

DESIGN AND ACCESS STATEMENT

4 NO. STEEL FRAMED AGRICULTURAL BUILDINGS FRONTING HOWDEN CROFT HILL, ELLERKER, EAST RIDING OF YORKSHIRE

Proposed Development by J H Levison (Holdings) Limited
c/o Mr J Levison, Brantingham Hall, Burrill Lane, Brantingham,
Brough, HU15 1QG

OCTOBER 2023



Prepared by:-

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Design and Access Statement: Land south-east of Howden Croft Hill, Ellerker, East Riding of Yorkshire

1.0 Introduction

- 1.1 This Design and Access Statement has been prepared by Michael Glover LLP, Chartered Rural Practice Surveyors, of Globe House, 15 Ladygate, Beverley, East Riding of Yorkshire, HU17 8BH, and relates to a proposal for the erection of 4 No. (two of which are linked) steel framed agricultural buildings adjacent to the buildings abutting White House Farm, south-east of Howden Croft Hill, Ellerker.
- 1.2 The Design and Access Statement has been prepared having regard to the guidance within Statutory Instrument 2013 No.1238 – Town and Country Planning, England, - The Town and Country Planning (Development Management Procedure) (England) (Amendment) Order 2013. This Statutory Instrument details the amendments in relation to Design and Access Statements and the guidance as to what Design and Access Statements shall deliver has been observed in producing this document.

2.0 Brief Description of Proposal

- 2.1 The proposal relates to the provision of 4 No. steel framed agricultural buildings (Buildings C and D linked) of the following dimensions:-

Barn A 27.476m (overall) x 15.171m x 6.954 into eaves (9.781m to ridge)

Barn B 27.476m (overall) x 15.171m x 6.954m to eaves (9.781m to ridge)

Barn C }
 } 60.524m (overall) x 16.87m x 6.595m to eaves (10.346m to ridge)

Barn D }

- 2.2 The location of the barns is shown by reference to the attached extract of ADP Architectural Designs site layout at Appendix 1 to this DAS.

3.0 The Requirement for the Buildings

- 3.1 The farm business, run by Mr John Levison of Brantingham Hall, Burrill Lane, Brantingham, Brough, HU15 1QG, extends to 201.98 hectares (499.09 acres) of land, owned either directly by Mr John Levison or by J H Levison (Holdings) Limited. For the purpose of the farm business, the two ownerships are synonymous and are all controlled and operated as one by Mr Levison.
- 3.2 The bulk of the land occupied within the farm business lies largely in the Brantingham, Ellerker and South Cave parishes. Following a recent acquisition of land amounting to 68.397 acres adjacent to White House Farm at Ellerker, all of which is cropped with established Miscanthus crops, Mr Levison has an urgent need to provide dry storage facilities, not just for the Miscanthus crop, but also for his farm machinery, hay and farm inputs.
- 3.3 The 68.397 acres of Miscanthus cropping gives rise to a sizeable bulk storage requirement extending to 2592 cubic metres. It is necessary to cater for the maximum yield likely in a year. Bales produced per acre, in recent years, locally in Miscanthus stands have varied between 5.5 bales to the acre, following a drought year, to 8.9 bales to the acre in 2022, which would give a need for storage for 609

bales over the net area of the crop of 68.397 acres catering for the upper end of the yield range. Each bale is a Heston bale of average dimensions of 2.60m x 1.3m x 1.2m (4.056 cu m per bale) and typically each weighs between 600 and 610 kg. The actual total bale volume is 2469 cu m but allowing for stacking gaps and manoeuvring space of 5%, 2592 cu m is to be catered for.

- 3.4 The buildings have been sized with bale dimensions in mind to maximise useable space. Most teleporters can stack 5 bales high (6m lift) which has informed eaves height allowing for top of bale grab frame clearance.
- 3.5 Whilst Miscanthus alone can be stored in umbrella type buildings, security and arson prevention considerations, together with protection of high value machinery stored in the buildings when not used for Miscanthus, has given rise to a requirement to erect enclosed buildings, providing this added protection.
- 3.6 The Miscanthus bales are sold for electricity generation fuel, typically in this area sold to Brigg straw-fired power station, through Terravesta or similar companies.

4.0 Planning Status of the Site Area

- 4.1 The site proposed for the buildings is outside the Conservation Area of Ellerker, as identified within the Ellerker Conservation Area Appraisal of July 2006, and then updated within the Ellerker Conservation Area Appraisal and Management Plan adopted in January 2022.
- 4.2 Whilst the site is therefore not within the Conservation Area, it lies on the very edge of it and the impact of the proposal on the Conservation Area is a consideration.

5.0 Description of the Setting and Surroundings of the Subject Site

- 5.1 The proposed siting of the buildings wraps around the northern and eastern sides of an existing but dated range of framed buildings lying to the north of White House Farm and east of Howden Croft Hill.
- 5.2 The landscape visually tends to be dominated by the Miscanthus crop which is grown in the field to the north and extending eastwards and south-eastwards around this side of Ellerker. This is a tall crop which dominates the visibility for much of the year, except for the period between its harvesting in March/April and its re-growth over the months of, initially, April and May, and through the summer and early autumn months.
- 5.3 The Miscanthus crop, which grows to some 2.4 metres in height, is visually impenetrable and the land rises gently to the north, along Howden Croft Hill, with the field south-east of the road similarly rising to the north-east.
- 5.4 The development within the Conservation Area to the north-west comprises mainly detached housing, including two recent developments/extensions directly opposite the existing farmstead. The farmstead adjacent to White House Farmhouse, to the south, is largely shielded by the existing buildings within Mr Levison's farm land.
- 5.5 A substantial thorn hedge, extending to approximately 2 metres in height, lies between the site of the buildings and the road, with a mature Ash tree on the frontage. Further landscaping proposals are referred to subsequently in this statement.

6.0 Reasons for the Choice of Site

- 6.1 The Miscanthus is the largest crop, in area and volume terms, grown by Mr Levison and it is grown directly adjacent to the proposed site of the buildings. This gives rise to economies of transport distance and makes use of the existing services at the building range, comprising electricity and water.
- 6.2 Approximately 1.19 acres of the crop would be lost to the development, which is likely to be replaced and indeed supplemented elsewhere on the holding.
- 6.3 The siting close to the existing buildings avoids incursion into open countryside to the south and east and avoids the need for associated highway infrastructure to access the buildings. It also gives rise to economies of extension of the services by placing the proposed buildings close to the existing building complex.
- 6.4 It will be noted that buildings A and B are sited to the rear of (south-east of) the existing building range. It will also be noted that the proposal is to site the end elevations of buildings C and D facing Howden Croft Hill, with the two buildings in line, such that, effectively, only one end elevation would be visible from Howden Croft Hill and only that element of the building visible above the roadside hedgerow. The aspect will also be shielded by additional tree planting, referred to later in this statement and illustrated on the plan at Appendix 1.

7.0 Building Design Proposals and Layout Arrangement

- 7.1 Four pitch roofed smaller buildings are proposed, two of which are linked by a monopitch store, rather than one or two larger ones, and that relates to a proposal to provide space around individual buildings which assists with the protection from spread of fire.
- 7.2 Miscanthus is a form of straw which is cane like in structure, but the leaf element that is baled with it is susceptible to rapid combustion if lit, which could result in significant spread of flame. By separating the buildings, the risk is mitigated and having them enclosed results in lesser risk of ignition to start with. Miscanthus has high calorific value and burns at high temperatures.

8.0 Design Concepts

- 8.1 The buildings have been designed to be more interesting than standard agricultural buildings in order to provide more interest on the edge of the Conservation Area.
- 8.2 It will be noted that the eaves level of buildings C and D are 6.595 metres and the ridge level, 10.346 metres. Heights above Ordnance Datum are also shown on the drawings.
- 8.3 The eaves level of buildings A and B is 6.954 metres, with a ridge level of 9.781 metres.
- 8.4 The use of timber cladding to parts and timber barn doors, together with differentially coloured cladding and hidden gutters, we believe, gives rise to a more acceptable design than a standard framed agricultural building, and it will also be noted that solar panels have been incorporated into roof slopes on a recessed basis to avoid interfering with the roof lines. Renewable energy generation is an important inclusion in modern building provision.

9.0 Central Loading Area

- 9.1 It will be noted that the buildings have been grouped around a central loading and unloading area. Doors open onto the loading/unloading area and opposing doorways open onto the Miscanthus fields cropped areas.
- 9.2 It will also be noted that the layout plans show an HGV turning area to accommodate large straw lorries and their trailers. Loading of Miscanthus bales into store is normally carried out by a teleporter which, depending on the bale grab utilised, can pick up between one and three bales, each of which weigh approximately 600 kg. It is therefore important to have space around the bale trailers coming into the unloading area and around the lorries when the crop is loaded to be dispatched to the power station. Alternatively, trans-stacker machines are used which pick up a column of bales in the field and place them in the buildings hydraulically.
- 9.3 An analysis and description of what is involved with Miscanthus growing is attached at Appendix 2.
- 9.4 The orientation of the buildings in the manner shown limits the level of visual impact from Howden Croft Hill and thus limits the dominance of the buildings from the village.

10.0 Operational Implications for Use of the Buildings

- 10.1 The principal use of the buildings is for storage, primarily of Miscanthus bales but also, when not so occupied, by farm machinery, hay and farm inputs, e.g. fertiliser and seed etc. It is feasible that some grain storage may be appropriate in future years but no drying facilities would be envisaged.
- 10.2 The Miscanthus cropping results in bales being moved into store from the field in a succession of loaded tractor/trailers to-ing and fro-ing between the field and the loading area, unless trans-stackers are used.
- 10.3 Whilst the timespan of the operation will hinge on how much equipment is available, typically, we would envisage that the 68 acres net of Miscanthus would be moved into store over a maximum of two days. It is important that the material is baled when dry and kept dry, so there is a significant incentive in moving the material into store as soon as possible once it is dry enough to bale and the baler has started its operation. Normally, bale movement starts as soon as the baler has entered the field and started baling.
- 10.4 In terms of loading out, this depends on how many lorries can be provided by the transport operator within any given day but to have a loader on site without waiting between loads means that, very often, at least 3-4 loads per day will be moved from the site. We would envisage that 16 lorry loads, approximately, would need to be loaded and leave the loading area which, we would imagine, would happen over 3-4 days. Even with a single bale fork equipped loader, a lorry load of 36 bales, which is the standard capacity of lorry plus trailer, is loaded within approximately 25 minutes. The lorry driver then simply has to strap the load and will then depart from site.
- 10.5 Accordingly, we consider that very limited disturbance would occur to local residents.

11.0 Additional Landscaping

- 11.1 There is an existing Ash tree on Howden Hill Croft eastern boundary hedge, the position of which is marked on the layout plan, and three further native trees of the species as marked on the plan are proposed to be planted in the positions shown on the layout plan, such that this will provide some additional long-term shielding/breaking up of the buildings from Howden Croft Hill.

12.0 Planning Policy

- 12.1 The over-arching policy document is the National Planning Policy Framework which was last reviewed in September 2023. This contains the macro policies within which local policies should comply.
- 12.2 Section 2 of the NPPF is entitled 'Achieving Sustainable Development' and sets out three principal objectives, an economic objective to help build a strong, responsive and competitive economy; a social objective to support strong, vibrant and healthy communities and, thirdly, an environmental objective to protect and enhance our natural, built and historic environment.
- 12.3 Paragraph 11 sets out that there is a presumption in favour of sustainable development and states that, in decision making, approving development proposals that accord with an up-to-date development plan should happen without delay.
- 12.4 Section 6 of the NPPF refers to building a strong, competitive economy and sets out that, in supporting a prosperous rural economy, planning policies and decisions should enable the sustainable growth and expansion of all types of businesses in rural areas, both through conversion of existing buildings and well-designed new buildings. Other sections within the NPPF refer to making effective use of land and achieving well-designed places.

13.0 The East Riding Local Plan

- 13.1 The East Riding Local Plan of April 2016 sets out current adopted planning policies. The East Riding Local Plan Update is currently about to proceed through the Examination in Public.
- 13.2 The current Adopted Plan is divided into a Strategy Document and an Allocations Document. A Strategy Document sets out the policies influencing development control in the county, and a Policies Map, including an Interactive Map, shows the policies affecting any individual area. Documented on the Policies Map, a Mineral Safeguarding Area protecting mineral resources is identified and the Hibaldstow Radar and Humberside Airport areas of influence are also identified as affecting the locality.
- 13.3 The Strategy Document has various headings including Promoting Sustainable Development, and Managing the Scale and Distribution of New Development. It also has Housing Market policies and Economic policies, together with policies aimed to achieve high quality design and a high quality environment.
- 13.4 Policy S4, Supporting Development in Villages and the Countryside, under paragraph C – No.7, indicates that, outside of a development limit, land will be regarded as the countryside and the following forms of development supported, where proposals

respect the intrinsic character of their surroundings. At paragraph 7, agricultural, horticultural and forestry uses are identified.

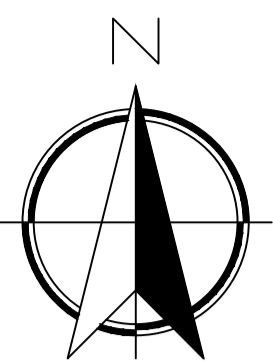
- 13.5 Paragraph 4.48 indicates that proposals for economic development that support the rural economy would be assessed alongside Policies EC1, EC2 and EC3.
- 13.6 At paragraph 4.49, this section of the Local Plan indicates that the agricultural and horticultural sectors play a significant role in shaping the landscape and character of the East Riding, as well as underpinning a strong local food industry from manufacturing to catering.
- 13.7 Economic development which relates to agriculture will be supported where it would enable the agricultural industry to diversify into new agricultural opportunities, e.g. renewable energy crops.
- 13.8 Policy EC1 addresses the support of the growth and diversification of the East Riding economy. Paragraph F refers to farm diversification schemes but indicates that, where possible, any new buildings should be well-related to the built form and scale of the farm.
- 13.9 Policy EC2 relates to developing and diversifying the visitor economy and is not appropriate to this application.
- 13.10 Policy EC3 relates to supporting the vitality and viability of centres and is again not relevant to this proposal.
- 13.11 We consider that the proposal is policy compliant.

14.0 Flood Risk

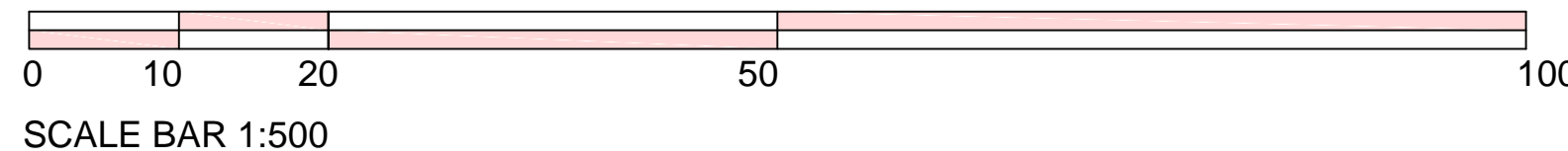
- 14.1 The site falls within an area of low flood risk and is shown on the Environment Agency Flood Risk Map for Planning as falling within Flood Zone 1. No flood risk assessment is therefore considered necessary.
- 14.2 An extract of the Environment Agency Flood Risk Map for Planning is attached at Appendix 3.

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Dated: 31st October 2023



Appendix 1



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Rev	Date	Revisions	By
B	06-11-23	Reference Update	SN
A	06-11-23	Design Updates	SN



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CLIENT
JOHN LEVISON

PROJECT

**Land South of
Howden Croft Hill
Ellerker
Brough
HU15 2DE**

TITLE:
Proposed Block Plan

Scale: 1:500 A1 Date: 06-11-23

Drawn By: S Naylor	Checked: SN	Approved: SN
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- Status
- | | |
|--|---|
| <input type="checkbox"/> WORKING DRAFT
<small>not for issue</small> | <input type="checkbox"/> PRELIMINARY DRAWING
<small>subject to detailed design</small> |
| <input type="checkbox"/> DRAFT
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| <input type="checkbox"/> CONSULTATION DRAWING
<small>not for construction</small> | <input type="checkbox"/> CONSTRUCTION DRAWING |

Drawing No : **J8270-202** Rev: **B**



- (A) PROPOSED BARN A
- (B) PROPOSED BARN B
- (C) PROPOSED BARN C
- (D) PROPOSED BARN D
- (E) HGV TURNING CIRCLE
25M DIAMETER
- (F) VEHICLE / PLANT STORAGE
- (G) LOADING ZONE
- (H) HGV PARKING FOR LOADING
- (J) HGV WAITING AREA
- (K) CAR PARKING AREA
- (L) EXISTING BUILDINGS

APPENDIX 2

Miscanthus Cultivation and Harvesting

1. Miscanthus, also known as Elephant Grass, is a perennial crop of a cane type nature and is illustrated by reference to the photographs below, in growing and harvested form.



Miscanthus during the growing season.



Baled Miscanthus being loaded from storage onto lorries on a neighbouring farm.

2. Miscanthus is established by planting rhizomes and, once established, the rhizomes spread outwardly, throwing out multiple shoots forming canes which grow to approximately 2.4 metres in height.
3. The crop has a duration of some 20-30 years of annual cropping and needs minimal fertiliser input and no insecticides or other agrochemicals, other than an occasional clearance with herbicide of any grass weed establishment in the base of the crop. Generally, however, the leaf fall in the autumn creates a dense mulch which suppresses most weed competition.
4. Miscanthus is grown for the production of biofuel for straw bale furnaces at a power station to generate electricity. In the East Yorkshire area, the nearest straw bale fuelled power station capable of burning Miscanthus is at Brigg, to which most crops in the area go.
5. Following establishment, the grass throws out multiple shoots which grow into canes. These grow through the spring, summer and autumn months. In autumn, the leaves of the grass senesce and drop and the majority of what is left is cane stems (see photograph below). These are left over winter and harvested in the early spring when they are cut with a modified self-propelled forage harvester and the cane is chopped into short lengths of approximately 300mm-450mm and left in swaths or windrows on a short stubble which allows air to circulate underneath to assist in removing moisture from the cane.



Miscanthus in winter, largely following leaf drop.

6. Harvesting normally takes place in February/March each year, depending on the season, and the swaths or windrows of harvested material are left to dry out until they reach 15% moisture rating or less.
7. The material is then baled with a big baler, typically a Heston baler, each bale weighing some 600-610 kg.

8. The material is then picked up as soon as possible after baling and placed under cover to protect it from rainfall. The operation in the field to pick up the bales is normally a teleporter with a bale grab and tractor and trailer or, what is known as, a transtacker, which directly takes the collected bales in groups of ten or so to the stores, where the bed of a transtacker rises up hydraulically, vertically, to place a column of bales in the store. Bales that are loaded onto trailers in the field are unloaded at the store within the loading area, outside the buildings and then stacked inside buildings.
9. The baled material is then kept in store until required at the power station and a programme of regular transportation from farms to the power station keeps a regular supply to be fed into the power station furnaces that power the generators.
10. Miscanthus is a simple crop to grow, requiring little attention once it has been well-established. It was eligible for agricultural support in the now closed Basic Payment Scheme, and is eligible for the final payments under the phasing out of the scheme.
11. Miscanthus is eligible for various means of support under the Sustainable Farming Incentive – for example, the No Insecticide payment, as there is no need for it on this crop. Various margin treatments also may be eligible for Stewardship or other payments.
12. Details of yields of the material are set out within the main section of the Design and Access Statement.

Appendix 3
Extract: Environment Agency
Flood Map for Planning

