

Greenfields Battery Energy Storage System

Addendum to the Environmental Statement – clarification update

January 2026

Prepared on behalf of Enso Green Holdings X Limited



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0 Addendum to the Environmental Statement for Greenfields BESS

0.1 Clarification update – January 2026

- 0.1.1 This ES Addendum for the Proposed Development was submitted to the LPA in June 2025 to address the changes to the Proposed Development as set out in the sections below. Following the submission of this ES Addendum, and through discussions with relevant consultees, further clarification has been provided in respect to the data and findings of the noise assessment presented in the 2025 ES. This clarification update to the noise assessment, does not present new data or draw different conclusions to that presented in the 2025 ES Addendum, instead it seeks to more clearly present the findings to enable to consultees to fully understand the modelling and assessment work undertaken. On this basis, it does not represent new environmental in accordance with the EIA Regulations.
- 0.1.2 The sections below replicate the 2025 ES addendum for consistency purposes, the only changes in this document relate to the noise section, referenced as Chapter 7, where the text has been updated to provide additional clarity and certainty that the likely significant effects in noise terms have been appropriately identified and assessed.

0.2 Introduction

- 0.2.1 Enso Green Holdings X Limited (The Applicant) submitted a full planning application in August 2024 for the installation of a Battery Energy Storage System (BESS) and substation with associated infrastructure and works (the Proposed Development) on land at Greenfields Farm, Thorney Edge Road, Bagnall, Stoke-on-Trent ST9 9LA. The application was accompanied by an Environmental Statement (ES) prepared under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) (the 2024 ES).
- 0.2.2 Following the submission of the planning application and subsequent consultation with Staffordshire Moorlands District Council (the Local Planning Authority; SMDC) and key statutory consultees, the Applicant has decided to make a number of amendments to the design of the Proposed Development.
- 0.2.3 Given that the planning application for the Proposed Development was accompanied by an ES in accordance with the EIA Regulations, any changes to the Proposed Development or assessed parameters must also be considered in accordance with the EIA Regulations.
- 0.2.4 The 2025 ES Addendum Report has been prepared to supplement the information contained within the submitted 2024 ES to provide a complete assessment of the likely environmental effects of the Proposed Development.
- 0.2.5 The 2025 ES Addendum Report has been prepared on behalf of the Applicant by Savills with contributes and advice from LDA Design, Aspect Ecology, Transport Planning Associates and InAcoustic.

0.3 Key changes from the 2024 submission

Design and layout

Post submission landscape consultation

0.3.1 Following submission of the planning application, a number of comments and potential design amendments were received from Ryder Landscape Consultants (Appendix A1-4), appointed on behalf of SMDC. These comments and potential design amendments include, but are not limited to:

- the suggestion of improved screening of the Site to mitigate landscape and visual impacts beyond that which was originally proposed in the original planning application;
- including other developments within the landscape and visual cumulative impact assessment; and,
- a reduction in building height to reduce views from the south of the Site.

0.3.2 The feedback received above led to a process of further interrogation of the design evolution process. Changes to the design of the Proposed Development are detailed below.

BESS Proposed Site Plan

0.3.3 A different type of battery will be sourced from a different technology provider in order to deliver 'Best Available Technology'. This has allowed for a reduction in area required for the BESS layout, which will reduce any landscape and visual impacts by 'pulling back' development from the residential dwellings to the northwest of the Site, and providing more space for hard and soft landscaping to screen the Proposed Development from the surrounding Public Right of Ways (PRoW).

BESS Substation Plateau

0.3.4 As noted above, Ryder Landscape Consultants suggested that there should be a reduction in building height to reduce views from the south of the Site. In response to this, it is proposed to reduce floor levels by 1 m further to 239 m AOD. The proposed plateau level of the Substation is approximately 4.7m lower than nearby existing retained ground levels.

Landscaping

0.3.5 As stated above, Ryder Landscape Consultants suggested that improved screening of Site. In response, 'planted bunds' are proposed to reduce the landscape and visual impact from the south and southwest of the Site, and additional planting along the northern and eastern boundaries of the Site is proposed. This will enhance mitigation to reduce any potential landscape and visual impacts to the surrounding PRoW.

Update to the Landscape and Visual Impact Assessment

0.3.6 The design amendments noted above have been proposed to further mitigate any potential landscape and visual impacts arising from the Proposed Development. As such, the landscape and visual impact assessment has been updated to assess the amended design. It also includes a cumulative assessment which considers the cumulative schemes as suggested by Ryder Landscape Consultants.

0.4 Approach to ES addendum

- 0.4.1 The 2025 ES Addendum Report is intended to supplement the information contained within the 2024 ES and should therefore be read alongside the submitted document. Section 0.4 below describes the outcomes of the review of the 2024 ES in accordance the changes described in section 0.2, on a chapter by chapter basis. Many of the changes required are simple updates, where this is the case, the text is updated in the section below and the paragraph references are provided that can be used to understand where these minor changes in the ES relate to. However, where the changes have resulted in more material updates to the text and/or the assessment, a complete replacement chapter has been provided. In order to clearly signpost the reader to the updates within the replacement chapters, new additional text is in red font, and the text that has been deleted is in red font and strike through text.
- 0.4.2 The amendments have also resulted in some required changes to figures and appendices that support the 2024 ES. Where submitted figures and appendices have been updated, these are referenced with the prefix 'A', for example ES figure 3.1 would become ES figure A3.1 to denote that it is updated and replaced as part of the ES addendum. The contexts page for the ES has been updated to reflect these changes and in addition to the prefix 'A', the changes have been underlined to signpost the updates.
- 0.4.3 In accordance with the EIA Regulations a Non-Technical Summary (NTS) of the ES is required to set out the findings of the assessment in clear and non-technical language. In order to ensure that the NTS is as clear as possible, this has been replaced in whole as part of this addendum. For clarity, where new text has been added or removed from the 2024 NTS, the text for the whole paragraph has been presented in red so that it is clear for the reader to see what has changed.
- 0.4.4 New information provided in this 2025 ES Addendum Report is as follows:
- Figure A3.1 – Proposed Site Plan
 - Figure A3.10 – Detailed Soft Landscape Plan
 - Figure A3.11 – Cut and Fill Strategy Document
 - Figure A3.12 – Proposed Levels Strategy Document
 - Figure A3.13 – Site Cross Sections
 - Figure A4.1 – Cumulative Schemes
 - Chapter A6 – Landscape and Visual Impact Assessment
 - Appendix A6.5 – National and Local Planning Policy and Guidance
 - Table 0.1 – Impact Scale for Comparison of Future Noise against Existing Noise
 - Figure A7.7 – Specific Sound Level Map – Daytime and Night-time
 - Table A7.22 – Specific Sound Level Summary
 - Table A7.25 - Night-time BS4142 Assessment
 - Table 0.2 – Assessment of Relative Change in Sound Level
- 0.4.5 Where references are made in the 2024 ES to any of the original chapters, appendices or figures listed above, it should now be taken that these references relate to the updated versions listed.
- 0.4.6 In addition, Figure 6.9 has now been removed from the ES and instead all cumulative sites are reflected in updated Figure A4.1 for consistency purposes. Figures 7-7 and 7-8 have also now been removed from the ES and replaced with a singular Figure A7.1, which combines the two.

0.5 ES review and update

- 0.5.1 The 2024 ES has been reviewed in light of the changes described in section 0.2 and the amendments to the submitted 2024 ES are described below.

Chapter 1 - Introduction

- 0.5.2 Section 1.5 of ES Chapter 1 of the 2024 ES provides cross referencing to other chapters of the ES. References to Chapter 6: Landscape and Visual Impact should now refer to Chapter A6: Landscape and Visual Impact as this chapter has been updated since the submission of the original ES.
- 0.5.3 No further changes are required to the chapter as a result of the amendments to the design of the Proposed Development.

Chapter 2 – Site and Local Context

- 0.5.4 The information contained within ES Chapter 2 of the 2024 ES remains an accurate reflection of the Proposed Development Site and surrounding area and there are no changes required to this chapter.

Chapter 3 – The Proposed Development

- 0.5.5 Following the design review which took place in response to the comments and potential design amendments received by Ryder Landscape Consultants outlined in Section 0.2, the following figures have been updated:
- Figure 3.1 – Proposed Site Plan (now Figure A3.1); and
 - Figure 3.10 – Detailed Soft Landscape Plan (now Figure A3.10).
- 0.5.6 Further, an additional three figures have been provided which relate to the further reduced floor levels which the height of the substation. These figures comprise:
- Figure A3.11 – Cut and Fill Strategy Document;
 - Figure A3.12 – Proposed Levels Strategy Document; and
 - Figure A3.13 – Site Cross Sections.
- 0.5.7 Paragraph 3.4.2 of Chapter 3 of the 2024 ES describes the resultant height of the substation after taking into consideration the reprofiling of the land. As outlined in Section 0.2, it is proposed to further reduce floor levels by 1 m to reduce views of tall infrastructure on-site, such as the substation. Taking this into account, the substation will now be reduced to approximately 8.3 m compared to surrounding retained ground levels due to the more extensive site levelling works. The addition of 1.5 m high planted bunds around the BESS will further reduce the visual impact of the Proposed Development.
- 0.5.8 Paragraph 3.4.5 of Chapter 3 of the 2024 ES describes the Detailed Soft Landscape Management Plan. As noted above, this has been updated due to the comments received by Ryder Landscape Consultants and reflects the increase in planting to screen views of the BESS.
- 0.5.9 No further changes are required to Chapter 3 of the 2024 ES.

Chapter 4 – Approach to Assessment

Cumulative schemes

- 0.5.10 As set out in Section 0.2 of this 2025 ES Addendum Report, the response received by Ryder Landscape Consultants on behalf of SMDC noted that two additional cumulative schemes should be included within Chapter 6: Landscape and Visual Impact. Ryder Landscape Consultants suggested that the Armshead Farm BESS (appeal reference APP/B3438/W/23/3335922) and the New House Farm BESS (application ref: SMD/2024/0452) schemes be added to the assessment of cumulative landscape and visual impacts.
- 0.5.11 Table 4.1 of Chapter 4 of the 2024 ES provided a list of eight cumulative schemes that were either approved developments, or developments that were not yet consented but pursuing consent, in proximity to the Site. Table 4.1 was accompanied by Figure 4.1, which illustrated the corresponding locations of the cumulative schemes in relation to the Proposed Development.
- 0.5.12 The cumulative schemes included in Table 4.1 were, defined through a combination of sites identified in the Council's screening opinion, as well as through an online planning search and through local knowledge of forthcoming projects. The list of schemes in Table 4.1 contained both the schemes suggested by Ryder Landscape Consultants: Armshead Farm BESS (Scheme 1) and the New House Farm BESS (Scheme 4).
- 0.5.13 Since the submission of the 2024 ES, there have been advancements to several of the cumulative schemes originally noted in Table 4.1. Scheme 1 (Armshead Road BESS) was originally refused planning permission, but then was subsequently granted permission at appeal. Since the original planning application, it appears that the application site boundary has changed. This has been reflected in an update to the application site boundary of scheme 1 in Figure A4.1
- 0.5.14 Cumulative schemes 2-7 of the 2024 ES have either been approved, are yet to be determined, or have been refused and are still within the window of time in which an appeal can be lodged. As such, these schemes have remain the same for the purposes of cumulative assessment within this ES Addendum Report.
- 0.5.15 The SMDC planning application database suggests that there has been no update to the planning status of cumulative scheme 8 since a screening opinion was requested in October 2021. This scheme has therefore been removed from the list of cumulative schemes as it is assumed not to be progressing.
- 0.5.16 Another online planning search was undertaken for the purposes of this ES Addendum Report. This search suggests that beyond the schemes noted in Table 4.1 of Chapter 4 of the 2024 ES, there have been no additional schemes proposed in proximity to the site which would result in cumulative effects.
- 0.5.17 To summarise:
- cumulative schemes 1-7 included in Table 4.1 of Chapter 4 of the 2024 ES remain schemes from which cumulative effects may occur and include the two schemes suggested to be assessed by Ryder Landscape Consultant;
 - scheme 8 has been removed from the original 2024 list of cumulative schemes due to planning application inactivity; and
 - a recent online planning application search confirms that no new cumulative schemes have been proposed since submission of the original ES.

- 0.5.18 To reflect the above, Figure 4.1 has been updated and is included within this ES Addendum as Figure A4.1.

Alternatives and design iteration

- 0.5.19 Section 4.6 of Chapter 4 of the 2024 ES set out the approach to alternative sites, layouts and design iterations. As described in section 0.2 of this ES Addendum Report, further design iterations have been undertaken since the submission of the original ES in 2024, based on the feedback and potential design amendments suggested by Ryder Landscape Consultants.
- 0.5.20 All alternative design layouts referred to in Section 4.6 of ES Chapter 4 remains an accurate reflection of design amendments undertaken. Since submission of the 2024 ES, the following design amendments have been proposed:
- a further reduction in the development area made possible by choosing different technology providers;
 - further enhancements to planting around the BESS to further screen views from surrounding visual receptors; and
 - the lowering of the floor level by an additional 1 m to reduce the maximum height of the Proposed Development.
- 0.5.21 No further amendments are required to ES Chapter 4.

Chapter 5 – Ecology

- 0.5.22 The Ecology chapter submitted as part of the 2024 ES has been reviewed in light of the amendments to the Proposed Development.
- 0.5.23 As the extent of the built development has been condensed and planting has increased, it is concluded that any ecological effects would improve as a result of the design amendments. As such, the assessment set out within the 2024 ES remains accurate insofar as it presents a worst-case assessment of ecological effects.
- 0.5.24 All appendices and figures remain unaltered at this stage albeit an updated BNG Assessment would be anticipated to be submitted post-planning as part of the Biodiversity Gain Plan in order to further demonstrate the detailed landscaping scheme continues to meet the statutory biodiversity gain objective.

Chapter 6 – Landscape and Visual Impact

- 0.5.25 Given the nature of this chapter and the amendments to the design of the BESS made due to received feedback relating to landscape and visual impacts, this chapter has been updated as ES Chapter A6 Landscape and Visual Impact. This chapter replaces the previous ES Chapter 6 in the 2024 ES.
- 0.5.26 ES Appendix 6.5 has been updated and replaced with ES Appendix A6.5 to reflect changes to national planning policy since submission of the original 2024 ES.
- 0.5.27 Figure 3.10 of the original 2024 ES, the Detailed Soft Management Plan, has been updated to reflect the changes to the layout, and to include details of nearby PRoW as suggested by Ryder Landscape Consultants.
- 0.5.28 ES Figure 6.9 has been removed and the updated ES Chapter A6 instead refers to Figure A4.1 in its assessment of cumulative impacts. There are no further changes required to the ES figures submitted alongside the 2024 ES.

Chapter 7 – Noise and Acoustics

0.5.29 The Noise and Acoustics chapter and assessment submitted as part of the 2024 ES has been reviewed in light of the amendments made to the Proposed Development.

0.5.30 As outlined in Section 0.2 of this ES Addendum Report, additional ‘planted bunds’ have been proposed to further reduce landscape and visual impacts. The addition of ‘planted bunds’ will also reduce noise and acoustic impacts. Further, smaller battery units are proposed, with a ‘pulling back’ of the proposed layout towards the west of the Site, introducing greater separation distances between the hardware locations and the nearest noise-sensitive receptors. Hence, it is concluded that the assessment set out within the 2024 ES remains accurate insofar as it presents a worst-case assessment of noise and acoustic effects. Further noise modelling has been undertaken to confirm this, as set out below.

Assessment Criteria

Relative Change in Ambient Noise Level

0.5.31 The IEMA Guidelines define ‘Noise Impact’ as “*the difference in the acoustic environment before and after the implementation of the proposals (also known as the magnitude of change)*”. In circumstances where a noise environment may be altered by addition or removal of a noise source, considered to be largely anonymous or within the prevailing acoustic character of an area, for example, changes to traffic quantum or patterns, it is normal to consider this relative change in ambient noise level. The assessment, therefore, considers this phenomenon to add context.

0.5.32 The impact scale adopted in this assessment is shown in Table A7-1 below, which relates to established human responses to noise, in line with ‘*Table 7-12 Effect Descriptors*’ of the IEMA Guidelines and set in the context of PPG:N.

Table A7-1 – Impact Scale for Comparison of Future Noise against Existing Noise

Noise Level Change dB(A)	Subjective Response	Significance	PPG:N Context
Less than 1.0	Not perceptible	Negligible	NOEL
1.0 – 2.9	Barely perceptible	Minor impact	NOAEL
3.0 – 4.9	Noticeable	Moderate impact	LOAEL
5.0 – 9.9	Up to a doubling or halving of loudness	Substantial impact	SOAEL
10.0 or more	More than a doubling or halving of loudness	Major impact	UAEL

0.5.33 The criteria above reflect the key benchmarks that relate to human perception of sound. A change of 3 dB(A) is generally considered to be the smallest change in environmental noise that is perceptible to the human ear. A 10 dB(A) change in noise represents a doubling or halving of the perception of loudness. The difference between the minimum perceptible change and the doubling or halving of the perceived noise level is split to provide greater definition to the assessment of changes in noise level.

0.5.34 It is considered that the criteria specified in Table 0.1 above provide a good indication as to the likely significance of changes in noise levels in this case and can be used to inform the context

in which the noise occurs in order to assess the impact of noise from the Proposed Development.

Operational Phase

Calculation Process

To replace paragraph 7.5.29 of Chapter 7 of the 2024 ES:

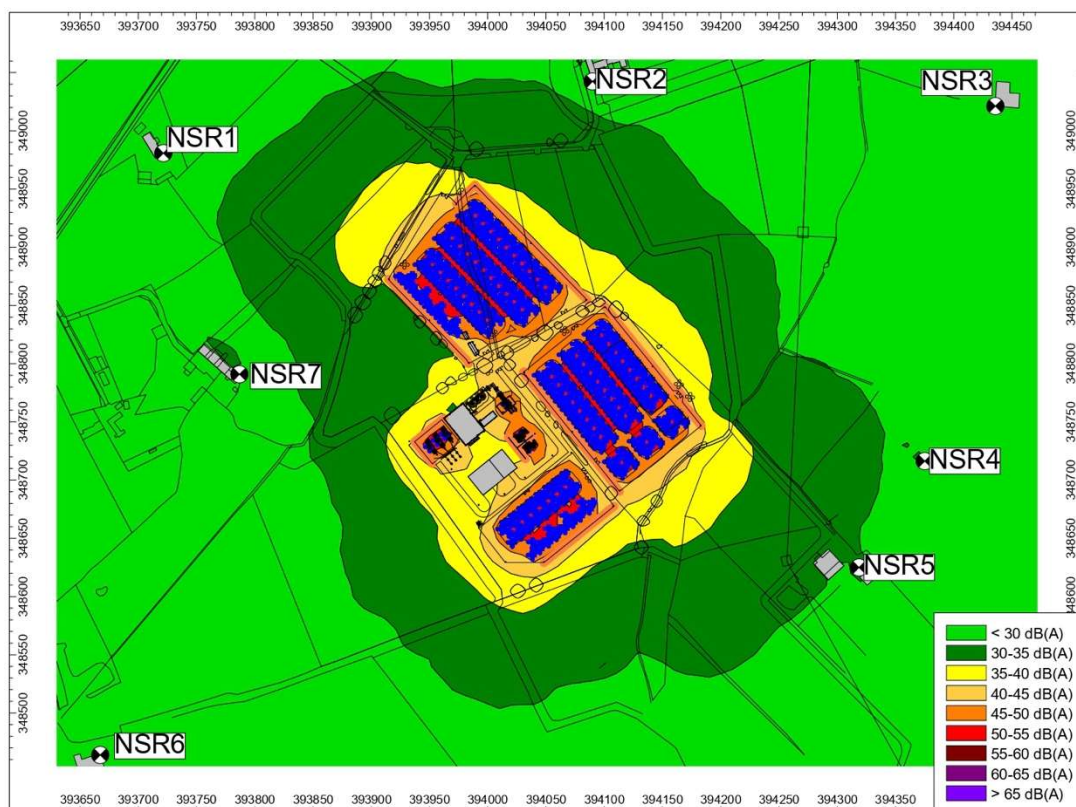
- 0.5.35 Calculations were carried out using Cadna/A software, which undertakes its calculations in accordance with guidance given in ISO9613-1:1993 and ISO9613-2:2024. This is the latest version of the standard, with the original 2024 ES Chapter being completed using ISO9613-2:1996 instead.

Specific Sound Level Map

To replace paragraph 7.7.4 of Chapter 7 of the 2024 ES:

- 0.5.36 The sound map showing the daytime and night-time specific sound level emissions from the Proposed Development with acoustic fencing is now shown in Figure A7.7.

Figure A7.7 Specific Sound Level Map – Daytime and Night-time



Specific Sound Level Summary

Table A7-22 Specific Sound Level Summary

Receptor	Predicted Specific Sound Level, dB(A)	
	Daytime	Night-time
NSR 1	28	28
NSR 2	29	29
NSR 3	25	25
NSR 4	29	29
NSR 5	29	29
NSR 6	24	24
NSR 7	29	29

BS4142 Assessment of Operational Effects

To replace paragraphs 7.7.8 – 7.7.20 of Chapter 7 of the 2024 ES:

0.5.37 The rating sound level, as calculated from the predicted specific sound level, has been assessed in accordance with BS4142, at all residential NSRs.

0.5.38 The resultant assessment summary, during the daytime period, is shown in Table A7-24 below.

Table A7-24 Daytime BS4142 Assessment

NSR	Rating Sound Level, dB	Background Sound Level, L _{A90} dB	Excess of Rating Level over Background Sound Level, dB
1	28	36	-8
2	29	37	-8
3	25	37	-12
4	29	35	-6
5	29	35	-6
6	24	36	-12
7	29	36	-7

0.5.39 As shown above, the Proposed Development is likely to have a 'low impact' at the NSRs during the daytime period, giving rise to a negligible effect (not significant).

0.5.40 The resultant assessment summary, during the night-time period, is shown below in Table A7-25.

Table A7-25 Night-time BS4142 Assessment

NSR	Rating Sound Level, dB	Background Sound Level, L_{A90} dB	Excess of Rating Level over Background Sound Level, dB
1	28	27	+1
2	29	28	+1
3	25	28	-3
4	29	28	+1
5	29	28	+1
6	24	27	-3
7	29	27	+2

0.5.41 As shown above, and considering the context explained below, the Proposed Development is likely to have a 'low impact' and consequently, a negligible effect at the sensitive receptors during the night-time period.

0.5.42 The results set out above identify that the Proposed Development's operation would occur with minimal effect to the amenity of the closest residential NSRs to the Site, equating to a negligible effect (not significant).

Discussion on Context

0.5.43 The results set out in Table A7-24 and Table A7-25 identify that the operation of the Proposed Development, can occur without affecting the amenity of the closest NSRs to the Site during the daytime and night-time, with mitigation, on the basis of a worst-case operational scenario.

0.5.44 BS 4142:2014+A1:2019, however, recognises the importance of the context in which a sound occurs when assessing impacts.

0.5.45 BS 4142:2014 states that '*for a given difference between the rating level and the background sound level, the magnitude of the overall impact might be greater for an acoustic environment where the residual sound level is high than for an acoustic environment where the residual sound level is low*'. It follows on to say that '*where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night*'.

0.5.46 In this case, both background sound levels and rating sound levels are low at the assessment locations. BS 4142:2014 assesses on the basis of an external noise level, with a maximum predicted outdoor sound level of 29 dB(A). This can be approximated to an indoor level in the order of 14-19 dB(A), assuming a loss of 10-15 dB for a partially open window for ventilation. This results in the internal levels between 11-16 dB below the internal night-time criteria of 30 dB(A) outlined by BS 8233:2014 '*Guidance on sound insulation and noise reduction for buildings*', and therefore deemed as negligible. With daytime and evening spells being the primary time for residents to make use of their garden/other external amenity areas, it is to be expected that most local residents would be inside/in bed during the 8-hour night-time period when background noise levels are low. It is therefore considered that the daytime period is more noise-sensitive, as there is more likely to be an external receptor present, with Table A7-25 showing rating sound levels significantly below background sound levels.

0.5.47 The effect of the Proposed Development on the relative change in night-time ambient noise levels at the nearest residential NSRs has also been assessed as part of the context, with reference to the IEMA guidelines and is presented in Table 0-2 below.

Table 0-2 Assessment of Relative Change in Sound Level

NSR	Period	Existing L _{Aeq} Ambient Sound Level, dB(A)	Sound from Proposed Development , dB(A)	Cumulative Sound Level, dB(A)	Change in Sound Level, dB	Significance
1	Night-time	40	28	40.3	0.3	Negligible
2	Night-time	43	29	43.2	0.2	Negligible
4	Night-time	39	29	39.4	0.4	Negligible
5	Night-time	39	29	39.4	0.4	Negligible
7	Night-time	40	29	40.3	0.3	Negligible

0.5.48 As can be seen above, the operation of the Proposed Development is predicted to have a negligible impact on the prevailing acoustic environment.

0.5.49 Finally, it is noted that the calculation method used has been changed to the latest edition (ISO 9613-2:2024) whilst the initial Chapter was completed using the latest at the time (ISO 9613-2:1996). The calculation method used has a direct impact on the calculated specific noise levels, typically predicting greater levels at the receptor, even with like-for-like layout comparisons. It is noted that the acoustic industry have been using the ISO 9613-2:1996 standard for decades, with predictions well validated against actual noise readings once developments are built and operational.

0.5.50 In this context, based on the professional judgement that the assessment for the night-time is hypothetical, and aims to reflect a worst-case scenario, which, in reality is unlikely to occur. Based on professional judgement it is considered that the justifications above are robust, and would have a Low Impact at the nearest receptors in BS4142 terms.

Cumulative Effects

To replace paragraphs 7.8.2 – 7.8.10 of Chapter 7 of the 2024 ES:

Operational Phase

0.5.51 The noise effects of the operational phase of the Proposed Development in cumulation with the cumulative schemes are discussed below. Table A7-26 below outlines the schemes which have been considered for potential significant cumulative effects with the Proposed Development, either due to their proximity or their similar noise impact profile to the Proposed Development. Other cumulative schemes have either been scoped out of the assessment of the Proposed Development's likely significant cumulative effects either due to their distance from the Proposed Development (at least 800m) or having incomparable noise impact profiles with the Proposed Development.

Table A7-26 Cumulative Schemes

NSR	Proposed Development
SMD/2022/0574 Cellarhead BESS Land Adjacent to Armshead Farm, Armshead Road, Werrington, Staffordshire	Owing to having its planning permission refused on 26 th July 2023, this scheme has not been assessed for any cumulative effects with the Proposed Development.
SMD/2024/0019 Newfields BESS Land at Newfields Farm, Rownall Road, Wetley Rocks, Staffordshire, ST9 0BS	Owing to having its planning permission refused on 27 th September 2024, this scheme has not been assessed for any cumulative effects with the Proposed Development.
SMD/2022/0548 Cellarhead BESS Land adjacent to Cellarhead Substation, Rownall Road, Wetley Rocks, Staffordshire	Cellarhead BESS is situated to the east of Cellarhead Substation, on the opposing side from where the Proposed Development is situated.
SMD/2024/0240 Screening Opinion for a Battery Energy Storage System Land adjoining New House Farm, Luzlow Lane, Bagnall, Staffordshire, ST9 9JZ	There is no Concept Layout or Noise Impact Assessment for the site on the Planning portal. As part of the detailed design stage, the applicant will be required to carry out a Noise Impact Assessment which will be required to ensure that no significant impact occurs as a result of noise. In doing so, it would require a worst-case rating level that is no greater than background, and in this instance would be equal to the rating level predicted for the Proposed Development. As a worst-case, this would give rise to a +3 dB excess over the prevailing level, or a LOAEL in NPPG context (not significant). Based on the red-line boundary for the site, it can be assumed that there is 1no. shared receptor between the Proposed Development and that on Luzlow Lane.
SMD/2024/0055 New Battery Storage Site Land South of Cellarhead Substation and West of Rownall Road, Wetley Rocks, Staffordshire	The New Battery Storage Site on Rownall Road is situated to the east of the Proposed Development. There are 3no. shared receptors between the two sites.
SMD/2023/0523 Rownall Solar Farm Land at Rownall Farm, Rownall Road, Wetley Rocks, Staffordshire, ST9 0BT	Owing to having its planning permission refused on 6 th March 2025, this scheme has not been assessed for any cumulative effects with the Proposed Development.
SMD/2022/0444 Cellarhead Battery Site Land east of Cellarhead Substation and west of Rownall Road, Wetley Rocks, Staffordshire	There are no shared receptors between the Proposed Development and Cellarhead Battery Site.

0.5.52 Three NSR locations have been identified as having the potential to be affected by the Proposed Development, as well as the schemes set out in the Table above.

0.5.53 The assessment of cumulative effects considers the calculated A-weighted sound pressure levels at each NSR, in accordance with the requirements of BS 4142.

0.5.54 The context of the BS4142 assessment is applicable here, as discussed in Paragraph 7.7.14 onwards of the 2024 ES Chapter.

Table A7-27 Calculated Cumulative Specific Sound Levels - Day

NSR	Proposed Development	SMD/2022/0548	SMD/2024/0055	Cumulative Level dB(A)
3	25	27	21	29.7
4	29	-	22	29.8
5	29	-	21	29.6

Table A7-28 Calculated Cumulative Specific Sound Levels - Night

NSR	Proposed Development	SMD/2022/0548	SMD/2024/0055	Cumulative Level dB(A)
3	25	28	21	30.3
4	29	-	22	29.8
5	29	-	21	29.6

Rating Penalty

0.5.55 The characteristic of the noise remains the same as previously stated, therefore the rating penalty assessment outcome is the same and no rating penalties need to be applied.

Assessment

0.5.56 The cumulative rating sound level assessment at the closest NSRs has been undertaken, on the basis of the above information, and is presented in A7-31 below.

Table A7-31 Cumulative Assessment

NSR	Period	Cumulative Rating Sound Level, $L_{A,r}$ dB	Background Sound Level, L_{A90} dB	Excess over Rating Sound Level Limit, dB
3	Day	29.7	37	-.3
	Night	30.3	28	+2.3
4	Day	29.8	35	-5.2
	Night	29.8	28	+1.8
5	Day	29.6	35	-5.4
	Night	29.6	28	+1.6

0.5.57 During the daytime periods, the cumulative rating sound levels from all identified relevant schemes set out in Table A7-31 above are predicted to be lower than the background sound level at all NSRs.

0.5.58 During the night-time periods, the cumulative rating sound levels from all identified relevant schemes set out in Table A7-9 above are predicted to slightly exceed the background sound level at all NSRs. The increased cumulative noise level at NSR3 gives rise to a 'minor impact' or NOAEL in the context of NPPG, which is primarily driven by the Cellarhead BESS scheme

(SMD/2022/0548), which predicts a specific of 28 dB at NSR3, 3 dB greater than the Proposed Development. The increased cumulative noise level at NSR4 gives rise to a 'minor impact' or NOAEL in the context of NPPG, owing primarily due to contributions from the Proposed Development, with lesser contributions from SMD/2024/0055. Finally, the increased cumulative noise level at NSR5 gives rise to a 'minor impact' or NOEL in the context of NPPG, owing primarily to contributions from the Proposed Development, with underlying contributions from SMD/2024/0055 also. It should be noted that the context considerations outlined from Paragraph 7.7.14 to 7.7.20 of the 2024 ES Chapter are relevant here. In the unlikely event that the 'worst-case' conditions arise, the cumulative assessment demonstrates that a 'minor impact' or NOAEL in the context of NPPG may occur at the NSRs assessed. It is noted that this is below, and not within, the threshold for a SOAEL in NPPG context (not significant).

Chapter 8 – Transport and Access

0.5.59 The Transport and Access chapter and assessment submitted as part of the 2024 ES has been reviewed in light of the amendments made to the Proposed Development.

0.5.60 It is concluded that the assessment set out within the 2024 ES remains accurate and that there are no changes required to this chapter.

0.5.61 All appendices and figures remain unaltered.

Chapter 9 – Other Environmental Matters

0.5.62 Chapter 9 of the 2024 ES considered effects of the Proposed Development on other environmental matters that had not been scoped into the ES. These included: accidents, fire and natural disasters; agricultural land and soils, including ground conditions; air quality; heritage; human health; and hydrology, flood risk and drainage. Through consideration of the survey work undertaken for, and the inherent design and mitigation measures of the Proposed Development, the chapter considered significant effects on the aforementioned technical areas unlikely.

0.5.63 The proposed amendments to the design of the Proposed Development do not affect the survey work undertaken for, nor the inherent design and mitigation measures of the Proposed Development which led to the conclusions of the previous assessment in Chapter 9 of the 2024 ES. Hence, there are no changes required to this chapter.

0.5.64 All appendices and figures referenced within the chapter remain unaltered.

Chapter 10 – Summary

0.5.65 Taking into consideration the amendments to the Proposed Development as set out within this 2025 ES Addendum Report and the updated assessments contained within ES Chapter A6, the likely effects of the Proposed Development remain unchanged from the 2024 ES. As such, Chapter 10 remains an accurate reflection of the conclusions of the ES and the mitigation proposed is unaltered.

Chapter 11 – Glossary

0.5.66 The design amendments of the Proposed Development described in Section 02 of this ES Addendum Report do not affect the terms and abbreviations included within Chapter 11 of the 2024 ES. Hence, Chapter 11 of the 2024 ES remains accurate and no changes are required.

0.6 Conclusions and next steps

- 0.6.1 The amendments as set out in section 0.2 of this 2025 ES Addendum Report have been considered in the context of the EIA Regulations 2017 in order to determine whether the changes result in the requirement for further assessment in EIA terms.
- 0.6.2 In conclusion, following consideration of the amendments and assessment work undertaken to date as part of the submitted 2024 ES, it has been determined that the maximum parameters were assessed in Chapters 5 and 7-9 and so no further assessment is required. Where the changes have required further assessment, this is set out above within Section 0.4 and the relevant updated chapter sections. Following this additional assessment work, it has been determined that the effects as assessed within the ES represent an accurate assessment and that for all effects, other than landscape and visual effects, no additional significant environmental effects are anticipated to arise due to the changes.
- 0.6.3 Four additional significant landscape and visual effects have been identified. When assessing the Proposed Development in isolation, an additional landscape effect has been identified in each of the construction and operational phases, but these are limited only to the Site itself, with effects beyond the Site boundary assessed as not significant. With respect to cumulative impacts, both an additional significant landscape and an additional significant visual effect has been identified during the construction phase, however this is a temporary effect only to be experienced during the construction phase.