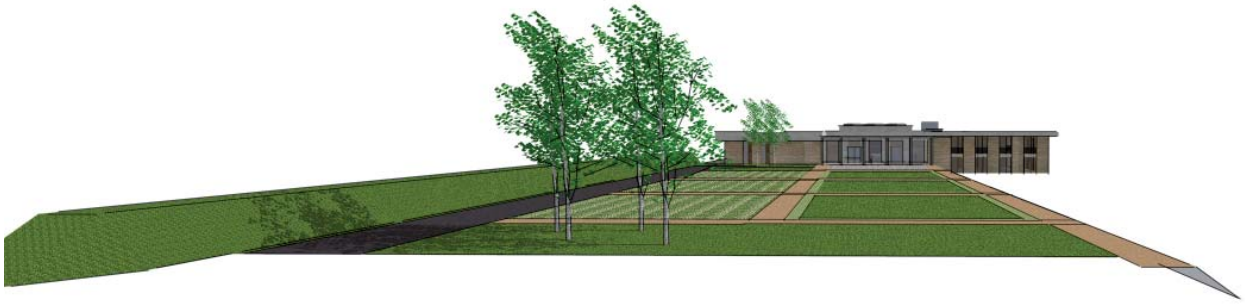


Bagby Airfield

Design and Access Statement
21.01.09

Accompanying Planning Submission to Hambleton District Council

0715_3.2.1_ January 2009

buschowhenley

BUSCHOWHALEBROWNHENLEYRORRISON

Section 1 - Introduction

This Design & Access Statement accompanies the set of planning drawings prepared by Buschow Henley, Zef (UK) Ltd and Landscape Projects. This has been prepared by Buschow Henley Architects in conjunction with structural engineers Jane Wernick Associates, service engineers Zef (UK) Ltd, landscape architects Landscape Projects, quantity surveyors Stockdale, Planning Consultants Signet Planning, Hughes Landscape Design Associates and Zertex. The structure of this supporting document to the Application follows CABE Guidelines on the preparation of Design & Access Statements.

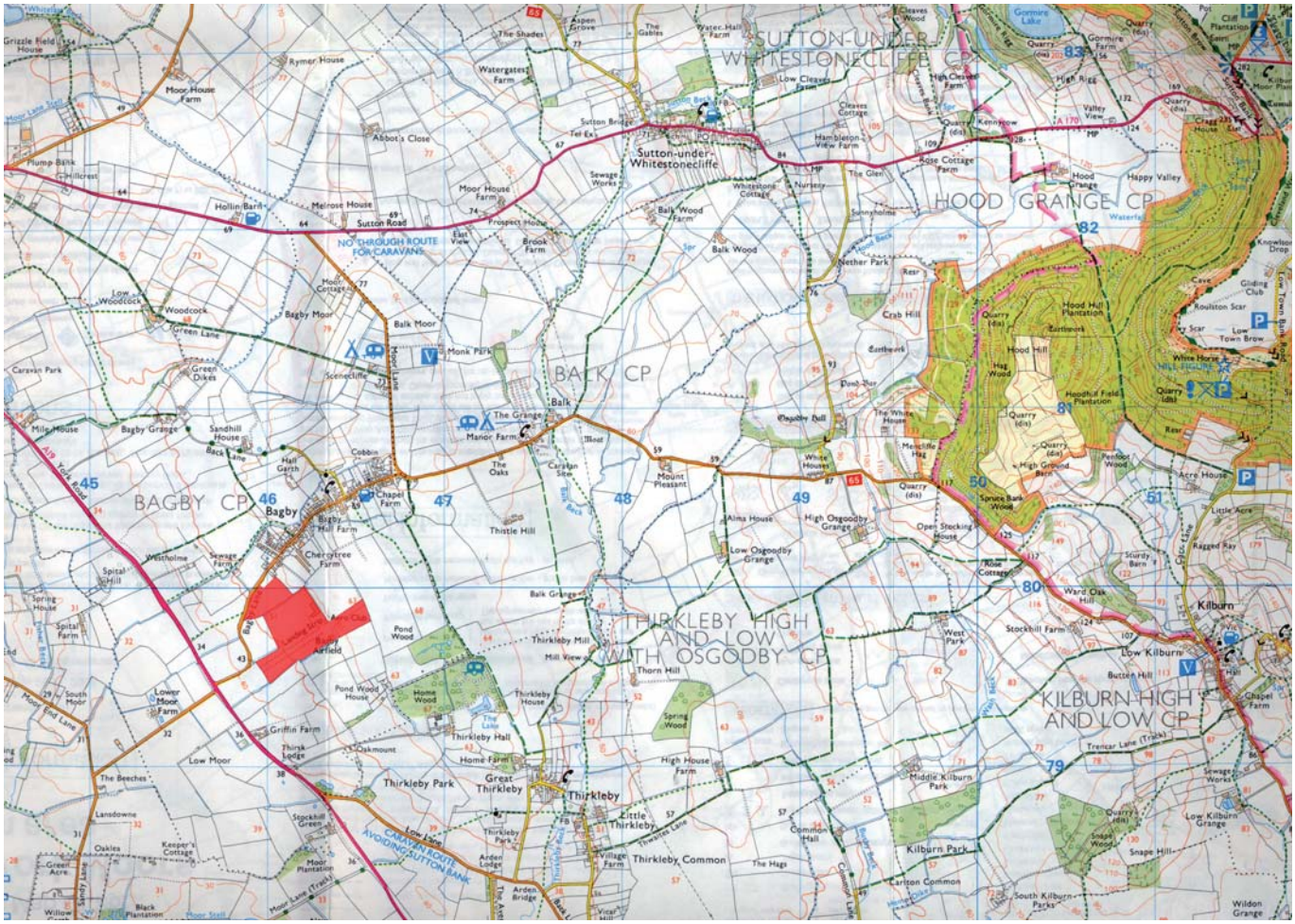
The proposals aim to refurbish and improve the existing facilities at Bagby Airfield for the benefit of the visitors to the Airfield, the users of the Airfield and the local community whilst providing additional and complementary facilities for the benefit of those same groups. It is intended that the built development will enhance the look and appearance of the Airfield with a particular improvement on the landscape.

The proposals seek to encompass renewable energy production and negate both the environmental impact of the development and flights. The construction method, stabilised rammed earth (SRE), has been chosen and developed to support the architectural and environmental aspiration of providing a building with high thermal mass and low embodied energy and CO2 emissions.

It is anticipated that there will be a change in the mix of air side visitors and their associated length of stay along with a slight shift in the balance between resident and visitor flights.

Consequences of the development will include job opportunities and increased tourism.

OS map extract



2.1 Planning Policies Relating to design

As part of the planning application submitted for development at Bagby Airfield is a planning support statement prepared by Signet Planning. This deals with the planning policies relating to the principle of the development as well as other considerations. In formulating the design of the proposed development, particularly the main hotel/clubhouse building, regard has been had to general Government objectives for good design and sustainable development including in Planning Policy Statement 1 "Delivering Sustainable Communities". Paragraph 35 of that document suggests that:

"High quality and inclusive design should be the aim of all those involved in the development process."

A number of other national design guidance documents have been taken into account including:

Safer Places - The Planning System and Crime Prevention
Planning and Access for Disabled People - a Good Practice Guide

There are also general policies in the RSS encouraging sustainable development and maximising improvements in energy efficiency.

At local level, there are specific policies, both within the core strategy and development policies that have specifically been taken into account. These include from the Core Strategy the following:

* Policy CP1 - dealing specifically with the quality of the development and the use of sustainable resources.
* Policy CP17 - which is a requirement to achieve a high quality of design of both buildings and landscaping. All of the seven requirements of Policy CP17 have been addressed in the design process and can be achieved through the design solution not just for the main clubhouse building but for other more functional buildings proposed on the airfield.
* Policy CP18 - which seeks to ensure that the impact on natural resources is minimised and potential use of renewable resources is maximised.

And from the development policies, the following:

* Policy DP30 - Protecting the character and apperance of the Countryside.
  Refer to Landscape Report attached.
* Policy DP32 - dealing with general design. All of the 18 principles which are set out in that policy (where relevant to the form of development proposed) have been taken into account, as is explained in the justification for the design later in the statement.
* Policy DP33 - dealing with landscaping. The landscaping scheme submitted complements and enhances the development and seeks to address the objectives within the policy.
* Policy DP34 - Sustainable Energy. This has been addressed as set out in the sustainability statement submitted together with this design and access statement and indeed in the text (particularly section 5.7 below).

2.2 Relation to immediate context

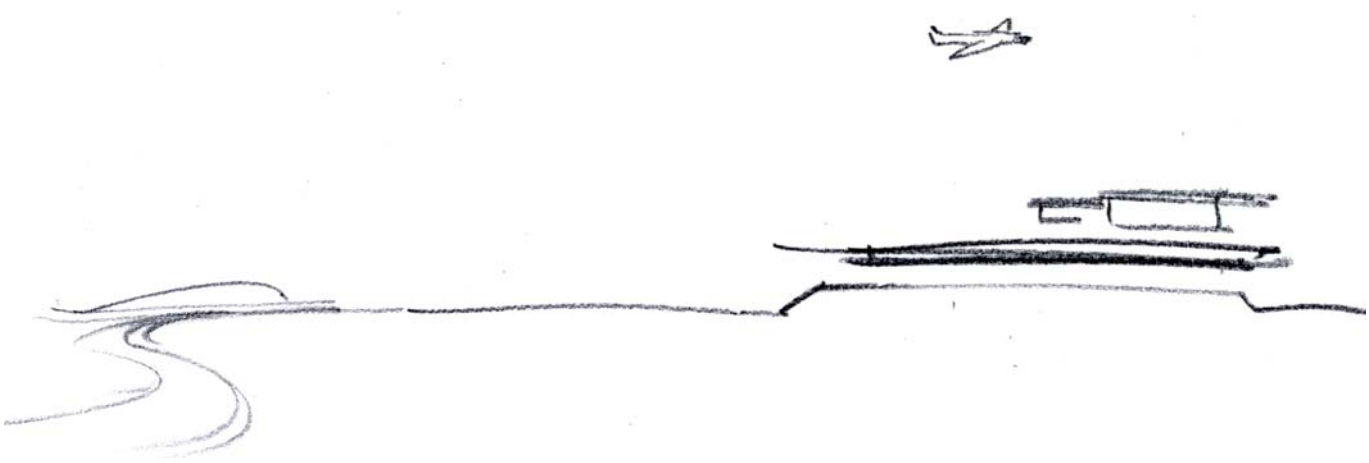
In its current reduced form the proposed Clubhouse will be largely invisible from the village, this is both as a result of the removal of a storey from the previous submission and also how it is sited as far down the slope from the village as possible whilst still maintaining a close link with the service yard, maintenance hangar as well as the crossing point over the runway to the other hangars.

Aerial photo

The change of entrance access point from Bagby Lane from within Bagby village to the South will remove traffic to the airfield away from village. The proposed landscaping relating to the new access approach gives additional acoustic and visual separation between the proposed development and Bagby village.

Visually, the proposed development will be most prominent from the South West of the site from Bagby Lane. At this point there will be an unimpeded view of the new Clubhouse across the existing fields and proposed planted lavender parterres approximately 400m away.

The above points are further elaborated in Section 5 (Design Proposals) of this document.



Section 3 – Involvement

Throughout the design development process leading to the present submission, there has been an ongoing dialogue with Hambleton District Council, specifically with Development Control Manager Tim Wood, that started back in Nov 2007. Further to this dialogue of meetings and formal issue of drawings, an Open Day of consultation was organised in February 2008 prior to the submission of an earlier application on April 2008. The results of the consultation were collated into a letter and report and issued to Tim Wood in March 2008.

The current Application addresses the issues raised both in the consultation process and responses to the previous application. Thus the amended proposal has been revised by a floor in height and no longer includes, inter alia, the spa and leisure facilities. Also, the approach to the building has been improved by the creation of a Forecourt and Open court to the North West of the Clubhouse addressing the formal landscaping as you travel towards the building improving access and safety (Secured by Design).

Section 4 – Evaluation and Design Objectives

4.1 The following is a list of opportunities and constraints that have informed and shaped the current proposal;

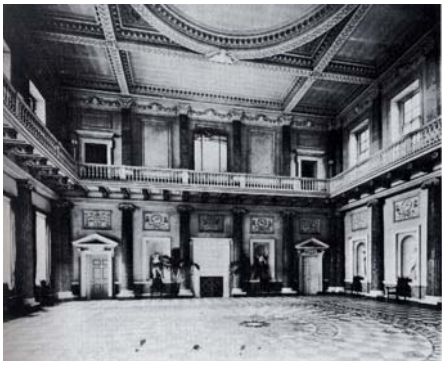
- Design opportunity. The opportunity in such an open site was to create a stand-alone building of outstanding architectural quality. This would tap into the strong architectural tradition of the English country house. In its material and architectural quality, its environmental strategy and landscape design we believe that the proposed scheme should be seen as a positive asset and advertisement for the airfield, the village of Bagby and the local area.
- Continuing use of the airfield. The location of the new Clubhouse has had to take into account minimising any impact to ongoing activities at the airfield during its construction.
- Visual impact of proposal. As mentioned above, the volume and siting of the clubhouse has aimed to balance the desire of creating a building with a strong presence and character and not being overbearing in its impact on the adjacent village of Bagby.
- Landscaping. This is a wonderful opportunity for landscape restoration. The creation of a wooded area around the area adjacent to the new access road, a formal garden (again reference to the country house model) leading up to the Clubhouse entrance and linear lavender parterres to the SW of the Clubhouse that play on colour and pattern found in open fields.

Historical precedence

Ebberston Hall,
Yorkshire 1718

Castle Bolton,
Yorkshire 1379

First Unitarian
Church, USA
1959-67
Louis I. Kahn



Wentworth
Woodhouse,
Yorkshire 1750-75

Villa Rotunda, Italy
1566-71
Andrea Palladio

5.1 Design process

From the outset a number of key themes have driven the development of the design:

• The search for morphological/ historical type suited to this open landscape setting to appropriate for the clubhouse.

• Stabilised rammed earth (SRE) construction and its environmental and aesthetic impact.

• A palpably sustainable approach, one that has a human, ethical and material dimension.

The concepts that underpin the design of the new Bagby Airfield clubhouse and grounds are inspired by the English country house and garden in its landscape setting. A secondary historical source of inspiration is the English castle. Both of these precedents suggest ways to plan a building where symmetry plays an important part and a plan that addresses all four points of the compass. In addition, the castle suggests a singular and bold use of material. An idea that the architect Sir Edwin Lutyens described in 1928 as 'noble':

"A building of one material is for some reason much more noble than one of many. It may be the accent it gives of sincerity. The persistence of texture and definite unity. "

Quality of design has been considered from the very outset: a high quality that is sustainable, that has a low ecological impact and that enhances the landscape. The landscape design, which is intrinsic to the proposal, takes care to consider the setting of the existing settlement, reference the existing historical field pattern and reflect these elements of local distinctiveness in the proposals. The setting for the new clubhouse combines formal gardens and open fields, approached through a series of paddocks and incidental landscape features.

5.2 Amount of development

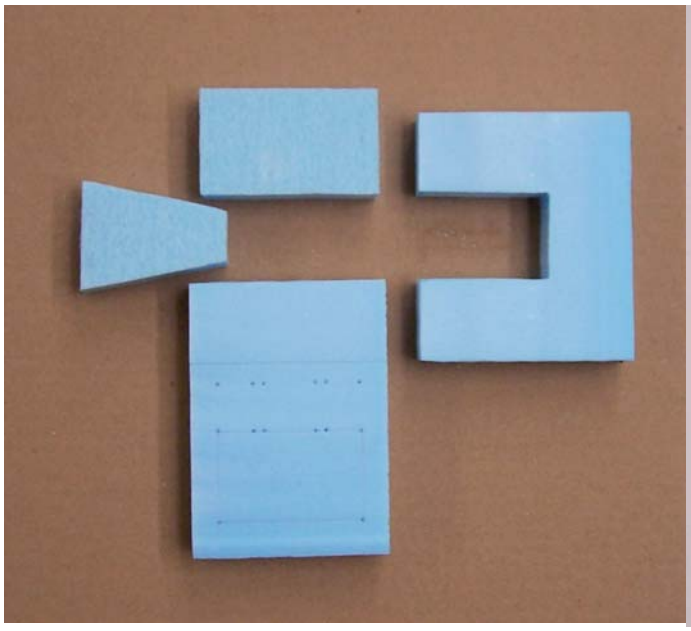
The total area of the site is 17.82 hectares. The existing clubhouse, sheds and hangars built on site amount to 3,308 sq. metres. The total proposed development would occupy 5,903 sq. metres, 1,504sq. metres for the clubhouse and 4,627 sq. metres for hangars and ancillary buildings. The total number of hangars would increase from 6 units to 9 units.

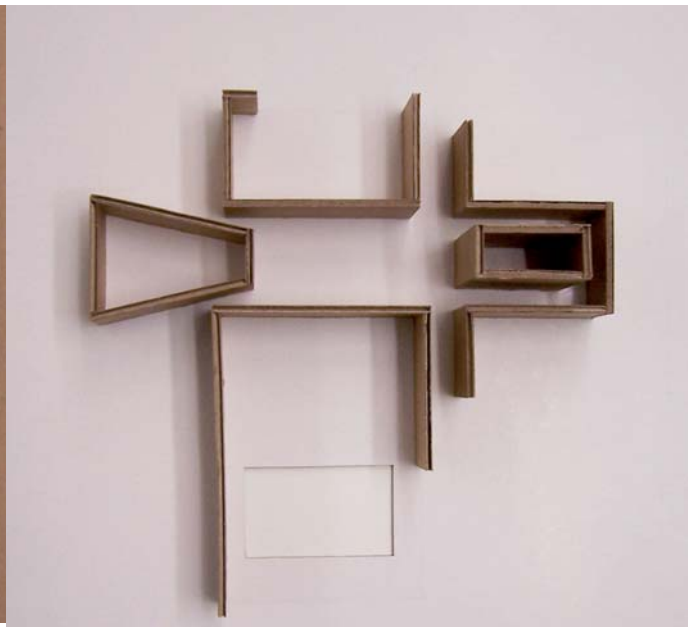
The exact floor space for existing and proposed buildings is annotated in drawings 0715_PL_03 & 0715_PL_05.

5.3 Use

The proposals for the site comprise of the following existing and proposed uses; Airfield and Aero Club with aircraft parking and storage; aircraft repair and maintenance; aircraft refuelling; aircraft hire; flying lessons and tuition and Club House. The Club House itself incorporates accommodation, members' room, restaurant and licensed bar.

Model studies





5.4 Layout

Our design has given due consideration to CP17 which states high quality design should be attractive, functional and safe.

Currently the site consists of a collection of dilapidated buildings scattered across the site. The proposed scheme aims to rationalise and consolidate the existing clutter of sheds, to improve the visual impact of the existing hangars, and to organise the proposed additional hangars in a coherent & ordered manner.

Most precedents for airfield buildings use the concept of flight for inspiration. This strategy is likely to produce a building that looks like a bird or a plane or has a wing-shaped roof. We did not feel this was appropriate. Equally the approach might be a road up to a car park situated in front of, or around, the clubhouse building dominating the setting. Instead we have looked at precedents that have less to do with use and more to do with a tradition of placing freestanding buildings in the English landscape. We are therefore seeking to build on tradition.

In the scheme the clubhouse, maintenance hangar, remote plant room, refuse & recycling store, and fuel stop are located north west of the main runway. On the other side of the main northeast southwest runway, the existing and proposed hangars have been aligned along the southeast boundary of the site in a consistent manner.

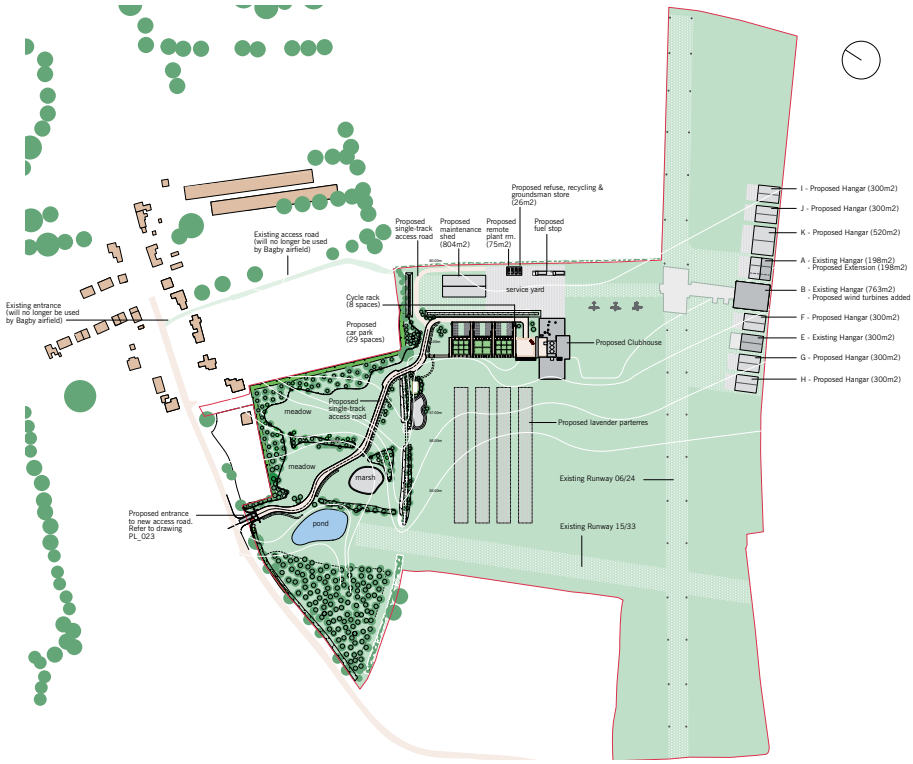
The new clubhouse is situated north west of the main runway, just southwest and downhill of the existing clubhouse buildings. The building is consolidated into a single tripartite plan and is designed to have a strong presence in this open landscape. Outside a series of square open parterre gardens extend on a northwest axis to create a formal setting and approach. Adjacent to these, to the northeast, there are three hedged parking courts. The car park is passively supervised by public activity, the office and staff circulation within the main building and contains high-level lighting to maximise visibility and safety. Northeast of this, a berm and hedge conceal from view the maintenance hangar, remote plant room, refuse & recycling store, and fuel stop, all located remotely from the main clubhouse building, close to the northeast boundary of the site. The scheme is integrated into the existing site predominantly bounded on all sides by hedges.

The sole current access is a narrow gravel road directly connected to Bagby Lane. This connection to the village passes between houses Milford and Grestan and passes through land outside of the site boundary. Conversely, the proposed entrance and access road would be located south of the village and have a direct connection with Bagby Lane along the west boundary of the site. This new location provides a medium for the redevelopment of the landscape and proposed entrance sequence to the clubhouse. The introduction of new trees and hedging in addition to existing planting will offer additional areas for biodiversity as well as providing visual and acoustic privacy for the village. (See landscape section below).

From Bagby Lane the new entrance sequence begins on passing through a pair of metal gates set between a pair of rammed earth gateposts. The single carriage driveway (with passing places) meanders through a series of new paddocks enriched by a number of new landscape features including a small lake and marsh. The drive provides a number of glimpses of the clubhouse, which only comes into full view as the drive reaches the northwest end of the formal gardens. From here the drive turns behind the hedged parking courts running south east before re-emerging close to the building and turning south west where it terminates with a forecourt overlooking the Vale of York in front of the clubhouse. Two paths on axis with the clubhouse link the parking courts, formal gardens and driveway with the landside entrance to the clubhouse. The main landside entrance is marked by a forecourt (turning circle/ vehicle drop-off), portico and open court- all on axis with the Main Hall, members' room, bar and restaurant inside. Staff entrance, deliveries and servicing can occur directly along the northeast side of the service wing.

Inside, the plan of the clubhouse, like a Palladian country house, is organised around a Main Hall, with two wings. The members' room, bar and restaurant are located south east of, and on axis with, the Main Hall. The bedrooms are disposed in the South West wing and the services in the North East wing. The section uses the natural slope of the site to accommodate generous one-storey volumes & two floors of bedrooms below a green roof. The restaurant and bar take advantage of the panoramic views over the landing strip towards the South East.

The remaining open fields will be partially planted to give some colour to the landscape while the existing runway surfacing will remain the same.



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5.5 Scale

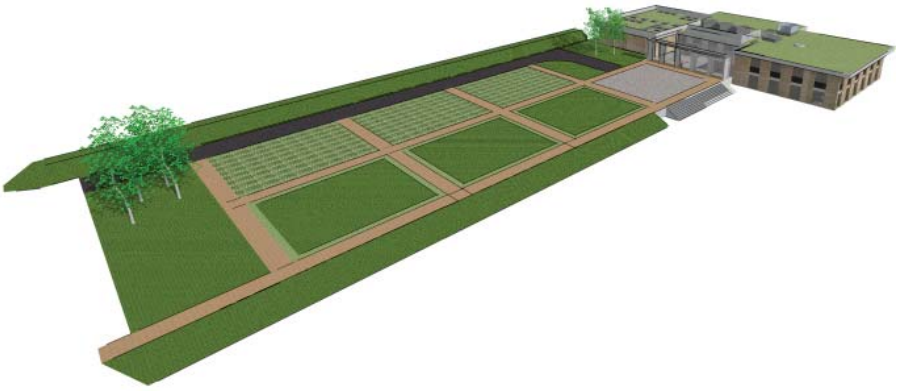
The building's scale (its relative height, length and width) is considered appropriate for its location. The clubhouse will be situated on a low rise, in a similar manner to many of the farmhouses and country houses, which typically occupy the open landscape of the Vale of York. The plan measures 28m wide from northwest to southeast, and 54m wide from northeast to southwest. The overall height of the building has generally been designed to a minimum, the parapet measuring 4,990mm, and the light monitors measuring 6,250m from ground level. The position of the clubhouse has also been relocated further downhill from the existing clubhouse building in order to minimise its visual impact on the horizon when viewed from the southwest. The only element to project above the roof of the Hall is the control room.

view from proposed access road (west)

5.6 Appearance

The clubhouse is constructed using stabilised rammed earth (SRE) walls made with soil excavated from the site which will be moulded in formwork to create synergy with the reinforced concrete floors, roof slab and retaining walls (see also structural engineer's report - Appendix B). Rammed earth can be a beautifully finished building material similar to sedimentary rock deposits and like concrete, the surface can be finished with tooling or left smooth. Doors and windows are natural timber. The silhouette of the Clubhouse is enriched by the varied roof levels of the Main Hall, Restaurant and adjacent wings either side.

The proposed hangars, maintenance hangar, remote plant room, refuse & recycling store, and fuel stop are all constructed with a steel frame and will be clad in a charcoal grey colour metal siding and existing hangars painted to match. The charcoal grey colour will have a significantly less visual impact in the landscape than the light grey sheds that currently exist. A sinusoidal rather than hexagonal metal profile has been chosen to suggest vernacular agricultural buildings as opposed to industrial.



aerial view (west)

5.7 Sustainability

The accompanying Environmental Sustainability Strategy Report describes in detail the measures taken to ensure sustainability is integral to the proposal's design. Among others, approaches include good fabric performance, robust external and internal materials, maximum use of natural ventilation, efficient and intelligent service systems, and the provision of renewable energy through the use of biomass boilers and potentially solar hot water collectors and wind turbines. The following principles form the core of the proposals and adopt sustainable construction principles as set out in CP17 and CP18 that seeks to ensure that impact on natural resources is minimised and the potential use of renewable resources is maximised.

The structural solution has been developed to support the architectural and environmental aspiration of providing a building with high thermal mass and low embodied energy and CO2. The foundations, retaining walls and ground floor are reinforced concrete, as are the suspended floor and roof slabs. The walls are constructed using stabilised rammed earth (SRE) from soil excavated from the site and are moulded to create synergy with the concrete. The remaining constituents of the rammed earth will be sourced locally wherever possible, in order to minimise the energy consumption and carbon emissions caused by transportation. The inner face of the external SRE walls will be lined with high performance insulation and plasterboard to provide good U-values to the external wall by reducing heat loss.

Furthermore, recycled materials, such as recycled aggregates and pulverised fuel ash as a cement replacement are being considered for the structural concrete floor slabs, provided that they can be sourced locally. The use of rammed earth walls will help to regulate the internal relative humidity, improve indoor air quality as well as providing good acoustic and fire separation.

Much of the roof areas shall be provided as green roof at first floor level, which will enhance the aesthetics of the building as well as improving sound and thermal insulation by adding mass and thermal resistance value. The green roof also helps to reduce the rate of storm water run-off as the rainwater percolates through soil layer on the roof. 40% of the average rainfall will be absorbed and evaporate while the remaining 60% will drain off at a much slower rate. Green roofs also help to maintain and enhance the ecological aspect of the environment as compared to exposed roofs. Finally green roofs filter pollutants and CO2 out of the air and even heavy metals out of rainwater.

The design also incorporates a sustainable urban drainage system where hard surfaces throughout the development will be designed as permeable surfaces, or surfaces, which drain to adjacent porous swales and French Drains; these will in turn allow the recharge of the local groundwater system, and reduce impact on the local drainage system.

Biomass Boilers using wood chip or pellets will be implemented for the production of low temperature heating water for the new development. Biomass Boilers burning wood chips or pellets are normally seen as a 'carbon neutral' form of providing heating for buildings.

The new Clubhouse will incorporate mixed mode ventilation for fresh air with limited air re-circulation. Fresh air supply passes through 200m of ground earth tubes, which are buried 2m underground causing the air temperature to rise or drop by up to 5 degrees depending on the ambient condition during winter and summer respectively. This provides passive cooling in summer and reduces energy demands in winter.

Further renewable energy proposals are currently being evaluated for incorporation into the scheme. These include, solar hot water collectors, wind turbines and photovoltaic panels.

Rammed Earth Construction

5.8 Landscaping.

Intrinsic to these proposals are principles that emphasise the natural setting and the recreational value of the area. The proposals incorporate landscape restoration with an emphasis on historical field patterns relative to the existing settlement (CP16). Please also refer to the accompanying Landscape Architect's report.

The proposed landscape design is an extension & derivation of the existing landscape pattern adjoining the site, progressing from garden plots to paddocks, to open meadows & runways. A single-track driveway traverses across this landscape revealing a series of views of the new clubhouse at strategic points along the way & contains passing zones to minimise the road's impact. A forecourt to drop & collect patrons is located in front of the landside entrance while parking is divided into 3 discreet hedged enclosures nearby.

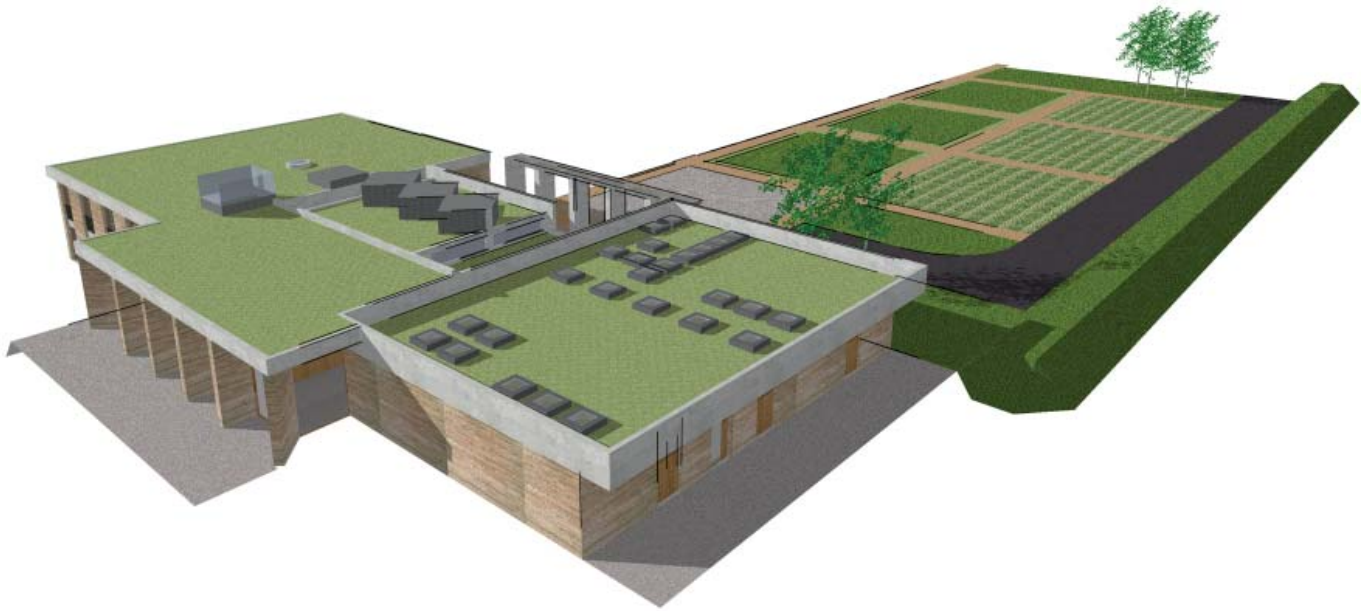
The opportunities for a new wooded landscape offer an attractive new edge to the entrance of the village and will provide an improved natural habitat to enhance biodiversity. These trees and hedges will create a unique setting for the building in a landscape of paddocks, wildflower meadows and open fields.

Visual and acoustic screening will be provided by considerable areas of additional tree planting, in the area between Bagby Lane and the Airfield. These trees will be organised in hedgerows or plantations, which are two distinctive landscape elements typical of the area. The tree hedgerows and plantations will assist in screening views of the clubhouse and hangars from parts of Bagby Lane and the Village. The trees will be used in conjunction with earth berms that will be located around the car park and maintenance taxi-way, which will have a significant effect in reducing noise from the airfield.

It is proposed to establish a reed bed/wetland habitat in the paddock adjacent to the new entrance. The habitat will increase biodiversity, and will be an interesting and attractive landscape feature. It will assist with the provision of a secure boundary to the site without the need for intrusive fencing. It is also possible that the reed bed could be designed to manage grey water or even black water drainage from the development.

From the outset the planned landscape works are an intrinsic part not only of the design, but also of how the building operates. The fundamental connection with the ground on which it is built demonstrates the ethic and function of the project while the overall landscape development respects and enhances the local context. The proposals seeks to protect the character and appearance of the countryside (DP30) by recognising the distinctive pattern of Bagby Village, its well-hedged, small scale paddocks close to the village street, contrasting with the extensive outer fields which are typically found in the open landscape surrounding the village. The proposals also show increased hedgerow and tree planting in the west of the site, thereby reinforcing the paddock infrastructure of the village.

(DP33) requires reassurance that the landscape works are an integral part of the design, which also compliments and enhances the development. The proposals for the airfield not only seek to protect the character and appearance of the countryside they desire to re-instate its classic nature as detailed in our comments above.



aerial view (east)

5.9 General access:
The proposal will allow access to all and will be designed to provide both clear and intuitive circulation. The building form and elevation treatment will guide the visitor to the entrance location, and the internal layouts will be easily understandable, with visitor and staff areas clearly zoned.
The landscape and architectural design have been developed together in order to integrate the building in its setting in a way which promotes intuitive wayfinding, and avoids the need for excessive signage. The formal and elevational composition assists the visitor to locate the building entrance as described earlier.

The approaches will be practically level. The landside entrance allows wheelchair users to pass through the entrance doors & draft lobby directly into the main hall. The airside entrance allows wheelchair users to enter the building via the members' room terrace directly into the members' room and in turn into the Main Hall. This centrally located main hall is a light filled space, which accommodates the reception, the main accommodation stair and lift. The bedrooms, members' room/restaurant/bar and service wing, are accessed directly from the Hall. The accommodation rooms are reached with half flights and by lift. Public circulation is generally restricted to the main hall, with ancillary areas securely controlled by staff.

Corridors have been predominantly substituted by open lounge spaces. Remaining corridor areas are designed to allow passing points at regular intervals while doors are ample in width for both able-bodied and wheelchair users. 2 of the 18 bedrooms proposed are specifically designed to accommodate wheelchair users while WC facilities for wheelchair users are provided along side other WC facilities on every floor. Shower and changing facilities for wheelchair users are provided individually along side similar facilities for both the public and staff. All of the above facilities, circulation spaces, stairs and lifts will be designed to comply with Part M of the Building Regulations.

Vehicular access:
The project aims to provide a safer environment for both village residents and airfield users by relocating the existing access road outside the village, hence minimising traffic and safeguarding the children's playground.

As described in the section on Layout, current vehicular access is from Bagby Lane. Pending planning permission for the proposed access road, the existing access road would no longer be used by the airfield.

The existing access to the airfield is unsatisfactory for the following reasons:
a) Traffic for the airfield both club members, visitors and commercial deliveries have to enter the village to access the site.
b) The access lane is difficult to see and difficult to turn into leaving many vehicles to continue further into the village and turn around.
c) When exiting the airfield the visibility of the road is poor to the west end very poor to the east i.e. into the village.
d) Visibility of the footpath is also poor and site traffic at this point 'encounter residents, and particularly children walking to the village playground facilities'.

The relocation of the entrance away from the village and its present location will improve safety for villagers and their children. In addition, noise pollution from traffic ingress into the village will be reduced.

aerial view (south)

Pedestrian access:
Currently pedestrians walking to the airfield use the stoned track connected to Bagby Lane. In future, they will use the new entrance off Bagby Lane, and use the access drive as a continuous, smooth, well-drained and pedestrian friendly surface. Pedestrian routes within the landscape will be a mix of shared surfaces to be flush with the carriageway, and traditional dedicated footways, 35-125mm raised above adjacent carriageway. Drop kerbs will be employed at crossings when required. Tactile pavers will be included where required, following the necessary design guidance.

Parking:
Many visitors to the airfield will arrive by aeroplane, which will make use of the existing aircraft parking provision close to the runways. Visitors arriving by cars and other vehicles will progress from the site entrance along the access drive, passing alongside the car park (3 discreet hedged enclosures to minimise the impact of the cars in the landscape), before arriving at a forecourt adjacent to the main entrance of the clubhouse. The drop-off provides level access to the main entrance, a distance of 9m. 29 car park spaces are provided, 2 of which are suitable for use by disabled vehicles. Access from the car park is by well-lit paved footpaths with level access.

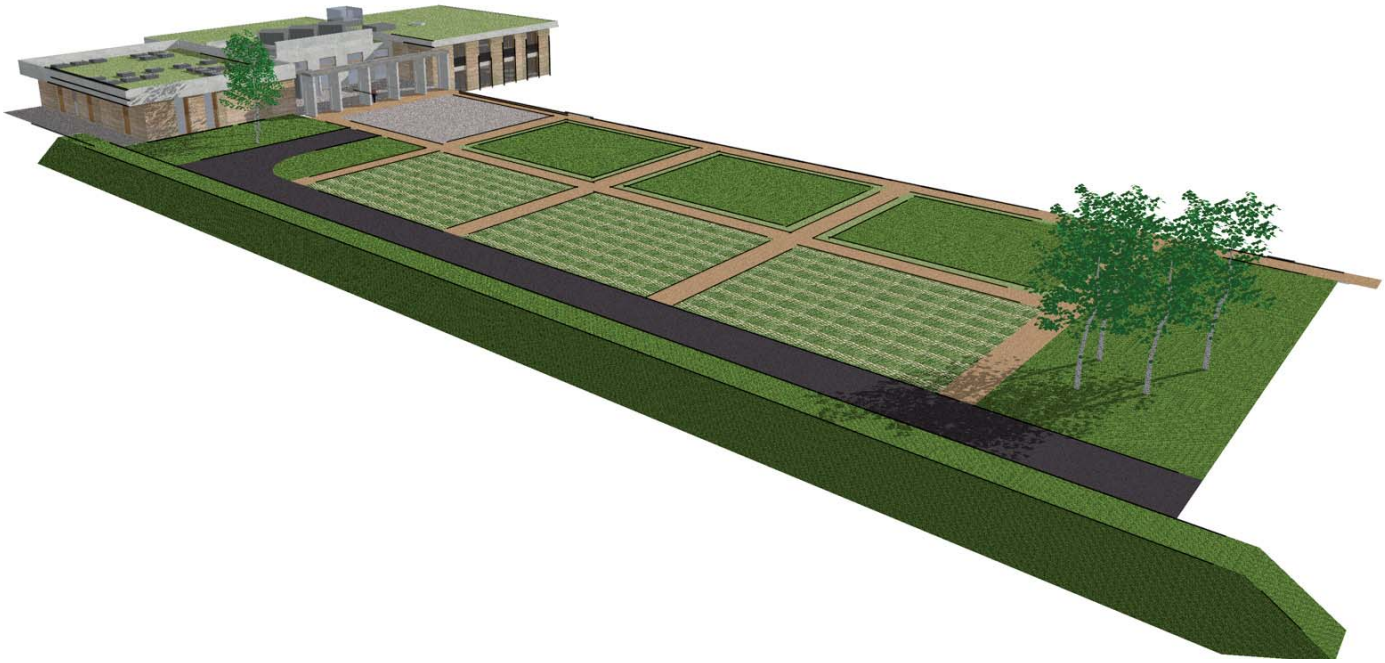
All parking spaces are a minimum 2400 X 4800 when perpendicular to the carriageway A provision is also made for cycle parking in the car park; 4 no. cycle stands with room for 8 no. cycles, will be provided.

Service access and deliveries:
Before reaching the car park, the main single-track access road discretely spurs off into a secondary access road and runs parallel the site boundary around the proposed maintenance hangar. The road surface terminates into a hard surface service yard between the service wing of the clubhouse and the northeast site boundary from where all deliveries can load, unload and turn around. This dedicated service area remains separate from the adjacent highways and parking areas to ensure regular deliveries and servicing does not interfere with traffic movements around the site. Emergency vehicle access is provided by the access drive. Also, the increased capacity of the proposed fuel tank will reduce the number of fuel deliveries required.

Waste collection:
A small refuse store (6.5 m^2) will be provided within the main clubhouse building for disposal and storage of daily waste. This waste can then be transferred less frequently to a remote refuse & recycling store (13.5 m^2). The remote refuse store has been sized to accommodate 3 no. standard commercial wheeled bins as recommended by Hambleton District Council and is located on the perimeter of a concrete service yard for ease of access and collection. Waste collection access to the airfield, maintenance hangar and the clubhouse will be via the access drive (see service and deliveries above).

Crime and Personal Safety:
The landscape at Bagby Airfield is designed to maximise personal safety throughout and to minimise opportunities for crime and other anti-social behaviour. All areas of the airfield are visible from the access road and / or clubhouse.

Lighting will be provided at the entrance gates, car park and on footpath routes from the car park to the clubhouse.



aerial view (north)