Design & Access Statement

Erection of a free-range egg production unit to extend to an existing unit, removal of mobile units, together with the siting of feed silos and associated works at Land at Bache Farm, New Radnor

Prepared for Hardwick's

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Site address

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Planning Authority

Powys County Council

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1. INTRODUCTION

1.1. This Design and Access Statement considers the planning issues associated with a planning application for the erection of a free-range poultry unit at Bache Farm, New Radnor. This statement should be read in conjunction with the submitted forms and plans.

1.2. Bache Farm was traditionally a Beef and Sheep Farm, until Mr & Mrs Hardwick decided to diversify an element of their farm into the poultry enterprise. In 2008 they received planning permission for a mobile free range laying unit which would house approximately 4000 hens (RAD2007 0502) and due to its success, a further application for an additional 4000 was approved in 2009 (P2009 0525).

1.3. During recent years, both units have been profitable for the farm business, and sheep and beef have stalled in profitability. In light of the above, the applicants expanded their poultry business in 2017 with a successful application for 16,000 free range unit which has now been erected and is fully functioning.

1.4. Mobile units are not seen as efficient these days, with fully constructed buildings with egg and manure conveyor belts showing the way for better ventilated and efficient systems. Therefore, the applicant wishes to apply for a 24,000 free range unit which will replace the two 4000 hen mobile units and house an additional 16,000 birds on site, from the current 24,000 on site. This will equate to a total free-range poultry unit at Bache Farm of 40,000 birds.

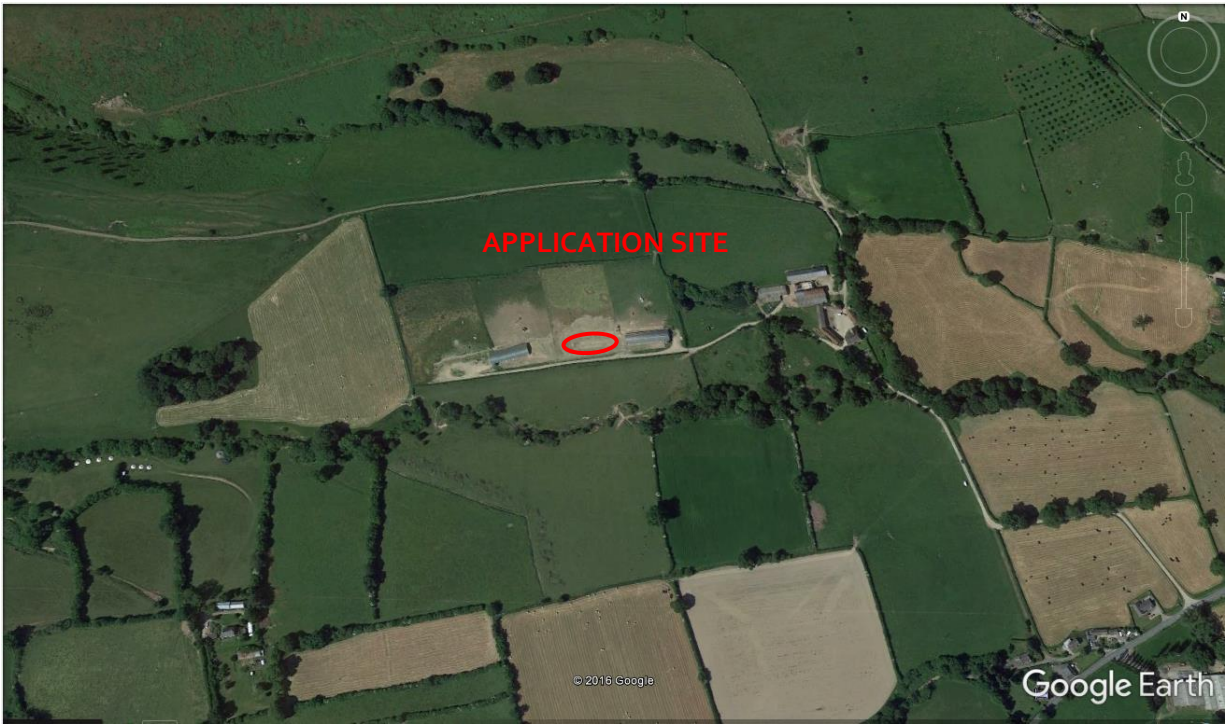
2. THE APPLICATION SITE

2.1 The proposed site is through the existing farm yard to the West and is perpendicular to the existing 16,000 bird unit.

2.2 In light of the above, the proposal will fit well within the site, and does not involve any loss of hedgerow/trees or any other ecological implications.

2.3 The closest un-associated dwelling to the proposed building, is over 450m away. The distance between the proposal and the property and the fact that there are existing poultry units on site, an additional unit won't raise any issues such as noise, odour or dust and therefore should be considered acceptable.

2.4 Aerial View



2.5 The location of the proposed building has been carefully considered, in order to ensure it has a minimal landscape and visual impact, together with the practicalities of the ranging areas for the proposed and existing units are not compromised.

2.6 The low-lying nature and juniper green finish will ensure that the building will integrate well within the immediate and surrounding area and the limited views of the existing units from different vantage points illustrate that the site is inconspicuous.

2.7 The poultry unit will be accessed via the same access as the existing two mobile poultry units and 16,000 bird unit, and therefore no additional access track or amendments are required.

3. PROPOSAL

3.1 The proposal is for a new free range hen building to provide a 24,000-bird unit within one building which will replace the two existing 4000 bird mobile units. The new building will be accessed utilising the existing farm access, which was significantly improved during the previous applications. The birds are brought in and remain in the egg production unit for some 13 months. After this time the flock is removed and the whole building fully cleaned down internally and a new flock introduced to restart the egg production cycle.

3.2 This section seeks to explain and justify the design and access principle and concepts on which the development proposed is based and how these are reflected in the individual aspects of the scheme.

The Amount of Development

3.3 The scheme proposes a single building with feed hoppers and access track. The proposed building will be 95m long by 21m wide, with a roof pitch of 15°, eaves height of 2.85m and ridge height of 5.5m. The building will have a floor area of approximately 1995m² which will house 24,000 laying hens.

3.4 The size of the proposed building is in line with the land availability surrounding the development, at a ratio of 2000 birds for every hectare of land. The formal drawings of the building are shown on the submitted drawings.

Layout of Development

3.5 The development layout is shown in the submitted site plan. It is located in a way which minimises the landscape and visual impact, with no visibility of the building from most public vantage points.

3.6 The proposed building will be situated from West to East, with ranging to the North, West and South through an existing gateway. This will ensure the new proposal and the existing 16,000 bird unit have some separation.

Scale of Development

3.7 A single building is proposed, which will house 24,000 laying birds along with a service area and egg storage section.

Appearance of the Development

3.8 The building is of a low-lying nature which helps to minimise its visual impact. The proposed building would utilise ridge mounted high velocity mechanical fans which thermostatically control the building. The building roof and sides will be clad with box profile sheeting in a Juniper green colour (or a colour to be approved by the LPA) set above a low concrete base wall. Feed for the birds is stored in two external green coloured, or a similar dark colour to be agreed with the local planning authority, on steel hoppers and conveyed automatically to the building. The external steel hoppers will be located directly adjacent to the building.

3.9 Adjoining the building there will be a concrete apron at the Northern end of the building that will be for access for delivery and removal of the birds and for cleaning out the manure, egg pick-up, feed and bird delivery.

Vehicular Access

3.10 The access to the new building will be via the existing farm access and track, minimal amount of hardstanding will need to be provided, only for the building itself, as the site is an existing poultry unit site.

Landscaping

3.11 The location of the building has been carefully considered. The existing landscaping and natural topography ensure the building will sit in the landscape well.

Vehicle movements

3.12 Currently, the bulk food required for the 16000 bird unit and the two 4000 mobile units is delivered to the farm by six or eight-wheeler HGVs, 2/3 times a month and stored in the hoppers on site. Eggs are collected approximately every 3 days and vehicles delivering new birds arrive once every 14 months. There will be no additional movements due to this proposal as the lorries can carry enough feed for a 40,000 bird unit and can accommodate the additional eggs produced.

Drainage

3.13 Construction of the floor will incorporate a damp proof membrane preventing any dirty water percolating into the ground below the building. A stump in the floor will drain further below ground into a sealed tank, which will allow collection of any dirty water primarily arising from the washing down process at the end of the production cycle. This dirty water will then be taken off site in a vacuum tanker.

Manure Storage and Disposal

3.14 The building proposed operates a multi-tier system. The two-tier system allows the laying hens to perch on two tier perches which are slated to allow manure to drop the floor onto the manure conveyor belt. The manure conveyor belt is operated every three/four days and removes manure from the building to a covered trailer parked outside to be taken off the farmstead.

3.15 Please see manure management plan.

Dead birds

3.16 Dead birds will be carefully disposed with and collected by an approved contractor under the National Fallen Stock Disposal Scheme. Whilst awaiting collection they will be stored in a secure container.

Emissions

3.17 The building design incorporates the use of mechanical ventilator extractor fans, the mechanical extractor fans will thermostatically control building. Efficient design of ventilation fans has minimised the number needed for this building. Fans will be maintained and inspected in accordance with the manufacturers or supplier's instructions. This will minimise mechanical noise from the unit and also dust escape. Automated feeding by internal conveyor with augers direct from the sealed external feed hoppers will minimise dust creation. The insulated construction of the walls and roof also reduce sound transmission. Detailed ammonia and nitrogen modelling has been undertaken, which is attached to this submission.

Noise and Odour Management

3.18 The proposed building design incorporates the use of mechanical ventilator extractor fans, the mechanical extractor fans will thermostatically control the building temperature. Therefore, they tend to operate more frequently during hot weather.

3.19 The nearest residential properties not controlled by the applicants is approximately 450m away (Ferndale), in light of the above, the noise level at this property will be well below the WTO noise guidance therefore the noise emanating from this development will not cause unacceptable adverse effects on any neighbouring property.

3.20 The proposed fan has done numerous manufacturing trials, which is the HER710/6/1, and the results are shown on the table below:

	Number of Fans				
Distance from fan to receptor – metres	**1**	**3**	**10**	**16**	**20**
3	61	66	70	72	74

6	57	61	65	68	70
10	51	55	59	62	64
20	45	49	53	56	58
100	31	35	39	40	43
200	21	27	31	33	35
400	18	23	27	29	31

3.21 The above data has been compiled in line with BS848 Part Two (1985) and using the Technical Specification of the Mechanical Fan which confirms the fan selected will operate at a level of 70 d B (A) at 3 metres. When all 10 fans are operational the cumulative sound level should be in the range of 27 d B (A) at 400 metres.

3.22 I would recommend the EH officer to visit the site, to fully understand the location of the building, and its relationship with the neighbouring property, which will show, noise will not be detrimental from the proposed building.

3.23 The manure will be removed from the shed every 3-4 days via conveyor belt. Therefore, there will be no long-standing manure in the shed which would produce odour. This will also reduce pest activity.

3.24 The design of the building and the incorporation of slatted floors and conveyor belt has a proven history of creating no odour. A poultry unit removes manure less frequently than other agricultural enterprises. Any odour within the poultry unit will not be apparent outside the surroundings of the associated fields, so shall not detrimentally affect those residential receptor points that are closest to the proposed scheme.

3.25 The multi-tier system is a far better system that the historic single tier system in terms of the odour dispersion. The single tier system meant that all the manure created was contained within the building for the full 13-month cycle thus increasing the odour and dust.

3.26 Odour will be kept to a minimum within the Poultry unit itself, with natural ventilation filtering through the incorporated pop holes. Water from the nipple drinkers is also controlled and is prevented from being spilt onto the manure, which would increase any associated odour issues.

3.27 It must be noted that odour is very rarely an issue in a modern poultry scheme, given that the buildings are now purpose built and the technology for natural ventilation mitigation and mechanical ventilation has improved unreservedly.

3.28 The manure will be spread on the applicant's farm holding as shown on the manure management plan.

3.29 It is imperative that there are no rodents on the site as this can impact egg sales so the applicants will carefully monitor the situation and act upon it immediately should any appear. A local Pest Control agent will be employed should a problem occur. The birds are kept indoors at night and predators such as foxes should not be a problem. During the day electric fences around the outside perimeter will deter predators.

Dust

3.30 It is paramount that dust is kept to a minimum in the unit to protect the welfare of the birds and workers. All feed is stored within the silos outside the main building, to reduce dust particles. The open design of a free-range unit and associated ventilation systems limit significant dust build up. The automated feeding system, internal conveyor and the external feed bins will minimise any dust creation.

Fly control

3.31 Flies are not an issue on a well-managed and hygienically run poultry unit; due to the feeding habits of poultry any maggots that hatch in the bedding are soon eaten.

3.32 Fly problems at poorly managed poultry farms can occur in the following areas:

Feed Storage

3.33 Animal feed is attractive to flies as a breeding area. Problems mainly occur when feed is stored in unsuitable buildings or storage bins that do not function effectively. These breeding areas are designed out of the majority of poultry farms by installing modern feed storage systems to meet the requirement of the Food Hygiene Regulations and the assured chicken production scheme standards.

Field Manure Storage

3.34 Managing poultry manure in such a way that it becomes unattractive as a breeding site is an effective way to keep the fly population under control. All flies go through four life stages; egg, larva, pupa, and adult. Eggs are deposited on the breeding media (frequently poultry manure) and larva (or maggots) hatch out in the moist or wet material where they remain until ready to pupate. Pupation may occur in a drier location than where the eggs hatch. Fresh poultry manure is approximately 60 to 80% moisture. If the moisture level can be reduced to approximately 30% flies will no longer find it an ideal site for laying eggs.

3.35 The storage of manure is one of the most important factors in preventing fly infestations. Manure that is produced, transported and delivered in a dry, fly free-state can in some cases become infested and cause problems. As good management practice, the applicant inspects existing poultry manure stores when delivered on a frequent basis to ensure that there is no fly activity. The following management principles for poultry manure storage to avoid fly nuisance will be followed:

3.36 Manure stores will be inspected frequently for signs of fly infestation and a record of the checks made will be kept for examination by the Local Authority.

3.37 At the first sign of fly activity on in field stores manure will be covered with suitable sheeting material; the sheeting raises the temperature inside the pile to a level which kills any flies or larvae.

3.38 Any manure covered in this way will remain covered for a minimum of ten days before it is used.

3.39 During the summer months from the beginning of May to the end of September manure will not be stored near to residential areas.

Private water supplies

3.40 Private water supplies close to the manure spreading areas have been identified as best as possible and no manure will be spread within 50m of those private water supplies. No manure will be spread within 50m of any borehole, spring or water supply, and 10m of any watercourse, and in accordance with COGAP and SSAFO Regs (Wales).

Lighting

3.41 The poultry unit will not include any external or perimeter lighting, as the hens will be trained to find their own way back to the building prior to darkness. A small external light will be outside the egg collection unit for use in winter months when staff enter the building to collect eggs in the morning and evening.

Quality Standards

3.42 The chickens are managed to comply with the stringent conditions that are imposed by the RSPCA Freedom Food specification, which sets out the standards of welfare at all stages of the chickens life. Spot inspections from the associations are frequent.

3.43 The unit will produce eggs in line with Defra 'Code of Good Agricultural Practice'. Manure will be spread onto the farm land in accordance with the Control of Pollution of Slurry and Agricultural Fuel Regulations and the farms manure management plan. If the time of year is not appropriate for the spreading of the manure, the farm business has hard standing areas and existing buildings to store the manure until required. The Codes of Good Agricultural and Environmental Condition (GAEC) and Cross Compliance will be adhered to.

4. PLANNING POLICY

4.1 Planning Policy Wales (Edition 10) confirms that the planning system manages the development and use of land in the public interest, contributing towards achievement of sustainable development. Local Authorities are required to ensure that the economic benefits associated with a proposed development are understood and that these given equal consideration with social and environmental issues in the decision-making process.

4.2 Technical Advice Note 6 (TAN 6) – planning for Sustainable Rural Communities (July 2010) confirms that the planning system has a key role to play in supporting the delivery of sustainable rural communities. TAN6 also states in section 6 that "The Welsh Assembly Government's objective is a sustainable and profitable future for farming families and businesses through the production and processing of farm products while safeguarding the environment, animal health and welfare, adapting to climate change and mitigating its impacts, while contributing to the vitality and prosperity of our rural communities. The planning system can play an important part in supporting the future sustainability of agriculture."

4.3 The site is within Powys County Council and therefore the relevant local planning policies will be within the adopted Local Development Plan (LDP).

4.4 The relevant policies of the LDP are:

- DM2 – The Natural Environment
- DM4 – Landscape
- DM13 – Design & Resources
- DM14 – Air Quality Management
- DM15 – Waste within Developments
- E6 – Farm Diversification

Policy Analysis – DM2

4.5 <u>Policy DM2 – The Natural Environment</u>

Development proposals will be permitted where they do not unacceptably adversely affect important site designations, species and habitats.

4.6 The proposal is approximately 1.5km from a nationally designated site (Radnor Forest) but then 4.7km from any other, and therefore the proposal will have little impact on them. Documentation and assessments are provided within the submission to address NRW's guidance on poultry units, and they are the statutory body to request any compensatory measures which might be required to ensure their proposal does not raise unacceptable adverse effects on the Environment.

4.7 The proposal meets the requirements of this policy as the development designed to fit in with the surrounding landscape and will have minimal impact on views into the site. The proposed building will be seen in context with the adjoining farmstead and appropriate in an agricultural setting. The buildings have been designed to be sustainable as possible as discussed earlier in this report. Materials will be sourced locally where possible and material already onsite will be recycled. The application will have no impact on any environmental features and there are no trees or hedges on the site.

4.8 *Policy Analysis – DM4*

Policy DM4 – Landscape

Proposals for development outside settlements must not have an unacceptable adverse effect on the characteristics of Powys' landscape.

4.9 The proposed site is perpendicular to an existing poultry unit, with it seen as a natural extension to the existing poultry site and therefore in the working countryside, the building will therefore integrate well within the built environment on the farm.

Policy Analysis – DM13

4.10 POLICY DM13 – Design and Resources

Proposals for development must demonstrate good quality design and have regards to the qualities and amenity of the area and resources and follow a set of general objectives.

4.11 The proposed poultry unit will be immediately perpendicular to the established poultry unit, and therefore will complement the existing area, by not being seen as a detached development. The building has been sited in a way, that the length is not easily seen from public vantage points.

4.12 In terms of noise, dust, air pollution and odour, these have been addressed in section 3, of which no unacceptable impact should arise to any neighbouring property.

Policy Analysis – DM14

4.13 Natural Resources Wales has published guidance on how developers should consider the air quality impacts of livestock installations on sites of international or local designated sites. This has been thoroughly investigated and discussed with NRW through the pre-consultation process. We have undertaken detailed modelling, and it confirms that the proposed scenario will have a significant reduction on the ammonia and nitrogen

deposition on nearby sensitive sites, and therefore is a benefit to the overall environment.

4.14 In light of this assessment, no significant detrimental impact will occur in terms of air pollution due to this development.

Policy Analysis – DM15

4.15 Waste within this development has been fully explained in the previous sections of this statement. The manure management plan, maps and processes involved with manure belts from sheds, means no detrimental impact will occur in terms of waste.

Policy Analysis – E6

4.16 Farm diversification is a vital factor in the coming years, as traditional farming activities such as beef and sheep are getting less and less viable every year. Proposals for diversifying will be permitted whereby the use is appropriate in terms of location and setting and that the proposal lies immediately adjacent to existing farm buildings.

4.17 The use is considered acceptable, given the existing units that have been constructed in Powys over the last 15 years, there is no cumulative impact, as proven through detailed modelling and the building is proposed immediately adjacent the existing farmyard.

4.18 In light of the above the diversification scheme is considered fully compliant with Policy E6.

5. ACCESS

5.1 The Disability Discrimination Act 1995 (DDA) seeks to avoid discrimination against people with impairments and disabilities and for instance ensures that work premises do not disadvantage someone with a disability.

5.2 The access arrangements have adopted an inclusive approach and aims to ensure that all users will have equal and convenient access to the site and buildings. The design of the application will have full consideration for ease of access for disabled pedestrian use.

5.3 All of the measures detailed above will be maintained in such a way that will allow all people access to / from and around the building. Also the facilities within the building will also be constructed and maintained in such a way to ensure people's access within the development.

6. COMMUNITY SAFETY

6.1 Site security is critical throughout day and night to prevent the theft of equipment and livestock, which may injure or adversely affect the welfare of animals. The proposed scheme will be no different to any farm business, and will run efficiently and not raise any adverse community safety issues.

7. ENVIRONMENTAL SUSTAINABILITY

7.1 Wherever practicable, developments shall be designed to reduce energy consumption and maximise energy conservation and maximise energy conservation through the use of appropriate materials, design, layout and orientation.

7.2 The strategic aims supporting sustainable development in National and local planning policy are as follows: -

- promote energy conservation and efficiency
- encourage appropriate energy generation from renewable energy sources
- Strengthen design standards and promote good design.

7.3 Our planning application has taken into consideration the following energy efficiency measures and technologies that can be incorporated alongside wider energy efficient design principles to ensure high energy performance.

7.4 The proposed use is a purpose-built poultry unit which is specifically designed for the welfare of birds. The pop holes will be open during the day to provide natural ventilation to the building rather than using mechanical ventilation. The mechanical ventilation (fans) will only be used to assist the natural ventilation in hot weather.

7.5 The building will be insulated (roof, walls and floors) according to the most recent building regulation standards in order to reduce heat loss in winter and excess solar gains in summer.

7.6 Wherever possible materials will be sourced and produced locally and will come from a source that can be renewed without harm to the environment. High quality reclaimed materials can save resources and may also provide a better match with the surrounding development. The scheme will avoid the use of tropical hardwood and look for timber which is certified as coming from sustainable sources. The materials used in this development including the steel, box profile sheeting and fibre cement roof sheets, will be sourced locally. These locally sourced materials can be renewed without harm to the environment.

7.7 Rainwater harvesting will be considered in the construction.

7.8 The development of this land will contribute to the aim of sustainability through the productive use of the above-mentioned features.

7.9 The above points will ensure that the scheme is sustainable in terms of its building design and the supply and use of energy in accordance with National and local planning policy guidance.

8. MATERIAL CONSIDERATIONS

Economic Context

8.1 Welsh Government are always looking to diversify and improve rural economy. The applicant is preparing to diversify his farm enterprise even further to cater for more laying hens, which will inevitably create employment and produce local produce.

8.2 Farm businesses need to change and grow in response to market forces and legislation if they are to survive. Poultry egg laying is becoming an important element in Wales' agricultural economy. The current market dictates that agriculture must adapt to meet consumer demands, the applicant has chosen to diversify to respond to the demand for free range eggs.

8.3 Planning policy Wales is supportive of diversification of agricultural enterprises.

Social context

8.4 The new building will improve and grow the existing enterprise in the immediate locality. The applicant foresees him allowing school children and clubs to visit the site to learn more about the poultry enterprise.

Physical context

8.5 The new building will be located perpendicular to the existing 16,000 bird unit and therefore there will be minimum impact on the landscape and visual impact.

9. CONCLUSION

9.1 The proposal is an economic development that is supported by both local and national policy; it amounts to sustainable development that will improve the agricultural business located on site.

9.2 The building is intelligently and sympathetically designed and strikes a balance between practical and economic efficiency and minimal landscape impact. The proposal will be a significant improvement to the landscape, air quality, ecological and farming business.

9.3 Adequate provision is made for the disposal of foul and surface water drainage and animal wastes without risk to watercourses through a sustainable drainage technique.

9.4 Adequate provision is made for access and movement of machinery to avert the perpetuation, intensification or creation of traffic hazard.

9.5 The proposal is of an appropriate location, scale and type so as not to be detrimental to the amenities of any nearby existing residential properties.

9.6 Please be aware that this is a free-range poultry unit and not an intensive livestock unit (battery unit). The poultry will be able to roam the agricultural land around the building.

9.7 This proposal has significant merit, fits within the policies of the development plan and national planning guidance, and it is respectfully requested that the submitted planning application be approved.