
Management Plan

Erection of a free range egg
production unit including silos
and all associated works

Prepared for Thomas Brothers

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land & property
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1.0 The Development

The proposal is for a new free range bird laying unit. The new building will be located on existing agricultural land and accessed with an existing access off the unclassified road. The building will be approximately 82m x 32m wide which will house 32,000 birds. The eggs would be conveyed into the packaging and storage area where they would be packed and stored ready for collection. The birds will have direct access from the pop holes on the north east and south west elevations of the building to dedicated pasture which will be fenced to keep out predators. The birds are brought in as young laying stock and remain in the egg production unit for some 14 months. After this time the flock is removed and the whole building fully cleaned down internally and the new flock introduced to restart the egg production cycle.



The building operates a multi-tier system and allows a smaller shed by having two tier perching decks for the laying hens within the building and the highest level of welfare standards. These perching areas are floored with plastic slats which allow manure to drop through the flooring system. The manure from each of the tiers then falls onto an internal conveyor belt.

The conveyor belt system is operated every 10 days and removes approximately 14 tonnes from the internal conveyor belt systems via an external conveyor belt into a parked trailer outside the building. After 13 months the flock is removed and the whole building fully cleaned down internally and a new flock introduced to restart the egg production cycle.

Feed for the birds is stored in the two external juniper green steel hoppers and conveyed automatically to the building.

Adjoining the building will be a hard stoned area approximately 5m wide to allow for access for delivery and removal of the birds.

The building has a proposed roof pitch of 15° and an eaves height of 3.10m. The building is of a low profile which helps to minimize its visual impact. The proposed building would utilise 10 mechanical extractor fans which thermostatically control the building. The building roof and sides will be clad with steel box profile sheeting coloured juniper green set above a low concrete base wall.

2.0 Free range laying hens



The birds have a laying cycle of 56 – 58 weeks. The birds are farmed to a free range system. The system utilizes a series of perches and feeders at different levels. The maximum stocking density is 9 birds per square metre and there must be at least 250cm square of litter area/bird. Perches for the birds must be installed to allow 15 cm of perch per hen. There must be at least 10cm of feeder/bird and at least one drinker/10 birds.

There must be one nest for every 7 birds or 1 square metre of nest space for every 120 birds. Water and feeding troughs are raised so that the food is not scattered. The birds must have continuous daytime access to open runs which are mainly covered with vegetation and with a maximum stocking density of 2,000 birds per hectare. Within the system the birds must be inspected at least once a day. At the end of each laying period the respective houses are completely cleared and disinfected.

3.0 Scratching Areas , Paddocks and Perimeter Fencing

In free range laying systems, good pasture management is essential if the ground is to remain in good condition and the problems of poaching and the build-up of parasitic intestinal worms and coccidial oocysts are to be avoided. The land surrounding the laying house will be divided into a series of paddocks which the birds are allowed to use for periods of up to 6 - 8 weeks each.



The length of time that the birds are allowed to use individual paddocks will vary depending on soil type, drainage, grass cover and weather conditions. The area immediately outside the poultry house tends to suffer the greatest amount of damage, so we propose that the ground adjacent to the pop holes should be covered with stones/pebbles. As well as providing health and welfare benefits the birds' feet will be cleaned as they enter the building providing cleaner eggs.



Free range layers are attractive to predators. Foxes are the most frequent cause of problems and can cause damage and often kill or maim large numbers of birds – far more than they are able to consume. We propose to use a 1.5 m semi permanent fence with netting.

4.0 Vehicle Movements

The proposed free-range egg production unit will require one feed delivery lorry of 18 tonne capacity or thereabouts 2-3 times a month. The collection of eggs is twice a week in a rigid body commercial lorry. Once in every production cycle i.e. 14 month intervals, lorries bringing fresh laying birds and a lorry for removing the old flock will need to access the site.

The main labour force to be used in conjunction with the proposed development will be Mr Thomas who owns and works at Cefn Gribin and therefore have no need to leave the holding to access the proposed development.

Thomas Brothers will also be creating jobs by employing 3/4 members of staff to help run the unit.

5.0 Vehicle Routing

The existing farm access is currently off an unclassified road, which provides a suitable visibility line to access and egress the site safely and easily. The entrance allows all vehicles to pull fully off the main highway.

6.0 Drainage

Clean surface water from the roof of the building will be collected in an underground storage tank and used for washing down purposes. The underground tank will be constructed in concrete to comply with SSAFO Regulations (Wales) 2010 Standards. Surplus clean water from the roof will be run by pipe and discharged in existing ditches.

Construction of the floor will incorporate a damp proof membrane preventing any dirty water percolating into the ground below the building. A slump in the floor will drain to a further below ground sealed tank, which will allow collection of any dirty water primarily arising from the washing down process at the end of the production cycle.

7.0 Manure Storage & Disposal

The unit will produce an estimated 500 tonnes of poultry manure each 14 month cycle.

The manure will be removed via conveyors every 10 days set below the nesting and perching areas. Due to the manure being moved every 10 days there will be minimal manure stored within the building which will result in reduced pest activity especially flies. Manure produced will be a relatively dry product of a friable nature which can be readily dumped for storage, however all of the muck will be taken off the farm and utilised on farmland. Dependant on the time of year the manure is removed from the building; it would be spread directly on the ground in accordance with good agricultural practice for soil and water and in accordance with the control of pollution, slurry and agricultural fuel regulations.

8.0 Neighbourhood Notification Requirements

Verbal confirmation is given to any neighbouring properties with 200m of the site in advance of the date of cleaning out.

9.0 Cleaning Out

With reference to the cleaning, this will take place once every cycle, which will be in the 14th month and muck movement will be for approximately two days, as it is moved off site.

10.0 Emissions

The building design incorporates the use of 10 mechanical ventilator extractor fans which will thermostatically control the building. Therefore they tend to operate more frequently during hot weather. 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 suppliers 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.

11.0 Noise / Odour Management

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. The industry standard noise level for the fans proposed, operating at 3m is 61dB.

The nearest residential property not controlled by the applicants is approximately 280m away. The table below details the Environmental Sound Levels dB (A) for HER710/6/1 following numerous manufacturing trials:

Distance from Fan to Receptor - metres	Number of Fans				
	1	3	10	16	20
3	61	66	70	72	74
6	57	61	65	68	70
10	51	55	59	52	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

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 61 dB (A) at 3 metres. When all 10 fans are operational, the cumulative sound level should be 27 dB (A) at 400 metres.

This data can be utilised to work out the approximate sound level of the proposed 10 fans on the building. The nearest receptor is at 280m, the fan shows a decibel level of 31 for 200m. this is a reasonable gauge to work out the worst-case scenario, as the property is further away than 200m.

In light of the above, we feel the proposed building will not be detrimental in terms of noise to any residential properties close by and therefore acceptable.

Mitigation:

The applicant is proposing the following mitigation as part of the proposal:

- 1) Movements of feed, birds and eggs to the site will be done so with full care and attention to all neighbours. All movements shall be restricted to daytime hours to respect neighbours thus meaning that movements shall only occur between 07:00 and 18:00.
- 2) Feed when transmitted to the feed bins is a normal occurrence on farm, however the applicant shall ensure that delivery is between 07:00 and 18:00.
- 3) All fans will be maintained by local electricians to ensure they are working properly and reducing any unplanned excessive noise.
- 4) All electrics within the poultry unit will be maintained so that they are fully operational and at no risk of failure within the unit – this is vital for Animal Welfare reasons and by law.
- 5) The birds within the unit are all female and therefore very quiet resulting in no noise impact upon local neighbours especially during the egg production period. Whilst the birds are placed in the unit and taken, we will ensure the operation is smoothly undertaken to prevent stress to the birds and no noise to the neighbours.

The fans shall be in a treated chamber which will have an insulated roof and walls which will exhaust into an insulated baffle area thus limiting the noise emanating from the poultry unit proposed. The cumulative noise impact of the poultry unit will not exceed World Health Organisation Guidelines.





The design of the unit incorporates a slatted floor and conveyor belt mechanism for waste removal. The waste is removed every 5 - 7 days, so there will be minimal manure stored within the unit which will result in reduced pest activity especially flies. Manure produced will be a relatively dry product of a friable nature which can be readily dumped for storage either on external ground or within covered storage. The potential build up of manure is mitigated by the free range hen's freedom to access the adjoining fields. The surrounding paddocks are rotated and only occupied by birds for a short period of time.

12.0 Quality Standards

The eggs are produced and 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.

13.0 Dead Bird Management & Pest Control

There are several reasons why the careful disposal of dead birds is an important part of the health management of systems:

-  Reduces the risk of disease spread back to the flock and other species.
-  Reduces the likelihood of carcasses being removed by scavengers, which can transmit disease.
-  Reduces the risk of blow flies (*Caliphora sp.*), which can also transmit disease.
-  NFS contractor Registered firm Pointins are used.

The dead birds will be collected by an approved contractor of the National Fallen Stock Disposal Scheme prior to this they will be stored in a secure container in line with the animal by-products Regulations 2003. Pest control for rats will be carried out by an approved agency. Preventative measures will be used to control flies to include fly screens and flies controls replaced periodically to prevent the flies entering the building from the outside.

Signed:.....

**Richard J. Corbett BSc (Hons) MRICS FAAV
For and on behalf of Roger Parry & Partners LLP**

Dated:.....