Transport Statement

Proposed Extension of Existing Poultry Unit at Broadway Farm

Far Broadway Farm, Ford Heath, Shropshire

April 2022 - SA43370_TS1









APPLICANTS DETAILS Broadway Poultry Ltd.

ISSUED BY Andrew Bannister BSc (Hons) MIHE GMICE Senior Civil Engineer

APPROVED BY Richard Harman IEng FIHE Partner & Head of Engineering

PROJECT

Transport Statement for proposed extension of poultry unit at Far Broadway Farm, Ford Heath, Shropshire.

DOCUMENT REFERENCE AND VERSION SA43370_TS1

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Beech House Anchorage Avenue Shrewsbury Business Park Shrewsbury SY2 6FG 01743 271697 berrys.uk.com

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1. Introduction

- This Transport Statement has been prepared by Andrew Bannister, a 1.1 Member of the Institute of Highway Engineers with over 20 years' experience working in environmental and engineering consultancy.
- 1.2 This report has been prepared with respect to a planning application for the proposed extension to existing poultry unit located at Far Broadway Farm, Ford Heath, Shropshire. The site location is indicated in Figure 1 below.

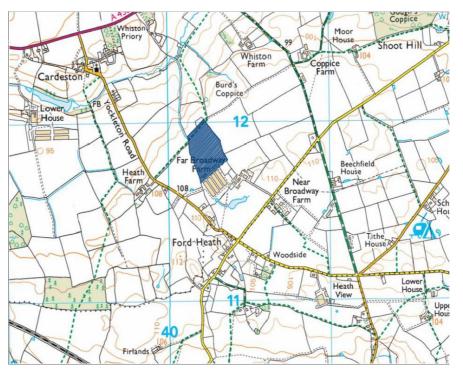


Figure 1 Site Location shown in blue hatch (@ 2022 Ordnance Survey)

- 1.3 This Transport Statement aims to demonstrate to the Local Planning Authority (LPA) that the proposed development is appropriately located from a transportation perspective and will provide safe and sustainable access for its future occupants/users, without impacting upon the safety of the public highway or creating wider traffic issues. This report should be read in conjunction with the other supporting planning documents and drawings submitted as part of the planning application. This Transport Statement has been produced in accordance with the UK Government advice on Travel Plans, Transport Assessments and Statements, and the National Planning Policy Framework (NPPF) Chapter 9 - Promoting sustainable transport.
- 1.4 The applicant is Broadway Poultry Ltd. The proposed development is located to the north-west of the existing poultry farm buildings at Far Broadway Farm, Ford Heath. The site sits adjacent to four existing purpose-built broiler buildings and consists of pastureland surrounded by mature hedgerows.
- 1.5 Access for the development is planned to be taken from the existing private access road into the site from Yockleton Road.
- 1.6 This report (including any attachments) has been prepared with care and due diligence in relation to the proposed extension to existing poultry unit located at Far Broadway Farm, Ford Heath, Shropshire, and solely for the purpose for which it is provided. Unless we provide express prior written consent, no part of this report should be reproduced, distributed or communicated to any third party. We do not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party in respect of this report.

2. Site Access and Sustainability

Access and the Road Network

2.1 The proposed development is located to the north-west of the existing poultry farm buildings at Far Broadway Farm, Ford Heath within existing pastureland. The surrounding area is predominantly agricultural with some scattered dwellings and farmsteads. There are also a number of small settlements within 2km of the site, with Ford Heath being the closest. Access to the site is proposed to be made via the existing gravel private access with the C5132 Yockleton Road. The existing access has been constructed with geometry for use by articulated heavy goods vehicles (HGVs). A site image of the access point can be found in figure 2 below.



Figure 2: view from western side of C5132/Yockleton Road towards the existing site access location.

- 2.2 Considering the rural local road environment, the access has been assessed for an approach speed of 50mph which gives 2.4m by 160m long visibility splays based on recommended SSD values as stated in the Design Manual for Roads and Bridges CD 123 - Geometric design of at-grade priority and signalcontrolled junctions. The drawing shown in Appendix A of this report shows an assessment of the visibility splays at the access point.
- 2.4 Swept path movements have been assessed for the main access point onto Yockleton Road and these have been based on an articulated HGV as the largest vehicle anticipated to visit the site. The assessment shows that the proposed geometry of the access is suitable to accommodate these vehicle movements, and this can be viewed in Appendix A.
- 2.5 All access to site is proposed to be via Yockleton Road (C5132) leading to the north of the site using the route shown on drawing number SA43370-BRY-ST-PL-C-0001 in Appendix B. Yockleton Road links to the A458 trunk road, which in turn links to the A5 trunk road at the Churncote Roundabout. An extract from the access route plan, also showing the site area can be viewed in Figure 3.

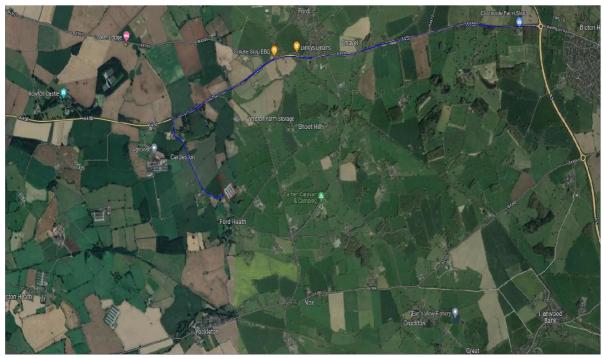


Figure 3: access route between the site and the A5 Trunk Road at Churncote Roundabout (map credit Google 2022).

- 2.6 All roads along the proposed access route are considered to be 'all purpose' routes suitable for use by HGVs and are free of any weight or height restrictions.
- 2.7 There are two significant junctions present along the proposed access route shown in Figure 3; these are the A458/C5132 Yockleton Road junction, and the Churncote Roundabout. Both of these junctions have been constructed with geometry appropriate for use by HGVs. There are no known constraints positioned along the proposed access route, which could restrict traffic and otherwise lead to capacity or safety issues.
- 2.8 Upon reaching the A458, the development traffic can access the wider road network as this route connects with various nearby locally and nationally strategic routes, including the A5 to the west and the M54 to the south.

Network Traffic Flows

2.9 We are not aware of any capacity issues on the nearby local road network. There is traffic count data is available for the A458 to the north of the site, with a Department for Transport traffic count point referenced 27209. The latest data available is for the year 2020 which shows a two-way figure of 7642 vehicles per day, of which 585 were HGVs (7.66%). However, these figures are lower than those of the previous 3 years (2017 to 2019) which is most likely to the reduction in traffic due to the Covid pandemic and subsequent lockdown. Figures for the year 2019 show a two-way figure of 10730 vehicles per day, of which 683 were HGVs (6.37%). These figures are considered to be within capacity for a single carriageway principal road. Copies of the traffic count data can be found in appendix C.

Road Safety

2.10 We have obtained the most recent available five-year road traffic personal injury collision data for the proposed access route from Crashmap.co.uk. The local road access route from the site along with a search radius of 500m at the A458/C5132 Yockleton Road junction has been searched. This showed that one collision has been reported within the search area within the latest five-year period which occurred at the A458/C5132 Yockleton Road junction. The locations of the recorded collision and the relevant collision report are shown in Appendix D.

- 2.11 The recorded collision resulted in a slight injury casualty. The collisions occurred at the junction intersection between the A458 and the C5132 Yockleton Road. Upon reviewing the collision report the incident involved a car turning right from the A458 into the C5132 Yockleton Road and a motorcycle travelling along the A458; it appears as the car was turning right the motorcycle attempted to pass the car on its offside and struck the rear of the car. The incident occurred in fine and dry daylight conditions but with a wet or damp road surface, in night time conditions during late spring. Therefore, it is likely that the motorcycle has not fully anticipated the car turning off the main carriageway before attempting to pass it.
- 2.12 The above collision suggest that driver of the motorcycle has failed to observe and anticipate that the turning vehicle was making/about to make. Given that visibility from the junction and along the main carriageway is good, there are no apparent road environment deficiencies at the junction. We therefore conclude that it's likely that the collision resulted from one or both of the drivers becoming distracted, lack of indication, or from poor observation. The details of the incident does not suggest that there is a local road safety problem.

Sustainability and Transport

- 2.13 Many of the employees working at the existing farm are based in the local area and the proposed development is not anticipated to alter this. By nature, farming operations are located in rural areas not well served by public transport and hence farm workers are normally reliant upon private vehicles for transport..
- 2.14 Sufficient parking will be provided within the proposed yard areas for all traffic associated with the development.

Public Rights of Way Network

2.15 There is an existing public right of way that traverses the proposed site along the northern boundary in a generally southwest to northeast direction. This is shown in figure 5 below. The existing public right of way will not be affected by the development proposals.



Figure 5: existing public right of way shown in violet

3. Development Traffic

Baseline Traffic

- 3.1 The existing broiler units located at the site were constructed under the planning consent reference 10/02963/FUL, which was supported by an Environmental Statement by Roger Parry & Partners LLP. This document has therefore been used as a source for the baseline traffic situation for the site. Traffic figures for the proposed development have then been derived on a 'first principles' basis based around our extensive knowledge and experience of managing the delivery of similar intensive farming operations in the UK and by applying a growth factor linked to the site capacity increase. Data used for calculating figures relating to the Manure Management Plan and Environmental Permit for the site have also been used as an information source when calculating the traffic figures.
- 3.2 The maximum stocking capacity of the existing site is 200,000 birds per cycle, which provides a robust baseline for assessing the existing traffic movements associated with the current poultry buildings. The applicant currently operates on a 38-39 day growing cycle with a 10-day turnaround time following depopulation for bedding and muck clearance, disinfecting and preparation for a new flock. Considering other occurrences of downtime through maintenance or timing around holiday periods, the applicant operates approximately seven crops per annum.
- 3.3 The peak periods of movements occur during the collection of fully-grown birds during thinning on days 31-32 and full depopulation occurring between days 38 and 39. Collections commence around 02:00 due to animal welfare requirements and to tie-in with operational hours of the processing plant. Collections are made on a rate of approximately one per hour, with 6-7 total 2-way movements made each day as each HGV takes up-to one-hour to fill, so one vehicle will generally arrive and leave the site each hour. The vehicles are timed so that an empty vehicle will arrive at the site prior to the next full vehicle leaving, to ensure there is no lost time in the process. Sufficient yard areas have been designed into the scheme for concurrent HGVs during depopulation. This means that HGVs should not have to pass on the network.
- 3.4 The planning consent for the existing 4 broiler buildings included that at the end of each crop cycle the litter/manure would be collected and taken to be spread as organic fertiliser on land within the management control of M T & S J Davies & Sons or land with whom the applicant has agreements to provide with manure.

- 3.5 Deliveries of day old chicks, bedding and food along with broiler collections are carried out by 16.5m articulated HGV's.
- 3.6 The monitoring and day-to-day management of the units is carried out by the applicant and their staff who are already working at the farm. As these movements will not be affected by the proposals, they have been excluded from the baseline and proposed movements.
- 3.7 The baseline traffic movements associated with the existing poultry buildings are presented in Table 1 below:

Operation	Vehicle type	Total 2-way movements	When in cycle	
Bedding delivery	Articulated HGV	2	Day 48	
Chick delivery	Articulated HGV	4	Day 1	
Feed delivery	Articulated HGV	20	Throughout	
Fuel delivery	Rigid HGV	2	Day 48	
Mortality collection	Box Van	3	Throughout	
Bird thinning	Articulated HGV	13	Day 31-32	
Bird depopulation	Articulated HGV	13	Days 38-39	
Manure removal	Tractor and trailer	30	Days 41-42	
Ongoing maintenance and inspections	Light vehicles	12	Throughout	
TOTAL PER CYCLE	1	99		

Table 1: existing poultry unit estimated average trip generation, 2-way movements per cycle (2-way means one combined trip to and from the development).

Development Traffic

3.8 The proposal is for the erection of a further two poultry buildings to increase the maximum stocking capacity of the site by 100,000 birds per cycle. The proposed buildings will be operated on the same crop cycle as the existing buildings to maintain biosecurity. The complete cycle length will be 49 days. The birds will be thinned at 31/32 days when approximately 35% of the birds will be removed. The remaining birds will be removed at 39 days followed by a 10-day cleaning and empty period.

- 3.9 At the end of each crop cycle the litter/manure would be collected and transported off site to an existing anaerobic digestion facility at Cardeston, which is located just 2km from the site.
- 3.10 Deliveries of day-old chicks, bedding and food along with broiler collections will generally be carried out by 16.5m articulated HGVs as per the existing operations.
- 3.11 The peak periods of movements occur during the collection of fully-grown birds during thinning on days 31-33 and full depopulation occurring between days 38 and 40. Collections commence around 02:00 due to animal welfare requirements and to tie-in with operational hours of the processing plant. Collections are made on a rate of approximately one per hour, with 6-7 total 2-way movements made each day.
- The two proposed additional buildings will allow some efficiency savings for light vehicle trips to the site for maintenance and inspections. As all HGV movements are effectively 'full' for the present development, so all heavy movements associated with the proposed buildings will be in addition to the existing.
- 3.13 The combined total movements for both the existing and the proposed two additional broiler buildings are given in the following Table 2. These have been based on the site capacity increase from 200,000 to 300,000 broilers which represents a growth of 50%. Therefore, in order to derive the development transport figures, a growth rate of 1.5 has been applied to all existing HGV movements and a rate of 1.25 applied to maintenance and inspection light vehicle movements (considering the potential efficiency savings available from intensifying operations on the site).



Operation	Vehicle type	Total 2-way movements	When in cycle	
Bedding delivery	Articulated HGV	3	Day 48	
Chick delivery	Articulated HGV	6	Day 1	
Feed delivery	Articulated HGV	30	Throughout	
Fuel delivery	Rigid HGV	3	Day 48	
Mortality collection	Box Van	5	Throughout	
Bird thinning	Articulated HGV	20	Day 31-33	
Bird depopulation	Articulated HGV	20	Days 38-40	
Manure removal	Tractor and trailer	46	Days 41-43	
Ongoing maintenance and inspections	Light vehicles	15	Throughout	
TOTAL PER CYCLE		148		

Table 2: combined existing and development trip generation, 2-way movements per cycle (2-way means one combined trip to and from the development).

- 3.14 As can be seen in the above table, the overall increase in movements in any one growing cycle is predicted to rise by 50% to an overall of 148 2-way trips. Due to the increased resource requirements for the proposed increased capacity, the thinning and clearance operations will take place over a longer period of three days for each respective operation. This will effectively extend the overall growing cycle from 39 to 40 days. Given there is adequate spare time within the turnaround period and downtime, the average number of crops per annum will be unaffected by this slight increase in operational time.
- 3.15 The proposed increase in broiler capacity at the site would not result in an increase in the number of daily peak movements to the site associated with thinning and depopulation, with this staying the same at 6-7 movements per day. However, the peak period will extend over a period of six days. As these movements are spread throughout the working shift, these are not expected to lead to any issues on the surrounding highway network.
- 3.16 The clearance of litter and manure will be carried out by tractors and trailers, with the work carried out over two to three days and result in a peak number of 3 2-way movements per hour.

3.17 As was discussed in Chapter 2 of the report, the site benefits from having a high-standard direct link to the principal road network. Consequently, the site is well placed for the network to accommodate the modest increase in traffic movements arising from the proposed development and no on or offsite modelling or mitigatory works are justified or required. The development will not increase the existing daily peak traffic flows, as the operations will take place over a longer period of time to accommodate the additional capacity. Also, no highway safety issues are anticipated as a result of the proposed development. Overall, we consider that on highway and access grounds the site is a sustainable location to accommodate the additional agricultural development proposed.

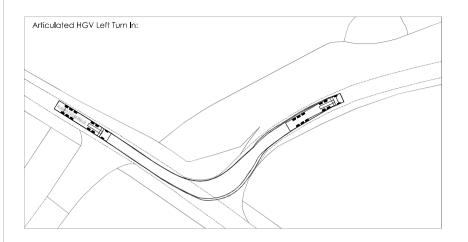
4. Conclusions

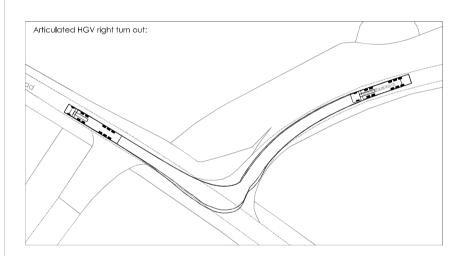
- This Transport Statement has considered the proposed construction of two 4.1 additional poultry unit buildings at Far Broadway Farm, Ford Heath. The proposal will increase the overall capacity at the site from 200,000 to 300,000 broilers.
- 4.2 The site benefits from having a good access from the strategic road network, which is considered to have sufficient available capacity to accommodate the proposed development traffic. The site has ample access and circulation space for accommodating all anticipated HGV movements and all vehicles can enter and leave the site in forward gear. Capacity is already available on the site to accommodate the development traffic.
- 4.3 The proposed development is predicted to increase the number of movements per cycle by 50% with the total number of 2-way movements increasing from 99 to 148 over the 49-day total cycle period. The existing average number of seven crops per annum is to remain unchanged by the proposals. The peak movements for all broiler buildings is predicted to occur during thinning and depopulation and will result in 6-7 articulated HGVs on the network per day over a period of around six days.
- 4.4 No further on or off-site assessment of the road network is deemed to be required to test its suitability to accommodate the proposed development traffic, as the level of traffic generated is deemed to be below the thresholds for requiring more detailed assessments. Nor are any mitigatory works deemed to be required. From a transportation perspective the location is considered to a sustainable location to accommodate the proposed development

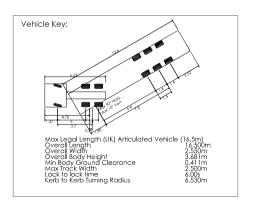


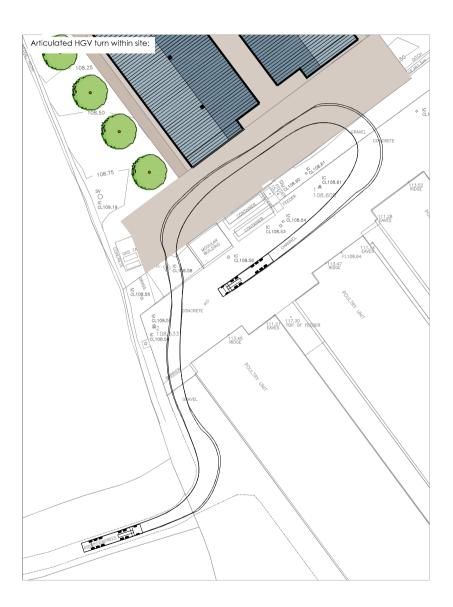
APPENDIX A - Site Access & Swept Path Analysis

Drawing number SA42435-BRY-ST-PL-C-0002 - Site Access Swept Path Analysis









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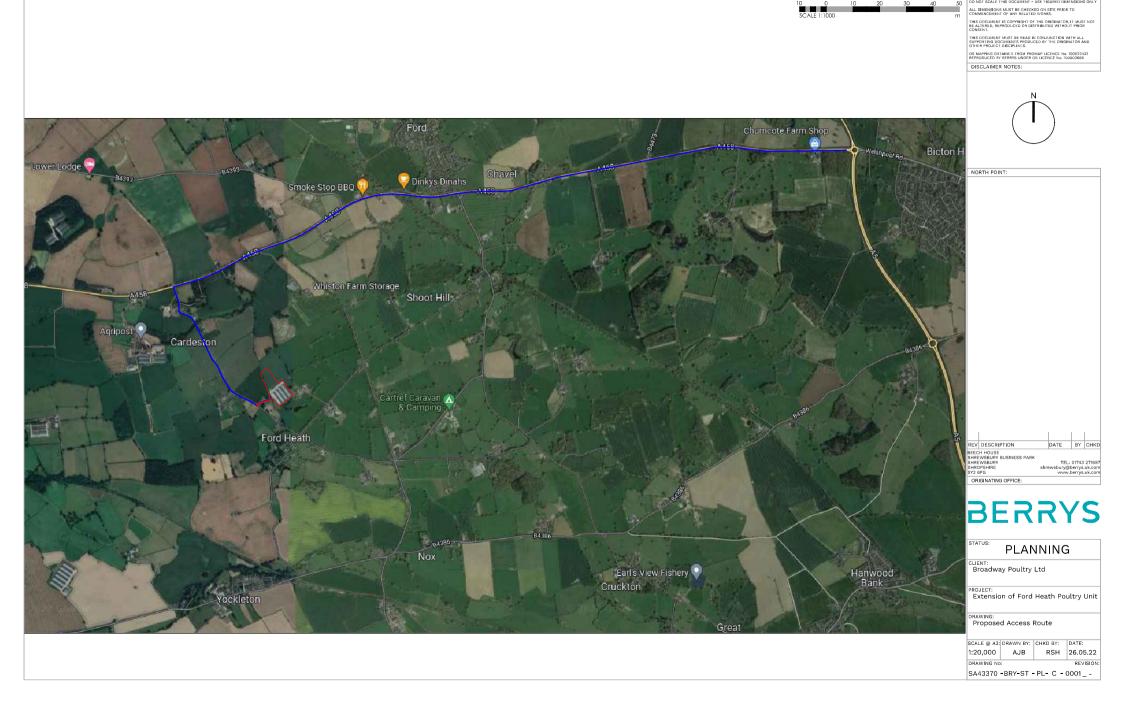
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CLIEN:
Broadway Poultry Ltd
WGGAEC:
Extension of Ford Heath Poultry Unit
DBAWNE:
Site Access Swept Path Analysis

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APPENDIX B - Proposed Access Route

Drawing number SA42435-BRY-ST-PL-C-0001 - Proposed Access Route



APPENDIX C - Traffic Data

Traffic survey data obtained from the Department for Transport Road traffic statistics website for the A458 to the north of the site.

<u>Traffic statistics</u> > <u>Manual count points</u> > 27209

Manual count points

Site number: 27209

Site details

Region West Midlands Local authority Shropshire Road name A458 Road classification 'A' road Managed by Highways England Road type Major Start junction LA Boundary End junction B4393 Link length 10.60km (6.59 miles) Easting, northing 339989, 312720 Latitude, longitude 52.70880200, -2.88966960

Location





Annual Average daily flow

Year	Count method	Pedal cycles	Two wheeled motor vehicles	Cars and taxis	Buses and coaches	Light goods vehicles	Heavy goods vehicles	All motor vehicles
2020	Automatic counter	6	37	5532	37	1451	585	7642
2019	Automatic counter	6	62	8124	60	1801	683	10730
2018	Automatic counter	5	61	8005	62	1796	681	10606
2017	Automatic counter	5	58	7964	63	1701	666	10453

APPENDIX D - Crashmap Data

Proposed access route latest five-year personal injury collision data obtained from Crashmap.

