

Report No. 0588.1 rev 2
October 2025

**WYRE FARM, POTTERNE, DEVIZES, WILTSHIRE, SN10 5PU
NOISE ASSESSMENT OF PROPOSED BEEF UNIT**



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On behalf of:
Bodman Livestock Ltd
Wyre Farm
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SN10 5PU

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1.0 SUMMARY

- 1.1 A noise assessment has been undertaken of the proposed beef unit at Wyre Farm, Potterne, Devizes, Wiltshire, SN10 5PU.
- 1.2 The proposed site is at a significant distance of 170-270m from the nearest residences in all directions.
- 1.3 The proposed scheme shows that the 2 no. main buildings would include solid roofs and walls with a solid concrete base with slatted timber above in the direction of the residences. These structures would provide useful partial acoustic screening to the residences. The proposed scheme would be orientated so that it is turned away from the nearest residences.
- 1.4 A noise assessment has been undertaken of the anticipated worst-case and intensive use of the site at the nearest residences. The assessment is necessarily outline in nature and includes assumptions on the proposed use and potential noise generation at source, including mobile plant/machinery and cattle noise. It is considered to provide a robust means of assessment.
- 1.5 At the nearest residences, the predicted noise level from the site would meet or be better than the noise level range recommended by BS8233 as desirable for residential amenity.
- 1.6 This is the case for external amenity (gardens) and inside habitable rooms, even with an open window at the residence.
- 1.7 It is therefore concluded that the proposed development would not adversely affect residential amenity.
- 1.8 A number of good practice noise control measures have been suggested for use, if practicable, to further minimise the potential for noise generation at source.
- 1.9 It is therefore recommended that from a noise impact perspective, planning permission may be granted and conditioned accordingly.

2.0 INTRODUCTION

- 2.1 DKN Acoustics Ltd has been instructed by Bodman Livestock Ltd to carry out a noise assessment of the proposed beef unit at Wyre Farm, Potterne, Devizes, Wiltshire, SN10 5PU.
- 2.2 The pre-application advice from Wiltshire Council includes a requirement for a noise impact assessment of the proposed development.
- 2.3 The assessment has included:
- Review of site drawings;
 - Site inspection;
 - Outline noise prediction of operation of proposed beef unit;
 - Prediction and assessment of predicted noise level at nearest residences;
 - Recommendations for appropriate outline noise control measures as necessary.
- 2.4 Noise levels referred to in the text of this report have been rounded to the nearest whole decibel (dB), as fractions of dBs are imperceptible. **A glossary and description of the relevant noise units and noise characteristics is provided in Appendix I.**
- 2.5 The survey and assessment has been carried out by Duncan Newhall, who is a Member of the Institute of Acoustics (IOA), holder of the IOA Diploma in Acoustics and Noise Control and who has 30 years' experience in the noise consultancy field. DKN Acoustics Ltd is an independent acoustic consultancy.

3.0 SITE DESCRIPTION

- 3.1 The site drawings and photos are shown in Figures 1-5.
- 3.2 The proposed development is for a beef unit on agricultural land to the east off Worton Road at Wyre Farm, Potterne. The site would include an agricultural storage building to the north and livestock building to the south.
- 3.3 The main noise-generating activities of the proposed site are expected to be from:
- Use of mobile plant and farm machinery;
 - Loading and unloading of delivery/collection materials;
 - Feeding and removal of waste;
 - Animal noise (cattle mooing). The livestock building would have capacity for up to around 125 cows plus calves up to three weeks of age. A total of 150 cattle has been assumed in the assessment as a worst-case.
- 3.4 It is noted that there would be no fixed mechanical services plant installation or use of mobile power generators/compressors associated with the development.
- 3.5 The main site activities would be confined to daytime hours for the most part. However, at busy times of the year the applicant has informed that there may be a need for early morning and/or evening use of the site.
- 3.6 The walls of the proposed buildings would be concrete panels at the base with slatted timber boarding above. These walls would be present on the feed barn (west and north elevations) and livestock barn (west and south elevations). The other elevations would be open for ventilation. The roof would be solid, profiled fibre cement sheeting.
- 3.7 The nearest residences in all directions are at some distance from the centre of the proposed site, as follows:
- Bolt Cottage, Worton Road approximately 230m to the north-west.
 - Turnpike Cottage at junction of Worton Road/High Street, approximately 170m to the west.
 - Ware Farm, approximately 270m to the south-east.

- 3.8 The assessment has been carried out to these nearest residences, which represent the most exposed locations. There are other residences in the area, including existing residences and new-build properties (under construction) off the High Street to the west and other residences further north on Worton Road. However, the noise impact at these other residences will be lower than the worst-case locations considered above, due to further attenuation from additional distance and intervening acoustic screening.
- 3.9 The construction of the proposed 2 no. site buildings would ensure that the infilled wall elevations, rather than open side elevations, would generally be orientated towards the nearest residences. The proposed layout would therefore 'turn its back' to the nearest residences. This arrangement would enable noise from within the buildings to be partially acoustically screened to the nearest residences. In addition, each building would allow some partial acoustic screening of any activities taking place 'behind' them, whether in the yard area or from the other building, in the direction of the nearest residences.
- 3.10 The intervening land is field/grass, which is generally flat with a gentle slope to the north and east.

4.0 ACOUSTIC CRITERIA

General Planning Policy

National Planning Policy Framework (NPPF)

- 4.1 National Government Guidance is provided by the National Planning Policy Framework (NPPF), of December 2024. The NPPF sets out the Government's planning policies for England and how these are expected to be applied.
- 4.2 The relevant extracts below from Chapter 15 of the NPPF '*Conserving and enhancing the natural environment*' shows the general guidance regarding planning and noise.

15. Conserving and enhancing the natural environment

187. Planning policies and decisions should contribute to and enhance the natural and local environment by:
- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

198. Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:
- a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life⁷²;
 - b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and
 - c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.
200. Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed.
201. The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.

Noise Policy Statement for England

- 4.3 The NPPF references the DEFRA publication 'Noise Policy Statement for England' (NPSE) of 2010. The NPSE states three policy aims:

Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:

- *Avoid significant adverse impacts on health and quality of life;*
- *Mitigate and minimise adverse impacts on health and quality of life; and*
- *Where possible, contribute to the improvement of health and quality of life.*

- 4.4 The NPSE introduces three 'effect levels' NOEL, LOAEL and SOAEL, see below.

Noise: Planning Practice Guidance (PPG)

- 4.5 In addition, the *Noise: Planning Practice Guidance* (PPG) of 2014 (updated 2019) provides further guidance. It recommends that good acoustic design is considered early in the planning process and provides the following guidance:

Plan-making and decision making need to take account of the acoustic environment and in doing so consider:

- *Whether or not a significant adverse effect is occurring or is likely to occur;*
- *Whether or not an adverse effect is occurring or likely to occur; and*
- *Whether or not a good standard of amenity can be achieved.*

- 4.6 The NPPF and its accompanying Explanatory Note (*Noise: Planning Practice Guidance*) provide only general guidance on planning and noise. It does not advise on assigning decibel values for 'threshold' noise levels where development may or may not be appropriate. The guidance recommends the following on noise exposure, its effects and recommended actions:

- 4.7 The NPSE and the PPG (*Noise*) introduce the following terms:
- *NOEL (No Observed Effect Level):* The level of noise exposure below which no effect on health and quality of life can be detected;
 - *LOAEL (Lowest Observed Adverse Effect Level):* The level of noise exposure above which adverse effects on health and quality of life can be detected;
 - *SOAEL (Significant Observed Adverse Effect Level):* The level of noise exposure above which significant adverse effects on health and quality of life occur; and
 - *UAE (Unacceptable Adverse Effect). Extensive and regular changes in behaviour and/or an inability to mitigate the effect of noise lead to psychological stress or physical effects.*

- 4.8 The PPG summarises the resultant noise exposure hierarchy, based on the likely average response:

Table 1: Noise: Planning Practice Guidance

Perception	Examples of Outcomes	Increasing Effect Level	Action
Not noticeable	No Effect	No Observed Effect	No specific measures required
Noticeable and not intrusive	Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No Observed Adverse Effect	No specific measures required
		Lowest Observed Adverse Effect Level	
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum
		Significant Observed Adverse Effect Level	
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable Adverse Effect	Prevent

4.9 It is important to note that there is no specific accompanying guidance provided on objective noise level thresholds or categories that apply to the above grades of noise exposure.

4.10 As is common practice, other guidance has therefore been referenced for the design recommendations of the scheme (see below).

Other guidance

BS 8233: 2014

- 4.11 Appropriate guidance on acoustic design goals for residential development is set out in British Standard 8233: 2014 'Guidance on sound insulation and noise reduction for buildings'. The World Health Organisation 'Guidelines for community noise' are in line with the recommendations of BS8233: 2014. The desirable criteria recommended by BS8233: 2014 for dwellings are summarised in Table 2.

Table 2: BS 8233 recommendations for desirable indoor ambient noise levels for dwellings

Activity	Location	Time period	
		07:00-23:00 hrs (day)	23:00-07:00 hrs (night)
Resting	Living room	35 dB $L_{Aeq,16hour}$	-
Dining	Dining room/area	40 dB $L_{Aeq,16hour}$	-
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq,16hour}$	30 dB $L_{Aeq,8hour}$

- 4.12 BS8233: 2014 states that the internal target levels may be relaxed by up to 5 dB and reasonable internal conditions would still be achieved. This would allow a recommended internal noise level range of 35-40 dB (living room/bedroom daytime), 40-45 dB (dining room daytime) and 30-35 dB (bedroom night-time).
- 4.13 BS8233: 2014 advises that a partially open window typically provides 15 dB(A) attenuation of external noise.
- 4.14 BS8233: 2014 also recommends that the desirable noise level in gardens is 50-55 dB L_{Aeq} .
- 4.15 BS8233 further states that '*an increase or decrease in level of 10 dB(A) corresponds roughly to a doubling or halving of loudness*'.
- 4.16 A 3 dB(A) change in noise level is generally considered the minimum perceptible under normal conditions. A 10 dB(A) change in noise level tends to be perceived as a halving or doubling of the sound.

BS 5228-1: 2009

- 4.17 BS 5228-1: 2009 '*Code of practice for noise and vibration control on construction and open sites – Part 1: Noise*' provides guidance on predicting and measuring construction noise and assessing its impact on those exposed to it.
- 4.18 Although primarily concerned with construction noise, BS5228 does provide useful reference data. Of particular relevance to this assessment is the information provided in the Annexes of BS 5228-1: 2009 on recognised sound level data for various site activities. This information has been used in the noise predictions of some of the assumed processes proposed.

5.0 NOISE ASSESSMENT

Noise level prediction

- 5.1 The indicative noise level from the use of the proposed site has been predicted at the nearest residences. It has been necessary for the predictions to take into account a number of assumptions on the type and locations of mobile plant/machinery that might typically be in use.
- 5.2 It is expected that there will be periods when there would be minimal activity taking place and when the site would generate a negligible level of noise.
- 5.3 However, to provide a robust assessment, a reasonable level of typical activity has been assumed i) during general feeding/cleaning out and ii) during a feed delivery (expected to occur on a monthly basis). Table 3 below summarises these processes and the reference noise level at source.

Table 3: Assumed noise sources

Activity	Noise source	Location	No. minutes per one hour	Reference noise level, dB†	BS5228-1 ref	Other reference
General - Feeding/cleaning out etc	Tractor towing trailer*	Rear yard In cattle shed	20 mins 20 mins	79 dB L_{Amax} at 10m 73 dB L_{Aeq} at 10m assumed	Table C4 ref 75	n/a
	Wheeled loader	Rear yard In cattle shed	30 mins 30 mins	76 dB L_{Aeq} at 10m	Table C6 ref 34	n/a
	Tractor idling	Rear yard In cattle shed	10 mins 10 mins	71 dB L_{Aeq} at 10m	Table D9 ref 50	n/a
	Cattle mooing	In cattle shed	60 mins	55 dB L_{Aeq} reverberant noise level (40 head of cattle)	n/a	Fig 3b of www.agriculturejournals.cz/pdfs/rae/2016/04/05.pdf
Feed delivery	Delivery lorry* (26 tonne)	Access track	5 mins	83 dB L_{Amax} at 10m 77 dB L_{Aeq} at 10m assumed	Table C11 ref 19	n/a
	Telescopic handler	In feed shed	60 mins	70 dB L_{Aeq} at 10m	Table C4 ref 55	n/a
	Cattle mooing	In cattle shed	60 mins	55 dB L_{Aeq} reverberant noise level (40 head of cattle)	n/a	Fig 3b of www.agriculturejournals.cz/pdfs/rae/2016/04/05.pdf

Note: * Only L_{Amax} reference noise level for drive-by provided by BS8233. From experience, L_{Aeq} level pessimistically assumed to be 6 dB lower than L_{Amax} reference.

† BS5228 unless stated otherwise

- 5.4 By its nature, the activities required by the site will be diverse and will vary from day-to-day. Not every eventuality of expected activity can be covered in the noise assessment. However, the above assumptions represent the anticipated worst-case peak hourly use to provide a robust assessment.
- 5.5 For each scenario, the predicted hourly L_{Aeq} noise level has been calculated at the nearest residences. Corrections have been applied for the on-time of each process over the one-hour assessment period, the number of cattle and for attenuation provided by intervening distance and acoustic screening (where appropriate, from intervening buildings/elevations etc).
- 5.6 A summary of the predicted noise levels is shown in Table 4 below. The detailed predictions appear in Appendix II.

Table 4: Predicted $L_{Aeq,1hour}$ noise level (dB, figures rounded)

Activity	Bolt Cottage	Turnpike Cottage	Ware Farm
General- Feeding/cleaning out etc	47	50	48
Feed delivery	45	48	39

Assessment of impact

- 5.7 The noise level at the nearest residences is predicted to range from 47-50 dB $L_{Aeq,1hour}$ for the general feeding/cleaning out duties and from 39-48 dB $L_{Aeq,1hour}$ for the feed delivery.
- 5.8 By reference to BS8233, the predicted levels all meet or are better than the recommended range of 50-55 dB L_{Aeq} in residential gardens for outdoor amenity.
- 5.9 With an open window at the residence providing around 15 dB attenuation, the predicted noise level inside the residence ranges from 32-35 dB (general feeding/cleaning out) and 24-33 dB (feed delivery). The predicted levels would meet or be better than the range recommended by BS8233 for good/reasonable resting and sleeping conditions in habitable rooms (35-40 dB day and 30-35 dB night).

- 5.10 With a closed window at the residence, the predicted noise level inside the residence would be considerably lower still. The BS8233 recommended levels for habitable rooms would be comfortably met in this case.
- 5.11 It is noted that the above predictions assume a worst-case level of site activity during the more intensive phases of the livestock cycle. The main activities would be undertaken predominantly during daytime hours. It is also expected that there will be times when there is minimal or no site activity taking place, when there would be negligible noise from the proposed site.
- 5.12 The layout of the proposed scheme would ensure that some areas of the site would be provided with useful acoustic screening to the residences from the proposed site buildings.
- 5.13 The assessment has been undertaken to the nearest residences, to offer a worst-case view. The potential noise impact at other residences in the area will be lower still due to additional attenuation from distance and screening, where appropriate.
- 5.14 Taking all of the above into account, it is concluded that the proposed development would not adversely affect residential amenity.
- 5.15 It is recommended that, from a noise impact perspective, planning permission may be granted and conditioned accordingly.

Good practice noise control measures

- 5.16 In addition to the measures already incorporated into the proposed scheme, the following good practice noise control measures are suggested for consideration:

Hours of use

- Wherever possible, restrict mobile plant/machinery use to reasonable daytime hours.
- Timetable the more intensive site activities to reasonable daytime hours only.
- However, it is recognised that farming is a 24-hour process and that this may not always be possible.

Mobile plant/machinery

- Maintain and regularly service site machinery/plant to ensure it is operating efficiently and not generating unnecessary noise.
- Ensure the use of modern machinery with appropriate engine enclosures and attenuators/silencers for exhaust systems.
- Disable or reduce volume of reversing alarms for vehicles.
- Switch off plant when not in use to prevent engine idling noise.
- Avoid unnecessary revving of engines.
- Reduce drop heights of handled materials.
- Where possible, preferably use plant in areas of the site that are acoustically-screened to residences by intervening buildings.

Access track

- Enforce a site speed limit, e.g. 5 mph, to ensure noise generation by vehicles accessing the site is reduced to a minimum.
- Consider paving the haul road to remove potholes etc to ensure minimum noise generation by passing vehicles.

Stored materials

- Where materials can be stored outside, consider stockpiling so that they provide a further acoustic barrier from site works to residences beyond. This would only be useful if they form a solid, continuous barrier of adequate dimensions (e.g. masonry, straw bales, aggregate/earth etc).

Appendix I – Noise & vibration units and indices

Sound pressure level and the decibel (dB)

A sound wave is a small fluctuation of atmospheric pressure. The human ear responds to these variations in pressure, producing the sensation of hearing. The ear can detect a very wide range of pressure variations. In order to cope with this wide range of pressure variations, a logarithmic scale is used to convert the values into manageable numbers. Although it might seem unusual to use a logarithmic scale to measure a physical phenomenon, it has been found that human hearing also responds to sound in an approximately logarithmic fashion. The dB (decibel) is the logarithmic unit used to describe sound (or noise) levels. The usual range of sound pressure levels is from 0 dB (threshold of hearing) to 120 dB (threshold of pain).

An increase in noise level of 10 dB(A) is roughly perceived as a doubling of the sound source. A 3 dB(A) change in noise level is generally the minimum perceptible difference.

Frequency and Hertz (Hz)

As well as the loudness of a sound, the frequency content of a sound is also very important. Frequency is a measure of the rate of fluctuation of a sound wave. The unit used is cycles per second, or Hertz (Hz). Sometimes large frequency values are written as kiloHertz (kHz), where 1 kHz = 1000 Hz. Young people with normal hearing can hear frequencies in the range 20 Hz to 20,000 Hz. However, the upper frequency limit gradually reduces as a person gets older.

Glossary of Terms

When a noise level is constant and does not fluctuate over time, it can be described adequately by measuring the dB(A) level. However, when the noise level varies with time, the measured dB(A) level will vary as well. In this case it is therefore not possible to represent the noise climate with a simple dB(A) value. In order to describe noise where the level is continuously varying, a number of other indices, including statistical parameters, are used. The indices used in this report are described below.

L_{Aeq} The A-weighted 'equivalent continuous noise level' which is an average of the total sound energy measured over a specified time period. In other words, L_{Aeq} is the level of a continuous noise which has the same total (A-weighted) energy as the real fluctuating noise, measured over the same time period. It is increasingly being used as the preferred parameter for all forms of environmental noise.

L_{Amax} The maximum A-weighted noise level that was recorded during the monitoring period.

L_{A10} The A-weighted noise level exceeded for 10% of the time period. L_{A10} is commonly used as a descriptor of road traffic noise.

L_{A90} The A-weighted noise level exceeded for 90% of the time period. L_{A90} is used as a measure of background noise.

SEL or L_{AE} Sound exposure level which is the level of sound of 1 second duration, that has the same sound energy as the actual noise event considered.

R_w Weighted sound reduction index. Single number quantity which characterises the airborne sound insulating properties of a material or building element over a range of frequencies as measured in a laboratory.

D_{nT,w} Weighted standardised level difference. Single number quantity that characterises the airborne sound insulation between rooms. This can only be tested and determined *in situ*.

L'_{nT,w} Weighted standardised impact sound pressure level. Single number quantity used to characterise the impact sound insulation of floors over a range of frequencies. This can only be tested and determined *in situ*.

C_{tr} Correction term applied against the sound insulation single-number values to provide a weighting against low frequency performance.

A-weighting

The human ear responds differently to different frequencies of sound. A-weighting is the method of adjusting measured sound pressure levels to take into account human hearing and our uneven frequency response. For example, an A-weighted Leq noise level of 95 dB can be written as either Leq of 95 dB(A) or LAeq of 95 dB.

Client:
Bodman Livestock Ltd

Site address:
Wyre Farm, Potterne, SN10 5PU

Appendix II – Noise predictions

To Bolt Cottage

To Bolt Cottage													
Activity	Noise source	Location	LAeq	LAeq at distance(m)	Reverberant/ reflected noise	Distance to residences (m)	Distance attenuation	Acoustic screening	Assumed on-time, mins/60mins	On-time correction	Correction for 150 head of cattle	L _{Aeq,1hour} at residence	Total L _{Aeq,1hour} at residence
General mobile plant use - feeding/cleaning out etc	Tractor towing trailer	Rear yard	73	10		239	-27.6	-5	20	-4.8		35.7	46.8
		In cattle shed	73	10	3	239	-27.6	-5	20	-4.8		38.7	
	Wheeled loader	Rear yard	76	10		239	-27.6	-5	30	-3.0		40.4	
		In cattle shed	76	10	3	239	-27.6	-5	30	-3.0		43.4	
	Tractor idling	Rear yard	71	10		239	-27.6	-5	10	-7.8		30.7	
		In cattle shed	71	10	3	239	-27.6	-5	10	-7.8		33.7	
	Cattle mooing	In cattle shed	55.5	Reverberant noise level in building 40 head of cattle		239	-47.6	-5	60	0	5.7	8.7	
Activity	Noise source	Location	LAeq	LAeq at distance(m)	Reverberant/ reflected noise	Distance to residences (m)	Distance attenuation	Acoustic screening	Assumed on-time, mins/60mins	On-time correction	Correction for 150 head of cattle	L _{Aeq,1hour} at residence	Total L _{Aeq,1hour} at residence
Feed delivery	Lorry 26 tonne on access road Telescopic handler	Access track	77	10		168	-24.5	0	5	-10.8		41.7	44.7
		In feed shed	70	10	3	207	-26.3	-5	60	0.0		41.7	
	Cattle mooing	In cattle shed	55.5	Reverberant noise level in building 40 head of cattle		239	-47.6	-5	60	0	5.7	8.7	
Note: Acoustic screening: 0 dB = clear line of sight; -5 dB = partial line of sight; -10 dB = line of sight fully broken													

To Turnpike Cottage

To Turnpike Cottage													
Activity	Noise source	Location	LAeq	LAeq at distance(m)	Reverberant/ reflected noise	Distance to residences (m)	Distance attenuation	Acoustic screening	Assumed on-time, mins/60mins	On-time correction	Correction for 150 head of cattle	L _{Aeq,1hour} at residence	Total L _{Aeq,1hour} at residence
General mobile plant use - feeding/cleaning out etc	Tractor towing trailer	Rear yard	73	10		200	-26.0	-5	20	-4.8		37.2	49.5
		In cattle shed	73	10	3	164	-24.3	-5	20	-4.8		41.9	
	Wheeled loader	Rear yard	76	10		200	-26.0	-5	30	-3.0		42.0	
		In cattle shed	76	10	3	164	-24.3	-5	30	-3.0		46.7	
	Tractor idling	Rear yard	71	10		200	-26.0	-5	10	-7.8		32.2	
		In cattle shed	71	10	3	164	-24.3	-5	10	-7.8		36.9	
	Cattle mooing	In cattle shed	55.5	Reverberant noise level in building 40 head of cattle		164	-44.3	-5	60	0	5.7	11.9	
Activity	Noise source	Location	LAeq	LAeq at distance(m)	Reverberant/ reflected noise	Distance to residences (m)	Distance attenuation	Acoustic screening	Assumed on-time, mins/60mins	On-time correction	Correction for 150 head of cattle	L _{Aeq,1hour} at residence	Total L _{Aeq,1hour} at residence
Feed delivery	Lorry 26 tonne on access road Telescopic handler	Access track	77	10		96	-19.6	0	5	-10.8		46.6	48.3
		In feed shed	70	10	3	168	-24.5	-5	60	0.0		43.5	
	Cattle mooing	In cattle shed	55.5	Reverberant noise level in building 40 head of cattle		164	-44.3	-5	60	0	5.7	11.9	
Note: Acoustic screening: 0 dB = clear line of sight; -5 dB = partial line of sight; -10 dB = line of sight fully broken													

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Client:
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Site address:
Wyre Farm, Potterne, SN10 5PU

To Ware Farm

To Ware Farm													
Activity	Noise source	Location	L _{Aeq}	L _{Aeq} at distance(m)	Reverberant/ reflected noise	Distance to residences (m)	Distance attenuation	Acoustic screening	Assumed on-time, mins/60mins	On-time correction	Correction for 150 head of cattle	L _{Aeq,1hour} at residence	Total L _{Aeq,1hour} at residence
General mobile plant use - feeding/cleaning out etc	Tractor towing trailer	Rear yard	73	10		271	-28.7	0	20	-4.8		39.6	48.1
		In cattle shed	73	10	3	264	-28.4	-5	20	-4.8		37.8	
	Wheeled loader	Rear yard	76	10		271	-28.7	0	30	-3.0		44.3	
		In cattle shed	76	10	3	264	-28.4	-5	30	-3.0		42.6	
	Tractor idling	Rear yard	71	10		271	-28.7	0	10	-7.8		34.6	
		In cattle shed	71	10	3	264	-28.4	-5	10	-7.8		32.8	
	Cattle mooing	In cattle shed	55.5	Reverberant noise level in building 40 head of cattle		164	-44.3	-5	60	0	5.7	11.9	
Activity	Noise source	Location	L _{Aeq}	L _{Aeq} at distance(m)	Reverberant/ reflected noise	Distance to residences (m)	Distance attenuation	Acoustic screening	Assumed on-time, mins/60mins	On-time correction	Correction for 150 head of cattle	L _{Aeq,1hour} at residence	Total L _{Aeq,1hour} at residence
Feed delivery	Lorry 26 tonne on access road Telescopic handler	Access track	77	10		339	-30.6	-5	5	-10.8		30.6	39.2
		In feed shed	70	10	3	296	-29.4	-5	60	0.0		38.6	
	Cattle mooing	In cattle shed	55.5	Reverberant noise level in building 40 head of cattle		164	-44.3	-5	60	0	5.7	11.9	
Note: Acoustic screening: 0 dB = clear line of sight; -5 dB = partial line of sight; -10 dB = line of sight fully broken													

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Report 0588.1 rev 2

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Client:
Bodman Livestock Ltd

Site address:
Wyre Farm, Potterne, SN10 5PU

Figure 1 – Site location plan

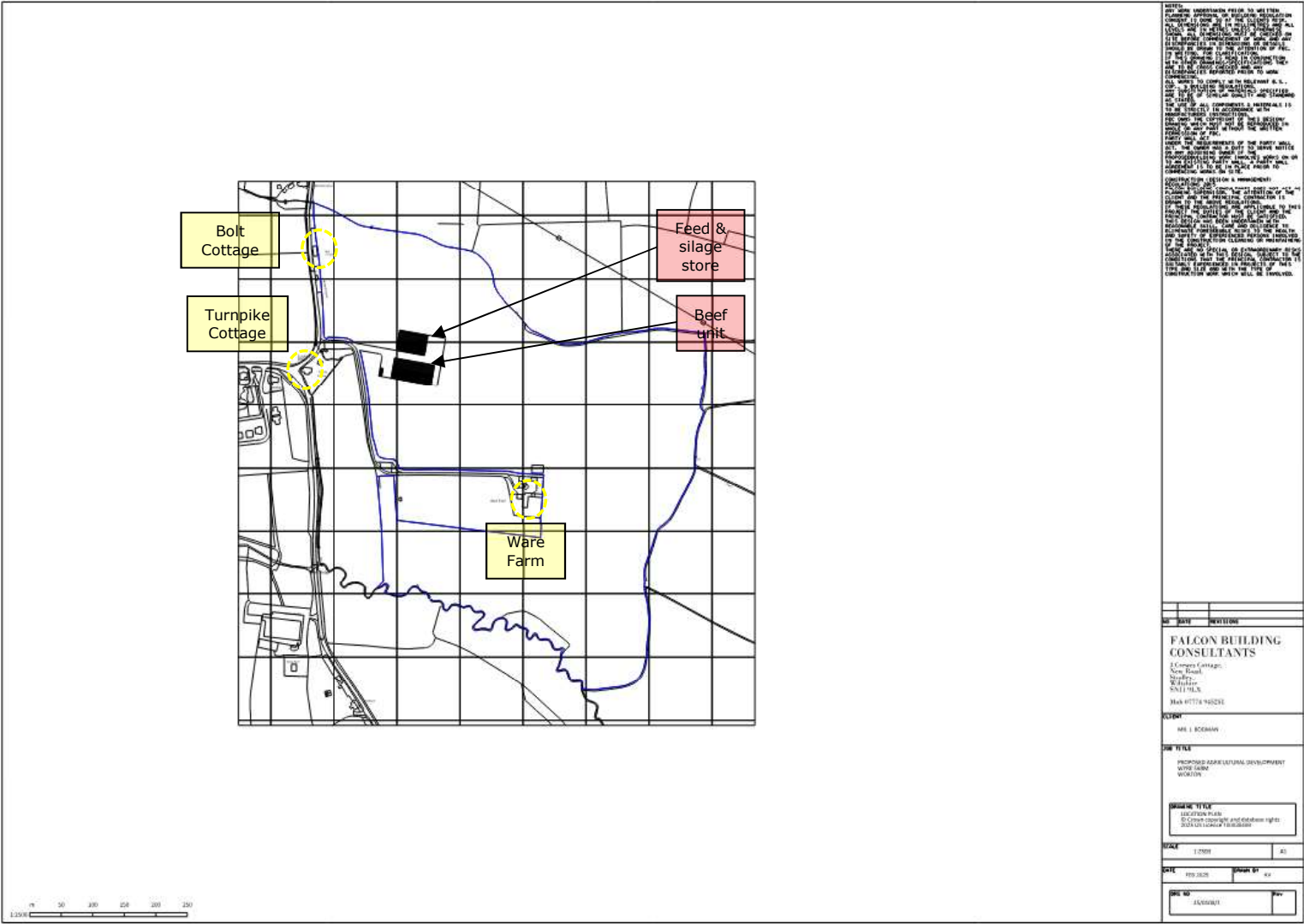
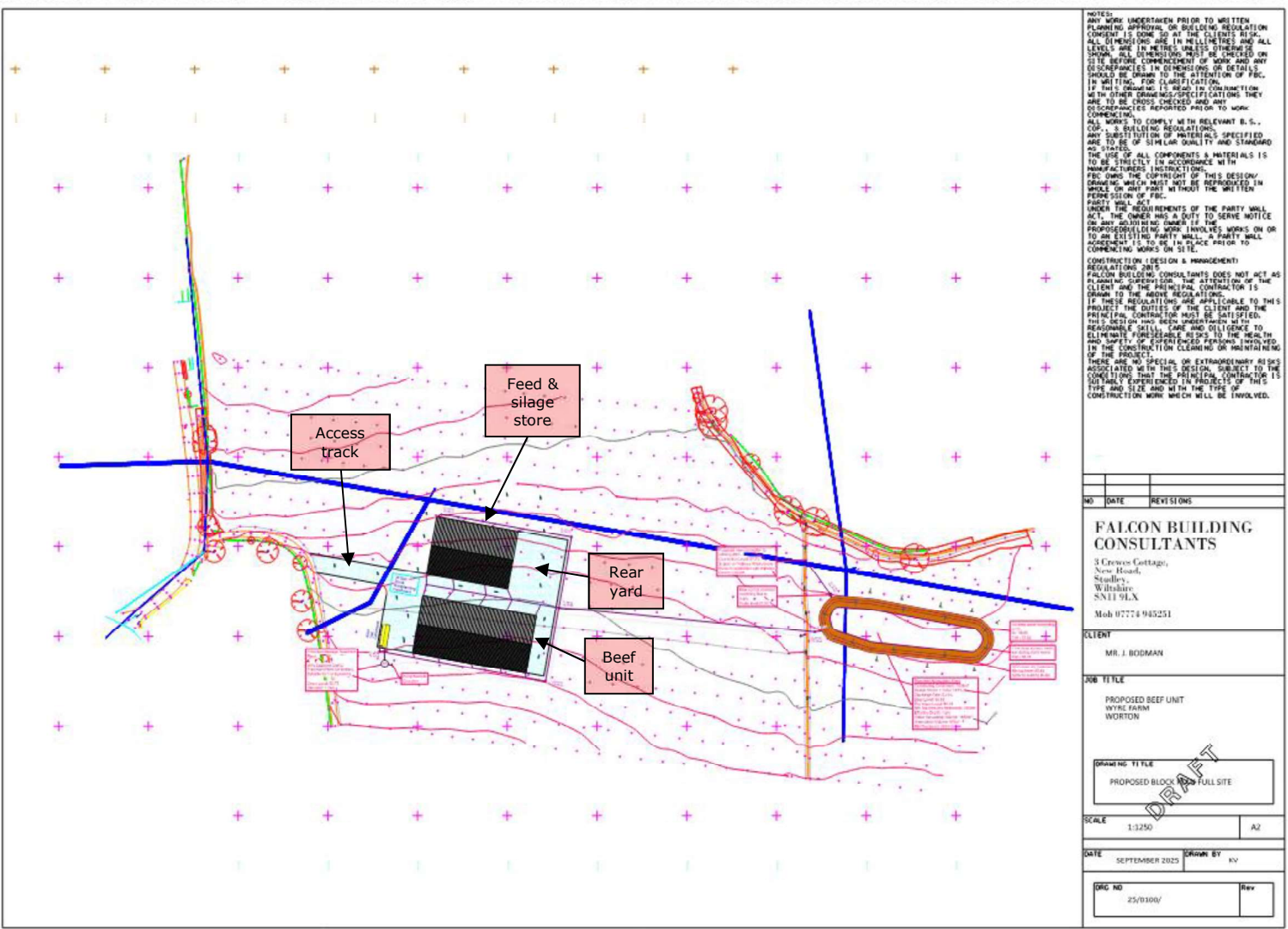


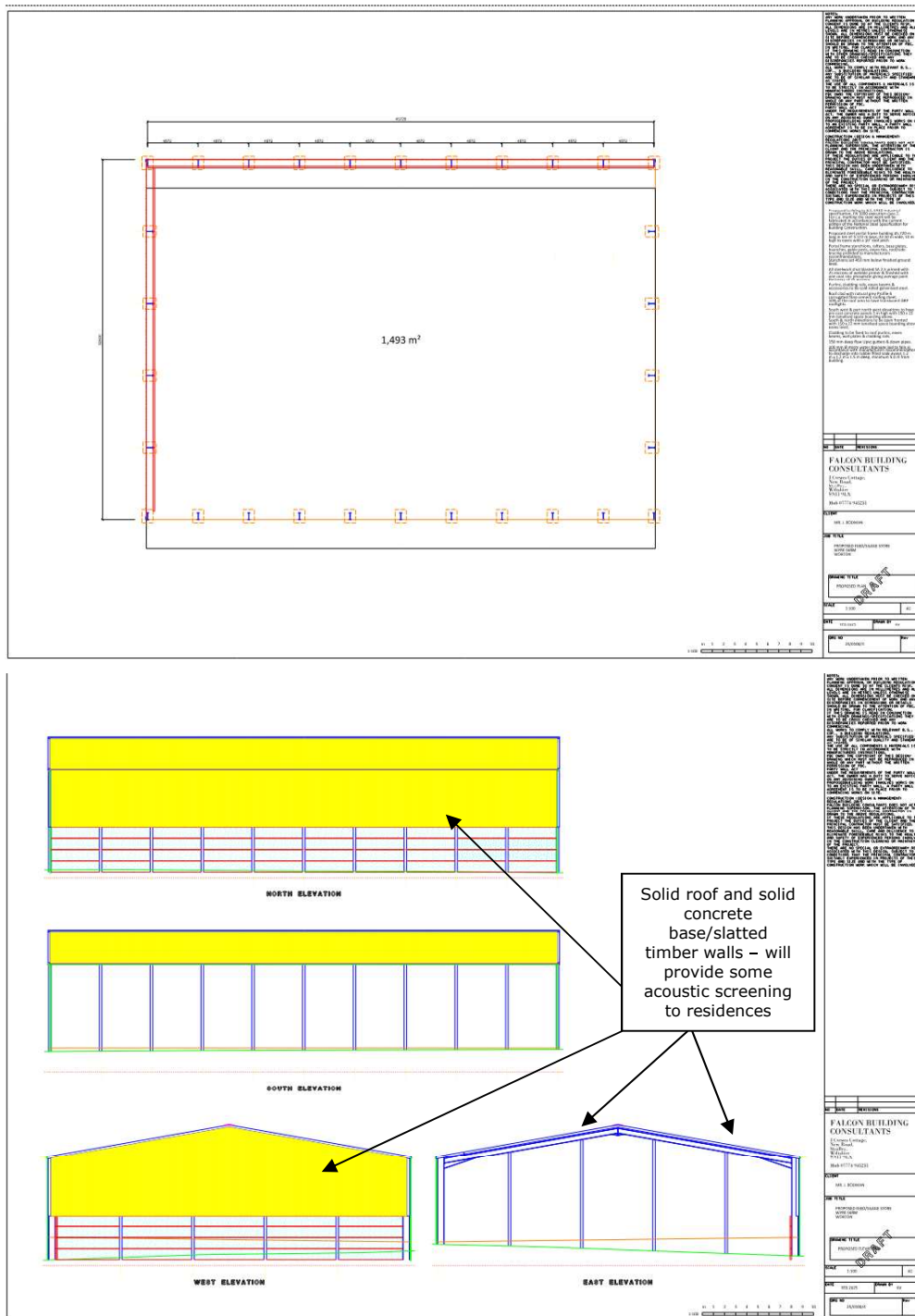
Figure 2 – Proposed block plan



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Figure 3– Proposed plans & elevations – feed/silage store



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Figure 4– Proposed plans & elevations – beef unit

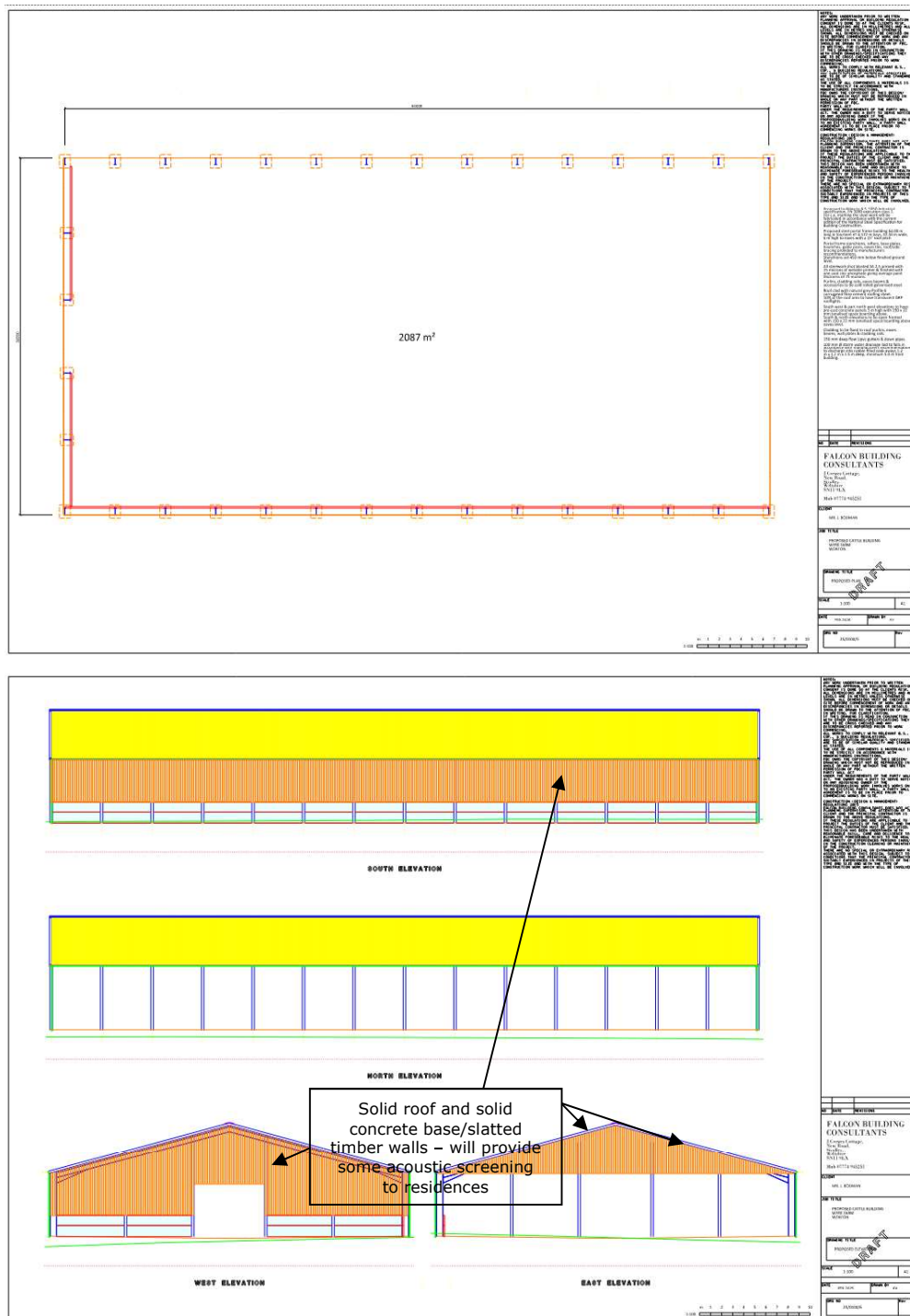


Figure 5 – Photos from proposed site location

View towards Bolt Cottage



View towards Turnpike Cottage (residence behind trees)



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View towards Ware Farm (residence behind agricultural barn)

