# **Desk-Based Assessment** of a proposed extension to Clifton Quarry, Severn Stoke, Worcestershire







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## Contents Summary

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Re	port	
1	Background	3
1.1	Reasons for the project	
1.2	Planning background	3
2	Aims	3
3	Methods	
3.1	Personnel	
3.2	Documentary research	_
3.3	List of sources consulted	
3.4	Other methods	5
3.5	Impact assessment criteria	5
4	The application site	6
4.1	Location and size	6
4.2	Topography, geology and soils	6
4.3	Current land-use	7
4.4	Historic land-use and archaeological character	7
5	Heritage assets	7
5.1	Designated heritage assets	
5.2	Undesignated heritage assets	
5.3	Potential heritage assets	8
6	Assessment of the significance of heritage assets	10
6.1		
6.	.1.1 Listed building	
6.	.1.2 Registered parks and gardens	10
6.2	Undesignated assets	10
6.	.2.1 Sites of archaeological interest	10
7	The impact of the development	11
7.1	Impacts during construction	11
7.2	,	
7.3	Residual impacts	12
8	Recommendations	12
a	Acknowledgements	13

# Desk-Based Assessment of a proposed extension to Clifton Quarry, Severn Stoke, Worcestershire

#### **Author Andrew Mann**

## **Summary**

A desk-based assessment for the historic environment was undertaken at Clifton Quarry, Severn Stoke, Worcestershire (NGR 385001 245849). It was undertaken at the request of Pleydell Smithyman Limited on behalf of Lafarge Tarmac, who intend to extend their existing quarry to the east and the south of the currently permitted extraction areas, for which a planning application will be submitted.

This report describes and assesses the significance of the heritage assets (and potential heritage assets) that are potentially affected by the application. The setting of heritage assets is considered. The potential impact of the application, and the need for further on-site evaluation, is assessed.

The proposed extension areas are likely to contain dispersed Neolithic and Bronze Age archaeological remains representing transient occupation and utilisation of the valley floor. Such remains, including burnt mounds, are likely to be more common along the edges of the palaeochannels which run along the margins of, and may extend into, the proposed extension areas. These are liable to be of local, regional or potentially national importance. In the centre of the eastern extension area there is a ring-ditch (a probable Bronze Age round barrow) and further east, outside of the eastern extension area, there are numerous other prehistoric funerary and possible ceremonial sites. Similar sites may therefore be encountered within the eastern extension area

It is probable that a nationally significant Early Iron Age settlement, previously excavated to the west, extends into the northern part of the eastern extension area. A Roman settlement, with possible Iron Age origins, is visible through cropmarks within the southern end of the eastern extension area and is liable to be of local or regional importance. This settlement may also contain a Roman road, previously seen beneath the A38 to the south. Any significant archaeological remains within the southern extension area are likely to be buried by alluvium. As this area is likely to have been prone to flooding it is unlikely that extensive settlement remains will be encountered. The southern area is however likely to contain the plough damaged remains of medieval ridge and furrow and water meadow ditches. It may also contain the remains of a WW2 search light battery.

It is suggested that to further understand the potential of the proposed extension areas and to characterise the identified archaeological remains a programme of geophysical analysis and archaeological evaluation be undertaken. This work will aim to ensure that the Worcestershire County Council archaeological planning advisor has sufficient information to judge the acceptability of the proposed extension areas and inform determination of a suitable archaeological mitigation strategy.

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## Report

## 1 Background

#### 1.1 Reasons for the project

A desk-based assessment was undertaken at land to the east and south of Clifton Quarry, Severn Stoke, Worcestershire (NGR 385001 245849, Fig 1). It was undertaken at the request of Pleydell Smithyman Limited on behalf of Lafarge Tarmac, who intends to extend quarrying operations for which a planning application will be submitted to Worcestershire County Council.

The proposed development site is considered to include potential heritage assets the significance of which may be affected by the application.

The project conforms to the Standard and guidance for historic environment desk-based assessment (IfA 2012).

The event reference for this project, given by the HER is WSM 55820.

#### 1.2 Planning background

Present government planning policy is contained within the *National Planning Policy Framework* (DCLG 2012). This is supplemented by detailed guidance which had related to earlier government policy but which is at least partially still relevant to the present policy (DCLG/DCMS/EH 2010).

#### 2 Aims

The general aims of this assessment are to:

- establish the nature and extent of the heritage assets;
- assesses the significance of the heritage assets within the application site and affected by the proposed development;
- assess the impact of the application on the heritage assets.

#### 3 Methods

#### 3.1 Personnel

The assessment was undertaken by Andrew Mann (MSc); who joined Worcestershire Archaeology in 2004 and has been practicing archaeology since 2001. The project manager responsible for the quality of the project was Robin Jackson (BA, AIFA) who has over 20 years experience of working with the mineral extraction industry in the region. Illustrations were prepared by Andrew Mann and Carolyn Hunt.

#### 3.2 Documentary research

All relevant information on the history of the site and past land-use was collected and assessed. Records of known archaeological sites and monuments were obtained from Worcestershire Historic Environment Record (HER). Historic maps and published sources were consulted at Worcestershire Archaeology and Archives Service.

The results are mapped on Figures 2-7 and a summary of individual features of the historic environment is given in Appendix 1. Event records have been omitted where this would repeat information in other record types, and would not materially affect the assessment. HER references have been used throughout this assessment but during its preparation.

#### 3.3 List of sources consulted

Cartographic sources

 Clifton Manor Severn Stoke Pre-enclosure map, Mid 18<sup>th</sup> century, WRO 705:73 BA 14450/246

- Clifton Manor Severn Stoke Post-enclosure map, Mid 18<sup>th</sup> century, WRO 705:73 BA 14450/247
- Dawson Robert map of Great Malvern. 1812 (British Library ref OSD 216)
- 1840 Severn Stoke Tithe Plan, WRO BA 1572 s760/541
- 1888 1<sup>st</sup> edition Ordnance Survey map, Worcestershire sheet 39.XL SE, scale 6":1 mile
- 1905 Ordnance Survey map, Worcestershire sheet 39.XL SE, scale 6": mile
- 1930 Ordnance Survey map, Worcestershire sheet 39.XL SE, scale 6":1 mile
- 1996 Ordnance Survey Explorer 190: Malvern Hills and Bredon Hill, 1:25,000

#### LiDAR

1m and 2m resolution LiDAR surrounding the site. Covering the following six 1km tiles

384 000/244 000

385 000/244 000

384 000/245 000

385 000/245 000

384 000/246 000

385 000/246 000

#### Aerial photographs

- 1951 aerial photos held by the Archives and Archaeology Service (Ref F470 BA10420)
- 1999 aerial photos held by the Archives and Archaeology Service
- 2005 aerial photos held by the Archives and Archaeology Service

#### Documentary sources

- DCLG 2012 National Planning Policy Framework, Department for Communities and Local Government
- DCLG/DCMS/EH 2010 PPS5 Planning for the historic environment: historic environment planning practice guide, Department for Communities and Local Government/Department for Culture, Media and Sport/English Heritage
- English Heritage 2011 The setting of heritage assets, English Heritage
- IfA 2012 Standard and guidance for historic environment desk-based assessment, Institute for Archaeologists, updated 16 November 2012
- Jackson, R, and Dalwood, H, 2007 Archaeology and aggregates in Worcestershire: a resource assessment and research agenda (PNUM 3966), WCC Historic Environment and Archaeology Service, Internal report, 1477. Available @ http://archaeologydataservice.ac.uk/archives/view/worcsagg eh 2007/
- Mawer, A, and Stenton, F M, 1927 The place-names of Worcestershire, Cambridge University Press, London
- Mindykowski, A, Atkin, M, Hancox, E, and Rogers, T 2010 Historic environment assessment for the South Worcestershire Joint Core Strategy area, Historic Environment and Archaeology Service, Worcestershire County Council, report 1672

- Ragg, J M, Beard, G R, George, H, Heaven, F W, Hollis, J M, Jones, R J A, Palmer, R C, Reeve, M J, Robson, J D, and Whitfield, W A D, 1984 Soils and their use in midland and western England, Soil Survey of England and Wales, 12
- RCHME, 1931 An inventory of the historical monuments in Herefordshire: I, south-west, Royal Commission on the Historical Monuments of England
- Thorn, F, and Thorn, C, 1982 Domesday Book Worcestershire, Chichester
- VCH I, Page, W (ed), 1913 Victoria History of the County of Worcestershire, I

#### Documentary sources

• Site archives from previous excavations and watching briefs at Clifton Quarry (2005-2009).

#### 3.4 Other methods

A site visit was undertaken on 24-1-14.

Consultation has been undertaken with the Mike Glyde (Curator) to establish the key issues of importance in decision-making in response to the planning application.

This assessment is limited to consideration of heritage assets and potential assets that are relevant to the application site.

#### 3.5 Impact assessment criteria

The criteria cited in Table 1 have been used.

Major Beneficial: Demonstrable improvement to a designated heritage asset of the highest order (or its setting), or non-designated asset (or its setting) of archaeological interest of demonstrable significance equal to that of a scheduled monument. Designated assets will include scheduled monuments, grade I/II\* listed buildings, grade I/II\* registered parks and gardens, registered battlefields, protected wrecks or World Heritage Sites. Improvement may be in the asset's management, its amenity value, setting, or documentation (for instance enhancing its research value). It may also be in better revealing a World Heritage Site or Conservation Area's significance.

**Beneficial**: Demonstrable improvement to a designated heritage asset (or its setting), or non-designated asset (or its setting) of archaeological interest such that the level of improvement will demonstrably have a minor affect the area and its heritage resource, either at a local or regional level. For instance grade II listed buildings, Conservation Areas and undesignated heritage assets important at a sub-national level. Improvement may be in the asset's management, its amenity value, setting, or documentation (for instance enhancing its research value).

Not Significant: Impacts that have no long-term effect on any heritage asset.

**Minor Adverse**: Minor harm to a designated heritage asset (or its setting), or non-designated asset (or its setting) of archaeological interest such that the level of harm will demonstrably have a minor affect the area and its heritage resource, either at a local or regional level. For instance grade II listed buildings, Conservation Areas and undesignated heritage assets important at a sub-national level.

**Moderate Adverse:** Minor harm to a designated heritage asset (or its setting) of the highest significance, or non-designated asset (or its setting) of archaeological interest of demonstrable significance equal to that of a scheduled monument. For instance scheduled monuments, grade I/II\* listed buildings, grade I/II\* registered parks and gardens, registered battlefields, protected wrecks or World Heritage Sites.

Harm to a designated heritage asset (or its setting), or non-designated asset (or its setting) of archaeological interest such that the level of harm will demonstrably affect the area and its heritage resource, either at a local or regional level. For instance grade II listed buildings, Conservation Areas and undesignated heritage assets important at a sub-national level.

**Major Adverse**: Harm to a designated heritage asset (or its setting) of the highest significance, or non-designated asset (or its setting) of archaeological interest of demonstrable significance equal to that of a scheduled monument. For instance scheduled monuments, grade I/II\* listed buildings, grade I/II\* registered parks and gardens, registered battlefields, protected wrecks, World Heritage Sites or harm to a building or other element that makes a positive contribution to the significance of a Conservation Area as a whole.

Substantial harm to, or loss of, a designated heritage asset (or its setting), or non-designated asset (or its setting) of archaeological interest such that the level of harm or loss will demonstrably affect the area and its heritage resource, either at a local or regional level. For instance grade II listed buildings, Conservation Areas and undesignated heritage assets important at a sub-national level.

**Severe Adverse**: Substantial harm to, or loss of, a designated heritage asset (or its setting) of the highest significance, or non-designated asset (or its setting) of archaeological interest of demonstrable significance equal to that of a scheduled monument. For instance scheduled monuments, grade I/II\* listed buildings, grade I/II\* registered parks and gardens, registered battlefields, protected wrecks, World Heritage Sites or the loss of a building or other element that makes a positive contribution to the significance of a Conservation Area as a whole.

**Unknown:** Where there is insufficient information to determine either significance or impact for any heritage asset, or where a heritage asset is likely to exist but this has not been established, or where there is insufficient evidence for the absence of a heritage asset. For instance where further information will enable the planning authority to make an informed decision.

Table 1: Impact assessment criteria for heritage asset

## 4 The application site

#### 4.1 Location and size

The study area included the application site is shown in Figure 2, though heritage assets were considered within a 500m buffer surrounding each extension area in order to provide a broader understanding of the local context. The proposed southern extension area is 23ha in area and the proposed eastern extension is 52ha in area (75ha total).

#### 4.2 Topography, geology and soils

The current quarry lies approximately 8km south of Worcester and surrounds Clifton Village on the north, west and south. The proposed eastern extension lies immediately to the east of Clifton village, 1.3km from the eastern bank of the River Severn. The proposed southern extension area lies 750m to the south of Clifton village, approximately 180m from the eastern bank of the River Severn. Both sites lie on the 5th Terrace of the River Severn (Worcester member), that has been

subjected to palaeochannel incision and alluvium accumulation. The eastern extension area lies between two palaeochannels dating from the Late Mesolithic to Iron Age. One of which is partially designated as a SSI (Ashmoor Common) (Fig 3).

The predominant soils along this stretch of the river are of the Hollington Soil Association (811c) comprising deep, stoneless, reddish fine silty and clayey soils, variably affected by groundwater, on flat land with a risk of flooding, over reddish river alluvium. To the west lie soils of the Wick 1 Soil Association (541r), comprising deep, well-drained, coarse loamy and sandy soils, locally over gravel, some affected by groundwater, with a slight risk of water erosion, over glaciofluvial or river terrace drift (Soil Survey of England and Wales, 1983).

#### 4.3 Current land-use

The larger eastern extension area is relatively flat and comprises five large sub-rectangular field parcels. The smaller southern extension area comprises 3 irregular fields whose south edge appears to respect a sinuous watercourse. The land is currently either under arable cultivation or under recently sown grassland (previously arable) (Plates 1-7).

#### 4.4 Historic land-use and archaeological character

Within the Historic environment assessment for the South Worcestershire Joint Core Strategy area (Mindykowski *et al* 2010) the expansion areas fall within HECZ 005 (River Severn Corridor South of Worcester). Settlement character is one of low-level dispersal with some later expansion within a landscape of mixed farming including riverside pasture and cereal/vegetable growing on the terraces.

Historic Landscape: The zone has a diverse pattern of small to medium, irregular enclosed riverside grazing pasture contrasted with areas of larger sub-regular enclosures characterising the arable terraces. The historic dispersed low-density settlement pattern is still extensive throughout the zone (e.g. Severn Stoke, Kerswell Green and Kinnersley) whereas Kempsey has expanded considerably during 20th c. Extensive areas of traditional orchards have been lost as a result of Kempsey's expansion.

Archaeological Character: Extensive below ground prehistoric and Romano-British settlements on the terraces and ritual features of national and regional importance located along the alluvial plain. The latter often associated with palaeochannels, which preserve nationally important environmental deposits. The medieval settlement pattern remains intact with some survival of ridge and furrow earthworks, common pasture, water meadows irrigation features and a range of listed buildings.

## 5 Heritage assets

#### 5.1 Designated heritage assets

### **Scheduled Ancient Monuments (SAMs)**

There are no SAMs within 500m of the extension areas.

#### **Listed Buildings**

There are no listed buildings within the proposed extension areas but there are eight in the surrounding 500m buffer (WSM 09631, WSM 09633, WSM 29234, WSM 42314, WSM 42315, WSM 42316, WSM 42317 and WSM 52628). These are either Grade II or III and consist of farm houses and outbuildings dating to between the 14<sup>th</sup> and 19<sup>th</sup> centuries (Fig 4). The nearest Grade I listed building is the Panorama at Croome Park (WSM 06725) approximately 1.5km to the south.

#### **Parks**

There are no parks within 1km of the extension areas although Pirton Park is located approximately 2.3km to the north east and Croome Park (Grade I) is located approximately 1.5km to the south east. The two parks were both designed by Lancelot Brown in the mid 18<sup>th</sup> century and can be seen as parts of the same scheme of Landscaping. Two smaller parks (WSM 28834 and WSM 28892) are also located on the western bank of the River Severn approximately 1km away (Fig 5).

#### **Battlefields**

No battlefields exist in the 500m buffer surrounding the proposed extension areas.

#### **Conservation Areas**

No conservation areas exist with 500m of the proposed extension areas. The nearest are approximately 1.8km to the north at Kempsey.

#### 5.2 Undesignated heritage assets

There are two monuments listed on Worcestershire HER within the eastern extension area (WSM 06039 and WSM 10226). The first is a complex of enclosures and field systems visible in aerial photographs in the southernmost field (Fig 6). These appear linear in arrangement and cover an area of approximately 7ha. Metal detecting across the site has recovered approximately 213 bronze coins of probable Roman date (WSM 42280). It is possible that this settlement was connected to the industrial Roman settlement identified to the north of Clifton and may contain elements of this industrial working (WSM 30892). The second monument within the eastern extension area (WSM 10226) is a ring-ditch, probably the remains of a Bronze Age barrow, approximately 17m in diameter. In the smaller extension area there are three monuments listed (WSM 15748, WSM 31274, and WSM 34925). These are ridge and furrow remains and water meadow ditches both of probable medieval date and a search light battery from the Second World War.

#### 5.3 Potential heritage assets

Although no Palaeolithic remains have been recovered from Clifton Quarry the Worcester terrace member, which is being extracted has been identified as having the potential to contain material of Palaeolithic date (WSM 56950). *In situ* Palaeolithic deposits are unlikely to be encountered but flint and stone tools and faunal remains may be preserved.

Previous excavations and watching briefs undertaken between 2006 and 2012 on behalf of Tarmac Ltd (now Lafarge Tarmac) at Clifton quarry have uncovered significant archaeological and palaeoenvironmental remains. These date from the Late Mesolithic to the Early Medieval period (WSM 35069, WSM 39885 and WSM 46456, Fig 7). The majority of these remains have been covered with alluvium which began to be deposited from the Early Medieval period.

The proposed extraction areas abut large north to south aligned palaeochannels that have been mapped previously through a combination of techniques including walkover surveys, borehole data and LiDAR analysis. Subsequent fieldwork has shown this mapping to be highly accurate which suggests that significant palaeochannel deposits are unlikely to be present, although the edges of the larger channels may partially extend into the proposed extension areas. Two of these palaeochannels have previously been investigated and radiocarbon carbon dates indicate that they began to infill from the Late Mesolithic. If discovered palaeochannel deposits in the southern extension areas (WSM 49580, WSM 56012) are of more significance as they are likely to relate to a previously undated and unstudied channel system.

Residual Mesolithic flints found at the quarry imply that the area was at least seasonally visited, although the most significant early prehistoric remains were a group of Late Neolithic pits (c 2900-

2600 cal BC). One of these contained an elaborate collection of six whole or fragmentary polished axes, numerous flint tools and debitage, significant quantities of Grooved Ware pottery (Durrington Wall and Clacton Styles) and abundant charred barley grains and crab apple fragments. It is likely that further discreet features will be present in both proposed extension areas and the significance of the remains previously recovered suggests that further nationally important deposits may be encountered. The three possible Neolithic henges (WSM 01369, WSM06040, 10408) and a large curvilinear enclosure 200m in diameter (WSM 27046) approximately 200m east of the proposed extension illustrate the earlier prehistoric potential of the area and may imply a more ceremonial nature to the local Neolithic Landscape.

Three Bronze Age burnt mounds have been excavated within the quarry to date. These were situated immediately next to, and partially sealed below, palaeochannel peats deposits and each consisted of a large concentration of heat fractured quartz pebbles within a rich charcoal matrix. The mounds were also surrounded by smaller pits and troughs containing similar fills. This activity is thought to have been seasonal and dates to around 1410-1300 cal BC. The mounds appeared to be isolated within the landscape as no contemporary settlement remains have been identified. However to the east of Ashmoor Common there are a number of potential Bronze Age ceremonial and funerary monuments listed on the HER (WSM 10362, WSM 10408, WSM 10409, WSM 10410, WSM 10411 and WSM 48346). As burnt mounds are commonly found next to palaeochannels it is highly likely that other exist within the proposed extension areas. There is also a chance that domestic Bronze Age settlement remains will be present.

Immediately flanking the western side of the A38, opposite the proposed eastern extraction area was an extensive Early to Middle Iron Age settlement (WSM 39885). This contained a minimum of 103 four-post granary strictures and 130 below ground storage pits, although only two round houses were identified. Charred cereals were well preserved suggesting that both barley and wheat was being stored in large quantities at the site. The full extents of the settlement were not established but it appeared unenclosed and provides the most comprehensive evidence for Early Iron Age lowland activity to have been excavated in the West Midlands to date. The site also contains the largest Early-Middle Iron Age pottery assemblage to have been discovered within Worcestershire to date. This was dominated by storage vessels and the lack of other finds and roundhouses implies that the site was not the focus of domestic occupation. It is possible that it represented the storage zone of a much larger settlement and it is highly probable that further settlement remains exist over the A38 within the eastern extension area. Further Iron Age monuments are also listed on the HER including probable pit alignments (WSM 30504).

Romano-British activity in the quarry has been limited to two graves, although the acidic nature of the soil had eroded the bone leaving only hobnails, an iron bracelet and pottery fragments. These burials are thought to be related an extensive Romano-British rural settlement identified through fieldwalking and geophysical to the immediate north (WSM 30892). This is no reason to suggest that significant Roman activity exists within the proposed southern extension area.

Early medieval deposits in the quarry have consisted of double-ditched field boundaries and a timber-lined well constructed from round wood stakes and cleaved planks. Dendrochronological analysis has shown that some of these timbers were felled in the years 704/5 AD and radiocarbon dates suggest that the well filled rapidly after construction. Plant macrofossil and pollen remains from waterlogged deposits in this feature suggest that it was associated with flax retting. As with the Bronze Age burnt mound activity further flax retting remains are most likely to exist near or next to the edge of palaeochannel deposits. There is however there is no reason to expect further archaeological remains associated with flax retting will exist in either extension area. Although Clifton is a listed as a deserted medieval village or a shrunken village (WSM 11850) the modern A38 appears to run along the eastern limits of the original village as shown on the LiDAR and tithe maps. This suggests that earlier remains of the village will not exist in the eastern extension area, although it is likely ploughed out ridge and furrows will be present.

## 6 Assessment of the significance of heritage assets

#### 6.1 Designated assets.

#### 6.1.1 Listed building

Grade 1 listed buildings are of the greatest importance at a national level although none are located within the surrounding 500m HER search area. The nearest is the Panorama at Croome Court, which sits at an elevation 50m OD, 1.4km to the south. The 8 listed buildings within the HER search area are either Grade II or III. The majority of the buildings are farm houses and barns dating from the 17<sup>th</sup>-19<sup>th</sup> centuries. Those at Baynhall Farm (WSM52628) include 4 red brick hop kilns. These are of regional importance as kilns are becoming increasingly rare and Herefordshire and Worcestershire and represent one of the two main concentrations of listed hop kilns in the country.

#### 6.1.2 Registered parks and gardens

Croome Park is Grade I listed and of national importance as it was the first landscape design completed by Lancelot Brown in the 17<sup>th</sup> Century. Pirton Park to the north is Grade II listed and was also landscaped by Lancelot Brown as it once formed part of the Croome Estate. In 1796 two follies were created within each park by James Wyatt. These included the Panorama at Croome Court (Grade I listed) and Pirton Castle.

#### 6.2 Undesignated assets

The undesignated heritage assets within the southern proposed extension area are thought to be of local or regional importance. These appear to have been significantly damaged as no ridge and furrow or water meadow ditches are visible as earthworks on either the 1999 and 2005 aerial photographs or the LiDAR, suggesting they have been destroyed by ploughing. They were also not visible during the walk over survey conducted on 23-1-14. Better preserved water meadow ditches are also still preserved around Clifton village (WSM 34925). The possible searchlight battery is also of regional importance but again was not visible during the walkover survey. It may be seen as a circular anomaly 30m in diameter, on the LiDAR. The possible round barrow and Roman settlement in the eastern extension area are also of probable regional importance, although their state of preservation, which has not yet been established, is key to defining their importance.

#### 6.2.1 Sites of archaeological interest

Nature of the archaeological interest in the site

There is a high probability that important archaeological and palaeoenvironmental remains will be present in both proposed extension areas and these are likely to be buried below alluvial deposits of varying thickness. Alluvial deposits are more likely to exist within the southern extension area, although overbank material is also known to exist immediately to the west of the A38 and is therefore likely to extend into the proposed eastern extension area. These deposits are likely to cover remains of Neolithic to Early Medieval date.

It is unlikely that large palaeochannels will be encountered although the edges of prehistoric palaeochannels are likely to be present in both extension areas. These will preserve significant palaeoenvironmental remains that record the vegetation and landscape history of the Severn Valley. Their waterlogged nature also has the potential to preserve significant archaeological remains that rarely survive on dry archaeological sites.

Across both extension areas dispersed evidence for Neolithic and Bronze settlement is to be expected. This is likely to include isolated and small clusters of pits representing the repeated

occupation of the valley. Further burnt mounds are also to be expected in both areas next to any palaeochannels and Bronze Age funerary monuments may also exist in the proposed eastern extension area. At the northern end of the eastern extension area it is likely that there is dispersed, unenclosed Iron Age settlement consisting of roundhouses and storage features.

Within the proposed eastern extension area there is at least one confirmed Roman settlement probably consisting of both habitation areas and stock enclosures. It is also possible the Roman road identified 200m to the south may run through this settlement area.

#### Relative importance of the archaeological interest in the site

If the prehistoric remains encountered in the previous phases of archaeological works at Clifton Quarry extend into proposed extension areas they are likely to be of regional and national importance. The majority of the dispersed prehistoric remains are likely to be of regional interest, specifically any further Grooved Ware pottery assemblages which are rare within the West Midlands. It is however possible that further nationally important remains of Neolithic date exist within the extension areas.

If the Early Iron Age settlement extends into the eastern extension area it will also be of national importance as few prehistoric settlements of the Early to Middle Iron Age have been excavated in the country. Elements of this settlement, specifically any pottery assemblages, will also be of regional importance as they will continue to expand the knowledge of this poorly represented period within the West Midlands. The potential Roman settlement is likely to of local and regional significance.

#### Physical extent of the archaeological interest in the site

Any archaeological remains are likely to be buried below alluvium, between 0.50-1.00m thick. The majority of the archaeological remains are likely to be discreet and isolated features and could be dispersed across both extension areas. There is however precedence from earlier phases of extraction to be densest along the edge of palaeochannels. If the Iron Age settlement area does extend across the road it may cover a comparable area to that previously excavated (approximately 3-4ha). The probable Roman settlement to the south of the proposed eastern extension covers an area of approximately 7ha.

## 7 The impact of the development

#### 7.1 Impacts during construction

The proposed development will affect the following heritage assets.

- Ridge and furrow earthworks (WSM 15748) within the southern extension area have been assigned an impact of "not significant" as they are no longer visible within the development area and presumably been ploughed out.
- Watermeadow ditches (WSM 34925) have been assigned an impact of "not significant" as they are no longer visible within the development area and presumably been ploughed out. Further extant watermeadow ditches are also better preserved to the north around Clifton village.
- A WW2 search light battery (WSM 31274) within the southern extension area has been assigned an impact of "not significant" as it is only likely to have left limited archaeological signature, partially due to the limited time it was used for.

- The probable Roman settlement to the south of the eastern extension (WSM 06039) has been assigned an impact of "Minor Adverse" as it is likely only to be of local and regional importance.
- The probable Bronze Age barrow (WSM 10226) in the middle of the eastern extension has been assigned an impact of "Minor Adverse" as it is likely only to be of local and regional importance.

#### 7.2 Impacts on sustainability

The NPPF emphasises the importance of sustainability (DCLG 2012, section 131). Should the extension proceed, two regionally significant monuments (A Bronze Age Barrow and a Roman settlement) will be destroyed and as the historic environment is a non-renewable resource they cannot be directly replaced. How ever mitigation through recording and investigation of these monuments will also produce an important research dividend that can be used for the better understanding of the area's history and contribute to local and regional research agendas (NPPF, DCLG 2012, section 141).

#### 7.3 Residual impacts

The proposed extension areas are likely to negatively affect the settings of the listed buildings as the historic landscape character surrounding them is significantly altered. This is reduced significantly by the natural topography as you move further away from the extraction areas. The negative impact upon the setting of the Grade I, listed Panorama is also greatly reduced by tree cover, specifically the deciduous trees surrounding the monument and a linear arrangement of tall Poplar trees running along the eastern edge of Ashmoor Common. This means that the Panorama should only be visible from the southern parts of the southern extension and the southern end of the eastern extension. During the summer months the Panorama should also be increasingly shielded by the thicker foliage.

During extraction the creation of bunds would also limit the negative impact upon building settings. As the majority of the land will revert back to agricultural use after extraction (Fig 8) there also is no long term effect upon the setting of these monuments. The implementation of the mitigation proposed above (pre, during and subsequent to extraction) should ensure that there are no residual effects on the historic environment and archaeological resource from the proposed development. Mitigation should ensure that adverse impacts are restricted in scope to "not significant"

#### 8 Recommendations

The DBA has identified significant archaeological remains within the application area that will require further archaeological investigation. It is suggested that a programme of geophysics and archaeological trial trenching be undertaken to better characterise these and to further establish the potential of the proposed extension areas. This should provide Worcestershire County Council planning with sufficient information to assess the suitability of the proposed extension areas and design appropriate mitigation strategies where applicable. The following specific recommendations attempts to fulfil the above aim but also suggests mitigation options for archaeological periods, features or areas of the site that are difficult to characterise pre-determination.

The Worcester Member sands and gravels to be extracted have the potential to contain Palaeolithic remains. It is virtually impossible to test for their presence, however, during extraction it may be necessary to mitigate against their destruction. This may involve access to the quarries "reject pile" to search for stone or flint tools and faunal remains. It may also be necessary to

provide access for a geoarchaeologist to the quarry face during extraction to assess the potential of the gravels to preserve Palaeolithic remains. Providing specialist access to the gravel face would enable an appropriate mitigation strategy to be created and assess whether it is necessary to continue looking for Palaeolithic remains at this location.

The DBA has identified a large (Roman) settlement to the south of the proposed eastern extension. These cropmarks appear well defined and are sufficient to establish individual enclosures and drove ways. It is suggested that targeted trial trenching be undertaken across the enclosures to establish state of preservation and complexity.

It is difficult to characterise the density of archaeological remains in the majority of the proposed eastern extension and it is therefore suggested that geophysical survey be undertaken in the fields to the north of the Roman settlement. Following its results a targeted evaluation should be undertaken to establish the character of any anomalies. During the walkover survey conducted on the 24-1-14 it was noted that there was a significant amount of gravel within the topsoil across the proposed eastern extension area. A topsoil survey also suggests that in areas the gravel is only 0.45m deep increasing the likely effectiveness of any geophysical survey within this part of the site.

Due to the character of the Iron Age settlement remains likely to be encountered at the northern end of the proposed eastern extension area it may be prudent to evaluate this part of the site with double width trenches or small open area trenching. This should hopefully identify posthole structures that were elusive in previous evaluations. It is also suggested that a number of trenches attempt to establish the western limits of Ashmoor Common by running at right angles of its western edge.

As the proposed southern extension area is likely to be sealed with alluvium and as the soil survey has implied there is 1.20m of overburden in places the geophysical survey is unlikely to work effectively across this part of the site. Also as the archaeological remains are more likely to be discrete and dispersed across this area it is thought a smaller evaluation would be appropriate across the southern extension area. These would focus upon the higher gravel islands and attempt to establish channel edges and the depth of alluvial spreads. A trench should also investigate the potential search light battery location visible on the LiDAR.

The assessment has identified that the development area is highly likely to contain dispersed Neolithic and Bronze Age remains. These are extremely difficult to identify through geophysical analysis and trial trenching due to their small and dispersed nature. These features are often only discovered during large open area stripping and it is suggested that a watching brief be implemented prior mineral extraction (during the removal of overburden) to mitigate against their destruction.

As the extensions are likely to remove some significant archaeological sites it is hoped that during the restoration of the quarry the developer will consider commissioning information panels to be placed in appropriate locations. This will partially mitigate against the loss of a non-renewable resource by providing the local population with a better understanding of the areas history. In this vein it may also be prudent for the restoration planting scheme be influenced by the botanical history of the area as provided by the palaeoenvironmental works carried out at the guarry.

Any site investigation works or watching briefs required would be concluded by production of an archaeological report (and appropriate publication) to be deposited for public consultation with the Worcestershire Historic Environment Record and a project archive to be deposited at a local museum.

## 9 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the successful conclusion of this project, Nick Atkins and Colin Stratford (Lafarge Tarmac Limited), Robin Smithyman and Colin Hume (Pleydell Smithyman) and Mike Glyde (WCC).



Appendix 1	HER Summary for Clifton, Severn Stoke

## Worcestershire Archive and Archaeology Service Monument List Report

#### **HER Summary for Clifton, Severn Stoke**

24/01/2014 Number of records: 117



Report prepared by Worcestershire HER, tel: 01905 765560 or email archaeology@worcestershire.gov.uk. Information is valid for three months from date of production.

Ref	Site Name	Monument Types	Parish	Grid Reference
Building				
WSM09631	Clifton Court, Severn Stoke	Country House (17TH CENTURY AD to 21ST CENTURY AD - 1601 AD to 2050 AD)	Severn Stoke	SO 8477 4638
		Dwelling (17TH CENTURY AD to 21ST CENTURY AD - 1601 AD to 2050 AD)		
		Timber Framed Building (17TH CENTURY AD to 21ST CENTURY AD - 1601 AD to 2050 AD)		
WSM09633	The Cottage, Lower Sandford, Severn Stoke	Dwelling (17TH CENTURY AD to 21ST CENTURY AD - 1601 AD to 2050 AD)	Severn Stoke	SO 8534 4565
		Timber Framed Building (17TH CENTURY AD to 21ST CENTURY AD - 1601 AD to 2050 AD)		
WSM22559	Baynhall Farm, Croome Road, Kempsey	Hop Kiln (19TH CENTURY AD to 20TH CENTURY AD - 1870 AD to 1930 AD)	Kempsey	SO 8513 4726
		Dwelling (21ST CENTURY AD - 2001 AD to 2050 AD)		
WSM29234	Cleeve Cottage, Clifton, Severn Stoke	Farmstead (14TH CENTURY AD to 21ST CENTURY AD - 1301 AD to 2050 AD)	Severn Stoke	SO 8460 4639
		Cruck House (14TH CENTURY AD to 21ST CENTURY AD - 1325 AD to 2050 AD)		
WSM30661	Timber Framed Barn, Baynhall Farm, Croome Road, Kempsey	Timber Framed Barn (POST MEDIEVAL to 21ST CENTURY AD - 1540 AD to 2050 AD)	Kempsey	SO 8506 4720
		House (21ST CENTURY AD - 2001 AD? to 2050 AD)		
WSM42314	Clifton Ham, Severn Stoke	Dwelling (18TH CENTURY AD to 21ST CENTURY AD - 1701 AD to 2050 AD)	Severn Stoke	SO 8461 4648
WSM42315	The Maltings, Severn Stoke	Dwelling (18TH CENTURY AD to 21ST CENTURY AD - 1701 AD to 2050 AD)	Severn Stoke	SO 8496 4621



Ref	Site Name	Monument Types	Parish	Grid Reference
WSM42316	Wayside Cottage, Severn Stoke	Dwelling (17TH CENTURY AD to 21ST CENTURY AD - 1601 AD to 2050 AD)	Severn Stoke	SO 8481 4618
		Timber Framed Building (17TH CENTURY AD to 21ST CENTURY AD - 1601 AD to 2050 AD)		
WSM42317	Clifton Lower Farmhouse, Severn Stoke	Dwelling (16TH CENTURY AD to 21ST CENTURY AD - 1501 AD to 2050 AD)	Severn Stoke	SO 8456 4623
		Farmhouse (16TH CENTURY AD to 21ST CENTURY AD - 1501 AD to 2050 AD)		
		Timber Framed Building (16TH CENTURY AD to 21ST CENTURY AD - 1501 AD to 2050 AD)		
WSM42318	Barns at Clifton Court, Severn Stoke	Barn (17TH CENTURY AD to 21ST CENTURY AD - 1601 AD to 2050 AD)	Severn Stoke	SO 8481 4634
WSM42319	Barns and farm builsings, Lower Clifton Farm, Severn Stoke	Barn (19TH CENTURY AD to 21ST CENTURY AD - 1801 AD to 2050 AD)	Severn Stoke	SO 8457 4620
WSM52580	Naunton Farm, Severn Stoke	Farm Building (19TH CENTURY AD to 21ST CENTURY AD - 1801 AD to 2050 AD)	Severn Stoke	SO 8579 4589
		Farmstead (19TH CENTURY AD to 21ST CENTURY AD - 1801 AD to 2050 AD)		
		Farmhouse (19TH CENTURY AD to 21ST CENTURY AD - 1850 AD? to 2050 AD)		
WSM52581	Sheepcote Farm (Sheepcot), Severn Stoke	Farmhouse (19TH CENTURY AD to 21ST CENTURY AD - 1850 AD? to 2050 AD)	Severn Stoke	SO 8448 4531
		Farmstead (19TH CENTURY AD to 21ST CENTURY AD - 1850 AD? to 2050 AD)		
WSM52583	Outbuildings at Clifton Court, Severn Stoke	Farmstead (17TH CENTURY AD to 21ST CENTURY AD - 1601 AD to 2050 AD)	Severn Stoke	SO 8479 4632
WSM52584	Sandford Villa Farm (Sandford Villa), Severn Stoke	Farm Building (19TH CENTURY AD to 21ST CENTURY AD - 1825 AD? to 2050 AD)	Severn Stoke	SO 8541 4513
		Farmhouse (19TH CENTURY AD to 21ST CENTURY AD - 1825 AD? to 2050 AD)		
		Farmstead (19TH CENTURY AD to 21ST CENTURY AD - 1825 AD? to 2050 AD)		



Ref	Site Name	Monument Types	Parish	Grid Reference
WSM52628	Baynhall Farm, Kempsey	Farmstead (18TH CENTURY AD to 21ST CENTURY AD - 1701 AD to 2050 AD)	Kempsey	SO 8510 4726
		Farmhouse (19TH CENTURY AD to 21ST CENTURY AD - 1801 AD to 2050 AD)		
VSM53520	The Maltings, Severn Stoke	Farmstead (18TH CENTURY AD to 21ST CENTURY AD - 1701 AD to 2050 AD)	Severn Stoke	SO 8489 4622
_andscape	Component			
NSM58767	Outfarm north west of Clifton Court, Severn Stoke	Outfarm (19TH CENTURY AD to Unknown - 1801 AD)	Severn Stoke	SO 8479 4643
WSM60230	Naunton Farm, Severn Stoke	Farmstead (19TH CENTURY AD to 21ST CENTURY AD - 1801 AD to 2050 AD)	Severn Stoke	SO 8579 4589
NSM60231	Sheepcote Farm (Sheepcot), Severn Stoke	Farmstead (19TH CENTURY AD to 21ST CENTURY AD - 1801 AD to 2050 AD)	Severn Stoke	SO 8452 4531
WSM60232	Clifton Lower Farm (Lower Farm), Severn Stoke	Farmstead (16TH CENTURY AD to 21ST CENTURY AD - 1501 AD to 2050 AD)	Severn Stoke	SO 8456 4621
WSM60233	Clifton Court, Severn Stoke	Farmstead (17TH CENTURY AD to 21ST CENTURY AD - 1601 AD to 2050 AD)	Severn Stoke	SO 8478 4636
WSM60234	Sandford Villa Farm (Sandford Villa), Severn Stoke	Farmstead (19TH CENTURY AD to 21ST CENTURY AD - 1801 AD to 2050 AD)	Severn Stoke	SO 8541 4513
WSM60278	Baynhall Farm, Kempsey	Farmstead (18TH CENTURY AD to 21ST CENTURY AD - 1701 AD to 2050 AD)	Kempsey	SO 8511 4723
NSM61116	Site of Farmstead north west of Sandford Villa, Severn Stoke	Farmstead (19TH CENTURY AD to 20TH CENTURY AD - 1801 AD? to 1970 AD?)	Severn Stoke	SO 8522 4519
WSM61170	The Maltings, Severn Stoke	Farmstead (18TH CENTURY AD to 21ST CENTURY AD - 1701 AD to 2050 AD)	Severn Stoke	SO 8492 4623
WSM61240	Cleeve Cottage, Severn Stoke	Farmstead (14TH CENTURY AD to 21ST CENTURY AD - 1301 AD to 2050 AD)	Severn Stoke	SO 8460 4640
WSM61241	Site of Farmstead south east of Clifton Court, Severn Stoke	Farmstead (19TH CENTURY AD to Unknown - 1801 AD)	Severn Stoke	SO 8488 4631
VSM61299	Wayside Cottage, Severn Stoke	Farmstead (17TH CENTURY AD to 21ST CENTURY AD - 1601 AD to 2050 AD)	Severn Stoke	SO 8480 4617

## Monument



Ref	Site Name	Monument Types	Parish	Grid Reference
WSM01347	Possible enclosures, North-Northeast of Clifton, Kempsey	Enclosure (Unknown date)	Kempsey	SO 8495 4730
WSM01352	Enclosure, East of River Severn, North of Clifton	Enclosure (Unknown date)	Kempsey	SO 8460 4729
WSM01353	Ditch, East of the Bogs, Clifton	Ditch (Unknown date)	Severn Stoke	SO 8473 4709
WSM01369	Enclosure with possible henge, North East of Sandford, Severn Stoke	Henge (EARLY NEOLITHIC to LATE NEOLITHIC - 4000 BC to 2700 BC)	Severn Stoke	SO 8557 4519
		Ring Ditch (EARLY BRONZE AGE to LATE IRON AGE - 2350 BC to 42 AD)		
		Enclosure (EARLY BRONZE AGE to ROMAN 5TH CENTURY AD - 2350 BC to 410 AD)		
WSM03530	Mound, field NW of Pound, Severn Stoke	Mound (Unknown date)	Severn Stoke	SO 8540 4460
		Castle (EARLY BRONZE AGE to EARLY IRON AGE - 2350 BC to 701 BC)		
		Round Barrow (EARLY BRONZE AGE to EARLY IRON AGE - 2350 BC to 701 BC)	DN	
		Motte (MEDIEVAL - 1066 AD to 1539 AD)		
WSM05740	Enclosure, west of Sandford, Severn Stoke	Enclosure (Unknown date)	Severn Stoke	SO 8507 4525
WSM06039	Enclosures, north of Sandford, Severn Stoke	Enclosure (Unknown date)	Severn Stoke	SO 8520 4538
VSM06040	Enclosures, ring ditch possible henge, Severn Stoke	Henge (NEOLITHIC - 4000 BC to 2351 BC)	Severn Stoke	SO 8494 4486
		Enclosure (EARLY BRONZE AGE to LATE IRON AGE - 2350 BC to 42 AD)		
		Ring Ditch (EARLY BRONZE AGE to LATE IRON AGE - 2350 BC to 42 AD)		
		Trackway (EARLY BRONZE AGE to LATE IRON AGE - 2350 BC to 42 AD)		
WSM07772	Possible site of chapel, Clifton, Severn Stoke	Chapel (MEDIEVAL - 1066 AD to 1539 AD)	Severn Stoke	SO 8469 4631
WSM10226	Ring ditch, south west of Ashmoor Common, Severn Stoke	Ring Ditch (MIDDLE NEOLITHIC to LATE IRON AGE - 3500 BC to 42 AD)	Severn Stoke	SO 8518 4613



Ref	Site Name	Monument Types	Parish	Grid Reference
WSM10362	Round barrow, south of Baynhall Farm,	Ring Ditch (Unknown date)	Kempsey	SO 8530 4671
	Kempsey	Round Barrow (EARLY BRONZE AGE to EARLY IRON AGE - 2350 BC to 701 BC)		
WSM10408	Ring ditch or henge, South of Baynhall	Henge (NEOLITHIC - 4000 BC to 2351 BC)	Kempsey	SO 8530 4674
	Farm, Kempsey	Ring Ditch (EARLY BRONZE AGE to LATE IRON AGE - 2350 BC to 42 AD)		
NSM10409	Ring ditch?, South of Baynhall Farm, Kempsey	Ring Ditch (Unknown date)	Kempsey	SO 8529 4678
WSM10410	Ring ditch, South of Baynhall Farm, Kempsey	Ring Ditch (Unknown date)	Kempsey	SO 8536 4679
WSM10411	Ring ditch, South of Baynhall Farm, Kempsey	Ring Ditch (Unknown date)	Kempsey	SO 8533 4671
WSM10413	Enlosure, Southeast of Baynhall Farm, Kempsey	Enclosure (Unknown date)	Kempsey	SO 8535 4714
NSM10487	Possible Enclosure, north-west of Severn Stoke, Severn Stoke	Enclosure (Unknown date)	Severn Stoke	SO 8510 4460
NSM11389	Cropmarks, West of Kerswell Green, Upton	Enclosure (Unknown date)	Kempsey	SO 8569 4677
WSM11850	Deserted Medieval Village, Clifton, Severn Stoke	Deserted Settlement (MEDIEVAL - 1066 AD to 1539 AD)	Severn Stoke	SO 8470 4629
NSM15748	Cropmarks, south of Sheepcote Farm,	Unassigned (Unknown date)	Severn Stoke	SO 8449 4523
	Severn Stoke	Ridge And Furrow (MEDIEVAL - 1066 AD to 1539 AD)		
WSM27046	Large curvilinear enclosure at Severn Stoke	Enclosure (EARLY NEOLITHIC to LATE IRON AGE - 4000 BC to 100 BC)	Severn Stoke	SO 8570 4593
WSM30504	Double and single pit alignment, Kempsey	Pit Alignment (EARLY BRONZE AGE to LATE IRON AGE - 2350 BC to 42 AD)	Kempsey	SO 8530 4712
WSM31261	Site of Aircraft Landing Obstacles, Riverside meadows, Severn Stoke	Aircraft Obstruction (World War Two - 1939 AD to 1945 AD)	Severn Stoke	SO 8520 4409
WSM31274	Site of WW2 Searchlight Site, Near Sheepcot, Clifton	Searchlight Battery (World War Two - 1939 AD to 1942 AD)	Severn Stoke	SO 8464 4519
WSM34595	Watermeadow, Clifton, Severn Stoke	Water Meadow (16TH CENTURY AD - 1501 AD to 1600 AD)	Severn Stoke	SO 8451 4644



Ref	Site Name	Monument Types	Parish	Grid Reference
WSM34925	Watermeadow, to the West of Severn Stoke	Water Meadow (16TH CENTURY AD to 18TH CENTURY AD - 1599 AD to 1800 AD)	Kempsey, Severn Stoke	SO 8444 4572
WSM36774	Settlement Site, Clifton Quarry, Severn Stoke	Settlement (LATE BRONZE AGE to EARLY IRON AGE - 1000 BC to 401 BC)	Severn Stoke	SO 8455 4699
		Hearth (EARLY IRON AGE to ROMAN 5TH CENTURY AD - 800 BC to 410 AD)		
WSM39965	Brickyard on east bank of River Severn, Severn Stoke	Brickyard (POST MEDIEVAL to 20TH CENTURY AD - 1540 AD to 1904 AD)	Severn Stoke	SO 8470 4479
WSM41235	Pond, Ashmoor Common, Severn Stoke	Pond (18TH CENTURY AD to 21ST CENTURY AD - 1775 AD to 2050 AD)	Kempsey, Severn Stoke	SO 8486 4692
WSM41236	Drainage Ditches, East of Watermeadow, Severn Stoke	Ditch (18TH CENTURY AD to 21ST CENTURY AD - 1775 AD to 2050 AD)	Kempsey, Severn Stoke	SO 8541 4561
WSM41237	Pond, Ashmoor Common, Kempsey	Pond (18TH CENTURY AD to 21ST CENTURY AD - 1750 AD to 2050 AD)	Kempsey	SO 8522 4656
WSM46705	Site of Farm Buildings, Sheepcote Farm, Severn Stoke	Shelter Shed (19TH CENTURY AD to 21ST CENTURY AD - 1900 AD? to 2008 AD?)	Severn Stoke, Malvern Hills	SO 8454 4531
		Farm Building (19TH CENTURY AD to 21ST CENTURY AD - 1850 AD? to 2008 AD?)		
WSM48346	Possible Concentric Bronze Age Ring	Cemetery (BRONZE AGE - 2350 BC to 801 BC)	Kempsey	SO 8523 4696
	Ditches, South of Baynhall Farm, Kempsey	Ring Ditch? (BRONZE AGE - 2350 BC to 801 BC)		
WSM48347	Possible Iron Age Settlement Site	Curvilinear Enclosure (EARLY BRONZE AGE to ROMAN 5TH CENTURY AD - 2350 BC to 410 AD)	Kempsey, Severn Stoke	SO 8462 4713
		Hearth (EARLY IRON AGE to ROMAN 5TH CENTURY AD - 800 BC to 410 AD)		
		Rectangular Enclosure (EARLY IRON AGE to ROMAN 5TH CENTURY AD - 800 BC to 410 AD)		
WSM48467	Rowley and Coney Piece Rabbit Warren, Severn Stoke	(Former Type) Rabbit Warren ((at some time) LATE 11TH CENTURY AD to 19TH CENTURY AD - 1066 AD to 1900 AD)	Severn Stoke	SO 8590 4580
WSM48837	Pond, Sheepcote Farm, Severn Stoke	Pond (Unknown date)	Severn Stoke	SO 8455 4505
WSM48839	Pond, North East of Brickpits Plantation, Severn Stoke	Pond (Unknown date)	Severn Stoke	SO 8481 4472



Ref	Site Name	Monument Types	Parish	Grid Reference
VSM48847	Pond, Brickpits Plantation, Severn Stoke	Pond (Unknown date)	Severn Stoke	SO 8459 4462
VSM49572	Osier Bed, North of Brickpits Plantation, Hanley Castle	Osier Bed (POST MEDIEVAL - 1540 AD to 1900 AD)	Hanley Castle	SO 8456 4471
VSM49573	Marsh, North East of Brickpits Plantation, Severn Stoke	Marsh (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8487 4471
VSM49574	Marsh, East side of River Severn, North East of Brickpits Plantation, Severn Stoke	Marsh (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8471 4478
VSM49575	Marsh, East side of River Severn, North East of Brickpits Plantation, Severn Stoke	Marsh (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8470 4477
VSM49576	Marsh, South of Sheepcote Farm, Severn Stoke	Marsh (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8462 4488
VSM49577	Marsh, South East of Sheepcote Farm, Severn Stoke	Marsh (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8470 4487
VSM49578	Marsh, North of Brickpits Plantation, Severn Stoke	Marsh (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8466 4481
VSM49578	Pond, North East of Brickpits Plantation, Hanley Castle	Pond (POST MEDIEVAL - 1540 AD to 1900 AD)	Hanley Castle	SO 8487 4473
VSM49579	Pond, North East of Brickpits Plantation, Severn Stoke	Pond (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8460 4484
VSM49580	Marsh, Clifton Arles, Severn Stoke	Marsh (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8472 4553
VSM49581	Marsh, Just North of Clifton Arles, Severn Stoke	Marsh (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8476 4563
VSM49584	Palaeochannel, South West of Clifton Lower Farm, Severn Stoke	Palaeochannel (POST MEDIEVAL to 20TH CENTURY AD - 1540 AD to 1999 AD)	Severn Stoke	SO 8426 4601
VSM49585	Pond, West of Sheepcote Farm, Severn Stoke	Pond (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8400 4530
VSM49586	Palaeochannel, North of Cliffey Wood, Severn Stoke	Palaeochannel (POST MEDIEVAL to 20TH CENTURY AD - 1540 AD to 1999 AD)	Severn Stoke	SO 8430 4491
VSM49601	Palaeochannel, East of Cleeve Cottage, Clifton Quarry, Severn Stoke	Pond (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8439 4641
VSM49607	Marsh, Just North of Clifton Arles, Severn Stoke	Marsh (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8479 4593
VSM49616	Pond, North West of Sandford Cottage, Severn Stoke	Pond (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8507 4518



Ref	Site Name	Monument Types	Parish	Grid Reference
WSM49848	Cobbled surface below modern tarmac surface of A38, north of Stanford Lodge, Severn Stoke	(Former Type) Road (ROMAN 1ST CENTURY AD to 19TH CENTURY AD - 43 AD to 1900 AD)	Severn Stoke, Malvern Hills	SO 8516 4508
WSM50125	Pond, The Bogs, Severn Stoke	Pond (POST MEDIEVAL - 1540 AD to 1900 AD)	Severn Stoke	SO 8466 4713
WSM51117	Site of Outfarm north west of Clifton	Outfarm (19TH CENTURY AD to Unknown - 1801 AD)	Severn Stoke	SO 8477 4646
	Court, Severn Stoke	Shelter Shed (19TH CENTURY AD to 20TH CENTURY AD - 1850 AD? to 2000 AD?)		
WSM52582	Site of farm buildings at Clifton Lower Farm (Lower Farm), Severn Stoke	Farmstead (16TH CENTURY AD to 21ST CENTURY AD - 1501 AD to 2050 AD)	Severn Stoke	SO 8455 4623
WSM53466	Site of Farmstead north west of Sandford Villa, Severn Stoke	Farmstead (19TH CENTURY AD to Unknown - 1801 AD)	Severn Stoke	SO 8515 4518
WSM53590	Site of farm buildings at Cleeve Cottage, Severn Stoke	Farmstead (14TH CENTURY AD to 21ST CENTURY AD - 1301 AD to 2050 AD)	Severn Stoke	SO 8460 4640
WSM53591	Site of Farmstead south east of Clifton Court, Severn Stoke	Farmstead (19TH CENTURY AD to Unknown - 1801 AD)	Severn Stoke	SO 8486 4630
WSM53649	Site of farm buildings at The Maltings, Severn Stoke	Farm Building (19TH CENTURY AD to 20TH CENTURY AD - 1801 AD to 1950 AD?)	Severn Stoke	SO 8488 4623
General Par	ish Info			
WSM05771	General Area of Medieval and Early Post- Medieval Pottery Production, Hanley	Pottery Manufacturing Site (14TH CENTURY AD to 17TH CENTURY AD - 1301 AD to 1700 AD)	Hanley Castle	SO 8234 4312
WSM05774	Windmill, Hanley Castle	Windmill (13TH CENTURY AD to 18TH CENTURY AD - 1250 AD to 1750 AD)	Hanley Castle	SO 8234 4312
WSM35727	Unspecified Oblique Aerial Photographs Within Parish of Severn Stoke		Severn Stoke	SO 8617 4495
WSM37203	Second World War Bombing Incidents in Worcestershire; Parish of Kempsey	Bomb Site (World War Two - 1939 AD to 1945 AD)	Kempsey	SO 8606 4903
WSM37216	Bomb site in Hanley Castle	Bomb Site (World War Two - 1939 AD to 1945 AD)	Hanley Castle	SO 8234 4312
WSM38608	Parish of Hanley Castle, Portable Antiquities Sceme	Event (EARLY MEDIEVAL - 411 AD to 1065 AD)  Event (MEDIEVAL - 1066 AD to 1539 AD)  Event (POST MEDIEVAL - 1540 AD to 1900 AD)	Hanley Castle	SO 8234 4312



Ref	Site Name	Monument Types	Parish	Grid Reference
WSM39539	Parish of Kempsey, Portable Antiquities Scheme	Event (NEOLITHIC - 4000 BC to 2351 BC)	Kempsey	SO 8606 4903
		Event (IRON AGE - 800 BC to 42 AD)		
		Event (ROMAN - 43 AD to 410 AD)		
		Event (MEDIEVAL - 1066 AD to 1539 AD)		
		Event (POST MEDIEVAL - 1540 AD to 1900 AD)		
WSM39579	Parish of Severn Stoke, Portable	Event (ROMAN - 43 AD to 410 AD)	Severn Stoke	SO 8617 4495
	Antiquities Scheme	Event (EARLY MEDIEVAL - 411 AD to 1065 AD)		
		Event (MEDIEVAL - 1066 AD to 1539 AD)		
		Event (POST MEDIEVAL - 1540 AD to 1900 AD)		
WSM41722	General Information for the Parish of	Event (MEDIEVAL - 1066 AD to 1539 AD)	Hanley Castle	SO 8234 4312
	Hanley Castle	Event (POST MEDIEVAL - 1540 AD to 1900 AD)		
WSM41788	General Information for the Parish of Kempsey	Event (MEDIEVAL - 1066 AD to 1539 AD)	Kempsey	SO 8606 4903
		Ridge And Furrow (LATE 11TH CENTURY AD to 19TH CENTURY AD - 1066 AD to 1900 AD)		
		Event (POST MEDIEVAL - 1540 AD to 1900 AD)		
WSM42251	General Information for the Parish of Severn Stoke	Ridge And Furrow (LATE 11TH CENTURY AD to 19TH CENTURY AD - 1066 AD to 1900 AD)	Severn Stoke	SO 8617 4495
Place Name	•			
WSM31514	Field-name: Sandford, Severn Stoke	Ford (19TH CENTURY AD - 1801 AD to 1900 AD)	Severn Stoke	SO 8516 4523
WSM31515	Field-name: Sandford Piece, Sandford, Severn Stoke	Ford (19TH CENTURY AD - 1801 AD to 1900 AD)	Severn Stoke	SO 8528 4530
WSM31516	Field-name: Sandfords Orchard, Sandford, Severn Stoke	Ford (19TH CENTURY AD - 1801 AD to 1900 AD)	Severn Stoke	SO 8508 4523
WSM31520	Field-name: Stayway, Sandford, Severn Stoke	Trackway (19TH CENTURY AD - 1801 AD to 1900 AD)	Severn Stoke	SO 8515 4537
WSM31581	Field-name: Broxford, Severn Stoke		Severn Stoke	SO 8566 4543
WSM31582	Field-name: Broxford Meadow, Severn Stoke		Severn Stoke	SO 8550 4539
WSM31583	Field-name: Sandford Plantation, Severn Stoke		Severn Stoke	SO 8542 4547
Geology				



Ref	Site Name	Monument Types	Parish	Grid Reference
WSM16508	Peat deposits, North of Sandford, Severn Stoke	Natural Feature (Unknown date)	Severn Stoke	SO 8539 4612
WSM47338	Worcester Member river terrace deposits near Baynhall	Natural Feature (Marine Isotope Stage 02 to EARLY NEOLITHIC - 16050 BC to 3550 BC) + Sci.Date	Severn Stoke	SO 8500 4698
WSM48165	Peat deposit, Severn Stoke and Kempsey	Environmental Deposit (Marine Isotope Stage 02 to LATE IRON AGE - 15000 BC? to 42 AD?)	Kempsey, Severn Stoke	SO 8529 4635
WSM48345	Palaeochannel, South of Baynhall Farm, Kempsey	Palaeochannel (LATE MESOLITHIC to 21ST CENTURY AD - 6000 BC to 2050 AD)	Kempsey, Severn Stoke	SO 8516 4670
WSM56937	Area of Palaeolithic Potential, Holt Heath Sand and Gravel Member	Environmental Deposit (Marine Isotope Stage 05d to Marine Isotope Stage 02 - 113050 BC to 12050 BC)		SO 8475 5811
WSM56941	Area of Palaeolithic Potential, Peat	Environmental Deposit (Marine Isotope Stage 02 to 21ST CENTURY AD - 27050 BC to 2050 AD)		SO 9451 5584
WSM56950	Area of Palaeolithic Potential, Worcester Member	Environmental Deposit (Marine Isotope Stage 02 - 27050 BC to 12050 BC)		SO 8395 5107



## Worcestershire Archive and Archaeology Service Event Short Report

**HER Summary for Clifton, Severn Stoke** 

Report prepared by Worcestershire HER. Tel 01905 765560 or email archaeology@worcestershire.gov.uk. Information valid for three months from date of production.

Event no.	Event Name	Event Type	Organisation	Date of work	Grid Reference
WSM12579	Metal Detecting Find, Bronze Age Axe, Severn Stoke	Event - Survey			SO 8540 4620
WSM16503	Metal Detecting Finds, Sandford, Severn Stoke	Event - Survey		1993	SO 8532 4532
WSM17833	Unstratified, grey flint flake, Clifton, Severn Stoke	Event - Interpretation		1993	SO 8445 4645
WSM17834	Unstratified Find, Flint, Clifton, Severn Stoke	Event - Interpretation			SO 8460 4639
WSM26404	Evaluation in 1991, The Nash, Baynhall, Kempsey	Event - Intervention	Birmingham Archaeology	1991	SO 8568 4746
WSM30892	Evaluation in 2001, Land North of Clifton Quarry, Severn Stoke and Kempsey	Event - Intervention	Worcestershire Archaeological Service	2001	SO 8458 4703
WSM30893	Fieldwalking in 2001, Clifton Quarry, Severn Stoke	Event - Survey		2001	SO 8441 4712
WSM30894	Fieldwalking in 2001, Clifton Quarry, Kempsey	Event - Survey	Worcestershire Archaeological Service	2001	SO 8473 4730
WSM30895	Metal Detector Survey in 2001, Clifton Quarry, Kempsey	Event - Survey	Worcestershire Archaeological Service	2001	SO 8459 4703
WSM30896	Geophysical Survey at Clifton Quarry	Event - Survey	ArchaeoPhysica Ltd	2002	SO 8464 4715
WSM32743	Survey of the Fisheries of the Worcestershire Severn	Event - Interpretation		1996	SO 8261 5825
WSM34341	Photographic Record in 2003 of Barn at Baynhall Farm, Kempsey	Event - Survey	Adrian Hunt Architects	2003	SO 8506 4720
WSM34494	Archaeological Evaluation in 2005 to Rear of Baynhall Garage, Kempsey	Event - Intervention	Mercian Archaeology	2005	SO 8503 4735
WSM34498	Archaeological Evaluation in 2005, Clifton Quarry, Severn Stoke, Worcesters	Event - Intervention	Worcestershire Archaeological Service	2005	SO 8457 4671



Event no.	Event Name	Event Type	Organisation	Date of work	Grid Reference
WSM35069	Ongoing Work: Watching Brief Area 10 Clifton Quarry	Event - Intervention			SO 8450 4700
WSM38090	Geophysical Survey in 1991, Baynhall Farm, Kempsey	Event - Survey	Birmingham Archaeology	1991	SO 8530 4693
WSM39447	Photographic Survey in 2001, Baynhall Farm Barn, Kempsey	Event - Survey	Adrian Hunt Architects	2001	SO 8506 4720
WSM39779	Metal Detecting in 2002/3, Severn End Estate, Hanley Castle	Desk Based Assessmen			SO 8386 4300
WSM39786	Fieldwalking and Metal Detecting Civil War Finds, Severn Stoke	Event - Survey			SO 8590 4498
WSM39802	Palaeoenvironmental Sampling in 1981, Ashmoor Common, Kempsey	Event - Intervention		1981	SO 8517 4670
WSM39885	Ongoing Work: Excavation, Clifton Quarry, Severn Stoke	Event - Intervention			SO 8473 4673
WSM41688	Archaeological Survey in 2008 of the banks of the River Severn	Event - Survey	Worcestershire Archaeological Service	2008	SO 8570 4324
WSM41741	Site Visit in 2009, The Maltings, Clifton, Severn Stoke	Event - Survey		2009	SO 8495 4623
WSM42280	Metal detecting, west of Sandford Villa Farm, Severn Stoke	Event - Survey			SO 8520 4539
WSM46434	Lower Severn Valley: Piloting Optical Dating of Terraces. Scientific Dating Report	Event - Intervention	English Heritage	2010	SO 8374 5378
WSM46456	Ongoing Work - Watching Brief, Clifton Quarry	Event - Intervention	Worcestershire Archive and Archaeology Service		SO 8442 4629
WSM46482	Dendrochronological Analysis of Oak Timbers, Clifton Quarry, Worcestershire.	Event - Intervention	English Heritage	2007	SO 8459 4668
WSM47574	Ongoing: Worcestershire Villages Historic Environment Resource Assessment for Kempsey	Desk Based Assessmen	Worcestershire Archive and Archaeology Service		SO 8606 4903
WSM49847	Rapid recording of cobbled surface, A38, north of Sandford Lodge, Severn Stoke	Event - Survey	Worcestershire Historic Environment and Archaeology Service	2004	SO 8516 4508

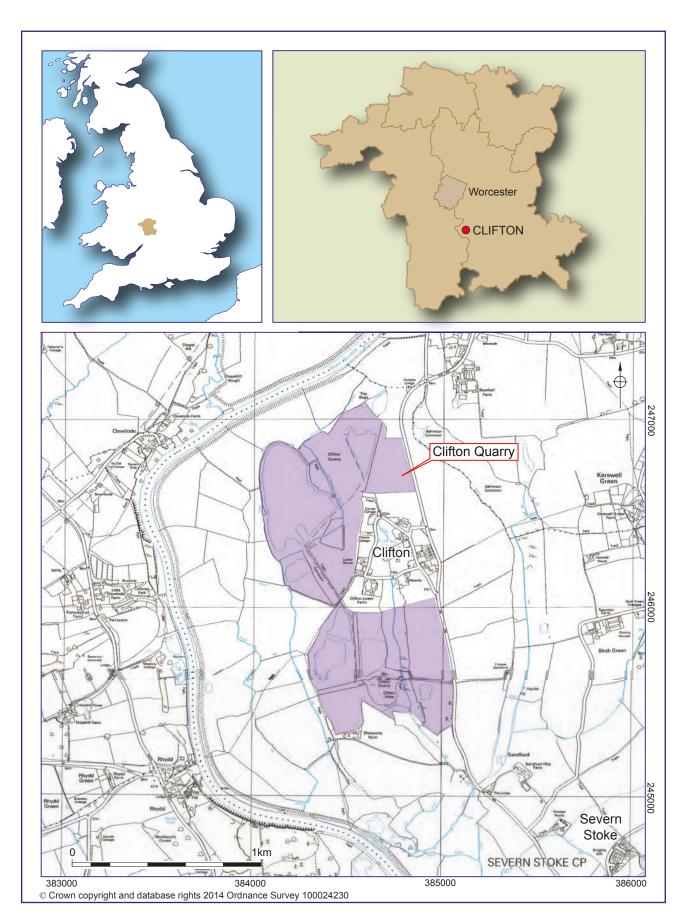


Event no.	Event Name	Event Type	Organisation	Date of work	Grid Reference	
WSM49986	Geotechnical investigation prior in 2011 on land Southwest of Ashmoor Common. Clifton	Event - Intervention		2011	SO 8469 4672	



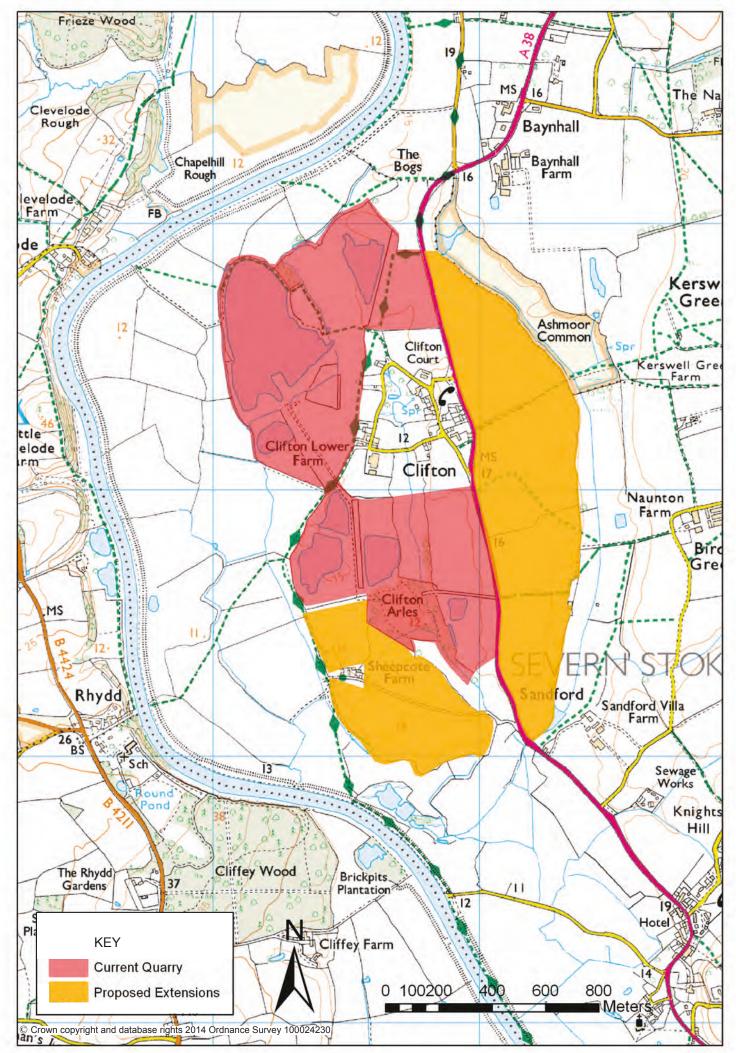


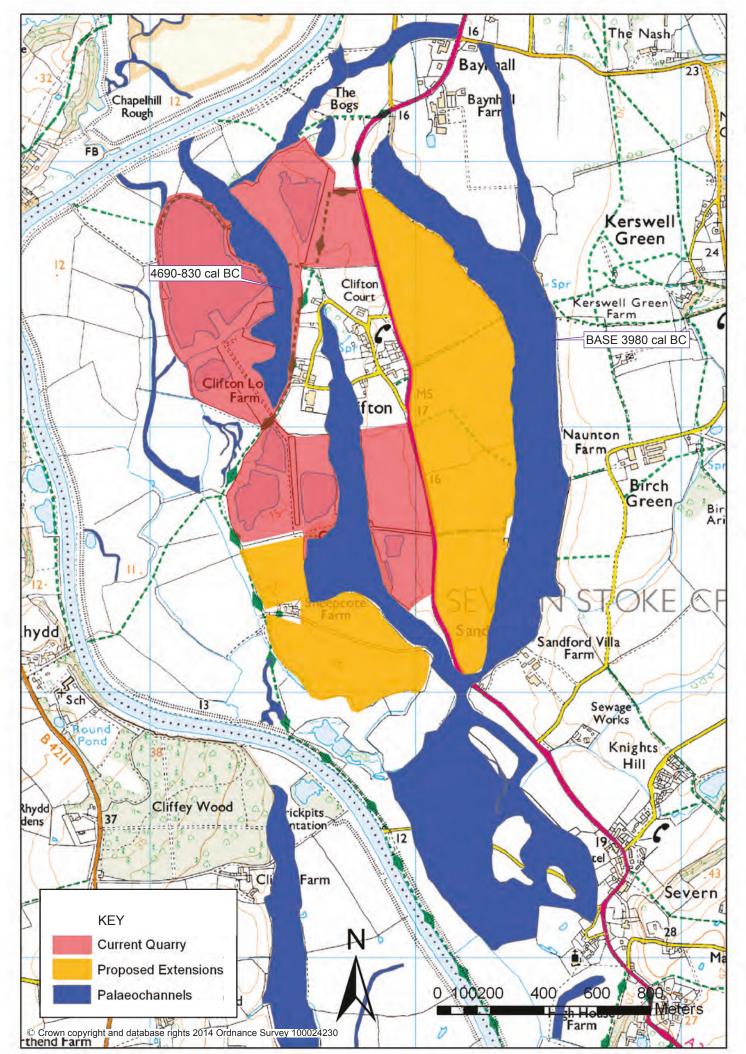
Clifton Quarry, Severn Stoke, Worcestershire			
Figures			

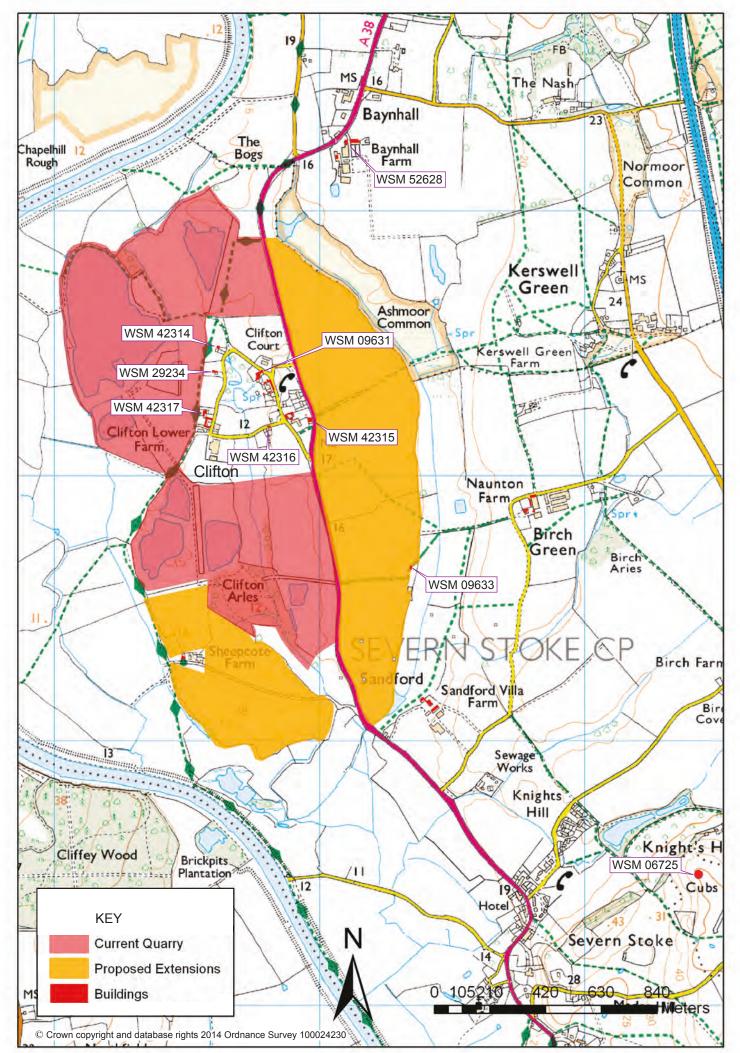


Location of Clifton Quarry

Figure 1

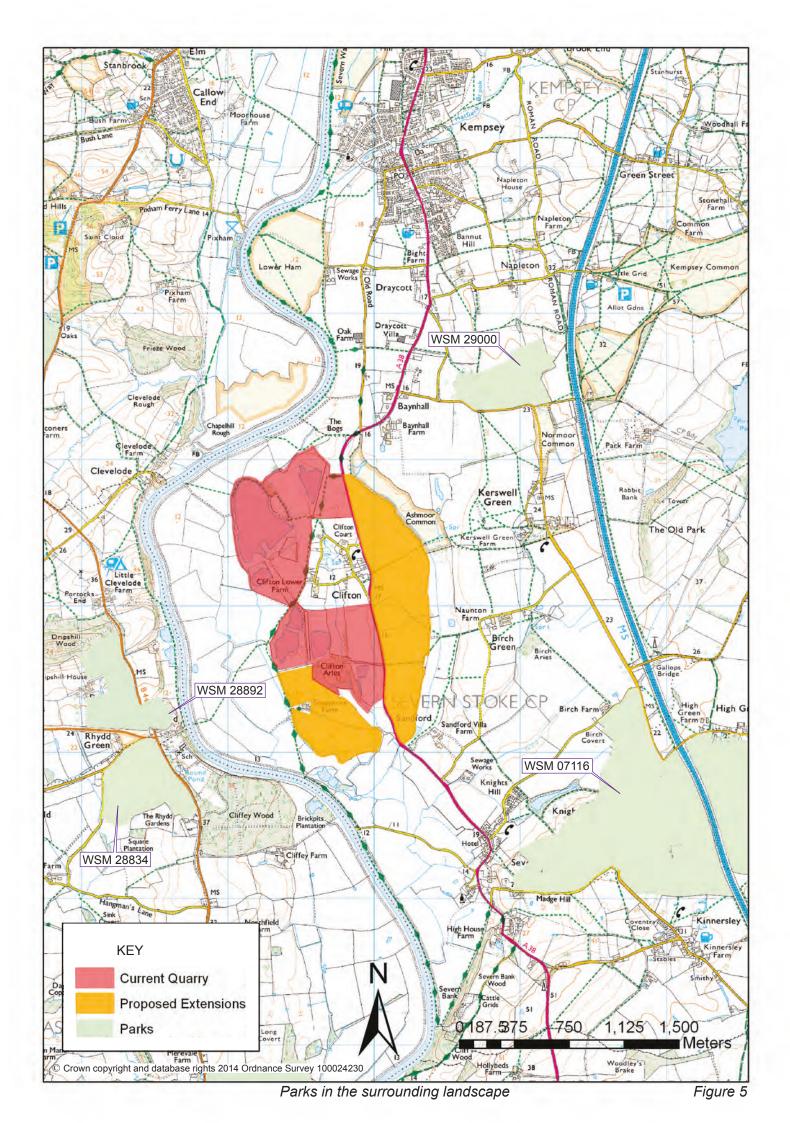


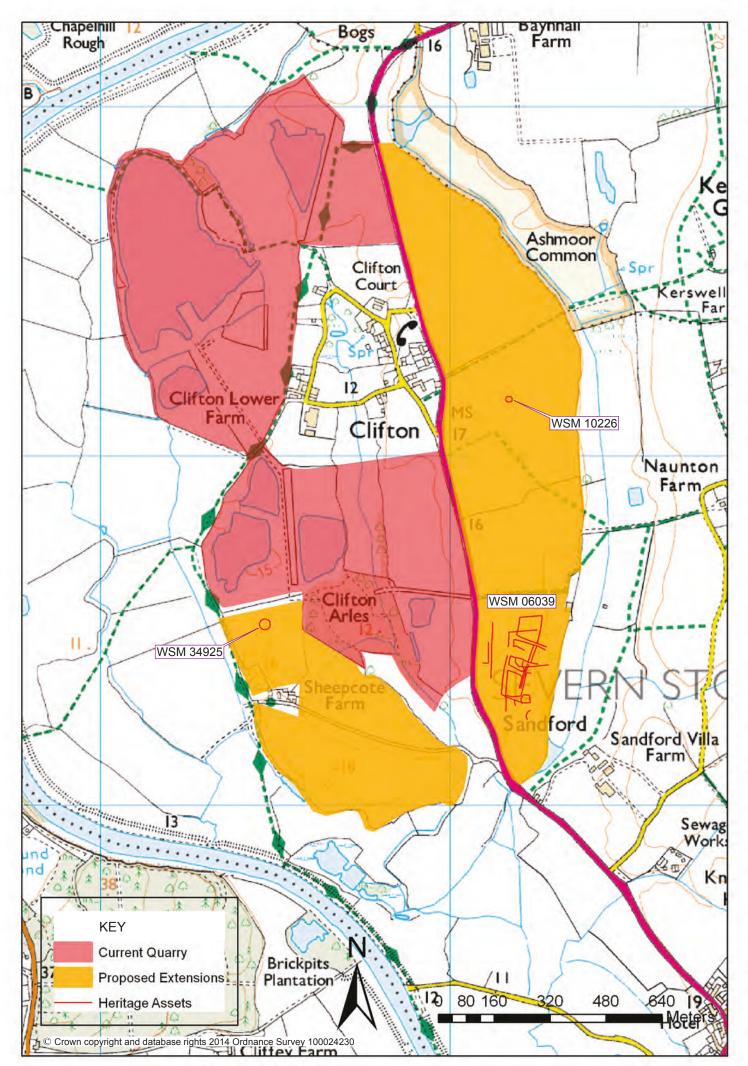




Historic buildings in study area

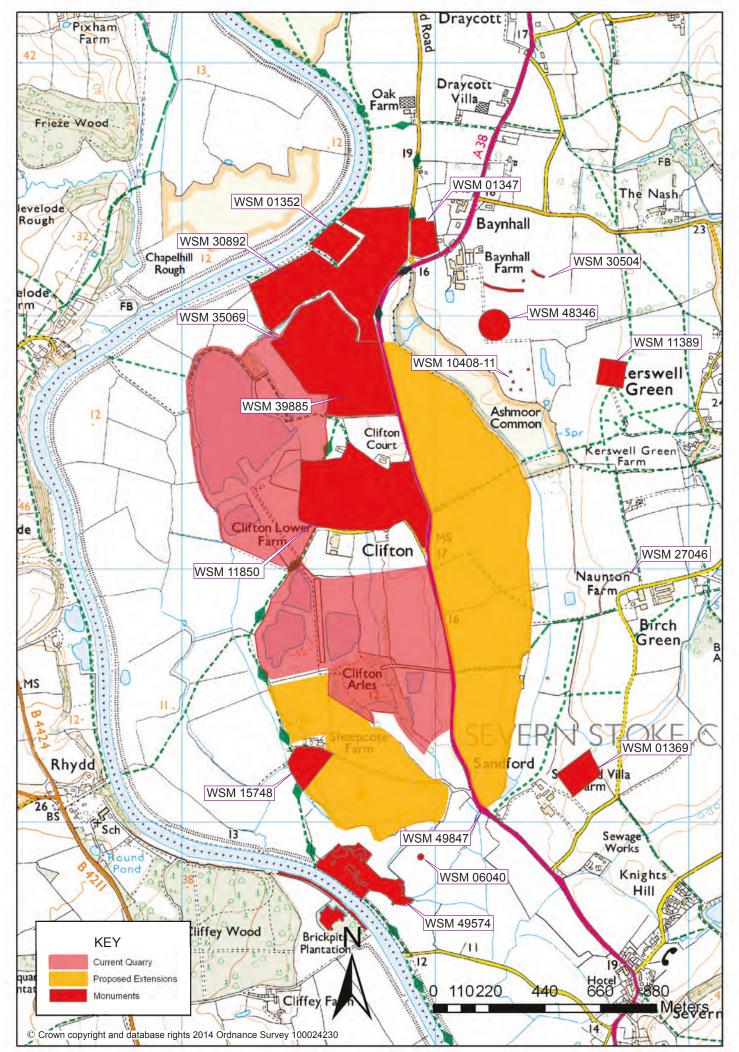
Figure 4





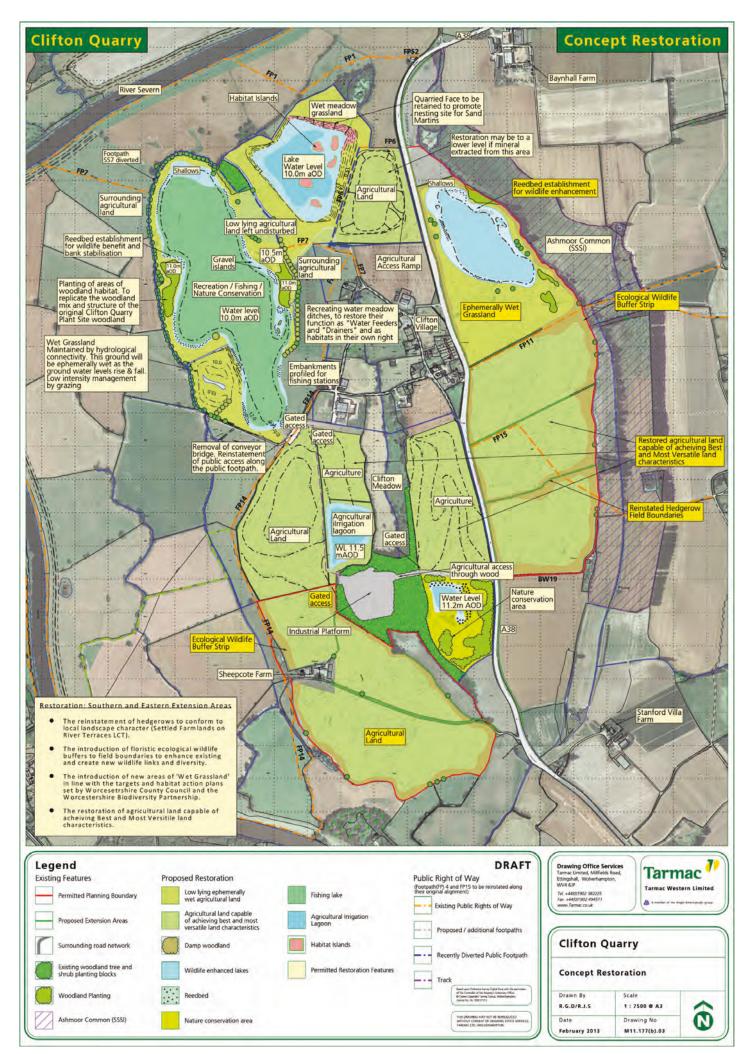
Known heritage assets within proposed extension areas

Figure 6



Significant sites outside extension areas

Figure 7





## **Plates**



Plate 1: Southern extension area facing north west, with flooded palaeochannel on right



Plate 2: Southern extension area facing south east



Plate 3: Southern extension area facing south with Sheepcote Farm in background



Plate 4: Southern extension area, main field, facing east



Plate 5: Eastern extension area north, with SSI/Palaeochannel to the right



Plate 6: Eastern extension area facing north west, edge of Clifton village to the left



Plate 7: Eastern extension area facing south

