8	272.4	0	76	21.8	A	67.6	0.0	-2.2	4.8	2.9	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495435.9	4765046.9	272.4	0	76	16.6	A	63.1	0.0	-2.1	4.8	1.9	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495419.2	4765072.4	272.4	0	76	12.3	A	62.6	0.0	-1.9	4.8	1.8	0.0	0.0	0.0	0.0	0.0	21
D09_HwyTrk	Highway Trucks	495513.2	4764810.0	272.4	0	76	13.5	A	66.5	0.0	-2.0	4.8	2.6	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	69.0	0.0	-2.4	0.0	3.3	0.0	0.0	0.0	0.0	0.0	16
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	62.6	0.0	-1.5	9.1	1.7	0.0	0.0	0.0	0.0	0.0	32
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	59.3	0.0	0.3	7.8	1.3	0.0	0.0	0.0	0.0	0.0	35
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	62.2	0.0	-1.4	13.1	1.8	0.0	0.0	0.0	0.0	0.0	43

Receiver: R03

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	55

Receiver Name	Receiver ID	X	Y	Z
R03	R03	495310.70 m	4765301.84 m	280.69 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	57.3	0.0	0.0	10.4	1.9	0.0	0.0	0.0	0.0	0.0	39
D09_HwyTrk	Highway Trucks	495452.0	4765024.2	272.4	0	76	10.5	A	60.9	0.0	-2.4	6.8	1.5	0.0	0.0	0.0	0.0	0.0	19
D09_HwyTrk	Highway Trucks	495463.2	4764980.3	272.4	0	76	19.0	A	62.0	0.0	-2.6	4.8	1.7	0.0	0.0	0.0	0.0	0.0	29
D09_HwyTrk	Highway Trucks	495486.1	4764891.1	272.4	0	76	20.2	A	64.0	0.0	-3.0	4.7	2.0	0.0	0.0	0.0	0.0	0.0	28
D09_HwyTrk	Highway Trucks	495432.6	4765050.8	272.4	0	76	15.5	A	59.9	0.0	-2.1	4.8	1.3	0.0	0.0	0.0	0.0	0.0	27
D09_HwyTrk	Highway Trucks	495447.3	4765033.5	272.4	0	76	10.1	A	60.6	0.0	-2.3	8.1	1.4	0.0	0.0	0.0	0.0	0.0	18
D09_HwyTrk	Highway Trucks	495417.3	4765079.5	272.4	0	76	15.0	A	58.8	0.0	-1.8	4.9	1.2	0.0	0.0	0.0	0.0	0.0	27
D09_HwyTrk	Highway Trucks	495536.5	4764779.9	272.4	0	76	17.4	A	66.1	0.0	-3.3	4.6	2.5	0.0	0.0	0.0	0.0	0.0	23
D09_HwyTrk	Highway Trucks	495562.5	4764752.0	272.4	0	76	13.3	A	66.6	0.0	-3.3	4.8	2.6	0.0	0.0	0.0	0.0	0.0	18
D09_HwyTrk	Highway Trucks	495593.7	4764718.4	272.4	0	76	18.5	A	67.2	0.0	-3.4	0.0	2.8	0.0	0.0	0.0	0.0	0.0	27
D09_HwyTrk	Highway Trucks	495508.5	4764820.2	272.4	0	76	16.5	A	65.3	0.0	-3.1	4.6	2.3	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495626.9	4764682.2	272.4	0	76	12.9	A	67.8	0.0	-3.5	1.9	2.9	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	68.3	0.0	-1.9	0.0	3.0	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	68.1	0.0	-3.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495675.9	4764682.3	275.4	0	76	8.9	A	68.1	0.0	-3.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495655.7	4764676.5	275.4	0	76	7.6	A	68.1	0.0	-3.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0	15
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	58.7	0.0	-1.5	4.9	1.2	0.0	0.0	0.0	0.0	0.0	41
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	57.0	0.0	0.3	9.3	1.1	0.0	0.0	0.0	0.0	0.0	36
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	58.1	0.0	-1.3	5.1	1.2	0.0	0.0	0.0	0.0	0.0	55

Receiver: R04
Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	56

Receiver Name	Receiver ID	X	Y	Z
R04	R04	495379.51 m	4765322.64 m	280.50 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	58.7	0.0	-0.1	8.8	2.1	0.0	0.0	0.0	0.0	0.0	39
D09_HwyTrk	Highway Trucks	495454.3	4765015.0	272.4	0	76	14.8	A	61.0	0.0	-2.6	5.7	1.5	0.0	0.0	0.0	0.0	0.0	25
D09_HwyTrk	Highway Trucks	495478.6	4764920.4	272.4	0	76	22.2	A	63.3	0.0	-3.1	4.7	1.9	0.0	0.0	0.0	0.0	0.0	31
D09_HwyTrk	Highway Trucks	495425.5	4765059.2	272.4	0	76	11.2	A	59.5	0.0	-2.2	4.8	1.3	0.0	0.0	0.0	0.0	0.0	23
D09_HwyTrk	Highway Trucks	495440.1	4765041.9	272.4	0	76	15.1	A	60.2	0.0	-2.4	9.5	1.4	0.0	0.0	0.0	0.0	0.0	22
D09_HwyTrk	Highway Trucks	495417.3	4765079.5	272.4	0	76	15.0	A	58.8	0.0	-2.0	4.9	1.2	0.0	0.0	0.0	0.0	0.0	28
D09_HwyTrk	Highway Trucks	495529.7	4764787.2	272.4	0	76	15.4	A	65.9	0.0	-3.5	4.8	2.4	0.0	0.0	0.0	0.0	0.0	21
D09_HwyTrk	Highway Trucks	495581.0	4764732.1	272.4	0	76	20.6	A	66.9	0.0	-3.7	4.8	2.7	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495508.5	4764820.2	272.4	0	76	16.5	A	65.3	0.0	-3.4	4.8	2.3	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495628.4	4764680.8	272.4	0	76	11.8	A	67.8	0.0	-3.3	0.0	2.9	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	68.0	0.0	-0.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495638.9	4764675.5	272.4	0	76	10.1	A	67.9	0.0	-2.9	0.0	2.9	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	68.0	0.0	-2.6	0.0	3.0	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495676.0	4764682.3	275.4	0	76	8.9	A	68.0	0.0	-2.6	0.0	3.0	0.0	0.0	0.0	0.0	0.0	16
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	58.5	0.0	-1.7	4.9	1.2	0.0	0.0	0.0	0.0	0.0	41
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	58.4	0.0	0.2	8.0	1.2	0.0	0.0	0.0	0.0	0.0	36
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	58.1	0.0	-1.4	5.0	1.2	0.0	0.0	0.0	0.0	0.0	55

Receiver: R05

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	52

Receiver Name	Receiver ID	X	Y	Z
R05	R05	495621.97 m	4765322.88 m	280.50 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	63.0	0.0	-1.9	4.7	2.9	0.0	0.0	0.0	0.0	0.0	39
D09_HwyTrk	Highway Trucks	495474.8	4764935.0	272.4	0	76	22.9	A	63.4	0.0	-1.6	4.8	1.9	0.0	0.0	0.0	0.0	0.0	30
D09_HwyTrk	Highway Trucks	495532.4	4764784.3	272.4	0	76	16.3	A	65.7	0.0	-2.4	4.8	2.4	0.0	0.0	0.0	0.0	0.0	21
D09_HwyTrk	Highway Trucks	495583.7	4764729.2	272.4	0	76	20.3	A	66.5	0.0	-2.3	4.8	2.6	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495436.8	4765045.9	272.4	0	76	16.3	A	61.5	0.0	-1.0	5.9	1.6	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495415.0	4765088.7	272.4	0	76	11.0	A	60.9	0.0	-1.1	5.1	1.5	0.0	0.0	0.0	0.0	0.0	20
D09_HwyTrk	Highway Trucks	495418.9	4765073.4	272.4	0	76	12.8	A	61.2	0.0	-1.1	7.7	1.5	0.0	0.0	0.0	0.0	0.0	19
D09_HwyTrk	Highway Trucks	495508.5	4764820.2	272.4	0	76	16.5	A	65.2	0.0	-2.4	4.8	2.3	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495626.9	4764682.2	272.4	0	76	12.9	A	67.1	0.0	-2.4	4.8	2.7	0.0	0.0	0.0	0.0	0.0	16
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	60.6	0.0	-0.4	7.0	1.5	0.0	0.0	0.0	0.0	0.0	35
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	62.8	0.0	-1.8	4.7	1.8	0.0	0.0	0.0	0.0	0.0	36
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	60.7	0.0	-0.6	4.8	1.6	0.0	0.0	0.0	0.0	0.0	52

Receiver: R06

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	45

Receiver Name	Receiver ID	X	Y	Z
R06	R06	495622.91 m	4764994.84 m	278.95 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	61.6	0.0	-1.5	7.0	2.7	0.0	0.0	0.0	0.0	0.0	38
D09_HwyTrk	Highway Trucks	495451.8	4765024.7	272.4	0	76	10.1	A	55.8	0.0	-1.0	10.7	0.9	0.0	0.0	0.0	0.0	0.0	19
D09_HwyTrk	Highway Trucks	495461.9	4764985.5	272.4	0	76	18.5	A	55.2	0.0	-1.0	11.2	0.8	0.0	0.0	0.0	0.0	0.0	28
D09_HwyTrk	Highway Trucks	495473.6	4764939.8	272.4	0	76	13.8	A	55.0	0.0	-0.9	11.3	0.8	0.0	0.0	0.0	0.0	0.0	23
D09_HwyTrk	Highway Trucks	495482.8	4764904.2	272.4	0	76	17.0	A	55.5	0.0	-1.1	11.1	0.9	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495489.7	4764877.1	272.4	0	76	8.0	A	56.0	0.0	-1.1	10.7	0.9	0.0	0.0	0.0	0.0	0.0	17
D09_HwyTrk	Highway Trucks	495491.4	4764870.6	272.4	0	76	8.6	A	56.2	0.0	-1.1	10.6	0.9	0.0	0.0	0.0	0.0	0.0	18
D09_HwyTrk	Highway Trucks	495493.4	4764862.6	272.4	0	76	9.7	A	56.4	0.0	-1.2	10.5	0.9	0.0	0.0	0.0	0.0	0.0	19
D09_HwyTrk	Highway Trucks	495495.5	4764854.6	272.4	0	76	8.7	A	56.6	0.0	-1.2	10.3	1.0	0.0	0.0	0.0	0.0	0.0	18
D09_HwyTrk	Highway Trucks	495497.8	4764845.7	272.4	0	76	10.4	A	56.8	0.0	-1.2	10.1	1.0	0.0	0.0	0.0	0.0	0.0	19
D09_HwyTrk	Highway Trucks	495539.9	4764776.2	272.4	0	76	18.1	A	58.4	0.0	-1.5	9.8	1.2	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495591.2	4764721.1	272.4	0	76	19.3	A	59.8	0.0	-1.9	9.7	1.3	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495435.5	4765047.5	272.4	0	76	14.2	A	56.8	0.0	-0.8	9.8	1.0	0.0	0.0	0.0	0.0	0.0	23
D09_HwyTrk	Highway Trucks	495447.3	4765033.5	272.4	0	76	10.1	A	56.1	0.0	-1.0	10.4	0.9	0.0	0.0	0.0	0.0	0.0	19
D09_HwyTrk	Highway Trucks	495502.5	4764833.1	272.4	0	76	12.0	A	57.1	0.0	-1.2	9.9	1.0	0.0	0.0	0.0	0.0	0.0	21
D09_HwyTrk	Highway Trucks	495511.8	4764812.9	272.4	0	76	14.6	A	57.6	0.0	-1.3	9.7	1.1	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495627.7	4764681.4	272.4	0	76	12.3	A	60.9	0.0	-2.2	9.5	1.5	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	60.7	0.0	0.4	7.8	1.5	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	61.1	0.0	-2.3	9.1	1.5	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495639.4	4764675.5	272.4	0	76	9.6	A	61.1	0.0	-2.4	9.5	1.5	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495675.9	4764682.3	275.4	0	76	8.9	A	61.0	0.0	-2.2	9.1	1.5	0.0	0.0	0.0	0.0	0.0	15
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	57.8	0.0	-0.2	16.9	1.1	0.0	0.0	0.0	0.0	0.0	28
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	61.6	0.0	-1.5	6.4	1.6	0.0	0.0	0.0	0.0	0.0	36
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	58.4	0.0	0.0	15.9	1.3	0.0	0.0	0.0	0.0	0.0	43

Receiver: R06g
Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	45

Receiver Name	Receiver ID	X	Y	Z
R06g	R06g	495607.89 m	4764993.07 m	279.23 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	61.3	0.0	-1.9	8.9	2.6	0.0	0.0	0.0	0.0	0.0	37
D09_HwyTrk	Highway Trucks	495456.8	4765005.3	272.4	0	76	17.0	A	54.6	0.0	-1.4	12.3	0.8	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495469.3	4764956.8	272.4	0	76	17.0	A	54.1	0.0	-1.5	12.7	0.7	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495480.9	4764911.5	272.4	0	76	16.4	A	54.6	0.0	-1.7	12.6	0.8	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495492.7	4764865.4	272.4	0	76	17.1	A	55.7	0.0	-1.7	11.8	0.9	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495521.1	4764796.4	272.4	0	76	9.9	A	57.7	0.0	-1.6	10.2	1.1	0.0	0.0	0.0	0.0	0.0	18
D09_HwyTrk	Highway Trucks	495528.1	4764788.9	272.4	0	76	10.3	A	57.8	0.0	-1.5	10.0	1.1	0.0	0.0	0.0	0.0	0.0	18
D09_HwyTrk	Highway Trucks	495534.5	4764782.0	272.4	0	76	9.0	A	58.0	0.0	-1.5	9.8	1.1	0.0	0.0	0.0	0.0	0.0	17
D09_HwyTrk	Highway Trucks	495546.5	4764769.1	272.4	0	76	14.4	A	58.3	0.0	-1.5	9.4	1.1	0.0	0.0	0.0	0.0	0.0	23
D09_HwyTrk	Highway Trucks	495589.0	4764723.5	272.4	0	76	19.7	A	59.6	0.0	-1.7	8.7	1.3	0.0	0.0	0.0	0.0	0.0	27
D09_HwyTrk	Highway Trucks	495425.0	4765059.8	272.4	0	76	10.6	A	56.8	0.0	-1.2	10.8	1.0	0.0	0.0	0.0	0.0	0.0	19
D09_HwyTrk	Highway Trucks	495440.7	4765041.2	272.4	0	76	14.8	A	55.8	0.0	-1.5	11.5	0.9	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495506.7	4764824.1	272.4	0	76	15.5	A	56.9	0.0	-1.7	11.0	1.0	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495516.0	4764803.9	272.4	0	76	9.4	A	57.5	0.0	-1.7	10.5	1.0	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495626.9	4764682.2	272.4	0	76	12.9	A	60.9	0.0	-2.1	8.4	1.5	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	60.8	0.0	0.0	6.6	1.5	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	61.1	0.0	-2.1	7.8	1.5	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495638.9	4764675.5	272.4	0	76	10.1	A	61.1	0.0	-2.1	8.3	1.5	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495675.9	4764682.3	275.4	0	76	8.9	A	61.1	0.0	-2.0	7.8	1.5	0.0	0.0	0.0	0.0	0.0	16
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	57.2	0.0	-0.5	17.4	1.1	0.0	0.0	0.0	0.0	0.0	29
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	61.2	0.0	-1.9	7.8	1.5	0.0	0.0	0.0	0.0	0.0	35
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	58.0	0.0	-0.3	16.8	1.2	0.0	0.0	0.0	0.0	0.0	42

Receiver: R07
Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	46

Receiver Name	Receiver ID	X	Y	Z
R07	R07	495761.95 m	4764967.76 m	283.78 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	64.7	0.0	-2.2	4.7	3.3	0.0	0.0	0.0	0.0	0.0	38
D09_HwyTrk	Highway Trucks	495452.2	4765023.2	272.4	0	76	11.2	A	61.0	0.0	-1.9	5.4	1.5	0.0	0.0	0.0	0.0	0.0	21
D09_HwyTrk	Highway Trucks	495461.1	4764988.6	272.4	0	76	17.7	A	60.6	0.0	-1.8	5.4	1.4	0.0	0.0	0.0	0.0	0.0	28
D09_HwyTrk	Highway Trucks	495470.0	4764954.0	272.4	0	76	11.2	A	60.3	0.0	-1.9	4.8	1.4	0.0	0.0	0.0	0.0	0.0	22
D09_HwyTrk	Highway Trucks	495485.4	4764894.0	272.4	0	76	20.4	A	60.1	0.0	-2.5	0.0	1.4	0.0	0.0	0.0	0.0	0.0	37
D09_HwyTrk	Highway Trucks	495523.9	4764793.4	272.4	0	76	12.5	A	60.4	0.0	-2.5	0.0	1.4	0.0	0.0	0.0	0.0	0.0	29
D09_HwyTrk	Highway Trucks	495563.3	4764751.1	272.4	0	76	19.9	A	60.4	0.0	-2.4	4.8	1.4	0.0	0.0	0.0	0.0	0.0	31
D09_HwyTrk	Highway Trucks	495608.5	4764702.5	272.4	0	76	15.4	A	60.7	0.0	-2.3	4.8	1.5	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495508.5	4764820.2	272.4	0	76	16.5	A	60.4	0.0	-2.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0	33
D09_HwyTrk	Highway Trucks	495435.9	4765046.9	272.4	0	76	16.6	A	61.5	0.0	-1.7	5.1	1.6	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495419.7	4765070.1	272.4	0	76	10.0	A	62.1	0.0	-1.6	6.2	1.7	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	59.0	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495626.9	4764682.2	272.4	0	76	12.9	A	61.0	0.0	-2.3	4.8	1.5	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495751.6	4764725.8	279.4	0	76	9.0	A	58.7	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495765.0	4764730.1	279.8	0	76	8.5	A	58.5	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495758.3	4764728.4	279.6	0	76	8.3	A	58.6	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	60.7	0.0	-1.8	4.8	1.5	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495638.9	4764675.5	272.4	0	76	10.1	A	61.0	0.0	-2.2	4.8	1.5	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495675.9	4764682.3	275.4	0	76	8.9	A	60.5	0.0	-1.7	4.8	1.4	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495751.3	4764710.5	279.5	0	76	6.9	A	59.2	0.0	0.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495655.7	4764676.5	275.4	0	76	7.6	A	60.8	0.0	-2.0	4.8	1.5	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495648.9	4764675.9	272.4	0	76	6.6	A	60.9	0.0	-2.1	4.8	1.5	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495729.1	4764703.2	280.0	0	76	5.2	A	59.5	0.0	-0.1	0.0	1.3	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495744.3	4764708.2	279.9	0	76	4.9	A	59.3	0.0	0.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495681.3	4764684.4	275.5	0	76	5.8	A	60.4	0.0	-1.6	4.8	1.4	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495726.2	4764702.0	279.8	0	76	4.9	A	59.6	0.0	-0.2	0.0	1.3	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495660.6	4764676.9	275.4	0	76	6.1	A	60.8	0.0	-1.9	4.8	1.5	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495720.6	4764699.8	279.3	0	76	5.0	A	59.7	0.0	-0.5	0.0	1.3	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495707.4	4764694.6	278.0	0	76	5.1	A	59.9	0.0	-1.1	0.0	1.3	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495710.4	4764695.8	278.3	0	76	4.9	A	59.8	0.0	-1.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495687.3	4764686.8	276.1	0	76	5.3	A	60.3	0.0	-1.5	4.8	1.4	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495723.4	4764700.9	279.5	0	76	4.6	A	59.6	0.0	-0.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495737.3	4764706.0	280.4	0	76	4.3	A	59.4	0.0	0.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495717.8	4764698.7	279.0	0	76	4.6	A	59.7	0.0	-0.6	0.0	1.3	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495701.9	4764692.5	277.5	0	76	4.8	A	60.0	0.0	-1.3	4.7	1.4	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495694.6	4764689.6	276.8	0	76	4.6	A	60.1	0.0	-1.5	4.8	1.4	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495705.3	4764693.8	277.8	0	76	1.2	A	59.9	0.0	-1.2	0.0	1.3	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495715.2	4764697.7	278.8	0	76	4.1	A	59.8	0.0	-0.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495684.4	4764685.6	275.8	0	76	4.6	A	60.3	0.0	-1.6	4.8	1.4	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495741.7	4764707.4	280.3	0	76	3.6	A	59.3	0.0	0.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495733.1	4764704.6	280.3	0	76	3.7	A	59.5	0.0	0.1	0.0	1.3	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495712.9	4764696.8	278.5	0	76	3.9	A	59.8	0.0	-0.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495735.1	4764705.3	280.4	0	76	2.8	A	59.4	0.0	0.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495731.3	4764704.0	280.2	0	76	1.5	A	59.5	0.0	0.1	0.0	1.3	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495748.4	4764709.5	279.4	0	76	0.6	A	59.3	0.0	0.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	15

Receiver: R07
Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	46

Receiver Name	Receiver ID	X	Y	Z
R07	R07	495761.95 m	4764967.76 m	283.78 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
HwyTrk	Highway Trucks	495740.1	4764706.9	280.4	0	76	0.6	A	59.4	0.0	0.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	15
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	62.0	0.0	-0.7	15.4	1.6	0.0	0.0	0.0	0.0	0.0	26
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	64.6	0.0	-2.1	4.7	2.0	0.0	0.0	0.0	0.0	0.0	35
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	62.5	0.0	-1.1	12.0	1.8	0.0	0.0	0.0	0.0	0.0	43

Receiver: R08

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	45

Receiver Name	Receiver ID	X	Y	Z
R08	R08	495772.53 m	4764936.86 m	281.30 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	65.0	0.0	-2.1	4.7	3.4	0.0	0.0	0.0	0.0	0.0	37
D09_HwyTrk	Highway Trucks	495456.2	4765007.6	272.4	0	76	16.6	A	61.2	0.0	-1.8	8.0	1.5	0.0	0.0	0.0	0.0	0.0	23
D09_HwyTrk	Highway Trucks	495471.2	4764949.3	272.4	0	76	18.8	A	60.6	0.0	-2.4	4.7	1.4	0.0	0.0	0.0	0.0	0.0	30
D09_HwyTrk	Highway Trucks	495489.8	4764876.7	272.4	0	76	18.8	A	60.2	0.0	-2.4	4.7	1.4	0.0	0.0	0.0	0.0	0.0	30
D09_HwyTrk	Highway Trucks	495560.0	4764754.6	272.4	0	76	20.9	A	59.9	0.0	-2.3	4.8	1.4	0.0	0.0	0.0	0.0	0.0	33
D09_HwyTrk	Highway Trucks	495611.3	4764699.5	272.4	0	76	14.3	A	60.2	0.0	-2.1	4.8	1.4	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495508.5	4764820.2	272.4	0	76	16.5	A	60.2	0.0	-2.4	4.7	1.4	0.0	0.0	0.0	0.0	0.0	28
D09_HwyTrk	Highway Trucks	495426.2	4765058.4	272.4	0	76	11.9	A	62.3	0.0	-1.7	6.9	1.7	0.0	0.0	0.0	0.0	0.0	18
D09_HwyTrk	Highway Trucks	495440.9	4765041.1	272.4	0	76	14.8	A	61.8	0.0	-1.9	7.6	1.6	0.0	0.0	0.0	0.0	0.0	21
D09_HwyTrk	Highway Trucks	495419.8	4765069.9	272.4	0	76	10.7	A	62.5	0.0	-1.7	8.4	1.7	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	57.9	0.0	0.5	0.0	1.1	0.0	0.0	0.0	0.0	0.0	27
HwyTrk	Highway Trucks	495626.9	4764682.2	272.4	0	76	12.9	A	60.4	0.0	-2.1	4.8	1.4	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495751.5	4764725.8	279.4	0	76	9.1	A	57.5	0.0	0.5	0.0	1.1	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495765.0	4764730.1	279.8	0	76	8.5	A	57.3	0.0	0.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495758.3	4764728.4	279.6	0	76	8.3	A	57.4	0.0	0.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	59.9	0.0	-1.6	4.7	1.3	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495638.9	4764675.5	272.4	0	76	10.1	A	60.4	0.0	-2.0	4.8	1.4	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495675.9	4764682.3	275.4	0	76	8.9	A	59.7	0.0	-1.5	4.7	1.3	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495751.3	4764710.5	279.5	0	76	6.9	A	58.1	0.0	0.5	0.0	1.1	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495655.7	4764676.5	275.4	0	76	7.6	A	60.1	0.0	-1.8	4.7	1.4	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495744.3	4764708.2	279.9	0	76	4.9	A	58.2	0.0	0.5	0.0	1.1	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495729.1	4764703.2	280.0	0	76	5.2	A	58.5	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495648.9	4764675.9	272.4	0	76	6.6	A	60.2	0.0	-1.9	4.8	1.4	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495726.2	4764702.0	279.8	0	76	4.9	A	58.6	0.0	-0.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495720.6	4764699.8	279.3	0	76	5.0	A	58.7	0.0	-0.4	4.6	1.2	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495681.3	4764684.4	275.5	0	76	5.8	A	59.6	0.0	-1.4	4.7	1.3	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495707.4	4764694.6	278.0	0	76	5.1	A	59.0	0.0	-0.9	4.7	1.2	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495660.6	4764676.9	275.4	0	76	6.1	A	60.0	0.0	-1.7	4.7	1.4	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495737.3	4764706.0	280.4	0	76	4.3	A	58.4	0.0	0.5	0.0	1.2	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495710.4	4764695.8	278.3	0	76	4.9	A	58.9	0.0	-0.7	4.6	1.2	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495724.0	4764701.2	279.6	0	76	1.6	A	58.6	0.0	-0.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495717.8	4764698.7	279.0	0	76	4.6	A	58.8	0.0	-0.4	4.6	1.2	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495687.3	4764686.8	276.1	0	76	5.3	A	59.4	0.0	-1.3	4.7	1.3	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495701.9	4764692.5	277.5	0	76	4.8	A	59.1	0.0	-1.1	4.7	1.2	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495704.6	4764693.5	277.8	0	76	4.4	A	59.1	0.0	-1.0	4.7	1.2	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495694.6	4764689.6	276.8	0	76	4.6	A	59.3	0.0	-1.3	4.7	1.3	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495715.2	4764697.7	278.8	0	76	4.1	A	58.8	0.0	-0.6	4.6	1.2	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495741.7	4764707.4	280.3	0	76	3.6	A	58.3	0.0	0.5	0.0	1.1	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495733.1	4764704.6	280.3	0	76	3.7	A	58.4	0.0	0.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495684.4	4764685.6	275.8	0	76	4.6	A	59.5	0.0	-1.5	4.7	1.3	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495712.9	4764696.8	278.5	0	76	3.9	A	58.9	0.0	-0.7	4.6	1.2	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495697.1	4764690.6	277.0	0	76	4.0	A	59.2	0.0	-1.2	4.7	1.3	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495690.0	4764687.8	276.3	0	76	3.8	A	59.4	0.0	-1.4	4.7	1.3	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495735.1	4764705.3	280.4	0	76	2.8	A	58.4	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495692.2	4764688.7	276.5	0	76	3.7	A	59.3	0.0	-1.3	4.7	1.3	0.0	0.0	0.0	0.0	0.0	15

Receiver: R08

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	45

Receiver Name	Receiver ID	X	Y	Z
R08	R08	495772.53 m	4764936.86 m	281.30 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
HwyTrk	Highway Trucks	495645.3	4764675.6	272.4	0	76	4.3	A	60.3	0.0	-2.0	4.8	1.4	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495651.8	4764676.1	273.5	0	76	4.1	A	60.2	0.0	-1.9	4.8	1.4	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495731.3	4764704.0	280.2	0	76	1.5	A	58.5	0.0	0.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495748.4	4764709.5	279.4	0	76	0.6	A	58.2	0.0	0.5	0.0	1.1	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495740.1	4764706.9	280.4	0	76	0.6	A	58.3	0.0	0.5	0.0	1.1	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495739.1	4764706.6	280.4	0	76	0.2	A	58.3	0.0	0.5	0.0	1.1	0.0	0.0	0.0	0.0	0.0	16
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	62.5	0.0	-0.6	15.5	1.7	0.0	0.0	0.0	0.0	0.0	25
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	64.9	0.0	-2.0	4.7	2.1	0.0	0.0	0.0	0.0	0.0	34
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	62.9	0.0	-0.8	12.7	1.9	0.0	0.0	0.0	0.0	0.0	41

Receiver: R09
Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	43

Receiver Name	Receiver ID	X	Y	Z
R09	R09	495881.10 m	4764831.73 m	279.38 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	67.1	0.0	-0.6	4.0	4.0	0.0	0.0	0.0	0.0	0.0	34
D09_HwyTrk	Highway Trucks	495569.1	4764744.8	272.4	0	76	21.8	A	61.2	0.0	-0.7	4.5	1.5	0.0	0.0	0.0	0.0	0.0	31
D09_HwyTrk	Highway Trucks	495474.8	4764935.0	272.4	0	76	22.9	A	63.4	0.0	-0.9	4.3	1.9	0.0	0.0	0.0	0.0	0.0	30
D09_HwyTrk	Highway Trucks	495508.5	4764820.2	272.4	0	76	16.5	A	62.4	0.0	-0.9	4.3	1.7	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495432.2	4765051.3	272.4	0	76	15.3	A	65.0	0.0	-0.6	4.8	2.2	0.0	0.0	0.0	0.0	0.0	19
D09_HwyTrk	Highway Trucks	495446.8	4765034.0	272.4	0	76	10.6	A	64.6	0.0	-0.6	4.2	2.1	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	55.8	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	29
HwyTrk	Highway Trucks	495765.0	4764730.1	279.8	0	76	8.5	A	54.8	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	27
HwyTrk	Highway Trucks	495751.5	4764725.8	279.4	0	76	9.1	A	55.5	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	27
HwyTrk	Highway Trucks	495758.3	4764728.4	279.6	0	76	8.3	A	55.1	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495626.9	4764682.2	272.4	0	76	12.9	A	60.4	0.0	-0.5	5.0	1.4	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495751.3	4764710.5	279.5	0	76	6.9	A	56.0	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	59.4	0.0	0.2	4.2	1.3	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495638.9	4764675.5	272.4	0	76	10.1	A	60.2	0.0	-0.4	5.1	1.4	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495675.9	4764682.3	275.4	0	76	8.9	A	59.1	0.0	0.3	4.3	1.2	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495744.3	4764708.2	279.9	0	76	4.9	A	56.3	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495729.1	4764703.2	280.0	0	76	5.2	A	57.0	0.0	1.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495655.7	4764676.5	275.4	0	76	7.6	A	59.7	0.0	-0.1	4.2	1.3	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495726.2	4764702.0	279.8	0	76	4.9	A	57.1	0.0	1.4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495737.3	4764706.0	280.4	0	76	4.3	A	56.6	0.0	1.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495720.6	4764699.8	279.3	0	76	5.0	A	57.4	0.0	1.2	0.0	1.0	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495723.4	4764700.9	279.5	0	76	4.6	A	57.2	0.0	1.4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495707.4	4764694.6	278.0	0	76	5.1	A	57.9	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495717.8	4764698.7	279.0	0	76	4.6	A	57.5	0.0	1.2	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495741.7	4764707.4	280.3	0	76	3.6	A	56.4	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495710.4	4764695.8	278.3	0	76	4.9	A	57.8	0.0	1.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495681.3	4764684.4	275.5	0	76	5.8	A	58.9	0.0	0.4	4.3	1.2	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495733.1	4764704.6	280.3	0	76	3.7	A	56.8	0.0	1.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495648.9	4764675.9	272.4	0	76	6.6	A	59.9	0.0	-0.3	5.3	1.3	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495701.9	4764692.5	277.5	0	76	4.8	A	58.1	0.0	0.9	3.9	1.1	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495687.3	4764686.8	276.1	0	76	5.3	A	58.7	0.0	0.6	4.1	1.2	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495715.2	4764697.7	278.8	0	76	4.1	A	57.6	0.0	1.2	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495660.6	4764676.9	275.4	0	76	6.1	A	59.6	0.0	0.1	4.2	1.3	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495704.6	4764693.5	277.8	0	76	4.4	A	58.0	0.0	0.9	3.9	1.1	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495694.6	4764689.6	276.8	0	76	4.6	A	58.4	0.0	0.6	3.9	1.2	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495712.9	4764696.8	278.5	0	76	3.9	A	57.7	0.0	1.2	0.0	1.1	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495735.1	4764705.3	280.4	0	76	2.8	A	56.7	0.0	1.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495684.4	4764685.6	275.8	0	76	4.6	A	58.8	0.0	0.4	4.3	1.2	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495697.1	4764690.6	277.0	0	76	4.0	A	58.3	0.0	0.8	3.9	1.1	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495699.4	4764691.5	277.3	0	76	3.9	A	58.2	0.0	0.8	3.9	1.1	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495692.2	4764688.7	276.5	0	76	3.7	A	58.5	0.0	0.7	3.9	1.2	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495731.3	4764704.0	280.2	0	76	1.5	A	56.9	0.0	1.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495748.4	4764709.5	279.4	0	76	0.6	A	56.1	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495740.1	4764706.9	280.4	0	76	0.6	A	56.5	0.0	1.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495739.1	4764706.6	280.4	0	76	0.2	A	56.5	0.0	1.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	17

Receiver: R09
Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	43

Receiver Name	Receiver ID	X	Y	Z
R09	R09	495881.10 m	4764831.73 m	279.38 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
HwyTrk	Highway Trucks	495747.5	4764709.3	279.4	0	76	-1.2	A	56.2	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	16
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	65.4	0.0	0.2	14.1	2.2	0.0	0.0	0.0	0.0	0.0	22
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	67.1	0.0	-0.8	4.0	2.5	0.0	0.0	0.0	0.0	0.0	31
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	65.7	0.0	0.4	11.4	2.5	0.0	0.0	0.0	0.0	0.0	38

Receiver: R10

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	45

Receiver Name	Receiver ID	X	Y	Z
R10	R10	495840.50 m	4764697.89 m	280.71 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	67.6	0.0	-1.1	4.2	4.1	0.0	0.0	0.0	0.0	0.0	34
D09_HwyTrk	Highway Trucks	495543.5	4764772.4	272.4	0	76	18.8	A	60.7	0.0	-1.2	0.0	1.5	0.0	0.0	0.0	0.0	0.0	33
D09_HwyTrk	Highway Trucks	495594.8	4764717.3	272.4	0	76	18.8	A	58.8	0.0	-0.8	4.3	1.2	0.0	0.0	0.0	0.0	0.0	31
D09_HwyTrk	Highway Trucks	495474.8	4764935.0	272.4	0	76	22.9	A	63.8	0.0	-1.4	4.4	2.0	0.0	0.0	0.0	0.0	0.0	30
D09_HwyTrk	Highway Trucks	495503.5	4764830.9	272.4	0	76	13.2	A	62.2	0.0	-1.3	2.4	1.7	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495512.9	4764810.7	272.4	0	76	13.7	A	61.8	0.0	-1.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
D09_HwyTrk	Highway Trucks	495425.4	4765059.3	272.4	0	76	11.1	A	65.8	0.0	-1.4	4.3	2.4	0.0	0.0	0.0	0.0	0.0	15
D09_HwyTrk	Highway Trucks	495440.1	4765042.0	272.4	0	76	15.1	A	65.5	0.0	-1.3	4.3	2.3	0.0	0.0	0.0	0.0	0.0	20
D09_HwyTrk	Highway Trucks	495419.1	4765072.6	272.4	0	76	12.4	A	66.0	0.0	-1.3	4.3	2.5	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	50.3	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	35
HwyTrk	Highway Trucks	495765.0	4764730.1	279.8	0	76	8.5	A	49.3	0.0	1.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	33
HwyTrk	Highway Trucks	495751.5	4764725.8	279.4	0	76	9.1	A	50.4	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	32
HwyTrk	Highway Trucks	495758.3	4764728.4	279.6	0	76	8.3	A	49.9	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	32
HwyTrk	Highway Trucks	495751.3	4764710.5	279.5	0	76	6.9	A	50.1	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	31
HwyTrk	Highway Trucks	495626.9	4764682.2	272.4	0	76	12.9	A	57.6	0.0	0.4	4.3	1.1	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	55.8	0.0	1.5	4.7	0.9	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495744.3	4764708.2	279.9	0	76	4.9	A	50.7	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	28
HwyTrk	Highway Trucks	495675.9	4764682.3	275.4	0	76	8.9	A	55.4	0.0	1.5	4.9	0.8	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495729.1	4764703.2	280.0	0	76	5.2	A	51.9	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	27
HwyTrk	Highway Trucks	495638.9	4764675.5	272.4	0	76	10.1	A	57.2	0.0	1.0	7.2	1.0	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495737.3	4764706.0	280.4	0	76	4.3	A	51.3	0.0	1.3	0.0	0.6	0.0	0.0	0.0	0.0	0.0	27
HwyTrk	Highway Trucks	495726.2	4764702.0	279.8	0	76	4.9	A	52.2	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495741.7	4764707.4	280.3	0	76	3.6	A	50.9	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495720.6	4764699.8	279.3	0	76	5.0	A	52.6	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495723.4	4764700.9	279.5	0	76	4.6	A	52.4	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495733.1	4764704.6	280.3	0	76	3.7	A	51.6	0.0	1.3	0.0	0.6	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495717.8	4764698.7	279.0	0	76	4.6	A	52.8	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495707.4	4764694.6	278.0	0	76	5.1	A	53.5	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495710.4	4764695.8	278.3	0	76	4.9	A	53.3	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495735.1	4764705.3	280.4	0	76	2.8	A	51.5	0.0	1.3	0.0	0.6	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495655.7	4764676.5	275.4	0	76	7.6	A	56.4	0.0	1.5	3.9	0.9	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495715.2	4764697.7	278.8	0	76	4.1	A	53.0	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495701.9	4764692.5	277.5	0	76	4.8	A	53.8	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495704.6	4764693.5	277.8	0	76	4.4	A	53.7	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495712.9	4764696.8	278.5	0	76	3.9	A	53.1	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495681.3	4764684.4	275.5	0	76	5.8	A	55.1	0.0	1.5	4.7	0.8	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495687.3	4764686.8	276.1	0	76	5.3	A	54.7	0.0	1.5	3.8	0.8	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495694.6	4764689.6	276.8	0	76	4.6	A	54.3	0.0	1.4	3.7	0.8	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495748.4	4764709.5	279.4	0	76	0.6	A	50.4	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495660.6	4764676.9	275.4	0	76	6.1	A	56.2	0.0	1.5	4.3	0.9	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495699.4	4764691.5	277.3	0	76	3.9	A	54.0	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495697.1	4764690.6	277.0	0	76	4.0	A	54.1	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495731.3	4764704.0	280.2	0	76	1.5	A	51.8	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495684.4	4764685.6	275.8	0	76	4.6	A	54.9	0.0	1.5	4.2	0.8	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495740.1	4764706.9	280.4	0	76	0.6	A	51.1	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	23

Receiver: R10

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	45

Receiver Name	Receiver ID	X	Y	Z
R10	R10	495840.50 m	4764697.89 m	280.71 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
HwyTrk	Highway Trucks	495692.2	4764688.7	276.5	0	76	3.7	A	54.4	0.0	1.4	3.7	0.8	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495690.0	4764687.8	276.3	0	76	3.8	A	54.6	0.0	1.5	3.7	0.8	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495739.1	4764706.6	280.4	0	76	0.2	A	51.2	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495747.5	4764709.3	279.4	0	76	-1.2	A	50.4	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495746.9	4764709.1	279.5	0	76	-3.0	A	50.5	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495746.4	4764708.9	279.6	0	76	-3.7	A	50.5	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495746.0	4764708.8	279.7	0	76	-3.8	A	50.6	0.0	1.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	19
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	66.1	0.0	-1.0	15.0	2.3	0.0	0.0	0.0	0.0	0.0	21
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	67.6	0.0	-1.2	4.2	2.6	0.0	0.0	0.0	0.0	0.0	31
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	66.4	0.0	-0.9	12.2	2.6	0.0	0.0	0.0	0.0	0.0	38

Receiver: R11

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	42

Receiver Name	Receiver ID	X	Y	Z
R11	R11	495780.11 m	4764474.61 m	283.19 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	68.9	0.0	-2.8	4.8	4.5	0.0	0.0	0.0	0.0	0.0	33
D09_HwyTrk	Highway Trucks	495569.1	4764744.8	272.4	0	76	21.8	A	61.7	0.0	-1.6	7.3	1.6	0.0	0.0	0.0	0.0	0.0	28
D09_HwyTrk	Highway Trucks	495474.8	4764935.0	272.4	0	76	22.9	A	65.8	0.0	-2.7	4.7	2.4	0.0	0.0	0.0	0.0	0.0	28
D09_HwyTrk	Highway Trucks	495508.5	4764820.2	272.4	0	76	16.5	A	63.9	0.0	-2.3	4.9	2.0	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495429.7	4765054.3	272.4	0	76	14.2	A	67.6	0.0	-3.0	4.5	2.9	0.0	0.0	0.0	0.0	0.0	18
D09_HwyTrk	Highway Trucks	495444.3	4765037.0	272.4	0	76	12.9	A	67.3	0.0	-2.9	4.5	2.8	0.0	0.0	0.0	0.0	0.0	17
D09_HwyTrk	Highway Trucks	495417.5	4765079.0	272.4	0	76	14.9	A	68.0	0.0	-3.1	4.5	3.0	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	58.8	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495751.5	4764725.8	279.4	0	76	9.1	A	59.1	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495765.0	4764730.1	279.8	0	76	8.5	A	59.2	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495758.3	4764728.4	279.6	0	76	8.3	A	59.1	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495751.3	4764710.5	279.5	0	76	6.9	A	58.5	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495707.4	4764694.6	278.0	0	76	5.1	A	58.3	0.0	0.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495729.1	4764703.2	280.0	0	76	5.2	A	58.4	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495720.6	4764699.8	279.3	0	76	5.0	A	58.3	0.0	0.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495710.4	4764695.8	278.3	0	76	4.9	A	58.3	0.0	0.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495726.2	4764702.0	279.8	0	76	4.9	A	58.4	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495744.3	4764708.2	279.9	0	76	4.9	A	58.5	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495701.9	4764692.5	277.5	0	76	4.8	A	58.3	0.0	0.4	4.4	1.1	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495694.6	4764689.6	276.8	0	76	4.6	A	58.3	0.0	0.4	5.0	1.1	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495717.8	4764698.7	279.0	0	76	4.6	A	58.3	0.0	0.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495723.4	4764700.9	279.5	0	76	4.6	A	58.4	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495704.6	4764693.5	277.8	0	76	4.4	A	58.3	0.0	0.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495737.3	4764706.0	280.4	0	76	4.3	A	58.4	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495715.2	4764697.7	278.8	0	76	4.1	A	58.3	0.0	0.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495697.1	4764690.6	277.0	0	76	4.0	A	58.3	0.0	0.4	4.6	1.1	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495699.4	4764691.5	277.3	0	76	3.9	A	58.3	0.0	0.4	4.4	1.1	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495712.9	4764696.8	278.5	0	76	3.9	A	58.3	0.0	0.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495733.1	4764704.6	280.3	0	76	3.7	A	58.4	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495741.7	4764707.4	280.3	0	76	3.6	A	58.5	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495735.1	4764705.3	280.4	0	76	2.8	A	58.4	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495731.3	4764704.0	280.2	0	76	1.5	A	58.4	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495748.4	4764709.5	279.4	0	76	0.6	A	58.5	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495740.1	4764706.9	280.4	0	76	0.6	A	58.4	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495739.1	4764706.6	280.4	0	76	0.2	A	58.4	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	16
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	68.0	0.0	-2.6	15.3	2.7	0.0	0.0	0.0	0.0	0.0	21
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	68.9	0.0	-2.7	4.7	2.9	0.0	0.0	0.0	0.0	0.0	30
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	68.2	0.0	-2.9	11.5	3.1	0.0	0.0	0.0	0.0	0.0	38

Receiver: R11g

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	40

Receiver Name	Receiver ID	X	Y	Z
R11g	R11g	495762.33 m	4764476.52 m	280.50 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	68.8	0.0	-0.8	4.0	4.4	0.0	0.0	0.0	0.0	0.0	32
D09_HwyTrk	Highway Trucks	495569.1	4764744.8	272.4	0	76	21.8	A	61.4	0.0	-0.2	7.9	1.6	0.0	0.0	0.0	0.0	0.0	27
D09_HwyTrk	Highway Trucks	495474.8	4764935.0	272.4	0	76	22.9	A	65.7	0.0	-1.1	4.3	2.4	0.0	0.0	0.0	0.0	0.0	27
D09_HwyTrk	Highway Trucks	495508.5	4764820.2	272.4	0	76	16.5	A	63.6	0.0	-0.8	4.7	1.9	0.0	0.0	0.0	0.0	0.0	23
D09_HwyTrk	Highway Trucks	495441.3	4765040.6	272.4	0	76	14.6	A	67.2	0.0	-1.3	4.3	2.8	0.0	0.0	0.0	0.0	0.0	17
D09_HwyTrk	Highway Trucks	495417.3	4765079.5	272.4	0	76	15.0	A	67.8	0.0	-1.4	4.3	2.9	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	58.6	0.0	1.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495751.5	4764725.8	279.4	0	76	9.1	A	58.9	0.0	1.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495765.0	4764730.1	279.8	0	76	8.5	A	59.1	0.0	1.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495758.3	4764728.4	279.6	0	76	8.3	A	59.0	0.0	1.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495751.3	4764710.5	279.5	0	76	6.9	A	58.4	0.0	1.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495707.4	4764694.6	278.0	0	76	5.1	A	58.0	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495729.1	4764703.2	280.0	0	76	5.2	A	58.2	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495720.6	4764699.8	279.3	0	76	5.0	A	58.1	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495710.4	4764695.8	278.3	0	76	4.9	A	58.1	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495726.2	4764702.0	279.8	0	76	4.9	A	58.2	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495701.9	4764692.5	277.5	0	76	4.8	A	58.0	0.0	1.6	3.6	1.1	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495744.3	4764708.2	279.9	0	76	4.9	A	58.3	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495717.8	4764698.7	279.0	0	76	4.6	A	58.1	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495723.4	4764700.9	279.5	0	76	4.6	A	58.1	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495704.6	4764693.5	277.8	0	76	4.4	A	58.0	0.0	1.6	3.6	1.1	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495737.3	4764706.0	280.4	0	76	4.3	A	58.3	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495715.2	4764697.7	278.8	0	76	4.1	A	58.1	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495712.9	4764696.8	278.5	0	76	3.9	A	58.1	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495733.1	4764704.6	280.3	0	76	3.7	A	58.2	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495741.7	4764707.4	280.3	0	76	3.6	A	58.3	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495735.1	4764705.3	280.4	0	76	2.8	A	58.2	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495731.3	4764704.0	280.2	0	76	1.5	A	58.2	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495748.4	4764709.5	279.4	0	76	0.6	A	58.4	0.0	1.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495740.1	4764706.9	280.4	0	76	0.6	A	58.3	0.0	1.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	15
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	67.9	0.0	-1.0	14.4	2.7	0.0	0.0	0.0	0.0	0.0	20
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	68.8	0.0	-1.0	4.1	2.9	0.0	0.0	0.0	0.0	0.0	29
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	68.1	0.0	-1.0	12.0	3.1	0.0	0.0	0.0	0.0	0.0	36

Receiver: R12
Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	48

Receiver Name	Receiver ID	X	Y	Z
R12	R12	495645.38 m	4764602.24 m	280.10 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	66.6	0.0	-1.6	4.5	3.8	0.0	0.0	0.0	0.0	0.0	35
D09_HwyTrk	Highway Trucks	495545.1	4764770.6	272.4	0	76	18.7	A	56.9	0.0	-1.0	9.9	1.0	0.0	0.0	0.0	0.0	0.0	27
D09_HwyTrk	Highway Trucks	495582.8	4764730.2	272.4	0	76	15.7	A	54.1	0.0	-0.3	12.1	0.7	0.0	0.0	0.0	0.0	0.0	25
D09_HwyTrk	Highway Trucks	495607.9	4764703.2	272.4	0	76	15.7	A	51.7	0.0	0.3	14.2	0.6	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495462.7	4764982.3	272.4	0	76	19.9	A	63.5	0.0	-1.9	5.5	1.9	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495487.0	4764887.7	272.4	0	76	19.9	A	61.3	0.0	-1.7	6.7	1.5	0.0	0.0	0.0	0.0	0.0	28
D09_HwyTrk	Highway Trucks	495507.6	4764822.0	272.4	0	76	16.1	A	59.3	0.0	-1.4	8.0	1.3	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495435.9	4765046.9	272.4	0	76	16.6	A	64.8	0.0	-2.0	5.1	2.2	0.0	0.0	0.0	0.0	0.0	22
D09_HwyTrk	Highway Trucks	495417.3	4765079.5	272.4	0	76	15.0	A	65.5	0.0	-2.0	4.9	2.3	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495626.9	4764682.2	272.4	0	76	12.9	A	49.3	0.0	0.9	16.5	0.4	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	49.1	0.0	1.2	16.5	0.4	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495675.9	4764682.3	275.4	0	76	8.9	A	49.7	0.0	1.3	16.0	0.5	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495655.7	4764676.5	275.4	0	76	7.6	A	48.5	0.0	1.2	16.5	0.4	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495750.8	4764717.5	279.4	0	76	11.4	A	54.9	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	30
HwyTrk	Highway Trucks	495687.3	4764686.8	276.1	0	76	5.3	A	50.5	0.0	1.3	12.2	0.5	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495751.5	4764725.8	279.4	0	76	9.1	A	55.2	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	27
HwyTrk	Highway Trucks	495694.6	4764689.6	276.8	0	76	4.6	A	51.0	0.0	1.3	5.3	0.5	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495707.4	4764694.6	278.0	0	76	5.1	A	51.9	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	27
HwyTrk	Highway Trucks	495701.9	4764692.5	277.5	0	76	4.8	A	51.6	0.0	1.3	3.7	0.6	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495690.0	4764687.8	276.3	0	76	3.8	A	50.7	0.0	1.3	9.3	0.5	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495692.6	4764688.8	276.6	0	76	1.8	A	50.9	0.0	1.3	7.8	0.5	0.0	0.0	0.0	0.0	0.0	17
HwyTrk	Highway Trucks	495758.3	4764728.4	279.6	0	76	8.3	A	55.6	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495697.1	4764690.6	277.0	0	76	4.0	A	51.2	0.0	1.3	4.4	0.5	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495710.4	4764695.8	278.3	0	76	4.9	A	52.1	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495765.0	4764730.1	279.8	0	76	8.5	A	55.9	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495704.6	4764693.5	277.8	0	76	4.4	A	51.7	0.0	1.4	3.7	0.6	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495699.4	4764691.5	277.3	0	76	3.9	A	51.4	0.0	1.3	3.9	0.6	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495751.3	4764710.5	279.5	0	76	6.9	A	54.6	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495721.5	4764700.2	279.4	0	76	0.9	A	52.9	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495720.0	4764699.6	279.2	0	76	2.8	A	52.8	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495717.8	4764698.7	279.0	0	76	4.6	A	52.6	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495729.1	4764703.2	280.0	0	76	5.2	A	53.4	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495726.2	4764702.0	279.8	0	76	4.9	A	53.2	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495715.5	4764697.8	278.8	0	76	2.9	A	52.5	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495714.3	4764697.4	278.7	0	76	-1.9	A	52.4	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495723.4	4764700.9	279.5	0	76	4.6	A	53.0	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495712.9	4764696.8	278.5	0	76	3.9	A	52.3	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495744.3	4764708.2	279.9	0	76	4.9	A	54.2	0.0	1.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495737.3	4764706.0	280.4	0	76	4.3	A	53.8	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495733.1	4764704.6	280.3	0	76	3.7	A	53.6	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495741.7	4764707.4	280.3	0	76	3.6	A	54.1	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495735.1	4764705.3	280.4	0	76	2.8	A	53.7	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495731.3	4764704.0	280.2	0	76	1.5	A	53.5	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495740.1	4764706.9	280.4	0	76	0.6	A	54.0	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495739.1	4764706.6	280.4	0	76	0.2	A	53.9	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	20

Receiver: R12
Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	48

Receiver Name	Receiver ID	X	Y	Z
R12	R12	495645.38 m	4764602.24 m	280.10 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
HwyTrk	Highway Trucks	495748.4	4764709.5	279.4	0	76	0.6	A	54.4	0.0	1.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495747.5	4764709.3	279.4	0	76	-1.2	A	54.4	0.0	1.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495746.9	4764709.1	279.5	0	76	-3.0	A	54.4	0.0	1.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495746.4	4764708.9	279.6	0	76	-3.7	A	54.3	0.0	1.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	15
HwyTrk	Highway Trucks	495746.0	4764708.8	279.7	0	76	-3.8	A	54.3	0.0	1.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	15
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	65.6	0.0	-1.7	16.6	2.2	0.0	0.0	0.0	0.0	0.0	21
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	66.6	0.0	-1.7	4.5	2.4	0.0	0.0	0.0	0.0	0.0	32
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	65.8	0.0	-1.6	4.7	2.5	0.0	0.0	0.0	0.0	0.0	47

Receiver: R12g

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	48

Receiver Name	Receiver ID	X	Y	Z
R12g	R12g	495626.13 m	4764596.21 m	279.93 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	66.5	0.0	-1.6	4.7	3.8	0.0	0.0	0.0	0.0	0.0	35
D09_HwyTrk	Highway Trucks	495543.5	4764772.4	272.4	0	76	18.8	A	56.8	0.0	-1.0	10.2	1.0	0.0	0.0	0.0	0.0	0.0	27
D09_HwyTrk	Highway Trucks	495582.0	4764731.0	272.4	0	76	15.8	A	54.1	0.0	-0.3	12.3	0.7	0.0	0.0	0.0	0.0	0.0	25
D09_HwyTrk	Highway Trucks	495607.6	4764703.5	272.4	0	76	15.8	A	51.8	0.0	0.4	14.2	0.6	0.0	0.0	0.0	0.0	0.0	24
D09_HwyTrk	Highway Trucks	495462.7	4764982.3	272.4	0	76	19.9	A	63.5	0.0	-1.9	5.8	1.9	0.0	0.0	0.0	0.0	0.0	26
D09_HwyTrk	Highway Trucks	495487.0	4764887.7	272.4	0	76	19.9	A	61.2	0.0	-1.7	7.1	1.5	0.0	0.0	0.0	0.0	0.0	27
D09_HwyTrk	Highway Trucks	495508.5	4764820.2	272.4	0	76	16.5	A	59.1	0.0	-1.4	8.5	1.2	0.0	0.0	0.0	0.0	0.0	25
D09_HwyTrk	Highway Trucks	495435.9	4765046.9	272.4	0	76	16.6	A	64.8	0.0	-2.0	5.3	2.2	0.0	0.0	0.0	0.0	0.0	22
D09_HwyTrk	Highway Trucks	495417.3	4765079.5	272.4	0	76	15.0	A	65.4	0.0	-2.0	5.1	2.3	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495626.9	4764682.2	272.4	0	76	12.9	A	49.7	0.0	0.9	16.3	0.5	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495638.9	4764675.5	272.4	0	76	10.1	A	49.1	0.0	1.1	17.4	0.4	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495667.5	4764679.0	275.4	0	76	10.2	A	50.3	0.0	1.3	15.9	0.5	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495675.9	4764682.3	275.4	0	76	8.9	A	51.0	0.0	1.3	15.4	0.5	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495655.7	4764676.5	275.4	0	76	7.6	A	49.7	0.0	1.3	15.9	0.5	0.0	0.0	0.0	0.0	0.0	16
HwyTrk	Highway Trucks	495749.9	4764719.6	279.4	0	76	9.6	A	55.8	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	27
HwyTrk	Highway Trucks	495752.6	4764713.3	279.5	0	76	6.6	A	55.7	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495751.5	4764725.8	279.4	0	76	9.1	A	56.1	0.0	1.4	0.0	0.9	0.0	0.0	0.0	0.0	0.0	26
HwyTrk	Highway Trucks	495694.6	4764689.6	276.8	0	76	4.6	A	52.3	0.0	1.4	7.9	0.6	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495707.4	4764694.6	278.0	0	76	5.1	A	53.1	0.0	1.4	3.7	0.7	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495701.9	4764692.5	277.5	0	76	4.8	A	52.8	0.0	1.4	3.7	0.6	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495758.3	4764728.4	279.6	0	76	8.3	A	56.4	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495765.0	4764730.1	279.8	0	76	8.5	A	56.7	0.0	1.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495710.4	4764695.8	278.3	0	76	4.9	A	53.3	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495697.1	4764690.6	277.0	0	76	4.0	A	52.4	0.0	1.4	6.4	0.6	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495704.6	4764693.5	277.8	0	76	4.4	A	52.9	0.0	1.4	3.7	0.7	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495751.3	4764710.5	279.5	0	76	6.9	A	55.6	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	25
HwyTrk	Highway Trucks	495699.4	4764691.5	277.3	0	76	3.9	A	52.6	0.0	1.4	3.9	0.6	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495720.6	4764699.8	279.3	0	76	5.0	A	53.9	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495717.8	4764698.7	279.0	0	76	4.6	A	53.8	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495729.1	4764703.2	280.0	0	76	5.2	A	54.4	0.0	1.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495726.2	4764702.0	279.8	0	76	4.9	A	54.3	0.0	1.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495715.2	4764697.7	278.8	0	76	4.1	A	53.6	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495723.4	4764700.9	279.5	0	76	4.6	A	54.1	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495712.9	4764696.8	278.5	0	76	3.9	A	53.5	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	24
HwyTrk	Highway Trucks	495744.9	4764708.4	279.8	0	76	2.6	A	55.3	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495743.4	4764708.0	280.1	0	76	1.1	A	55.2	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495737.3	4764706.0	280.4	0	76	4.3	A	54.9	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	23
HwyTrk	Highway Trucks	495733.1	4764704.6	280.3	0	76	3.7	A	54.7	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495741.7	4764707.4	280.3	0	76	3.6	A	55.1	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	22
HwyTrk	Highway Trucks	495735.1	4764705.3	280.4	0	76	2.8	A	54.8	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	21
HwyTrk	Highway Trucks	495731.3	4764704.0	280.2	0	76	1.5	A	54.6	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	20
HwyTrk	Highway Trucks	495740.1	4764706.9	280.4	0	76	0.6	A	55.0	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	19
HwyTrk	Highway Trucks	495739.1	4764706.6	280.4	0	76	0.2	A	55.0	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495748.4	4764709.5	279.4	0	76	0.6	A	55.4	0.0	1.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	18
HwyTrk	Highway Trucks	495747.5	4764709.3	279.4	0	76	-1.2	A	55.4	0.0	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	17

Receiver: R12g

Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	48

Receiver Name	Receiver ID	X	Y	Z
R12g	R12g	495626.13 m	4764596.21 m	279.93 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	65.5	0.0	-1.7	16.7	2.2	0.0	0.0	0.0	0.0	0.0	21
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	66.6	0.0	-1.7	4.6	2.4	0.0	0.0	0.0	0.0	0.0	32
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	65.8	0.0	-1.6	4.8	2.5	0.0	0.0	0.0	0.0	0.0	47

Receiver: R13
Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	40

Receiver Name	Receiver ID	X	Y	Z
R13	R13	494969.92 m	4764121.59 m	279.19 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	71.2	0.0	-0.3	7.4	5.2	0.0	0.0	0.0	0.0	0.0	25
D09_HwyTrk	Highway Trucks	495474.8	4764935.0	272.4	0	76	22.9	A	70.6	0.0	-2.1	4.8	3.8	0.0	0.0	0.0	0.0	0.0	21
D09_HwyTrk	Highway Trucks	495569.1	4764744.8	272.4	0	76	21.8	A	69.7	0.0	-1.9	4.8	3.5	0.0	0.0	0.0	0.0	0.0	21
D09_HwyTrk	Highway Trucks	495508.5	4764820.2	272.4	0	76	16.5	A	69.9	0.0	-1.9	4.7	3.5	0.0	0.0	0.0	0.0	0.0	16
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	71.6	0.0	-1.3	4.5	3.6	0.0	0.0	0.0	0.0	0.0	25
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	71.3	0.0	-0.8	5.9	3.5	0.0	0.0	0.0	0.0	0.0	24
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	71.6	0.0	-1.3	4.8	4.2	0.0	0.0	0.0	0.0	0.0	39

Receiver: R14
Project: Proposed Elgin Road Pit - NIS
Project Number: 22568

Time Period	Total (dBA)
Day	38

Receiver Name	Receiver ID	X	Y	Z
R14	R14	494822.26 m	4764881.35 m	281.01 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
D09_DRAGLINE	Drag Line	495297.4	4765095.0	272.4	0	108	0.0	A	65.3	0.0	-0.2	12.1	3.5	0.0	0.0	0.0	0.0	0.0	28
D09_HwyTrk	Highway Trucks	495474.8	4764935.0	272.4	0	76	22.9	A	67.3	0.0	-1.5	4.7	2.8	0.0	0.0	0.0	0.0	0.0	25
D09_HwyTrk	Highway Trucks	495569.1	4764744.8	272.4	0	76	21.8	A	68.6	0.0	-1.9	4.8	3.1	0.0	0.0	0.0	0.0	0.0	23
D09_HwyTrk	Highway Trucks	495429.4	4765054.6	272.4	0	76	14.0	A	67.0	0.0	-1.8	4.8	2.7	0.0	0.0	0.0	0.0	0.0	17
D09_HwyTrk	Highway Trucks	495444.0	4765037.4	272.4	0	76	13.1	A	67.1	0.0	-1.7	4.8	2.7	0.0	0.0	0.0	0.0	0.0	16
D09_HwyTrk	Highway Trucks	495508.5	4764820.2	272.4	0	76	16.5	A	67.8	0.0	-1.6	4.8	2.9	0.0	0.0	0.0	0.0	0.0	18
D09_HwyTrk	Highway Trucks	495417.3	4765079.5	272.4	0	76	15.0	A	66.9	0.0	-1.7	5.2	2.7	0.0	0.0	0.0	0.0	0.0	17
D09_FELS	Loader - Shipping	495427.4	4765090.3	272.4	0	107	0.0	A	67.1	0.0	-1.5	4.8	2.5	0.0	0.0	0.0	0.0	0.0	31
D09_FELSP	Loader - Surge Pile	495302.5	4765101.6	272.4	0	107	0.0	A	65.5	0.0	-0.4	9.1	2.2	0.0	0.0	0.0	0.0	0.0	28
D09_Crusher	Processing Plant	495411.7	4765099.4	273.0	0	118	0.0	A	67.0	0.0	-1.5	15.6	2.8	0.0	0.0	0.0	0.0	0.0	34

Appendix D
Qualifications of the Authors

aercoustics

Aercoustics Engineering Ltd.
1004 Middlegate Road, Suite 1100
Mississauga, ON L4Y 0G1

Tel: 416-249-3361
Fax 416-249-3613
aercoustics.com

Derek Flake M.Sc., P.Eng.

Profile

Derek is an employee of Aercoustics Engineering Limited, an engineering consulting company specializing in acoustics, noise and vibration. Prior to that, he worked for several years at another acoustics, noise and vibration firm and he completed a Master of Science in the field of ultrasound transducer design. Derek is a Professional Engineer with the Professional Engineers Ontario.

Derek has been recognized by the Local Planning Appeal Tribunal (LPAT) and previously by the Ontario Municipal Board (OMB) as an expert in environmental noise and has provided expert opinion testimony to the Board and in civil litigation.

Employment History

2012 – Present	Acoustical Engineer, Aercoustics Engineering Limited
2009 – 2012	Engineering Intern, Jade Acoustics Incorporated

Additional Activities / Committees

2019 – Present	Officer on the Board of Directors and Chair of the Membership Committee at the Air & Waste Management Association (A&WMA) Ontario Section (OS)
2018 – Present	Member of Environment Committee at the Ontario Sand, Stone and Gravel Association (OSSGA)
2014 – Present	Member of Training and Development Committee at the Ontario Sand, Stone and Gravel Association (OSSGA)

Education

Master of Science (M.Sc.)	Medical Biophysics (Ultrasound Physics) University of Toronto
Bachelor of Applied Science (B.A.Sc.)	Engineering Physics (Mechanical) Queen's University

Professional Registration / Affiliations

Licensed Professional Engineer with the Professional Engineers of Ontario (PEO)

Courses and Speaking Events

Instructor, Municipal Law Enforcement Officers' Association (MLEOA) Environmental Noise training courses. This is an annual four-day training program which provides the officers with an understanding of sound measurement and its relationship with environmental noise impact. The officer is trained in the utilization of technical equipment required in the application of sound measurement theories. This course also covers the unique elements of qualitative noise regulations and is authorized by the Ministry of the Environment and Climate Change.

Speaker, "Overview of Noise & Vibration Issues in Land-Use Planning", A&WMA OS Environment Issues in Land-Use Planning, Guelph, October 30, 2019.

Attended A&WMA Course "Consultant Liability and Expert Witness Testimony", Guelph, 2019.

Speaker, "Environmental Noise: Modelling Techniques to Quiet your Acoustic Troubles", ACE 2019, Quebec City, 2019.

Attended PSMJ Resources Project Management Bootcamp, Toronto, 2016.

Attended OSSGA Health and Safety Seminar courses *"Aggregates 101" and "Aggregates 201"*, Toronto, 2015. Mr. Flake both attended and aided in the development for parts of the course.

Speaker, "*The New NPC-300 Noise Guideline: What does it mean for your noise by-law?*" MLEOA Annual General Meeting, Kingston, 2014.

Professional Activities

Land Use Planning

In the field of environmental acoustics, Mr. Flake has completed numerous projects involving noise impact from planned stationary sources as well as noise impact studies for proposed new noise sensitive uses. These projects included conducting studies for proposed operations and developments and addressing noise concerns for existing operations. Peer reviews of noise studies prepared by other acoustic consultants were also conducted by Mr. Flake. In the land use planning process, Mr. Flake has completed studies which provide assessments of the noise impact on proposed residential, commercial, institutional and industrial developments from the local environment which includes noise from road, rail, and aircraft traffic and stationary noise sources such as industrial and commercial uses. Also, vibration measurements and studies were conducted to assess vibration from rail traffic such as trains, streetcars and subways. The studies include recommendations for noise control of the sources, dwelling building components, wall, window, and door constructions to satisfy the Ministry of Environment, Conservation and Parks noise guidelines.

In addition, Mr. Flake has conducted architectural drawing reviews and provided design advice for residential and commercial developments. These have ensured the construction plans will meet the municipal and Ontario Building Code requirements.

Environmental Compliance Approvals & EASR
Mr. Flake was involved in noise and vibration impact studies for industrial, institutional and commercial uses. He has prepared Acoustic Assessment Reports for use in applications for Environmental Compliance Approvals (ECA) and the Environmental Activity & Sector Registry (EASR). These studies provided conceptual as well as detailed designs of noise mitigation to reduce in-plant noise or noise emission into the environment. In-plant projects generally involved noise surveys, detailed noise and vibration measurements of equipment, data analysis and computer modelling of noise controls to evaluate effectiveness. In some cases, detailed designs and specifications have been provided. Mr. Flake has a good record of submitting applications that are accepted as fully complete according to MECP records.

Aggregates
Mr. Flake has done work in the aggregates industry which involved the preparation and support of noise impact studies to determine technical feasibility of aggregate licence applications to the Ministry of Natural Resources & Forestry. This work included preparing the noise impact studies, supporting the findings at public meetings, and performing acoustic audits to confirm compliance with the noise requirements.

Mining
Mr. Flake has acted as a third-party peer reviewer for the City of Timmins, overseeing all aspects of environmental compliance (including acoustics, noise & vibration) for the Hollinger Pit Open Mine in Timmins.

Acoustic Audits were also conducted at Goldcorp's Red Lake Balmerton & Cochenour sites.

Renewable Energy
Mr. Flake has performed IEC 61400 testing of Wind Turbines and Transformer Station noise audits.

Noise Source Investigations and Room Acoustics
Mr. Flake has completed several projects involving design of spaces where sound privacy and room acoustics were critical. These projects have included noise complaint investigation, room acoustics, mechanical noise, noise measurements to quantify sound isolation, and environmental noise impact. Examples of spaces include cinemas, offices, hospitals and residential condominiums.

aercoustics

Aercoustics Engineering Ltd.
1004 Middlegate Road, Suite 1100
Mississauga, ON L4Y 0G1

Tel: 416-249-3361
Fax 416-249-3613
aercoustics.com

Kohl Clark, B.Eng.

Project Manager

Profile

Kohl holds a Bachelor of Engineering in Mechanical Engineering from McMaster University. As an Acoustical Engineer at Aercoustics Engineering Ltd., Kohl brings experience tackling projects in a variety of industries, including architectural design, residential, environmental and transit.

Education & Experience

- Bachelor of Engineering, Mechanical Engineering, McMaster University, June 2016
- Acoustical Engineer, Aercoustics Engineering Ltd. August 2016 to present

Relevant Project Experience

Aggregate site modelling and design experience includes:

Law Quarry Extension	Wainfleet ON
Wallace Pit	Thamesford, ON
Robinson Pit	Central Frontenac, ON
Cunningham Pit	Ottawa, ON
Greely Quarry	Ottawa, ON
Lichty Pit	Various, ON
Bury Road Quarry	Bruce Peninsula, ON

Aggregate site review and audit experience includes:

Vinemount Quarries	Stoney Creek, ON
Brown Pit	North Dumfries, ON
Hennig Pit	North Dumfries, ON
Dance & Dabrowski Pits	North Dumfries, ON
Melancthon Pit	Melancthon, ON

Other relevant industrial noise modelling and assessment experience includes:

D. Crupi and Sons Ltd. Asphalt Plant	Oshawa, ON
Hamilton Wastewater Treatment Plant	Hamilton, ON
Lafarge Bath Cement Plant	Bath, ON
PureGold Mine	Madsen, ON
Cochenour Mine	Cochenour, ON
Red Lake Gold Mine	Red Lake, ON

End of Report