Archaeological monitoring and excavation,
Stage 7 and 8 western extension,
Hanson Quarry, Maldon Road, Birch, Essex

Stage 7: November 2014 - January 2015
Stage 8: October - November 2015

on behalf of Hanson Aggregates

report by Ben Holloway and Howard Brooks
fieldwork by Ben Holloway, Emma Sanford, Felix Whymark, Adam Wightman and Howard Brooks
Figures by Mark Baister and Emma Holloway

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Colchester Archaeological Trust
Roman Circus House, Circular Road North,
Colchester, Essex CO2 7GZ
tel.: 01206 501785
e-mail: archaeologists@catuk.org

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1 Summary
Since the late 1990s, the expansion of the Hanson Birch Quarry has been preceded by archaeological monitoring and excavation on behalf of Hanson Aggregates. This has allowed us to explore a landscape containing a Bronze Age burial site, a late Iron Age and Roman enclosure, and a WWII air base.

This is the report on archaeological monitoring at Birch Pit in 2014 and 2015, during and after topsoil-stripping of the Stage 7 and Stage 8 western extensions of the quarry, next to areas investigated in 2004, 2008, and 2013. In the sequence of letter codes attributed to the various quarry areas, this is Area K.

Thirty archaeological features were excavated in 2014/15. Five features can be attributed to the WWII airfield, and three ditches are post-medieval field boundaries which are clear continuations of ditches excavated on adjacent Birch Pit sites. There are five undated pits, and a natural pit. Of the fifteen post-holes, twelve are convincingly arranged as three ‘four-post’ structures. Dated finds are rare, but five of the post-holes contain Early Iron Age pottery, and one contains a Roman sherd.

The majority of the site was disturbed by the construction and subsequent removal of the World War II airbase, particularly at the northern edge of the site.

Photo 1: the Stage 7 strip in 2014, view NW

2 Introduction (Fig 1)
This is the report on Stage 7 (November 2014-January 2015), and Stage 8 archaeological monitoring and excavation (October-November 2015) carried out by Colchester Archaeological Trust (CAT) at Birch Pit, Maldon Road, Birch, on behalf of Hanson Aggregates.

Birch Pit is 6 km south-west of Colchester (Figs 1-2), north-east of Palmer’s Farm, at NGR TL 9217 1937. It consists of approximately 19.6 hectares of land which was formerly part of a World War II United States Army Air Force base.
The requirement for archaeological work was prompted by a western extension of the existing quarry. In August 2014, Essex County Council Place Services were consulted by Essex County Council (ECC) on a continuation of a planning consent for mineral extraction first granted in 1995. Attached to the consent was the following condition:

‘No development, or preliminary groundworks of any kind shall take place until the applicant has secured the implementation of a programme of archaeological work and recording in accordance with a written scheme of investigation which has been submitted by the applicant, and approved by the MPA.’

Photo 2: the Stage 7 strip in 2014. To the right (east) is the Stage 6 area, now a working quarry.

3 Archaeological background
This section is based on records held by the Essex Historic Environment Record (EHER) held at Essex County Council, County Hall, Chelmsford, and the Urban Archaeological Database (UAD) held and maintained by Colchester Borough Council. All work listed below was carried out by CAT, unless otherwise credited.

Archaeology
The archaeological background of the area around Birch Pit has been extensively summarised in the many CAT Reports produced since the planning consent for mineral extraction was first granted in 1995.

Prior to the 1990s, little was known of the archaeology of the area immediately surrounding Birch Pit. The archaeological work followed an environmental impact assessment carried out in 1992 (CAT Report 8).

Aerial photographs show a large number of undated, but pre-modern, cropmarks representing activity north of Birch Pit. Some 0.8 km to the north-west is the cropmark complex of a large sub-rectangular enclosure with associated tracks or droveways and a system of fields (EHER 11548, 11577, 11582, 11924). Close to these sites, but within the boundaries of the permissible northern quarrying area, there are several smaller cropmark sites (CAT Report 8, appendix). Neolithic and early Mesolithic flints have also been recorded about 2 km to the east (Spencer & Dennis 1988).
The most significant archaeological remains identified by the 1992 assessment was two surface scatters of Roman finds to the northeast of Palmer’s Farm (CAT Report 8, appendix). A small quantity of medieval pottery was also recovered. Further work in 1997 on one of the areas of Roman finds (CAT Report 8, 4 and fig 2) and in 1998, geophysical survey and trial-trenching in the same area of Roman finds revealed a number of features below the ploughsoil, containing Roman finds (CAT Report 23).

Other archaeological work undertaken in response to quarry expansion (Fig 2). In 1995, a small Roman oven was excavated on the east side of the quarry close to Brake’s Farm (NGR TL 9333 2002; CAT excavation 1995 on Fig 2; CAT archive 6/95b). In 2001, evaluation trenching in advance of a northern extension to the quarry revealed features of Bronze Age and Roman date (CAT Report 141). Excavation on this area in 2003 revealed a Bronze Age cemetery - consisting of three ring-ditches associated with sixteen urned and unurned cremation burials - and part of a Roman field system (CAT excavation 2003 on Fig 2; CAT Report 289). In 2005 excavation at the Birch airfield compost site (on the former USAAF airbase) revealed features of Late Iron Age or early Roman, and Roman date (CAT Report 326; excavation 2005 on Fig 1). In 2004, again in 2005-6, 2007 and in 2008, excavation prior to extensions to the western side of the quarry (Fig 3; CAT Report 383, CAT Report 485, CAT Report 523) revealed features of prehistoric, Roman, medieval and post-medieval date. The main period of activity was during the Late Iron Age, Roman, medieval and early post-medieval periods. No clear traces of any buildings were found, but the remains of ditches revealed enclosures divided by tracks or droveways. A Roman oven was situated within the area of one enclosure, and a small number of cremation burials situated to the east of the enclosures. A few features dated to the Late Bronze Age, including one large pit which was possibly a waterhole. In addition, there were a small number of features of post-medieval and modern date.

In 2012, monitoring and excavation during topsoil-stripping (Stage 5 western extension) adjacent to areas excavated in 2007 and 2008 revealed only two features - a post-hole containing potsherds dated to the Late Bronze Age or early Iron Age, and a post-medieval or modern ditch. Most of the stripped area was disturbed by the construction and removal of the World War II airbase (CAT Report 671).

In 2013, monitoring and excavation topsoil-stripping (Stage 6 western extension) adjacent to the Stage 5 area excavated in 2012 revealed twenty-two archaeological features. The significant remains included a ‘placed deposit’ (a Late Bronze Age jar without cremated bone) and seventeen pits and post-holes containing LBA sherds. Other features were mostly post-medieval field ditches which are shown extant on 19th-century Ordnance Survey maps. Much of the site had been disturbed by the construction and subsequent removal of a World War II airbase (CAT Report 738).

4 Aim

The aim of the monitoring and excavation was to record the character, extent, date and significance of any archaeological remains and deposits which would be removed by mineral extraction. Particular attention was paid to the survival of the remains mentioned in Section 3 above.
5 Report on monitoring and excavation (Figs 1-7)

Documentation
All archaeological work was carried out in accordance with a Written Scheme of Investigation (WSI) produced by CAT (CAT 2013) in response to a brief issued by and agreed with the ECC Place Services (Gascoyne 2012).

In addition to the WSI, all fieldwork was carried out in accordance with the Chartered Institute for Archaeologists’ Standard and guidance for an archaeological watching brief (CIfA 2014a) and Standard and guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2014b). The guidance contained in the documents Management of Research Projects in the Historic Environment (MoRPHE: English Heritage 2006), and Standards for field archaeology in the East of England (EAA 14) and EAA 24 was also followed.

Site work
The topsoil strip for the Stage 7/8 extensions was carried out under archaeological supervision using a 360° mechanical excavator with a toothless ditching bucket. Stage 7 (2014) measured 1.582 ha, and Stage 8 (2015) 1.235 ha. Therefore the total area monitored in Stage 7/8 was 2.81 ha.

Although large areas of the Stage 7/8 extraction area (particularly to the north and west) had been substantially disturbed by the construction and subsequent dismantling of the airbase, there was limited survival of archaeological features. Specifically, eight ditches, five pits, fifteen postholes, one WWII road foundation, and one natural pit.

Despite only six of the features containing dated finds, four main periods are evident: prehistoric (Early Iron Age), Roman, post-medieval, and WWII. However, some of the undated features can be tentatively dated by association. For instance, there are two long ditches which are undated on this site, but are continuations of post-medieval ditches (field boundaries) seen on 2012 and 2013 site to the east of the Stage 7/8 site (CAT Reports 671, 738). Of the fifteen post-holes, twelve are convincingly distributed in what are commonly referred to as ‘four-posters’. Three of those post-holes contain Early Iron Age pottery. Of the three isolated post-holes, one contains EIA pottery. Of the five pits, four are undated, and one contains EIA pottery. There are also a few pieces of burnt flint, which are generally (though not exclusively) prehistoric in date. A case can therefore be made that the majority of the undated pits and post-holes are also prehistoric in date, and perhaps specifically EIA.

The difficulty is with post-hole F25 - one of the ‘four-poster’ post-holes, which contains a Roman sherd. The EIA dating of at least one of the ‘four-posters’ (ie, F10-F13) is quite strong, so it is difficult to know what to make of the Roman sherd. Is it intrusive?

Contexts, including those with finds, are tabulated below. Dated contexts are shown in bold.

<table>
<thead>
<tr>
<th>context no</th>
<th>description</th>
<th>locator</th>
<th>finds</th>
<th>period</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>hoggin and clay base of airbase road</td>
<td>N</td>
<td>-</td>
<td>modern</td>
</tr>
<tr>
<td>F2</td>
<td>N/S ditch, continuation of ditch F1 on 2013 site to the east</td>
<td>NE</td>
<td>tile/drain (mod) concrete - not retained</td>
<td>modern</td>
</tr>
<tr>
<td>F3</td>
<td>shallow pit, with burnt stone</td>
<td>E</td>
<td>-</td>
<td>undated-prehistoric?</td>
</tr>
<tr>
<td>F4</td>
<td>E/W ditch, same as F8, continuation of ditch F15 on 2013 site to E</td>
<td>E</td>
<td>-</td>
<td>post-medieval</td>
</tr>
<tr>
<td>context no</td>
<td>description</td>
<td>locator</td>
<td>finds</td>
<td>period</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>---------</td>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>F5</td>
<td>pit</td>
<td>E</td>
<td>-</td>
<td>undated - prehistoric?</td>
</tr>
<tr>
<td>F6</td>
<td>ditch</td>
<td>SW</td>
<td>cattle bone</td>
<td>good condition of cattle bone indicates context probably post-med</td>
</tr>
<tr>
<td>F7</td>
<td>pit</td>
<td>SW</td>
<td>EIA pottery, burnt stones (probably prehistoric)</td>
<td>EIA (c 700-350 BC)</td>
</tr>
<tr>
<td>F8</td>
<td>E/W ditch, same as F4, continuation of ditch F15 on 2013 site to E</td>
<td>W</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>F9</td>
<td>ditch parallel to and cut by ditch F30. Probably an earlier cut of F30? Same ditch as F18?</td>
<td>NW</td>
<td>-</td>
<td>WWII</td>
</tr>
<tr>
<td>F10</td>
<td>post-hole, convincing 4-post group with F11-13</td>
<td>NW</td>
<td>-</td>
<td>undated, but probably EIA by association with F11-13</td>
</tr>
<tr>
<td>F11</td>
<td>post-hole, convincing 4-post group with F10, F12-13</td>
<td>W</td>
<td>EIA pottery</td>
<td>EIA</td>
</tr>
<tr>
<td>F12</td>
<td>post-hole, convincing 4-post group with F10-11, F13</td>
<td>W</td>
<td>EIA pottery, fired clay (probably prehistoric)</td>
<td>EIA</td>
</tr>
<tr>
<td>F13</td>
<td>post-hole, convincing 4-post group with F10-12</td>
<td>W</td>
<td>EIA pottery</td>
<td>EIA</td>
</tr>
<tr>
<td>F14</td>
<td>isolated post-hole, near F15</td>
<td>NW</td>
<td>-</td>
<td>undated - prehistoric?</td>
</tr>
<tr>
<td>F15</td>
<td>isolated post-hole, near F14</td>
<td>NW</td>
<td>-</td>
<td>undated - prehistoric?</td>
</tr>
<tr>
<td>F16</td>
<td>isolated post-hole, near F17</td>
<td>central</td>
<td>EIA pottery</td>
<td>EIA</td>
</tr>
<tr>
<td>F17</td>
<td>isolated post-hole, near F16</td>
<td>central</td>
<td>-</td>
<td>undated - prehistoric?</td>
</tr>
<tr>
<td>F18</td>
<td>ditch parallel to and cut by ditch F30. Probably an earlier cut of F30? Same ditch as F9?</td>
<td>SW</td>
<td>-</td>
<td>WWII</td>
</tr>
<tr>
<td>F19</td>
<td>natural pit</td>
<td>S central</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>F20</td>
<td>pit with charcoal fill - hearth base?</td>
<td>S central</td>
<td>-</td>
<td>undated - prehistoric?</td>
</tr>
<tr>
<td>F21</td>
<td>pit with charcoal flecking</td>
<td>S central</td>
<td>-</td>
<td>undated - prehistoric?</td>
</tr>
<tr>
<td>F22</td>
<td>post-hole, convincing 4-post group with F23-25</td>
<td>NW</td>
<td>-</td>
<td>Roman by association with F25?</td>
</tr>
<tr>
<td>F23</td>
<td>post-hole, convincing 4-post group with F22, F24-25</td>
<td>NW</td>
<td>-</td>
<td>Roman by association with F25?</td>
</tr>
<tr>
<td>F24</td>
<td>post-hole, convincing 4-post group with F22-23, F25</td>
<td>NW</td>
<td>-</td>
<td>Roman by association with F25?</td>
</tr>
<tr>
<td>F25</td>
<td>post-hole, convincing 4-post group with F22-24</td>
<td>NW</td>
<td>Roman rim sherd, fired clay (probably prehistoric), burnt stones (probably prehistoric)</td>
<td>Roman</td>
</tr>
<tr>
<td>F26</td>
<td>post-hole, convincing 4-</td>
<td>NW</td>
<td>-</td>
<td>undated -</td>
</tr>
</tbody>
</table>
Table 1: context list with dated finds

<table>
<thead>
<tr>
<th>context no</th>
<th>description</th>
<th>locator</th>
<th>finds</th>
<th>period</th>
</tr>
</thead>
<tbody>
<tr>
<td>F27</td>
<td>post-hole, convincing 4-post group with F26, F28-29</td>
<td>NW</td>
<td>-</td>
<td>undated-prehistoric?</td>
</tr>
<tr>
<td>F28</td>
<td>post-hole, convincing 4-post group with F26-27, F29</td>
<td>NW</td>
<td>-</td>
<td>undated-prehistoric?</td>
</tr>
<tr>
<td>F29</td>
<td>post-hole, convincing 4-post group with F26-28</td>
<td>NW</td>
<td>-</td>
<td>undated-prehistoric?</td>
</tr>
<tr>
<td>F30</td>
<td>modern ditch - parallel with F31 and aligned with WWII airfield. Cuts F8, F9 and F18</td>
<td>W</td>
<td>-</td>
<td>WWII</td>
</tr>
<tr>
<td>F31</td>
<td>modern ditch - parallel with F30 and aligned with WWII airfield</td>
<td>W</td>
<td>-</td>
<td>WWII</td>
</tr>
</tbody>
</table>

6 Finds (Fig 7)
by Stephen Benfield

Introduction
Finds of pottery, fired clay, heat altered (burnt) stone and animal bone were recovered from several features, most of which are identified as post-holes. A few sherds of pottery were also recovered from a soil layer. Almost all of the pottery is of prehistoric date and is considered as most probably belonging a post-Deverel-Rimbury assemblage dating to the period of the Late Bronze Age (LBA)-Early Iron Age (EIA) although some of the pottery may date earlier. There is also a single greyware sherd that is probably of Roman date. The other finds types consist of only a few pieces. All of the finds are listed by context in Table 3 at the end of the Finds report.

Prehistoric Pottery
Hand-made prehistoric (pre-‘Belgic’) pottery was recovered from post-holes F11, F12, F13, and F16, from pit F7, and from a soil layer L2. In total there are 84 sherds weighing 418g, with an average sherd weight of 4.9g. The pottery fabrics used in quantifying the assemblage (Table 2) broadly follow those commonly used for cataloguing prehistoric pottery in Essex (Brown 1988).

<table>
<thead>
<tr>
<th>Fabric</th>
<th>Fabric description</th>
<th>No.</th>
<th>Wt/g.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Flint small-medium, common</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>C</td>
<td>Flint small-medium common, with occasional large flint</td>
<td>46</td>
<td>232</td>
</tr>
<tr>
<td>D</td>
<td>Flint medium-large, common</td>
<td>33</td>
<td>172</td>
</tr>
<tr>
<td>E</td>
<td>Flint and sand-tempered</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>84</td>
<td>418</td>
</tr>
</tbody>
</table>

Table 2 Prehistoric pottery by fabric type

The great majority of the prehistoric pottery consists of plain, flint-tempered body sherds that of themselves are not easily closely dated with any great confidence. However, despite the fact that a significant proportion have a fairly coarse flint-temper (Fabric D) the indications are that they probably date to the LBA-EIA rather than earlier and can be attributed to the post-Deverel-Rimbury (PDR) pottery tradition. In part this is indicated by one small rim sherd from F12 (Fig 7.2) that appears fairly typical of this period and by a number of sherds that have moderate or fine or fine-medium flint-temper (Fabric B & Fabric C) that is well embedded within the fabric. A LBA or EIA date would also be in keeping with other closely-dated prehistoric pottery from this part of the quarry (CAT Report 383, CAT Report 485, CAT Report 523, and CAT Report 738). It can be noted
that most of the flints recovered from this area of the quarry are also dated as Late Bronze Age-Iron Age rather than earlier, although a few are dated as Neolithic (CAT Report 523).

There are sherds from two, possibly three decorated pots. Of particular interest are sherds from a decorated bowl (Fig 7.1) that comes from post-hole F12. This consists of a number of body sherds with finger-tip impressions a section of the shoulder (composed of four joining sherds) where the finger-tipping can be seen to carry onto the neck. Internally the shoulder carination is defined by a distinct ledge. It is unfortunate that no certain rim sherds from this pot are present. The small rim sherd from this feature (Fig 7.2), although in a similar fabric, appears much too slight to be the rim from the pot. Extensive decoration across the body of a pot is uncommon among decorated PDR type assemblages. In flint-tempered fabrics it is more commonly associated with Middle Neolithic (Peterborough ware) and Late Neolithic-Early Bronze Age pottery, although it is noted that on some Peterborough ware finger-tip impressions often form rows (Brown 2001) while the impressions here are rather more spaced and random in appearance. The sherds here are associated with other pottery that appears to be of probable LBA-EIA (PDR) date and the extensive decoration on the pot body can be broadly paralleled among the PDR pottery from Marks Warren in northeast London (Brudenell 2011, fig 14.14 & fig 16.23) and on Iron Age pottery at Valley Belt, Trowse on the Norwich Southern By-pass (Percival 2000, fig138.P92). At the Marks Warren site the decoration includes one sherd with finger-pinching across the pot body. The second decorated pot, represented by a single body sherd (Fig 7.3), comes from post-hole F11 (4) and has impressed, finger-tip impressions forming spaced, deep dimples. They appear to be part of a row rather than a more extensive pattern on the body, which is not uncommon among PDR assemblages. Another very small sherd from the same context appears to have finger tip or finger pinching on its surface and might represent a third decorated pot. The only other mark on any of the pottery is a small post-firing hole made through one sherd from pit F7 (2).

With reservations, the pottery is proposed as representing an assemblage of PDR type, although in that case the decoration would suggest an EIA date (c 700-350 BC) rather than the LBA date (c 1100-700 BC) that has been assigned to the PDR plainware previously recovered from this part of the quarry. While some of the pottery appears certainly to be of PDR type it is conceded that the finger-tip decorated sherds and by association some of the coarse flint-tempered pottery might possibly date earlier (Neolithic-Bronze Age); however, at present it is proposed that they are most likely to be part of the PDR assemblage.

Illustrated Fig 7.1 F12 (5), Body and shoulder sherds from a decorated bowl four joining shoulder sherd (illustrated) other small body sherds from the same pot, common small-large flint-temper, decorated with spaced finger-tip impressions across body and over shoulder (Fabric D)

Illustrated Fig 7.2 F12 (5) Small up-right or slightly flaring rim sherd with flat-top (Fabric D).

Illustrated Fig 7.3 F11 (4) Body sherd, common flint-temper small-large, decorated with impressed spaced indentations/dimples probably arranged as a single row (Fabric D)

Other finds
There are a few finds of fired clay and burnt flint stones that are likely to be of prehistoric date. Small pieces of fired clay were recovered from post-holes F12 & F25, that from F12 associated with pottery dated to the LBA-EIA. Single pieces of burnt flint stones come from a pit (F7) and from a post-hole (F25). One small pottery rim sherd from F25 is almost certainly of Roman date. A small group of animal bone from a large mammal(s), probably cattle bone, was recovered from linear feature F6 (Sx1). The moderately good condition of the bone suggests it may be likely to be post-medieval rather than earlier unstratified material (US) consisted of, one (1) is a small flint flake with about 60% cortex, removed from a flint stone or nodule. There is no indication of
any reworking and its archaeological significance is doubtful as this could be a waste flake (from flint working) or an incidental plough struck piece. The other (2) is a base sherd (25g) from a Roman greyware jar or deep bowl (Colchester Fabric GX) recovered from spoil. This has small surface voids from burnt out organic inclusions and sparse dark inclusions of grog or bunt organic matter in the fabric. An Early Roman date (mid1st-2nd century) is more likely than a date later in the Roman period.

7 Discussion

Prehistory
The majority of the dated features on this site are prehistoric, and contain Late Bronze Age or Early Iron Age pottery. Stephen Benfield takes the view that the pottery is more likely to be EIA (Early Iron Age - circa 700-350 BCE).

Structures
There are three groups of four posts on the western edge of the Stage 8 area. These are interpreted as 'four-posters', and are described as Structures 1-3.

Structure 1: consisting of post-holes F10-13, is very securely dated to the Late Bronze Age / Early Iron Age by virtue of having EIA pottery in three out of its four post-holes (F11-13). Structure 1 measures 2.6m E-W by 2.4m N-S (post centre to post centre). This is broadly similar to the smaller of the two four-posters from Stansted Airport, measuring 2.8 x 2.8m, post-centre to post-centre (Havis and Brooks 2004, 25-8).

Structure 2: north of Structure 1, consisting of post-holes F22-25, is undated, but presumed to be EIA by association with Structure 1.

Structure 3: north of Structure 2, consisting of post-holes F26-29, has a sherd of Roman pottery in one of its post-holes (F25). It is difficult to know what to make of this. Is it intrusive? The relatively large group of EIA pottery in Structure 1 (73 sherds, 290g) makes it uncomfortable to suggest that the EIA material is residual, and Structures 1-3 are actually Roman in date. It may be best to view the single Roman sherd as intrusive.

Other prehistoric features
Of the two adjacent post-holes in the centre of Stage 8 area, F16 contains 2 sherds of LBA/EIA pottery, and the other (F17) is undated. Likewise the two post-holes at the northern edge of Stage 8, east of Structures 1-3, are undated (F14-15).

There are five pits. F7 on the western site edge south of Structures 1-3 contains seven sherds of LBA/EIA pottery (105g). The other four (F3, F5, F20-1) are undated.

The view taken here is that, given the number of well-dated EIA contexts on this site, the undated post-holes and pits are probably EIA.

What is the function of the 'four-post' structures?. If they are close to enclosures or farms, such as the examples from the Stansted Airport CIS site (Havis and Brooks 2004, 25-8), they are interpreted as raised buildings where grain is stored over winter. In fact, they can also have a ritual use, or be domestic structures. As the Birch structures are so far from any contemporary site (ie, the Iron Age enclosure on the 2005-7 excavation sites, which is 200m to the east) it may be necessary to think of a ritual use for these structures. Are they exposure platforms, or boundary markers?
Roman
Evidence of Roman activity is limited to a single sherd of Roman pottery from one of the post-holess of Structure 2. There is also an unstratified Roman sherd from the topsoil strip. This is probably manure scatter from the Roman site excavated in 2005-7.

Anglo-Saxon and medieval
There are no finds or features of these periods.

Post medieval-modern
There are two categories of feature here. First, post-medieval ditches F2, F6, and F4/F8 are field boundaries. In the case of F2 and F4/F8, they are continuations of ditches excavated previously on Birch sites to the east, and they can be seen on the 1881 OS map.

As on previous Birch sites, particularly the recent western extensions, there is considerable evidence of disturbance caused by the construction and dismantling of the former airbase. This includes concrete/bitumen/brick debris from taxi ways and aircraft aprons, electric and communication cables, drainage runs. There are also wheel ruts from the construction and demolition phases of the airbase.

General
The intensity of archaeological activity on this site, and indeed on all the areas west of the Iron Age and Roman enclosure (the 2004, 2012, 2013 seasons) is at a much lower level than the Iron Age and Roman enclosure excavated 2005-7.
8 Acknowledgements
The project was commissioned by Alex Smiles of Hanson. Site work was managed by B Holloway. Fieldwork was carried out by BH, HB, A Wightman, E Sanford and F Whymark. The project was monitored for Essex County Council by Adrian Gascoyne.

9 References
Brown, N 1988 ‘A Late Bronze Age enclosure at Lofts Farm, Essex, in Proceedings of the Prehistoric Society, Volume 54, 249-302
Brudenell, M 2011 ‘The prehistoric pottery’ in Lyons, A., ‘High living at Marks Warren, a Northeast London landscape from the Mesolithic to the modern period’ in ESAH Vol 2, 24-31
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CAT Archive 6/95b 1995 A Roman heating chamber at the ARC Quarry, Birch, Colchester. By Donald Shimmin. CAT Archive folders
CAT Report 485 2008 An archaeological excavation at Birch Pit, Stage 3 western extension, Maldon Road, Birch, Colchester, Essex, July-August 2007. CAT client report by Stephen Benfield & Emma Spurgeon
CAT Report 523 2010 An archaeological excavation at Birch Pit, Stage 4 western extension, Maldon Road, Colchester, Essex, October-November 2008. CAT client report by Stephen Benfield & Emma Spurgeon
CAT Report 671 2012 Archaeological monitoring and excavation at Birch Pit, Stage 5 western extension, Maldon Road, Birch, Colchester, Essex: August-September 2012. CAT client report by Chris Lister and Ben Holloway
CAT Report 738 2013 An archaeological excavation at Birch Pit, Stage 6 western extension, Maldon Road, Birch, Colchester, Essex, August-September 2013
CIfA 2014a Standard and guidance for archaeological watching brief
Glossary and abbreviations

Anglo-Saxon (AS) period from circa AD 410 to AD 1066
BA Bronze Age (2,000 - 700 BC)
CAT Colchester Archaeological Trust
CBCAA Colchester Borough Council Archaeological Advisor
CIfA Chartered Institute for Archaeologists
CIMS Colchester and Ipswich Museums
context specific location of finds on an archaeological site
EIA Early Iron Age (circa 700-350 BC)
feature (F) an identifiable thing like a pit, a wall, a drain: can contain ‘contexts’
IA Iron Age (circa 700 BC - AD 43)
layer (L) distinct or distinguishable deposit of soil
LBA Late Bronze Age (1,000- 700 BC)
LIA Late Iron Age (100 BC - AD 43)
modern period from c AD 1800 to the present
natural geological deposit undisturbed by human activity
post-medieval from Henry VIII to c AD1800
prehistoric pre-Roman
residual something out of its original context - a Roman coin in a modern pit
Roman period from AD 43 to circa AD 410/430
WSI Written Scheme of Investigation

Contents of archive

Finds
1 museum box containing all finds.

Paper record
One A4 wallet containing: Brief and WSI. Copy of Report 807
Original site record sheets. Photo log. Attendance record
Disc with digital photographs. Sundry papers

10 Glossary and abbreviations

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WSI Written Scheme of Investigation

11 Contents of archive

Finds
1 museum box containing all finds.

Paper record
One A4 wallet containing: Brief and WSI. Copy of Report 807
Original site record sheets. Photo log. Attendance record
Disc with digital photographs. Sundry papers
12 Archive deposition
The paper and digital archive is currently held by the Colchester Archaeological Trust at Roman Circus House, Roman Circus Walk, Colchester, CO2 7GZ, but will be permanently deposited with Colchester & Ipswich Museum (accession 2014.20).

13 Bulk Finds list
*by S Benfield. last update 20/11/2015*

BS=heat altered (burnt) stone; FC=fired clay; AB=animal bone

<table>
<thead>
<tr>
<th>Ctxt type</th>
<th>Ctxt no.</th>
<th>find no</th>
<th>Find type</th>
<th>Finds description</th>
<th>Period</th>
<th>Fabric code</th>
<th>No</th>
<th>Wt/g</th>
<th>Period/spot date</th>
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<td>linear</td>
<td>F006 sx1</td>
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<td>AB</td>
<td>large mammal, inc. cattle, scapula piece(s)</td>
<td></td>
<td></td>
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<td>90</td>
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<td>pit</td>
<td>F007</td>
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<td>pot</td>
<td>7 body sherds, prob. from SV, quite thick, inc. part of small bored hole at one sherd edge, slightly prominent flint</td>
<td>LBA- EIA</td>
<td>HMF C</td>
<td>7</td>
<td>105</td>
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<td>BS</td>
<td>burnt flint (calcinated white, crazed)</td>
<td>preh</td>
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<td>30</td>
<td>preh</td>
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<td>p-hole</td>
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<td>pot?</td>
<td>abraded small sand piece, appears to be pot but may poss. be natural?</td>
<td>preh</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>p-hole</td>
<td>F011</td>
<td>4</td>
<td>pot</td>
<td>Fig 7.3 body sherd, common flint-temper small-large, decorated with impressed spaced dimples (PDR) c 1200/1000-400/350 BC</td>
<td>EIA</td>
<td>HMF D</td>
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<td>16</td>
<td>LBA- EIA EIA(?)</td>
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<td>F011</td>
<td>4</td>
<td>pot</td>
<td>small body sherds and frags. (PDR), 17 sherds with 6 small frags.</td>
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<td>HMF D</td>
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<td>33</td>
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<td>pot</td>
<td>Fig 7.1 decorated bowl, body sherds, common small-large flint-temper, decorated with spaced finger-tip impressions across body and over carinated shoulder (see Lyons 2011 fig 14.14 &amp; fig 16.23), prob. all one pot, inc. small flat-top rim sherd in same fabric that is possibly the rim, prob. Earliest IA c 750-500 BC,</td>
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<td>HMF D</td>
<td>11</td>
<td>101</td>
<td>prob. EIA</td>
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<td>pot</td>
<td>Fig 7.2 small flat-top rim sherd in same fabric that is possibly the P1 rim, prob. (PDR)</td>
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<td>HMF D</td>
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<td>p-hole</td>
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<td>pot</td>
<td>body sherd (PDR) with dense flint-temper</td>
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<td>HMF C</td>
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<td>pot</td>
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<td>HMF C</td>
<td>8</td>
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<td>misc. body sherds (PDR)</td>
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<tr>
<td>hole</td>
<td>p-hole</td>
<td>F012</td>
<td>5 FC</td>
<td>abraded rounded frags. reddish-buff medium sand fabric</td>
<td>preh</td>
<td>B MS</td>
<td>3</td>
<td>3</td>
<td>EIA</td>
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<td>p-hole</td>
<td>F013</td>
<td>6 pot</td>
<td></td>
<td>body sherd, prominent flint, probable rim, flat rop, top damaged</td>
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<td>HMF D</td>
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<td>13</td>
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<tr>
<td>p-hole</td>
<td>F013</td>
<td>6 pot</td>
<td></td>
<td>misc. body sherds, some prominent flint, rather coarse, 2 sherds join,</td>
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<td>HMF C</td>
<td>28</td>
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<td>p-hole</td>
<td>F015</td>
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<td>abraded sandy &amp; powdery with some flint &amp; quartz temper, prob FC</td>
<td>preh</td>
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<td>1</td>
<td>4</td>
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<td>p-hole</td>
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<td>8 pot</td>
<td></td>
<td>moderate fine flint, well embedded, smooth surfaces, sherd recently broken in two (PDR)</td>
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<td>HMF B</td>
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<td>p-hole (4 post)</td>
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<td>preh</td>
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<td>74</td>
<td>preh</td>
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<tr>
<td>p-hole (4 post)</td>
<td>F025</td>
<td>9 pot</td>
<td>small rim sherd, balck surface, red-brown fabric, prob. Roman</td>
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<td>1</td>
<td>1</td>
<td>Rom(?)</td>
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<td>L002</td>
<td>10 Pot</td>
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<td>2 small body sherds &amp; one small frag., common flint-temper (PDR) c 1200/1000-400/350 BC. Abraded</td>
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<td>HMF C</td>
<td>2</td>
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<td>LBA-EIA</td>
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<tr>
<td>L002</td>
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<td></td>
<td>small body sherd, common flint-temper (PDR) c 1200/1000-400/350 BC</td>
<td>LBA-EIA</td>
<td>HMF D</td>
<td>1</td>
<td>6</td>
<td>LBA-EIA</td>
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Lyons, A., 2011, 'High living at Marks Warren, a Northeast London landscape from the Mesolithic to the modern period' in ESAH Vol 2, 3-57

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Distribution list:
Alex Smiles, Hanson Group
Adrian Gascoyne, ECC HEM officer
Essex Historic Environment Record, Essex County Council
Fig 1  Site location.
Fig 2  2014-15 Site location (red), showing previous CAT excavations
Fig 3  Location of 2014/15 monitoring, showing previous archaeological work.
Fig 4  2014/15 monitoring and excavation site plan. For detail of four-post structures, see Fig 5
Fig 5  Details of four-post structures
Fig 6 Sections.
Fig 7 Prehistoric pottery.
**Essex Historic Environment Record**

**Summary sheet**

<table>
<thead>
<tr>
<th><strong>Address:</strong></th>
<th>Birch Pit (Hanson), Maldon Road, Birch</th>
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<td><strong>Parish:</strong></td>
<td>Birch</td>
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<td>Colchester</td>
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<td>TL 9225 1935 (c)</td>
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<td><strong>Site codes:</strong></td>
<td>CAT project – 14/10j</td>
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<td></td>
<td>HEM code BIBP14</td>
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<tr>
<td><strong>Type of work:</strong></td>
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<td><strong>Site director/group:</strong></td>
<td>Colchester Archaeological Trust</td>
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<tr>
<td><strong>Date of work:</strong></td>
<td>November 2014-January 2015 (Stage 7), October-Nov 2015 (Stage 8)</td>
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<td><strong>Size of area investigated:</strong></td>
<td>Stage 7 - 1.582 ha, Stage 8 - 1.235 ha</td>
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<td><strong>Location of curating museum:</strong></td>
<td>Colchester and Ipswich Museums accession – 2014.117</td>
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<td><strong>Funding source:</strong></td>
<td>Developer</td>
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<td><strong>Further seasons anticipated?</strong></td>
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<td><strong>Related EHER number:</strong></td>
<td>11548, 11577, 11582, 11924</td>
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<td><strong>Final report:</strong></td>
<td>CAT Report 807</td>
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<td><strong>Periods represented:</strong></td>
<td>Iron Age, Roman, post-medieval, modern</td>
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**Summary of fieldwork results:**

Since the late 1990s, the expansion of the Hanson Birch Quarry has been preceded by archaeological monitoring and excavation which has allowed us to explore a landscape containing a Bronze Age burial site, a late Iron Age and Roman enclosure, and a WWII airbase.

This is the report on archaeological monitoring at Birch Pit in 2014 and 2015, during and after topsoil-stripping of the Stage 7 and Stage 8 western quarry extensions, next to areas investigated in 2004, 2008, and 2013. In the sequence of letter codes given to various quarry areas, this is Area K.

Thirty archaeological features were excavated in 2014/15. Five features can be attributed to the WWII airfield, and three ditches are post-medieval field boundaries which are clear continuations of ditches excavated on adjacent Birch Pit sites. There are five undated pits, and a natural pit. Of the fifteen post-holes, twelve are convincingly arranged as three 'four-post' structures. Dated finds are rare, but five of the post-holes contain Early Iron Age pottery, and one contains a Roman sherd.

The majority of the site was disturbed by the construction and subsequent removal of the World War II airbase, particularly at the northern site edge.

**Previous summaries/reports:** CAT Reports 523, 671, 738

**ECC monitor:** Adrian Gascoyne

**Keywords:** EIA four post-structures

**Significance:** *

**Author of summary:** Howard Brooks

**Date of summary:** April 2016