

# Rosefield Solar Farm

## Environmental Statement

Volume 4  
Appendix 13.3: Operational Noise Assessment  
Details  
(Tracked)

EN010158/APP/6.4\_2  
Revision 2  
Deadline 1  
September 2025-March 2026  
Rosefield Energyfarm Limited

APFP Regulation 5(2)(a)  
Planning Act 2008  
Infrastructure Planning  
(Applications: Prescribed Forms  
and Procedure) Regulations 2009



# Table of Contents

- 1. Introduction ..... 1**
  - 1.1. Purpose of the Report ..... 1**
  - 1.2. The Order Limits ..... 1**
  - 1.3. The Proposed Development ..... 1**
- 2. Operational Noise Assessment Details ..... 3**
  - 2.1. Noise Model Settings ..... 3**
  - 2.2. Data Sources ..... 4**
  - 2.3. Plant Locations ..... 5**
- 3. Model Results ..... 7**
  - 3.1. Without Additional Mitigation ..... 7**
  - 3.2. With Additional Mitigation ..... 7**

# 1. Introduction

## 1.1. Purpose of the Report

1.1.1. This document has been updated at Deadline 1 in response to the Community Relevant Representations received and the Relevant Representations received from Buckinghamshire Council. The document references have not been updated from the original submission. Please refer to the **Guide to the Application [EN010158/APP/1.2.6]** for the list of current versions of documents.

~~1.1.1.~~ 1.1.2. This Operational Noise Assessment Appendix has been prepared on behalf of Rosefield Energyfarm Limited ('the Applicant') to present the likely significant effects on noise and vibration in relation to the Development Consent Order (DCO) application for the construction, operation (including maintenance) and decommissioning of Rosefield Solar Farm (hereafter referred to as the 'Proposed Development').

## 1.2. The Order Limits

1.2.1. The extent of the Order Limits are shown in **Location, Order Limits and Grid Coordinate Plans [EN010158/APP/2.1]** and the Proposed Development is described in full in **ES Volume 1, Chapter 3: Proposed Development Description [EN010158/APP/6.1]** and shown spatially on the **Works Plans [EN010158/APP/2.3]**.

## 1.3. The Proposed Development

1.3.1. The Proposed Development comprises the construction, operation (including maintenance), and decommissioning of solar photovoltaic ('PV') development and energy storage, together with associated infrastructure and an underground cable connection to the National Grid East Claydon Substation.

1.3.2. The Proposed Development would include a generating station with a total exporting capacity exceeding 50 megawatts ('MW').

1.3.3. The location of the Proposed Development is shown on **ES Volume 3, Figure 1.1: Location Plan [EN010158/APP/6.3]** and described in **ES Volume 1, Chapter 2: Location of the Proposed Development [EN010158/APP/6.1]**. The Proposed Development would be located within the Order Limits (the land shown on the **Works Plans [EN010158/APP/2.3]** within which the Proposed Development can be carried out). The Order Limits plan is provided as **ES Volume 3, Figure 1.2: Order Limits [EN010158/APP/6.3]**. Land within the Order Limits is known as the 'Site'.

1.3.4. The principal components of the Proposed Development include:

- Solar PV development consisting of:
  - Ground mounted Solar PV generating station. The generating station would include Solar PV modules and mounting structures; and
  - Balance of Solar System (BoSS) which comprises: Inverters; Transformers; Switchgear; Combiner Boxes; acoustic barriers and cabling.
- A project substation (the 'Rosefield Substation') compound comprising: Transformers; Switchgear; reactive power compensation bays; disconnectors; circuit breakers; busbars; control equipment; lightning surge arrestors; building(s) including office, control, functions, material storage, material laydown areas and welfare facilities; firewalls; fencing and acoustic barriers; a security cabin; parking as well as wider monitoring, maintenance and emergency equipment;
- A Main Collector Compound and two Satellite Collector Compounds comprising: Switchgear; Transformers; ancillary equipment; operation and maintenance and welfare facilities; material storage; material laydown areas; fencing and acoustic barriers; and security cabins;
- Battery Energy Storage System (BESS) compound comprising: batteries and associated Inverters; Transformers; Switchgear, ancillary equipment and their containers; office, control and welfare buildings; fencing and acoustic barriers; monitoring, maintenance and emergency systems; air conditioning; electrical cables; fire safety infrastructure; operation (including maintenance) security facilities; material storage; and material laydown areas;
- Interconnecting Cabling Corridor(s) to connect the Solar PV modules and the BESS to the Satellite and Main Collector Compounds to the Rosefield Substation;
- A Grid Connection Cable Corridor to connect the Rosefield Substation to the National Grid East Claydon Substation via 400kV cabling;
- Ancillary infrastructure works comprising: boundary treatment; security equipment; lighting; fencing; landscaping; internal access tracks; works to facilitate vehicular access; earthing devices; earthworks; surface water management; utility connections and diversions; and any other works identified as necessary to enable the Proposed Development;
- Green and blue infrastructure, recreation and amenity works comprising: landscaping; habitat management; biodiversity enhancement; the creation of three permissive footpaths; and works to permanently divert four PRow Footpaths in five instances;
- Site-wide operational monitoring and security equipment; and
- Highways infrastructure improvements and safety works comprising: minor junction improvement works; road widening; passing places; and works to facilitate vehicular access to the Site.

## 2. Operational Noise Assessment Details

### 2.1. Noise Model Settings

- 2.1.1. The predicted noise emissions generated by the operation of the converter station have been calculated at the surrounding noise sensitive receptors using the computational noise modelling software SoundPLAN (v9.1). The modelling software calculates industrial noise in accordance with the methodology set out in BS ISO 9613-2:2024.
- 2.1.2. The BS ISO 9613-2 method predicts noise levels under meteorological conditions favourable to noise propagation from the sound source to the receptor, downwind propagation or equivalently, propagation under a moderate ground-based temperature inversion as commonly occurs at night.
- 2.1.3. The modelling parameters used have been detailed in **Table 2.1**.

**Table 2.1: Modelling parameters**

Item	Setting
<b>Algorithm</b>	BS ISO 9613-2:2024
<b>Ground absorption</b>	Ground absorption has been set based on local conditions as derived from aerial imagery and noise survey. Agricultural land, grassland, vegetation, G=1.0). Gravel hardstanding areas around main equipment installations, G=0.5.
<b>Meteorological conditions</b>	10 degrees Celsius; 70% humidity; and Wind from source to receiver.
<b>Receptor height</b>	Ground Floor level set at 1.5m above external ground level. First Floor level set at 4m above external ground level.
<b>Façade Corrections</b>	Predictions are at 1 metre from a given façade, in free-field conditions. No façade corrections have been applied.
<b>Site layout</b>	Indicative site layout based on ES Volume 3, Figure 3.5: Zonal Masterplan [EN010158/APP/6.3] that will be subject to amendments and refinement as part of the detailed design.

Item	Setting
<b>Terrain</b>	Lidar data from Defra with a 5m resolution has been imported into the model.

## 2.2. Data Sources

2.2.1. **Table 2.2** details the data sources used in the operational noise model. Data sources have been provided by the Applicant.

**Table 2.2: Operational phase noise emissions**

Equipment	Quantity	Noise level	Notes
<b>BESS</b>			
BESS generic containers	500	65 dB(A) at 1m distance (from the relevant kit).	Noise emitting from one side and one end. Noise emitting faces orientated inwards.
BESS transformers	51	<i>Varying depending on unit surface:</i>  59 dB(A) at 1m (front) 52 dB(A) at 1m (right) 71 dB(A) at 1m (back) 61 dB(A) at 1m (left) 62 dB(A) at 1m (top)	Noise emitting from all sides of unit, orientated with the front of the containing facing the north-east.
BESS auxiliary transformers	12	40 dB(A) at 1m	Noise emitting from all sides of unit – 2.4m x 2.5m x 4.0m (LxWxH).
<b>Main Collector Compound</b>			
Auxiliary transformers	12	40 dB(A) at 1m	Noise emitting from all sides of unit – 2.4m x 2.5m x 4.0m (LxWxH).
<b>Satellite Collector Compound</b>			
Main transformer	1	75 dB(A) at 1m	Noise emitting from all sides of unit - 6.72m x 2.74m x 4.65m (LxWxH).

Equipment	Quantity	Noise level	Notes
Auxiliary transformers	1	40 dB(A) at 1m	Noise emitting from all sides of unit – 2.4m x 2.5m x 4.0m (LxWxH).
<b>Rosefield Substation</b>			
Main transformers	Up to 7	75 dB(A) at 1m	Noise emitting from all sides of unit - 6.72m x 2.74m x 4.65m (LxWxH).
<b>Solar PV modules</b>			
Central inverters/ITS stations	27	57 dB(A) at 10m per single station 60 dB(A) at 10m per double station	27 central inverter/ITS stations distributed across 24 fields. Each of the 27 stations includes one or two inverters, each emitting 57 dB(A) at 10m.
String Inverters	83	75 dB(A) at 1m	Distributed across five fields within Parcel 1 and Parcel 3.

## 2.3. Plant Locations

2.3.1. **Table 2.3** details the locations of the above noise emitting equipment used in the operational noise model. Locations of the equipment are based on **ES Volume 3, Figure 3.5: Zonal Masterplan [EN010158/APP/6.3]** and secured in the **Works Plans [EN010158/APP/2.3]**.

Table 2.3: Equipment locations

Project element	Location
<b>BESS</b>	Fields D8 and D9 in Parcel 2.
<b>Rosefield Substation</b>	Across Fields E11 and E20 in Parcel 3.
<b>Balance of Solar System (BoSS)</b>	27 central inverter/ITS stations distributed across 24 fields in Parcels 1, 2 and 3: <ul style="list-style-type: none"> <li>• Field B1 – 1 inverter station (2 inverters);</li> <li>• Field B11 – 1 inverter station (2 inverters);</li> <li>• Field B12 – 1 inverter station (1 inverters);</li> <li>• Field B13 – 1 inverter station (2 inverters);</li> <li>• Field B14 – 1 inverter station (2 inverters);</li> <li>• Field B18 – 1 inverter station (2 inverters);</li> <li>• Field B20 – 2 inverter stations (4 inverters);</li> </ul>

Project element	Location
	<ul style="list-style-type: none"> <li>• Field B21 – 1 inverter station (2 inverters);</li> <li>• Field B22 – 1 inverter station (2 inverters);</li> <li>• Field B23(S) – 1 inverter station (2 inverters);</li> <li>• Field B4 – 1 inverter station (2 inverters);</li> <li>• Field B7 – 1 inverter station (2 inverters);</li> <li>• Field D7 – 1 inverter station (2 inverters);</li> <li>• Field D10 – 1 inverter station (2 inverters);</li> <li>• Field D11 – 1 inverter station (2 inverters);</li> <li>• Field D12 – 1 inverter station (2 inverters);</li> <li>• Field D13 – 1 inverter station (2 inverters);</li> <li>• Field D16 – 1 inverter station (2 inverters);</li> <li>• Field D17 – 1 inverter stations (2 inverters);</li> <li>• Field D19 – 1 inverter station (2 inverters);</li> <li>• Field D26 – 1 inverter station (2 inverters);</li> <li>• Field D28 – 2 inverter stations (4 inverters);</li> <li>• Field D45 – 1 inverter station (2 inverters);</li> <li>• Field E23 – 2 inverter stations (3 inverters).</li> </ul> <p>83 string inverters across the following locations in Parcels 1 and 3:</p> <ul style="list-style-type: none"> <li>• Field B8;</li> <li>• Field B10;</li> <li>• Field B16;</li> <li>• Field E21; and,</li> <li>• Field E10.</li> </ul>
<b>Main Collector Compound</b>	Field E21
<b>Satellite Collector Compounds</b>	<p>Two Satellite Collector Compounds located at the following locations:</p> <ul style="list-style-type: none"> <li>• Field B23 (South) in Parcel 1; and,</li> <li>• Field D17 in Parcel 2.</li> </ul>

## 3. Model Results

### 3.1. Without Additional Mitigation

3.1.1. The results of the operational phase modelling, accounting for the cumulative impact of all operational phase plant items running concurrently without additional mitigation, are as shown in **Table 3.1** and **Table 3.2**.

### 3.2. With Additional Mitigation

3.2.1. Following the introduction of additional mitigation measures, the results of the operational phase modelling, accounting for the cumulative impact of all operational phase plant items running concurrently, are shown in **Table 3.3** and **Table 3.4**.

3.2.2. A **low** magnitude of impact upon **high** sensitive receptors would result in a long-term minor adverse residual effect, which is considered to be **not significant**.

Table 3.1: Derivation of Rating Level (without additional mitigation)

Ref	Name	Specific Sound Level, dB L <sub>AS, T</sub>	Character Correction, dB	Rating Level, dB L <sub>AR, Tr</sub>	Representative background sound level, dB	
					Daytime	Night-time
R1	Beachfield	18	3	21	33	29
R2	Bernwood Farm	34	3	37	<del>29</del> <u>34</u>	30
R3	Orchard Way, Botolph Claydon	29	3	32	<del>29</del> <u>34</u>	30
R4	Botyl Rd, Botolph Claydon	31	3	34	<del>29</del> <u>34</u>	30
R5	Brickhill Way, Calvert	26	3	29	34	30
R6	Calvert Cottages	31	3	34	34	30
R7	Catherine Cottages	35	3	38	31	23
R8	Catherine Farm	31	3	34	<del>29</del> <u>31</u>	<del>25</del> <u>23</u>
R9	Clayton Rd	29	3	32	29	24
R10	Dry Leys Farmhouse	23	3	26	36	29
R11	Finmere Hill House	22	3	25	33	29
R12	Hogshaw Farm	34	3	37	29	24
R13	Knowlhill Farm	27	3	30	32	30
R14	Lower Farm	29	3	32	29	24
R15	Muxwell Farm	26	3	29	29	27
R16	Pond Farm	32	3	35	29	25

Ref	Name	Specific Sound Level, dB L <sub>AS, T</sub>	Character Correction, dB	Rating Level, dB L <sub>AR, T<sub>r</sub></sub>	Representative background sound level, dB	
					Daytime	Night-time
<b>R17</b>	The Old Dairy, Pond Farm	32	3	35	29	25
<b>R18</b>	Sion Hill Farm	38	2	40	32	30
<b>R19</b>	Woodland Barn	18	3	21	36	29
<b>R20</b>	Borshaw Farm	34	2	36	29	24
<b>R21</b>	Brackley Ln, Calvert (A)	27	3	30	34	30
<b>R22</b>	Brackley Ln, Calvert (B)	26	3	29	34	30
<b>R23</b>	Red Kit View, Calvert	27	3	30	34	30
<b>R24</b>	Blackmore Hill Farm Cottages	34	3	37	31	23
<b>R25</b>	Woodlands Farm Fishery	18	3	21	33	29
<b>R26</b>	Claydon House	25	3	28	31	23
<b>R27</b>	Middle Farm	18	3	21	36	29
<b>R28</b>	Granborough	25	2	27	32	30
<b>R29</b>	East Claydon	26	2	28	32	30

Table 3.2: Derivation of Impact Magnitude (without additional mitigation)

Ref	Name	Period	Rating Level, dB <i>L<sub>AR, Tr</sub></i>	Representative background sound level, dB	Exceedance above representative background sound level, dB	Exceedance above LOAEL criteria, dB <i>L<sub>Ar, T</sub><sup>[1]</sup></i>	Magnitude Criterion Reached
<b>R1</b>	Beachfield	Daytime	21	33	-12	<del>-19-24</del>	Negligible
		Night-time	21	29	-8	<del>-14-14</del>	Negligible
<b>R2</b>	Bernwood Farm	Daytime	37	<del>29</del> <u>34</u>	<del>8</del> <u>3</u>	<del>-3-8</del>	Low
		Night-time	37	30	7	<del>2</del> <u>2</u>	Medium
<b>R3</b>	Orchard Way, Botolph Claydon	Daytime	32	<del>29</del> <u>34</u>	<del>3</del> <u>-2</u>	<del>-8-13</del>	Negligible
		Night-time	32	30	2	<del>-3</del> <u>-3</u>	Low
<b>R4</b>	Botyl Rd, Botolph Claydon	Daytime	34	<del>29</del> <u>34</u>	<del>5</del> <u>0</u>	<del>-6-11</del>	Negligible
		Night-time	34	30	4	<del>-1</del> <u>-4</u>	Low
<b>R5</b>	Brickhill Way, Calvert	Daytime	29	34	-5	<del>-11-16</del>	Negligible
		Night-time	29	30	-1	<del>-6</del> <u>-6</u>	Negligible
<b>R6</b>	Calvert Cottages	Daytime	34	34	0	<del>-6-11</del>	Negligible
		Night-time	34	30	4	<del>-1</del> <u>-4</u>	Low
<b>R7</b>	Catherine Cottages	Daytime	38	31	7	<del>-2</del> <u>-7</u>	Low
		Night-time	38	23	15	<del>3</del> <u>3</u>	Medium
<b>R8</b>	Catherine Farm	Daytime	34	31	3	<del>-6-11</del>	Negligible
		Night-time	34	23	11	<del>-1</del> <u>-4</u>	Low

Ref	Name	Period	Rating Level, dB $L_{AR, Tr}$	Representative background sound level, dB	Exceedance above representative background sound level, dB	Exceedance above LOAEL criteria, dB $L_{Ar, T}^{[1]}$	Magnitude Criterion Reached
<b>R9</b>	Clayton Rd	Daytime	32	29	3	<del>-8-13</del>	Negligible
		Night-time	32	24	8	<del>-3-3</del>	Low
<b>R10</b>	Dry Leys Farmhouse	Daytime	26	36	-10	<del>-14-19</del>	Negligible
		Night-time	26	29	-3	<del>-9-9</del>	Negligible
<b>R11</b>	Finmere Hill House	Daytime	25	33	-8	<del>-15-20</del>	Negligible
		Night-time	25	29	-4	<del>-10-10</del>	<u>Negligible</u> Low
<b>R12</b>	Hogshaw Farm	Daytime	37	29	8	<del>-3-8</del>	Low
		Night-time	37	24	13	<del>2-2</del>	Medium
<b>R13</b>	Knowlhill Farm	Daytime	30	32	-2	<del>-10-15</del>	Negligible
		Night-time	30	30	0	<del>-5-5</del>	Negligible
<b>R14</b>	Lower Farm	Daytime	32	29	3	<del>-8-13</del>	Negligible
		Night-time	32	24	8	<del>-3-3</del>	Low
<b>R15</b>	Muxwell Farm	Daytime	29	29	0	<del>-11-16</del>	Negligible
		Night-time	29	27	2	<del>-6-6</del>	Negligible
<b>R16</b>	Pond Farm	Daytime	35	29	6	<del>-5-10</del>	Negligible
		Night-time	35	25	10	<del>0-0</del>	Low
<b>R17</b>		Daytime	35	29	6	<del>-5-10</del>	Negligible

Ref	Name	Period	Rating Level, dB L <sub>AR, Tr</sub>	Representative background sound level, dB	Exceedance above representative background sound level, dB	Exceedance above LOAEL criteria, dB L <sub>Ar, T</sub> <sup>[1]</sup>	Magnitude Criterion Reached
	The Old Dairy, Pond Farm	Night-time	35	25	10	<u>0</u> 0	Low
<b>R18</b>	Sion Hill Farm	Daytime	40	32	8	<u>0</u> -5	Low
		Night-time	40	30	10	<u>5</u> 5	Medium
<b>R19</b>	Woodland Barn	Daytime	21	36	-15	<u>-19</u> -24	Negligible
		Night-time	21	29	-8	<u>-14</u> -14	Negligible
<b>R20</b>	Borshaw Farm	Daytime	36	29	7	<u>-4</u> -9	Low
		Night-time	36	24	12	<u>1</u> 4	Medium
<b>R21</b>	Brackley Ln, Calvert (A)	Daytime	30	34	-4	<u>-10</u> -15	Negligible
		Night-time	30	30	0	<u>-5</u> -5	Negligible
<b>R22</b>	Brackley Ln, Calvert (B)	Daytime	29	34	-5	<u>-11</u> -16	Negligible
		Night-time	29	30	-1	<u>-6</u> -6	Negligible
<b>R23</b>	Red Kit View, Calvert	Daytime	30	34	-4	<u>-10</u> -15	<u>Negligible</u> Low
		Night-time	30	30	0	<u>-5</u> -5	Negligible
<b>R24</b>	Blackmore Hill Farm Cottages	Daytime	37	31	6	<u>-3</u> -8	Low
		Night-time	37	23	14	<u>2</u> 2	Medium
<b>R25</b>		Daytime	21	33	-12	<u>-19</u> -24	Negligible

Ref	Name	Period	Rating Level, dB L <sub>Ar</sub> , T <sub>r</sub>	Representative background sound level, dB	Exceedance above representative background sound level, dB	Exceedance above LOAEL criteria, dB L <sub>Ar,T</sub> <sup>[1]</sup>	Magnitude Criterion Reached
	Woodlands Farm Fishery	Night-time	21	29	-8	<u>-14-14</u>	Negligible
<b>R26</b>	Claydon House	Daytime	28	31	-3	<u>-12-17</u>	Negligible
		Night-time	28	23	5	<u>-7-7</u>	Negligible
<b>R27</b>	Middle Farm	Daytime	21	36	-15	<u>-19-24</u>	Negligible
		Night-time	21	29	-8	<u>-14-14</u>	Negligible
<b>R28</b>	Granborough	Daytime	27	32	-5	<u>-13-18</u>	Negligible
		Night-time	27	30	-3	<u>-8-8</u>	Negligible
<b>R29</b>	East Claydon	Daytime	28	32	-4	<u>-12-17</u>	Negligible
		Night-time	28	30	-2	<u>-7-7</u>	Negligible

**Notes:**

<sup>1</sup> LOAEL aligned with the low impact criteria i.e. 40 dB L<sub>Ar</sub> daytime, 35 dB L<sub>Ar</sub> night-time.

Table 3.3: Derivation of Rating Level (with additional mitigation)

Ref	Name	Specific Sound Level, dB L <sub>AS, T</sub>	Character Correction, dB	Rating Level, dB L <sub>AR, T<sub>r</sub></sub>	Representative background sound level, dB	
					Daytime	Night-time
R1	Beachfield	16	3	19	33	29
R2	Bernwood Farm	32	3	35	<del>29</del> <u>34</u>	30
R3	Orchard Way, Botolph Claydon	25	3	28	<del>29</del> <u>34</u>	30
R4	Botyl Rd, Botolph Claydon	30	3	33	<del>29</del> <u>34</u>	30
R5	Brickhill Way, Calvert	23	3	26	34	30
R6	Calvert Cottages	27	3	30	34	30
R7	Catherine Cottages	29	3	32	31	23
R8	Catherine Farm	24	3	27	<del>29</del> <u>31</u>	<del>25</del> <u>23</u>
R9	Clayton Rd	27	3	30	29	24
R10	Dry Leys Farmhouse	18	3	21	36	29
R11	Finmere Hill House	20	3	23	33	29
R12	Hogshaw Farm	32	3	35	29	24
R13	Knowlhill Farm	25	3	28	32	30
R14	Lower Farm	28	3	31	29	24
R15	Muxwell Farm	22	3	25	29	27
R16	Pond Farm	29	3	32	29	25

Ref	Name	Specific Sound Level, dB L <sub>AS, T</sub>	Character Correction, dB	Rating Level, dB L <sub>AR, Tr</sub>	Representative background sound level, dB	
					Daytime	Night-time
R17	The Old Dairy, Pond Farm	29	3	32	29	25
R18	Sion Hill Farm	<del>30</del> <u>29</u>	2	<del>32</del> <u>31</u>	32	30
R19	Woodland Barn	14	3	17	36	29
R20	Borshaw Farm	32	2	34	29	24
R21	Brackley Ln, Calvert (A)	25	3	28	34	30
R22	Brackley Ln, Calvert (B)	23	3	26	34	30
R23	Red Kit View, Calvert	25	3	28	34	30
R24	Blackmore Hill Farm Cottages	28	3	31	31	23
R25	Woodlands Farm Fishery	14	3	17	33	29
R26	Claydon House	21	3	24	31	23
R27	Middle Farm	14	3	17	36	29
R28	Granborough	22	2	24	32	30
R29	East Claydon	23	2	25	32	30

Table 3.4: Derivation of Impact Magnitude (with additional mitigation)

Ref	Name	Period	Rating Level, dB L <sub>AR, Tr</sub>	Representative background sound level, dB	Exceedance above representative background sound level, dB	Exceedance above LOAEL criteria, dB L <sub>Ar, T</sub> <sup>[1]</sup>	Magnitude Criterion Reached
R1	Beachfield	Daytime	19	33	-14	<del>-21</del> -26	Negligible
		Night-time	19	29	-10	<del>-16</del> -16	Negligible
R2	Bernwood Farm	Daytime	35	<del>29</del> 34	<del>6</del> 1	<del>-5</del> -10	Negligible
		Night-time	35	30	5	<del>0</del> 0	Low
R3	Orchard Way, Botolph Claydon	Daytime	28	<del>29</del> 34	<del>-16</del>	<del>-12</del> -17	Negligible
		Night-time	28	30	-2	<del>-7</del> -7	Negligible
R4	Botyl Rd, Botolph Claydon	Daytime	33	<del>29</del> 34	<del>4</del> -1	<del>-7</del> -12	Negligible
		Night-time	33	30	3	<del>-2</del> -2	Low
R5	Brickhill Way, Calvert	Daytime	26	34	-8	<del>-14</del> -19	Negligible
		Night-time	26	30	-4	<del>-9</del> -9	Negligible
R6	Calvert Cottages	Daytime	30	34	-4	<del>-10</del> -15	Negligible
		Night-time	30	30	0	<del>-5</del> -5	Negligible
R7	Catherine Cottages	Daytime	32	31	1	<del>-8</del> -13	Negligible
		Night-time	32	23	9	<del>-3</del> -3	Low
R8	Catherine Farm	Daytime	27	31	-4	<del>-13</del> -18	Negligible
		Night-time	27	23	4	<del>-8</del> -8	Negligible

<b>R9</b>	Clayton Rd	Daytime	30	29	1	<del>-10-15</del>	Negligible
		Night-time	30	24	6	<del>-5-5</del>	Negligible
<b>R10</b>	Dry Leys Farmhouse	Daytime	21	36	-15	<del>-19-24</del>	Negligible
		Night-time	21	29	-8	<del>-14-14</del>	Negligible
<b>R11</b>	Finmere Hill House	Daytime	23	33	-10	<del>-17-22</del>	Negligible
		Night-time	23	29	-6	<del>-12-12</del>	Negligible
<b>R12</b>	Hogshaw Farm	Daytime	35	29	6	<del>-5-10</del>	Negligible
		Night-time	35	24	11	<del>0-0</del>	Low
<b>R13</b>	Knowlhill Farm	Daytime	28	32	-4	<del>-12-17</del>	Negligible
		Night-time	28	30	-2	<del>-7-7</del>	Negligible
<b>R14</b>	Lower Farm	Daytime	31	29	2	<del>-9-14</del>	Negligible
		Night-time	31	24	7	<del>-4-4</del>	Low
<b>R15</b>	Muxwell Farm	Daytime	25	29	-4	<del>-15-20</del>	Negligible
		Night-time	25	27	-2	<del>-10-10</del>	Negligible
<b>R16</b>	Pond Farm	Daytime	32	29	3	<del>-8-13</del>	Negligible
		Night-time	32	25	7	<del>-3-3</del>	Low
<b>R17</b>	The Old Dairy, Pond Farm	Daytime	32	29	3	<del>-8-13</del>	Negligible
		Night-time	32	25	7	<del>-3-3</del>	Low
<b>R18</b>	Sion Hill Farm	Daytime	<u>32</u> <sub>1</sub>	32	<u>0</u> <sub>-1</sub>	<del>-9-</del>	Negligible
		Night-time	<u>32</u> <sub>1</sub>	30	<u>2</u> <sub>1</sub>	<del>-4</del> <sub>3</sub>	Low

<b>R19</b>	Woodland Barn	Daytime	17	36	-19	<u>-23-28</u>	Negligible
		Night-time	17	29	-12	<u>-18-18</u>	Negligible
<b>R20</b>	Borshaw Farm	Daytime	34	29	5	<u>-6-11</u>	Negligible
		Night-time	34	24	10	<u>-1-4</u>	Low
<b>R21</b>	Brackley Ln, Calvert (A)	Daytime	28	34	-6	<u>-12-17</u>	Negligible
		Night-time	28	30	-2	<u>-7-7</u>	Negligible
<b>R22</b>	Brackley Ln, Calvert (B)	Daytime	26	34	-8	<u>-14-19</u>	Negligible
		Night-time	26	30	-4	<u>-9-9</u>	Negligible
<b>R23</b>	Red Kit View, Calvert	Daytime	28	34	-6	<u>-12-17</u>	Negligible
		Night-time	28	30	-2	<u>-7-7</u>	Negligible
<b>R24</b>	Blackmore Hill Farm Cottages	Daytime	31	31	0	<u>-9-14</u>	Negligible
		Night-time	31	23	8	<u>-4-4</u>	Low
<b>R25</b>	Woodlands Farm Fishery	Daytime	17	33	-16	<u>-23-28</u>	Negligible
		Night-time	17	29	-12	<u>-18-18</u>	Negligible
<b>R26</b>	Claydon House	Daytime	24	31	-7	<u>-16-21</u>	Negligible
		Night-time	24	23	1	<u>-11-11</u>	Negligible
<b>R27</b>	Middle Farm	Daytime	17	36	-19	<u>-23-28</u>	Negligible
		Night-time	17	29	-12	<u>-18-18</u>	Negligible
<b>R28</b>	Granborough	Daytime	24	32	-8	<u>-16-21</u>	Negligible
		Night-time	24	30	-6	<u>-11-11</u>	Negligible

<b>R29</b> East Claydon	Daytime	25	32	-7	<u>-15-20</u>	Negligible
	Night-time	25	30	-5	<u>-10-10</u>	Negligible

**Notes:**

1. LOAEL aligned with the low impact criteria i.e. 40 dB L<sub>A</sub>r daytime, 35 dB L<sub>A</sub>r night-time.



[rosefieldsolarfarm.co.uk](http://rosefieldsolarfarm.co.uk)