



Morbaine Limited

Bowburn Retail Store

Archaeology and Cultural Heritage

Desk Based Assessment

July 2011

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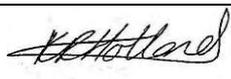
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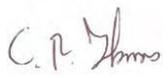
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Contents Page

| | | |
|-------|---|----|
| 1.0 | Introduction | 5 |
| 1.1 | Aims and Objectives | 5 |
| 2.0 | Methodology..... | 6 |
| 2.1 | Assessment Methodology..... | 6 |
| 2.2 | Sources Consulted..... | 7 |
| 3.0 | Site and Development Description | 7 |
| 4.0 | Legislation and Planning Policy Context..... | 8 |
| 4.1 | Ancient Monuments and Archaeological Areas Act 1979..... | 8 |
| 4.2 | Planning (Listed Buildings and Conservation Areas) Act 1990 | 8 |
| 4.3 | Planning Policy Statement 5: Planning for the Historic Environment - 2010 | 8 |
| 4.4 | Local Policy and Guidance..... | 9 |
| 4.5 | Analysis..... | 10 |
| 5.0 | Baseline Data | 10 |
| 5.1 | Designated Sites | 10 |
| 5.2 | Archaeological and Historic Background | 11 |
| 5.2.1 | Prehistoric (up to 43AD) | 11 |
| 5.2.2 | Roman/Romano-British (43AD to c.450AD) | 12 |
| 5.2.3 | The Early Medieval (c.450AD to 1066AD) and Medieval (1066AD to c.1540AD) Periods..... | 13 |
| 5.2.4 | Post-Medieval Period (c.1540AD to 1900AD) and Modern (1900AD to present)..... | 13 |
| 6.0 | Historic Mapping Survey | 15 |





| | | |
|------|---|----|
| 7.0 | Aerial Photographs | 16 |
| 8.0 | Heritage Potential and Impact Assessment | 16 |
| 9.0 | Recommended Evaluation and Mitigation Measures..... | 17 |
| 10.0 | Residual Impacts and Conclusions | 18 |
| 11.0 | References | 19 |

Appendix Contents

Appendix A – Site Location Plan & Proposed Development Plan

Appendix B - Assessment Methodology

Appendix C – Site Photographs

Appendix D – Planning Policies

Appendix E – Recorded Cultural Heritage Sites

Appendix F – Historic Mapping

Appendix G – Report Conditions





1.0 Introduction

This Archaeological and Cultural Heritage Desk-Based Assessment has been prepared by Kirsten Holland, Principal Archaeologist, WYG on behalf of Morbaine Ltd to accompany a planning application for the development of a new retail food store and associated car parking and infrastructure at Bowburn, County Durham.

The development site has been the subject of a previously consented planning application for a retail store. An archaeological and cultural heritage desk-based assessment was prepared for this previous planning application (WYG, 2007) and therefore this report updates this previous assessment.

1.1 Aims and Objectives

This study examines the cultural heritage potential of the proposed development site and the surrounding area. The aim of the study is to:

- Identify recorded cultural heritage sites within the site boundary;
- Identify the potential for previously unrecorded sites to be present within the site;
- Identify potential impacts and mitigation strategies where appropriate; and
- Make recommendations for further work where required.

Cultural heritage within this context includes all buried and upstanding archaeological remains, built heritage sites, historic landscapes and any other features that contribute to the archaeological and historic interest of the area.

In accordance with the Institute for Archaeologists (IfA) Standard definition of a Desk-Based Assessment (IfA, 1994 rev 2009), this report seeks to identify and assess the known and potential historic resource within a specified area ('the site'), collating existing written and graphic information and taking full account of the likely nature and extent of previous impacts on the site, in order to identify the likely character, extent, quantity and worth of that resource in a local, regional and national context as appropriate.

The purpose of the desk-based assessment is to enable the cultural heritage resource to be assessed within its context and allow the formulation of one or more of the following:



- Formulation of a strategy to ensure the recording, preservation or management of the resource;
- Formulation of a strategy for further investigation to permit a mitigation strategy or other response to be devised, where existing evidence is insufficient.

This desk-based assessment considers the cultural heritage potential within the site itself and the surrounding area. This assessment does not attempt to plot and review every archaeological find and monument; rather it aims to examine the distribution of evidence and to use this to predict the archaeological potential of the study area and the likely significance of the development proposals on those remains.

2.0 Methodology

2.1 Assessment Methodology

Impact assessment has been carried out through the consideration of baseline conditions in relation to the elements of the scheme that could cause cultural heritage impacts. Baseline conditions are defined as the existing environmental conditions and in applicable cases, the conditions that would develop in the future without the scheme. In accordance with best practice this report assumes that the scheme will be constructed, although the use of the word 'will' in the text should not be taken to mean that implementation of the scheme is certain.

No standard method of evaluation and assessment is provided for the assessment of impact significance upon cultural heritage, therefore a set of evaluation and assessment criteria have been developed using a combination of the Secretary of State's criteria for Scheduling Monuments (Scheduled Monument Statement, Annex 1), Design Manual for Roads and Bridges, Volume 11, Part 3, Section 2, HA 208/07 and Transport Analysis Guidance (TAG Unit 3.3.9, Heritage of Historic Resources Sub-Objective). Professional judgment is used in conjunction with these criteria to undertake the impact assessment. The full assessment methodology can be seen in Appendix B.

The principles of the impact assessment methodology rest upon independently evaluating the value of the cultural heritage resource and the predicted magnitude of impact (both positive and negative) upon the resource. By combining the value of the cultural heritage resource with the predicted magnitude of impact, the significance of the impact can be determined. The impact significance can be beneficial or adverse. The



Bowburn Retail Store

evaluation of magnitude of impact and impact significance is undertaken both before and after mitigation measures are proposed.

2.2 Sources Consulted

A study area of approximately 1km radius from the approximate centre of the site (NZ 30440 37960) has been examined to assess the nature of the surrounding cultural heritage sites and place the recorded sites within their context.

This study has been based upon a previous desk-based assessment completed for the site (WYG, 2007). In addition updated consultations and baseline research was undertaken using the following sources:

- Durham County Council Historic Environment Record (HER);
- National Monuments Record (NMR);
- Durham County Council and English Heritage for designated sites;
- Historic mapping including relevant Ordnance Survey Maps; and
- Appropriate documentary sources and archaeological journals, including grey literature reports.

3.0 Site and Development Description

The development site is located in the centre of the village of Bowburn. The site is centred on NZ 30440 37960 (430440 537960) and is at approximately 85m above Ordnance Datum. The site is bounded to the east by Durham Road (A177), to the south and west by Bowburn Industrial Estate and to the north by further undeveloped land giving way to Bowburn North Industrial Estate. A site location plan can be seen in Appendix A (WYG Figure 01).

The development site is currently an area of unutilised ground. There are areas of tarmac to the south of the development site including a former access road. Two concrete pads are located just outside of the development site to the north-west. The majority of the site is covered in rough grassland. There are also a number of trees within the site primarily along the eastern and northern the site boundaries. There is an area of private allotments in the north of the development site. There is no evidence of the former mineworkings or other features of heritage interest within the site boundary. Photographs of the site can be seen in Appendix C.



Bowburn Retail Store

The proposed development is a retail food store of gross internal floor area of 4184m² and covered loading area to the west of the store. 313 parking spaces and six trolley bays will be provided to the north of the store. The main access to the store will from Durham Road to the east and access to the service yard from the industrial estate to the west. The development will retain a number of trees located within the development site and provide additional planting. A full description of the development is included in the Design and Access Statement. A plan of the proposed development is included in Appendix A.

4.0 Legislation and Planning Policy Context

4.1 Ancient Monuments and Archaeological Areas Act 1979

Scheduled Monuments are designated by the Secretary of State for Culture, Media and Sport on the advice of English Heritage as selective examples of nationally important archaeological remains. Under the terms of Part 1 Section 2 of the Ancient Monuments and Archaeological Areas Act 1979 it is an offence to damage, disturb or alter a Scheduled Monument either above or below ground without first obtaining permission from the Secretary of State. This Act does not allow for the protection of the setting of Scheduled Monuments.

4.2 Planning (Listed Buildings and Conservation Areas) Act 1990

The Act outlines the provisions for designation, control of works and enforcement measures relating to Listed Buildings and Conservation Areas. Section 66 of the Act states that the planning authority must have special regard to the desirability of preserving the setting of any Listed Building that may be affected by the grant of planning permission. Section 72 of the Act states that special attention shall be paid to the desirability of preserving or enhancing the character or appearance of Conservation Areas.

4.3 Planning Policy Statement 5: Planning for the Historic Environment - 2010

Planning Policy Statement 5 (PPS5) sets out the Government's national planning policies on the conservation of the historic environment. The PPS covers all aspects of the historic environment and heritage assets including designated assets (World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Conservation Areas, Registered Parks and Gardens and Registered Battlefields) and non-designated assets. The PPS identifies that consideration of the historic environment and the requirements for assessment and mitigation of impacts on heritage assets should be proportional to their value and the effect of proposals on their significance. The PPS sets out the approach regional and local



Bowburn Retail Store

authorities should adopt in identifying and making provision for conservation of heritage within the plan making process (HE1-HE5) and in assessing development proposals within the context of applications for development (HE6-HE12).

The PPS states that the significance of heritage assets (including their settings) should be identified and the effect of the proposal on the significance of the asset should be assessed. Prior to validation the planning application should include sufficient information to enable the impact of proposals on significance to be assessed and thus where desk-based research is insufficient to assess the interest field evaluation may also be required (HE6). The PPS includes policy principles to guide the determination of applications relating to heritage assets (HE7 and HE8) and additional principles to be considered for designated assets (HE9 and HE10).

Whilst the PPS reflects the Governments overarching aim that “the historic environment and its heritage assets should be conserved and enjoyed for the quality of life they bring to this and future generations” it recognises that there are occasions where loss of significance is justified on the merits of new development. The more significant the asset and the greater the harm to the significance the greater the justification will be needed. Policy HE11 outlines a number of principles for enabling development that should be considered in assessing the benefits and disbenefits. Where loss of significance as a result of development is considered justified the PPS includes provision to allow for the recording and advancing understanding of the asset before it is lost using planning conditions or obligations (e.g. S106) as appropriate (HE12). The results of these investigations should be made available and the archive deposited in a suitable repository. A Planning Practice Guide (English Heritage, March 2010) provides further information and guidance on the interpretation and implementation of the PPS.

4.4 Local Policy and Guidance

The City of Durham Local Plan (adopted 2004) contains several “saved” policies relating to heritage. The policies reinforce the principles of national planning policy. The relevant policies include:

- E21 Protection of the Historic Environment
- E22 Conservation Areas
- E24 Scheduled Ancient Monuments and Archaeological Remains



Bowburn Retail Store

The full text of the relevant policies can be seen in Appendix D. Additional policies relating to World Heritage Sites (E3 and E4) Conservation Areas (E6), Listed Buildings (E23), Battlefields (E25) and Parks and Gardens (E26) are also present within the plan, however as there are no assets within these categories in the vicinity of the development site these policies are not relevant to this application and are not considered further.

4.5 Analysis

The proposals will not directly affect any designated heritage assets therefore these policies will not be affected. There are not anticipated to be any indirect effects upon the setting of designated heritage features as the designated sites are sufficiently distant from the proposed development site that it is not included within their setting.

The development may affect archaeological remains, however it is considered most likely that these will be of local or low value. It is therefore considered that this desk-based assessment prior to the submission of the planning application allows an assessment of the potential impact to be undertaken and has enabled appropriate evaluation and mitigation measures to be devised. The mitigation measures proposed within this report are considered to be proportionate to the significance of remains identified. It is not anticipated that the development within the site would be in direct conflict with any identified and current planning policies.

5.0 Baseline Data

5.1 Designated Sites

There are no World Heritage Sites, Scheduled Monuments, Listed Buildings, Registered Battlefields, Registered Common Land or Registered Parks and Gardens within the study area.

There is one Conservation Area within the study area. The Bowburn Conservation Area is located approximately 170m south-east of the proposed development site. A Conservation Area Appraisal has not been completed for the area. The Conservation Area is largely comprised of miners housing of early 20th century date which was built to serve the needs of Bowburn Colliery which was partially located within the development site.



5.2 Archaeological and Historic Background

The Historic Environment Record and the National Monuments Record holds details for 15 sites within the study area. Further details of these sites can be seen in Appendix E and on WYG Figure 02. The bracketed site numbers within the text refer to the site reference on the figure and in the table.

5.2.1 Prehistoric (up to 43AD)

There is a paucity of recorded evidence for activity within the study area and wider region during the prehistoric periods. This lack of evidence may be partially due to the relatively low density of population, which means that much activity is below archaeologically visible levels, and the extensive use of organic materials which do not survive well in the archaeological record.

The climate in the early prehistoric period would preclude settlement for much of the Palaeolithic period as this region would have been glaciated. Throughout the late Palaeolithic, Mesolithic and Neolithic periods it is probable that hunter gatherers would have moved between upland and lowland areas exploiting resources. It is feasible that Bowburn would have lain along routes travelled and therefore transitory evidence of population, such as flint artefacts or temporary settlements may be present. Within the wider region there are isolated find spots and concentrations of flint tools.

As the transition from hunter gatherers to settled farmers occurred in the Neolithic period there was a gradual shift inland indicating less reliance on marine resources. Settlement appears to have been concentrated in lowland areas, whilst upland areas show evidence for ritual activity and burial. The distribution of evidence indicates that the fertile lowlands of the Wear valley and the sands and gravels of Durham, were the first areas to be settled and exploited. Bowburn lies to the south of the Durham gravels and would have been attractive as an area for expansion when pressure for resources within these areas increased.

The pattern of settlement that became established in the Neolithic period appears to have continued into the Bronze Age. Within the region there is an increase in density of recorded monuments from the Bronze Age. This may be partially due to the monumental nature of round barrows and cairns which means they may have been respected by later populations. Until recently the nature of Bronze Age evidence has been restricted to isolated findspots of axes and flints which probably represent casual loss during transitory passage through the area.



Bowburn Retail Store

Evaluation and excavations in advance of road construction to the east of the study area in 2007 identified a potential Bronze Age settlement (ASUD, 2007). The site comprised a first phase of post holes, indicating circular structural features, which may have been enclosed by a palisade. These were overlain by a later enclosed settlement. The internal area of the enclosure was heavily truncated however pits and postholes indicating structural features were recorded. Although the form of the enclosed settlement may indicate an Iron Age date environmental remains of particular seed types indicate a Bronze Age date.

Evidence of settlement within the region in the Iron Age becomes more frequent and the population appears to have increased. The pattern of settlement also exhibits a change as nucleated and defended settlements become more common. An Iron Age settlement at Brandon approximately 4km west of Bowburn excavated in 1960-61 had evidence of two circular huts and furnaces, within a rectangular ditched enclosure. The settlement showed several phases of activity, particularly relating to the re-defence of the settlement, with palisade trenches and additional ditches and ramparts constructed indicating conflict within the region at this time. A rectangular enclosure and field boundary (Site 1) is recorded in the south-east of the study area from aerial photographs. The enclosure has not been excavated and therefore its antiquity can not be confirmed but may date from the Iron Age. A circular cropmark which is likely to have been removed by road construction was also recorded to the east of the study area and may have been a ploughed out barrow or roundhouse (HER2695).

5.2.2 Roman/Romano-British (43AD to c.450AD)

Whilst this region does not appear to have been heavily defended by the Romans, the forts at Binchester, Ebchester and Chester-le-Street within this region are on major roads and are likely to have been built as part of the strategic defence network.

The postulated route of a Roman road between Great Stainton to Chester-le-Street passes to the west of Bowburn. This road would have formed that principal north-south route through East Durham leading to Newcastle and Hadrian's Wall. It is generally known as Cade's road after the 18th century antiquarian who first identified its route (Site 13). The line of the Roman road can be traced from the south towards the motorway junction, however after this the line is uncertain and it is anticipated to have passed just to the east of the development site. Should the line of the road have passed through the development site it is highly likely that the later colliery development would have truncated or disturbed the remains. There is also the find spot of a Roman brooch (Site 15) within the study area, however this is anticipated to be a casual loss and the precise findspot is unknown.



Bowburn Retail Store

Although no other sites of Roman date have been recorded within the study area it is probable that there may be evidence relating to the transitory use of the site by people travelling in this period.

5.2.3 The Early Medieval (c.450AD to 1066AD) and Medieval (1066AD to c.1540AD) Periods

There are no recorded sites of early medieval date within the study area, however it is probable that a number of the sites documented in the medieval period have their origins in the early medieval period and represent continuation of settlement. This may be the case for Tursdale which is likely to derive its name from Old Norse and means 'Thor's Valley (HER 6899).

The medieval period is the first period which contains evidence for settlement which is sustained until the modern period. Whilst Bowburn does not have medieval origins a number of the villages surrounding the village do including Tursdale, Coxhoe, Shincliffe and Croxdale. There are numerous documentary references within these villages to mills, houses, churches and crosses although relatively few have survived until the modern day.

There is a potential that the study area may contain the archaeological remains of dispersed medieval settlement and the remnants of medieval agricultural practices or field patterns. An aerial survey of the area (see Section 7) identified numerous areas of ridge and furrow remains, some of these are of medieval date although the majority date to the post-medieval period. The majority of these remains have been removed by subsequent development and are now overlain by residential housing. Geophysical survey in the south of the study area identified levelled ridge and furrow remains within the area of the proposed Durham Green Business Park (ASWYAS, 2008) and the evaluation in advance of road development to the east of the study area also recorded buried ridge and furrow remains (ASUD, 2007). It is unlikely that the study area contains medieval mining remains due to the depth of coal in this area.

5.2.4 Post-Medieval Period (c.1540AD to 1900AD) and Modern (1900AD to present)

The early post-medieval period demonstrates few changes within the study area. There was a general decline in settlement in this period in a number of the medieval villages such as Coxhoe and Old Quarrington, however there is anticipated to have been little changes within the study area.

The area saw a renaissance in population in the later part of the post-medieval period due to the sinking of numerous collieries in the area. An attempt was made to mine coal in the Bowburn area in the 1840s when a pit was established near the Coxhoe terminus of the Durham City Branch of the Clarence Railway. The mine was abandoned in 1857 (Durham Miners Project, 2004). The first edition OS map showed Bowburn as



Bowburn Retail Store

a small hamlet on the Durham to Stockton turnpike road. Bowburn House and the Hare and Hounds public house were marked.

The second Bowburn Colliery (Site 7) was sunk in 1906 with the first coal drawn in 1908. A double-horizontal steam winding engine (Site 2), built by the Airdrie Iron Company Ltd, was installed to serve the Busty seam at a depth of 109 fathoms. Another winding engine, this time for the Harvey seam, was installed in 1923. Built by Robey, it was a double horizontal cross-compound steam engine. The piston valve engine had link motion on the Stephenson principle, with Robey overwind and overspeed prevention gear. A spur line connected the colliery to the railway line, described as the Newcastle, Leamside & Ferryhill section of the North Eastern Railway at Bowburn Colliery Junction. Pithead baths and also a Miners' Hall were constructed to serve the colliery.

The colliery employed 397 people (289 below and 108 above) in 1914. This rose until a peak in 1940 when 2,358 were employed below, coinciding with the Second World War when demand for coal was very high. Employment was maintained at over 2,000 total employed until the 1960s and even in 1964 1,320 people were still employed. The colliery primarily provided coal for manufacturing and coking at first, however by the 1940s it was also providing household coal and fireclay was being won as a by-product. Bowburn Colliery closed in 1967 (Durham Miners Project, 2004).

In addition to the remains such as waggonways, horse gins (Site 4) and engine sheds associated with the coal mines in the area a number of other industrial sites are recorded in the wider region. These include sites such as clay pits and tile works at Crow Trees which are likely to have been established to provide building materials for the growing village. The evaluation in advance of road development also recorded evidence of the industrial history of the area noting numerous areas of mining waste (ASUD 2007) and a large spoil mound associated with the colliery is recorded in the west of the study area (Site 8).

The opening of the main Bowburn Colliery was catalyst for the growth of Bowburn and precipitated the building of miner housing and associated facilities such as the church and school. The site of the colliery is now partly occupied by Bowburn South Industrial Estate and partly by the development site. The only visible remains of the colliery itself are the pit housing, much of which falls within the village Conservation Area. Bowburn grew in the modern period and the majority of the village dates from the post-war era. Wartime air raid shelters have been recorded within the village (Site 12) and adjacent to the colliery (Site 11).



6.0 Historic Mapping Survey

Extracts of selected historic maps can be seen in Appendix F. Bowburn was not shown on Cary's Map of Durham (1787), although Moor House was depicted. The Kelloe Parish tithe mapping (Quarrington township, 1839, not reproduced) demonstrated that Bowburn was still only a small hamlet at this time. The mapping depicted the development site as being fields with a shelter belt of trees adjacent to Durham Road. Moor House (later Bowburn House and Bowburn Hall Farm) was depicted to the north of the development site and it is anticipated that the development site formed part of the wider landholdings of Moor House hence the tree shelter belt.

There are few changes visible on the first edition Ordnance Survey mapping (1857). The development site was shown as three fields with a shelter belt of trees to the east and north of the development site. Moor House was now called Bowburn House and a track runs along the west of the development site before turning east to connect with Durham Road. The only other feature within the development site was a small clump of trees. There were almost no changes on the second edition OS mapping (1897) with the exception of the removal of the shelter belt of trees along Durham Road and the eastern site boundary.

Significant changes have occurred by the third edition (1920) OS mapping. Bowburn Colliery has been established and extends across the development site as well as to the south and west. The development site was bisected south-west to north-east by a branch railway line. To the north of the railway line there were relatively few changes with the exception of a reservoir being established in the north of the development area and the lands associated with Bowburn House decreased and demarcated by a clear boundary. To the south of the railway line more extensive changes had occurred. Several industrial buildings, most likely for coal processing as some were directly over the railway branch lines for ease of transport, had been established along the western and southern boundaries of the development site. In the centre of the site a reservoir had been constructed. Much of the site was screened along the eastern boundary by re-established tree planting. The workers housing which now forms the core of the Conservation Area had been established to the south of the village and the layout of the streets to the east of the development site were depicted but housing had not been constructed.

Further development of the colliery was evident on the fourth edition OS mapping (1946). Significant expansion of the railway/tramway sidings had occurred to the west of the development site and a larger building housing coal screening chambers had been constructed. The buildings along the western and southern boundaries had also been extended. The reservoir in the centre of the site was still present and



additional tramlines to service the wider colliery area had also been established. The additional workers housing to the east of the development site had now been built including an area of allotment gardens.

7.0 Aerial Photographs

An extensive analysis of aerial photographs has been undertaken for this region as part of an Aggregates Levy Sustainability Fund funded project. The results of this study are lodged with the Durham Historic Environment Record and were examined as part of this project. The study has identified extensive remains of ridge and furrow, of medieval and post-medieval date, within the study area. The majority of these remains have been levelled or destroyed by later development. Whilst the majority of the fields have been amalgamated in the modern period the field alignment has remained largely the same.

The other main class of site identified were air raid shelters. The shelters are located at the same locations as those recorded on the NMR (Sites 11 and 12). The locations of features identified from the aerial photographs can be seen on Figure 02, Appendix E.

8.0 Heritage Potential and Impact Assessment

Bowburn colliery was demolished in the late 1960s. It is anticipated that the majority of the buildings and potential archaeological remains would have been removed during this period, however there is the potential that not all of the foundations and below ground remains would have been removed. Any surviving colliery remains are considered to be of low heritage value due to their relatively recent date. Significant developments in mining engineering or practice are not recorded at Bowburn Colliery which might have raised their historical significance. Much of the proposed development will require limited ground works to create the car parking and access areas. A greater extent of groundworks will be required within the store footprint, however there are no proposals for significant below ground development such as basements. The magnitude of impact on heritage remains before any mitigation measures could be moderate negative resulting in the partial removal of remains. The unmitigated significance of effect would therefore be minor adverse.

There is considered to be a very low potential to discover previously unrecorded archaeological remains within the development site. The establishment of the colliery in the 20th century is anticipated to have substantially truncated and disturbed any archaeological remains pre-dating the 20th century, particularly in the areas of railway sidings and reservoirs. The route of Cades Roman Road is poorly defined in this area (Margary, 1967, RR80a, p.433) and therefore there is the potential that it may have passed through the



development site. The value and magnitude of impact on any previously unrecorded remains can not be known at this stage but they are likely to be of low or medium value and the impact could be up to substantial negative. The unmitigated significance of effect could therefore be intermediate adverse for remains of medium value and intermediate-minor adverse for remains of low value.

The setting and significance of the Conservation Area will not be affected by the proposed development. Whilst the Conservation Area would originally have had a connection to the development site because of the association with the colliery, the demolition of the colliery and subsequent redevelopment of the majority of the site has removed the visual connection. The development of the retail store will not affect the heritage significance of the Conservation Area.

9.0 Recommended Evaluation and Mitigation Measures

The evaluation and mitigation measures in this section are based upon mitigation measures previously agreed with Durham County Council (Lee White, 2007, WYG, 2007). The extension of the site boundary in comparison with the earlier consented development is relatively limited and does not encompass forms of heritage asset not previously considered. The previously agreed approach is therefore considered to be appropriate with regard to the significance and form of heritage assets to be impacted.

Evaluation of the potential archaeological remains associated with the 20th century mineworkings is considered to be of limited value. The location of heritage assets can be identified with relative certainty from historic mapping and evaluation trenches would yield relatively little additional information. Geophysical survey would be unlikely to yield productive results due to the anticipated localised disturbance and metal bearing materials associated with the demolition of the mine buildings within the site.

It is recommended that a strip, map and record methodology is adopted across the development site. A strip, map and record methodology encompasses the monitoring of initial groundworks during the removal of overburden and the excavation for foundations or services to the top of archaeologically significant layers. All identified archaeological features are recorded on a plan of the site and subsequently excavation of a sample of these features is undertaken. The sample of features excavated is determined with reference to the significance of the archaeological remains. This approach means that a mitigation response which is proportionate to the significance of the archaeological remains will be adopted in line with the requirements of Policy 12.3 of PPS5.



The strip, map and record methodology should be undertaken in advance of the commencement of the main construction works to ensure adequate time is available to record identified archaeological remains. All further mitigation measures should be undertaken in accordance with a Written Scheme of Investigation agreed in advance with the Archaeologist for Durham County Council. All mitigation works should be undertaken in accordance with the Standards and Guidance from the Institute for Archaeologists.

10.0 Residual Impacts and Conclusions

The implementation of a programme of strip, map and record will allow the most appropriate final mitigation strategy to be adopted for the development site. This mitigation strategy may allow for the preservation of archaeological remains *in situ*, where groundworks are limited this may not be possible. Where preservation *in situ* is not possible, or the significance of the archaeological remains do not warrant it, a programme of preservation through recording will be pursued. It is anticipated that the magnitude of impact upon the colliery and any previously unrecorded archaeological remains can be reduced to slight negative through the implementation of this evaluation and mitigation strategy. The residual significance of effect would therefore be minor adverse for remains of medium value and minor adverse – neutral for remains of low value and is therefore not considered to be a significant environmental effect.



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Historic Mapping

Cary's Map of Durham 1787

Ordnance Survey mapping 25" to 1mile/1:2500 1857, 1897, 1920, 1946 Ref: DT(27.14)A-D

Quarrington tithe plan and apportionment 1839 Ref: EP/Ke26/1-2

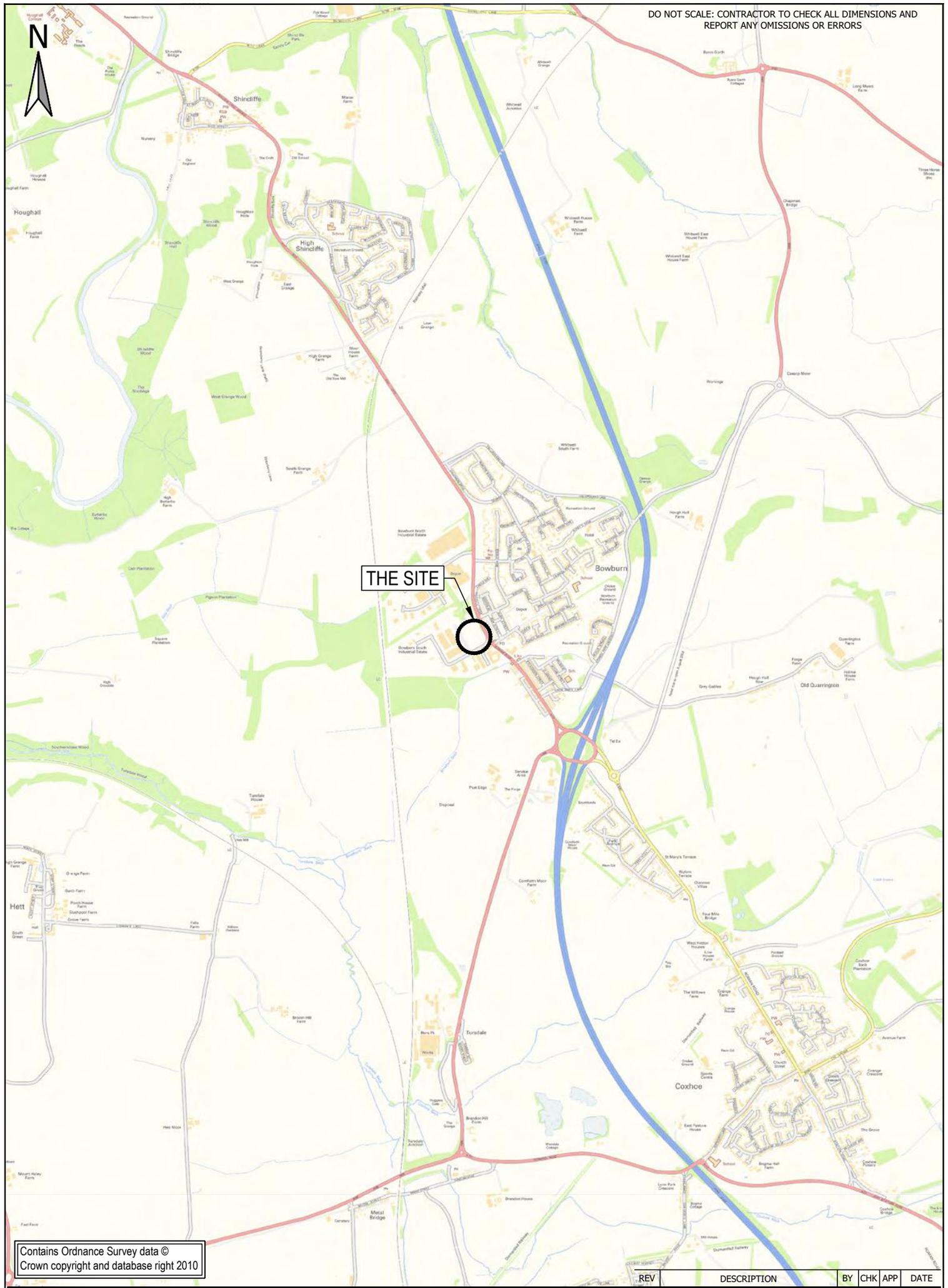


Appendices



Appendix A – Site Location Plan & Proposed Development Plan

DO NOT SCALE: CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ANY OMISSIONS OR ERRORS



THE SITE

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Client:
MORBAINE LTD

Project: A016151-3
**BOWBURN RETAIL STORE
CULTURAL HERITAGE
ASSESSMENT**

Drawing Title:
SITE LOCATION PLAN

| REV | DESCRIPTION | BY | CHK | APP | DATE |
|-----|-------------|----|-----|-----|------|
| | | | | | |

| Scale @ | A4 | Drawn | Date | Checked | Date | Approved | Date |
|-------------|--------|-------|-------------|---------|----------|----------|----------|
| 1:25,000 | | CM | 13.09.10 | KH | 16.09.10 | CT | 16.09.10 |
| Project No. | Office | Type | Drawing No. | | Revision | | |
| A016151-3 | 41 | 54 | Fig. 1 | | | | |



- Notes**
- 1) This drawing MUST NOT BE SCALED.
 - 2) All dimensions to be CHECKED ON SITE and any DISCREPANCY reported to the Architects.
 - 3) The site boundary shown is the best assumed from available data and does NOT represent legal ownership.

SCHEDULE OF ACCOMMODATION

RETAIL FOOD STORE
Gross Internal Floor Area; 4184 m²

CAR PARKING
285 Standard Parking Spaces
12 Parent & Child Parking
16 Disabled Parking

313 TOTAL PARKING

6 No Trolley bays

- Revisions.**
- | | |
|--|--|
| APPROVAL | INFORMATION |
| PRELIMINARY | FOR CONSTRUCTION |

Project
RETAIL DEVELOPMENT
DURHAM ROAD
BOWBURN

Client
OGDEN GROUP

Drawing Title
PROPOSED SITE PLAN

| | |
|------------------------------------|-----------------------------|
| Drawing By DMW | Checked By |
| Date JULY 2012 | Scale 1:1250 @ A3 |
| Drawing Number 6243 / 16 | Revision |

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Appendix B - Assessment Methodology



Cultural Heritage Impact Assessment Methodology

No standard method of evaluation and assessment is provided for the assessment of significance of effects upon cultural heritage, therefore a set of evaluation and assessment criteria have been developed using a combination of the Secretary of State's criteria for Scheduling Monuments (Scheduled Monument Statement, Annex 1), Design Manual for Roads and Bridges, Volume 11, Part 3, Section 2, HA 208/07 and Transport Analysis Guidance (TAG Unit 3.3.9, Heritage of Historic Resources Sub-Objective). Professional judgement is used in conjunction with these criteria to undertake the impact assessment.

Value

The table below provides guidance on the assessment of cultural heritage value on all archaeological sites and monuments, historic buildings, historic landscapes and other types of historical site such as battlefields, parks and gardens, not just those that are statutorily designated.

| Value | Examples |
|-----------|---|
| Very High | World Heritage Sites, Scheduled Monuments of exceptional quality, or assets of acknowledged international importance or can contribute to international research objectives Grade I Listed Buildings and built heritage of exceptional quality Grade I Registered Parks and Gardens and historic landscapes and townscapes of international sensitivity, or extremely well preserved historic landscapes and townscapes with exceptional coherence, integrity, time-depth, or other critical factor(s) |
| High | Scheduled Monuments, or assets of national quality and importance or than can contribute to national research objectives Grade II* and Grade II Listed Buildings, Conservation Areas with very strong character and integrity, other built heritage that can be shown to have exceptional qualities in their fabric or historical association. Grade II* and II Registered Parks and Gardens, Registered Battlefields and historic landscapes and townscapes of outstanding interest, quality and importance, or well preserved and exhibiting considerable coherence, integrity time-depth or other critical factor(s) |
| Medium | Designated or undesignated assets of regional quality and importance that contribute to regional research objectives Locally Listed Buildings, other Conservation Areas, historic buildings that can be shown to have good qualities in their fabric or historical association Designated or undesignated special historic landscapes and townscapes with reasonable coherence, integrity, time-depth or other critical factor(s) |



| Value | Examples |
|------------|---|
| | Assets that form an important resource within the community, for educational or recreational purposes. |
| Low | Undesignated assets of local importance Assets compromised by poor preservation and/or poor survival of contextual associations but with potential to contribute to local research objectives. Historic (unlisted) buildings of modest quality in their fabric or historical association Historic landscapes and townscapes with limited sensitivity or whose sensitivity is limited by poor preservation, historic integrity and/or poor survival of contextual associations. Assets that form a resource within the community with occasional utilisation for educational or recreational purposes. |
| Negligible | Assets with very little or no surviving cultural heritage interest. Buildings of no architectural or historical note. Landscapes and townscapes that are badly fragmented and the contextual associations are severely compromised or have little or no historical interest. |

Magnitude

The magnitude of the potential impact is assessed for each site or feature independently of its archaeological or historical value. Magnitude is determined by considering the predicted deviation from baseline conditions. The magnitude of impact categories are adapted from the Transport Assessment Guidance (TAG Unit 3.3.9) and Design Manual for Roads and Bridges, Volume 11, Part 3, Section 2, HA 208/07.

| Magnitude of Impact | Typical Criteria Descriptors |
|---------------------|--|
| Substantial | Impacts will damage or destroy cultural heritage assets; result in the loss of the asset and/or quality and integrity; cause severe damage to key characteristic features or elements; almost complete loss of setting and/or context of the asset. The assets integrity or setting is almost wholly destroyed or is severely compromised, such that the resource can no longer be appreciated or understood. (Negative) The proposals would remove or successfully mitigate existing damaging and discordant impacts on assets; allow for the restoration or enhancement of characteristic features; allow the substantial re-establishment of the integrity, understanding and setting for an area or group of features; halt rapid degradation and/or erosion of the heritage resource, safeguarding substantial elements of the |



| Magnitude of Impact | Typical Criteria Descriptors |
|------------------------|--|
| | heritage resource. (Positive) |
| Moderate | Substantial impact on the asset, but only partially affecting the integrity; partial loss of, or damage to, key characteristics, features or elements; substantially intrusive into the setting and/or would adversely impact upon the context of the asset; loss of the asset for community appreciation. The assets integrity or setting is damaged but not destroyed so understanding and appreciation is compromised. (Negative) Benefit to, or restoration of, key characteristics, features or elements; improvement of asset quality; degradation of the asset would be halted; the setting and/or context of the asset would be enhanced and understanding and appreciation is substantially improved; the asset would be bought into community use. (Positive) |
| Slight | Some measurable change in assets quality or vulnerability; minor loss of or alteration to, one (or maybe more) key characteristics, features or elements; change to the setting would not be overly intrusive or overly diminish the context; community use or understanding would be reduced. The assets integrity or setting is damaged but understanding and appreciation would only be diminished not compromised. (Negative) Minor benefit to, or partial restoration of, one (maybe more) key characteristics, features or elements; some beneficial impact on asset or a stabilisation of negative impacts; slight improvements to the context or setting of the site; community use or understanding and appreciation would be enhanced. (Positive) |
| Negligible / No Change | Very minor loss or detrimental alteration to one or more characteristics, features or elements. Minor changes to the setting or context of the site. No discernible change in baseline conditions (Negative). Very minor benefit to or positive addition of one or more characteristics, features or elements. Minor changes to the setting or context of the site No discernible change in baseline conditions. (Positive). |

Magnitude (scale of change) is determined by considering the predicted deviation from baseline conditions. Quantifiable assessment of magnitude has been undertaken where possible. In cases where only qualitative assessment is possible, magnitude has been defined as fully as possible.

During the assessment any embedded mitigation has been considered in the impact assessment and this is clearly described in this section (cross referring the development description). Therefore, the magnitude of the impacts described herein will be stated before and after additional mitigation has been taken into consideration.



Impacts may be of the following nature and will be identified as such where relevant:

- Negative or Positive.
- Direct or indirect.
- Temporary or permanent.
- Short, medium or long term.
- Reversible or irreversible.
- Cumulative.

Significance

By combining the value of the cultural heritage resource with the predicted magnitude of impact, the significance of the effect can be determined. This is undertaken following the table below. The significance of effects can be beneficial or adverse.

| Significance of Effects | Magnitude of Impact | | | |
|-------------------------|---------------------------------------|------------------------|----------------------------|------------------------|
| | Substantial | Moderate | Slight | Negligible / no Change |
| Very High | Major | Major – Intermediate | Intermediate | Minor |
| High | Major – Intermediate | Intermediate | Intermediate – Minor | Neutral |
| Medium | Intermediate | Intermediate | Minor | Neutral |
| Low / Negligible | Intermediate – Minor or Minor-Neutral | Minor or Minor-Neutral | Minor – Neutral or Neutral | Neutral |

Significance should always be qualified as in certain cases an effect of minor significance could be considered to be of great importance by local residents and deserves further consideration.

The significance of effect is considered both before and after additional mitigation measures proposed have been taken into account.



Appendix C – Site Photographs



Photograph 1: Looking east across the southern part of the development site with the tarmac hard standing in the foreground.



Photograph 2: Looking north across development site with former access road in the foreground



Photograph 3: Looking north-east across northern half of the development site



Appendix D – Planning Policies



Bowburn Retail Store

City of Durham Local Plan, 2004

Policy E21 Protection of the Historic Environment

The council will preserve and enhance the historic environment of the district by:

1. Requiring development proposals to minimise adverse impacts on significant features of historic interest within or adjacent to the site; and
2. Encouraging the retention, repair and re-use of buildings and structures which are not listed, but are of visual or local interest.

Policy E22 Conservation Areas

The council will seek to preserve or enhance the character or appearance of the Conservation Areas within the City of Durham by:

1. Not permitting development proposals which would detract from the character or appearance of the Conservation Area or its setting. All development proposals should be sensitive in terms of siting, scale, design and materials, reflecting, where appropriate, existing architectural details;
2. Not permitting the demolition of buildings which contribute to the area's character. Permission for the demolition of any significant building will not be granted until a detailed scheme for appropriate redevelopment of the site has been approved;
3. Protecting trees, hedgerows, landscape features, views and undeveloped areas which contribute to the character or appearance of the area and its setting;
4. Requiring a sufficient level of detail to accompany applications for development to enable an assessment to be made of its impact on the Conservation Area.

In addition the council will also implement schemes for the enhancement of Conservation Areas where appropriate and as resources permit.

Policy E24 Scheduled Monuments and Archaeological Remains

The council will preserve Scheduled Ancient Monuments and other nationally significant archaeological remains and their setting in situ. Development likely to damage these monuments will not be permitted.



Bowburn Retail Store

Archaeological remains of regional and local importance, which may be adversely affected by development proposals, will be protected by seeking preservation in situ, and where preservation in situ is not justified by:

1. Ensuring that in areas where there is evidence that significant archaeological remains exist, or reasons to pre-suppose such remains exist whose extent and importance is not known, pre-application evaluation or archaeological assessment will be required; and
2. Requiring, as a condition of planning permission, that prior to development an appropriate programme of archaeological investigation, recording and publication has been made, in cases where the preservation in situ of archaeological remains is not justified;

In the event of archaeological remains being discovered once development has commenced, the council will seek to ensure that adequate opportunity is made available to investigate and record such discovery.



Appendix E – Recorded Cultural Heritage Sites


Recorded Cultural Heritage (National Monuments Record and Historic Environment Record)

| Site No. | Identifier | Grid Reference | Period | Description |
|----------|--------------------------|----------------|--------------------------|--|
| 1 | HER 414 | NZ 313 377 | Prehistoric | Rectangular enclosure and field boundary recorded from aerial photographs which may represent Iron Age settlement. |
| 2 | HER 785 | NZ 304 379 | Post Medieval | Bowburn colliery winding engines. Harvey winding engine a double horizontal cross compound steam engine on 1923. Also Busty engine a double horizontal steam winder of 1908. Both were demolished in 1908. |
| 3 | HER 4358 | NZ 303 387 | Modern | Bowburn village. The village was only a tollgate, four or five houses and Bowburn House in 1857. The colliery was sunk in 1906 and production began in 1908 which prompted the construction of workers housing. The main expansion of the village occurred after the Second World War. |
| 4 | HER 5905 | NZ 31234 37576 | Post Medieval | Possible horse gin at Lambs Close. A circular structure of approx 50m identified from aerial photographs. |
| 5 | HER 9606 | NZ 30501 37500 | Modern | A desk-based assessment carried out in advance of Bowburn Business Park and later updated. Subsequently geophysical survey was carried out on the site but recorded only levelled ridge and furrow remains and evidence of later drainage and utilities. |
| 6 | UID 25932 | NZ 310 371 | ?Medieval | Park Hill - site of Quarrington Grange. |
| 7 | UID 1448281; HER 6988 | NZ 301 377 | Modern | Bowburn Colliery. A twentieth century colliery is visible as an earthwork on air photographs, centred at NZ 301 377. The feature covers an area of approximately 21ha. On later photography the feature has been levelled. |
| 8 | UID 1456865 | NZ 295 377 | Modern | A twentieth century spoil heap is visible as an earthwork on air photographs. The spoil heap measures approximately 11.4ha and is associated with a Bowburn Colliery (UID 1448281). It has been levelled on the latest 1989-1995 aerial photographs. |
| 9 | UID 25943; HER 2703 | NZ 312 372 | Medieval / Post-Medieval | Ridge and furrow seen on air photograph. |
| 10 | UID 25945; HER 2705 | NZ 314 380 | Post-Medieval | Ridge and furrow seen on air photograph. |

Bowburn Retail Store



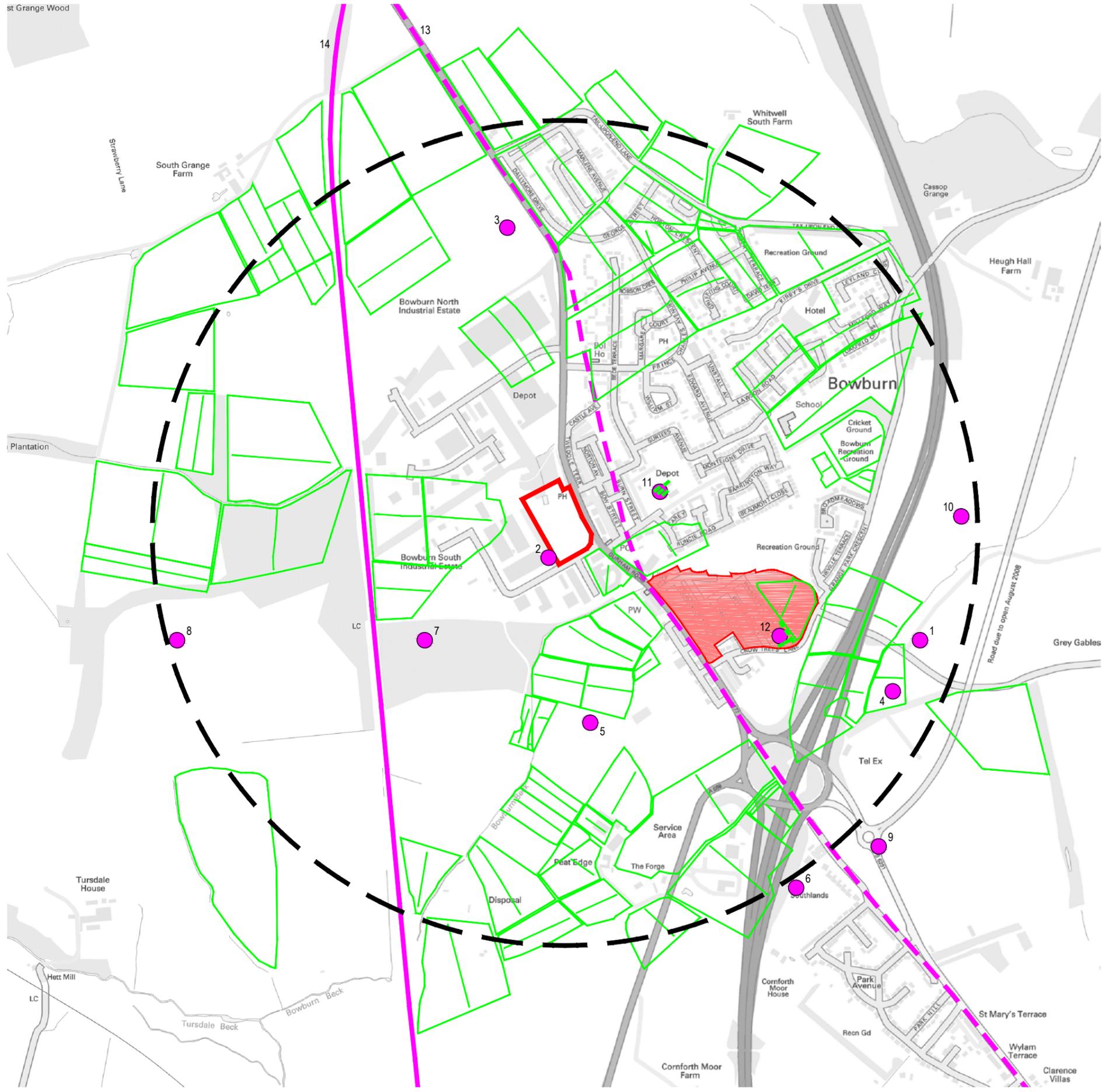
| Site No. | Identifier | Grid Reference | Period | Description |
|----------|--------------------------|----------------|---------------|---|
| 11 | UID 1448264 | NZ 3067 3806 | Modern | World War II air raid shelters are visible as structures on air photographs, centred at NZ 3067 3806. The shelters are arranged within the grounds of a school. |
| 12 | UID 1448260 | NZ 3096 3771 | Modern | World War II air raid shelters are visible as structures on air photographs, centred at NZ 3096 3771. The shelters are arranged within the grounds of a school. |
| 13 | UID 1029995; HER 3333 | - | Roman | Roman road running from Barmby - Stamford Bridge - Thirsk - Durham. This road extends for 72 miles and can be traced in lines of roads, hedgerows and parish boundaries. This may also be known as Cades Road in this area. |
| 14 | UID 1375371 | - | Post-Medieval | The Great North of England Railway from Darlington to Newcastle opened in 1841. |
| 15 | UID 25899 | NZ 31 38 | Roman | A harp shaped Roman brooch found at Cassop and now in the British Museum. |



DO NOT SCALE: CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ANY OMISSIONS OR ERRORS

KEY

- SITE BOUNDARY
- STUDY AREA
- FEATURES IDENTIFIED FROM AERIAL PHOTOGRAPHY
- CULTURAL HERITAGE FEATURE
- PROJECTED LINE OF ROMAN ROAD
- CULTURAL HERITAGE FEATURES
- CONSERVATION AREA



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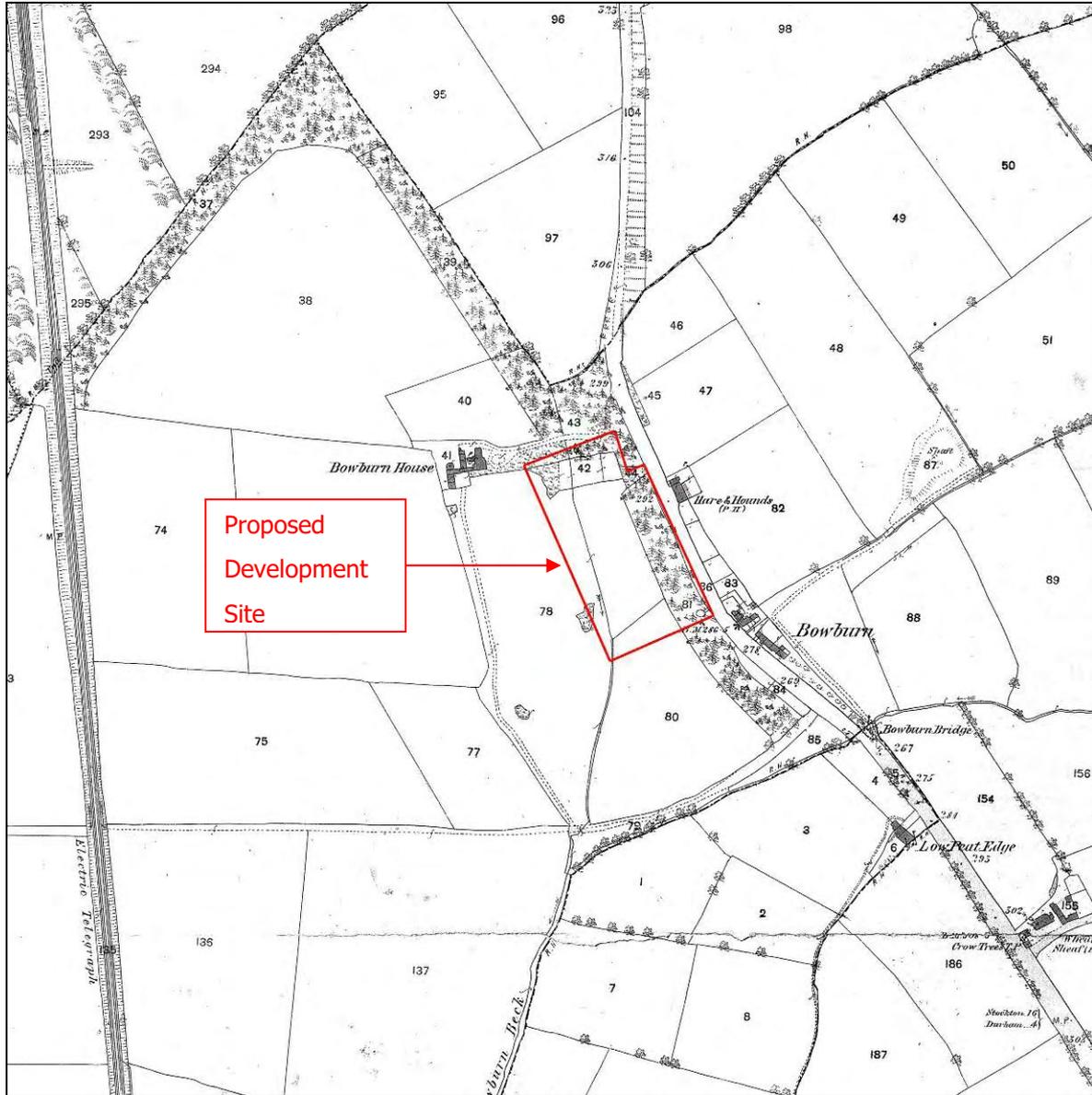
Project: A016151-3
**BOWBURN RETAIL STORE
CULTURAL HERITAGE
ASSESSMENT**

Drawing Title:
RECORDED CULTURAL HERITAGE

| REV | DESCRIPTION | BY | CHK | APP | DATE | |
|---------------------------------|---------------------|-------------------|------------------------------|------------------|----------------|------------------|
| Scale @ A3 1:10,000 | Drawn CM | Date 13.09.10 | Checked KH | Date 16.09.10 | Approved CT | Date 16.09.10 |
| Project No. A016151-3 | Office 41 | Type 54 | Drawing No. Fig. 2 | Revision | | |



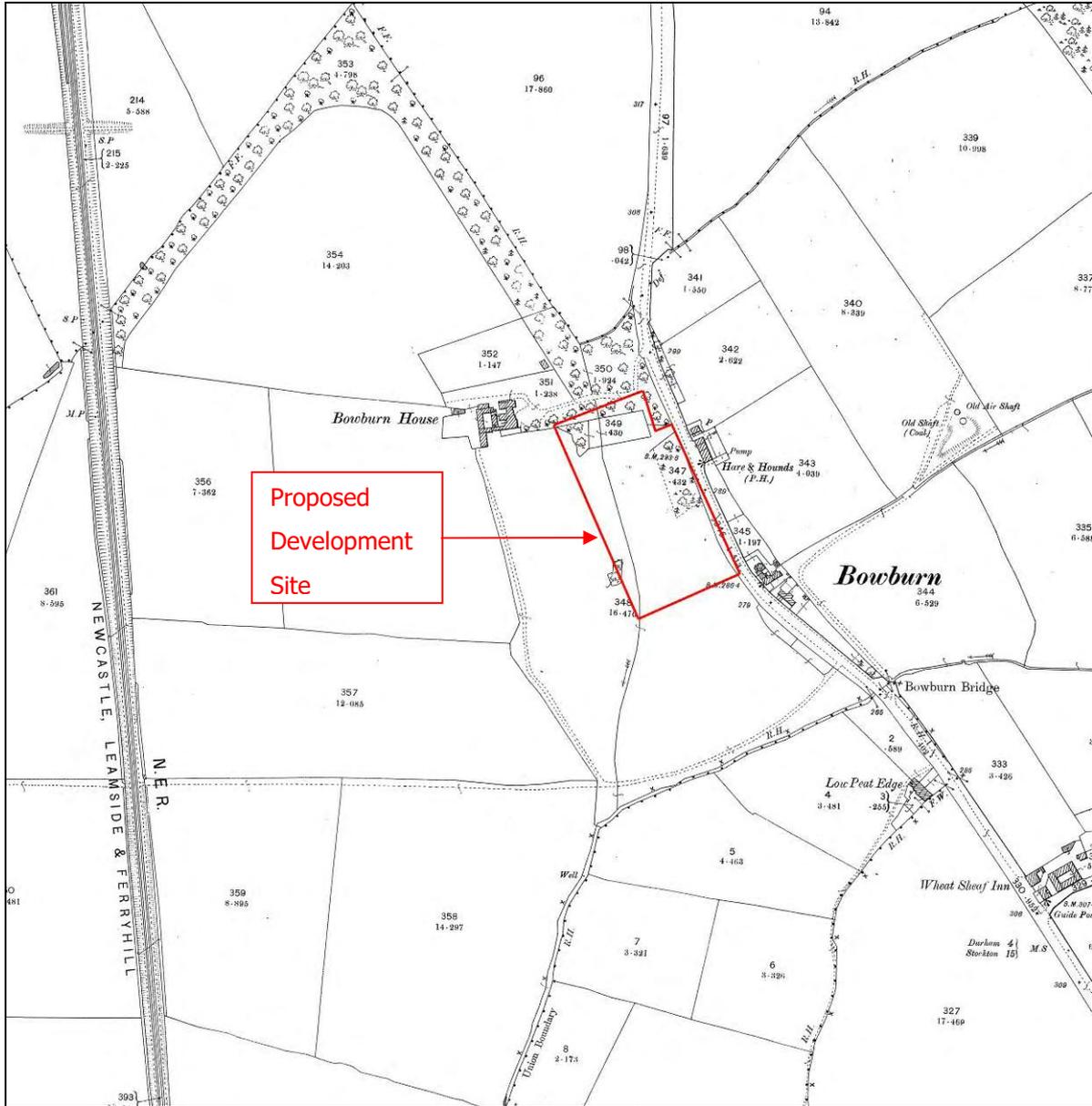
Appendix F – Historic Mapping



First Edition Ordnance Survey Mapping, 1857

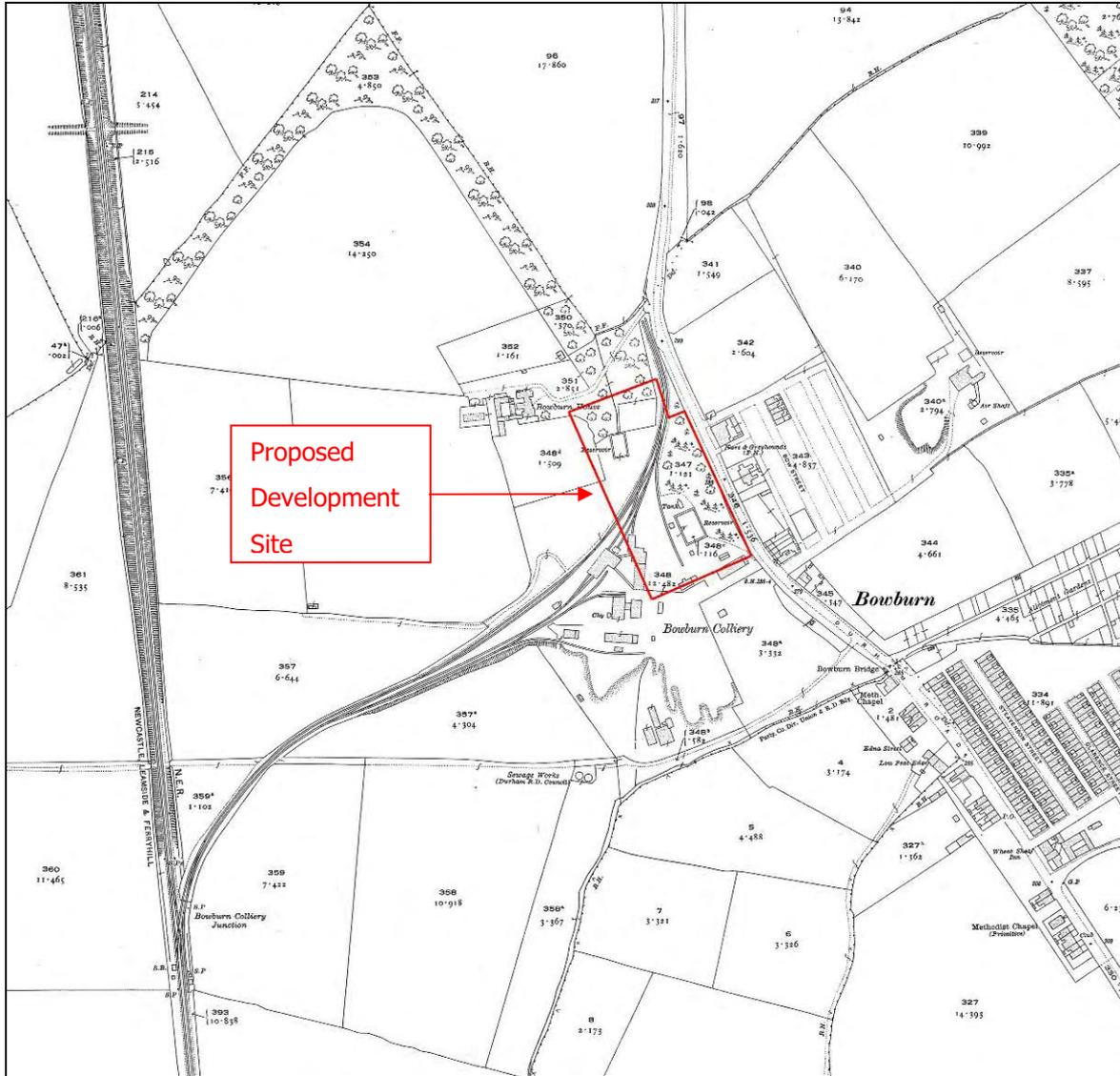
Reproduced with the permission of Durham County Record Office, Ref: DT(27.14)A

Bowburn Retail Store



Second Edition Ordnance Survey Mapping, 1897

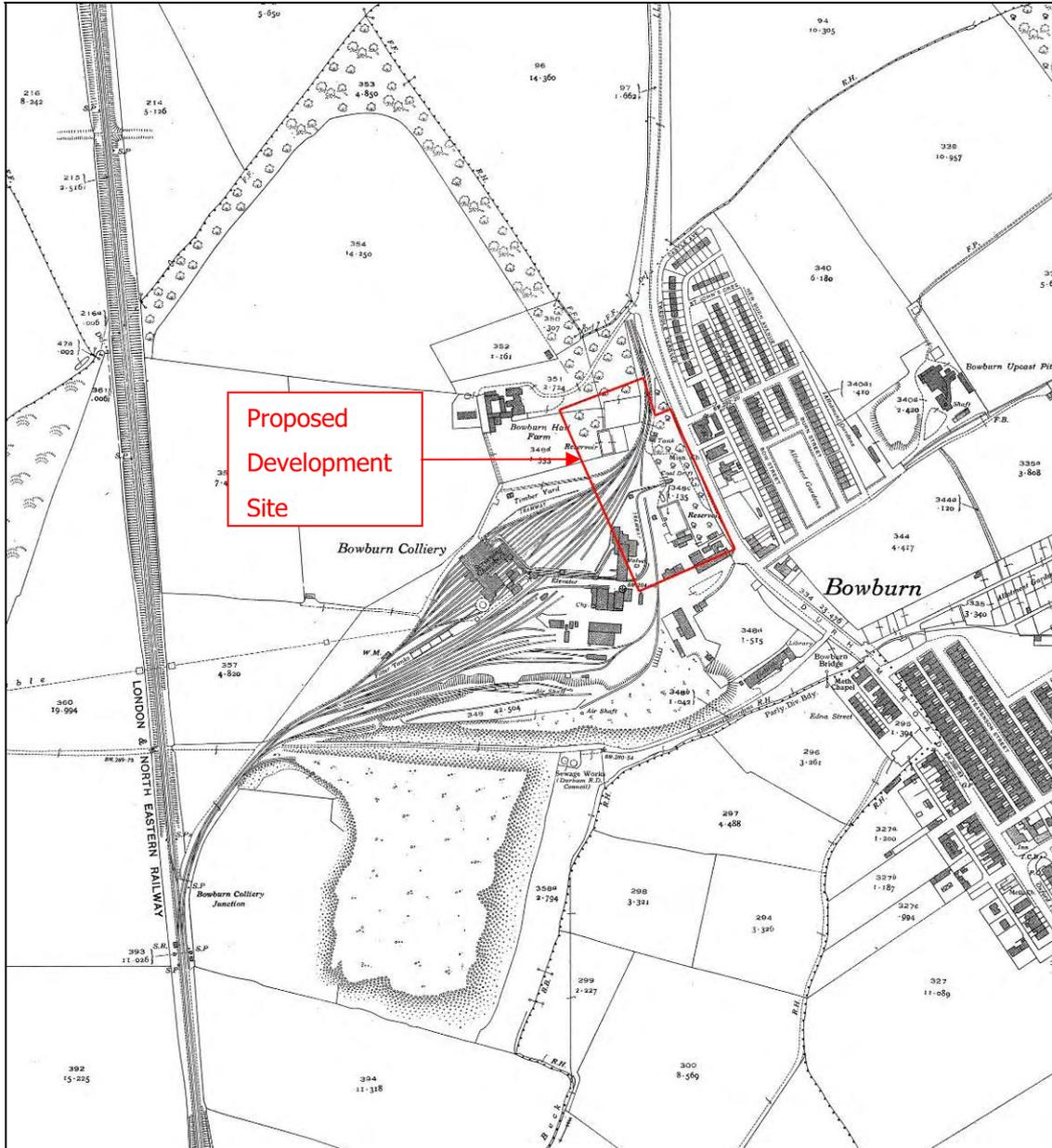
Reproduced with the permission of Durham County Record Office, Ref: DT(27.14)B



Third Edition Ordnance Survey Mapping, 1920

Reproduced with the permission of Durham County Record Office, Ref: DT(27.14)C

Bowburn Retail Store



Fourth Edition Ordnance Survey Mapping, 1946

Reproduced with the permission of Durham County Record Office, Ref: DT(27.14)D



Appendix G – Report Conditions



Cultural Heritage Desk-Based Assessment, Bowburn Retail Store, Bowburn, County Durham

This report is produced solely for the benefit of **Morbaine Ltd** and no liability is accepted for any reliance placed on it by any other party unless specifically agreed in writing otherwise.

This report is prepared for the proposed uses stated in the report and should not be used in a different context without reference to WYG. In time improved practices, fresh information or amended legislation may necessitate a re-assessment. Opinions and information provided in this report are on the basis of WYG using due skill and care in the preparation of the report.

This report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times.

This report is limited to those aspects reported on, within the scope and limits agreed with the client under our appointment. It is necessarily restricted and no liability is accepted for any other aspect. It is based on the information sources indicated in the report. Some of the opinions are based on unconfirmed data and information and are presented as the best obtained within the scope for this report.

Reliance has been placed on the documents and information supplied to WYG by others but no independent verification of these has been made and no warranty is given on them. No liability is accepted or warranty given in relation to the performance, reliability, standing etc of any products, services, organisations or companies referred to in this report.

Whilst skill and care have been used, no investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather related conditions.

Although care is taken to select monitoring and survey periods that are typical of the environmental conditions being measured, within the overall reporting programme constraints, measured conditions may not be fully representative of the actual conditions. Any predictive or modelling work, undertaken as part of the commission will be subject to limitations including the representativeness of data used by the model and the assumptions inherent within the approach used. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions.

The potential influence of our assessment and report on other aspects of any development or future planning requires evaluation by other involved parties.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYG accept no liability for issues with performance arising from such factors

November 2008

WYG Environment Planning Transport Ltd