ADDITIONAL AMENDMENTS

- [ ] Amended layout of buildings/outside areas
- [x] Additional background information
- [ ] Amended design
- [ ] Revised access arrangements
- [ ] Change of description of proposed development - as indicated on the previous page
- [ ] Change in site boundaries
- [ ] Other (as specified below)

0859

North York Moors National Park
Planning Department
Helmsley
Attn Mr A Muir
ref: NYM/2007/0859/FL/INV

12th Nov 2007

Agate design
buildings • interiors • space planning
48 Cleveland Street Shrewsbury SY2 5DN
Tel/Fax: 01743 357589

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15 NOV 2007

Dear Mr Muir

Newbiggin High Farm Aislaby, Whitby
Application for Siting of a wind turbine:

With regards your letter of the 24/10/07 & our subsequent conversation we would agree to an adjustment of the position of the turbine in order to reduce its impact on passers-by on the adjacent high level unclassified road to Egton.

As suggested we can align it to be set against the large barns & other farm buildings which would form a backdrop from the road approaching in the Aislaby direction. The current tree planting on the edge of the garden will mature to form a more substantial screen, blocking vision as people pass towards Egton. The re-positioning lowers the mast by approx 1.5 mtrs. I enclose further photographs to illustrate this & a revised plan.

In answer to the other items in your letter I list the points below:

1. Mr Thackray has £530.00 credit with the NYM Parks Authority from application NYM2006/0006, please deduct the fee from this balance.
2 & 5. Details enclosed
3.Copy of Bat Scoping report enclosed
4 & 6. The energy requirement is for new development. There is no live data of these consumption rates as yet. The objective is to reduce energy imports onto site by 30-50% using a combination of insulation up-grades, heat exchange units & the turbine to power these units. The turbine is part of an integral approach to energy capture & use.

Thank you for your assistance.

Yours sincerely

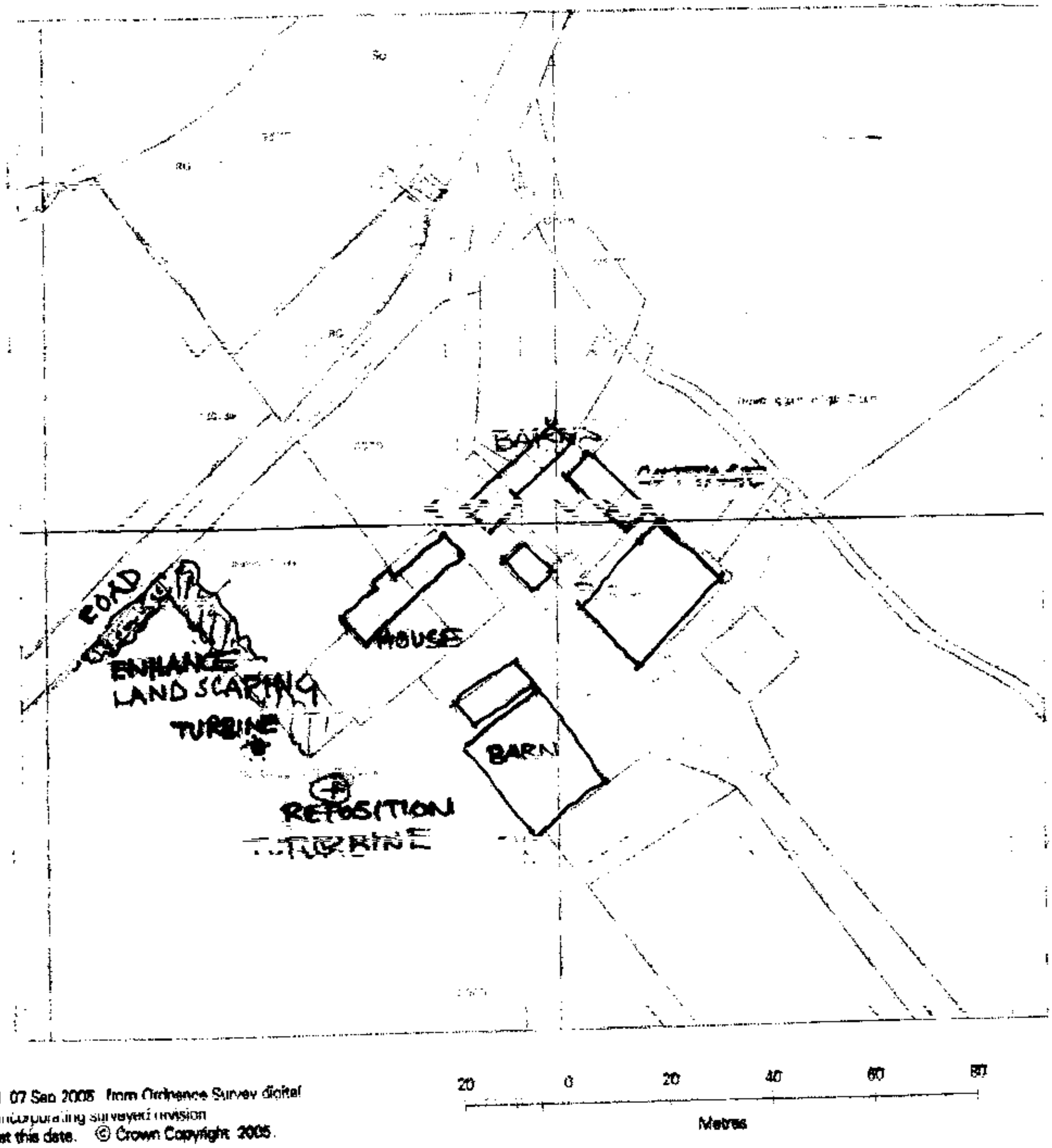
enc. Proven Technical spec sheet
Location plan
photo sheets ref 0708 P 1/ 2 /3

w. mcCabe, director

Ordnance Survey

Sitepian® 1:1250

0708.02



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Part or all of this Siteplan is enlarged from mapping produced at one or more of the following scales 1:1250, 1:2500, 1:10000.

Centre Coordinates: 483886 507700

Ordnance Survey reference at centre of this Siteplan: NZ8307

Supplied by: The Map Shop

Serial Number: 00655500

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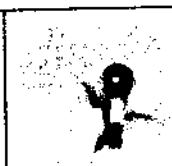
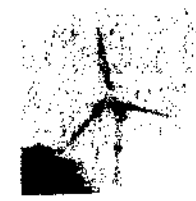
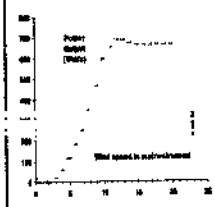
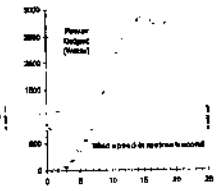
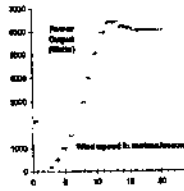
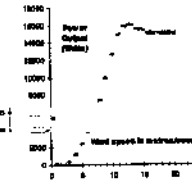
NEWBIGGIN HIGH FARM
AISLABY
YO21 1SX

NEWBIGGIN HIGH FARM AISLABY.

Above 12m/s or 25mph) blades twist to limit power in response to high rpm				
All machines steel, steel & components				
WT MODEL	**WT600 (0.6kW)**	**WT2500 (2.5kW)**	**WT6000 (6kW)**	**WT15000 (15kW)**
Cut In (m/s)[1]	2.5			
Cut Out m/s)	None!			
Survival (m/s)	65			
Rated (m/s)	12			
Rotor Type	Downwind, Self Regulating			
No. of Blades	3			
Blade Material	Polypropylene	Polypropylene	Wood/Epoxy	Glass Polypropylene
Rotor Diameter(m)	2.55	3.5	5.5	9
Generator Type	Brushless, Direct Drive, Permanent Magnet			
Battery charging	12, 24 or 48V DC	24 or 48V DC	48V DC	48V DC
Grid connect with *Windy Boy Inverter*	230Vac 50Hz *or* 240 Vac 60Hz	230Vac 50Hz *or* 240 Vac 60Hz	230Vac 50Hz *or* 240 Vac 60Hz	230Vac 50Hz *or* 240 Vac 60Hz
Direct Heating	n/a	120Vac *or* 240Vac	120Vac *or* 240Vac	120Vac *or* 240Vac
Rated RPM	500	300	200	140
Annual Output[2]	900-1,500 kWh	2,500 – 5,000 kWh	6,000 – 12,000 kWh	15,000 – 30,000 kWh
Head Weight (kg)	70	190	500	1100
Mast Type	Tilt-up, tapered, self-supporting, no guy wires (Taller guyed towers also available on request)			
Hub Height (m)	5.5 *or* 12	6.5 *or* 11	9 *or* 15	15
WT Found (m)	1x1x1 *or* 1.6x1.6x1	1.6x1.6x1 *or* 2.5x2.5x1	2.5x2.5x1 *or* 3x3x1.2	3.7x3.7x1.2
Winch Found (m)	0.65x0.65x0.65	0.65x0.65x0.65 *or* 1x1x1	1x1x1 *or* 1.5x1.5x1	1.5x1.5x1.2
Tower Weight (kg)	220 or 250	245 or 445	360 or 656	1200
Mechanical Brake	No	Yes	Yes	Yes
Noise[3] @ 5m/s	35 dBA	40 dBA	45 dBA	48 dBA
Noise @ 20m/	55 dBA	60 dBA	65 dBA	65 dBA
Rotor Thrust (kN)	2.5	5	10	26
Sample of UK commercial customers	British Telecom / Scottish Youth Hostel Association / British Rail / Irish Lighthouse Authority UK Lighthouse Authority / T-mobile / Orange / Saudi Aramco / Shell / B&Q / BP / Sainsbury's			

[1] 1 metre/second = 2.24 miles per hour=3.6kph.

[2] Based on an ideal site and average wind speed of 5m/s - please refere to our website at www.provenenergy.com for further information

[3] All readings taken with an ATP SL-25 dBA meter at the base of the tower at a height of 1.5m.

A car passing 20m away @ approx 40 mph is 61-80dBA

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PROVEN ENERGY LTD, WARDHEAD PARK, STEWARTON, AYRSHIRE, KA3 5LH
TEL: ++44 (0) 1560 485 570 FAX: ++44 (0) 1560 485 580 EMAIL: info@provenenergy.com

NOV . 2007

Proposed unit for NEWBIGGIN HIGH FARM
BLACK ROTOR . MAST COLOUR TO BE AGREED.

15 NOV 2007

REF 0708 P1.

Naturally Wild

Newbiggin High Farm
Aislaby, Whitby
Farm Development

Bat Scoping Assessment

January 2006

NPA
15 NOV 2007

The Environmental Specialists

STATUS	FINAL
DATE	07/02/2006
APPROVED BY	G.SKINNER

1. INTRODUCTION

Background to development

The survey area is a farm site situated to the west of the village of Aislaby, approximately 2 miles North West of Whitby a grid reference NZ 839 077. The farm is situated in the valley on a south facing slope.

The proposed development involves the conversion of various farm outbuildings into holiday accommodation, together with some work on the existing farmhouse.

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Survey and site assessment

Pre-existing information on protected species at survey site

No information regarding bats in the locality was available at the time of survey.

Status of protected species in the local/regional area

Bats are protected by the Wildlife and Countryside Act 1981 (as amended), Schedule 5 and the Conservation (Natural Habitats &c.) Regulations 1994, Schedule 2. These laws give protection to all species of British bats; it is an offence to:

- Intentionally or deliberately kill, injure or take (capture) bats.
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a bat.
- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for that purpose.
- Deliberately disturb bats (whether in a roost or not).
- Keep, transport, sell or exchange, or offer for sale or exchange a live or dead bat or any part of a bat.

Objective(s) of survey

The objective of the survey was to:

- Assess the risk to bats using any part of the site as a roost.
- Ascertain if site is utilised by bats.

Survey area

The buildings were inspected internally and externally for signs of occupation by bats. The area surrounding the site was assessed for suitability for use by bats for roosting or foraging.

Habitat description

The survey area is located to the west of the village of Aislaby, approximately 2 miles north west of Whitby at OS Grid Ref NZ 839 077.
The site comprises eight buildings situated to the east of the driveway, together with a farmhouse and attaché cottage situated to the west. The farm is approximately one mile to the west edge of Aislaby village; to the south, west and east the site is surrounded by pasture land, to the north is a hillside covered by mature trees and scrub. Hedgerows link the farm to the wider countryside, a hedge with mature trees runs east / west along the road to the north. The area provides foraging habitat for bats and the farm is connected to the wider countryside by linear commuting routes, such as the hedges leading to the east west and south.

2. METHODOLOGY

During two site inspections the survey team examined cracks, fissures, timber beams, gable ends and roof voids as far as was pactical. Searches were made for signs of feeding, urine stains, access point and of course old droppings.

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Limitations to this scoping exercise.

UK bats are insectivorous; therefore during the winter when few insects are available bats hibernate. During September and October prior to hibernation the bats gain weight, then as mean temperatures fall they locate roosts appropriate for over wintering. Bats are capable of reducing body temperature and slowing their metabolism in order to conserve there food reserves until the following March April. Any disturbance of bats during the hibernation period increases the amount of energy used with a subsequent reduction in food availability for over wintering. The figure below show the typical bat year.

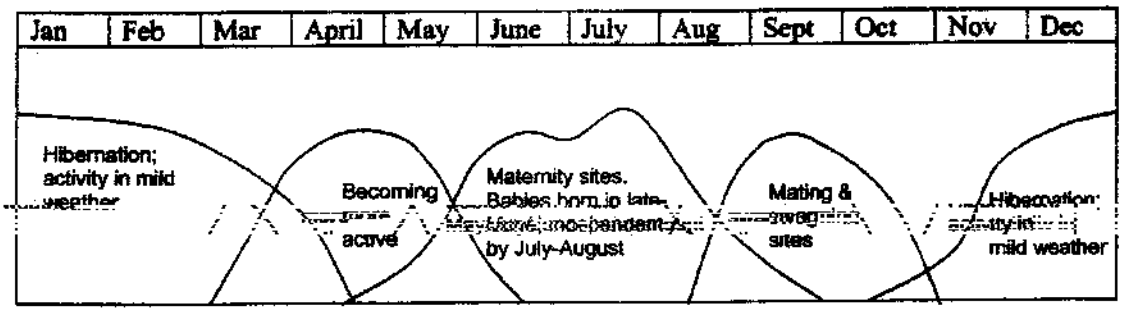

Figure 2 The bat year. Although there are species-specific differences, the bat year can be divided into the two major phases of breeding and hibernation, with other activities interspersed.

(Bat Mitigation Guidelines A. J. Mitchell-Jones 2004)

From the above it can be seen that it is extremely unlikely that bats would be observed in January when the site visit was undertaken. Therefore readers of this report should take this into consideration. During the visit observations were made for evidence of bats having been present within the buildings. Other factors were also taken into account when compiling this report e.g. the building condition, dampness of walls, missing roof tiles, presence or absence of cob webs, concentrations or occasional bat droppings, moth and butterfly wings concentrations especially on gable walls etc.

3. RESULTS

Farmhouse.

From conversation with the owner we understand that the first phase of the proposed development is to be undertaken at the farm house. This consists of the removal of the roof section to the western end of the farm, including removal of the dormer windows to the north facing rear of the building and also removal of the velux style windows in the South facing roof. This is shown in the plan drawings of the farm showing the front and rear elevations.

The farm is constructed of sandstone blocks and is roofed by pan tiles with lead flashing where the tiles abut the building walls. The entire south facing roof has been

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replaced (by previous owner), only the roof over the rear entrance / utility and the rear western section of the farmhouse appears original.

Initial inspection involved access to the roof voids of both buildings, the nearest extension to the original farm appears to have been re roofed in the recent past. They appear in an excellent state of repair. There is some evidence of use by bats in both areas especially the farm extension (droppings & insect debris). The loft of the extension to the farm is a self contained area and it is understand that no further development is planned for this area. There was no visible access from the farm extension into the attic space of the main farm building.

Inspection of the western section of the farm attic space shows that at some time this has been converted into living space with boards attached to the roof joists reaching up to the apex of the roof. Above the boards is lath and plaster with roof tiles above. Installation of the velux windows has made this a bright open area. There was no evidence of bats using this area.

The replacement of the roof on this section with the removal of the windows is anticipated by the owner to be the first stage of redevelopment. Details of future use of this area were not given, with the windows removed it would apparently revert to loft space.

As a result an early start date prior to the beginning of April would be advantageous in that there would be little or no likelihood of disturbance to roosting bats. Female bats would not have taken up their nursery roosts at this time and due to the temperatures maintained within the building the probabilities of hibernating bats being present is extremely remote.

Phase 2

The second phase of work involves renovation and conversion of the various stone outbuildings and removal / alteration of the "Dutch" barns. With regard to the dutch barns these structures do not offer roosting or hibernatory sites for bats due to their construction and materials. These facilities have been known to offer feeding areas for bats.

The main works planned are on the existing out buildings all of which are constructed of stone with tile roofs apart from the cattle barn. Starting from what is shown as the Cattle Barn the plan numbering clockwise direction make the following observations.

Cattle Barn

Stone built with a cinder (type) block lean on the eastern side, the main barn has a corrugated asbestos roof with the lean to having a metal roof. The barn is open to the north, with gaps between the roof and supporting walls. Examination of walls floors showed no evidence of use by bats. The external walls of this building have a large number of places where the mortar is missing and would make ideal locations for roosting sites during the summer months.

Mill

Some evidence of use by bats single droppings found in two locations with no concentrations of droppings, therefore it is assumed that this area is used for feeding purposes. As with all buildings in this group the north facing wall is extremely wet due

to run off from the nearby land. The roof of this building is in need of urgent repair due to several missing tiles adjacent to the apex. Due to the concentrations of cob webs covering the roof, its beams and walls within this area there is little likelihood of roosting within this building. From this building there is access into the upper story of the first loose box.

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Loose Box 1

This section of the building is divided into an upper and lower story as stated access to the upper is gained from the mill the floor is riddled with woodworm and considered unsafe to walk on. Examination of this room was undertaken visually from the access point. Again this section of the building requires repairs to the roof due to missing tiles again along the apex. Walls were damp in particular the north facing wall. Bulging there was considerable amount of cobwebs on the internal side of the roof walls and roof joists. It is reasonable to assume that this part of the building is not used by bats.

Ground floor is a low ceiling room with an extremely damp and bulging north wall. Examination of all walls and floor failed to show evidence of use by bats.

Loose Box 2

This is the smallest of all the loose boxes and has a roof which is intact; the room is dryer than the others within this block. There is access via a door and also a high level access into loose box 3. This room due to its dry condition may well provide suitable habitat for a bat roost. There was some evidence that bats had been present in the past, but the droppings found were in scattered locations on the floor, without specific concentrations. There was no evidence of roosting found within this part of the building.

Loose Box 3

Again with this loose box the roof is in need of urgent attention with gaps along the ridge line and missing tiles in various other locations. No bat droppings were found during examination of this room. Again the roof its beams and walls were heavily covered by cobwebs.

Loose Boxes 4, 5 & 6

These are situated to the East of the fold Yard. All are in a state of disrepair, numerous tiles are missing from the roof, walls, roofs and roof joists are all covered by large quantities of cobwebs. No evidence of use by bats was observed. One section of the east wall was observed to be bulging on the external side and appears in need of urgent work to prevent further collapse.

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4 CONCLUSIONS

Main Farmhouse

The main farmhouse does have evidence of regular bat use; proposed alterations to this building will have minor or no impact upon the use of this building by bats.

Outbuildings.

Most are to remain single story buildings with a loft space with the possible exception of the mill and loose box 1. Evidence of bats having been present was observed in the Mill and loose box 2 but without concentrations of droppings indicative of use as a maternity roost. We believe that north facing walls of the farm outbuildings would generally provide the best over wintering habitat with a temperature unaffected by solar radiation. As previously stated the north facing walls of this complex were extremely damp due to surface run off from the surrounding hillside, making the walls unsuitable for hibernation.

Mitigation

Available habitat for bats to roost is constantly being eroded with the removal of old/diseased trees, barn conversions, house improvements and modifications. In the case of these premises sensitive conversion with care and the installation of access points and areas within the roof voids could provide numerous roosts facilities for most of the bat species to be found in the area. Due to the height of these buildings there is no reason why a loft space could not be created providing a void suitable for bats. The majority of the buildings would be retained as a single story. The Mill and Loose Box 1 being two stories could still retain a void in the upper portion of the roof above what is currently the access to the room above loose box 1 as shown in picture 9. With some planning the installation of suitable access points together with roosting areas the voids together with the loft spaces could be turned into various habitats suitable for utilisation by bats as nursery roosts. As the range of outbuildings has different aspects this would furnish bats with different temperatures dependant upon the weather. Maternity roosts are known to move from one area to another dependant upon the temperature found within the nursery.

5 RECOMMENDATIONS

As no surveys were conducted during the typical period when bats are active April to end of October we recommend that extreme care is exercised during all work undertaken in order that disturbance is kept to a minimum. Advice should be given to contractors as to appropriate methods to be used during work, with particular attention to removal of the ridge tiles and where tiles and external walls meet. Consideration should be given as to having a licensed bat worker on site during such operations. Survey of all gaps and crevasses within the walls should be undertaken before pointing (where necessary with endoscopic searches).

Although it is felt that disturbance is likely to be minimal and that the development is unlikely to have a detrimental impact upon the conservation status of bats in the area we recommend that a full survey is conducted in spring. A detailed Survey into the use of the farm outbuildings and its surrounding landscape by bats during the time in which bats are most active (April- September) would be beneficial.

At this stage it is felt that provided the developer works closely with the ecological team to ensure good practice and provided the recommended mitigation is undertaken then the development is likely to improve suitable conditions for bats.

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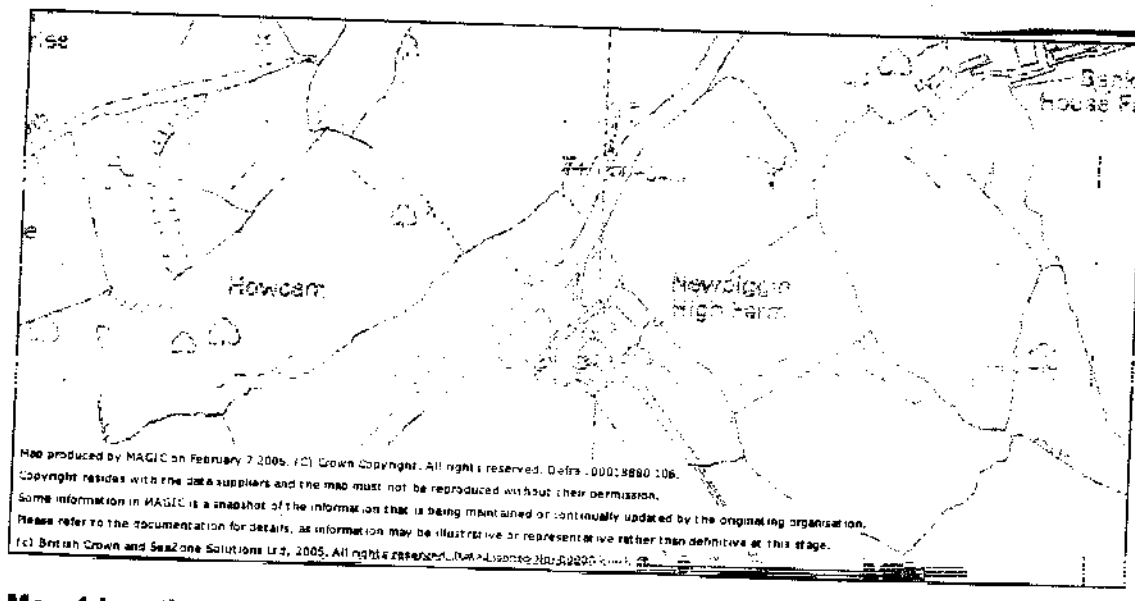
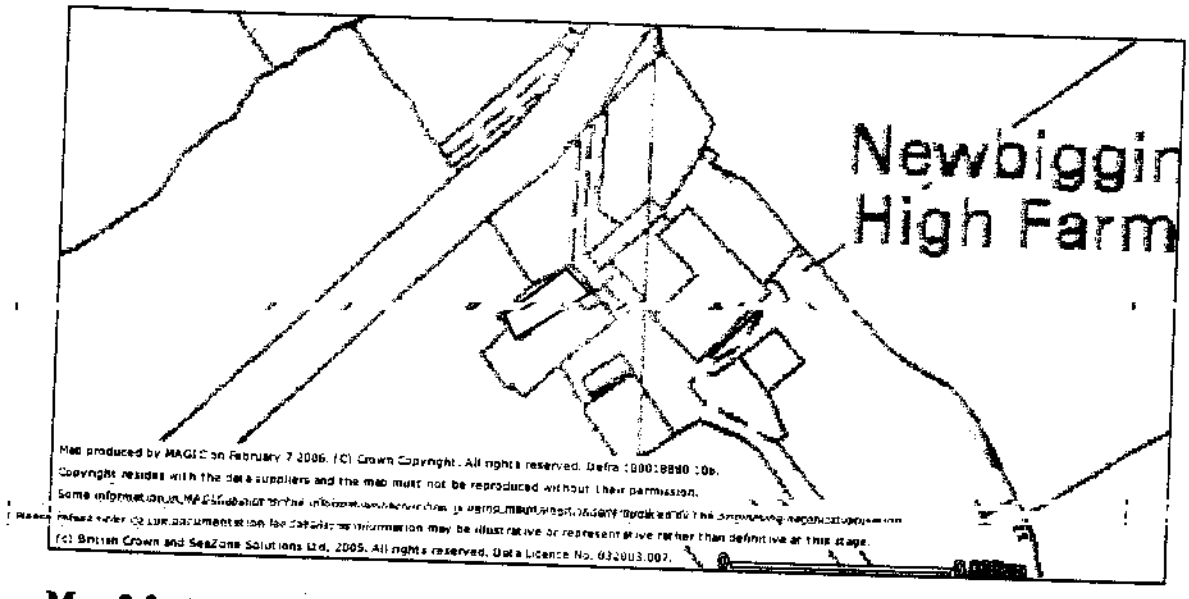
6 MAPS



Map 1 location of farm



Map 2 features

Yellow block shows location of main farmhouse structure

Grey shaded areas are the development areas

8 REFERENCES

Altringham, J; 2003, British Bats, Harper Collins New Naturalist

Mitchell-Jones, A.J. & McLeish, A.P. (2004) The Bat Workers' Manual (3rd Ed.). JNCC, Peterborough.

Mitchell-Jones, (2004), Bat Mitigation Guidelines, English Nature, Peterborough.

Bat Conservation Trust, Bats and the Law, BCT

Statutory Instrument 2000 No. 192; The Conservation (Natural Habitats &c.) Regulations 1994 (as amended), HMSO

Wildlife and Countryside Act, 1981 (as amended), HMSO

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