



Sainsbury's Supermarkets Ltd
Steart Farm, Cheddar, Somerset
Proposed New Foodstore
Archaeology and Heritage Desk-Based
Assessment
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1.0 Introduction

This Archaeological and Heritage Desk-Based Assessment has been prepared by Martin Brown, Principal Archaeologist, WYG on behalf of Sainsbury's Supermarkets Ltd to inform a planning application for a proposed new food store and associated highways works at the former Steart Farm, Lower New Road, Cheddar.

The assistance and support of the County Archaeologist for Somerset and his staff, as well as that of the Somerset Record Office are gratefully acknowledged.

1.1 Aims and Objectives

1.1.1 In accordance with the Institute for Archaeologists (IfA) standard definition of a desk-based assessment (Standard and Guidance for Desk-Based Assessment, Operational Draft, 2011):

Desk-based assessment will determine, as far as is reasonably possible from existing records, the nature, extent and significance of the historic environment within a specified area. Desk-based assessment will be undertaken using appropriate methods and practices which satisfy the stated aims of the project, and which comply with the Code of conduct, Code of approved practice for the regulation of contractual arrangements in field archaeology, and other relevant by-laws of the IfA. In a development context, desk-based assessment will establish the impact of the proposed development on the significance of the historic environment (or will identify the need for further evaluation to do so), and will enable reasoned proposals and decisions to be made whether to mitigate, offset or accept without further intervention that impact.

1.1.2 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.
- 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.

- 1.1.3 This baseline assessment considers the cultural heritage potential within the site itself, the surrounding area and wider local and regional context. 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 Site and Development Description

- 2.1 The development site is located in the south-western part of the village of Cheddar, Somerset. The site is centred on ST 4520 5280 (345200 152800) and sits approximately 10m above the Ordnance Datum at its northern boundary, falling to 6m at its southern boundary. A site location plan is included in Appendix A.
- 2.2 The site that is the subject of this assessment extends to 2.4 hectares. It was previously given over to agricultural activity and includes a number of 20th Century agricultural buildings, mostly of metal frame and corrugated iron or asbestos sheet construction. Much of the interiors of these buildings and the farmyard are concrete hardstanding. Outside the farmyard the site is currently given over to pasture and some orchard, part of which will be retained. To the west the site is bounded by the B3151, to the south by pasture and a drain, while to the east the Cheddar Business Park bounds the site. In the north of the site is Stearth Bushes. This building is to remain as part of the proposed development works, as is Stearth House which is located at the western boundary of the site, adjacent to the pasture. The boundary of the site is illustrated at Appendix A. Photographs of the site can be seen in Appendix B.
- 2.3 The planning application seeks detailed planning permission for a new Sainsbury's foodstore and associated customer car park, together with highways works along the B3151. Limited alterations to ground level are also proposed in the pasture south of the main development site and north of the river Yeo in order to offer better flood protection. The proposed development is shown on drawing 31080-149_SK020_F included at Appendix A.



3.0 Methodology

3.1 Assessment Methodology

3.1.1 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.

3.1.2 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 C.

3.2 Sources Consulted

3.2.1 A study area of 1km radius around the development site (NGR: ST 45225 52890) has been examined to assess the nature of the surrounding heritage sites and place the recorded sites within their context.

3.2.2 This study has been undertaken taking into consideration the historical and archaeological background of the proposed development area. The sources consulted were:

- Somerset Historic Environment Record (HER);
- English Heritage and Local Planning Authority for designated sites;
- Historic mapping;
- National Mapping Programme;



- Somerset Archives and Record Office;
- Appropriate documentary sources and archaeological journals; and
- Geotechnical site investigation report by Tweedie Evans Consulting (TEC 2011).

3.2.3 A site walkover survey was undertaken on 21st June 2012 to assess the site for previously unrecorded heritage remains and suitability for potential evaluation and mitigation measures.

4.0 Consultation

Consultation was undertaken with the Somerset Historic Environment Record, English Heritage, and Somerset Archives and Record Office for the provision of data for this report. Pre-application discussions were held with Steve Membrey, Senior Archaeological Officer, Somerset County Council on Monday 18th June 2012, to agree the scope of this assessment.

5.0 Legislation and Planning Policy Context

5.1 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.

5.2 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 states that special attention shall be paid to the desirability of preserving or enhancing the character or appearance of Conservation Areas.



5.3 National Planning Policy Framework, 2012

- 5.3.1 The National Planning Policy Framework (NPPF) sets out the Government's national planning policies including those on the conservation of the historic environment. The NPPF 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 NPPF draws attention to the benefits that conserving the historic environment can bring to the wider objectives of the NPPF in relation to sustainability, economic benefits and place-making (Para 126). NPPF replaces PPS5 (2010), which had already replaced PPG16 (1990), both of which dealt with planning and the historic environment in England and Wales. Section 12 of the NPPF addresses "Conserving and Enhancing the Historic Environment". Although slimmer than PPS5 the current professional opinion is that the intention of the document is very similar in intention (English Heritage 2012).
- 5.3.2 The NPPF states that the significance of heritage assets (including their settings) should be identified, described and the impact of the proposal on the significance of the asset should be assessed. 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. The NPPF identifies that the requirements for assessment and mitigation of impacts on heritage assets should be proportional to their significance and the potential impact (Para 128).
- 5.3.3 The NPPF sets out the approach local authorities should adopt in assessing development proposals within the context of applications for development of both designated and non-designated assets. Great weight should be given to the conservation of designated heritage assets and harm or loss to significance through alteration or destruction should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably Scheduled Monuments, protected wreck sites, battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional (Para 132). Additional guidance is given on the consideration of elements within World Heritage Sites and Conservation Areas (Para 138).



- 5.3.4 Where there is substantial harm to or total loss of significance of a designated heritage asset a number of criteria must be met alongside achieving substantial public benefits (Para 133). Where there is less than substantial harm, the harm should be weighed against the public benefits of the development (Para 134). Balanced judgements should be made when weighing applications that affect non-designated heritage assets (Para 134). The NPPF also makes provision to allow enabling development (Para 140) and allowing development which enhances World Heritage Sites and Conservation Areas (Para 127).
- 5.3.5 Where loss of significance as a result of development is considered justified, the NPPF includes provision to allow for the recording and advancing understanding of the asset before it is lost in a manner proportionate to the importance and impact. The results of these investigations and the archive should be made publically accessible. The ability to record evidence should not however be a factor in deciding whether loss should be permitted (Para 141).

5.4 Regional and Local Policy and Guidance

5.4.1 Somerset and Exmoor Joint Structure Plan

The adopted Somerset and Exmoor National Park Joint Structure Plan (1991 – 2011) is the formally adopted Structure Plan for Somerset and the Exmoor National Park. All of the policies within the Plan, bar Policy 53, were “saved” by the Secretary of State in 2009 in lieu of the forthcoming publication of the Local Development Framework. The policies relevant both to heritage and the proposed development from the Adopted plan are listed below:

Adopted Joint Structure Plan

- Policy 11 – Areas of High Archaeological Potential;
- Policy 12 – Nationally Important Archaeological Remains;
- Policy 13 – Locally Important Archaeological Remains; and
- Policy 14 – Archaeological Strategies.



These policies, written in line with the former Planning Policy Guidance 16, support the appropriate assessment of remains leading to necessary protection of and mitigation of impact on heritage assets. The policies may be seen in Appendix D.

The Environment chapter may be seen here:

http://www.somerset.gov.uk/irj/go/km/docs/CouncilDocuments/SCC/Documents/Environment/Strategic%20Planning/Spatial%20Planning/JSPlan/sp_the_environment.pdf

5.4.2 Sedgemoor District Local Plan

Sedgemoor District Council's Local Plan 1991 – 2011 has been superseded by a Core Strategy (Sedgemoor District Council 2011) as part of the Local Development Framework. Many of the Local Plan policies have been saved pending the publication of supporting Development Plan Documents. Chapter 10 of the Local Plan addressed the Historic Environment and relevant policies to the proposed development at Steart Farm are included in Appendix D. Both policies reproduced (HE 9 & HE12) were Saved as part of the Core Strategy (Ibid.).

Stear Farm is located within an area designated an Area of High Archaeological Potential in the Sedgemoor Local Plan and has been designated a Site of County Importance by the County Archaeologist.

The site was formerly allocated the land for Industrial, Warehouse and Business Use under The Sedgemoor District Local Plan Proposal E3. Appendix 5.1 of the Local Plan stated that "an appropriate archaeological evaluation and ecological survey shall be carried out on the entire site".

6.0 Baseline Data

6.1 Designated Sites

- 6.1.1 There are no World Heritage Sites, Registered Parks and Gardens or Registered Battlefields within the study area.
- 6.1.2 There are two Scheduled Monuments (SM) within the study area. The first is SM 29673, the Roman settlement site, Anglo-Saxon and Norman royal palace, and St Columbanus' Chapel (EH 29673). This site is focussed around the modern Kings of Wessex School. The monument includes a Romano-British settlement site, described as "the core of an extensive area of Roman settlement".



It includes finds of pottery from the 2nd to 4th centuries AD, as well as burials and settlement remains. These discoveries and further evidence from aerial photographs point to the site having been the core of a villa estate, probably including the villa itself. The Roman site is overlain by remains an Anglo-Saxon palace that became, in turn, a royal residence of the Norman kings following the conquest of 1066. The site also includes a ruined chapel dedicated to St Columbanus and believed to originate in the reign of King Athelstan (925-939 AD) (Ibid.).

- 6.1.3 The second Scheduled Monument is SM 33705 the medieval Market Cross situated at the junction of Bath Street, Union Street and Church Street (EH 33705).
- 6.1.4 There is one Grade II* Listed Building within the study area which is the chapel of St Columbanus. The chapel is ruined and is located within SM 29673, the Romano-British and Early medieval site and is specifically included as an element within the Scheduling (EH op. cit.). The majority (13) of the remaining 19 Listed Buildings are concentrated in the centre of the town and form part of the historic core of Cheddar. However, there is clear evidence of the development of the town manifest in the buildings with earlier post-medieval buildings in the core and 19th and 20th century structures, including the Baptist Chapel (268774) on the periphery. Other properties, such as the Great Barn (268777) or Ivy Farmhouse (568794) represent rural settlement and agricultural buildings that have become urban fringe properties as the town has continued to expand.
- 6.1.5 The Cheddar Conservation Area is located in the historic core of the town to the north-east. It is not impacted by this development. No registered historic landscapes are located within the study area. All designated heritage assets within the study area are detailed in Appendix E and their locations can be seen on Figure 2.

6.2 Archaeological and Historic Background

The Historic Environment Record holds details for 128 recorded heritage assets within the study area. Details of the sites can be seen in Appendix E and their locations can be seen on Figure 2. Bracketed numbers within the text refer to the identifier in the Appendix E table and Figure 2.

Background information on the area has also been drawn from documentary sources including the South-West Regional Research Framework (Webster, 2007).

6.2.1 Prehistoric (up to 43AD)



Palaeolithic activity in the region is not well characterised due to the paucity of data. Typically, 'sites' are recognised from lithic scatters, often found within river gravels and terraces (of which the highest density is from the east of the region (Hosfield *et al.* 2007, 30)). Cave sites associated with Palaeolithic activity are found throughout the south west region, particularly in south Devon and central Somerset (Hosfield *et al.* 2007, 37) and a number of such cave dwellings have been recorded in Cheddar Gorge to the east. Mesolithic activity is typically associated with upland zones and lowland wetland areas (Hosfield *et al.* 2007, 40). The environment is better understood, in part due to the work of several specialists who contributed to the Somerset Levels Project: 1974-1989 (cf. Caseldine 1984 cited in Hosfield *et al.* 2007, 43). One Palaeolithic hand-axe is recorded with the study area north of the development area (12492) and another was recorded in New Road (12492).

Throughout the region a diverse range of prehistoric sites survive, dating from the Neolithic onwards. From within the peat deposits of the Somerset Levels, timber trackways and artefacts have been recovered, as well as providing extensive environmental data (Pollard and Healy 2007, 75). Within the region, areas of continued activity (albeit seasonal) have been recorded from the Mesolithic through to the Early Bronze Age, both from lithic assemblages and in the continued use of cave sites (Pollard and Healy 2007, 76-77). A cup-marked stone, that may be tentatively identified as Neolithic was found west of Hythe Bow, (11413).

Whilst Later Bronze Age settlement in the region is characterised by roundhouses, settlement evidence from within Somerset is largely gathered from material culture (pottery and lithics), rather than structures (Fitzpatrick 2007, 118). Settlement in the Iron Age focuses, for the most part, on agriculture. 'Village-like' settlements, such as Little Yeovilton, as well as hillforts are seen in the region. Whilst the hillforts have been the focus of much research over a number of years, the non-hillfort settlements are less well characterised with the exception of the 'Lake Villages' at Meare and Glastonbury in Somerset which have been the subject of excavation. These villages represent near contemporary settlement, and have revealed evidence for specialised craftsmanship and trade (Fitzpatrick 2007, 133). A hillfort at Norton Fitzwarren, on the western edge of Taunton demonstrates longevity of occupation from the Bronze Age through to the Romano-British period (Fitzpatrick, 135).

Within the study area, Bronze Age pottery was recovered during a 1998 evaluation at Draycott Road but without associated features (44873). Meanwhile a number of Prehistoric finds, including pits and ditches, as well as worked flint, have been discovered at the Kings of Wessex School, underlining the continued importance of that location from later Prehistory onwards. This importance may well have developed from the value of settlement close to waterlogged ground (East Anglian fen edge settlement is similar) where



such a location afforded easy access to a range of resources including seasonal grazing, fish and fowl and reeds but also having access to agricultural land, routes and markets on drier ground.

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

Extensive Roman activity and influence is seen within the region. Within Somerset, the Iron Age tribal areas of the Durotriges in the south, Dobunni in the north, and Dumnonii in the west were all occupied during the 1st century AD. As part of this conquest and subsequent process of Romanisation the major Roman road, later known as the 'Fosse Way' was constructed through the county at this time. Several forts have been recorded in Somerset, with one at Wiveliscombe, to the southwest of the study area (Ordnance Survey 1994). With the exception of militarised zones and larger civitas capitals, settlement forms remained relatively unchanged until the 2nd century with streets and 'roadside settlements'. Somerset saw a marked expansion in villas in the 3rd-4th century (Holbrook 2007, 151). Some of these villas have been shown to continue in use into the sub-Roman period of the 5th century. Villa sites have been the main focus of research in the region, with new sites identified and investigated at Dinnington, south Somerset and Yarford, north of Taunton (Holbrook 2007, 152). Natural resources were locally exploited (within Somerset) included iron to the west, salt to the northeast of the study area, stone to the south and lead from the Mendips in the north of the county (Ordnance Survey 2004; Holbrook 2007, 154-157).

There is evidence of significant Romano-British activity within the study area. In addition to the Scheduled Monument around the villa beneath the Kings of Wessex School, Roman material has been found elsewhere in the study area, including possible Romano-British ditches seen during a watching brief at the Cheddar Business Park. (Site 15264) Romano-British pottery has also previously been found within the development area at Steart Farm itself. The Somerset HER records "A sort of path of RB [Romano-British] potsherds; about 4" thick". This deposit was found prior to 1970, when the Ordnance Survey made record of it (Site 11418). The density of pottery in this deposit indicates either activity resulting in the creation of a midden, a backfilled Roman ditch, or the waster heaps associated with pottery kilns. Further interrogation of the HER revealed no further information about this entry and there is no trace on the site. The association of the villa and these further discoveries suggests that the study area includes the buried remains of an extensive Romano-British agricultural landscape with the villa as its focus.

6.2.3 Early Medieval (450AD to 1066AD)

The nature of the transition from Romano-British culture to the later Anglo-Saxon in the region is not wholly understood. Theories of 'system collapse' for the Roman period and subsequent Anglo-Saxon conquest



have been challenged; thoughts of a continuation of Romano-British settlement beyond 410AD and the incursion of peoples from northern Europe seen more in terms of a migration events during the 5th-6th centuries provide contrasting view points (Webster 2007, 170-171). Indeed, evidence from a number of villa sites, including Langport, suggest that Romano-British culture definitely continues into the 5th century in Somerset. The latter part of the Early medieval (9th century) sees resurgence in both urban areas and nucleated rural settlements (Webster 2007, 171). This re-urbanisation is prompted in part by the rulers of Wessex, whose heartland includes Somerset and who see towns as centres both of trade and defence. They had the palace at Cheddar built and this centre appears to have stimulated urban development (Richardson 2003, 6-7). The palace served as both a royal and ecclesiastical centre of power and may have its origins in a monastic settlement within the ruins of the villa according to the Somerset Extensive Urban Survey (*Ibid.*).

6.2.4 Medieval Period (1066AD-c.1540AD)

The archaeological evidence for the medieval period largely survives within pockets of the landscape which are used less intensively today, and also sealed beneath modern towns and farmsteads (Rippon and Croft 2007, 195). Overviews of medieval Somerset are provided by Aston and Burrow (1982 cited in Rippon and Croft 2007, 195) and Aston (1988 cited in Rippon and Croft 2007, 195). The origins of the social structure is rooted in the Early medieval period with improvements made to these existing patterns and perhaps a spread into more marginal zones throughout the High medieval period (Rippon and Croft 2007, 195). The 13th century saw the enclosure of earlier field systems and later in the period, rural nucleated settlements in areas including west Somerset contracted and split into two or more single farmsteads (Rippon and Croft 2007, 197).

No medieval remains are recorded at Steart Farm but there are significant medieval remains within the Scheduled Monument to the east where the Saxon royal palace continued in use, expanding its ecclesiastical role following the Norman Conquest in 1066. In addition, the historic core of Cheddar itself has medieval origins, as demonstrated by the parish church and the Scheduled market cross. However, despite Cheddar's royal associations, the medieval town appears to have been a relatively small and rather dispersed settlement.



6.2.5 Post-Medieval Period (c.1540AD to 1750AD), Industrial (1750 to 1900AD) and Modern (1900AD to present)

Much of the wider region remained largely unchanged from the medieval period through the post-medieval period. The area remained agricultural in nature with continuation of farmsteads and villages established in the medieval period. The greatest changes to the landscape occurred as a result of the Parliamentary enclosures of land and changing agricultural techniques, including the extensive drainage and enclosure of the moors – low-lying, wet ground in the Axe valley; Somerset moors being similar to fen or mire elsewhere in England. Early industrial agricultural improvement from the 18th and 19th centuries is manifest within the study area, including the remains of Warping Drains identified on Cheddar Moor. However improvements in transport links also had a significant impact on the landscape, including the Turnpike roads, such as that of the Wedmore Trust (15546), which runs alongside the site's western boundary, or the Cheddar to Wells road (26233), both of which run through the study area.

The most dramatic change in rural areas, epitomising the Industrial Age, was the arrival of the railway. Not only did this open the countryside to both new goods for sale and opportunities for the sale of goods and services it also facilitated passenger travel; in Cheddar's case bringing increased visitor numbers to the Gorge. It also fuelled development in many areas, whether directly connected to the railway or benefiting from its economic impact; for example, although outside the study area, the 19th century shirt factory in Cheddar is a manifestation of the railway's ability to transport raw materials and finished products acting as a driver to commercial development. The railway through Cheddar has been removed but the line may be seen running close to the site from north-west to south-east. Map evidence suggests that development at Steart Farm only began in the mid 19th century and may be associated with the expansion of dairying in the Yeo Valley at this time. The geotechnical report notes a comment from the farmer that there may be a buried well somewhere on the site (TEC 2011: 2.2.23). This may be the stone-lined well head seen on the southern area of the site during the walk-over survey.

7.0 Historic Mapping Survey

7.1 The Somerset Record Office was visited on Monday 18th June 2012 and a number of sources were consulted. Although the Record Office holds a number of books on Cheddar, almost all concentrate on the Gorge and caves.

A number of historic maps were consulted, some of which are reproduced here:



DD/spy/110 – A Perambulation of Compton Martin (later 16th century). Although this map mentions Cheddar and depicts its church, the development area is not shown.

DD/WY/C/306/SOM/118 – A Map of the Parish of Cheddar (1837). This map shows the development area as pasture. According to the map, the farmhouse had not yet been developed. Unfortunately, the digital photographs taken of this map are of poor quality and have not been reproduced.

Tithe Map of Cheddar (1839). This map shows the development area (parcel 1868) as undeveloped. The Tithe map is held on microfiche, digital copying was not possible.

Historic Ordnance Survey mapping of the development site from 1884 to 1990. The following maps are reproduced in Appendix F:

Ordnance Survey One Inch First Edition (1884). No development appears within the development area.

Ordnance Survey First Edition, Six Inch County Series (1884). Although the cottages at Stearth Bushes, or Stert Bushes as they appear here, have been constructed by this period, the development area remains as open pasture. A watercourse is shown forming the boundary with Stearth Bushes but it is not currently visible.

Ordnance Survey Six Inch County Series (1932). This shows development for Stearth Farm and Stearth Bushes cottages along the road frontage where the current development is located. The majority of the site remains under pasture but by this time large, rectangular buildings have been constructed in part of the orchard surrounding the farmhouse. The site is further developed and redeveloped between 1932 and the present as agricultural buildings are built and replaced. By 1986, the current layout is established.

8.0 Site Walkover Survey

- 8.1 A site walkover survey was undertaken on 21st June 2012. The weather was overcast turning to rain. Photographs of the site can be seen in Appendix B. The site may be usefully divided into three parts: the farmyard, the old orchard and the pasture.
- 8.2 The farmyard is a mixture of buildings. Only one appeared to be of any antiquity – a single storey, stone-built building on the eastern side of the farmyard. It appears on the 1932 Ordnance Survey map but not either the 1902-4 or 1884 surveys, suggesting a relatively recent date. The remainder of



the structures are relatively modern agricultural buildings and much of the area is laid to concrete hardstanding.

- 8.3 The orchard is overgrown by large clumps of thistle and has a number of fallen trees within it, making visibility less than perfect. However, the orchard is generally flat, sloping gently from north to south. No earthworks or other features were identified within this area. There are derelict pig arcs, wooden sheds and chicken coops along the western edge of the paddock. The orchard is bounded to north, east and south by metal fencing. The eastern boundary with the Business Park is 2 metre chain-link, while other fences are pig netting and barbed wire typical of agricultural holdings. To the west the orchard is bounded by the garden wall for Steart Bushes and the buildings of the farm complex.
- 8.4 The pasture is generally flat, sloping gently from north to south. It is transacted by a low (up to 0.30m high) linear earthwork running east to west from Steart House to the boundary with the Business Park. To the north of this earthwork the ground level is slightly higher than to the south of it, with the boundary forming a slight but visible step between the two parts of the pasture. This earthwork appears on the 1946 RAF aerial photograph of the site (see Section 9 below) and appears to be a field boundary visible on the 1837 Parish Map and the 1839 Tithe Map for Cheddar. To the north of the earthwork there is some evidence of disturbance, in the form of low amorphous earthworks up to 0.30m high. These probably reflect nothing more than old, spread piles of dung and soil of the sort commonly seen in farmers' fields. To the south of the linear earthwork the ground is similarly disturbed but there *may* be slightly more form to the earthworks in places, particularly adjoining Steart House by the southern wall of the garden. Here the earthworks, which appear to form a roughly rectangular platform up to 0.30m high and around 25m square, may represent a paddock or vegetable garden connected to the house, or an earlier pre-enclosure field.
- 8.5 The pasture is bounded to the north by the barbed wire fence into the orchard, to the east by the chain-link fence of the Business Park and to the west by the farm buildings, Steart House and the hedge and ditch bounding the Wedmore Road. To the south the site is bounded by a watercourse that runs from east to west from the Wedmore Road to the Business Park, where it also forms the southern boundary. On the north side of this watercourse is a low bank that runs along the entire length of the feature. This bank was probably formed by arisings from the excavation of the ditch. A large slab of limestone was observed lying on this mound at about 40 metres from the south-east corner of the site. On closer inspection this was identified as the capstone on a stone-lined, circular



feature some 0.50m in diameter and about 0.40m deep, though the exact depth could not be determined because of the capstone and the fill of the feature. Photographs taken through a gap in the capping suggested this feature has a fill of water-lain silty soils. The drain is visible on both 1837 and 1839 maps but its origin is unknown. Although the feature cuts the bank formed by arisings from the excavation, or a later clearance of the ditch it is impossible to ascribe a date to it, except to say that it must post-date the ditching works.

- 8.6 Two further features were observed in the pasture. Both have the appearance of inspection pits or soakaways and are concrete lined and over 0.30m deep. However, both features have both natural silting and informal filling in the form of dumped material. There is also an old GPO Telephones metal and concrete manhole cover in the pasture lying about 15 metres east of Steart House but it appeared to be sitting on the surface, rather than in-situ on an inspection chamber.
- 8.7 To the south of the drain that forms the southern boundary of the development area is a low-lying, rather wet pasture that runs down to the River Yeo. No earthworks were identified in this field.

9.0 Site Investigation Results, Historic Landscape Characterisation, Extensive Urban Survey and Aerial Photographic Evidence

- 9.1 The site has been the subject of a geo-environmental and geotechnical report (TEC 2011). Borehole data indicates that made ground is present across the majority of the site to a maximum of 0.80m (TEC 2011: 7.1.3). Within the pasture this was characterised as “brown slightly gravelly slightly sandy clay with fine to medium gravel of mudstone, limestone, slate, charcoal and brick and frequent rootlets” (Ibid). Boreholes within the yard area showed “hardstanding (concrete) over dark brown sandy slightly gravelly clay with gravel of limestone, mudstone, brick, tile, tarmacadam, concrete, timber and plastic.” (Op. Cit. 7.1.4). Only two boreholes showed no evidence of building material or refuse – DS2 and DS8 on the southern and eastern boundaries of the site respectively and both close to drains showed “brown slightly sandy slightly sandy clay with gravel of limestone and mudstone and frequent rootlets” (Op. Cit. 7.1.5).
- 9.2 The area has not been included in the English Heritage National Mapping Project. Of the other aerial photographs consulted, only one, from the 1946 RAF series (Ref: 3/TUD/UK15/19 Part III 13 Jan 46/F12”//90SQDMK), shows any identifiable remains within the pasture. This image shows either a



former field boundary or a redundant track running west to east across the development area from Steart House.

- 9.3 The Extensive Urban Survey for Cheddar covers the development area. Paragraph 44.3 (a) suggests that Steart Farm may include a medieval farmstead or could be included in the wider, somewhat dispersed settlement around a market that is thought to have made up medieval Cheddar (Richardson 2003: 10).
- 9.4 The Historic Landscape Character assessment (HLC) for Somerset is part of the Historic Environment Record. It includes the study area. The development area has been characterised as Subtype 1.2 to the north and 5.2 to the south, which are forms of enclosed agricultural land.

10.0 Heritage Potential and Impact Assessment

- 10.1 The only recorded heritage asset within the development site is the record of the Romano-British pottery described above at paragraph 6.2.2 (Site 11418). The description of the asset is unclear but suggests a deposit of sherds, which may indicate the presence of further, associated Roman remains. For this reason, the potential for further discoveries must be at least Moderate, if not High. Given the association of this heritage asset with further nearby sites, including the villa and its possible landscape setting, such as the ditches identified on the Business Park, the potential for further information about land-use during the Roman period is High. However, the quality of remains identified from this period in the immediate environs of the site suggests that while the contribution they could make to our understanding of the rural landscape and economy around Roman Cheddar may be significant but the quality of the identified remains, principally ditches, appears relatively low.
- 10.2 While there is potential for previously unrecorded Roman archaeological remains to be present within the development site, no further remains of other periods have been recorded on the site. In addition, little has been recorded in the immediate vicinity of Steart Farm. HER entry 28139 describes an archaeological evaluation at Steart Bushes, located immediately north of the development area, that was undertaken in 2008 by Context One Archaeological Services ahead of residential development. The evaluation included the excavation of four 20m long trenches. No archaeological features were identified, nor were any artefacts recovered. In 1998 a watching brief on the Cheddar Business Park to the east of the development area showed only an in-filled field drain (28931). However, three shallow Romano-British ditches were recorded in a 1987 watching brief toward the north of the Business Park but further archaeological monitoring of the development did not identify



any further evidence of Roman activity. A 1998 evaluation at Draycott Close, east of the development area, found no evidence of the westward extension of the Romano-British settlement. Some Bronze Age pottery was recovered but no features.

- 10.3 Aside from remains associated with the deposit of Romano-British pottery it is considered unlikely that significant remains will be found within the development site. This opinion reflects the lack of extensive remains either in the immediate surrounding area or on the historic maps. While the palace complex is of very high significance it is a contained unit that does not appear to physically extend into the landscape. While the villa estate may have extended westwards from the school, evidence from nearby watching briefs suggests a relatively low density of remains. Previously unrecorded remains are most likely to be discrete features and if not Prehistoric date associated with the recorded sites to the south of the development site, then later sites associated with the ongoing agricultural use of the area, such as the east-west linear feature visible on the 1946 aerial photograph. Later settlement is likely to have been focussed around the historic core of the town and therefore is unlikely to be present within the development site.
- 10.4 If discovered these remains are likely to be of medium or low heritage value depending on the nature of their survival and form. The impact of the proposed mixed use development will be dependent upon the location of the archaeological remains in relation to the development layout.

11.0 Proposed Evaluation and Mitigation Measures

- 11.1 Following consultation with Steve Membrey, Senior Historic Environment Officer with Somerset County Council, it is recommended that two stages of archaeological evaluation of the site are employed. In the first instance, the site should be subject to extensive geophysical survey, probably employing a magnetometer. The results of this survey will then inform discussions with the curator about the requirement for any further evaluation, which could include archaeological trenching. Geophysical survey will help identify the possible extent of any remains and, as a result, assist in the more accurate siting of any evaluation trenches.
- 11.2 Once the results of the remote sensing and any field evaluation have been received it will be possible to determine the nature and scope of any further archaeological mitigation that may be required.



11.3 All further work should be undertaken in accordance with the standards and guidance from the Institute for Archaeologists and a Written Scheme of Investigation agreed in advance with the Senior Archaeologist for Somerset County Council.

12.0 Residual Effects and Conclusions

The implementation of a programme of geophysical survey and potentially evaluation excavations to assess the magnitude of impact from the development on any previously unrecorded, buried archaeological remains, as identified above, is considered likely. It is considered that the implementation of a scheme of mitigation will minimise the impact of the development, should evaluation demonstrate that this is necessary.



References

DCLG (2012) National Planning Policy Framework.EH 29673: <http://magic.defra.gov.uk/rsm/29673.pdf> (accessed 13th June 2012)

EH 33705: <http://magic.defra.gov.uk/rsm/33705.pdf> (accessed 13th June 2012)

English Heritage 2012 <http://www.english-heritage.org.uk/content/imported-docs/a-e/eh-commentary-nppf.pdf> (accessed 13th June 2012)

Fitzpatrick A (2007) "Later Bronze Age and Iron Age" in Webster C (2007) *The Archaeology of South West England. South West Archaeological Research Framework*. Taunton: Somerset County Council.

HMSO (1979) *Ancient Monuments and Archaeological Areas Act*.

HMSO (1990) *Planning (Listed Buildings and Conservation Areas) Act*.

Holbrook N (2007) "Roman" in Webster C (2007) *The Archaeology of South West England. South West Archaeological Research Framework*. Taunton: Somerset County Council.

Hosfield, R T, Brown, A G, Basell, L and Hounsell, S. (2005) *The Palaeolithic Rivers of South-West Britain: Assessment Report and Updated Project Design*. Unpublished English Heritage Interim Phase I Project Report (Project No. 3847).

Institute for Archaeologists (1994 rev 2011) *Standards and Guidance for Archaeological Desk-Based Assessments* Operational Draft.

Mills, A.D. (2003) *Oxford Dictionary of British Place Names*. Oxford: Oxford University Press.

Ordnance Survey (1994) *Roman Britain*.

Pollard J & Healy F (2007) "Neolithic and Early Bronze Age" in Webster C (2007) *The Archaeology of South West England. South West Archaeological Research Framework*. Taunton: Somerset County Council.

Richardson, M (2003) *Somerset Extensive Urban Survey: Cheddar*. Taunton: Somerset County Council.

Rippon S & Croft B (2007) "Post-Conquest Medieval" in Webster C (2007) *The Archaeology of South West England. South West Archaeological Research Framework*. Taunton: Somerset County Council.

Sedgemoor Core strategy (2011) <http://www.sedgemoor.gov.uk/CHttpHandler.ashx?id=9260&p=0>

Sedgemoor District Council (2004) *Sedgemoor District Local Plan 1991-2011*. Bridgwater: Sedgemoor District Council.



<http://www.sedgemoor.gov.uk/CHttpHandler.ashx?id=9261&p=0> (accessed 22nd June 2012)

Somerset County Council (2000) *Somerset and Exmoor National Park Joint Structure Plan*. Taunton

http://www.somerset.gov.uk/irj/go/km/docs/CouncilDocuments/SCC/Documents/Environment/Strategic%20Planning/Spatial%20Planning/JSPlan/sp_the_environment.pdf (accessed 20th June 2012)

Tweedie Evans Consulting (2011) *Steart Farm, Cheddar, Geo-Environmental and Geotechnical Exploratory Investigation*

Webster C (2007) *The Archaeology of South West England. South West Archaeological Research Framework*. Taunton: Somerset County Council.

Historic Mapping and Archives

DD/SPY/110 Perambulation of Compton Martin (Later 16th Century)

DD/WY/C/306/SOM/118 Map of the Parish of Cheddar (1837)

Tithe Map for the Parish of Cheddar (1839)

Ordnance Survey maps 6" to 1 mile /1:10,000 1884, 1892, 1903, 1932, 1948, 1952, 1976, 1980, 2002

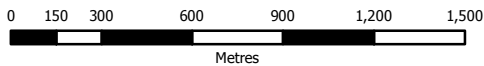
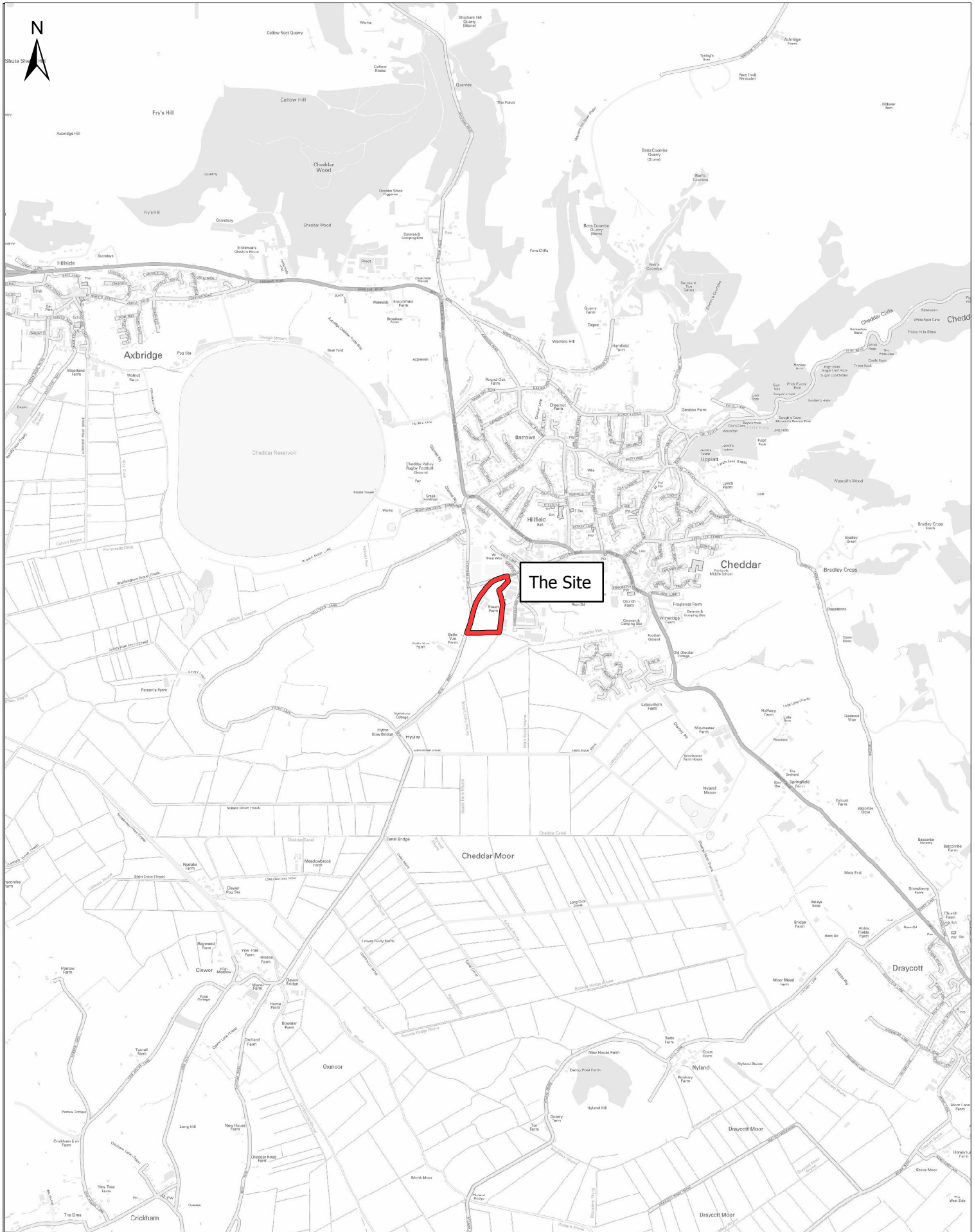
Ordnance Survey maps 25" to 1 mile / 1:2,500, 1886, 1903, 1930, 1976, 1983, 1993



Appendices

Appendix A –

Site Location Plan & Proposed Development Plan



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Client: **Sainsbury's Supermarkets Ltd**

Project: **Proposed New Foodstore at Steart Farm
Cheddar**

PMC Created:	KRH Checked:	May 2012 Date:	V1 Version:
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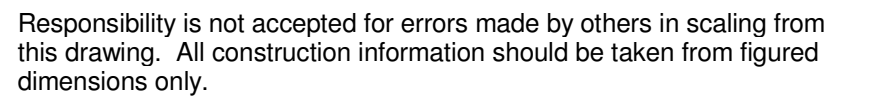
Title:

Site Location Plan

Office:
4154

Project No:
A069799

Figure No:
1



Location Map

06.07.12	A	SB	PAF	Planning Submission
date	rev	name	chk	note



Stride Treglown

Architecture Town Planning Interior Design Building Surveying Landscape Design Graphic Design
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T 0117 974 3271 F 0117 974 5207 www.stridetreglown.co.uk

PROJECT

Proposed New Foodstore at Steart Farm, Cheddar for Sainsbury's Supermarkets Ltd

DRAWING TITLE

Existing Site Plan

STATUS

PLANNING

DATE	SCALE	DRAWN BY	CHECKED BY
06/07/12	1 : 1250	SB	AIB

DRAWING NUMBER
31080-149 AP_01

REVISION NO.
A



Responsibility is not accepted for errors made by others in scaling from this drawing. All construction information should be taken from figured dimensions only.

A1 Original Sheet Size

L/S Concept Key

EXISTING TREES TO BE RETAINED
Refer Tree Protection Drawing for details,
Drawing No. 40142_LP(90)001 & 002

EXISTING HEDGES TO BE RETAINED
Refer Tree Protection Drawing for details,
Drawing No. 40142_LP(90)001 & 002

PROPOSED TREE PLANTING
Refer Planting Plan for details,
Drawing No. 40142_LP(90)006

PROPOSED HEDGE PLANTING
Refer Planting Plan for details,
Drawing No. 40142_LP(90)006

PROPOSED NATIVE PLANTING
See Planting Plan for details,
Drawing No. 40142_LP(90)006

PROPOSED ORNAMENTAL PLANTING
See Planting Plan for details,
Drawing No. 40142_LP(90)007 & 008

PROPOSED GRASSLAND WILDFLOWER PLANTING
See Planting Plan for details,
Drawing No. 40142_LP(90)006

PROPOSED GRASS AREAS
See Planting Plan for details,
Drawing No. 40142_LP(90)006

NOTE:

All drainage & base formations as per Engineers design & specification.

Spot levels & embankments are indicative, Refer to Engineers Design & Specifications for all level information

External levels of hard surface treatments are to be co-ordinated with Engineers design & specifications.

Main contractor to determine exact location of services/drainage, this should to be confirmed on site prior to commencement of works to avoid tree pit / services conflicts

This drawing assumes that the some existing site subsoil could be re-used, however this is subject to on-site management of the subsoil. If the subsoil is not suitable, imported subsoil will be required in accordance with the soft and base landscape specification

All treatment of softwork areas to comply to BS4428 Code of Practice for general landscape operations. All native shrub & hedge species plant type supplied for designated areas are to be determined by the proposed planting season. (ie bareroot or container grown stock).

NOTE: Internal Layout shown indicatively only

06.07.12	A	SB	PAF	Planning Submission
date	rev	name	chk	note

Architecture Town Planning Interior Design Building Surveying Landscape Design Graphic Design

Promenade House, The Promenade, Clifton Down, Bristol, BS8 3NE

T 0117 974 3271 F 0117 974 5207 www.stridetreglown.co.uk

PROJECT

Proposed New Foodstore

at Steart Farm, Cheddar

for Sainsbury's Supermarkets Ltd

DRAWING TITLE

Proposed Site Plan

PLANNING			
SCALE	DATE	DRAWN BY	CHECKED BY
1:500 @ A1	06/07/12	SB	AIB
PROJECT NUMBER	DRAWING NUMBER	REVISION	
31080-149	AP_05	A	



Appendix B – Site Photographs



Photo 1: Development site, the farmyard looking east from the north-west corner.



Photo 2: Development site, the farmyard looking north.



Photo 3: View to south-east across the former orchard.



Photo 4: View north into the former orchard.



Photo 5: View to south-east from the north-west corner of the pasture.



Photo 6: View to south-west from the north-east corner of the site. One of the areas of disturbed ground is in the foreground.



Photo 7: The linear earthwork/former field boundary running west to Steart House from the eastern boundary of the development area.



Photo 8: View to north-west from the south-east corner of the development area showing the southern boundary, Steart House and the farm buildings.



Photo 9: View to east along the ditch and bank forming the southern boundary of the development area.



Photo 10: The limestone cap of the possible well.



Photo 11: View of the interior of the well.



Photo 12: Concrete-lined pit east of Steart House



Photo 13: Concrete-lined pit south-east of Steart House



Photo 14: GPO Telephones manhole cover



Appendix C – 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



Value	Examples
	reasonable coherence, integrity, time-depth or other critical factor(s) 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



Magnitude of Impact	Typical Criteria Descriptors
	and/or erosion of the heritage resource, safeguarding substantial elements of the 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			
Cultural Heritage Value	Substantial	Moderate	Slight	Negligible / no Change
Very High	Major	Major – Intermediate	Intermediate	Minor
High	Major – Intermediate	Intermediate	Intermediate – Minor	Neutral
Medium	Intermediate	Intermediate – Minor	Minor	Neutral
Low	Intermediate – Minor	Minor	Minor – Neutral	Neutral
Negligible	Minor-Neutral	Minor-Neutral	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.

Effects of intermediate significance or greater are considered to be significant effects within the context of planning policy and Environmental Impact Assessment.



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.
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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.

Effects of intermediate significance or greater are considered to be significant effects within the context of planning policy and Environmental Impact Assessment.



Appendix D – Planning Policies



Adopted 2nd Review Somerset Structure Plan (1991 - 2011)

POLICY 11 AREAS OF HIGH ARCHAEOLOGICAL POTENTIAL

Development proposals should take account of identified Areas of High Archaeological Potential or, elsewhere where there is reason to believe that important remains exist, so that appropriate assessment and necessary protection can be afforded to any archaeological remains identified.

POLICY 12 NATIONALLY IMPORTANT ARCHAEOLOGICAL REMAINS

There should be a presumption in favour of the physical preservation in situ of nationally important archaeological remains. The setting and amenity value of the archaeological remains should be protected.

POLICY 13 LOCALLY IMPORTANT ARCHAEOLOGICAL REMAINS

Development proposals which affect locally important archaeological remains should take account of the relative importance of the remains. If the preservation in situ of the archaeological remains cannot be justified, arrangements should be sought to record those parts of the site that would be destroyed or altered.

POLICY 14 ARCHAEOLOGICAL STRATEGIES

Development proposals in Towns, Rural Centres and Villages should ensure that, where appropriate, the protection of archaeological remains is undertaken. [Cheddar is included in a list of these towns]

Sedgemoor Core Strategy 2006-2027

Although the Local Plan for Sedgemoor District Council is to be replaced by a Core Strategy, many of the policies have been saved until that Strategy is complete. The following policies are relevant to the proposed development:



POLICY HE9

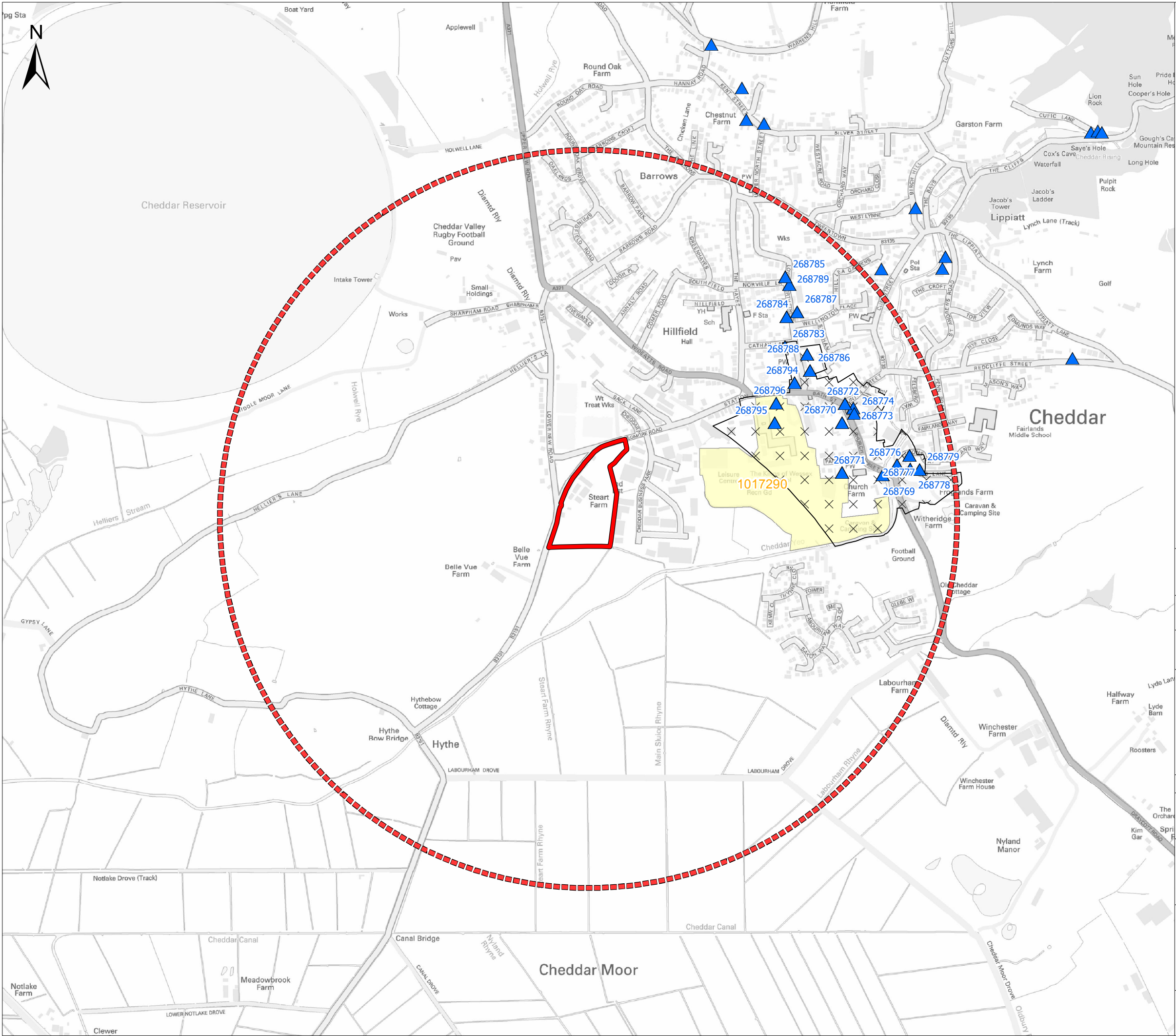
Where development proposals will affect Areas of High Archaeological Potential and elsewhere where there is reason to believe that there may be archaeological remains, an assessment of the nature, character and importance of the site will be sought prior to the determination of any planning application.

POLICY HE12






Planning permission will not be granted for development which would damage or destroy locally important archaeological remains, unless the importance of the development outweighs the local significance of the remains. Where physical preservation in situ is not possible, mitigation strategies will be required for the protection and/or recording of the site.

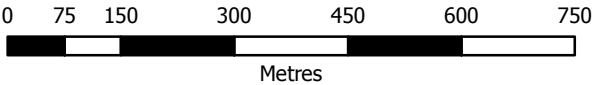


Appendix E – Recorded Heritage Sites



Legend

-  Application Boundary
-  Study Area
-  Listed Buildings
-  Scheduled Monuments
-  Conservation Areas



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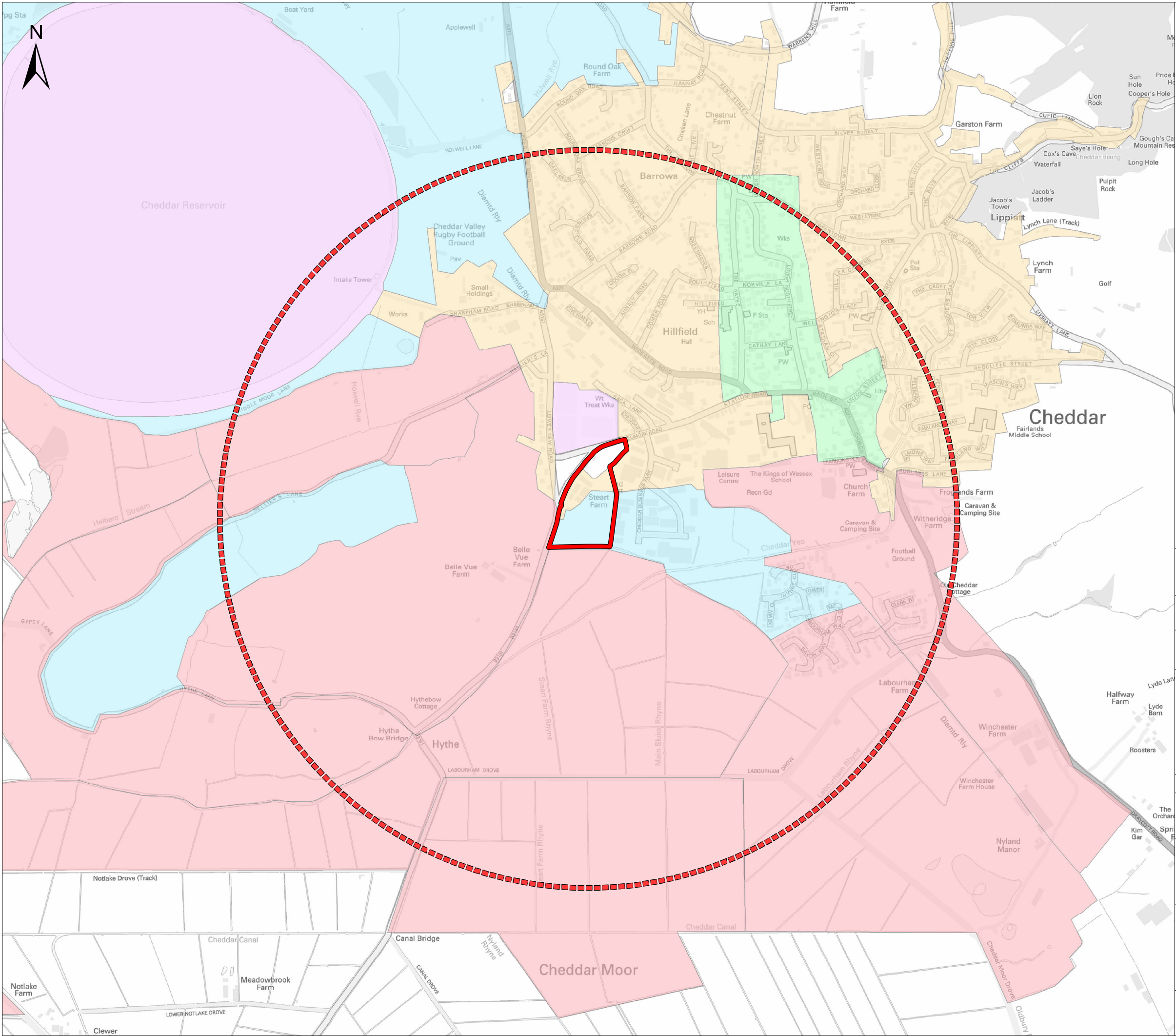
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Client: **Sainsbury's Supermarkets Ltd**



Project: **Proposed New Foodstore at Steart Farm
Cheddar**

Title: **Designated Heritage Sites**

Office: 4154	Project No: A069799	Figure No: 2
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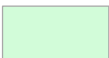
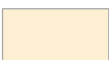


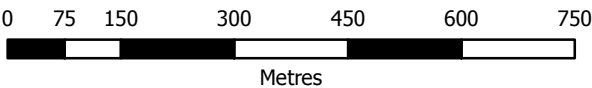
Legend

-  Application Boundary
-  Study Area

CheddarAreaHLC_region

TYPE, SUBTYPE

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-  1, 5
-  5, 0
-  5, 1
-  5, 2



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Client: **Sainsbury's Supermarkets Ltd**

Project: **Proposed New Foodstore at Steart Farm
Cheddar**

Title: **Historic Landscape Character**

Office: 4154	Project No: A069799	Figure No: 4
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Recorded Heritage Sites (English Heritage and Somerset Historic Environment Record)

Identifier	Designation	Grid Reference	Period	Description
1017290	SM	ST 45783 53002	Romano-British	Roman settlement site, Anglo-Saxon and Norman royal palace, and St Columbanus' Chapel
1019033	SM	ST 45920 53199	Medieval	Market cross at the junction of Bath Street, Union Street and Church Street
15538	LBII*	ST 46023 53010	Post-Medieval	Church Farm house and Church farmhouse
268772	LBII*	ST 45920 53199	Medieval	Market cross at the junction of Bath Street, Union Street and Church Street
268796	II	ST 45734 53204	Post-Medieval	Hanham Manor
268788	II	ST 45818 53336	Post-Medieval	The Manor House And Attached Stables
268787	II	ST 45791 53451	Post-Medieval	Hannah Mores Cottage
268777	II	ST 46096 53062	Post-Medieval	Great Barn At Fairlands House
268794	II	ST 45784 53259	Post-Medieval	Ivy Farmhouse
268778	II	ST 46098 53026	Post-Medieval	Barn, About 21 Metres South East Of Fairlands House And Bank Of Adjacent Leat
268779	II	ST 46123 53024	Post-Medieval	Moonrakers
268771	II	ST 45913 53015	Post-Medieval	The Vicarage
268784	II	ST 45762 53438	Post-Medieval	The Dolphins
268773	II	ST 45943 53191	Post-Medieval	Market Cross Hotel
268776	II	ST 46062 53037	Post-Medieval	Fairlands House And Attached Wall To Rear
268795	II	ST 4573 5315	Medieval	Former Chapel Dedicated To St Columbanus, Now Ruin, In The Grounds Of Kings Of Wessex School
268770	II	ST 45913 53151	Post-Medieval	The Court House And Forecourt Wall



Identifier	Designation	Grid Reference	Period	Description
268786	II	ST 45826 53293	Post-Medieval	Fern Bank
268789	II	ST 45770 53525	Post-Medieval	Norville Cottage
268783	II	ST 45758 53357	Post-Medieval	Baptist Chapel
268774	II	ST 45946 53175	Post-Medieval	Sungate And Forecourt Railings
268785	II	ST 45759 53547	Post-Medieval	Norville House And Forecourt Wall
10410	II*	ST 4595 5295	Medieval	Church of St Andrew and churchyard, Cheddar
10416		ST 4605 5336	19 th century	Corn mill, Cheddar
10419		ST 461 532	19 th century	Valley Paper Mills, Redcliff Street, Cheddar
10422		ST 4610 5302	19 th century	Tannery, Fairlands, Cheddar
11337		ST 4571 5304	Prehistoric, Romano-British & Medieval	Watching briefs (January and July 2001), Kings of Wessex School, Cheddar
11413		ST 4441 5220	Prehistoric	Cup marked stone
11414		ST 4473 5257	Romano-British	Roman pottery finds, N of Hythe Bow, Cheddar
11415		ST 4434 5220	Romano-British	Roman finds, W of Hythe Bow
11418		ST 452 530	Romano-British	Roman pottery finds, Steart Farm, Cheddar
11441		ST 4591 5298	Romano-British, Anglo-Saxon & Medieval	Roman, Saxon and medieval occupation, The Vicarage, Cheddar
11442		ST 457 531	Medieval	Medieval royal and Episcopal palace, Cheddar
11443		ST 4592 5319	Medieval	Market Cross, Cheddar
12492		ST 4513 5320	Palaeolithic	Handaxe find, New Road, Cheddar



Identifier	Designation	Grid Reference	Period	Description
12742		ST 4557 5305		Geophysical survey (1990) Kings of Wessex School, Cheddar
12838		ST 4584 5298		Geophysical survey (1990) Kings of Wessex School, Cheddar
12839		ST 4588 5291		Geophysical survey (1990) Kings of Wessex School, Cheddar
12754		ST 45882 53299	Romano-British & Medieval	Evaluation (1992), Lower North Street, Cheddar,
12802		ST 4612 5303	Romano-British	Roman occupation, Froglands Lane, Cheddar
12808		ST 4446 5223	Medieval	Deserted hamlet, Hythe Lane, Hythe
12841		ST 4558 5297		Geophysical survey (1991) Kings of Wessex School, Cheddar
12840		ST 4563 5310		Geophysical survey (1991) Kings of Wessex School, Cheddar
12842		ST 4556 5310		Geophysical survey (1991) Kings of Wessex School, Cheddar
12879		ST 4583 5280	Industrial	Cheddar Gas Works
12880		ST 4538 5324	Industrial	Cheddar Station
12977		ST 4570 5317	None	Science block watching brief (1998), Kings of Wessex, Cheddar
28931		ST 4538 5280	None	Negative watching brief (1998), Cheddar Business Park
12963		ST 421 560 - ST 543 453	Industrial	Cheddar Valley and Yatton Railway, Yatton to Wells
35934		ST 4570 5305	Romano-British	Evaluation (1998), Kings of Wessex School, Cheddar
12891		ST 4570 5305	Romano-British	Watching brief (1999), Kings of Wessex School, Cheddar
35935		ST 4588 5300	Romano-British	Excavation (1965), The Vicarage, Cheddar
12892		ST 457 529	Romano-British	Evaluation (1999), boundary bank, Kings of Wessex School, Cheddar
35936		ST 4586 5300	Romano-British	Excavation (1970), The Vicarage, Cheddar
35937		ST 4572 5303		Resistivity survey (1999), Kings of Wessex School, Cheddar
35938		ST 4565 5298		Magnetic susceptibility survey (1999), Kings of Wessex School, Cheddar
35982		ST 4484 5257	Romano-British	Evaluation (1992), Cheddar Sewage Works

Stear Farm, Cheddar, Somerset
Proposed New Foodstore



Identifier	Designation	Grid Reference	Period	Description
44731		ST 4585 5296	Romano-British, Medieval & Post-Medieval	Watching brief (1999), Cycle path, Kings of Wessex School, Cheddar
12738		ST 457 531	Anglo-Saxon	Evaluation (1987) Kings of Wessex School, Cheddar
12739		ST 4561 4311	Romano-British	Evaluation (1991) Kings of Wessex School, Cheddar
44757		ST 4545 5325		Negative Evaluation (2000), Station Yard, Cheddar
57100		ST 457 529	Romano-British	Watching brief (1999), Kings of Wessex school playing fields,
57178		ST 456 532	Romano-British & Medieval	Watching brief (1999), Kings of Wessex school playing fields, Cheddar
57180		ST 457 533	Prehistoric, Romano-British, Medieval	Evaluation (1997), The Old Showground, Cheddar
57179		ST 457 532		Geophysical survey (1998), The Old Showground, Cheddar
44783		ST 4570 5324		Post-Roman ditch, Station Road, Cheddar
44862		ST 457 526		Geophysical survey (1993), S of Cheddar
44873		ST 4556 5275	Bronze Age	Evaluation (1998), land off Draycott Road, Cheddar
44958		ST 4560 5342	None	Evaluation (2000), Cheddar Middle School, The Hayes, Cheddar
44966		ST 4570 5304	Prehistoric, Romano-British, Medieval	Evaluation (2000) and watching brief (2001), Kings of Wessex School, Cheddar
11337		ST 4571 5304	Prehistoric, Romano-British, Medieval	Watching brief (2001), Kings of Wessex School, Cheddar
28844		ST 4593 5335		Evaluation (1995), Albion Terrace, Cheddar
12255		ST 4595 5295		Watching brief (1990) St. Andrew's Church, Cheddar
15075		ST 4601 5294		Evaluation (2001), Cheddar Bridge Touring park, Cheddar
12760		ST 457 531		Cheddar Palace excavation (1960-62), Cheddar
12844		ST 4570 5317	Undated	Evaluation (1997), Kings of Wessex School, Cheddar



Identifier	Designation	Grid Reference	Period	Description
15262		ST 4615 5300	Romano-British	Roman finds, Froglands Farm, Cheddar
15264		ST 4545 5305	Romano-British	Watching brief (1987-8) , Cheddar Business Park
15371		ST 4599 5302	Romano-British	Watching brief (2002), Church Farm House, Cheddar
12843		ST 4568 5317	Prehistoric, Romano-British, Medieval	Watching brief (1988), Kings of Wessex School, Cheddar
15538		ST 4599 5302	Post-medieval	Church house, Church Farm, Cheddar
15546		ST 4505 5265	19 th Century	Hythe House, Cheddar
15547		ST 4594 5320	Post-Medieval	Watching brief (1988), Cheddar Cinema
15898		ST 4564 5315	Romano-British	Watching brief (2002), Kings of Wessex school, Cheddar
16199		ST 4601 5294	None	Watching brief (2002), Cheddar Bridge Touring Park
16136		ST 4589 5313	Industrial	Watching brief (1991), Court House retirement home, Cheddar
16988		ST 460 533	Post-Medieval	Evaluation (2004) 4 Union Street, Cheddar
17655		ST 4565 5323	20 th Century	War Memorial, Station Road, Cheddar
17656		ST 4597 5294	20 th Century	War Memorial, Churchyard of St Andrew, Cheddar
17793		ST 4568 5306	Romano-British & Medieval	Evaluation (2004) Kings of Wessex Community School, Station Rd, Cheddar
17966		ST 4598 5344	1904	Memorial Wesleyan Church, Cliff Street, Cheddar
17967		ST 4588 5341	19 th Century	Burial Ground, Cheddar
17968		ST 4575 5335	19 th Century	Baptist Burial Ground, Cathy Lane, Cheddar
18254		ST 4569 5325	Romano-British & Medieval	Excavation (2001) The Old Showground, Cheddar
18256		ST 4568 5326	Medieval	Medieval remains, Old Showground, Cheddar
13927		ST 4597 5276	Romano-British	Evaluation (2006), Cheddar Touring Park, south of Church of St Andrew, Cheddar
19197		ST 4599 5142	Industrial	Warping Drains, Cheddar Moor, Cheddar

Stear Farm, Cheddar, Somerset
Proposed New Foodstore



Identifier	Designation	Grid Reference	Period	Description
19286		ST 4482 5362	Medieval/Post-Medieval	Field boundaries, W of Cheddar
26997		ST 4523 5247	Post-Medieval	Possible duck decoy, Cheddar Moor
24681		ST 4568 5311	Undated	Watching Brief (2007), The Kings of Wessex School, Station Road, Cheddar
24682		ST 4567 5305	Romano-British	Watching Brief (2005-2006), Kings of Wessex, Station Road, Cheddar
26098		ST 4560 5312	Romano-British & Anglo-Saxon	Excavation (2007), Kings of Wessex School, Station Road, Cheddar
26231		ST 4174 3681 - ST 4342 4788	Industrial	Turnpike Road, Rowberrow to Pedwell
26233		ST 4500 4570 - ST 4867 5012	Industrial	Turnpike Road, Cheddar to Wells
22522		ST 458 531	Romano-British & Medieval	Evaluation (2007)
28126		ST 4580 5337	Prehistoric & Medieval	Evaluation (2008)
28139		ST 4526 5302	None	Evaluation, Steart Bushes (2008)
28603		ST 3994 5466 - ST 4581 5280	Medieval	Canalised section of the River Yeo
28604		ST 4607 5311 - ST 4582 5280	Medieval	Canalised section of the River Yeo
12664		ST 4553 5300	Romano-British	Roman pottery finds, S of Cheddar
14365		ST 4476 5230	1911	Hythe Bow Bridge, Hythe, Cheddar
12978		ST 4572 5312	18 th to 19 th Century	Service trench watching brief (1998), Kings of Wessex, Cheddar
18255		ST 4568 5325	Anglo-Saxon	Late Saxon Hollow-way, Old Showground, Cheddar
28838		ST 4563 5314	None	Negative watching brief (1996), Kings of Wessex School, Cheddar

Stear Farm, Cheddar, Somerset
Proposed New Foodstore



Identifier	Designation	Grid Reference	Period	Description
28914		ST 456 451	None	Negative watching brief (1998), Kings of Wessex School, Cheddar
44911		ST 4587 5288	Romano-British	Watching brief (2000), Cycleway, Kings of Wessex School, Cheddar
57103		ST 4603 5300	None	Pipeline watching brief (2000), Draycott Road, Cheddar
29335		ST 459 530		Geophysical Survey 2005, Cheddar Vicarage Lawn
12845		ST 4566 5315	Romano-British & Medieval	Watching brief (1993), Learning Resources Centre, Kings of Wessex School, Cheddar
15836		ST 4570 5314	None	Watching brief (2002), Kings of Wessex School, Cheddar
29948		ST 4591 5322	Post-Medieval	Bath Arms Cottage, Cheddar
29953		ST 4579 5344	Post-Medieval	Site of Wellington House, Lower North Street, Cheddar
29952		ST 4577 5339	Post-Medieval	Marburn, Lower North Street, Cheddar
12812		ST 4577 5344	Medieval	Building survey and watching brief (1983), Wellington House, Lower North Street, Cheddar
30285		ST 4599 5323	19 th Century	Watching brief (2010), Valley House, Union Street, Cheddar
30421		ST 457 532	Medieval	Medieval manor site
11610		ST 457 532	Romano-British & peat deposits and Prehistoric flint	Pipeline watching brief (1992), Axbridge to Cheddar
31611		ST 444 524	Undated	Watching brief (2011)



Appendix F – Historic Mapping

Ordnance Survey First Edition, One Inch, 1884



Stear Farm, Cheddar, Somerset
Proposed New Foodstore



Ordnance Survey First Edition, Six Inch, 1884



Steart Farm, Cheddar, Somerset
Proposed New Foodstore



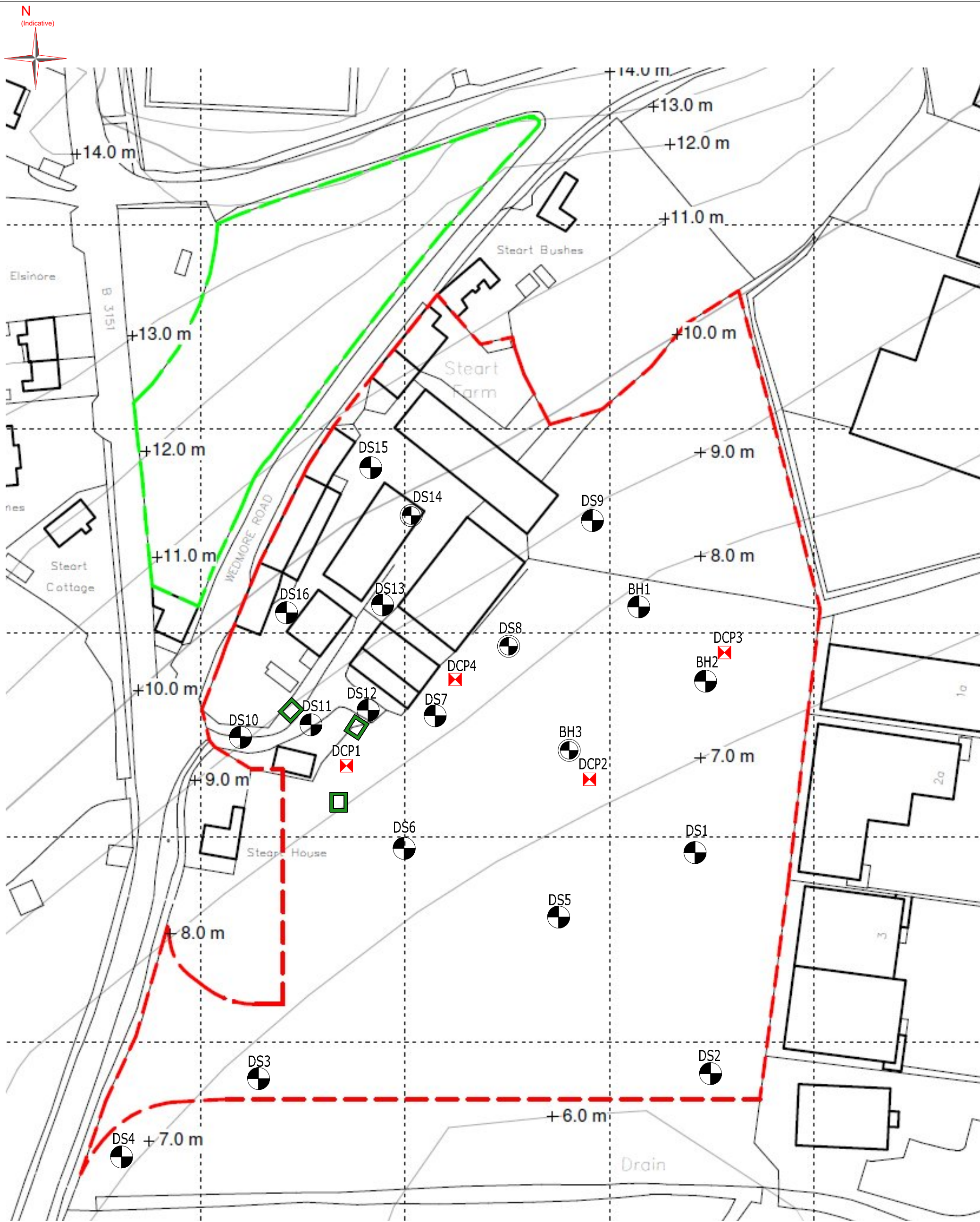
Ordnance Survey, Third Edition, Six Inch, 1932






Appendix G – Site Investigation Logs and Plan

The Following plan and logs are reproduced from Tweedie Evans Consulting (TEC 2011)



TEC Exploratory Hole Location: 

TEC DCP Location: 

TEC Exploratory Hole with Installation Location: 

Observed AST Location: 

Extract of Drawing by:
Stride Treglown Ltd
'Existing Site Plan'

Drawing Ref:
31080-149 SK002 Rev. A



Tweedie Evans Consulting
The Old Chapel
35a Southover
Wells, Somerset
BA5 1UH

Tel: 01749 677760
Fax: 01749 679345
Email: info@tecon.co.uk
www.tecon.co.uk

Site Name:
Steart Farm, Cheddar

Scale:
n/a

Drawing Name:
Exploratory Hole Location Plan

Client Name:
Sainsbury's Supermarkets Ltd

Project No:
1110023.001

Date:
December
2011

Figure No:
3



**TWEEDIE EVANS
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The Old Chapel
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CABLE PERCUSSIVE BORING RECORD		BOREHOLE: BH1
Project Title: Steart Farm, Cheddar		
Project No: 1110023.001	Dates: 21 November 2011	
Client: Sainsbury's Supermarkets Ltd	Coordinates: -	

Depth (m)	Description	Legend	Depth (m)	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface		0.0				
0.40	MADE GROUND Dark brown to brown slightly sandy ashy clay.			A		SPT and PID Results PID at 0-0.4mbgl = 0.0ppm	
					0.4m		
	Soft to firm brown locally orange-brown mottled slightly sandy slightly gravelly CLAY. Fine to medium gravel of mudstone.				0.8m		
			1.0	T	1.0m		
1.50						SPT at 1.5m - (0, 0) 1, 4, 8, 11 N = 24	
	Stiff red-brown to brown slightly sandy gravelly CLAY. Gravel of flint, limestone and mudstone. Materials are wet.					SPT at 2m - (3, 7) 10, 13, 13, 14 N = 50	
2.00			2.0				
	Dense to very dense red-brown to brown clayey sandy GRAVEL. Gravel and occasional cobbles of strong grey limestone and mudstone. Materials recovered as slurry.					SPT at 3m - (4, 6) 9, 9, 9, 10 N = 37	
			3.0	T	3.0m		
					3.1m		
3.50				D			
					3.5m		
	MERCIA MUDSTONE Very stiff to hard red-brown locally grey slightly sandy CLAY. Materials are dry.			D			
					4.0m	SPT at 4m - (6, 7) 8, 13, 15, 14+ (50mm) N = >50	
4.50			4.0	D			
	Borehole Terminated						
			5.0				

Notes:

Samples:

A - 500ml Amber Glass Jar
T - 1000ml Plastic Tub
V - Glass Vial
D - Disturbed Sample
U - Undisturbed Sample
SPT - Standard Penetration Test
HSV - Hand Shear Vane

Plant: Dando 2000 Mk2

Water Observations:

Groundwater ingress at 0.75mbgl.

Notes:
Borehole hand-dug to 1.2mbgl.

PID = Photo Ionisation Detector.

Logged by: HG

Checked by: AF

Approved by: RE



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CABLE PERCUSSIVE BORING RECORD		BOREHOLE: BH2
Project Title: Steart Farm, Cheddar		
Project No: 1110023.001	Dates: 21 November 2011	
Client: Sainsbury's Supermarkets Ltd	Coordinates: -	

Depth (m)	Description	Legend	Depth (m)	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface		0.0				
0.50	MADE GROUND Brown slightly sandy slightly gravelly slightly ashy clay. Rare fine gravel of charcoal.		0.0	A/T		SPT, HSV and PID Results PID at 0-0.5mbgl = 0.0ppm	
					0.5m		
			1.0	D	0.9m 1.0m		
1.50	Soft grey-brown locally orange-brown mottled slightly gravelly to gravelly CLAY. Gravel of strong grey limestone and mudstone, quartz and flint.				1.5m	SPT at 1.5m - (5, 5) 7, 5, 6, 6 N = 24	
			2.0	D	2.0m	SPT at 2m - (6, 12) 12, 14, 18, 6+ (35mm) N = >50	
					2.5m		
			3.0	D	3.0m	SPT at 3m - (15, 10+ (50mm)) 26, 24+ (65mm) N = >50	
					3.4m		
3.70	Dense to very dense red-brown to brown silty very sandy GRAVEL locally gravelly sandy clay. Gravel and occasional cobbles of strong grey limestone and mudstone. Materials are wet, recovered as slurry.						
			4.0	U	4.0m		
					4.45m	HSV (kPa) at 4.7m - 70, 50, 85, 80, 70	
			5.0	D	5.0m	SPT at 5m - (5, 5) 11, 15, 18, 6+ (10mm) N = >50	
5.50	MERCIA MUDSTONE Very stiff to hard red-brown locally grey slightly sandy CLAY. Materials are dry.						
	Borehole Terminated		6.0				

Notes:

Samples:

A - 500ml Amber Glass Jar
T - 1000ml Plastic Tub
V - Glass Vial
D - Disturbed Sample
U - Undisturbed Sample
SPT - Standard Penetration Test
HSV - Hand Shear Vane

Plant: Dando 2000 Mk2

Water Observations:

Groundwater ingress at 1.7mbgl.

Notes:

Borehole hand-dug to 1.2mbgl.

PID = Photo Ionisation Detector.

Logged by: HG

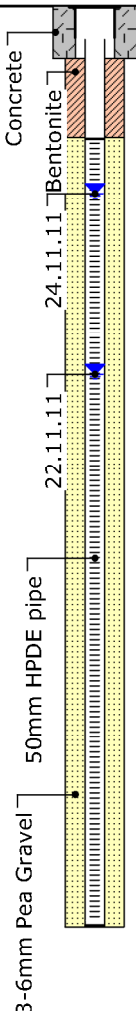
Checked by: AF

Approved by: RE



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CABLE PERCUSSIVE BORING RECORD			BOREHOLE: BH3
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 22 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	Depth (m)	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface		0.0				
0.50	MADE GROUND Brown slightly sandy slightly gravelly clay. Gravel of chert,, mudstone and rare fine charcoal.			A	0.1m	SPT and PID Results PID at 0-0.5mbgl = 0.0ppm	
					0.4m		
				T	0.5m		
0.80	Soft brown to dark grey-brown locally orange-brown mottled slightly gravelly CLAY. Fine gravel of strong grey limestone and mudstone.				0.7m		
					0.8m		
1.50	Very soft brown locally orange-brown slightly sandy gravelly CLAY. Gravel of moderately strong yellow-brown sandstone and strong grey limestone and mudstone.		1.0	D			
					1.5m	SPT at 1.5m - (7, 7) 22, 15, 13+ (70mm) N = >50	
			2.0	D			
	Dense to very dense red-brown to brown slightly clayey very sandy GRAVEL locally gravelly sandy clay. Gravel and occasional cobbles of strong grey limestone and mudstone. Materials are wet, recovered as slurry.				2.4m	SPT at 2m - (5, 2) 2, 8, 19, 20 N = 49	
			3.0		3.0m	SPT at 3m - (25+(60mm)) 41, 9+ (10mm) N = >50	
				D			
3.60					3.5m		
	Borehole Terminated		4.0				
			5.0				
Notes: Samples: A - 500ml Amber Glass Jar T - 1000ml Plastic Tub V - Glass Vial D - Disturbed Sample U - Undisturbed Sample SPT - Standard Penetration Test HSV - Hand Shear Vane				Plant: Dando 2000 Mk2			
				Water Observations: Groundwater ingress at 1.4mbgl.			
				Notes: Borehole hand-dug to 1.2mbgl.			
				PID = Photo Ionisation Detector.			
				Logged by: HG	Checked by: AF	Approved by: RE	



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DYNAMIC SAMPLING RECORD		BOREHOLE: DS1	
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 23 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.30	MADE GROUND Brown slightly gravelly slightly sandy clay. Fine gravel of mudstone and charcoal. Frequent rootlets observed.			A	0.3m	<u>SPT and PID Results</u> PID at 0-0.3mbgl = 0.0ppm SPT at 1m - (9, 8) 4, 2, 3, 4 N = 13	
0.50	Soft to firm brown locally orange-brown mottled sandy CLAY. Occasional rootlets observed.			T	0.5m		
0.75	Soft to firm orange-brown to yellow-brown locally grey-brown mottled slightly sandy slightly gravelly CLAY. Gravel of strong grey limestone and mudstone.				0.75m		
	Medium dense to very dense orange-brown to red-brown sandy clayey to very clayey GRAVEL. Gravel of strong angular to sub-angular grey limestone and mudstone with local yellow-brown sandstone.			D			
					2.0m	SPT at 2m - (16, 9+ (45mm) 20, 25, 5+ (15mm) N = > 50	
2.45							
	Borehole Terminated						
Notes: SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Plant: Archway Dart			
				Water Observations: Groundwater encountered at 2.1mbgl. Groundwater rose to 1mbgl after SPT at 2mbgl.			
				Logged by: HG	Checked by: AF	Approved by: RE	



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DYNAMIC SAMPLING RECORD			BOREHOLE: DS2
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 23 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.40	Brown slightly gravelly slightly sandy clay. Fine gravel of mudstone. Frequent rootlets observed.			A		<u>SPT and PID Results</u> PID at 0.1-0.4mbgl = 0.0ppm SPT at 1m - (10, 13) 11, 8, 8, 10 N = 37	
0.60	Soft to firm grey-brown locally orange-brown and black mottled slightly sandy CLAY. Occasional rootlets observed.				0.4m		
	Dense grey-brown to brown sandy clayey GRAVEL. Gravel of strong angular to sub-angular grey mudstone and limestone.			D	1.0m		
					1.3m		
1.90	MERCIA MUDSTONE Very stiff to hard red-brown locally grey slightly sandy CLAY. Sand is fine.					SPT at 2m - (2, 5) 5, 7, 10, 13 N = 35 SPT at 3m - (10, 13) 15, 18, 15, 2+ (10mm) N = >50	
3.45							
	Borehole Terminated						

Notes:

SPT - Standard Penetration Test
PID - Photo Ionisation Detector
HSV - Hand Shear Vane

Sampling:

A - 250ml Glass Jar
T - 1000ml Plastic Tub
D - Disturbed Sample

Plant: Archway Dart

Water Observations:

Groundwater encountered at 1.7mbgl.

Logged by: HG

Checked by: AF

Approved by: RE



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DYNAMIC SAMPLING RECORD			BOREHOLE: DS3
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 23 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.45	MADE GROUND Brown slightly gravelly slightly sandy clay. Fine gravel of mudstone, limestone and charcoal. Frequent rootlets observed.			A	0.45m	<u>SPT Results</u> SPT at 1m - (0, 0) 0, 0, 0, 0 N = 0 SPT at 2m - (16, 9+ (50mm)) 20, 21, 9+ (50mm) N = >50	
1.50	Very soft brown to grey-brown locally orange-brown mottled slightly sandy CLAY. Occasional rootlets observed.			D	1.5m		
2.45	Dense to very dense grey-brown locally red-brown sandy clayey GRAVEL. Gravel of strong angular to sub-angular grey mudstone and limestone.						
	Borehole Terminated						
Notes:				Plant: Archway Dart			
SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane				Water Observations:			
Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Groundwater encountered at 2mbgl. Groundwater rose to 0.9mbgl after SPT at 2mbgl.			
Logged by: HG		Checked by: AF		Approved by: RE			



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DYNAMIC SAMPLING RECORD		BOREHOLE: DS4	
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 23 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.20	<p>MADE GROUND</p> <p>Brown slightly gravelly slightly sandy clay. Fine to medium gravel of mudstone, limestone, brick and fine charcoal. Frequent rootlets observed.</p> <p>Firm brown locally orange-brown and black mottled slightly sandy CLAY. Sand is fine.</p>			A	0.2m	<p><u>SPT Results</u></p> <p>SPT at 1m - (0, 1) 1, 1, 2, 2 N = 6</p> <p>SPT at 2m - (3, 4) 4, 3, 1, 1 N = 9</p> <p>SPT at 3m - (14, 11+ (45mm)) 21, 16, 11, 2+ (5mm) N = >50</p>	
				A/T	0.5m		
0.95				D	0.95m		
	Soft to firm red-brown locally grey slightly gravelly slightly sandy CLAY. Gravel of strong angular to sub-angular grey mudstone and limestone.						
1.90	Loose becoming very dense brown to grey-brown locally red-brown sandy clayey GRAVEL. Gravel of strong angular to sub-angular grey mudstone and limestone.						
3.45							
	Borehole Terminated						
Notes:				Plant: Archway Dart			
SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane				Water Observations:			
Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Groundwater encountered at 1.9mbgl. Groundwater rose to 1.35mbgl after SPT at 3mbgl.			
		Logged by: HG		Checked by: AF		Approved by: RE	



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DYNAMIC SAMPLING RECORD		BOREHOLE: DS5	
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 23 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.25	MADE GROUND Brown slightly gravelly slightly sandy clay. Fine gravel of mudstone and slate. Frequent rootlets observed.			A	0.25m	SPT and PID Results PID at 0-0.25mbgl - 0.0ppm	
0.85	Firm becoming very soft from 0.7mbgl brown to grey-brown locally orange-brown and black mottled slightly sandy CLAY. Occasional rootlets observed.						
2.45	Dense to very dense brown to grey locally orange-brown sandy clayey GRAVEL. Gravel of strong angular to sub-angular grey limestone and mudstone.					SPT at 1m - (1, 4) 4, 6, 9, 13 N = 32 SPT at 2m - (17, 8+ (30mm) 13, 10, 13, 14+ (55mm) N = >50	
	Borehole Terminated						
Notes: SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Plant: Archway Dart Water Observations: Groundwater encountered at 1.5mbgl. Groundwater rose to 1.1mbgl after SPT at 2mbgl.			
		Logged by: HG		Checked by: AF		Approved by: RE	



BOREHOLE: DS6




Project Title: Steart Farm, Cheddar

Project No: 1110023.001

Dates: 23 November 2011

Client: Sainsbury's Supermarkets Ltd

Coordinates: -

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.20	MADE GROUND Brown slightly gravelly slightly sandy clay. Fine gravel of mudstone and charcoal. Frequent rootlets observed.			A	0.2m	<u>SPT and PID Results</u> PID at 0.1-0.2mbgl = 0.0ppm SPT at 1m - (0, 0) 0, 0, 0, 0 N = 0	
	Firm becoming very soft from 1m brown locally orange-brown mottled slightly sandy CLAY. Sand is fine. Occasional rootlets observed.			D	0.3m		
					0.6m		
1.80							
	Medium dense to very dense orange-brown to grey-brown sandy clayey GRAVEL. Gravel of strong angular to sub-angular grey limestone and mudstone with local yellow-brown sandstone.					SPT at 2m - (10, 15+ (70mm) 18, 18, 14+ (65mm) N = >50	
2.45							
	Borehole Terminated						

Notes:

SPT - Standard Penetration Test

PID - Photo Ionisation Detector

HSV - Hand Shear Vane

Sampling:

A - 250ml Glass Jar

T - 1000ml Plastic Tub

D - Disturbed Sample

Plant: Archway Dart

Water Observations:

Groundwater encountered at 1.8mbgl. Groundwater rose to 1.15mbgl after SPT at 2mbgl.

Logged by: HG




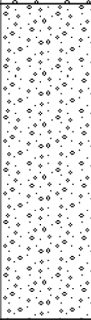
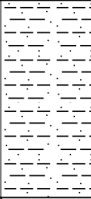
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Approved by: RE



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
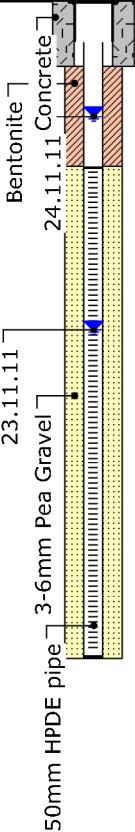
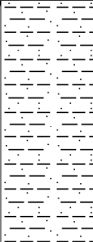

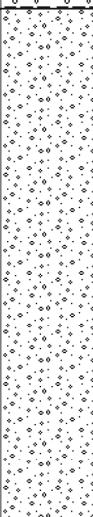
DYNAMIC SAMPLING RECORD		BOREHOLE: DS7	
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 23 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.30	MADE GROUND Brown to dark brown slightly gravelly slightly sandy clay. Fine to medium gravel of mudstone, limestone, brick and fine charcoal. Frequent rootlets observed. Firm becoming soft from 1m brown to grey-brown locally orange-brown and black mottled slightly sandy CLAY. Occasional rootlets observed.			A	0.3m	SPT and PID Results PID at 0-0.3mbgl = 0.0ppm SPT at 1m - (0, 0) 2, 2, 0, 1 N = 5 SPT at 2m - (1, 2) 1, 2, 3, 5 N = 11 SPT at 3m - (13, 10) 6, 6, 7, 10 N = 29 SPT at 4m - (11, 14) 14, 17, 16, 3+ (10mm) N = >50	
					0.4m		
				D	1.0m		
1.20		1.2m					
	Firm becoming very soft from 2m brown locally red-brown gravelly CLAY. Gravel of strong grey angular to sub-angular limestone and mudstone.			D			
					2.0m		
2.50							
	Medium dense to dense orange-brown to red-brown sandy clayey GRAVEL. Gravel of strong angular to sub-angular grey limestone and mudstone. Materials are wet.						
3.70							
	MERCIA MUDSTONE Very stiff to hard red-brown locally grey slightly sandy CLAY. Sand is fine.			D	3.7m		
					4.0m		
4.45							
	Borehole Terminated						
Notes: SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Plant: Archway Dart			
				Water Observations: Groundwater encountered at 1.2mbgl.			
				Logged by: HG		Checked by: AF	Approved by: RE



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DYNAMIC SAMPLING RECORD		BOREHOLE: DS8	
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 23 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.20	Brown to dark brown slightly gravelly slightly sandy clay. Fine to medium gravel of mudstone and limestone. Frequent rootlets observed. Firm brown locally orange-brown and black mottled slightly sandy CLAY. Occasional rootlets observed.			A	0.2m	SPT and PID Results PID at 0-0.2mbgl = 0.0ppm	
0.95	Black plastic pseudo-fibrous very organic slightly gravelly CLAY. Plant remains comprise grass and roots. Organic odour noted. Fine to medium gravel of strong grey angular to sub-angular limestone and mudstone.			D	1.0m	SPT at 1m - (0, 1) 1, 0, 1, 1 N = 3	
1.90	Very soft dark brown locally black sandy gravelly CLAY. Gravel of strong grey angular to sub-angular limestone and mudstone. Materials are wet.				1.9m	SPT at 2m - (7, 6) 6, 10, 16, 17 N = 49	
3.45	Dense to very dense red-brown to grey-brown sandy clayey GRAVEL. Gravel of strong angular to sub-angular flint, grey limestone and mudstone. Materials are wet.					SPT at 3m - (20, 5+ (15mm)) 27, 23+ (65mm) N = >50	
	Borehole Terminated						
Notes: SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Plant: Archway Dart Water Observations: Groundwater encountered at 1.0mbgl.			
				Logged by: HG		Checked by: AF	Approved by: RE



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DYNAMIC SAMPLING RECORD		BOREHOLE: DS9	
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 23 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.25	MADE GROUND Dark brown slightly gravelly slightly sandy clay. Fine to medium gravel of mudstone, limestone, sandstone and slate.. Frequent rootlets observed.			A	0.25m	SPT Results SPT at 1m - (0, 0) 1, 1, 1, 1 N = 4 SPT at 2m - (0, 1) 1, 6, 19, 21 N = 47 SPT at 3m - (18, 7+ (30mm)) 16, 14, 12, 8+ (65mm) N = >50	
0.40					0.4m		
1.10	Firm brown locally orange-brown mottled slightly sandy gravelly CLAY. Gravel of strong rounded sandstone. Occasional rootlets observed.			D	1.1m		
	Very soft to soft brown locally orange-brown mottled slightly sandy CLAY. Sand is fine.				1.1m		
1.80	Very soft red-brown to brown slightly sandy gravelly CLAY. Gravel of strong grey angular to sub-angular limestone and mudstone. Materials are wet.				1.8m		
	Dense to very dense red-brown to grey-brown sandy clayey GRAVEL. Gravel of strong angular to sub-angular flint, grey limestone and mudstone. Materials are wet.			D	1.8m		
					3.0m		
3.45							
	Borehole Terminated						
Notes:				Plant: Archway Dart			
SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane				Water Observations:			
Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Groundwater encountered at 1.1mbgl.			
		Logged by: HG		Checked by: AF		Approved by: RE	



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DYNAMIC SAMPLING RECORD		BOREHOLE: DS10
Project Title: Steart Farm, Cheddar		
Project No: 1110023.001	Dates: 24 November 2011	
Client: Sainsbury's Supermarkets Ltd	Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.40	MADE GROUND Dark brown gravelly sandy clay. Gravel of limestone hardcore, brick and tile.			A		SPT, PID and HSV Results PID at 0-0.2mbgl - 0.0ppm	
					0.4m		
					0.5m	HSV at 0.5-0.6mbgl - 50, 65, 65, 55, 60 (kPa)	
1.50	Firm becoming soft from 1m brown locally red-brown mottled slightly gravelly slightly sandy gravelly CLAY with local inclusions of black organic material (rootlets). Fine to medium gravel of strong yellow-brown and grey limestone. Occasional rootlets observed. Slight organic odour noted.			T	1.0m	SPT at 1m - (1, 2) 1, 1, 2, 3 N = 7	
2.00	Soft red-brown slightly sandy gravelly CLAY with local inclusions of black organic materials (rootlets). Fine to medium gravel of strong grey limestone and mudstone.					SPT at 2m - (0, 0) 0, 0, 1, 1 N = 2	
	No recovery.						
3.00							
3.70	Very soft red-brown slightly sandy CLAY. Sand is fine. Materials are wet.					SPT at 3m - (0, 0) 0, 0, 0, 0 N = 0	
4.25	Dense to very dense red-brown to grey-brown sandy clayey GRAVEL. Gravel of strong angular to rounded grey limestone and mudstone. Materials are wet.					SPT at 3.8m - (16, 9+ (50mm)) 17, 21, 12+ (40mm) N = >50	
	Borehole Terminated						
Notes:				Plant: Archway Dart			
SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane				Water Observations:			
Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Groundwater encountered at 2.2mbgl.			
		Logged by: HG		Checked by: AF		Approved by: RE	



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DYNAMIC SAMPLING RECORD

BOREHOLE: DS11

Project Title: Steart Farm, Cheddar

Project No: 1110023.001

Dates: 24 November 2011

Client: Sainsbury's Supermarkets Ltd

Coordinates: -

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.20	MADE GROUND Red-brown locally black gravelly sandy clay. Gravel of brick, mudstone, tarmacadam, and quartz.			A	0.2m	<u>SPT, PID and HSV Results</u>	
0.50	Soft to firm brown slightly gravelly slightly sandy CLAY with local inclusions of black organic material (rootlets). Fine to medium gravel of strong grey limestone, mudstone and quartz.					HSV at 0.5-0.9mbgl - 65, 45, 35, 50, 70 (kPa)	
1.50	Soft to firm red-brown to brown slightly sandy CLAY with local inclusions of moist black organic materials (rootlets). Slight hydrocarbon odour noted within the moist materials.			A	1.3m	SPT at 1m - (1, 1) 2, 1, 2, 3 N = 8	
	Firm red-brown locally grey-brown slightly sandy CLAY. Sand is fine. No hydrocarbon odour noted.				1.5m	PID at 1.5mbgl - 0.0ppm	
2.00						PID at 1.9-2mbgl - 0.0ppm SPT at 2m - (1, 0) 1, 1, 0, 2 N = 4	
	Very soft red-brown gravelly sandy CLAY. Gravel of strong angular sub-angular grey limestone and mudstone. Materials are wet.			A	2.3m	PID at 2.4-2.5mbgl - 0.0ppm	
3.00						SPT at 3m - (4, 11) 15, 18, 17+ (70mm) N = >50	
3.45	Very dense red-brown to grey-brown sandy clayey GRAVEL. Gravel of strong angular to rounded grey limestone and mudstone. Materials are wet.						
	Borehole Terminated						
Notes:				Plant: Archway Dart			
SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane				Water Observations:			
Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Groundwater encountered at 2.0mbgl.			
				Logged by: HG	Checked by: AF	Approved by: RE	



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DYNAMIC SAMPLING RECORD		BOREHOLE: DS12	
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 24 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.80	MADE GROUND Brown gravelly sandy clay. Gravel of brick, limestone hardcore and mudstone. Coarse gravel of brick between 0.5-0.6mbgl.			A	0.4m	SPT and PID Results PID at 0.1-0.2mbgl - 0.0ppm	
2.20	Very soft to firm brown locally orange-brown and black mottled slightly gravelly slightly sandy CLAY with local inclusions of moist black organic materials (rootlets). Fine gravel of strong grey limestone and mudstone. Slight hydrocarbon odour noted within the moist materials between 1.3 and 1.5mbgl.			A	1.5m	SPT at 1m - (1, 0) 0, 0, 1, 1 N = 2 PID at 1.3-1.5mbgl - 0.0ppm SPT at 2m - (2, 2) 2, 3, 4, 3 N = 12	
2.70	Soft to firm red-brown to brown sandy gravelly CLAY. Gravel of strong angular to rounded grey limestone and mudstone. Materials are wet. No hydrocarbon odour noted.						
3.00	Very dense red-brown to grey-brown sandy clayey GRAVEL. Gravel of strong angular to rounded grey limestone and mudstone. Materials are wet.					SPT at 2.7m - (19, 6+ (25mm)) 23, 24, 3+ (7mm) N = >50	
	Borehole Terminated						
Notes: SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Plant: Archway Dart Water Observations: Groundwater encountered at 2.2mbgl.			
		Logged by: HG		Checked by: AF		Approved by: RE	



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DYNAMIC SAMPLING RECORD		BOREHOLE: DS13	
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 24 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.10	MADE GROUND Concrete.				0.1m	<u>SPT, HSV and PID Results</u> PID at 0.1-0.2mbgl - 0.0ppm HSV at 0.5-0.7m - 75, 85, 60, 75, 70 (kPa) SPT at 1m - (0, 2) 1, 1, 1, 1 N = 4	
0.20	MADE GROUND Dark brown slightly sandy gravelly clay. Gravel of brick, limestone and concrete.			A	0.2m		
	Firm becoming soft at 1m brown slightly gravelly slightly sandy CLAY with local inclusions of moist black organic materials (rootlets). Fine to medium gravel of strong grey limestone and mudstone. Slight organic odour noted.			D	0.4m		
				D	0.7m		
1.20	Firm to stiff red-brown locally grey slightly sandy CLAY. Sand is fine.					SPT at 2m - (3, 1) 3, 5, 4, 4 N = 16	
				D	1.5m		
					2.0m		
2.40	Very dense red-brown sandy very clayey GRAVEL. Gravel of strong angular to sub-angular grey limestone and mudstone. Materials are wet.					SPT at 3m - (10, 15) 17, 23, 10+ (30mm) N = >50	
3.45	Borehole Terminated						
Notes:				Plant: Archway Dart			
SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane				Water Observations:			
Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Groundwater encountered at 2.4mbgl.			
		Logged by: HG		Checked by: AF		Approved by: RE	



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DYNAMIC SAMPLING RECORD		BOREHOLE: DS14
Project Title: Steart Farm, Cheddar		
Project No: 1110023.001	Dates: 24 November 2011	
Client: Sainsbury's Supermarkets Ltd	Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.40	MADE GROUND Brown clayey gravelly sand. Gravel of limestone, mudstone, timber, plastic and rope.			A	0.4m	SPT and PID Results PID at 0-0.4mbgl - 0.0ppm	
0.85	Firm brown to red-brown very gravelly CLAY. Gravel of strong grey angular to sub-angular mudstone and limestone.					SPT at 1m - (1, 1) 1, 0, 1, 2 N = 4	
	Soft black plastic pseudo-fibrous very organic slightly gravelly CLAY. Organic materials are wood and roots. Organic odour noted.			D	1.2m		
	Very soft to firm brown slightly gravelly slightly sandy CLAY with local inclusions of moist black organic materials (rootlets). Fine to medium gravel of strong grey limestone and mudstone. Slight organic odour noted.				1.7m		
2.00	Very soft to firm red-brown slightly sandy to sandy gravelly CLAY. Fine to medium gravel of strong grey limestone and mudstone.			D	2.0m	SPT at 2m - (0, 2) 2, 2, 2, 3 N = 9	
					3.5m	SPT at 3m - (2, 2) 2, 2, 2, 2 N = 8	
4.00						SPT at 4m - (6, 8) 9, 12, 12, 16 N = 49	
4.50	Very dense red-brown sandy very clayey GRAVEL. Gravel of strong angular to sub-angular grey limestone and mudstone. Materials are wet.				4.5m		
	MERCIA MUDSTONE Very stiff to hard red-brown locally grey slightly sandy CLAY. Sand is fine.			D	5.0m	SPT at 5m - (12, 13+ (65mm)) 17, 19, 14+ (50mm) N = >50	
5.45							
	Borehole Terminated						
Notes: SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Plant: Archway Dart			
				Water Observations: Groundwater encountered at 2.7mbgl.			
				Logged by: HG	Checked by: AF	Approved by: RE	



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DYNAMIC SAMPLING RECORD		BOREHOLE: DS15	
Project Title: Steart Farm, Cheddar			
Project No: 1110023.001		Dates: 24 November 2011	
Client: Sainsbury's Supermarkets Ltd		Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.15	MADE GROUND Concrete.				0.15m	SPT, HSV and PID Results	
0.60	MADE GROUND Grey-brown clayey sandy gravel. Gravel of limestone hardcore.			A		PID at 0.3-0.6mbgl - 0.0ppm	
1.00	Firm brown slightly gravelly CLAY. fine to medium gravel of rounded yellow-brown sandstone.				0.6m		
	MERCIA MUDSTONE Firm becoming very hard red-brown locally grey slightly sandy CLAY. Sand is fine.					SPT at 1m - (2, 1) 2, 4, 4, 5 N = 15	
					1.5m	HSV at 1.5-1.7mbgl - 80, 85, 75, 80, 70 (kPa)	
				D	2.0m	SPT at 2m - (3, 3) 4, 6, 7, 8 N = 25	
					3.5m	SPT at 3m - (4, 4) 4, 4, 5, 6 N = 19	
				D		SPT at 4m - (5, 8) 6, 6, 6, 9 N = 27	
					5.0m	SPT at 5m - (11, 11) 14, 13, 16, 7+ (10mm) N = >50	
5.45	Borehole Terminated						
Notes: SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Plant: Archway Dart			
				Water Observations: No groundwater encountered.			
				Logged by: HG	Checked by: AF	Approved by: RE	



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DYNAMIC SAMPLING RECORD		BOREHOLE: DS16
Project Title: Steart Farm, Cheddar		
Project No: 1110023.001	Dates: 24 November 2011	
Client: Sainsbury's Supermarkets Ltd	Coordinates: -	

Depth (m)	Description	Legend	O.D. Level	Sample Details		Remarks	Installation
				Type	Depth		
	Ground Surface						
0.15	MADE GROUND Concrete.				0.15m	SPT and PID Results PID at 0.15-0.4mbgl - 0.0ppm SPT at 1m - (1, 1) 2, 4, 3, 3 N = 12 SPT at 2m - (2, 2) 2, 2, 2, 2 N = 8 SPT at 3m - (2, 2) 3, 2, 2, 3 N = 10 SPT at 5m - (15, 10+ (50mm)) 19, 21, 10+ (35mm) N = >50	
0.40	MADE GROUND Dark grey and brown gravelly sandy clay. Gravel of concrete, limestone and brick.			A	0.4m		
0.95	Soft dark brown slightly sandy slightly gravelly CLAY with local inclusions of moist black organic materials (rootlets). Fine to medium gravel of strong grey limestone and quartz.			A	0.95m		
1.90	Soft to firm brown slightly sandy CLAY.						
2.30	Firm red-brown locally grey slightly sandy CLAY.						
4.50	Firm slightly sandy to sandy gravelly to very gravelly CLAY. Gravel of strong angular to sub-rounded grey mudstone and limestone with yellow-brown sandstone. Materials are wet.						
5.45	Very dense red-brown sandy clayey GRAVEL. Gravel of strong angular to sub-angular grey limestone and mudstone. Materials are wet.						
	Borehole Terminated						
Notes: SPT - Standard Penetration Test PID - Photo Ionisation Detector HSV - Hand Shear Vane Sampling: A - 250ml Glass Jar T - 1000ml Plastic Tub D - Disturbed Sample				Plant: Archway Dart Water Observations: Groundwater encountered at 4.5mbgl. Groundwater rose to 2.8mbgl after SPT at 5mbgl.			
Logged by: HG		Checked by: AF		Approved by: RE			



Appendix H – Report Conditions



Archaeology and Heritage Assessment, Steart Farm, Cheddar, Somerset Proposed New Foodstore

This report is produced solely for the benefit of **Sainsbury's Supermarkets 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.

WYG Environment Planning Transport Ltd