



**MEARLEY CROFT
CLITHEROE
ECOLOGICAL ASSESSMENT 2011
(Report Ref: 3146.001 Version 2.0)**

December 2011

for

320111064P

**Beck Developments
Challenge House
Challenge Way
Greenbank Business Park
Blackburn
BB1 5QB**

Genesis Centre
Birchwood Science Park
Warrington
WA3 7BH

T: 01925 844004
F: 01925 844002
E: tep@tep.uk.com
W: www.tep.uk.com



Written:	Checked:	Approved:
EP	DCS	DCS

CONTENTS

PAGE

1.0	SUMMARY	1
2.0	INTRODUCTION	2
3.0	SITE DESCRIPTION	2
4.0	METHODS	2
	Desktop Survey	2
	Phase 1 Habitat Survey	3
5.0	RESULTS	3
	Desktop Survey	3
	Phase 1 Habitat Survey	4
6.0	CONCLUSIONS	5
7.0	RECOMMENDATIONS	6
8.0	REFERENCES & FURTHER READING	7

APPENDICES

Appendix One	Desktop records
Appendix Two	Target Notes

DRAWINGS

D3146.001B	Phase 1 Habitat Survey
------------	------------------------

320111064P

1.0 SUMMARY

- 1.1 TEP was commissioned in October 2011 by Beck Developments to undertake an ecological assessment of Mearley Croft, in Clitheroe. The site comprises a section of a wooded valley, bordering Mearly Brook which flows from north to south, positioned to the east of the site.
- 1.2 Proposals for the site include a new access road from Woone Lane and construction of residential dwellings with associated gardens and parking.
- 1.3 A Desktop study, Phase 1 habitat survey and an assessment of the site for potential to support protected species was undertaken in October 2011.
- 1.4 Japanese knotweed and Himalayan balsam are widely distributed throughout the site. A non-native invasive species method statement will be required to prevent the spread of these plants during construction and to eradicate or control these species post-construction.
- 1.5 The old buildings and sheds on site have limited potential for use by roosting bats. A daytime building inspection of these buildings for bats will be required if building demolition works are necessary within the development. Reasonable precaution during the demolition process should be taken, implementing best practice measures of hand removal of ridge tiles and boards.
- 1.6 If it is necessary to remove mature trees during development of the site, these trees should be inspected by a licensed bat surveyor prior to felling.
- 1.7 Due to the proposed loss of trees to the development, it is recommended that replacement planting of native trees is undertaken, ideally using species of local provenance. If this compensation planting cannot be accommodated within the site boundary, provision of off site land for tree planting should be considered. There is scope for this to occur on or immediately adjacent to the Primrose Phase 2 site, which is within one mile of the Mearley Croft site.
- 1.8 Removal of woody vegetation should be undertaken outside of the nesting bird season (March – August inclusive). If this is not possible a pre-clearance check should be made by an ecologist on the day of removal.
- 1.9 Additional opportunities for bats could be provided through the installation of bat roost units within the new buildings.
- 1.10 Additional opportunities for birds could be provided through the use of bird boxes within the new buildings.
- 1.11 Green trellising, utilising ivy, honeysuckle or berry producing climbers, could be installed on buildings to provide foraging and sheltering opportunities for insects and birds.

2.0 INTRODUCTION

- 2.1 TEP was commissioned in October 2011 by Beck Developments to undertake an ecological assessment of Mearley Croft site, in Clitheroe. Proposals for the site include a new access road from Woone Lane and construction of residential dwellings with associated gardens and parking.
- 2.2 This report has the following objectives:
- to describe the existing vegetation and give an overview of the habitats present on the site;
 - to identify whether there are any features of conservation value, such as species or habitats which are legally protected or of biodiversity importance (including those habitats prioritised in the UK Biodiversity Action Plan (BAP) or the Local BAP);
 - to identify habitat enhancement measures;
 - to advise of further surveys or mitigation requirements that might be needed prior to the proposed works.

3.0 SITE DESCRIPTION

- 3.1 The site is located in Clitheroe, Lancashire at central grid reference SD 740411. The site comprises a section of a wooded valley, bordering Mearley Brook which flows from north to south, positioned to the east of the site. Terraced housing along Woone Lane borders the site to the west.

4.0 METHODS

Desktop Survey

- 4.1 Information regarding historic species records, protected sites, land allocation and relevant policies was gathered from the sources listed in Table 1.

Table 1: Ecological information and consultations

CONSULTEE/SOURCE OF INFORMATION	NATURE OF INFORMATION
Lancashire Environment Record Network	Local designations and species records
MAGIC website (Multi Agency Geographic Information for the Countryside)	Designated sites and land classifications
Natural England – Nature on the Map	Protected habitats
UK Biodiversity Action Plan (UKBAP)	UKBAP priority habitats/species
Lancashire BAP	Local BAP priority habitats/species

Phase 1 Habitat Survey

4.2 The habitat survey was undertaken by TEP ecologist David Sweeting on 26th October 2011. The survey followed the methods set out in the '*Handbook for Phase 1 Habitat Survey*' (JNCC, 2003). This survey gives an overview of key habitats and wildlife corridors and identifies likely sites for species of conservation concern.

4.3 Limitations

The Phase 1 habitat survey was undertaken outside of the optimum survey season of mid-April to mid-October. Although broad habitat types could be identified, the number and diversity of flowering plants present in the woodland understorey vegetation was low due to the time of year.

5.0 RESULTS

Desktop Survey

- 5.1 Desktop information is provided at Appendix One. No nationally or internationally designated wildlife sites are located within or adjacent to the site.
- 5.2 Primrose Lodge, which is immediately adjacent to the site is designated as a Lancashire County Biological Heritage Site in the *Ribble Valley Districtwide Local Plan (Adopted 1998)*.
- 5.3 There are no records of protected species within the Mearley Croft site but there are records of Eurasian Teal and Pochard within Primrose Lodge, which are on the Lancashire BAP provisional long list, within 1km to the south of the site.
- 5.4 A previous ecological assessment of Primrose Lodge was carried out by TEP in May 2011 and included the Mearley Croft site. During survey work for this assessment field evidence of water vole activity was found along the banks of

Mearley Brook to the north of the Mearley Croft site. An active water vole burrow was identified on the eastern bank of Mearley Brook. However, no water vole evidence was identified on the bank adjacent to the Mearley Croft site, where the shallow low lying profile makes it unsuitable for water vole burrows.

Phase 1 Habitat Survey

- 5.5 The Phase 1 Habitat survey is illustrated at D3146.001B. Target notes are presented at Appendix two.

The following habitats were identified on site:

- Semi-natural broadleaved woodland
- Tall ruderal herbs (including Japanese knotweed)
- Running water
- Other habitats (Allotments)

Semi-natural broadleaved woodland

- 5.6 The majority of the site is dominated by this habitat type. The woodland is located west of Mearly Brook on a steep embankment and contains large, mature trees dominated by ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*) with occasional birch (*Betula* sp.), elder (*Sambucus nigra*), hawthorn (*Crataegus monogyna*) and wych elm (*Ulmus glabra*). The majority of the groundflora throughout the woodland is a combination of bramble (*Rubus fruticosus* agg.) and nettle (*Urtica dioica*). Other species found within the understorey includes Herb Robert (*Geranium robertianum*), wood avens (*Geum urbanum*), butterbur (*Petasites hybridus*) and yellow-flag iris (*Iris pseudacorus*). Himalayan balsam (*Impatiens glandulifera*) is also present throughout the site, more noticeably adjacent to the brook.

Tall ruderal herbs (including Japanese knotweed)

- 5.7 Areas of tall ruderal herbs were found throughout the site, predominantly comprising Japanese knotweed (*Fallopia japonica*). A large stand of Japanese knotweed (400m²) is present in the west of the site at TN1. The surveyor was shown evidence of Japanese knotweed within both the allotments area (TN2) and chicken runs (TN3). Due to the established stands of this plant (500m²) along the brook and in the east of the site (TN4), it is assumed that established rhizomes are present under the majority of the allotments (TN2) and chicken runs (TN3).

Running water (with periodic standing water)

- 5.8 Mearly Brook runs from north to south, lying offsite but adjacent to the eastern site boundary, into the historic Mearly Lodge located south of the site. The bank profile of this section of the brook is shallow and low lying. The water within the brook is shallow and has a considerably faster flow than further upstream, where it is held back by a weir.

Other habitats

- 5.9 There are some long-standing fenced areas which are used by the owners of the neighbouring terraced houses as allotments (TN2) and for keeping chickens

(TN3). Japanese knotweed is present within both these areas. There are dilapidated small buildings and sheds within the allotments.

Potential for species of conservation concern

- 5.10 The dilapidated buildings within the allotments at TN2 have limited bat potential for roosting. Some of the mature trees on site have potential for roosting bats. The entire site has potential for use by foraging and commuting bats.
- 5.11 There are no on site water bodies and there is no permanent standing water within 500m of the site. There is an area of periodic standing water to the south of the site boundary that accumulates after heavy rainfall. Amphibians may make use of this area of standing water, however the water soon drains away and therefore is not a reliable breeding habitat for amphibians.
- 5.12 To the north of the Mearley Croft site there is a 50m stretch of Mearley Brook that is upstream of a weir. This area has bank habitat suitable for water vole burrows. Evidence of water vole was identified in this area in May 2011. However below this weir the banks adjacent to the site are shallow and low lying and so do not have potential for water vole burrows. However water vole could forage along the section of brook that is adjacent to the Mearley Croft site.
- 5.13 Otter could potentially make use of the habitats along Mearly Brook although no evidence of this species was found in the May 2011 survey.

6.0 CONCLUSIONS

- 6.1 No internationally or nationally designated wildlife sites will be affected by the proposed works on the site. Primrose Lodge BHS is adjacent to the site and measures will be required to ensure that non-native invasive plants present in Mearley Croft are not spread to this site.
- 6.2 There are no local or UKBAP habitats within the site boundaries.
- 6.3 No protected species were identified on site. However water vole is present along Mearley Brook within 50m to the north of the Mearley Croft site.
- 6.4 The site is dominated by broadleaved woodland that has no specific protection; however there are mature trees on site which have potential to support roosting bats and nesting birds. These trees also provide foraging and commuting habitat for bats.
- 6.5 The old buildings within the allotment along the western site boundary have limited roosting potential for bats.
- 6.6 The alien invasive species Himalayan balsam and Japanese knotweed are present on site in abundance. Given the widespread coverage of both Himalayan balsam and Japanese knotweed, any earth removed from site would be regarded as controlled waste.

7.0 RECOMMENDATIONS

- 7.1 The old buildings within the allotments along the western site boundary have limited potential for use by roosting bats. If development proposals affect these buildings, minimum survey effort of a day time internal inspection would be required.
- 7.2 If it is necessary to remove mature trees during enhancement of the site, these trees should be inspected by a licensed bat surveyor prior to felling.
- 7.3 Due to the proposed loss of trees to development, it is recommended that replacement planting of native trees is undertaken, ideally using plants of local provenance. If this compensation planting cannot be accommodated within the site boundary, provision of off site land for tree planting should be considered. There is scope for this to occur on or immediately adjacent to the Primrose Phase 2 site, which is within one mile of the Mearley Croft site.
- 7.4 Nesting birds are protected under the *Wildlife and Countryside Act 1981 (as amended)*. Removal of woody vegetation should be undertaken outside of the nesting bird season (March – August inclusive). If this is not possible a pre-clearance check should be made by an ecologist on the day of removal.
- 7.5 A non-native, invasive species method statement should be produced to ensure that Japanese knotweed is eradicated from the site and that Himalayan balsam is managed appropriately during the development works. Typical treatments for Japanese knotweed involve either a programme of cutting and spraying with herbicide over a minimum of three years or the excavation and removal of the contaminated material from site. There are also various specialist on-site treatment options that could be employed. Although the presence of these species will impact on working methods during development, these impacts can easily be minimised through the preparation of an appropriate method statement.
- 7.6 As Himalayan balsam is widely distributed throughout the site, it is recommended that no earth is removed from site in order to prevent the spread of this non-native invasive plant to other sites. Due to the high occurrence of Japanese knotweed and Himalayan balsam on site, any material that does have to leave the site should be taken to a landfill site that is licensed to receive controlled waste. Given that a watercourse is adjacent to the site it is unlikely that Himalayan balsam could permanently be eradicated from the site but this plant should be managed appropriately during the development works.
- 7.7 Additional roosting opportunities for bats could be provided through the installation of bat roost units within the new buildings.
- 7.8 Additional opportunities for birds could be provided through the use of bird boxes within the new buildings.

- 7.9 Green trellising, utilising ivy, honeysuckle or berry producing climbers, could be installed on buildings to provide foraging and sheltering opportunities for insects and birds.

8.0 REFERENCES & FURTHER READING

DEFRA (2002) *Working with the grain of nature – A biodiversity strategy for England*. DEFRA Publications, London

JOINT NATURE CONSERVATION COMMITTEE (2003) *Phase 1 Habitat Survey*. JNCC. Peterborough

OFFICE OF THE DEPUTY PRIME MINISTER (2005) '*Planning Policy Statement 9: Geological and Biological Conservation*' HMSO, Norwich

OFFICE OF THE DEPUTY PRIME MINISTER (2005) '*Government Circular: Geological and Biological Conservation – Statutory obligations and their implications within the planning system*' ODPM circular 06/2005, DEFRA circular 01/2005

STACE, C. A. (1997) *Flora of the British Isles, 2nd ed.* Cambridge University Press

TUCKER GM & HEATH MF (1994) *Birds in Europe: Their Conservation Status*, Birdlife International, Cambridge.

320111064P

**APPENDIX ONE
DESKTOP RECORDS**





Lancashire County Heritage Sites

Biological Heritage Site

Biological Heritage Sites Partnership:

- © Lancashire County Council
- © Wildlife Trust for Lancashire
- Natural England

This form may contain privileged and confidential information. Permission must be obtained from Lancashire County Council and the Wildlife Trust for Lancashire before reproducing or divulging information contained on this form to any party not directly in receipt of the form from the copyright holders.

Site Name: Primrose Lodge

Site Ref: 74SW03

Approved: 08 September 1993

Area (ha): 4.27

Date written/last updated:

Grid Ref: SD739410

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Clitheroe

Description:

To be completed.

Guideline(s) for Site Selection:

Artificial Habitats (Ar1)

Flowering Plants and Ferns (Ff4)

Other Information/Comments:

Lancashire County Heritage Sites

Biological Heritage Site

Primrose Lodge



Site Boundary

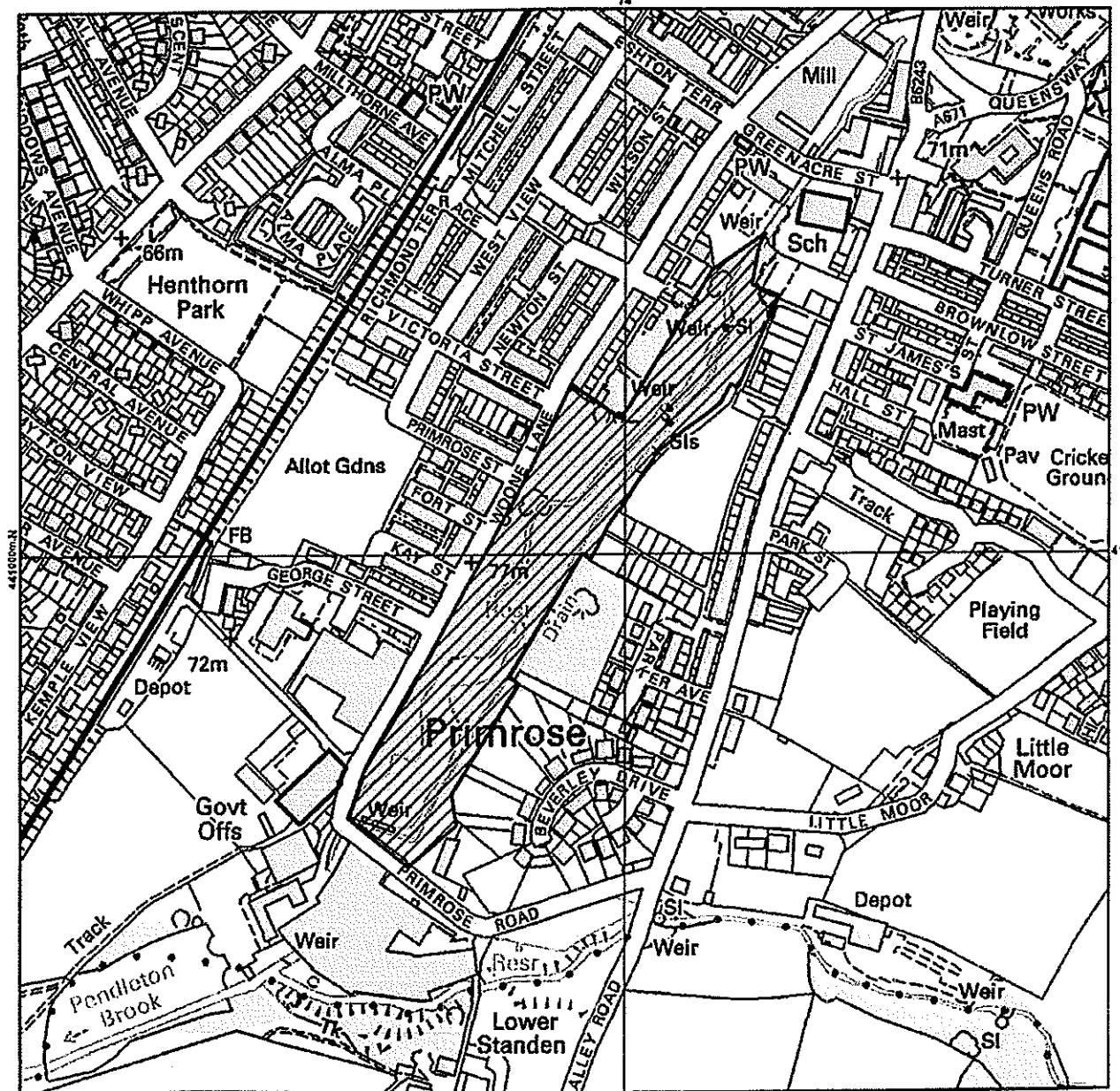
This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Lancashire County Council 100023320 2011

This map shows only the boundary of the Biological Heritage Site named above. It does not show any other designated sites which may occur within the area covered by the map.

Ref No. 74SW03

Biological Heritage Sites Partnership

© Lancashire County Council
© The Wildlife Trust for Lancashire,
Manchester and North Merseyside
Natural England



Grid ref. SD739410

Scale 1:5,000

Site approved 08/09/1993

Map 1 of 1



Lancashire
County Council



Lancashire County Heritage Sites

Biological Heritage Site

**Biological Heritage Sites
Partnership:**

- Lancashire County Council
- Wildlife Trust for Lancashire
- Natural England

This form may contain privileged and confidential information. Permission must be obtained from Lancashire County Council and the Wildlife Trust for Lancashire before reproducing or divulging information contained on this form to any party not directly in receipt of the form from the copyright holders.

Site Name: Barrow Clough Wood

Site Ref: 73NW11

Approved: 08 September 1993

Area (ha): 3.68

Date written/last updated:

Grid Ref: SD736399

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Pendleton

Description:

To be completed

Guideline(s) for Site Selection:

Woodland and Scrub (Wd1)

Other Information/Comments:

320111064P

Lancashire County Heritage Sites

Biological Heritage Site

Barrow Clough Wood



Site Boundary

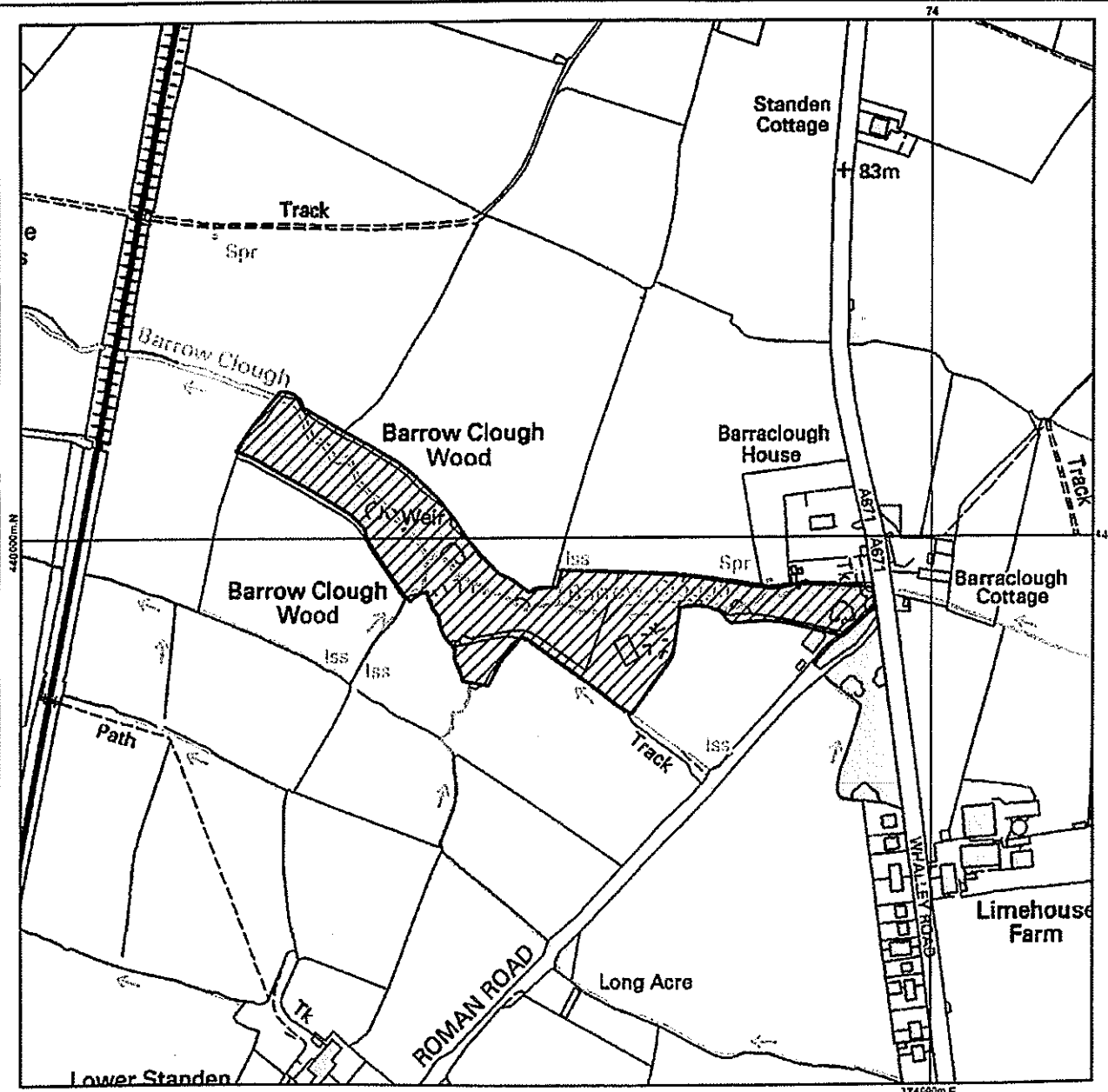
This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Lancashire County Council 100023320 2011.

This map shows only the boundary of the Biological Heritage Site named above. It does not show any other designated sites which may occur within the area covered by the map.

Ref No. 73NW11

Biological Heritage Sites Partnership

© Lancashire County Council
 © The Wildlife Trust for Lancashire,
 Manchester and North Merseyside
 Natural England



Grid ref. SD736399

Scale 1:5,000

Site approved 08/09/1993

Map 1 of 1



Lancashire
 County Council



Lancashire County Heritage Sites

Biological Heritage Site

**Biological Heritage Sites
Partnership:**

© Lancashire County Council
© Wildlife Trust for Lancashire
Natural England

This form may contain privileged and confidential information. Permission must be obtained from Lancashire County Council and the Wildlife Trust for Lancashire before reproducing or divulging information contained on this form to any party not directly in receipt of the form from the copyright holders.

Site Name: Clitheroe Castle Knoll

Site Ref: 74SW05

Approved: 08 September 1993

Area (ha): 1.04

Date written/last updated:

Grid Ref: SD742417

Owner/Occupier:

Districts:
Ribble Valley

Parishes:
Clitheroe

Description:

To be completed.

Guideline(s) for Site Selection:

Rock (Ro2)

Other Information/Comments:

320111064P

Lancashire County Heritage Sites

Biological Heritage Site

Clitheroe Castle Knoll



Site Boundary

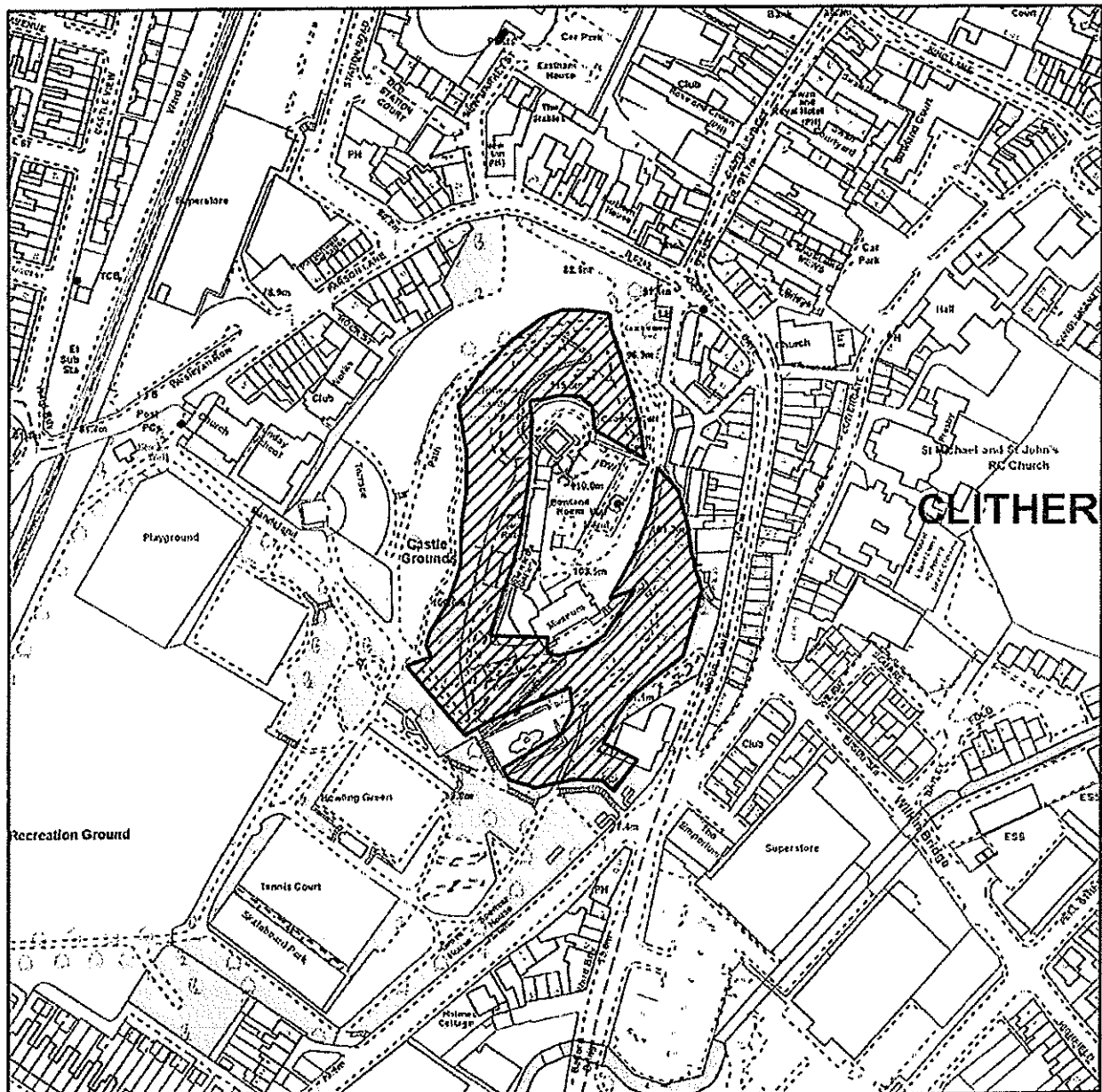
This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Lancashire County Council 100023320 2011.

This map shows only the boundary of the Biological Heritage Site named above. It does not show any other designated sites which may occur within the area covered by the map.

Ref No. 74SW05

Biological Heritage Sites Partnership

© Lancashire County Council
 © The Wildlife Trust for Lancashire,
 Manchester and North Merseyside
 Natural England



Grid ref. SD742417

Scale 1:2,500

Site approved 08/09/1993

Map 1 of 1



Lancashire
 County Council

Site Check Report

Report generated on August 8 2011.

You clicked on the point:

Grid Ref: SD 739 409

Full Grid Ref: 373912 , 440982

The following features have been found within 1,000 metres of your search point:

Counties, Metropolitan Districts and Unitary Authorities (GB)

Name Geographic Level

LANCASHIRE COUNTY

NUTS1 - Government Office Regions (GB)

Name Reference

Hotlink

NORTH WEST UKD

http://www.statistics.gov.uk/geography/nuts_nw.asp

Ancient Woodland (England)

Grid Reference Wood Name Theme ID

Theme Name

sd735400

1413061 ANCIENT & SEMI-NATURAL WOODLAND

Local Nature Reserves (England)

There are no features within your search area.

National Nature Reserves (England)

There are no features within your search area.

Biosphere Reserves (England)

There are no features within your search area.

Ramsar Sites (England)

There are no features within your search area.

Special Protection Areas (England)

There are no features within your search area.

Special Areas of Conservation (England)

There are no features within your search area.

Sites of Special Scientific Interest (England)

There are no features within your search area.

National Parks (England)

There are no features within your search area.

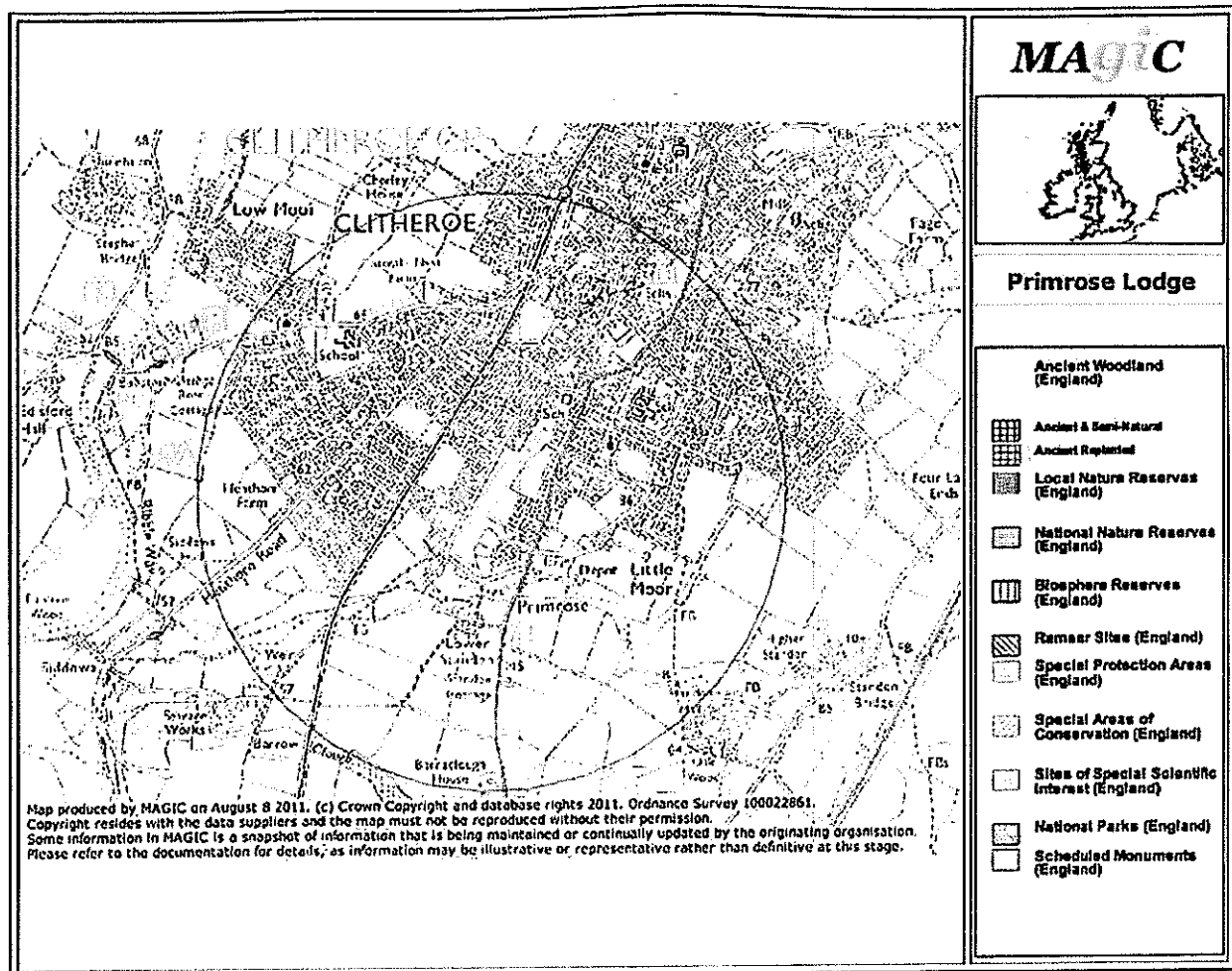
Scheduled Monuments (England)

Legacy UID	Reference	Name	Scale of Capture	Easting	Northing	Date
<u>2884</u>	1016196	CLITHEROE CASTLE; MEDIEVAL ENCLOSURE CASTLE	1:10000	374225 159898	441652 428544	Sat, 10 Apr 1915 00:00:00 GMT

To save the report, select "Save As" from the File menu. Give the report a name of your choice and save it in "Web Page, HTML only" format.

You can then open your report using your web browser software.

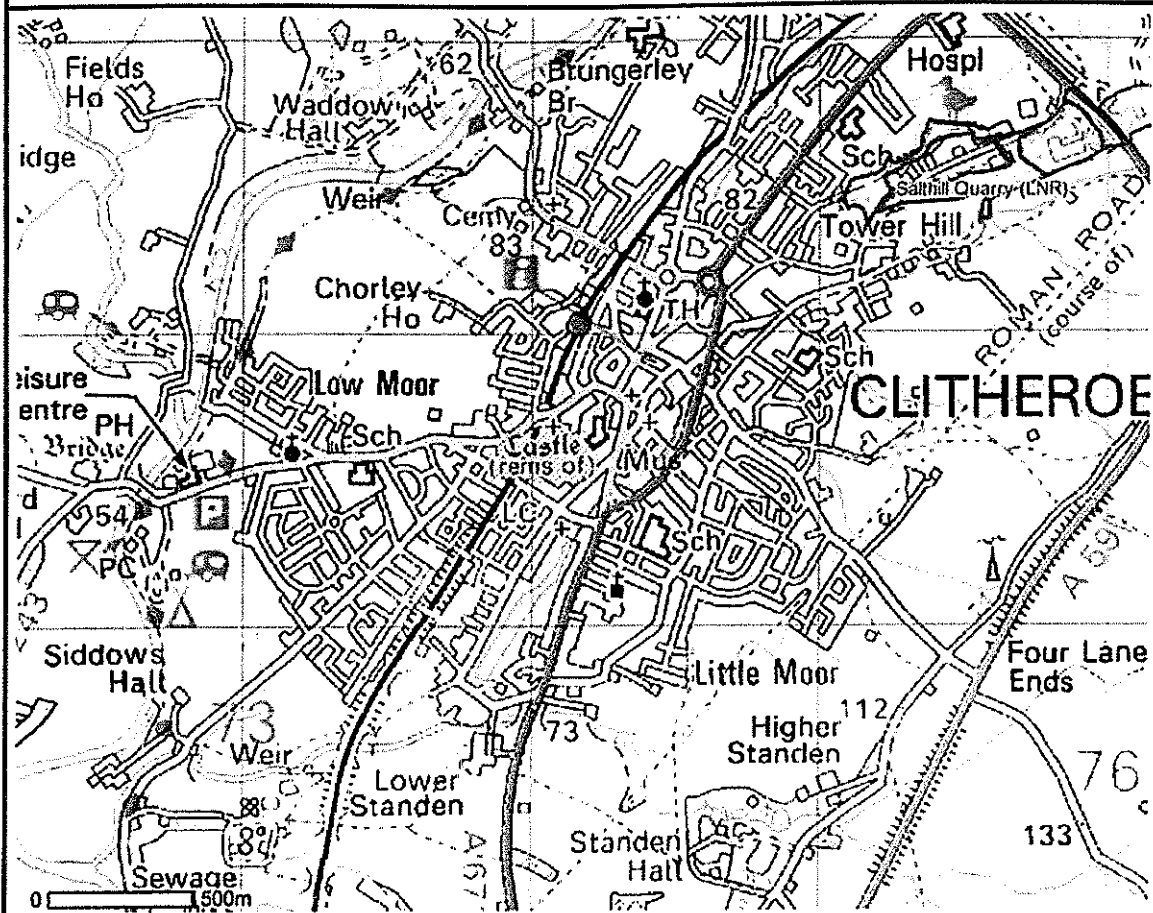
[Print Report](#) | [Close Window](#)



ENGLAND

Nature on the Map

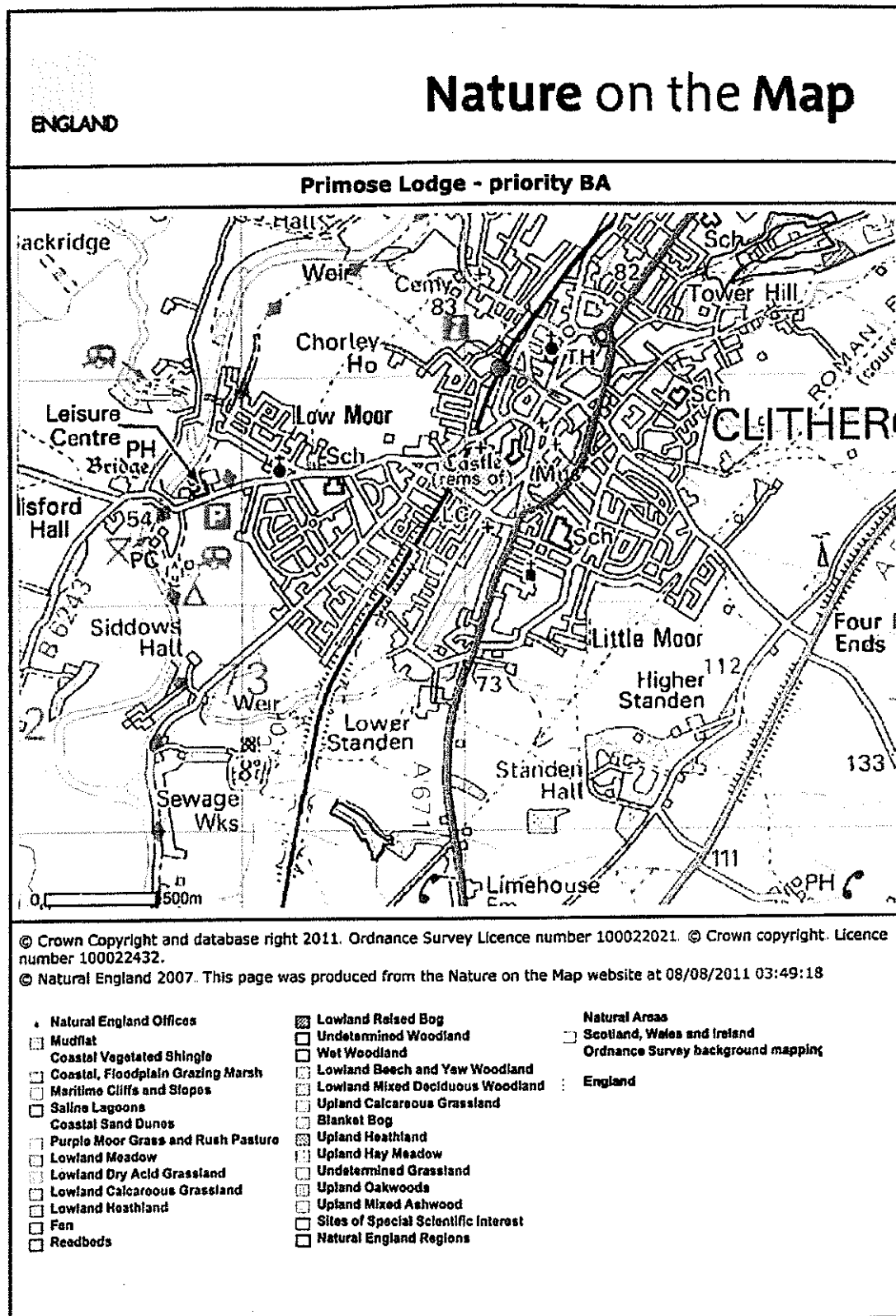
My Map



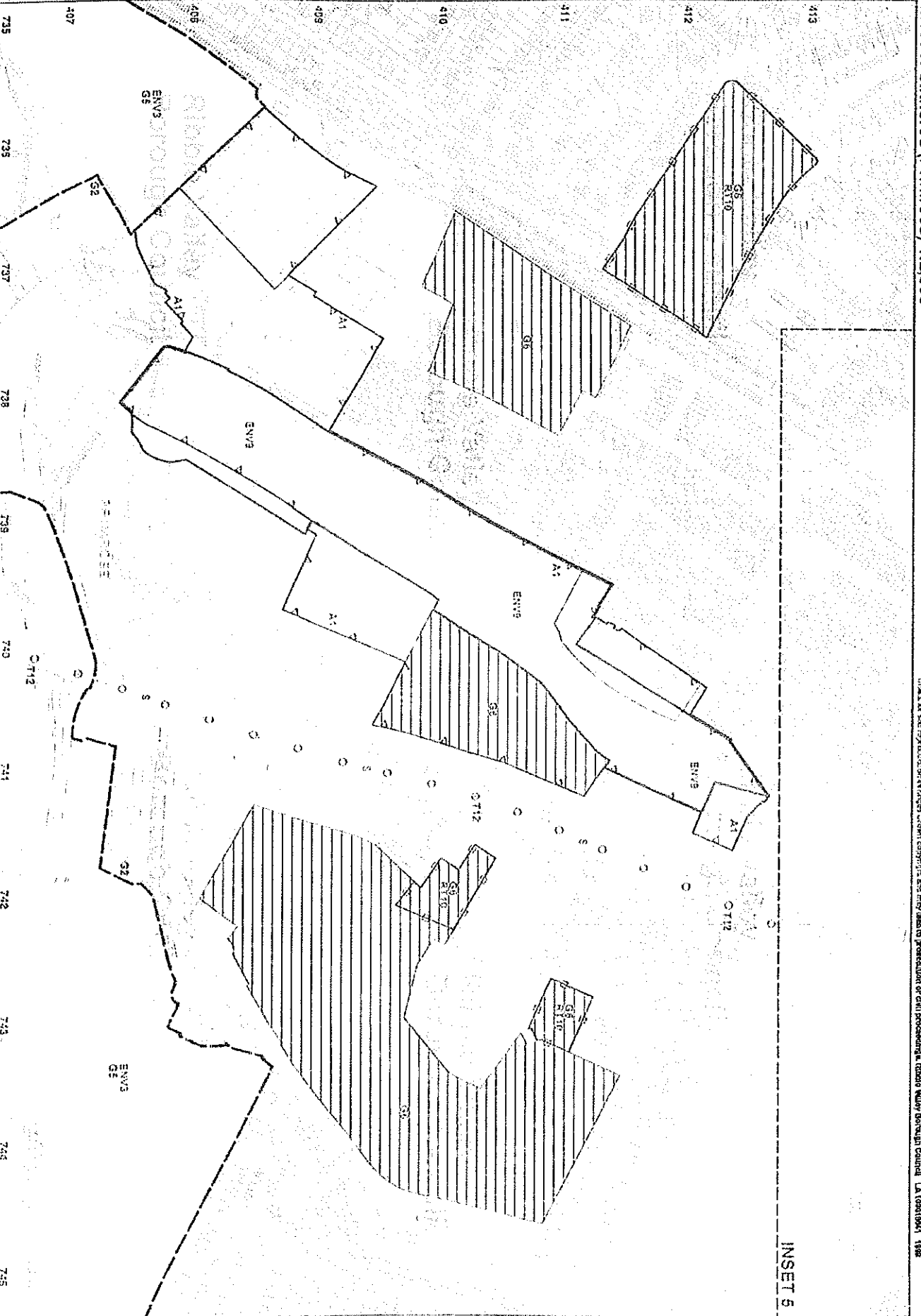
© Crown Copyright and database right 2011. Ordnance Survey Licence number 100022021. © Crown copyright. Licence number 100022432.

© Natural England 2007 This page was produced from the Nature on the Map website at 08/08/2011 02:42:06

- | | |
|-------------------------------|--|
| ★ Natural England Offices | □ Sites of Special Scientific Interest |
| □ National Nature Reserves | □ Natural England Regions |
| □ Local Nature Reserves | □ Natural England Area Teams |
| □ Country Parks | □ Scotland, Wales and Ireland |
| □ Green Flag Country Park | □ Ordnance Survey background mapping |
| □ Non Green Flag Country Park | |
| □ Millennium Greens | □ England |
| □ Doorstep Greens | |



Inset 6. Clitheroe (Primrose) 1:2,500



This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. Crown copyright. Unauthorised reproduction by others is prohibited and may lead to prosecution or civil proceedings. Ordnance Survey, 100 High Street, London, EC2A 4PU. 1998

SHEET 2

Ribble Valley
Districtwide Local Plan
Adopted June 1998

320111064P

-  Inset map
-  Main settlement boundary. Policy G2
-  Village boundary. Policy G4
-  Land outside main settlement / village boundaries. Policy G5
-  Essential open space. Policy G6
-  Flood risk area. Policy G7
-  Notifiable installations / pipeline. Policy G8
-  Open countryside. Policy ENV3
-  Sites of special scientific interest. Policy ENV8
-  Local nature reserve. Policy ENV8
-  County biological heritage sites. Policy ENV9
-  Ancient woodland. Policy ENV12
-  Scheduled ancient monument. Policy ENV14
-  Conservation area. Policy ENV16
-  Historic parks and gardens. Policy ENV21
-  Housing land allocation. Policy H1
-  Industrial land allocation. Policies EMP1; EMP2
-  Industrial land allocation. B1 use only. Policy EMP2
-  Public open space in recreational use. Policy RT10
-  Golf driving range. Policy RT13
-  Proposed bus terminus. Policy T9
-  Lancashire cycleway (N) north (S) south. Policy T12
-  Main shopping centre. Policy S1
-  Principal shopping frontage. Policy S3
-  Primrose area policy. Policy A1
-  Calderstones area policy. Policy A3
-  Central built campus (Calderstones). Policy A3

Note: Inset 6. Clitheroe (Primrose)

-  Potential employment area (subject to constraints)
-  Potential residential area - see policy wording

Other Local Plan policies, not indicated above apply across the whole area or to specific types of development.





320111064P

**APPENDIX TWO
TARGET NOTES**

Target Note TN1

A large stand of Japanese knotweed (400m²) is present in the west of the site near to Woone Lane. This stand is at the top of the bank which slopes down towards Mearley Brook.

Target Note TN2

There are some long-standing fenced areas which are used as allotments by the owners of the terraced houses that front onto Woone Lane. These allotments are immediately behind the terraced houses and are partly outside the land ownership boundaries of the terraced houses. There are dilapidated small buildings and sheds of varying construction located within the allotments. The invasive non-native species Japanese knotweed was found within the allotments, although the above ground stems had been cleared in places and been burned on site. It is assumed that rhizomes of this plant are present underneath the majority of the allotments due to the established nature of the plant in the area immediately surrounding them.

Target Note TN3

Chicken runs used by the owners of the terraced houses on Woone Lane are located between the allotments and Mearley Brook. These chicken runs are outside the land ownership boundaries of the terraced houses. It is assumed that Japanese knotweed rhizomes are present underneath these chicken runs due to the established stands of the invasive plant that surround them, and the presence of Japanese knotweed that was positively identified within one of the chicken runs that the surveyor was allowed to enter.

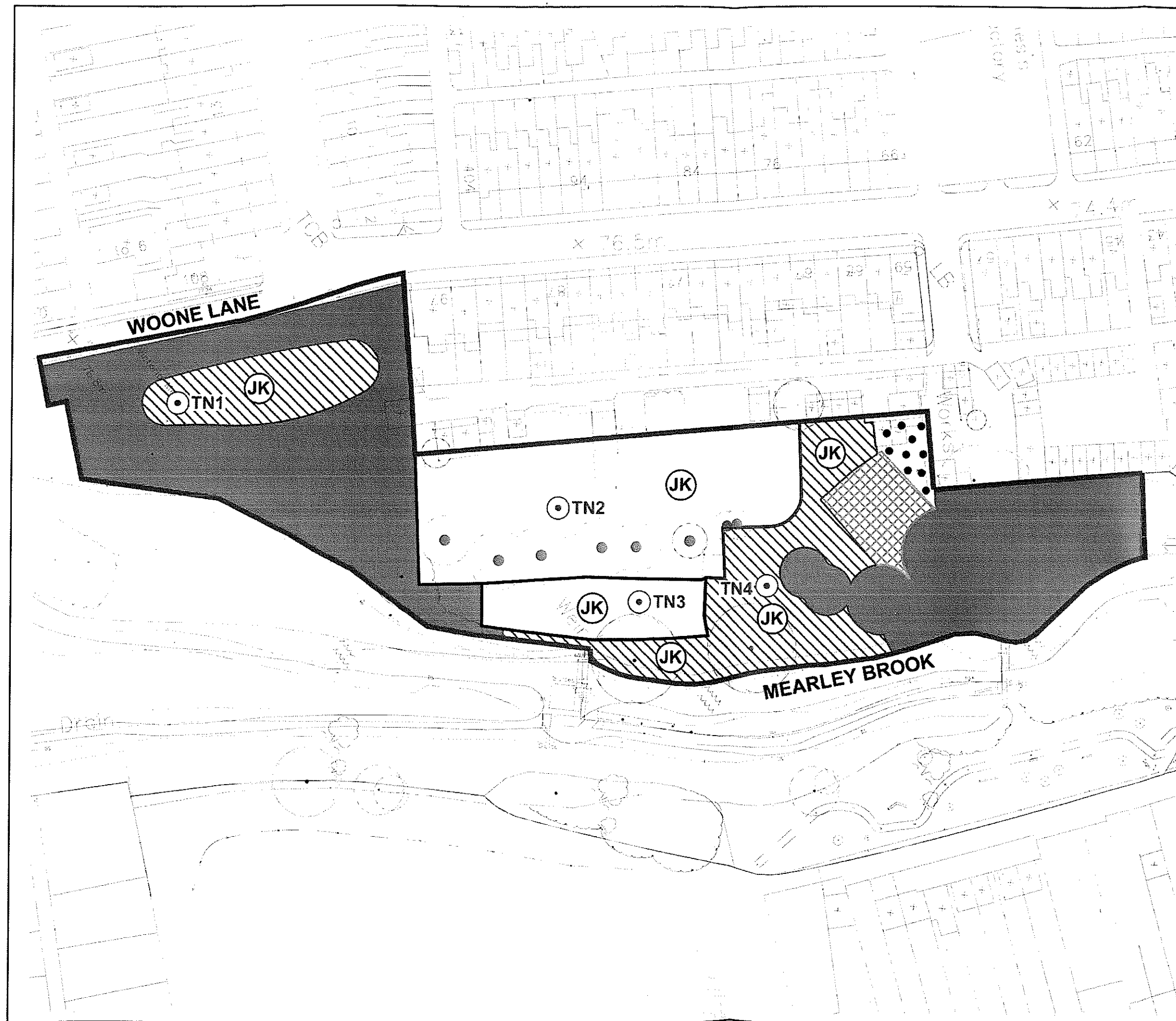
Target Note TN4

Along the bank of Mearley Brook there is a stand of the invasive species Japanese knotweed; this stand is approximately 500m². This stand is positioned within the eastern half of the Mearley Croft site and borders the allotments and chicken runs associated with the existing terraced houses that front onto Woone Lane.



320111064P

DRAWINGS



Key

-  Site boundary
-  Tall ruderal
-  Semi-natural broadleaved woodland
-  Dense scrub
-  Scattered broad-leaved trees
-  Bare ground
-  Japanese knotweed
-  TN4 Target note

320111064P



Reproduced by permission of Ordnance Survey on behalf of Her Majesty's Stationery Office

© Crown Copyright and database right 2010. All rights reserved

B	Amendments to Red Line Boundary	DCS	RAH	12/12/11
A	Amendments to Red Line Boundary	LG	DCS	06/12/11
Rev	Description	Drawn	Approved	Date



Genesis Centre
Birchwood Science Park Warrington
WA3 7BH
Tel: 01925 844004
Fax: 01925 844002
e-mail: tep@tep.uk.com

Project

Mearley Croft

Title

Phase 1 Habitat Survey

Drwg No
D3146.001B

Scale
1:750@ A3

Date
10/11/11

Drawn
CZ

Checked
DCS

Approved
DCS



**PRIMROSE PHASE 2
CLITHEROE
ECOLOGICAL ASSESSMENT 2011
(Report Ref: 3147.001 Version 1.0)**

December 2011

for

**Beck Developments
Challenge House
Challenge Way
Greenbank Business Park
Blackburn
BB1 5QB**

320111064P

Genesis Centre
Birchwood Science Park
Warrington
WA3 7BH

T: 01925 844004
F: 01925 844002
E: tep@tep.uk.com
W: www.tep.uk.com



Written:	Checked:	Approved:
EP	DCS	DCS

CONTENTS

PAGE

1.0	SUMMARY	1
2.0	INTRODUCTION	2
3.0	SITE DESCRIPTION	2
4.0	METHODS	2
	Desktop Survey	2
	Phase 1 Habitat Survey	3
5.0	RESULTS	3
	Desktop Survey	3
	Phase 1 Habitat Survey	4
6.0	CONCLUSIONS	5
7.0	RECOMMENDATIONS	6
8.0	REFERENCES & FURTHER READING	7

APPENDICES

Appendix One Desktop records

DRAWINGS

D3147.001 Phase 1 Habitat Survey

1.0 SUMMARY

- 1.1 TEP was commissioned in October 2011 by Beck Developments to undertake an ecological assessment of the Primrose Phase 2 site, in Clitheroe. The site comprises an improved grassland field adjacent to a railway embankment. A species-poor defunct hedgerow borders the site to the east. There are occasional trees and scrub present around the perimeter of the site.
- 1.2 Proposals for the site include the construction of residential dwellings with associated gardens and parking.
- 1.3 Hedgerows are a UK Biodiversity Action Plan (UKBAP) priority habitat. Any loss of hedgerow habitat will need to be replaced using native woody species of local provenance. Gap planting within the existing defunct hedgerow using native woody species would enhance the value of this habitat for wildlife.
- 1.4 It is recommended that all or part of the site boundaries are enhanced with hedgerow and tree planting; native species of local provenance should be used. This will enhance the wildlife value of the site, creating wildlife corridors around the perimeter.
- 1.5 Nesting birds are protected under the *Wildlife and Countryside Act 1981 (as amended)*. Removal of woody vegetation should be undertaken outside of the nesting bird season (March – August inclusive). If this is not possible a pre-clearance check for nesting birds should be made by an ecologist on the day of removal.
- 1.6 Additional opportunities for bats could be provided through the installation of bat roost units within the new buildings.
- 1.7 Additional opportunities for birds could be provided through the use of bird boxes within the new buildings.
- 1.8 Green trellising, utilising ivy, honeysuckle or berry producing climbers, could be installed on buildings to provide foraging and sheltering opportunities for insects and birds.

320111064P

2.0 INTRODUCTION

- 2.1 TEP was commissioned in October 2011 by Beck Developments to undertake an ecological assessment of the Primrose Phase 2 site in Clitheroe. Proposals for the site include the construction of residential dwellings with associated gardens and parking.
- 2.2 This report has the following objectives:
- to describe the existing vegetation and give an overview of the habitats present on the site;
 - to identify whether there are any features of conservation value, such as species or habitats which are legally protected or of biodiversity importance (including those habitats prioritised in the UK Biodiversity Action Plan (BAP) or the Local BAP);
 - to identify habitat enhancement measures;
 - to advise of further surveys or mitigation requirements that might be needed prior to the proposed works.

3.0 SITE DESCRIPTION

- 3.1 The site is located in Clitheroe, Lancashire at central grid reference SD 734 407. The survey site itself is an improved grassland field with a short sward.
- 3.2 The surrounding landscape comprises residential development, light industry and open agricultural land. To the south of the Primrose Phase 2 site is Pendleton Brook, beyond which there is agricultural land. Residential and industrial buildings are located from the north eastern perimeter of the site. The north western site boundary is directly bordered by a railway line, beyond which there is residential housing and associated gardens.

4.0 METHODS

Desktop Survey

- 4.1 Information regarding historic species records, protected sites, land allocation and relevant policies was gathered from the sources listed in Table 1.

Table 1: Ecological information and consultations

CONSULTEE/SOURCE OF INFORMATION	NATURE OF INFORMATION
Lancashire Environment Record Network	Local designations and species records
MAGIC website (Multi Agency Geographic Information for the Countryside)	Designated sites and land classifications
Natural England – Nature on the Map	Protected habitats
UK Biodiversity Action Plan (UKBAP)	UKBAP priority habitats/species
Lancashire BAP	Local BAP priority habitats/species

Phase 1 Habitat Survey

- 4.2 The habitat survey was undertaken by TEP ecologist David Sweeting on 26th October 2011. The survey followed the methods set out in the '*Handbook for Phase 1 Habitat Survey*' (JNCC, 2003). This survey gives an overview of key habitats and wildlife corridors and identifies likely sites for species of conservation concern.

Limitations

- 4.3 The Phase 1 habitat survey was undertaken outside of the optimum survey season of mid-April to mid-October. However habitat types on site were of limited nature and therefore the timing of the survey is not considered to be a significant limitation.

5.0 RESULTS

Desktop Survey

- 5.1 Desktop information is provided at Appendix One. No nationally or internationally designated wildlife sites are located within the site or within a 1km radius of the site.
- 5.2 Primrose Lodge, which lies 200m to the north east of the site, is designated as a Lancashire County Biological Heritage Site in the *Ribble Valley Districtwide Local Plan (Adopted 1998)*.
- 5.3 There are no records of protected species within the Primrose Phase 2 site. There are records of Eurasian Teal and Pochard within Primrose Lodge, which are on the Lancashire BAP provisional long list, within 1km to the north east of the site.

Phase 1 Habitat Survey

- 5.4 The Phase 1 Habitat survey is illustrated at Drawing D3147.001. The following habitats were identified on site:

- Improved grassland
- Defunct species-poor hedge
- Scattered scrub
- Scattered broad-leaved trees
- Scattered coniferous trees
- Buildings

Improved grassland

- 5.5 The site itself consists of a heavily grazed and cultivated agricultural field the majority of which is improved grassland. This improved grassland extends up to all site boundaries. The area is dominated with perennial rye grass (*Lolium perenne*) with occasional creeping buttercup (*Ranunculus repens*) and broad-leaved dock (*Rumex obtusifolius*) within it.

Defunct species-poor hedgerow

- 5.6 Bordering the site along the north eastern perimeter is a defunct hedgerow. This hedgerow is considered to be species poor, consisting of mainly hawthorn (*Crataegus monogyna*). Due to the lack of diversity within the hedgerow it does not qualify as 'Important' under the Hedgerows Regulations (1997). It does however classify as UKBAP habitat. It is a mature feature with significant intact stretches and is over 4m high.

Scattered scrub

Areas of scattered scrub are located along the southern boundary of the site. These patches of scrub are dominated by hawthorn (*Crataegus monogyna*). The northern corner of the site also has areas of scattered scrub, this was also found to consist of hawthorn.

Scattered broad-leaved/ coniferous trees

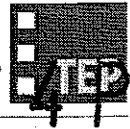
- 5.8 Within the site there are a number of scattered trees; these are predominantly young trees, both broad-leaved and coniferous in nature. These are positioned along the north western and southern site boundary. Tree species within or immediately adjacent to the site include Monterey cypress (*Cupressus macrocarpa*), apple (*Malus* sp.), beech (*Fagus sylvatica*), and hawthorn. Just outside the site boundary at the south west corner is a large, mature sycamore (*Acer pseudoplatanus*) tree.

Buildings

- 5.9 Within the south western corner of the site there is a small wooden shed structure. This structure has no potential for roosting bats.

Potential for species of conservation concern

- 5.10 The scattered broad-leaved and coniferous trees on site are immature and have no cracks or crevices suitable for roosting bats. The small wooden structure within the south west corner of the site has no potential for roosting bats.



However, the trees and species-poor hedgerow provides potential foraging and commuting habitat for bats.

- 5.11 Desktop searches for great crested newts show no records within 500m of the site. There are no water bodies located within the site boundaries. Therefore there are no implications to the development regarding great crested newts.
- 5.12 There is no habitat within the site suitable for water vole or otter. To the south of the site lies Pendleton Brook, this may provide suitable habitat for water voles. However, Pendleton Brook is located over 50m away from the site boundary, therefore there are no implications for the development with regard to water voles.
- 5.13 There was no evidence of badger activity recorded within the site during the habitat survey. The trees, hedgerow and areas of scattered scrub within the site provide nesting habitat for birds. Habitats on site were assessed to have low suitability for reptiles.

6.0 CONCLUSIONS

- 6.1 No internationally or nationally designated wildlife sites will be affected by the proposed works on the site. Primrose Lodge Biological Heritage Site (BHS) is located 200m north east of the Primrose Phase 2 site. There are no implications for the development with regard to wildlife sites.
- 6.2 There is a single UKBAP habitat within the site; a defunct hedgerow along the north eastern site boundary. This hedgerow is tall, mature and has significant intact sections that will support a range of species, some of which will be protected; e.g. nesting birds.
- 6.3 The site was deemed not suitable for great crested newts with no water source and poor habitat quality. Consequently there are no implications for development regarding great crested newts.
- 6.4 The site provides no suitable habitat for water vole or otter. There are no implications for the development of the site in regard to water vole or otter.
- 6.5 There was no evidence of badger identified in the habitat survey. There are no implications for the development of the site with regard to badger.
- 6.6 The broad-leaved trees on site are not suitable for roosting bats although they may provide some potential foraging and commuting habitat for bats.
- 6.7 All nesting birds are protected under the *Wildlife and Countryside Act 1981* (as amended). There is no provision under the licensing system for disturbance or destruction of nests to facilitate development, so there are potential implications for the timing of vegetation clearance works with regard to nesting birds.

- 6.8 The grassland within the site has low structural diversity and has low habitat suitability for reptiles. There are also no records of reptiles within 500m of the site. There are therefore no implications for development of this site with regard to reptiles.

7.0 RECOMMENDATIONS

- 7.1 The trees and hedgerow on and adjacent to the site are likely to provide foraging habitat for bats, and nesting habitat for birds. It is recommended that the trees and hedgerow along all site boundaries are retained within the development proposals. It is likely that the main access road into the site will correspond at least partly with an existing gap in this hedge, however if any of the trees or sections of hedgerow on site are to be removed, replacement planting should be incorporated into the landscape proposals in order to maintain and enhance the biodiversity of the site.
- 7.2 Any loss of UKBAP hedgerow habitat will trigger the requirement for replacement habitat to be provided. New hedgerow habitat should be created using native woody species of local provenance. Gap planting within the existing defunct hedgerow using native woody species would enhance the value of this habitat feature for wildlife.
- 7.3 It is recommended that all or part of the site boundaries are enhanced with hedgerow and tree planting; native species of local provenance should be used. This will enhance the wildlife value of the site; creating wildlife corridors around the perimeter.
- 7.4 Nesting birds are protected under the *Wildlife and Countryside Act 1981 (as amended)*. Removal of woody vegetation should be undertaken outside of the nesting bird season (March – August inclusive). If this is not possible a pre-clearance check should be made by an ecologist on the day of removal.
- 7.5 Additional opportunities for bats could be provided through the installation of bat roost units within the new buildings.
- 7.6 Additional opportunities for birds could be provided through the use of bird boxes within the new buildings.
- 7.7 Green trellising, utilising ivy, honeysuckle or berry producing climbers, could be installed on buildings to provide foraging and sheltering opportunities for insects and birds.

8.0 REFERENCES & FURTHER READING

DEFRA (2002) *Working with the grain of nature – A biodiversity strategy for England*. DEFRA Publications, London

JOINT NATURE CONSERVATION COMMITTEE (2003) *Phase 1 Habitat Survey*. JNCC. Peterborough

OFFICE OF THE DEPUTY PRIME MINISTER (2005) '*Planning Policy Statement 9: Geological and Biological Conservation*' HMSO, Norwich

OFFICE OF THE DEPUTY PRIME MINISTER (2005) '*Government Circular: Geological and Biological Conservation – Statutory obligations and their implications within the planning system*' ODPM circular 06/2005, DEFRA circular 01/2005

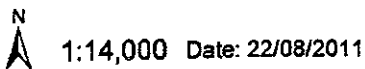
STACE, C. A. (1997) *Flora of the British Isles, 2nd ed.* Cambridge University Press

TUCKER GM & HEATH MF (1994) *Birds in Europe: Their Conservation Status*, Birdlife International, Cambridge.

320111064P

320111064P

**APPENDIX ONE
DESKTOP RECORDS**



LEPN



Lancashire County Heritage Sites

Biological Heritage Site

**Biological Heritage Sites
Partnership:**
● Lancashire County Council
● Wildlife Trust for Lancashire
● Natural England

This form may contain privileged and confidential information. Permission must be obtained from Lancashire County Council and the Wildlife Trust for Lancashire before reproducing or divulging information contained on this form to any party not directly in receipt of the form from the copyright holders.

Site Name: Primrose Lodge

Site Ref: 74SW03

Approved: 08 September 1993

Area (ha): 4.27

Date written/last updated:

Grid Ref: SD739410

Owner/Occupier:

Districts:
Ribbles Valley

Parishes:
Clitheroe

Description:
To be completed.

Guideline(s) for Site Selection:

Artificial Habitats (Ar1)

Flowering Plants and Ferns (Ff4)

Other Information/Comments:

320111064P

Lancashire County Heritage Sites

Biological Heritage Site

Primrose Lodge



Site Boundary

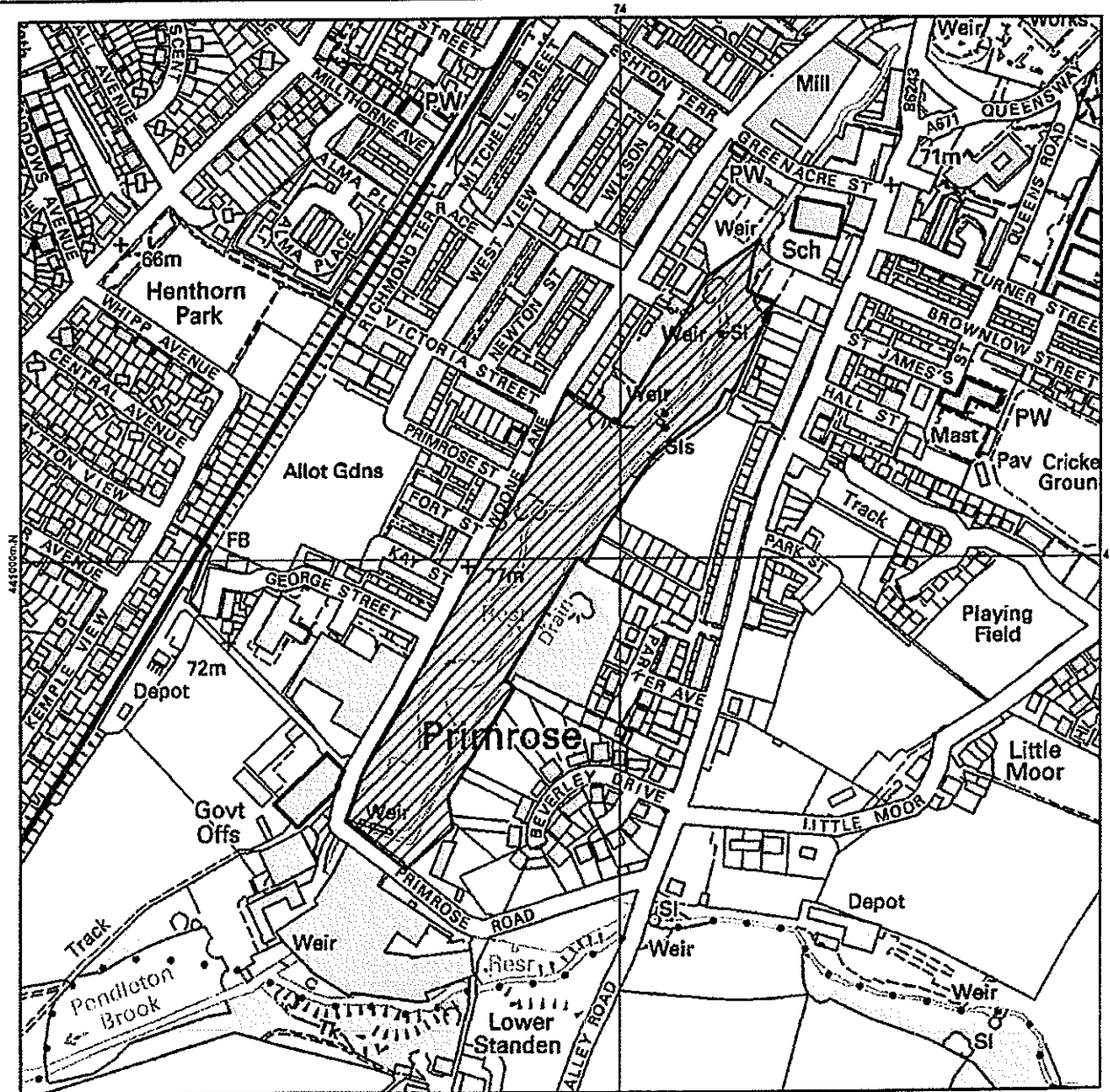
This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Lancashire County Council 100023320 2011

This map shows only the boundary of the Biological Heritage Site named above. It does not show any other designated sites which may occur within the area covered by the map.

Ref No. 74SW03

Biological Heritage Sites Partnership

© Lancashire County Council
© The Wildlife Trust for Lancashire,
Manchester and North Merseyside
Natural England



Grid ref. SD739410

Scale 1:5,000

Site approved 08/09/1993

Map 1 of 1



Lancashire
County Council



Lancashire County Heritage Sites

Biological Heritage Site

**Biological Heritage Sites
Partnership:**
• Lancashire County Council
• Wildlife Trust for Lancashire
Natural England

This form may contain privileged and confidential information. Permission must be obtained from Lancashire County Council and the Wildlife Trust for Lancashire before reproducing or divulging information contained on this form to any party not directly in receipt of the form from the copyright holders.

Site Name: Barrow Clough Wood

Site Ref: 73NW11

Approved: 08 September 1993

Area (ha): 3.68

Date written/last updated:

Grid Ref: SD736399

Owner/Occupier:

Districts: Ribble Valley
Parishes: Pendleton

Description:
To be completed

Guideline(s) for Site Selection:

Woodland and Scrub (Wd1)

Other Information/Comments:

320111064P

Lancashire County Heritage Sites

Biological Heritage Site

Barrow Clough Wood

**Site Boundary**

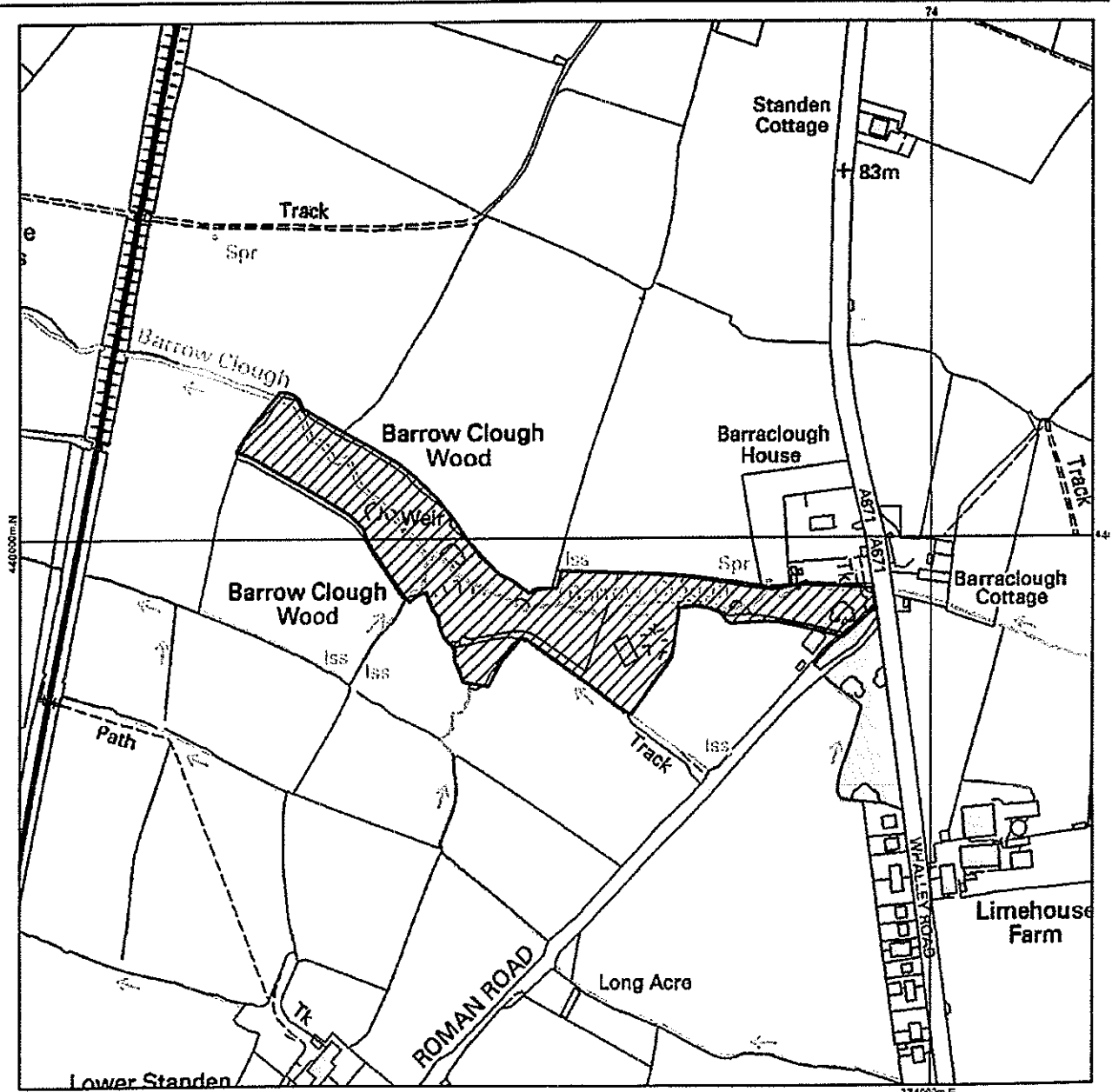
This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Lancashire County Council 100023320 2011.

This map shows only the boundary of the Biological Heritage Site named above. It does not show any other designated sites which may occur within the area covered by the map.

Ref No. 73NW11

Biological Heritage Sites Partnership

© Lancashire County Council
 © The Wildlife Trust for Lancashire,
 Manchester and North Merseyside
 Natural England



Grid ref. SD736399

Scale 1:5,000

Site approved 08/09/1993

Map 1 of 1



Lancashire
 County Council



Lancashire County Heritage Sites

Biological Heritage Site

**Biological Heritage Sites
Partnership:**

- © Lancashire County Council
- © Wildlife Trust for Lancashire
Natural England

This form may contain privileged and confidential information. Permission must be obtained from Lancashire County Council and the Wildlife Trust for Lancashire before reproducing or divulging information contained on this form to any party not directly in receipt of the form from the copyright holders.

Site Name: Clitheroe Castle Knoll

Site Ref: 74SW05

Approved: 08 September 1993

Area (ha): 1.04

Date written/last updated:

Grid Ref: SD742417

Owner/Occupier:

Districts:
Ribbles Valley

Parishes:
Clitheroe

Description:

To be completed.

Guideline(s) for Site Selection:

Rock (Ro2)

Other Information/Comments:

Site Check Report
Report generated on August 8 2011.

You clicked on the point:
Grid Ref: SD 739 409
Full Grid Ref: 373912 , 440982

The following features have been found within 1,000 metres of your search point:

Counties, Metropolitan Districts and Unitary Authorities (GB)

Name	Geographic Level
LANCASHIRE COUNTY	

NUTS1 - Government Office Regions (GB)

Name	Reference	Hotlink
NORTH WEST	UKD	http://www.statistics.gov.uk/geography/nuts_nw.asp

Ancient Woodland (England)

Grid Reference	Wood Name	Theme ID	Theme Name
sd735400		1413061	ANCIENT & SEMI-NATURAL WOODLAND

Local Nature Reserves (England)

There are no features within your search area

National Nature Reserves (England)

There are no features within your search area

Biosphere Reserves (England)

There are no features within your search area

Ramsar Sites (England)

There are no features within your search area

Special Protection Areas (England)

There are no features within your search area

Special Areas of Conservation (England)

There are no features within your search area

Sites of Special Scientific Interest (England)

There are no features within your search area

National Parks (England)

There are no features within your search area

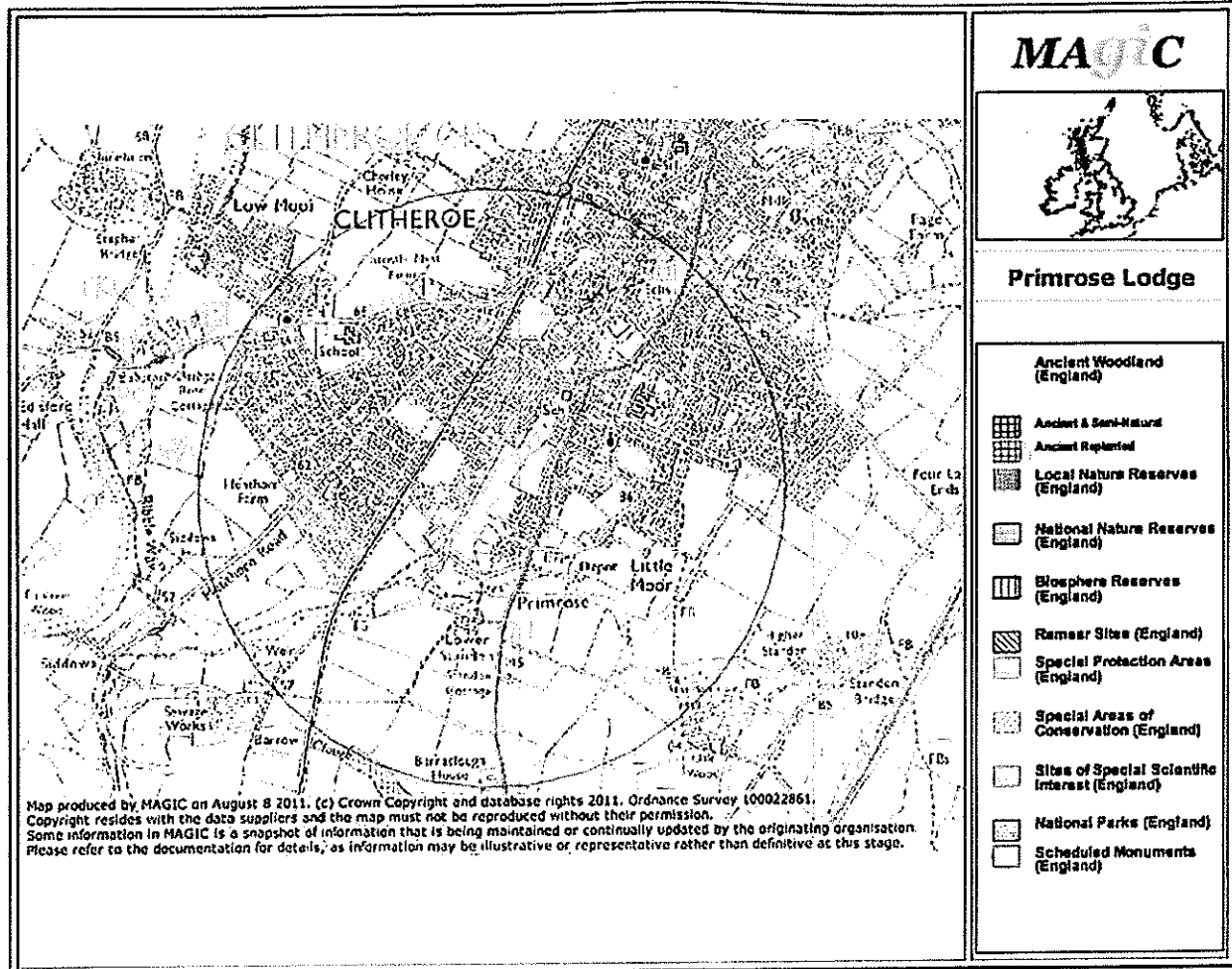
Scheduled Monuments (England)

Legacy UID	Reference	Name	Scale of Capture	Easting	Northing	Date
<u>27334</u>	1016196	CLITHEROE CASTLE; MEDIEVAL ENCLOSURE CASTLE	1:10000	374225 159896	441652 428544	Sat, 10 Apr 1915 00:00:00 GMT

To save the report, select "Save As" from the File menu. Give the report a name of your choice and save it in "Web Page, HTML only" format.

You can then open your report using your web browser software.

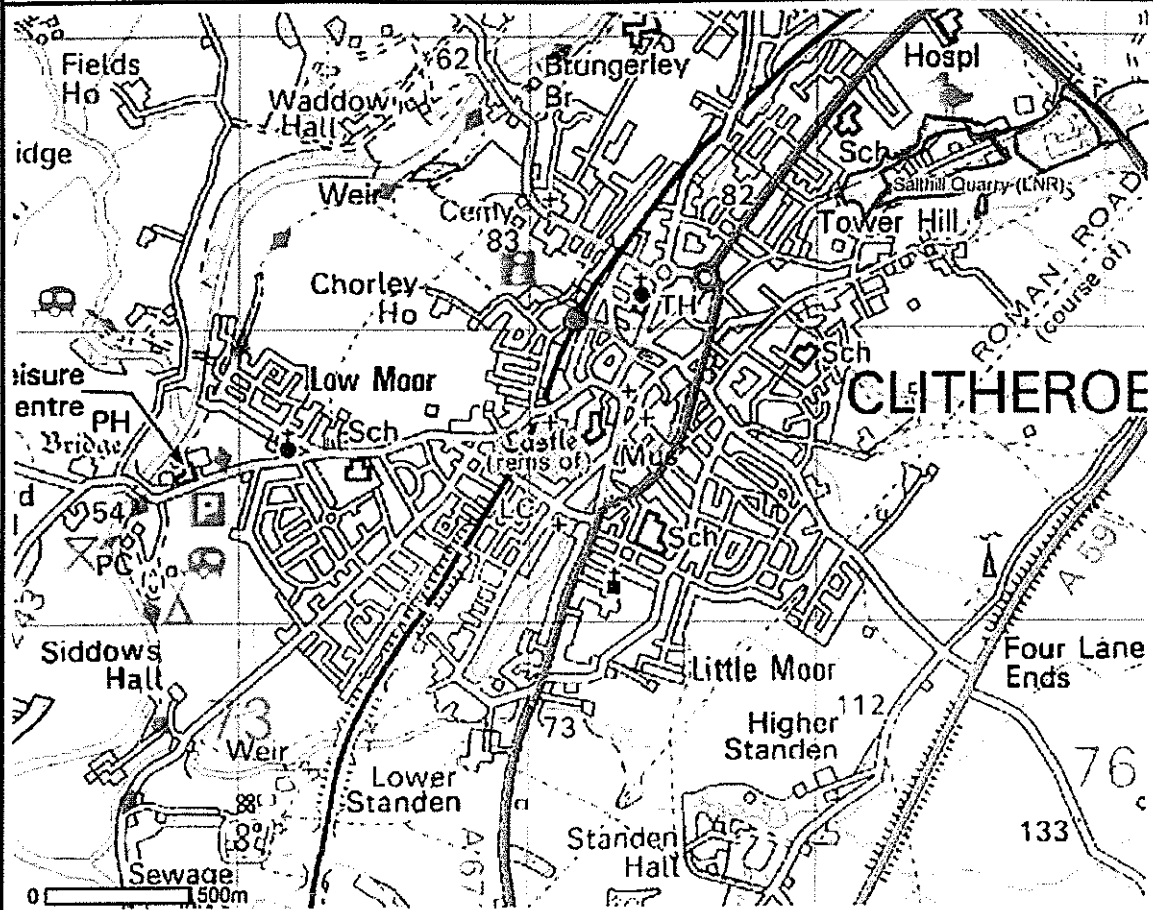
[Print Report](#) | [Close Window](#)



ENGLAND

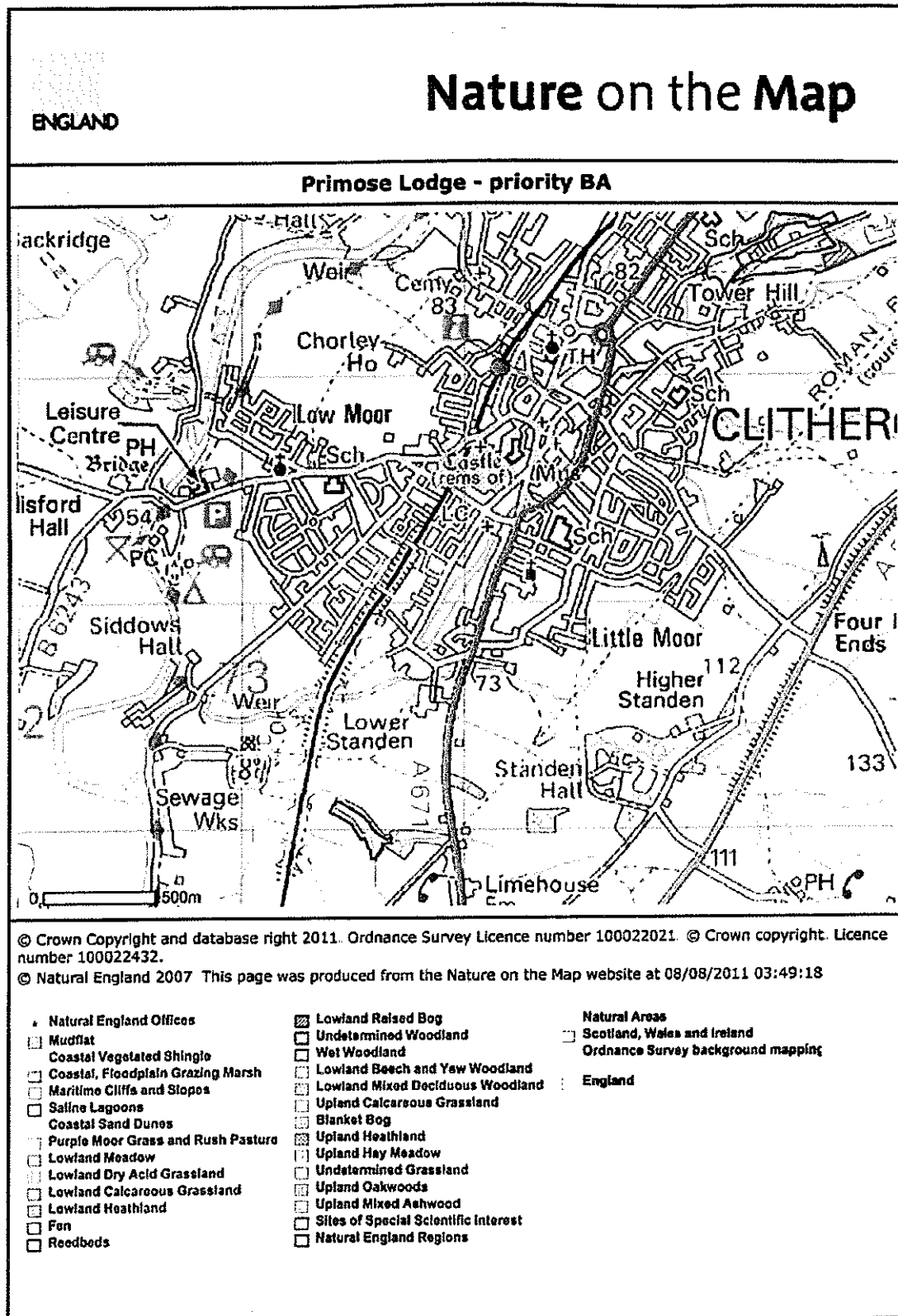
Nature on the Map

My Map



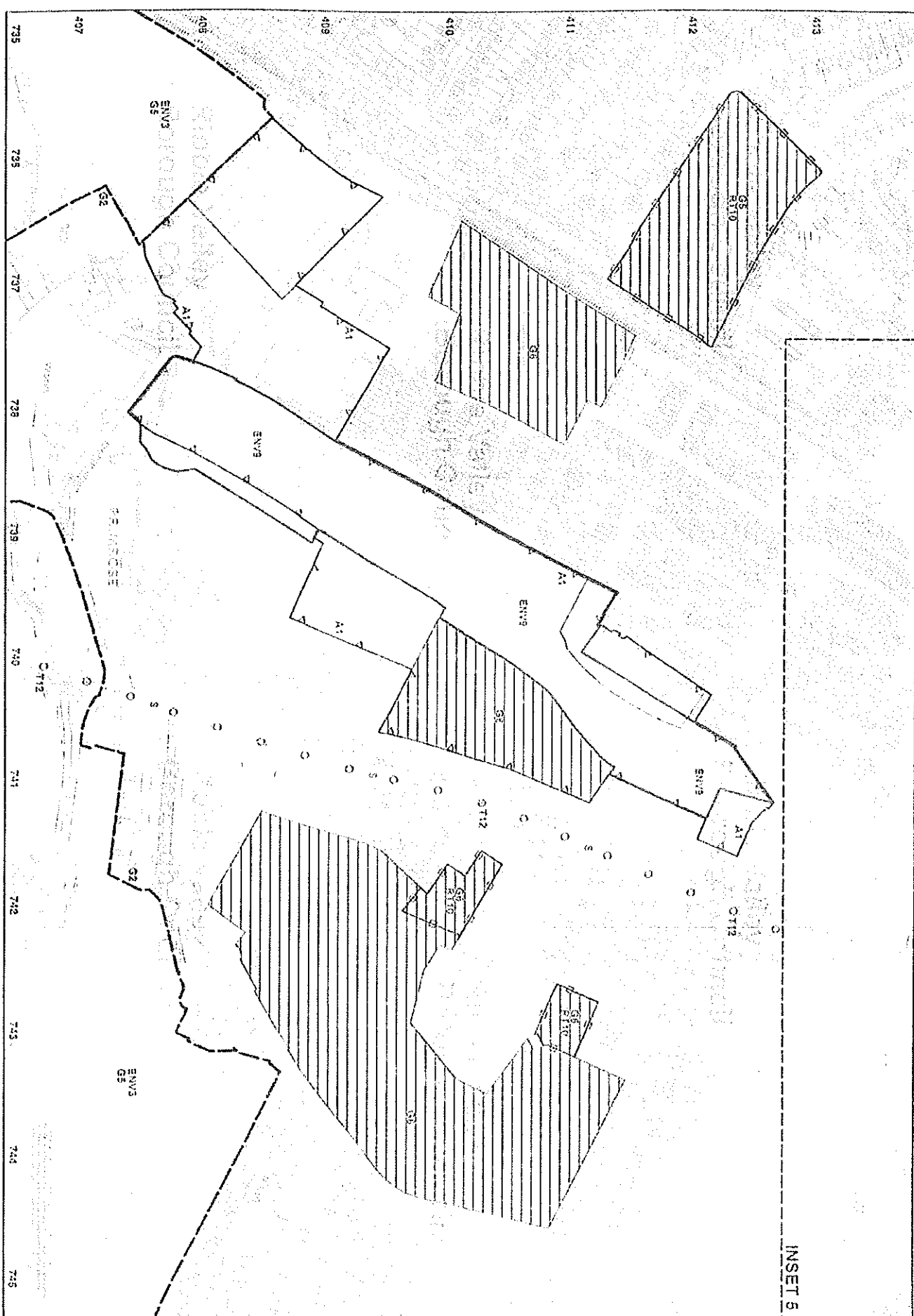
© Crown Copyright and database right 2011 Ordnance Survey Licence number 100022021. © Crown copyright. Licence number 100022432.
 © Natural England 2007 This page was produced from the Nature on the Map website at 08/08/2011 02:42:06

- | | |
|-------------------------------|--|
| ★ Natural England Offices | □ Sites of Special Scientific Interest |
| □ National Nature Reserves | □ Natural England Regions |
| □ Local Nature Reserves | □ Natural England Area Teams |
| □ Country Parks | □ Scotland, Wales and Ireland |
| ■ Green Flag Country Park | □ Ordnance Survey background mapping |
| ■ Non Green Flag Country Park | □ England |
| ■ Millennium Greens | |
| ■ Doorstep Greens | |



Inset 6. Citheroe (Primrose) 1:2,500

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office & Crown copyright. All other text reproduced on this map is shown as copyright and may be reproduced or otherwise used without the permission of the copyright owner. LA 1000/1001 1999



SHEET 2

Ribble Valley
Districtwide Local Plan
Adopted June 1998

-  Inset map
-  Main settlement boundary. Policy G2
-  Village boundary. Policy G4
-  Land outside main settlement / village boundaries. Policy G5
-  Essential open space. Policy G6
-  Flood risk area. Policy G7
-  Notifiable installations / pipeline. Policy G8
-  Open countryside. Policy ENV3
-  Sites of special scientific interest. Policy ENV8
-  Local nature reserve. Policy ENV8
-  County biological heritage sites. Policy ENV9
-  Ancient woodland. Policy ENV12
-  Scheduled ancient monument. Policy ENV14
-  Conservation area. Policy ENV16
-  Historic parks and gardens. Policy ENV21
-  Housing land allocation. Policy H1
-  Industrial land allocation. Policies EMP1; EMP2
-  Industrial land allocation. B1 use only. Policy EMP2
-  Public open space in recreational use. Policy RT10
-  Golf driving range. Policy RT13
-  Proposed bus terminus. Policy T9
-  Lancashire cycleway (N) north (S) south. Policy T12
-  Main shopping centre. Policy S1
-  Principal shopping frontage. Policy S3
-  Primrose area policy. Policy A1
-  Calderstones area policy. Policy A3
-  Central built campus (Calderstones). Policy A3

Note: Inset 6. Clitheroe (Primrose)



Potential employment area (subject to constraints)



Potential residential area - see policy wording

Other Local Plan policies, not indicated above, apply across the whole area or to specific types of development.



320111064P

DRAWINGS

320111064P

Key

- Site boundary
 Improved grassland
 Defunct species-poor hedge
 Scattered scrub
 Scattered broad-leaved trees
 Scattered coniferous trees
 Buildings
 Rubble

Species Codes

- Ap Sycamore
 Cm Hawthorn
 Me Monterey cypress
 Md Apple
 Fs Beech



Reproduced by permission of Ordnance Survey on behalf of Her Majesty's Stationery Office.

© Crown Copyright and database right 2010. All rights reserved.

Rev	Description	Drawn	Approved	Date



Genesis Centre
 Birchwood Science Park Warrington
 WA3 7BH
 Tel 01925 844004
 Fax 01925 844002
 e-mail tep@tep.uk.com

Project

Primrose Phase 2

Title

Phase 1 Habitat Survey

Drwg No

D3147.001

Scale

1:1000@ A3

Date

10/11/11

Drawn

CZ

Checked

DCS

Approved

DCS

