

CarbonFree Rainy River Project  
Acoustic Assessment Report

H375916-0000-846-066-0001

|            |      |                  |                                                                                     |                                                                                       |                                                                                       |
|------------|------|------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|            |      |                  |  |  |  |
| 2026-05-29 | 2    | Approved for Use | M. Andargie                                                                         | M. Choy                                                                               | C. Sehl                                                                               |
| 2026-04-08 | 1    | Approved for Use | M. Andargie                                                                         | M. Choy                                                                               | S. Thompson                                                                           |
| 2026-03-12 | 0    | Approved for Use | M. Andargie                                                                         | M. Choy                                                                               | S. Thompson                                                                           |
| DATE       | REV. | STATUS           | PREPARED BY                                                                         | CHECKED BY                                                                            | APPROVED BY                                                                           |
|            |      |                  |                                                                                     | Discipline Lead                                                                       | Functional Manager                                                                    |

### **Revision History**

| Revision | Date       | Status           | Update                                                                                                                                                                                           |
|----------|------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0        | 2026-03-12 | Approved For Use | Issued for Use                                                                                                                                                                                   |
| 1        | 2026-04-08 | Approved For Use | Incorporation of updated inverter orientation in the design. Updated noise model and Section 3.8, Table 3-2: Noise Source Summary Table. Updated Section 5 - Mitigation Measures Summary.        |
| 2        | 5/29/2026  | Approved For Use | Incorporation of additional inverter locations and updated site layout. Updated noise model and Section 3.8, Table 3-2: Noise Source Summary Table. Updated Section 7.3 Noise Modelling Results. |

### **IMPORTANT NOTICE TO READER**

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5. The noise impact evaluation is based on a conservative assumption that the Facility will operate at full power capacity for at least 1 hour during the evening and night periods. Due to the solar facility's dependency on sun exposure, it is anticipated that inverters will not operate at full capacity during evening and night periods. As a result, the inverter fan duty cycle and associated inverter sound power level is anticipated to be lower than the sound power levels identified in this report. A review of the maximum inverter and subsequent noise output during evening and night hours will be incorporate in a future addendum to this report.

## Table of Concordance

The following table of concordance describes the scope of the report herein as per the requirements identified in Table 1 of O. Reg. 359/09 [1].

| Item | Document           | Requirement per Table 1 of O. Reg. 359/09                                                                                                                                                                                                                                                 | Project Type           |
|------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 8    | Noise study report | Report to be prepared in accordance with Appendix A of the publication of the Ministry of the Environment and Climate Change entitled, "Basic Comprehensive Certificates of Approval (Air) – User Guide", dated April 2004, as amended from time to time and available from the Ministry. | Class 3 solar facility |

## Abbreviations and Definitions

|         |                                                                    |
|---------|--------------------------------------------------------------------|
| AAR     | Acoustic Assessment Report                                         |
| AC      | Alternating Current                                                |
| dB      | Decibel                                                            |
| dBA     | A-weighted sound level                                             |
| DC      | Direct Current                                                     |
| IEEE    | Institute of Electrical and Electronics Engineers                  |
| km      | Kilometre                                                          |
| kV      | Kilovolt                                                           |
| Leq     | Equivalent sound level                                             |
| m/s     | Metre per second                                                   |
| MECP    | Ministry of the Environment, Climate, and Parks                    |
| MVA     | Megavolt-ampere                                                    |
| MW      | Megawatt                                                           |
| NEMA    | National Electrical Manufacturers Association                      |
| NPC     | Noise Pollution Control                                            |
| O. Reg. | Ontario Regulation                                                 |
| INV     | Inverter System (combined inverter and medium-voltage transformer) |
| POR     | Point of Reception                                                 |
| PV      | Photovoltaic                                                       |
| PWC     | Predictable Worst Case                                             |
| REA     | Renewable Energy Approval                                          |

## Table of Contents

|                                                                             |            |
|-----------------------------------------------------------------------------|------------|
| <b>Table of Concordance .....</b>                                           | <b>iii</b> |
| <b>Abbreviations and Definitions .....</b>                                  | <b>iv</b>  |
| <b>1. Introduction .....</b>                                                | <b>1</b>   |
| 1.1 Approach to Noise Assessment.....                                       | 1          |
| 1.2 Vibration Sources.....                                                  | 2          |
| <b>2. Facility Description .....</b>                                        | <b>2</b>   |
| 2.1 Operational Flexibility .....                                           | 2          |
| <b>3. Noise Source Summary .....</b>                                        | <b>2</b>   |
| 3.1 Panel Arrays .....                                                      | 2          |
| 3.2 Inverter With Integrated Medium-Voltage Transformer .....               | 2          |
| 3.3 Switchgear .....                                                        | 3          |
| 3.4 Substation Transformer .....                                            | 3          |
| 3.5 Other Nearby Solar Facilities and External Anthropic Noise Sources..... | 3          |
| 3.6 Ancillary Distribution Lines.....                                       | 3          |
| 3.7 Excluded Noise Sources.....                                             | 3          |
| 3.8 Noise Source Summary Table .....                                        | 4          |
| <b>4. Points of Reception .....</b>                                         | <b>8</b>   |
| <b>5. Mitigation Measures Summary.....</b>                                  | <b>9</b>   |
| <b>6. Assessment Criteria.....</b>                                          | <b>10</b>  |
| <b>7. Acoustic Assessment Summary.....</b>                                  | <b>10</b>  |
| 7.1 Analysis Methodology .....                                              | 10         |
| 7.2 Predictable Worst-Case Assessment Scenario .....                        | 11         |
| 7.3 Noise Modelling Results .....                                           | 11         |
| <b>8. Conclusion .....</b>                                                  | <b>13</b>  |
| <b>9. References .....</b>                                                  | <b>13</b>  |

### *List of Tables*

|                                                    |    |
|----------------------------------------------------|----|
| Table 3-1: Excluded Noise Sources .....            | 4  |
| Table 3-2: Noise Source Summary Table.....         | 5  |
| Table 4-1: Point of Reception Locations.....       | 8  |
| Table 5-1: Mitigation Summary Table.....           | 10 |
| Table 6-1: Class 3 Performance Limits.....         | 10 |
| Table 7-1: Assessment Scenarios .....              | 11 |
| Table 7-2: Acoustic Assessment Summary Table ..... | 12 |

### ***List of Appendices***

- Appendix A    Zoning/Land-Use Siting Map**
- Appendix B    Site and Noise Source Layout**
- Appendix C    Noise Source Sound Power Levels and Equipment Vendor Information**
- Appendix D    POR Noise Impact Table and Noise Contour Plot**
- Appendix E    Acoustic Assessment Report Checklist**

## **1. Introduction**

CarbonFree Rainy River Ltd. (CarbonFree) is proposing to develop a 60 megawatt (MW) Class 3 solar photovoltaic (PV) project on lands located in the township of Chapple, Ontario (approximately 40 kilometres (km) northwest of Fort Frances).

The proposed CarbonFree Rainy River Project (hereinafter referred to as 'the Facility') is a renewable energy generation facility which will use solar PV technology to generate electricity. Electricity generated by solar PV panels will be converted from direct current (DC) to alternating current (AC) by inverters and then stepped up (via pad-mounted inverters, medium-voltage transformers and a main substation transformer) to 115 kilovolts (kV) prior to being connected to the existing Hydro One Networks Inc. transmission line.

The Project aims to contribute to the government of Ontario's goal of accelerating new electricity generation from renewable sources to support the province's growing energy needs. Accordingly, CarbonFree intends to enter into an agreement for the sale or supply of electricity, the quantity of which will be commensurate with the name plate capacity of the facility.

Construction of the Project will commence in early 2027 once the Renewable Energy Approval (REA) and other required permits have been obtained. This Acoustic Assessment Report (AAR) provides an evaluation of the community noise impact of the Facility under predictable worst-case (PWC) noise-emitting operating conditions.

### **1.1 Approach to Noise Assessment**

The AAR follows the Province of Ontario regulations and guidelines: O. Reg. 359/09 [1], PIBS 8472e – "Technical Guide to Renewable Energy Approvals" [2], PIBS 4391e01 – "Basic Comprehensive Certificates of Approval (Air)" [3], and NPC-300 [4]. The Facility's noise performance limit is established as the higher of the 1-hour a-weighted equivalent sound level (Leq) identified for the applicable exclusion limit or the background sound level. No background measurements were taken, so the noise limit has been set to the applicable exclusion limit based on the surrounding receptor classifications. A review of the surrounding community identifies all noise sensitive receptors as Class 3.

A community noise model of the Facility has been developed to assess the noise impact of the nearest points of reception (PORs). The noise study area for modelling was extended 1 km from the outermost noise sources consistent with the approach outlined in the "Technical Guide to Renewable Energy Approvals" [2]. Participating and non-participating receptors were identified including receptors for vacant lots. Acoustic modelling was completed on a PWC basis that determined the equivalent 1-hour noise impact on the identified PORs. There are no other surrounding solar facilities within 1 km of the boundary of the Facility.

## 1.2 Vibration Sources

The Facility does not have any significant stationery or moving ground-borne vibration sources. As such, a vibration assessment is not required.

## 2. Facility Description

The Facility is located in the township of Chapple, Ontario (approximately 40 km northwest of Fort Frances) (Appendix A).

The proposed 60-MW solar facility is comprised of two solar panel arrays spread over four properties. Each array is isolated by its own switch gear. The panels are routed into 15 SunGrow SG4400, 4.4 megavolt-ampere (MVA) inverter system (INV) modules. Each switch gear feeds the proposed high-voltage substation located at the north end of the Facility. The Facility is designed to operate during sunlight hours, 7 days a week. The proposed layout of the Facility is included in Appendix B.

### 2.1 Operational Flexibility

The Facility is seeking the inclusion of operational flexibility with its REA application as described under section 9 of PIBS 8472e [2]. Operational flexibility allows the Facility to make limited modifications to its operations or works without having to seek an amendment to the REA. These permissible operational flexibility changes include:

- Noise from site maintenance equipment including vegetation control, panel washing, snow clearing, access road and infrastructure maintenance.
- In-kind equipment replacements (panels, tracker motors, inverter systems, transformer, switches, etc.).
- Decreasing the number of project components.

## 3. Noise Source Summary

### 3.1 Panel Arrays

Panel racks will be fitted with a single axis tracker. The proposed Facility will have one motor per tracker. A sample tracker is provided in Appendix C. The tracker motor operates briefly to tilt the panels into an optimal position for solar radiation exposure. Due to their relatively small size and brief operation, the tracker motors are considered insignificant community noise emission sources.

### 3.2 Inverter With Integrated Medium-Voltage Transformer

The 4.4 MW AC inverters convert the DC supplied by the PV modules to AC. A 4.4 MVA, 3-phase, liquid-filled transformer will then 'step up' the voltage to 34.5 kV. Each installation will consist of a SunGrow Solar Inverter Skid SG4400 or equivalent inverter system (INV) that combines the inverter and medium-voltage transformer in single container skid.

Noise from the inverter system comes from the intake and exhausts of its air-cooling fans while noise from its medium-voltage transformer is largely from the magnetostriction hum. Due to the tonal nature of the magnetostriction hum, a 5 decibel (dB) tonal penalty is added to the noise emission of entire inverter system. Full calculations can be found in Appendix C.

### 3.3 Switchgear

The local panel array and substation switchgears are a combination of switches, fuses and circuit breakers used to safely isolate arrays or the entire facility for maintenance. Switchgear control panel cooling fans are small and are located indoors. Therefore, the switchgears are considered insignificant community noise emission sources.

### 3.4 Substation Transformer

The Facility contains one large 68 MVA transformer that will 'step up' the voltage from 34.5 kV to 230 kV. The substation transformer noise was calculated using the NEMA TP-80050 standard [5] with a 5 dB tonal penalty added for its magnetostriction hum. Calculations to characterize the sound emission of the substation transformer can be found in Appendix C. Transformer noise was modelled as a point source at half the height of the transformer.

Additional substation yard components such as the switchgear, communication tower, and line reactors are considered insignificant noise sources.

### 3.5 Other Nearby Solar Facilities and External Anthropogenic Noise Sources

There are no adjacent solar facilities within 1 km of the Facility. As such, a cumulative noise impact study that incorporates adjacent solar facilities, as recommended in Ontario's *Technical Guide to Renewable Energy Approvals* [2], is not required.

A desktop review of Access Environment did not identify any Environmental Compliance Approvals for industrial applications within 1 km of the Facility. The land-use map included with Appendix A identifies that the site is surrounded by agricultural land. As such, additional external anthropogenic noise may include farming equipment. However, these external anthropogenic noise sources need not be included with the AAR.

### 3.6 Ancillary Distribution Lines

Aboveground ancillary distribution lines connecting the local panel switchgears to the substation will not emit significant amounts of isolator corona noise due to a relatively low AC line current and voltage (34.5 kV). Therefore, the noise from the ancillary distribution lines is considered insignificant.

### 3.7 Excluded Noise Sources

Insignificant and non-applicable noise sources were excluded from this assessment. Table 3-1 lists noise sources insignificant or outside the scope of this assessment.

**Table 3-1: Excluded Noise Sources**

| Source                             | Reason for Exclusion                                                                                                        |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Vehicular Traffic                  | Noise exclusions identified in accordance with O. Reg. 359/09 [1] and the Technical Guide to Renewable Energy Approvals [2] |
| Maintenance and Service Activities |                                                                                                                             |
| Emergency Conditions               |                                                                                                                             |
| Construction and Decommissioning   |                                                                                                                             |

### 3.8 Noise Source Summary Table

Table 3-2 lists the significant noise sources from the Facility. The noise source layout is presented in Appendix B.

**Table 3-2: Noise Source Summary Table**

| Source ID | Equipment Description             | NV dB Library Source | Sound Power (Lw) Un-Weighted Octave Band Spectrum, Hz (dB) |    |     |     |     |       |       |       |       | Overall (dBA) | Source Location | Sound Characteristic | Noise Control Measure | UTM Zone 16 |         |
|-----------|-----------------------------------|----------------------|------------------------------------------------------------|----|-----|-----|-----|-------|-------|-------|-------|---------------|-----------------|----------------------|-----------------------|-------------|---------|
|           |                                   |                      | 31.5                                                       | 63 | 125 | 250 | 500 | 1,000 | 2,000 | 4,000 | 8,000 |               |                 |                      |                       | E           | N       |
| INV01_In  | Inverter System No 01 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434819      | 5397989 |
| INV01_Out | Inverter System No 01 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434819      | 5397989 |
| INV01_TR  | Inverter System No 01 Transformer | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434819      | 5397989 |
| INV02_In  | Inverter System No 02 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434574      | 5397895 |
| INV02_Out | Inverter System No 02 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434574      | 5397895 |
| INV02_TR  | Inverter System No 02 Transformer | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434574      | 5397895 |
| INV03_In  | Inverter System No 03 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434543      | 5397895 |
| INV03_Out | Inverter System No 03 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434543      | 5397895 |
| INV03_TR  | Inverter System No 03 Transformer | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434543      | 5397895 |
| INV04_In  | Inverter System No 04 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434399      | 5397695 |
| INV04_Out | Inverter System No 04 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434399      | 5397695 |
| INV04_TR  | Inverter System No 04 Transformer | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434399      | 5397695 |
| INV05_In  | Inverter System No 05 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434407      | 5397424 |
| INV05_Out | Inverter System No 05 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434407      | 5397424 |
| INV05_TR  | Inverter System No 05 Transformer | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434407      | 5397424 |
| INV06_In  | Inverter System No 06 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434402      | 5397263 |
| INV06_Out | Inverter System No 06 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434402      | 5397263 |

CarbonFree Rainy River Ltd.  
CarbonFree Rainy River Project  
H375916

Specialty Disciplines Report  
Environmental and Community  
Acoustic Assessment Report

| Source ID | Equipment Description             | NV dB Library Source | Sound Power (Lw) Un-Weighted Octave Band Spectrum, Hz (dB) |    |     |     |     |       |       |       |       | Overall (dBA) | Source Location | Sound Characteristic | Noise Control Measure | UTM Zone 16 |         |
|-----------|-----------------------------------|----------------------|------------------------------------------------------------|----|-----|-----|-----|-------|-------|-------|-------|---------------|-----------------|----------------------|-----------------------|-------------|---------|
|           |                                   |                      | 31.5                                                       | 63 | 125 | 250 | 500 | 1,000 | 2,000 | 4,000 | 8,000 |               |                 |                      |                       | E           | N       |
| INV06_TR  | Inverter System No 06 Transformer | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434402      | 5397263 |
| INV07_In  | Inverter System No 07 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434402      | 5397091 |
| INV07_Out | Inverter System No 07 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434402      | 5397091 |
| INV07_TR  | Inverter System No 07 Transformer | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434402      | 5397091 |
| INV08_In  | Inverter System No 08 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434205      | 5397091 |
| INV08_Out | Inverter System No 08 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434205      | 5397091 |
| INV08_TR  | Inverter System No 08 Transformer | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434205      | 5397091 |
| INV09_In  | Inverter System No 09 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433526      | 5397102 |
| INV09_Out | Inverter System No 09 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433526      | 5397102 |
| INV09_TR  | Inverter System No 09 Transformer | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433526      | 5397102 |
| INV10_In  | Inverter System No 10 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433786      | 5397149 |
| INV10_Out | Inverter System No 01 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433786      | 5397149 |
| INV10_TR  | Inverter System No 10 Transformer | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433786      | 5397149 |
| INV11_In  | Inverter System No 11 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433858      | 5397432 |
| INV11_Out | Inverter System No 11 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433858      | 5397432 |
| INV11_TR  | Inverter System No 11 Transformer | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433858      | 5397432 |
| INV12_In  | Inverter System No 12 Air Inlet   | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433881      | 5397432 |
| INV12_Out | Inverter System No 12 Air Outlet  | INV                  | 85                                                         | 82 | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433881      | 5397432 |

| Source ID                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Equipment Description             | NV dB Library Source | Sound Power (Lw) Un-Weighted Octave Band Spectrum, Hz (dB) |     |     |     |     |       |       |       |       | Overall (dBA) | Source Location | Sound Characteristic | Noise Control Measure | UTM Zone 16 |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------|------------------------------------------------------------|-----|-----|-----|-----|-------|-------|-------|-------|---------------|-----------------|----------------------|-----------------------|-------------|----------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                   |                      | 31.5                                                       | 63  | 125 | 250 | 500 | 1,000 | 2,000 | 4,000 | 8,000 |               |                 |                      |                       | E           | N        |
| INV12_TR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Inverter System No 12 Transformer | INV                  | 85                                                         | 82  | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433881      | 5397432  |
| INV13_In                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Inverter System No 13 Air Inlet   | INV                  | 85                                                         | 82  | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433853      | 5397597  |
| INV13_Out                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Inverter System No 13 Air Outlet  | INV                  | 85                                                         | 82  | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433853      | 5397597  |
| INV13_TR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Inverter System No 13 Transformer | INV                  | 85                                                         | 82  | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433853      | 5397597  |
| INV14_In                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Inverter System No 14 Air Inlet   | INV                  | 85                                                         | 82  | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433885      | 5397598  |
| INV14_Out                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Inverter System No 14 Air Outlet  | INV                  | 85                                                         | 82  | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433885      | 5397598  |
| INV14_TR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Inverter System No 14 Transformer | INV                  | 85                                                         | 82  | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 433885      | 5397598  |
| INV15_In                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Inverter System No 15 Air Inlet   | INV                  | 85                                                         | 82  | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434402      | 5397244  |
| INV15_Out                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Inverter System No 15 Air Outlet  | INV                  | 85                                                         | 82  | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434402      | 5397244  |
| INV15_TR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Inverter System No 15 Transformer | INV                  | 85                                                         | 82  | 87  | 87  | 90  | 83    | 83    | 88    | 75    | 92            | O               | S, T                 | U                     | 434402      | 5397244  |
| ST01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Substation Transformer            | TR_68                | 100                                                        | 106 | 108 | 103 | 103 | 97    | 92    | 87    | 80    | 104           | O               | S, T                 | U                     | 434119      | 53.97361 |
| <p>*Spectra and Overall levels do NOT include tonal penalties. A 5 dB tonal penalty is added in the model for all sources with tonal sound characteristics.</p> <p>1. O: located/installed outside the building, including on the roof, I: located/installed inside the building.</p> <p>2. S: Steady; Q: Quasi Steady Impulsive; B: Buzzing; T: Tonal; C: Cyclic.</p> <p>3. S: Silencer, Acoustic Louvre, Muffler; A: Acoustics lining, Plenum; B: Barrier, Berm, Screening; L: Lagging; E: Acoustic Enclosure; O: Other; U: Uncontrolled.</p> |                                   |                      |                                                            |     |     |     |     |       |       |       |       |               |                 |                      |                       |             |          |

## 4. Points of Reception

PORs representing the worst-case community noise sensitive dwellings and vacant lots were identified around the Facility. In accordance with O. Reg. 359/09 [1] and the Technical Guide to Renewable Energy Approvals [2], the noise study area extent for POR identification was set to 1 km from each of the noise sources.

All PORs, participating receptors and vacant lots within 1 km of a Facility noise source were identified and included in the noise assessment. Though O. Reg. 359/09 [1] Clause (6) notes that a “noise receptor does **not** include a location on a parcel of land if any part of the renewable energy generation facility will be located on that parcel of land once the facility is installed, constructed or expanded,” these participating receptors are identified herein, but noise compliance for them have not been evaluated.

Each POR was modelled at 1.5 m above ground for single-storey dwellings or 4.5 m above ground for two-storey dwellings to represent a plane of window on the building façade. Building façade POR IDs are identified with a “f” suffix. Outdoor living areas are modelled at 1.5 m above ground within 30 m of a façade of the dwelling. Outdoor living POR IDs are identified with an “o” suffix. Table 4-1 lists the PORs impacted by the Facility. The layout of identified PORs is shown in Appendix D.

**Table 4-1: Point of Reception Locations**

| POR ID              | Description                                      | UTM Coordinates (Zone 16) |          |
|---------------------|--------------------------------------------------|---------------------------|----------|
|                     |                                                  | Easting                   | Northing |
| Points of Reception |                                                  |                           |          |
| R01_f               | 947 Mather Road<br>Existing residential dwelling | 432662                    | 5398595  |
| R01_o               |                                                  | 432676                    | 5398567  |
| R02_f               | 1784 ON-71<br>Existing residential dwelling      | 432611                    | 5397147  |
| R02_o               |                                                  | 432642                    | 5397140  |
| R03_f               | 1790 ON-71<br>Existing residential dwelling      | 432609                    | 5397068  |
| R03_o               |                                                  | 432632                    | 5397070  |
| R04_f               | 1778 ON-71<br>Existing residential dwelling      | 432616                    | 5396947  |
| R04_o               |                                                  | 432634                    | 5396946  |
| R05_f               | 1764 ON-71<br>Existing residential dwelling      | 432623                    | 5396834  |
| R05_o               |                                                  | 432637                    | 5396834  |
| R06_f               | 1754 ON-71<br>Existing residential dwelling      | 432676                    | 5395945  |
| R06_o               |                                                  | 432695                    | 5395967  |
| R07_f               | 1568 ON-71<br>Existing residential dwelling      | 434537                    | 5398746  |
| R07_o               |                                                  | 434536                    | 5398715  |
| R08_f               | 576 Mather Road<br>Existing residential dwelling | 434865                    | 5398674  |
| R08_o               |                                                  | 434865                    | 5398644  |

| POR ID                         | Description                                      | UTM Coordinates (Zone 16) |          |
|--------------------------------|--------------------------------------------------|---------------------------|----------|
|                                |                                                  | Easting                   | Northing |
| R09_f                          | 576 Mather Road<br>Existing residential dwelling | 435712                    | 5398988  |
| R09_o                          |                                                  | 435689                    | 5398967  |
| R10_f                          | 535 Cates Road<br>Existing residential dwelling  | 435798                    | 5398990  |
| R10_o                          |                                                  | 435798                    | 5398960  |
| RN11_f                         | 572 Cates Road<br>Existing residential dwelling  | 435798                    | 5398990  |
| RN11_o                         |                                                  | 435798                    | 5398960  |
| VN01                           | Vacant lot                                       | 432474                    | 5398587  |
| VN02                           | Vacant lot                                       | 432473                    | 5396938  |
| VN03                           | Vacant lot                                       | 432472                    | 5396838  |
| VN04                           | Vacant lot                                       | 432633                    | 5396424  |
| VN05                           | Vacant lot                                       | 433405                    | 5395319  |
| VN06                           | Vacant lot                                       | 434221                    | 5395309  |
| VN07                           | Vacant lot                                       | 435810                    | 5396808  |
| VN08                           | Vacant lot                                       | 435828                    | 5396908  |
| VN09                           | Vacant lot                                       | 435033                    | 5396812  |
| VN10                           | Vacant lot                                       | 435016                    | 5396913  |
| VN11                           | Vacant lot                                       | 434892                    | 5396812  |
| VN12                           | Vacant lot                                       | 436178                    | 5398564  |
| VN13                           | Vacant lot                                       | 435828                    | 5398556  |
| VN14                           | Vacant lot                                       | 435829                    | 5398667  |
| VN15                           | Vacant lot                                       | 435028                    | 5398575  |
| VN16                           | Vacant lot                                       | 435025                    | 5398675  |
| VN17                           | Vacant lot                                       | 434367                    | 5398681  |
| VN18                           | Vacant lot                                       | 433824                    | 5398586  |
| VN19                           | Vacant lot                                       | 433811                    | 5398687  |
| VN20                           | Vacant lot                                       | 433424                    | 5398590  |
| VN21                           | Vacant lot                                       | 433407                    | 5398690  |
| <b>Participating Receptors</b> |                                                  |                           |          |
| VP01                           | Vacant lot                                       | 434916                    | 5396923  |
| VP02                           | Vacant lot                                       | 434226                    | 5398583  |

## 5. Mitigation Measures Summary

Table 5-1 lists the noise mitigation features proposed to be incorporated into the design. The evaluation of the community noise impact presented in Section 7.3 includes these mitigation features.

**Table 5-1: Mitigation Summary Table**

| Mitigation ID | Targeted Noise Source | Description          | Details                                                                                                                                                                             |
|---------------|-----------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MT01          | INV07_In              | Positioning of INV07 | Position INV07 such that its primary noise-radiating surfaces are directed away from the nearest receptor VN11. Appendix B presents the INV orientation incorporated in the design. |
|               | INV07_Out             |                      |                                                                                                                                                                                     |
|               | INV07_TR              |                      |                                                                                                                                                                                     |

## 6. Assessment Criteria

The MECP publications; *NPC-300 - Environmental Noise Guideline - Stationary and Transportation Sources - Approval and Planning* provides guidance on control of industrial noise emissions for Ontario [4] and *Technical Guide to Renewable Energy Approvals* [2] provide noise limits according to the surrounding POR classification. Table 6-1 shows the Class 3 performance limits for rural receptors at different times of the day. A conservative assessment limit of 40 dBA was used at all receptor locations under the likely potential for the Facility to operate, sometime throughout its lifecycle, at full power generation for at least 1 hour during the evening period.

**Table 6-1: Class 3 Performance Limits**

| Class 3 Area                |                                        |
|-----------------------------|----------------------------------------|
| Time Period                 | Sound Level Limit – Leq [1 hour] (dBA) |
| 07:00 to 19:00 (Daytime)    | 45                                     |
| 19:00 to 23:00 (Evening)    | 40                                     |
| 23:00 to 07:00 (Night-time) | 40                                     |

## 7. Acoustic Assessment Summary

### 7.1 Analysis Methodology

To model the community noise impact of the project, a noise model was developed using CADNA-A software application. The ISO 9613-2 [6] algorithm was implemented using CADNA-A to evaluate the environmental noise exposure from stationary sources.

The assumptions used in the noise model are in accordance with Section 9.2 of the *Technical Guide to Renewable Energy Approvals* [2] and are as follows:

- The model is assessed at 10°C and 70% relative humidity.
- The noise study area extends 1 km from each noise source.
- Ground absorption was modelled with a global value of  $G=0.7$ .
- All equipment on-site operates continuously steady during daytime, and for at least 1 hour during evening and night periods without impulsive noise emissions. This

assumption for some equipment is under review and may change following a detailed study into the dependency of equipment duty cycle and subsequent noise emissions on solar exposure.

- The substation transformer was modelled as point sources at half the height of the transformer and sound power data was estimated based on National Electrical Manufacturers Association (NEMA) [5] and Institute of Electrical and Electronics Engineers (IEEE) [6] standards.

## 7.2 Predictable Worst-Case Assessment Scenario

Acoustic modelling was completed on a PWC basis that determined the equivalent 1-hour noise impact on the identified noise PORs. The following worst-case scenario was analyzed as described in Table 7-1.

**Table 7-1: Assessment Scenarios**

| Scenario                     | Description                                                                                                                                                                                                                                                                                          |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Predictable Worst-Case (PWC) | <p>15 INV units.<br/>One 68 MVA substation transformer.<br/>Panels as noise obstructions not modelled.<br/>All equipment operates simultaneously at design for 1 hour during the evening/nighttime period.<br/>Conservative noise limit of 40 dBA at all receptors, modelled 4.5 m above ground.</p> |

## 7.3 Noise Modelling Results

Table 7-2 summarizes the noise assessment results at each of the noise sensitive POR locations. Participating receptors are listed but not compared to the noise criteria as noted under Clause (6) of O. Reg. 359/09 [1] (Section 4). All applicable PORs are compliant with the NPC-300 40 dBA noise criteria for a Class 3 receptors during the evening and nighttime periods. To visualize the predicted noise emissions from the Facility, refer to the noise contour plot in Appendix D.

**Table 7-2: Acoustic Assessment Summary Table**

| POR ID              | Description                   | Sound Level (dBA) |                   | Verified by<br>Acoustic<br>Audit | Performance Limit (dBA) |                   | Compliance<br>(Yes/No) |
|---------------------|-------------------------------|-------------------|-------------------|----------------------------------|-------------------------|-------------------|------------------------|
|                     |                               | Day               | Night/<br>Evening |                                  | Day                     | Night/<br>Evening |                        |
| Points of Reception |                               |                   |                   |                                  |                         |                   |                        |
| RN01_f              | 947 Mather Road               | 28                | 28                | No                               | 45                      | 40                | Yes                    |
| RN01_o              | Existing residential dwelling | 29                | 29                | No                               | 45                      | 40                | Yes                    |
| RN02_f              | 1784 ON-71                    | 31                | 31                | No                               | 45                      | 40                | Yes                    |
| RN02_o              | Existing residential dwelling | 29                | 29                | No                               | 45                      | 40                | Yes                    |
| RN03_f              | 1790 ON-71                    | 33                | 33                | No                               | 45                      | 40                | Yes                    |
| RN03_o              | Existing residential dwelling | 33                | 33                | No                               | 45                      | 40                | Yes                    |
| RN04_f              | 1778 ON-71                    | 32                | 32                | No                               | 45                      | 40                | Yes                    |
| RN04_o              | Existing residential dwelling | 32                | 32                | No                               | 45                      | 40                | Yes                    |
| RN05_f              | 1764 ON-71                    | 31                | 31                | No                               | 45                      | 40                | Yes                    |
| RN05_o              | Existing residential dwelling | 32                | 32                | No                               | 45                      | 40                | Yes                    |
| RN06_f              | 1754 ON-71                    | 31                | 31                | No                               | 45                      | 40                | Yes                    |
| RN06_o              | Existing residential dwelling | 31                | 31                | No                               | 45                      | 40                | Yes                    |
| RN07_f              | 1568 ON-71                    | 21                | 21                | No                               | 45                      | 40                | Yes                    |
| RN07_o              | Existing residential dwelling | 27                | 27                | No                               | 45                      | 40                | Yes                    |
| RN08_f              | 576 Mather Road               | 37                | 37                | No                               | 45                      | 40                | Yes                    |
| RN08_o              | Existing residential dwelling | 35                | 35                | No                               | 45                      | 40                | Yes                    |
| RN09_f              | 576 Mather Road               | 35                | 35                | No                               | 45                      | 40                | Yes                    |
| RN09_o              | Existing residential dwelling | 35                | 35                | No                               | 45                      | 40                | Yes                    |
| RN10_f              | 535 Cates Road                | 27                | 27                | No                               | 45                      | 40                | Yes                    |
| RN10_o              | Existing residential dwelling | 25                | 25                | No                               | 45                      | 40                | Yes                    |
| RN11_f              | 572 Cates Road                | 27                | 27                | No                               | 45                      | 40                | Yes                    |
| RN11_o              | Existing residential dwelling | 24                | 24                | No                               | 45                      | 40                | Yes                    |
| VN01                | Vacant lot                    | 27                | 27                | No                               | 45                      | 40                | Yes                    |
| VN02                | Vacant lot                    | 32                | 32                | No                               | 45                      | 40                | Yes                    |
| VN03                | Vacant lot                    | 32                | 32                | No                               | 45                      | 40                | Yes                    |
| VN04                | Vacant lot                    | 28                | 28                | No                               | 45                      | 40                | Yes                    |
| VN05                | Vacant lot                    | 17                | 17                | No                               | 45                      | 40                | Yes                    |
| VN06                | Vacant lot                    | 21                | 21                | No                               | 45                      | 40                | Yes                    |
| VN07                | Vacant lot                    | 31                | 31                | No                               | 45                      | 40                | Yes                    |
| VN08                | Vacant lot                    | 31                | 31                | No                               | 45                      | 40                | Yes                    |
| VN09                | Vacant lot                    | 37                | 37                | No                               | 45                      | 40                | Yes                    |
| VN10                | Vacant lot                    | 38                | 38                | No                               | 45                      | 40                | Yes                    |
| VN11                | Vacant lot                    | 38                | 38                | No                               | 45                      | 40                | Yes                    |
| VN12                | Vacant lot                    | 21                | 21                | No                               | 45                      | 40                | Yes                    |
| VN13                | Vacant lot                    | 25                | 25                | No                               | 45                      | 40                | Yes                    |
| VN14                | Vacant lot                    | 24                | 24                | No                               | 45                      | 40                | Yes                    |

| POR ID                         | Description | Sound Level (dBA) |                   | Verified by<br>Acoustic<br>Audit | Performance Limit (dBA) |                   | Compliance<br>(Yes/No) |
|--------------------------------|-------------|-------------------|-------------------|----------------------------------|-------------------------|-------------------|------------------------|
|                                |             | Day               | Night/<br>Evening |                                  | Day                     | Night/<br>Evening |                        |
| VN15                           | Vacant lot  | 37                | 37                | No                               | 45                      | 40                | Yes                    |
| VN16                           | Vacant lot  | 36                | 36                | No                               | 45                      | 40                | Yes                    |
| VN17                           | Vacant lot  | 38                | 38                | No                               | 45                      | 40                | Yes                    |
| VN18                           | Vacant lot  | 38                | 38                | No                               | 45                      | 40                | Yes                    |
| VN19                           | Vacant lot  | 37                | 37                | No                               | 45                      | 40                | Yes                    |
| VN20                           | Vacant lot  | 37                | 37                | No                               | 45                      | 40                | Yes                    |
| VN21                           | Vacant lot  | 36                | 36                | No                               | 45                      | 40                | Yes                    |
| <b>Participating Receptors</b> |             |                   |                   |                                  |                         |                   |                        |
| VP01                           | Vacant lot  | 39                | 39                | No                               | 45                      | 40                | N/A                    |
| VP02                           | Vacant lot  | 39                | 39                | No                               | 45                      | 40                | N/A                    |

## 8. Conclusion

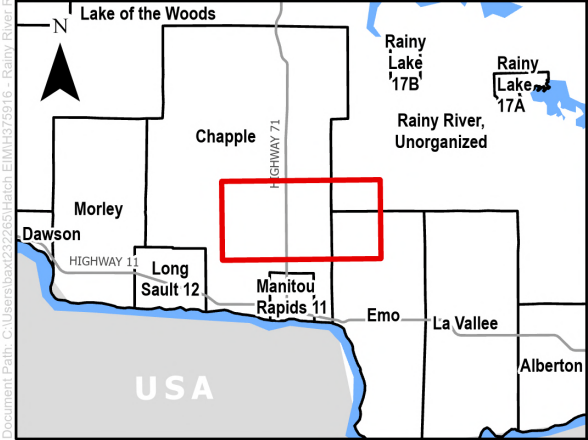
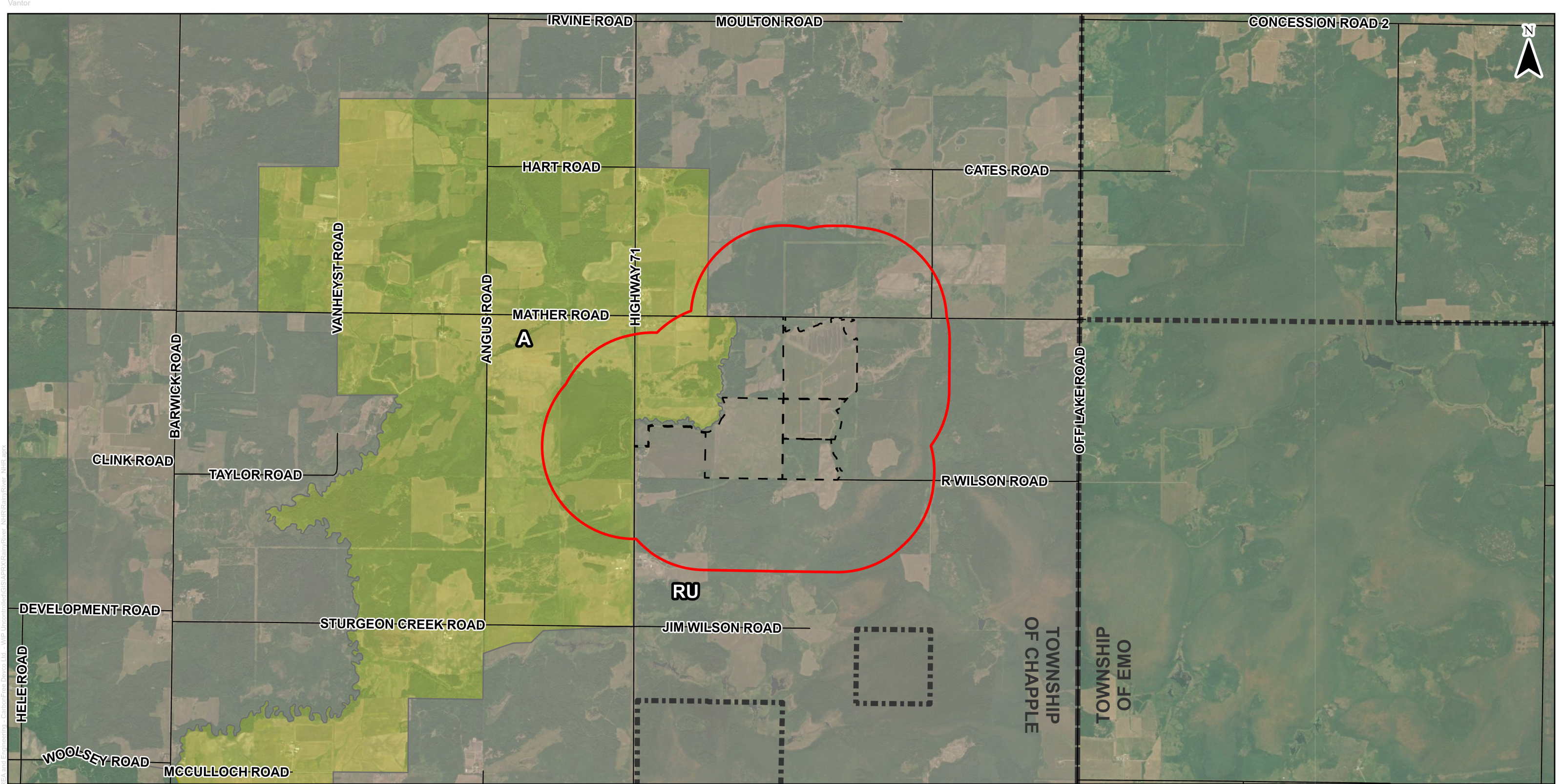
An acoustic assessment of the proposed Rainy River 60 MW Class 3 solar PV facility has been completed. Based on this AAR's approach and noise mitigations included with the design, the proposed Project is expected to be compliant with the community noise limits identified in the MECP *Technical Guide to Renewable Energy Approvals* [2] and *Environmental Noise Guidelines NPC-300* [4] for the PWC operating condition.

## 9. References

- [1] Province of Ontario, O. Reg 359/09 - *Renewable Energy Approvals under Part V.0.1 of the Environmental Protection Act*, 2016.
- [2] Province of Ontario, PIBS 8472e – *Technical Guide to Renewable Energy Approvals*, 2013.
- [3] Province of Ontario, PIBS 4391e01 – *Basic Comprehensive Certificates of Approval (Air)*, 2011.
- [4] Ontario Ministry of the Environment, Climate, and Parks (MECP), NPC-300 - *Environmental Noise Guideline – Stationary and Transportation Sources*, 2013.
- [5] National Electrical Manufacturers Association, "NEMA TP-80050-2013 (R2024): Transformers, Step Voltage Regulators, and Reactors," NEMA, Rosslyn, VA, USA, 2013.
- [6] Institute of Electrical and Electronics Engineers, C57.12.90 Standard Test Code for Liquid-Immersed Distribution, Power and Regulating Transformers, 2010.
- [7] International Organization for Standardization, "ISO 9613-2: Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation," ISO, Geneva, Switzerland, 1996.

# **Appendix A**

## **Zoning/Land-Use Siting Map**



**LEGEND**

— Road

— Project Boundary

— Study Area (1km Buffer)

— Municipal Boundary

**Municipal Zone**

Agricultural Area (A)

Rural Area (RU)

**NOTES:**

1. Produced by Hatch, contains information licensed under the Open Government Licence – Ontario

2. Spatial referencing: NAD 1983 UTM Zone 15N

3. Zoning digitized from the Township of Chapple's Official Plan, 2013

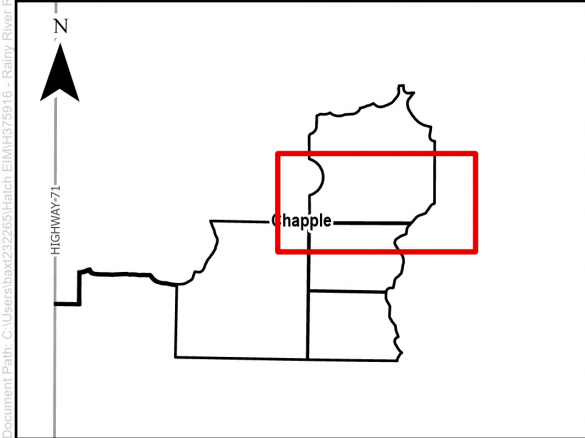
0 500 1,000 2,000

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|----------------------|--|--------------------|--|-------------|---------------------------------|---------------------------------------------------------------------------------------|--|--|--|
| PROJECT:             |  |                    |  |             | Rainy River Solar Project       |                                                                                       |  |  |  |
| FIGURE TITLE:        |  |                    |  |             | Municipality Zoning Information |                                                                                       |  |  |  |
| CLIENT:              |  |                    |  |             | CarbonFree Rainy River LTD      |                                                                                       |  |  |  |
| DWG BY:<br>V. BAXTER |  | CHK BY:<br>C. SEHL |  | FIG<br>NO.: | REV<br>NO.:                     |  |  |  |  |
| DATE:<br>14/01/26    |  | PAGE:<br>1         |  | 1           | 1                               |                                                                                       |  |  |  |

# **Appendix B**

## **Site and Noise Source Layout**



**LEGEND**

- PV Array
- Vertical Area Noise Source
- Inverter Casing
- Project Location

**NOTES:**

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- Spatial referencing: NAD 1983 UTM Zone 15N

037.575150

1:3,000

m

|                      |                        |                                                         |               |                  |  |
|----------------------|------------------------|---------------------------------------------------------|---------------|------------------|--|
| PROJECT:             |                        | Acoustic Assessment Report<br>Rainy River Solar Project |               |                  |  |
| FIGURE TITLE:        |                        | Noise Source Layout                                     |               |                  |  |
| CLIENT:              |                        | CarbonFree Rainy River LTD                              |               |                  |  |
| DWG BY:<br>V. BAXTER | CHK BY:<br>M. ANDARGIE | FIG NO.:<br>1                                           | REV NO.:<br>1 | <div>HATCH</div> |  |
| DATE:<br>05/05/26    | PAGE:<br>1 of 3        |                                                         |               |                  |  |



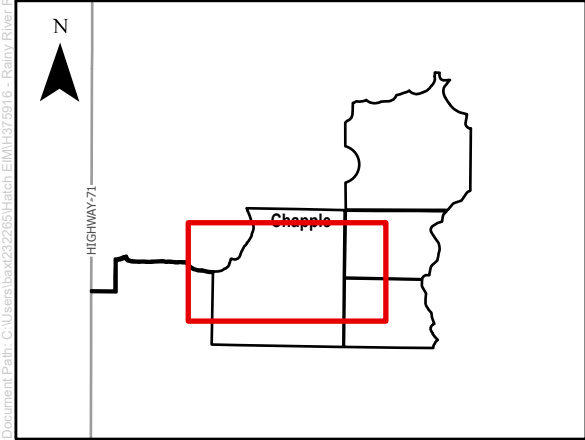
-  Point Source
-  PV Array
-  Vertical Area Noise Source
-  Inverter Casing
-  Project Location

0 37.5 75 150 m

1:3,000

# HATCH

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**LEGEND**

- PV Array
- Vertical Area Noise Source
- Inverter Casing
- Project Location

**NOTES:**

- Produced by Hatch, contains information licensed under the Open Government Licence – Ontario
- Spatial referencing: NAD 1983 UTM Zone 15N

0 37.5 75 150  
1:3,000

|                             |                               |                                                         |                      |  |  |
|-----------------------------|-------------------------------|---------------------------------------------------------|----------------------|--|--|
| <b>PROJECT:</b>             |                               | Acoustic Assessment Report<br>Rainy River Solar Project |                      |  |  |
| <b>FIGURE TITLE:</b>        |                               | Noise Source Layout                                     |                      |  |  |
| <b>CLIENT:</b>              |                               | CarbonFree Rainy River LTD                              |                      |  |  |
| <b>DWG BY:</b><br>V. BAXTER | <b>CHK BY:</b><br>M. ANDARGIE | <b>FIG NO.:</b><br>1                                    | <b>REV NO.:</b><br>1 |  |  |
| <b>DATE:</b><br>05/05/26    | <b>PAGE:</b><br>3 of 3        |                                                         |                      |  |  |

# **Appendix C**

## **Noise Source Sound Power Levels and Equipment Vendor Information**



|                |                                    |        |                                                    |              |      |
|----------------|------------------------------------|--------|----------------------------------------------------|--------------|------|
| Equipment Type | 150 kV BIL 68 MVA Transformer ONAN | NV dB  | TR_68                                              | Project Tags | ST01 |
| Manufacturer   | Larson Electronics                 |        |                                                    |              |      |
| Power          | 68 MVA                             | Date   | 2026.03.09                                         |              |      |
| Flow           | (m <sup>3</sup> /s)                |        |                                                    |              |      |
| Pres           | kPA                                | Source | NEMA TR1-1993 (R2000), Oil Filled- Forced Air      |              |      |
| Temperature    | (°C)                               |        | Larson Electronics 68 MVA 150 KV BIL MT-PSTC-R7-3P |              |      |

|      |     |     |     |     |      |      |      |      |     |
|------|-----|-----|-----|-----|------|------|------|------|-----|
| 31.5 | 63  | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | OVL |
| 100  | 106 | 108 | 103 | 103 | 97   | 92   | 87   | 80   | 104 |

**Derived Lw**

From Handbook of Noise and Vibration Control (Crocker, 2007, page 1335-1336, Eq. 18 and Table 20)

Average LpA 77 dBA Based on NEMA TR1-1993 (R2000), Table 0-4, Oil Filled, Naturally Air Cooled

Estimated surface area 270.5 m<sup>2</sup> Estimated based on Larson Electric specifications

|      |    |     |     |     |      |      |      |      |       |
|------|----|-----|-----|-----|------|------|------|------|-------|
| 31.5 | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | OVL   |
|      |    |     |     |     |      |      |      |      | (dBA) |

**STEP 1: Correction factors**

|                                                                 |     |    |    |    |    |     |     |     |     |
|-----------------------------------------------------------------|-----|----|----|----|----|-----|-----|-----|-----|
| C1 Outdoors, indoors in mechanical room over 140 m <sup>3</sup> | -11 | -5 | -3 | -8 | -8 | -14 | -19 | -24 | -31 |
| C2 - Indoors                                                    | -11 | -2 | 3  | -2 | -2 | -11 | -19 | -24 | -31 |
| C3 - Serious Noise Problems                                     | -11 | -2 | 3  | 2  | 2  | -4  | -9  | -14 | -21 |

**STEP 2: Sound Power Level calculated as Lw=Average LpA + Awt + 10\*log(Estimated surface area) + C + 10**

|               |       |       |       |      |      |     |     |    |      |     |
|---------------|-------|-------|-------|------|------|-----|-----|----|------|-----|
| C1 based [dB] | 100   | 106   | 108   | 103  | 103  | 97  | 92  | 87 | 80   | 104 |
| C2 based [dB] | 100   | 109   | 114   | 109  | 109  | 100 | 92  | 87 | 80   | 109 |
| C3 based [dB] | 100   | 109   | 114   | 113  | 113  | 107 | 102 | 97 | 90   | 113 |
| A-weightings  | -39.4 | -26.2 | -16.1 | -8.6 | -3.2 | 0   | 1.2 | 1  | -1.1 |     |

| Average Sound Level Lp, Decibels | Equivalent Two-Winding Rating* |   |   |                      |   |   |                    |   |   |                     |   |   |
|----------------------------------|--------------------------------|---|---|----------------------|---|---|--------------------|---|---|---------------------|---|---|
|                                  | 350 KV BIL and Below           |   |   | 450, 550, 650 KV BIL |   |   | 750 and 825 KV BIL |   |   | 900 and 1050 KV BIL |   |   |
|                                  | 1                              | 2 | 3 | 1                    | 2 | 3 | 1                  | 2 | 3 | 1                   | 2 | 3 |
| 57                               | 7500                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 58                               | 1000                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 59                               | 1500                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 60                               | 2000                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 61                               | 2500                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 62                               | 3000                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 63                               | 3500                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 64                               | 4000                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 65                               | 4500                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 66                               | 5000                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 67                               | 5500                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 68                               | 6000                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 69                               | 6500                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 70                               | 7000                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 71                               | 7500                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 72                               | 8000                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 73                               | 8500                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 74                               | 9000                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 75                               | 9500                           |   |   |                      |   |   |                    |   |   |                     |   |   |
| 76                               | 10000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 77                               | 10500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 78                               | 11000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 79                               | 11500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 80                               | 12000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 81                               | 12500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 82                               | 13000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 83                               | 13500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 84                               | 14000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 85                               | 14500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 86                               | 15000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 87                               | 15500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 88                               | 16000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 89                               | 16500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 90                               | 17000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 91                               | 17500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 92                               | 18000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 93                               | 18500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 94                               | 19000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 95                               | 19500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 96                               | 20000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 97                               | 20500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 98                               | 21000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 99                               | 21500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 100                              | 22000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 101                              | 22500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 102                              | 23000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 103                              | 23500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 104                              | 24000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 105                              | 24500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 106                              | 25000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 107                              | 25500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 108                              | 26000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 109                              | 26500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 110                              | 27000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 111                              | 27500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 112                              | 28000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 113                              | 28500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 114                              | 29000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 115                              | 29500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 116                              | 30000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 117                              | 30500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 118                              | 31000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 119                              | 31500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 120                              | 32000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 121                              | 32500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 122                              | 33000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 123                              | 33500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 124                              | 34000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 125                              | 34500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 126                              | 35000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 127                              | 35500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 128                              | 36000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 129                              | 36500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 130                              | 37000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 131                              | 37500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 132                              | 38000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 133                              | 38500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 134                              | 39000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 135                              | 39500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 136                              | 40000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 137                              | 40500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 138                              | 41000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 139                              | 41500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 140                              | 42000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 141                              | 42500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 142                              | 43000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 143                              | 43500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 144                              | 44000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 145                              | 44500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 146                              | 45000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 147                              | 45500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 148                              | 46000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 149                              | 46500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 150                              | 47000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 151                              | 47500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 152                              | 48000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 153                              | 48500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 154                              | 49000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 155                              | 49500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 156                              | 50000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 157                              | 50500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 158                              | 51000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 159                              | 51500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 160                              | 52000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 161                              | 52500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 162                              | 53000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 163                              | 53500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 164                              | 54000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 165                              | 54500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 166                              | 55000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 167                              | 55500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 168                              | 56000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 169                              | 56500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 170                              | 57000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 171                              | 57500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 172                              | 58000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 173                              | 58500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 174                              | 59000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 175                              | 59500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 176                              | 60000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 177                              | 60500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 178                              | 61000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 179                              | 61500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 180                              | 62000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 181                              | 62500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 182                              | 63000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 183                              | 63500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 184                              | 64000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 185                              | 64500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 186                              | 65000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 187                              | 65500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 188                              | 66000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 189                              | 66500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 190                              | 67000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 191                              | 67500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 192                              | 68000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 193                              | 68500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 194                              | 69000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 195                              | 69500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 196                              | 70000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 197                              | 70500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 198                              | 71000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 199                              | 71500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 200                              | 72000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 201                              | 72500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 202                              | 73000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 203                              | 73500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 204                              | 74000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 205                              | 74500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 206                              | 75000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 207                              | 75500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 208                              | 76000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 209                              | 76500                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 210                              | 77000                          |   |   |                      |   |   |                    |   |   |                     |   |   |
| 211                              | 77500                          |   |   |                      |   |   |                    |   |   |                     |   |   |



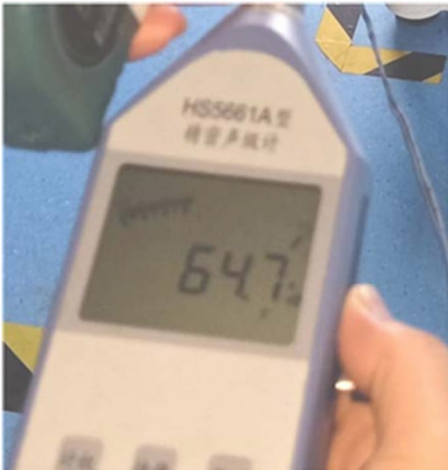
## Nextracker Motor Sound Summary

Each Nextracker row uses a 24V DC motor powered by a Nextracker controller (SPC). To track the Sun, the motor operates for five to ten seconds every few minutes. The noise level of the motors is tested by the manufacturer. Test reports from the manufacturer indicate that the sound power level is approximately ~65dB. The sound level produced is low and essentially indistinguishable to surrounding site noises such as inverters, transformers, and HVAC units.

Below is a Motor test report from Nextracker Vendor.

| Distance      | Sound Level | Equivalent Sound                  |
|---------------|-------------|-----------------------------------|
| 3m (9.8 ft)   | ~ 65dB      | Normal Conversation, Quiet Suburb |
| 30m (98 ft)   | ~ 45dB      | Light Rain, Bird calls            |
| 300m (980 ft) | ~ 25dB      | Leaves Rustling, Whisper          |

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |           |            |            |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|------------|------------|
| Applicator          | Lu Weijian                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Department  | Technical | Date       | 2020.04.14 |
| Sample name         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Drawing No. |           | Sample No. | 2          |
| Test purpose        | Test gearbox motor can meet the noise standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |           |            |            |
| Test process        | <p>1. The test motor shall be isolated from the aging table to prevent it from being affected by the noise of the aging table. The torque shall be set to 150N.m for 10min forward rotation, 1min stop, 10min reverse and 1min stop, work for 2 cycles. The noise meter should be 1m to the under test motor.</p> <p>2. Acceptable standard: Noise during the test shall be <math>\leq 65\text{dB}</math></p>                                                                                                                                                                                            |             |           |            |            |
| Test equipment      | 300N.m dynamometer, noise meter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |           |            |            |
| Test cycle          | 1 day                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |           |            |            |
| Process Description | <p>1. Clamp the sample motor and test the corresponding data according to the above test methods</p> <p>1-1 Ambient noise 56.1dB</p>  <p>1-2 Dynamometer parameter setting 150N.m</p>  <p>1-3 Test the motor noise when running as required, and the horizontal distance from the motor is 1m</p>  <p>1-4 Motor noise test result: 64.7dB</p> |             |           |            |            |

|             |                                                                                                                             |       |            |
|-------------|-----------------------------------------------------------------------------------------------------------------------------|-------|------------|
|             |                                            |       |            |
| Test report | No. B1 Motor noise 64.7 dB;<br>No. F1 Motor noise 63.2 dB;                                                                  |       |            |
| Test result | According to the test results show that the stable operation of electric motor noise can meet the performance requirements; |       |            |
| Operator    | Sun Jieying                                                                                                                 | Audit | Lu Weijian |

## **Appendix D**

# **POR Noise Impact Table and Noise Contour Plot**

**Point of Reception Noise Impact Table**

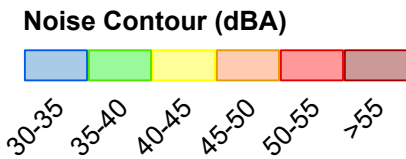
| Receptor ID | Top Noise Sources |           |           |           |          |          |           |           |           |           | Source ID     |
|-------------|-------------------|-----------|-----------|-----------|----------|----------|-----------|-----------|-----------|-----------|---------------|
|             | 1                 | 2         | 3         | 4         | 5        | 6        | 7         | 8         | 9         | 10        |               |
| RN01_f      | ST01              | INV09_In  | INV10_In  | INV13_In  | INV09_TR | INV14_In | INV11_In  | INV12_In  | INV13_TR  | INV10_TR  | Source ID     |
|             | 26 dBA            | 15 dBA    | 14 dBA    | 14 dBA    | 14 dBA   | 14 dBA   | 13 dBA    | 13 dBA    | 13 dBA    | 13 dBA    | Partial Level |
|             | 1910 m            | 1726 m    | 1832 m    | 1554 m    | 1726 m   | 1579 m   | 1669 m    | 1685 m    | 1554 m    | 1832 m    | Distance      |
| RN01_o      | ST01              | INV09_In  | INV10_In  | INV13_In  | INV09_TR | INV14_In | INV11_In  | INV12_In  | INV13_TR  | INV10_TR  |               |
|             | 26 dBA            | 15 dBA    | 14 dBA    | 14 dBA    | 14 dBA   | 14 dBA   | 13 dBA    | 13 dBA    | 13 dBA    | 13 dBA    |               |
|             | 1881 m            | 1694 m    | 1801 m    | 1525 m    | 1694 m   | 1550 m   | 1639 m    | 1656 m    | 1525 m    | 1801 m    |               |
| RN02_f      | ST01              | INV09_In  | INV09_TR  | INV11_In  | INV12_In | INV11_TR | INV10_In  | INV10_TR  | INV12_TR  | INV13_Out |               |
|             | 28 dBA            | 20 dBA    | 19 dBA    | 18 dBA    | 18 dBA   | 16 dBA   | 14 dBA    | 13 dBA    | 13 dBA    | 12 dBA    |               |
|             | 1959 m            | 1364 m    | 1364 m    | 1706 m    | 1729 m   | 1706 m   | 1621 m    | 1621 m    | 1729 m    | 1731 m    |               |
| RN02_o      | ST01              | INV09_In  | INV09_TR  | INV11_In  | INV12_In | INV11_TR | INV10_In  | INV10_TR  | INV12_TR  | INV13_Out |               |
|             | 26 dBA            | 18 dBA    | 17 dBA    | 15 dBA    | 15 dBA   | 14 dBA   | 14 dBA    | 12 dBA    | 12 dBA    | 11 dBA    |               |
|             | 1928 m            | 1333 m    | 1333 m    | 1676 m    | 1698 m   | 1676 m   | 1590 m    | 1590 m    | 1698 m    | 1701 m    |               |
| RN03_f      | ST01              | INV09_In  | INV09_TR  | INV11_In  | INV12_In | INV11_TR | INV10_In  | INV12_TR  | INV10_TR  | INV09_Out |               |
|             | 29 dBA            | 23 dBA    | 22 dBA    | 19 dBA    | 19 dBA   | 18 dBA   | 17 dBA    | 16 dBA    | 16 dBA    | 16 dBA    |               |
|             | 1523 m            | 915 m     | 915 m     | 1279 m    | 1301 m   | 1279 m   | 1174 m    | 1301 m    | 1174 m    | 915 m     |               |
| RN03_o      | ST01              | INV09_In  | INV09_TR  | INV11_In  | INV12_In | INV11_TR | INV10_In  | INV12_TR  | INV10_TR  | INV09_Out |               |
|             | 29 dBA            | 24 dBA    | 22 dBA    | 19 dBA    | 19 dBA   | 18 dBA   | 18 dBA    | 17 dBA    | 16 dBA    | 16 dBA    |               |
|             | 1493 m            | 885 m     | 885 m     | 1249 m    | 1271 m   | 1249 m   | 1144 m    | 1271 m    | 1144 m    | 885 m     |               |
| RN04_f      | ST01              | INV09_In  | INV09_Out | INV11_In  | INV12_In | INV09_TR | INV11_TR  | INV12_TR  | INV10_Out | INV13_Out |               |
|             | 29 dBA            | 20 dBA    | 20 dBA    | 19 dBA    | 18 dBA   | 18 dBA   | 17 dBA    | 17 dBA    | 14 dBA    | 12 dBA    |               |
|             | 1538 m            | 917 m     | 917 m     | 1301 m    | 1322 m   | 917 m    | 1301 m    | 1322 m    | 1179 m    | 1352 m    |               |
| RN04_o      | ST01              | INV09_In  | INV09_Out | INV11_In  | INV09_TR | INV12_In | INV11_TR  | INV12_TR  | INV10_Out | INV13_Out |               |
|             | 29 dBA            | 21 dBA    | 20 dBA    | 19 dBA    | 19 dBA   | 19 dBA   | 18 dBA    | 17 dBA    | 14 dBA    | 12 dBA    |               |
|             | 1516 m            | 894 m     | 894 m     | 1279 m    | 894 m    | 1300 m   | 1279 m    | 1300 m    | 1157 m    | 1331 m    |               |
| RN05_f      | ST01              | INV09_Out | INV09_In  | INV11_In  | INV12_In | INV11_TR | INV12_TR  | INV09_TR  | INV10_Out | INV15_In  |               |
|             | 29 dBA            | 20 dBA    | 19 dBA    | 18 dBA    | 18 dBA   | 17 dBA   | 17 dBA    | 16 dBA    | 14 dBA    | 12 dBA    |               |
|             | 1559 m            | 923 m     | 923 m     | 1333 m    | 1354 m   | 1333 m   | 1354 m    | 923 m     | 1187 m    | 1811 m    |               |
| RN05_o      | ST01              | INV09_Out | INV09_In  | INV11_In  | INV12_In | INV11_TR | INV12_TR  | INV09_TR  | INV10_Out | INV06_In  |               |
|             | 29 dBA            | 20 dBA    | 19 dBA    | 19 dBA    | 18 dBA   | 17 dBA   | 17 dBA    | 16 dBA    | 14 dBA    | 12 dBA    |               |
|             | 1542 m            | 905 m     | 905 m     | 1317 m    | 1338 m   | 1317 m   | 1338 m    | 905 m     | 1169 m    | 1796 m    |               |
| RN06_f      | ST01              | INV09_Out | INV11_In  | INV12_In  | INV09_In | INV11_TR | INV12_TR  | INV10_Out | INV09_TR  | INV06_In  |               |
|             | 28 dBA            | 19 dBA    | 18 dBA    | 18 dBA    | 17 dBA   | 17 dBA   | 16 dBA    | 14 dBA    | 14 dBA    | 12 dBA    |               |
|             | 1587 m            | 942 m     | 1372 m    | 1393 m    | 942 m    | 1372 m   | 1393 m    | 1205 m    | 942 m     | 1830 m    |               |
| RN06_o      | ST01              | INV09_Out | INV11_In  | INV12_In  | INV09_In | INV11_TR | INV12_TR  | INV10_Out | INV09_TR  | INV06_In  |               |
|             | 29 dBA            | 20 dBA    | 18 dBA    | 18 dBA    | 17 dBA   | 17 dBA   | 17 dBA    | 14 dBA    | 14 dBA    | 12 dBA    |               |
|             | 1573 m            | 928 m     | 1360 m    | 1380 m    | 928 m    | 1360 m   | 1380 m    | 1191 m    | 928 m     | 1816 m    |               |
| RN07_f      | INV09_Out         | INV11_In  | INV12_In  | INV10_Out | INV11_TR | INV12_TR | INV08_Out | INV09_In  | INV09_TR  | INV08_In  |               |
|             | 14 dBA            | 12 dBA    | 12 dBA    | 12 dBA    | 12 dBA   | 11 dBA   | 11 dBA    | 8 dBA     | 6 dBA     | 5 dBA     |               |
|             | 1435 m            | 1899 m    | 1913 m    | 1637 m    | 1899 m   | 1913 m   | 1910 m    | 1435 m    | 1435 m    | 1910 m    |               |
| RN07_o      | ST01              | INV09_Out | INV11_In  | INV12_In  | INV11_TR | INV12_TR | INV10_Out | INV09_In  | INV08_Out | INV13_Out |               |
|             | 26 dBA            | 12 dBA    | 12 dBA    | 11 dBA    | 10 dBA   | 10 dBA   | 10 dBA    | 8 dBA     | 8 dBA     | 7 dBA     |               |
|             | 1993 m            | 1406 m    | 1870 m    | 1884 m    | 1870 m   | 1884 m   | 1608 m    | 1406 m    | 1882 m    | 2000 m    |               |
| RN08_f      | ST01              | INV01_In  | INV02_In  | INV03_In  | INV01_TR | INV02_TR | INV03_TR  | INV04_In  | INV04_TR  | INV05_In  |               |
|             | 32 dBA            | 26 dBA    | 26 dBA    | 26 dBA    | 25 dBA   | 25 dBA   | 25 dBA    | 23 dBA    | 22 dBA    | 21 dBA    |               |
|             | 1446 m            | 808 m     | 851 m     | 851 m     | 808 m    | 851 m    | 851 m     | 1059 m    | 1059 m    | 1327 m    |               |

| Receptor ID | Top Noise Sources |           |           |           |           |           |           |           |           |           |
|-------------|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|             | 1                 | 2         | 3         | 4         | 5         | 6         | 7         | 8         | 9         | 10        |
| RN08_o      | ST01              | INV01_In  | INV03_In  | INV02_In  | INV01_TR  | INV02_TR  | INV03_TR  | INV04_In  | INV04_TR  | INV05_In  |
|             | 30 dBA            | 25 dBA    | 24 dBA    | 24 dBA    | 24 dBA    | 23 dBA    | 23 dBA    | 22 dBA    | 20 dBA    | 18 dBA    |
|             | 1417 m            | 779 m     | 820 m     | 821 m     | 779 m     | 821 m     | 820 m     | 1029 m    | 1029 m    | 1297 m    |
| RN09_f      | ST01              | INV01_In  | INV01_TR  | INV02_In  | INV03_In  | INV02_TR  | INV03_TR  | INV04_In  | INV04_TR  | INV05_In  |
|             | 29 dBA            | 26 dBA    | 25 dBA    | 24 dBA    | 24 dBA    | 23 dBA    | 23 dBA    | 21 dBA    | 20 dBA    | 16 dBA    |
|             | 1510 m            | 687 m     | 687 m     | 831 m     | 843 m     | 831 m     | 843 m     | 1084 m    | 1084 m    | 1331 m    |
| RN09_o      | ST01              | INV01_In  | INV01_TR  | INV02_In  | INV03_In  | INV02_TR  | INV03_TR  | INV04_In  | INV04_TR  | INV05_In  |
|             | 29 dBA            | 27 dBA    | 26 dBA    | 25 dBA    | 24 dBA    | 24 dBA    | 23 dBA    | 21 dBA    | 20 dBA    | 16 dBA    |
|             | 1484 m            | 657 m     | 657 m     | 803 m     | 815 m     | 803 m     | 815 m     | 1057 m    | 1057 m    | 1303 m    |
| RN10_f      | INV01_In          | INV01_TR  | INV02_In  | INV03_In  | INV02_TR  | INV03_TR  | INV04_In  | INV04_TR  | INV01_Out | INV02_Out |
|             | 21 dBA            | 19 dBA    | 19 dBA    | 18 dBA    | 17 dBA    | 17 dBA    | 12 dBA    | 12 dBA    | 4 dBA     | 3 dBA     |
|             | 1340 m            | 1340 m    | 1578 m    | 1601 m    | 1578 m    | 1601 m    | 1843 m    | 1843 m    | 1340 m    | 1578 m    |
| RN10_o      | INV01_In          | INV01_TR  | INV02_In  | INV03_In  | INV02_TR  | INV03_TR  | INV04_In  | INV04_TR  | INV01_Out | INV02_Out |
|             | 19 dBA            | 17 dBA    | 16 dBA    | 16 dBA    | 15 dBA    | 15 dBA    | 12 dBA    | 11 dBA    | 4 dBA     | 2 dBA     |
|             | 1309 m            | 1309 m    | 1547 m    | 1570 m    | 1547 m    | 1570 m    | 1812 m    | 1812 m    | 1309 m    | 1547 m    |
| RN11_f      | INV01_In          | INV01_TR  | INV02_In  | INV03_In  | INV02_TR  | INV03_TR  | INV01_Out | INV04_In  | INV04_TR  | INV03_Out |
|             | 20 dBA            | 19 dBA    | 18 dBA    | 18 dBA    | 17 dBA    | 16 dBA    | 15 dBA    | 12 dBA    | 11 dBA    | 3 dBA     |
|             | 1400 m            | 1400 m    | 1642 m    | 1665 m    | 1642 m    | 1665 m    | 1400 m    | 1906 m    | 1906 m    | 1665 m    |
| RN11_o      | INV01_TR          | INV02_In  | INV03_In  | INV02_TR  | INV01_In  | INV03_TR  | INV01_Out | INV04_In  | INV04_TR  | INV02_Out |
|             | 16 dBA            | 16 dBA    | 16 dBA    | 14 dBA    | 14 dBA    | 14 dBA    | 12 dBA    | 11 dBA    | 10 dBA    | 1 dBA     |
|             | 1379 m            | 1622 m    | 1646 m    | 1622 m    | 1379 m    | 1646 m    | 1379 m    | 1886 m    | 1886 m    | 1622 m    |
| VN01        | INV13_In          | INV11_In  | INV09_In  | INV12_In  | INV14_In  | INV10_In  | INV13_TR  | INV11_TR  | INV09_TR  | INV12_TR  |
|             | 18 dBA            | 17 dBA    | 17 dBA    | 17 dBA    | 17 dBA    | 16 dBA    | 16 dBA    | 15 dBA    | 15 dBA    | 15 dBA    |
|             | 1698 m            | 1804 m    | 1821 m    | 1821 m    | 1724 m    | 1948 m    | 1698 m    | 1804 m    | 1821 m    | 1821 m    |
| VN02        | ST01              | INV11_In  | INV12_In  | INV09_Out | INV11_TR  | INV12_TR  | INV10_Out | INV13_Out | INV09_In  | INV14_Out |
|             | 30 dBA            | 20 dBA    | 19 dBA    | 19 dBA    | 18 dBA    | 18 dBA    | 14 dBA    | 13 dBA    | 12 dBA    | 12 dBA    |
|             | 1700 m            | 1471 m    | 1492 m    | 1066 m    | 1471 m    | 1492 m    | 1330 m    | 1530 m    | 1066 m    | 1559 m    |
| VN03        | ST01              | INV11_In  | INV12_In  | INV09_Out | INV11_TR  | INV12_TR  | INV10_Out | INV13_Out | INV14_Out | INV09_In  |
|             | 30 dBA            | 19 dBA    | 19 dBA    | 19 dBA    | 18 dBA    | 18 dBA    | 14 dBA    | 12 dBA    | 12 dBA    | 12 dBA    |
|             | 1728 m            | 1507 m    | 1528 m    | 1086 m    | 1507 m    | 1528 m    | 1350 m    | 1576 m    | 1604 m    | 1086 m    |
| VN04        | ST01              | INV09_Out | INV11_In  | INV12_In  | INV10_Out | INV11_TR  | INV12_TR  | INV06_In  | INV15_In  | INV13_Out |
|             | 25 dBA            | 16 dBA    | 14 dBA    | 14 dBA    | 14 dBA    | 14 dBA    | 14 dBA    | 12 dBA    | 12 dBA    | 12 dBA    |
|             | 1757 m            | 1120 m    | 1586 m    | 1603 m    | 1361 m    | 1586 m    | 1603 m    | 1957 m    | 1950 m    | 1693 m    |
| VN05        | INV09_Out         | INV10_Out | INV08_Out | INV09_In  | INV08_In  | INV09_TR  | INV08_TR  | INV10_In  | INV10_TR  | ST01      |
|             | 11 dBA            | 10 dBA    | 10 dBA    | 6 dBA     | 5 dBA     | 4 dBA     | 3 dBA     | 2 dBA     | 0 dBA     | 0 dBA     |
|             | 1787 m            | 1869 m    | 1944 m    | 1787 m    | 1944 m    | 1787 m    | 1944 m    | 1869 m    | 1869 m    | 2164 m    |
| VN06        | INV15_In          | INV06_In  | INV15_TR  | INV06_TR  | INV08_Out | INV07_Out | INV10_Out | INV09_Out | INV07_In  | INV10_In  |
|             | 12 dBA            | 12 dBA    | 11 dBA    | 11 dBA    | 11 dBA    | 11 dBA    | 10 dBA    | 10 dBA    | 6 dBA     | 6 dBA     |
|             | 1943 m            | 1962 m    | 1943 m    | 1962 m    | 1782 m    | 1791 m    | 1890 m    | 1922 m    | 1791 m    | 1890 m    |
| VN07        | ST01              | INV15_Out | INV06_Out | INV01_Out | INV05_Out | INV07_Out | INV08_Out | INV02_Out | INV03_Out | INV04_Out |
|             | 30 dBA            | 15 dBA    | 15 dBA    | 14 dBA    | 14 dBA    | 14 dBA    | 12 dBA    | 12 dBA    | 12 dBA    | 12 dBA    |
|             | 1779 m            | 1474 m    | 1480 m    | 1542 m    | 1532 m    | 1436 m    | 1630 m    | 1646 m    | 1669 m    | 1667 m    |
| VN08        | ST01              | INV15_Out | INV06_Out | INV01_Out | INV05_Out | INV07_Out | INV02_Out | INV03_Out | INV04_Out | INV08_Out |
|             | 30 dBA            | 15 dBA    | 15 dBA    | 15 dBA    | 14 dBA    | 14 dBA    | 12 dBA    | 12 dBA    | 12 dBA    | 12 dBA    |
|             | 1767 m            | 1464 m    | 1469 m    | 1478 m    | 1511 m    | 1437 m    | 1595 m    | 1620 m    | 1631 m    | 1633 m    |
| VN09        | ST01              | INV07_Out | INV05_Out | INV15_Out | INV06_Out | INV07_TR  | INV08_Out | INV07_In  | INV01_Out | INV08_TR  |
|             | 36 dBA            | 22 dBA    | 21 dBA    | 21 dBA    | 21 dBA    | 20 dBA    | 19 dBA    | 18 dBA    | 18 dBA    | 17 dBA    |

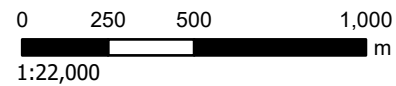
| Receptor ID | Top Noise Sources |           |           |           |           |          |           |           |          |           |
|-------------|-------------------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|-----------|
|             | 1                 | 2         | 3         | 4         | 5         | 6        | 7         | 8         | 9        | 10        |
|             | 1065 m            | 689 m     | 875 m     | 764 m     | 775 m     | 689 m    | 874 m     | 689 m     | 1196 m   | 874 m     |
| VN10        | ST01              | INV06_Out | INV07_Out | INV05_Out | INV15_Out | INV07_TR | INV07_In  | INV08_Out | INV08_TR | INV01_Out |
|             | 36 dBA            | 24 dBA    | 23 dBA    | 23 dBA    | 22 dBA    | 22 dBA   | 21 dBA    | 20 dBA    | 19 dBA   | 19 dBA    |
|             | 1003 m            | 707 m     | 639 m     | 796 m     | 698 m     | 639 m    | 639 m     | 831 m     | 831 m    | 1094 m    |
| VN11        | ST01              | INV07_Out | INV15_Out | INV06_Out | INV08_Out | INV07_TR | INV05_Out | INV07_In  | INV15_In | INV06_In  |
|             | 37 dBA            | 24 dBA    | 23 dBA    | 22 dBA    | 21 dBA    | 21 dBA   | 21 dBA    | 20 dBA    | 19 dBA   | 19 dBA    |
|             | 948 m             | 564 m     | 653 m     | 666 m     | 742 m     | 564 m    | 781 m     | 564 m     | 653 m    | 666 m     |
| VN12        | INV02_In          | INV01_Out | INV03_In  | INV02_TR  | INV03_TR  | INV04_In | INV04_TR  | INV01_In  | INV01_TR | INV02_Out |
|             | 13 dBA            | 13 dBA    | 13 dBA    | 13 dBA    | 12 dBA    | 12 dBA   | 11 dBA    | 8 dBA     | 7 dBA    | -3 dBA    |
|             | 1737 m            | 1475 m    | 1766 m    | 1737 m    | 1766 m    | 1980 m   | 1980 m    | 1475 m    | 1475 m   | 1737 m    |
| VN13        | INV01_Out         | INV02_In  | INV03_In  | INV02_TR  | INV03_TR  | INV04_In | INV04_TR  | INV05_In  | INV05_TR | INV01_In  |
|             | 16 dBA            | 16 dBA    | 16 dBA    | 15 dBA    | 15 dBA    | 14 dBA   | 13 dBA    | 13 dBA    | 12 dBA   | 10 dBA    |
|             | 1157 m            | 1417 m    | 1445 m    | 1417 m    | 1445 m    | 1668 m   | 1668 m    | 1816 m    | 1816 m   | 1157 m    |
| VN14        | INV01_Out         | INV02_In  | INV03_In  | INV02_TR  | INV03_TR  | INV04_In | INV04_TR  | INV05_In  | INV05_TR | INV01_In  |
|             | 16 dBA            | 15 dBA    | 15 dBA    | 15 dBA    | 14 dBA    | 13 dBA   | 13 dBA    | 12 dBA    | 12 dBA   | 10 dBA    |
|             | 1216 m            | 1473 m    | 1500 m    | 1473 m    | 1500 m    | 1729 m   | 1729 m    | 1888 m    | 1888 m   | 1216 m    |
| VN15        | ST01              | INV01_In  | INV01_TR  | INV02_In  | INV03_In  | INV02_TR | INV03_TR  | INV14_In  | INV13_In | INV04_In  |
|             | 32 dBA            | 29 dBA    | 28 dBA    | 26 dBA    | 26 dBA    | 25 dBA   | 25 dBA    | 19 dBA    | 19 dBA   | 19 dBA    |
|             | 1517 m            | 623 m     | 623 m     | 818 m     | 836 m     | 818 m    | 836 m     | 1504 m    | 1529 m   | 1082 m    |
| VN16        | ST01              | INV01_In  | INV01_TR  | INV02_In  | INV03_In  | INV02_TR | INV03_TR  | INV04_In  | INV04_TR | INV14_In  |
|             | 31 dBA            | 28 dBA    | 26 dBA    | 25 dBA    | 25 dBA    | 24 dBA   | 24 dBA    | 22 dBA    | 21 dBA   | 19 dBA    |
|             | 1596 m            | 717 m     | 717 m     | 901 m     | 917 m     | 901 m    | 917 m     | 1163 m    | 1163 m   | 1569 m    |
| VN17        | ST01              | INV03_In  | INV02_In  | INV01_In  | INV03_TR  | INV02_TR | INV01_TR  | INV04_In  | INV04_TR | INV13_In  |
|             | 33 dBA            | 26 dBA    | 26 dBA    | 26 dBA    | 25 dBA    | 25 dBA   | 25 dBA    | 24 dBA    | 23 dBA   | 22 dBA    |
|             | 1343 m            | 806 m     | 814 m     | 827 m     | 806 m     | 814 m    | 827 m     | 987 m     | 987 m    | 1199 m    |
| VN18        | ST01              | INV13_In  | INV14_In  | INV03_In  | INV02_In  | INV04_In | INV13_TR  | INV14_TR  | INV03_TR | INV02_TR  |
|             | 34 dBA            | 24 dBA    | 24 dBA    | 24 dBA    | 24 dBA    | 23 dBA   | 23 dBA    | 23 dBA    | 23 dBA   | 22 dBA    |
|             | 1260 m            | 989 m     | 990 m     | 997 m     | 1020 m    | 1060 m   | 989 m     | 990 m     | 997 m    | 1020 m    |
| VN19        | ST01              | INV03_In  | INV13_In  | INV14_In  | INV02_In  | INV04_In | INV03_TR  | INV01_In  | INV13_TR | INV14_TR  |
|             | 33 dBA            | 23 dBA    | 23 dBA    | 23 dBA    | 23 dBA    | 22 dBA   | 22 dBA    | 22 dBA    | 22 dBA   | 22 dBA    |
|             | 1361 m            | 1078 m    | 1090 m    | 1092 m    | 1100 m    | 1152 m   | 1078 m    | 1226 m    | 1090 m   | 1092 m    |
| VN20        | ST01              | INV13_In  | INV14_In  | INV13_TR  | INV11_In  | INV14_TR | INV12_In  | INV03_In  | INV04_In | INV02_In  |
|             | 32 dBA            | 23 dBA    | 23 dBA    | 22 dBA    | 22 dBA    | 22 dBA   | 22 dBA    | 21 dBA    | 21 dBA   | 21 dBA    |
|             | 1412 m            | 1081 m    | 1094 m    | 1081 m    | 1237 m    | 1094 m   | 1245 m    | 1317 m    | 1323 m   | 1344 m    |
| VN21        | ST01              | INV13_In  | INV14_In  | INV11_In  | INV13_TR  | INV12_In | INV14_TR  | INV03_In  | INV04_In | INV02_In  |
|             | 32 dBA            | 22 dBA    | 22 dBA    | 21 dBA    | 21 dBA    | 21 dBA   | 21 dBA    | 20 dBA    | 20 dBA   | 20 dBA    |
|             | 1508 m            | 1181 m    | 1193 m    | 1337 m    | 1181 m    | 1345 m   | 1193 m    | 1387 m    | 1405 m   | 1413 m    |
| VP01        | ST01              | INV07_Out | INV05_Out | INV15_Out | INV06_Out | INV07_TR | INV07_In  | INV08_Out | INV08_TR | INV08_In  |
|             | 37 dBA            | 25 dBA    | 24 dBA    | 24 dBA    | 23 dBA    | 23 dBA   | 22 dBA    | 21 dBA    | 20 dBA   | 20 dBA    |
|             | 909 m             | 540 m     | 714 m     | 606 m     | 616 m     | 540 m    | 540 m     | 731 m     | 731 m    | 731 m     |
| VP02        | ST01              | INV03_In  | INV02_In  | INV01_In  | INV03_TR  | INV02_TR | INV04_In  | INV01_TR  | INV04_TR | INV14_In  |
|             | 34 dBA            | 27 dBA    | 27 dBA    | 26 dBA    | 26 dBA    | 26 dBA   | 25 dBA    | 24 dBA    | 24 dBA   | 24 dBA    |
|             | 1226 m            | 757 m     | 771 m     | 839 m     | 757 m     | 771 m    | 904 m     | 839 m     | 904 m    | 1042 m    |



 Point of Reception  
 Road  
 Project Location



1. Produced by Hatch, contains information licensed under the Open Government Licence – Ontario
2. Spatial referencing: NAD 1983 UTM Zone 15N
3. Noise contours were generated based on a 10 x 10m grid at a 4.5m elevation above ground



# HATCH

# **Appendix E**

## **Acoustic Assessment Report Checklist**

## ACOUSTIC ASSESSMENT REPORT CHECK-LIST

Company Name: CarbonFree Rainy River Ltd.

Company Address: 1 St Clair Ave W#801  
Toronto, Ontario M4T 1Y5

Location of Facility: Rainy River, Ontario

The attached Acoustic Assessment Report was prepared in accordance with the guidance in the ministry document "Information to be Submitted for Approval of Stationary Sources of Sound" (NPC 233) dated October 1995 and the minimum required information identified in the check-list on the reverse of this sheet has been submitted.

Company Contact: Doug Deeks

Name: Doug Deeks

Title: Vice President - Projects

Phone Number: 647-408-9680

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Technical Contact: Hatch Ltd

Name: Mervyn Choy

Representing: Hatch Ltd.

Phone Number: 289-326-2740

Signature:  \_\_\_\_\_

Date: May 29, 2026

## ACOUSTIC ASSESSMENT REPORT CHECKLIST

|            | Required Information                                                   | Submitted                               | Explanation/Reference          |
|------------|------------------------------------------------------------------------|-----------------------------------------|--------------------------------|
| <b>1.0</b> | <b>Introduction</b> (Project Background and Overview)                  | <input checked="" type="checkbox"/> Yes | <a href="#">Section 1</a>      |
| <b>2.0</b> | <b>Facility Description</b>                                            |                                         |                                |
|            | 2.1 Operating hours of facility and significant Noise Sources          | <input checked="" type="checkbox"/> Yes | <a href="#">Section 2</a>      |
|            | 2.2 Site Plan identifying all significant Noise Sources                | <input checked="" type="checkbox"/> Yes | <a href="#">Appendix B</a>     |
| <b>3.0</b> | <b>Noise Source Summary</b>                                            |                                         |                                |
|            | 3.1 <b>Noise Source Summary Table</b>                                  | <input checked="" type="checkbox"/> Yes | <a href="#">Table 3-4</a>      |
|            | 3.2 Source noise emissions specifications                              | <input checked="" type="checkbox"/> Yes | <a href="#">Appendix C</a>     |
|            | 3.3 Source power/capacity ratings                                      | <input checked="" type="checkbox"/> Yes | <a href="#">Appendix C</a>     |
|            | 3.4 Noise control equipment description and acoustical specifications  | <input type="checkbox"/> Yes            | <a href="#">Section 5</a>      |
| <b>4.0</b> | <b>Point of Reception Noise Impact Calculations</b>                    |                                         |                                |
|            | 4.1 <b>Point of Reception Noise Impact Table</b>                       | <input checked="" type="checkbox"/> Yes | <a href="#">Appendix D</a>     |
|            | 4.2 Point(s) of Reception (POR) list and description                   | <input checked="" type="checkbox"/> Yes | <a href="#">Table 4-1</a>      |
|            | 4.3 Land-use Zoning Plan                                               | <input checked="" type="checkbox"/> Yes | <a href="#">Appendix A</a>     |
|            | 4.4 Scaled Area Location Plan                                          | <input checked="" type="checkbox"/> Yes | <a href="#">Appendix A / B</a> |
|            | 4.5 Procedure used to assess noise impacts at each POR                 | <input checked="" type="checkbox"/> Yes | <a href="#">Section 7.1</a>    |
|            | 4.6 List of parameters/assumptions used in calculations                | <input checked="" type="checkbox"/> Yes | <a href="#">Section 7.1</a>    |
| <b>5.0</b> | <b>Acoustic Assessment Summary</b>                                     |                                         |                                |
|            | 5.1 <b>Acoustic Assessment Summary Table</b>                           | <input checked="" type="checkbox"/> Yes | <a href="#">Table 7-2</a>      |
|            | 5.2 Rationale for selecting applicable noise guideline limits          | <input checked="" type="checkbox"/> Yes | <a href="#">Section 5</a>      |
|            | 5.3 Predictable Worst Case Impacts Operating Scenario                  | <input checked="" type="checkbox"/> Yes | <a href="#">Section 7.2</a>    |
| <b>6.0</b> | <b>Conclusions</b>                                                     |                                         |                                |
|            | 6.1 Statement of compliance with the selected noise performance limits | <input checked="" type="checkbox"/> Yes | <a href="#">Section 8</a>      |
| <b>7.0</b> | <b>Appendices</b> (Provide details such as)                            | <input checked="" type="checkbox"/> Yes |                                |
|            | Listing of Insignificant Noise Sources                                 | <input checked="" type="checkbox"/> Yes | <a href="#">Section 3</a>      |
|            | Manufacture's Noise Specifications                                     | <input checked="" type="checkbox"/> Yes | <a href="#">Appendix C</a>     |
|            | Calculations                                                           | <input checked="" type="checkbox"/> Yes | <a href="#">Appendix C</a>     |
|            | Instrumentation                                                        | <input type="checkbox"/> Yes            | <a href="#">n/a</a>            |
|            | Meteorology during Sound Level Measurements                            | <input type="checkbox"/> Yes            | <a href="#">n/a</a>            |
|            | Raw Data from Measurements                                             | <input type="checkbox"/> Yes            | <a href="#">n/a</a>            |
|            | Drawings (Facility / Equipment)                                        | <input checked="" type="checkbox"/> Yes | <a href="#">Appendix B</a>     |