

# SOLAR FARM, BIRCH AIRFIELD, BLIND LANE, BIRCH, COLCHESTER, ESSEX

# ARCHAEOLOGICAL EVALUATION



Report Number: 1131 May 2016



# SOLAR FARM, BIRCH AIRFIELD, BLIND LANE, BIRCH, COLCHESTER, ESSEX

#### **ARCHAEOLOGICAL EVALUATION**

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#### **Abstract**

In December 2015 and April 2016, Britannia Archaeology Ltd (BA) undertook a trial trench evaluation on Birch Airfield, Blind Lane, Birch, Colchester, Essex as part of a remedial scheme of archaeological works, subsequent to the erection of a solar farm at Birch Airfield, Blind Lane, Birch, Colchester Essex (TL 9130 1971) (Fig. 1). A brief issued by Colchester Borough Council (CBC) (Tipper, J.; 24th November 2015) required two trenches to be opened on the northern part of the solar farm.

The archaeological background suggested that the site had a specific potential for the Roman period. The evaluation revealed three main phases of activity at the site. The first phase relates to Roman occupation. All of the Roman features encountered in the evaluation are indicative of those found in an agricultural landscape with a focus on cultivation rather than habitation at this specific location.

The second phase activity relates to the late Roman and post Roman agricultural activity while the third and final phase of activity on the site relates to post medieval and modern activity associated with agriculture and the eventual construction of the airfield.

Overall the evaluation was successful in identifying further phases of Roman activity in the vicinity of RAF Birch in the form of agricultural features suggesting nearby occupation. Given the sites proximity to monument record MCC 7567, a Roman road running through the north of the airfield site this is perhaps unsurprising. The evidence encountered in the evaluation will help to contribute to the understanding of Roman occupation in the wider historical landscape.



#### 1.0 INTRODUCTION

In December 2015 and April 2016, Britannia Archaeology Ltd (BA) undertook a trial trench evaluation on Birch Airfield, Blind Lane, Birch, Colchester, Essex as part of a remedial scheme of archaeological works, subsequent to the erection of a solar farm at Birch Airfield, Blind Lane, Birch, Colchester Essex (TL 9130 1971) (Fig. 1). A brief issued by Colchester Borough Council (CBC) (Tipper, J.; 24th November 2015) required two trenches to be opened on the northern part of the solar farm. A T-shaped trench comprising linear trenches of 150.00x1.80m north-west to south-east and 12.00x1.80m north-east to south-west across the end of this longer trench is to be excavated on the west side of this area of the solar farm. A smaller L-shaped trench comprising of an arm of 40.00x1.80m orientated north-west to south-east and an arm of 20.00x1.80m orientated north-east to south-west is to be excavated in the south-east corner of this area of the solar farm.

#### 2.0 SITE DESCRIPTION

The site is located more than 2km to the west of the village of Birch, itself located 8km south-west of Colchester (Fig. 1). The bedrock geology is described as London Clay Formation – Clay, Silt and Sand, sedimentary bedrock formed 34 to 56 million years ago in the Paleogene Period (BGS, 2015). The local environment was previously dominated by deep seas.

Superficial deposits at the site are described as Lowestoft Formation – Diamicton. These formed in the Quaternary Period as deposits from glacial scarring and post-glacial meltwater flow. (BGS, 2015).

#### 3.0 PLANNING POLICIES

The archaeological investigation is to be carried out on the recommendation of CBC, following guidance laid down by the National Planning and Policy Framework (NPPF, DCLD 2012) which replaced Planning Policy Statement 5: Planning for the Historic Environment (PPS5, DCLG 2010) in March 2012. The relevant local planning policy is the Colchester Borough Council Core Strategy (adopted 2008, updated 2014), which states that the "natural and historic environment, countryside and coastline will be conserved to protect the Borough's diverse history, archaeology, geology, and biodiversity".



#### 4.0 ARCHAEOLOGICAL BACKGROUND (Figures 2, 3 & 4)

The following archaeological background utilises the Colchester Historic Environment Record (HER) (1km search centred on the site), Historic England PastScape (www.pastscape.org.uk), and the Archaeological Data Service (www.ads.ahds.ac.uk) (ADS) (Fig. 2 & 3).

The site is located 10km west of the town of Colchester, Essex.

The NHER search returned seventeen monument records and three listed buildings within a 1 kilometre radius of the site. Naturally, most monument records returned by the HER search refer to the World War II Airfield and related buildings.

The only two records returned by the search relating to the wider Prehistoric period are two separate find spots (MCC 7587 and MCC 7588) in Fox Wood 650m north-west of the site area referring to beads dated to the Bronze Age or Iron Age.

Roman records are also limited to two. Record MCC 5664 refers to Roman features discovered during a limited-depth excavation only 100m to the west of the site area. Record MCC 7567 refers to a Roman road that aerial photography identifies as running through the land to the north of the site on a north-east to south-west alignment.

The next records chronologically are medieval records. Record MCC 7304 refers to a manorial moated enclosure 650m south of the site while a possible medieval field system (MCC 5686) is located 200m to the south-east of site. Despite the limited monument records for the late prehistoric, Romano-British and medieval periods, there is a moderate potential for the discovery of finds and features from these periods, with the undated cropmark system (object ID: 3975) spanning the length of the entire airfield likely to at least in part have existed in medieval times. The ground however is likely to be somewhat disturbed by the presence of the airfield; the construction of the airfield running through the winter of 1943 will have had some kind of impact on any shallow archaeological remains.

Aside from undated records of field systems and cropmarks (such as MCC 5702, former field boundaries 950m to the north-east of the site) the other significant records within a kilometre's radius of the site relate to the short-lived World War II airfield at Birch. The airbase was built late in the war and useable from early 1944 although remained



redundant for the rest of the year, only seeing significant use during operation Varsity (24th March 1945). Record MCC 9109 refers to the airfield as a whole, while MCC 4098 refers to the Admin site south of the western portion of the airfield (and the site area), where no buildings remain. Dispersed sites relating to the airfield and located to the south and south-west are represented by records MCC 4099, MCC 4887, MCC 4888, MCC 5489, (titled Dispersed sites No. 4, No. 2, No. 12 and No. 13 respectively) and MCC 4971, the sewage works for the airfield. No buildings from any of these records still stand, with only a concrete base probably originally constructed to support a fuel tank still extant at the location of record MCC 4887 850m to the south-west of the airfield. Of all of the buildings associated with the airfield, only one remains, a Nissen hut to the south of the site area.

The airfield consisted on three runways, one of which now forms a public road (Blind Lane), while the other runways still partially survive in the form of narrow farm tracks. All runways and access roads have been recorded as cropmarks (object ID: 3816) due to their visibility on the surface from the air. Most of the concrete from the runways, dispersal loops and access lanes has since been removed, but a set of dispersal loops remain from an original total of 50 on the north boundary of the airfield. The proposed trench locations were neither built upon nor concreted over, although there is a small chance that the southern parts of both trenches may enter a previously concreted area.

Given the above, the likelihood of encountering archaeological remains dated to the Roman period, based on the close vicinity of excavation MCC 5664, was moderate, while the likelihood of encountering modern archaeological evidence related to the World War II Airfield was high.

#### 5.0 PROJECT AIMS

The Colchester Borough Council brief states that the evaluation is required to:

- Identify the date, approximate form and purpose of any archaeological deposit, together with its likely extent, localised depth and quality of preservation.
- Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.
- Establish the potential for the survival of environmental evidence.



 Provide sufficient information to construct an archaeological remediation strategy, dealing with the recording of archaeological deposits, working practices, timetables and orders of cost.

All aspects of the evaluation will be undertaken in accordance with the CIfA Standard and Guidance for Archaeological Field Evaluations, 2014.

#### 6.0 PROJECT OBJECTIVES

Research objectives for the project are in line with those laid out in *Research and Archaeology Revisited: a revised framework for the East of England,* East Anglian Archaeology Occasional Paper 24 (Medlycott, 2011).

Specific objectives outlined in the brief state that a particular importance be placed on:

- the amount of truncation to buried deposits,
- the presence or absence of a palaeosol or 'B' horizon,
- the preservation of deposits within negative features,
- site formation processes.

An assessment of the environmental potential of the site through examination of suitable deposits must also be arranged with a suitably qualified specialist. Attention should be paid:

- to the retrieval of charred plant macrofossils and land molluscs from former dryland palaeosols and cut features, and to soil pollen analysis;
- to the retrieval of plant macrofossils, insect, molluscs and pollen from waterlogged deposits located.
- provision for the absolute dating of critical contacts should be made: eg the basal contacts of peats over former dryland surfaces; distinct landuse or landmark change in urban contexts



#### 7.0 FIELDWORK METHODOLOGY

In accordance with the Colchester Borough Council brief, 150.00x1.80m trench was excavated on a north-west to south-east alignment in the south west of the site. Due to on site restrictions caused by other contractors working on cable runs the planned 12.00x1.80m north-east to south-west trench across the end of the longer trench could not be excavated. Following monitoring by the CBC planning archaeologist a further 2.00m wide section of trench was excavated in the location of Ditch **1011** to compensate for the lost area of trenching. The smaller L-shaped trench comprising of an arm of 40.00x1.80m orientated north-west to south-east and an arm of 20.00x1.80m orientated north-east to south-west was also excavated in the south-east corner of this area of the solar farm. This resulted in 3 trenches measuring, excavated with a 360° mechanical excavator fitted with a toothless ditching bucket. These trenches were excavated down to the first archaeological horizon.

The archaeology was recorded using pro-forma record sheets, drawn plans and section drawings. Appropriate photographs were taken.

#### 8.0 DESCRIPTION OF RESULTS (Figures 5 - 14)

Trench 1 was located in the south west of the northern area of the solar park while Trenches 2 and 3 were located in the north east of the site.

#### 8.1 Trench 1

Trench 1 was orientated north west to south east and was excavated to a maximum depth of 0.33m. The trench contained three gullies, a single boundary ditch, two land drains and a natural feature.

Gully **1003** was linear in plan  $(2.00 \times 0.62 \times 0.14\text{m})$  with steep sloping sides and a flat base. It was orientated north to south. The gully contained two fills. Basal fill **1004** was mid-orange brown, compact, silty clay with occasional chalk flecks. Secondary fill **1005** was light grey brown, compact silty clay which contained 15 sherds of pottery weighing 136g. The pottery is dated from the mid-late 1st century. The majority of sherds display only slight abrasion and are either unsourced sandy grey wares or Romanising type



wares. A single sherd of both Colchester buff ware and southern British grog-tempered ware were also present, (Fawcett, 2016).

Natural Feature **1006** was of indeterminable shape  $(7.45 \times 1.80 + \times 0.25m)$  with gently sloping sides and a concave base, six sherds weighing 92g were recovered from the feature and were dated to the late 3<sup>rd</sup> - early 4<sup>th</sup> century. Two test pits were excavated through the feature which contained two distinct fills. Primary Fill 1007 was mid orange brown, compact, silty clay with occasional chalk pebbles. Secondary Fill 1008 was amid grey brown, compact, silty clay with occasional flint pebble inclusions. Both test pits recovered finds from 1007. Test pit 1 recovered 2 sherds of pottery weighing 10g and 1 fragment of CBM weighing 96g both of Roman date, (Fawcett, 2016). Test pit 2 recovered 1 sherd of pottery weighing 11g and 1 fragment of CBM weighing 149g. The pottery was dated to the mid-1<sup>st</sup> - 2<sup>nd</sup> century with only a broad Roman date being applied to the CBM, (Fawcett, 2016). A single 10L sample was taken from Secondary Fill 1008 for environmental processing. The assemblage from the sample was dominated by a group of terrestrial taxa indicative of open conditions, the sample contained Cecilioides acicula, a subterranean snail widely thought to be a medieval arrival in Britain (Davies 2010). The relatively high number of snail species and shells in this feature suggests that the fill accumulated relatively slowly, (Law, 2016). This evidence coupled with the shape and form of the feature gives credence to its origins being natural and not man made.

Land Drain 1009 (4.00 x 0.90 x 0.37m) was linear in plan with steep sloping sides and a concave base. The feature was orientated east to west. The land drain contained a single fill 1010 which was comprised of mid grey brown, compact silty clay with occasional flint pebble inclusions. CBM recovered from 1010 (3 fragments weighing 110g), dates to the late post-medieval/modern and are a typical, dense well sorted quartz based fabric associated with that period, (Fawcett, 2016).

Boundary Ditch **1011** (5.55 x 2.65 x 1.35m) was linear in plan with moderately steep sloping sides and a concave base. The ditch was aligned north to south and cuts Gully **1016** while it is in turn cut by Land Drain **1018**. The ditch contained two fills. Primary Fill **1012** was mid buff brown, compact silty clay with frequent chalk pebble inclusions. Two sherds of pottery weighing 21g were recovered from this layer. The sherds are dated to the mid-1<sup>st</sup> –  $2^{nd}$  century and are a form of Black surfaced/Romanising greywares, (Fawcett, 2016). A single 10L sample was taken from this layer and sent for environmental processing. The sample produced a small assemblage which is most likely

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the result of relatively rapid infilling of the feature. The sample contained *Radix balthica* which is an amphibious species indicative of seasonal flooding, (Law, 2016). The residue of this sample also contained an internal plate of a slug of the Limacidae family, which is tolerant of a wide range of terrestrial conditions, (Law, 2016). Secondary Fill **1013** was mid grey brown, compact silty clay with infrequent chalk flecks and flint pebble inclusions.

Gully **1014** (1.00+  $\times$  0.40  $\times$  0.12m) was linear in plan with moderate sloping sides and a flat base. The gully was orientated west to west and contained a single fill. Primary Fill **1015** was amid grey brown, compact silty clay.

Gully **1016** ( $4.30+ \times 0.50 \times 0.04m$ ) was linear in plan with gentle sloping sides and a flat base. The gully was oriented east to west. The feature was cut by Roman boundary ditch **1011** and contained a single fill. Primary Fill **1017** was mid grey brown, compact silty clay.

Land Drain **1018** ( $6.00 \times 0.58 \times 0.36$ m) was linear in plan with steep sloping sides and a concave base. It was orientated north to south and truncates Roman boundary ditch **1011**. The feature contained a single fill. **1019** was mid grey brown, compact silty clay and contained a portion on intact ceramic pipe left *in situ*.

Only modern field drains were located at the south eastern end of the trench. This is likely due to the proximity of the former runway servicing RAF Birch airfield.

Topsoil layer **1000** was present to a maximum depth of 0.07m. This layer overlay subsoil layer **1001** which was a maximum of 0.26m thick to a depth of 0.33m.

#### 8.2 Trench 2

Trench 2 was orientated north-east to south-west and was 20.00m by 1.80m. No archaeological features or finds were present in the trench.

Topsoil layer **1000** was present to a depth of 0.20m. This layer overlay subsoil layer **1001** which was up to 0.22m thick to a maximum depth of 0.42m.

#### 8.3 Trench 3

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Trench 3 was orientated north-west to south-east and was  $40.00m \times 1.80m$ . No archaeological features or finds were present in the trench.

Topsoil layer **1000** was present to a depth of 0.23m. This layer overlay subsoil layer **1001** which was up to 0.31m thick to a maximum depth of 0.54m.

#### 9.0 DEPOSIT MODEL (Figure 9 & 10)

The deposit model was consistent across all the trenches.

In all trenches at the top of the stratigraphic sequence was topsoil layer **1000**, comprising grey brown compact silty clay with moderate angular flint inclusions. This layer was present to a maximum depth of 0.20m in Sample Section 4.

Beneath Topsoil **1000** was Subsoil layer **1001**, comprising dark grey brown, firm silty clay, with occasional small chalk inclusions. This layer was present to a maximum depth of 0.47m in Sample Section 4. This layer sealed all features.

At the base of the stratigraphic sequence in all trenches was Natural Geology **1002**, comprising of mid buff brown, compact, silty clay with frequent rounded chalk pebbles.

#### 10.0 DISCUSSION AND CONCLUSION

The archaeological background suggested that the site had a specific potential for the Roman period, based on the close vicinity of excavation MCC 5664, while there was a strong likelihood of encountering modern archaeological evidence related to the World War II Airfield. While the only modern remains found related to field drains the level on likely truncation at the south eastern end of Trench 1 is likely a result of the construction of the airfield.

The evaluation revealed three main phases of activity at the site. The first phase relates to Roman occupation at the site and can be tied in directly to the remains found adjacent



to the site during an archaeological excavation and watching brief at Birch airfield compost site, Colchester, Essex: May-August 2005 (Crossan, 2006). The watching brief revealed a substantial number of Roman features including a number of field ditches, and perhaps indications of a trackway at the northern end of the site. It is likely that the features of Roman date found in the evaluation area an extension of these. The majority of the features found in the 2006 watching brief date to the 1st century AD correlating with the evidence recovered in the evaluation, (Gully 1003 and Boundary Ditch 1011). It is likely that Gullies 1014 and 1016 also relate to the Roman period through association and similarity in profile to Gully 1003.

All of the Roman features encountered in the evaluation are indicative of those found in an agricultural landscape with a focus on cultivation rather than habitation at this specific location. It is likely that there are areas of Roman domestic occupation nearby however proven by the presence of Roman CBM (*imbrex* and *tegula*) in both test pits excavated through Natural Feature **1007**. The exact location of any structures must remain conjectural until further work can be carried out in the area.

The second phase activity relates to the late Roman and post Roman activity. Natural Feature **1007** contained a high number of snail species and shells suggesting that the fill accumulated relatively slowly. This is also mirrored on the adjacent site where a number of natural features were also encountered, (Cossan, 2006). It is likely that this natural hollow lay open for some time from the late Roman period accumulating fill until the site was subject to wider consolidation for agricultural activity.

The third and final phase of activity on the site relates to post medieval and modern activity associated with agriculture and the eventual construction of the airfield. Land Drains **1009** and **1018** are typical of those introduced during the late post medieval / early modern periods.

No archaeological features were identified in trenches 2 and 3 and no finds were recovered from that part of the site. It is likely that no archaeology is present in that area of works, given the lack of any archaeological material scattered by ploughing in Subsoil **1001**.

Overall the evaluation was successful in identifying further phases of Roman activity in the vicinity of RAF Birch in the form of agricultural features suggesting nearby occupation. Given the sites proximity to monument record MCC 7567, a Roman road



running through the north of the airfield site this is perhaps unsurprising. The evidence encountered in the evaluation will help to contribute to the understanding of Roman occupation in the wider historical landscape.

#### 11.0 ACKNOWLEDGEMENTS

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We would also like to thank Dr Jess Tipper of Colchester Borough Council for his advice and assistance throughout the project.

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The site was excavated by Daniel McConnell, Martin Brook, Matthew Adams and Adam Leigh of Britannia Archaeology Ltd.



#### **BIBLIOGRAPHY**

Brown, D.H. 2007. *Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation*; Archaeological Archives Forum.

Brown, N. And Glazebrook, J. 2000. *Research and Archaeology: a Framework for the Eastern Counties, 2. research agenda and strategy*; East Anglian Archaeol. Occ. Paper 8.

Crossan, 2006. An archaeological excavation and watching brief at Birch airfield compost site, Colchester, Essex: May-August 2005. Colchester Archaeological Trust

Fawcett, A. 2016. The Roman pottery and ceramic building materials (CBM) from Birch Airfield, Blind Lane, Birch, Colchester, Essex (ECC 3570); An assessment report.

Gurney, D. 2003. *Standards for Field Archaeology in the East of England*; East Anglian Archaeology Occasional Paper 14.

Chartered Institute for Archaeologists. 2015. Code of Conduct.

Chartered Institute for Archaeologists. 2015. Standard and Guidance for Archaeological Field Evaluation.

Law, M. 2016. SAMPLE FLOT AND RESIDUE ASSESSMENT RAF BIRCH, TIPTREE, ESSEX. LP Archaeology

Medlycott. 2011. Research and Archaeology Revisited: a revised framework for the East of England; East Anglian Archaeology Occasional Paper 24.

Mills. A. D, 2003. Oxford Dictionary of British Place Names. Oxford University Press.

Tipper, J. 2015. Brief for a Trenched Archaeological Evaluation at Solar Farm, Birch Airfield, Blind Lane, Birch, Colchester. Colchester Borough Council

United Kingdom Institute for Conservation, 1983. *Packaging and Storage of Freshly-Excavated Artefacts from Archaeological Sites;* Conservation Guidelines No. 2.



#### Websites:

The British Geological Survey (Natural Environment Research Council) – Geology of Britain Viewer - <a href="https://www.bgs.ac.uk/opengeoscience/home.html?Accordion2=1#maps">www.bgs.ac.uk/opengeoscience/home.html?Accordion2=1#maps</a>

English Heritage PastScape <u>www.pastscape.org.uk</u>

Archaeological Data Service (ADS) www.ads.ahds.ac.uk

English Heritage National List for England <a href="https://www.english-heritage.org.uk/professional/protection/process/national-heritage-list-for-england">www.english-heritage.org.uk/professional/protection/process/national-heritage-list-for-england</a>

DEFRA Magic <a href="http://magic.defra.gov.uk/website/magic">http://magic.defra.gov.uk/website/magic</a>



#### **APPENDIX 1 - DEPOSIT TABLES & CONTEXT DESCRIPTIONS**

#### **Deposit Tables**

#### TRENCH 1

Trench No	Orientation NW - SE	Heigh	Height AOD 42.67m		Shot ID  DP 1	
Sample Section No	Locatio	n SW Side N End		Facing SW Facing		
Context No	Depth	Deposit Description				
1000	0.00 - 0.07m	Topsoil: Grey b	il: Grey brown compact silty clay with moderate angular nclusions			ular
1001	0.07 - 0.22m	Subsoil: dark gr chalk inclusions	rey brown,	firm silty	clay, with occasional sn	nall
1002	0.22m+	Natural Geologi frequent rounde			compact, silty clay w	vith

Trench No	Orientation NW - SE	Height AOD 41.84m	Shot ID  DP 2
<b>Sample Section No</b> 2	Locatio	n SW Side S End	Facing SW Facing
Context No	Depth	Deposit Description	
1000	0.00 - 0.06m	Topsoil: Grey brown comp flint inclusions	pact silty clay with moderate angular
1001	0.06 - 0.27m	Subsoil: dark grey brown, chalk inclusions	firm silty clay, with occasional small
1002	0.27m+	Natural Geology: Mid bu frequent rounded chalk pe	ff brown, compact, silty clay with

#### **Context Descriptions**

Feature Context	Feature Type & Description (m)	Layer/Fill Context	Layer/Fill Description	Spot Date	Finds /g (sherds or number)
1003	Gully (2.00+ x 0.62+ x 0.14m) Liner in plan, steep sloping sides with a flat base. Orientation N-S.	1004	Mid-orange brown, compact silty clay with occasional chalk flecks.		N/A
		1005	Light Orange Brown, compact silty clay	Mid/late 1 <sup>st</sup> C	136g (15) Pottery
1006	Natural Feature (7.45+ x 1.80+ x 0.25m) Indeterminable possibly sub- circular in plan, genital sloping sides with a concave base.	1007	Mid-orange brown, compact silty clay with occasional chalk pebbles.	Late 3 <sup>rd</sup> /4 <sup>th</sup> C Roman - Roman -	95g (6)Pottery 282g (2) CBM <b>TP1</b> - 105g (3) Pottery <b>TP2</b> - 11g (1) Pottery 149g (1) CBM
		1008	Mid Grey-brown, compact silty clay with occasional flint pebbles.		N/A
1009	Land Drain (4.00+ x 0.90+ x 0.37m) Liner in plan, steep sloping	1010	Mid grey-brown, compact silty clay with occasion flit pebbles.	PMed/mod	110g (3) CBM



	sides with a concave base. Orientation E-W.				
1011	Boundary Ditch (5.55+ x 2.65+ x 1.35m) Linear in plan moderately steep sloping sides, with a	1012	Mid buff-brown, compact silty clay with frequent chalk pebbles.	Mid1 <sup>st</sup> -2 <sup>nd</sup> C	21g (2) Pottery
	concave base. Orientation N-S.	1013	Mid grey-brown, compact silty clay with infrequent chalk flecks and flint pebbles.		N/A
1014	Gully (1.00+ x 0.40+ x 0.12m) Liner in plan, moderate sloping sides with a flat base. Orientation E-W.	1015	Mid grey-brown compact silty clay.		N/A
1016	Gully (4.30+ x 0.50+ x 0.04m) Liner in plan, genital sloping sides with a flat base. Orientation E-W	1017	Mid grey-brown compact silty clay.		N/A
1018	Land Drain (6.00+ x 0.58+ x 0.36m) Linear in plan, steep sloping sides with a concave base. Orientation N-S	1019	Mid grey-brown compact silty clay.		N/A

#### **TRENCH 2**

Trench No 2	Orientation SW - NE		Height AOD 43.84m		Shot ID  DP 3	
Sample Section No	Loc	Location SE Side WW End		Facing NW Facing		
Context No	Depth	Deposit	t Description			
1000	0.00 - 0.19m	0.00 – 0.19m Topsoil: Grey brown compact silty clay with moderate ang flint inclusions				
1001	0.19 - 0.45m		Subsoil: dark grey brown, firm silty clay, with occasional sm chalk inclusions			
1002	0.45m+		Geology: Mid but t rounded chalk pet		compact, silty clay with	



#### **TRENCH 3**

Trench No	Orienta	Orientation NW - SE		Height AOD 43.93m		Shot ID  DP 4
Sample Section No 4		Locatio	NE Side NW End		Facing SW Facing	
Context No	Depth		Deposit Description			
1000	0.00 - 0	0.00 – 0.20m Topsoil: Grey brown compact silty clay with flint inclusions			clay with moderate angular	
1001	0.20 - 0	.47m	Subsoil: dark grey brown, firm silty clay, with chalk inclusions			clay, with occasional small
1002	0.47m+			Geology: Mid bu t rounded chalk pel		compact, silty clay with



#### **APPENDIX 2 - Specialist Reports**

The Roman pottery and ceramic building materials (CBM) from Birch Airfield, Blind Lane, Birch, Colchester, Essex (ECC 3570); An assessment report 20/04/16

Andy Fawcett

#### Introduction

This report provides an overview and assessment of both the pottery and CBM assemblages from Birch Airfield, Birch, Essex.

Firstly the report sets out the methodology used for recording the two groups and then goes on to describe the individual assemblages. This will then be followed by an overall conclusion and any recommendations for further analysis of the materials.

#### Methodology

The pottery has been recorded by sherd count and weight. The principle fabrics in each context have been rapidly scanned (where required, fabric examination at x20 vision has also been undertaken). Fabric codes have been assigned using simple letter combinations based upon codes developed by Tomber and Dore (1998) as part of a national system; these have been supplemented by those utilised at Chelmsford by Going (1987) and Colchester by Symonds and Wade (1999).

The CBM assemblage has been recorded in a similar manner to the pottery, although in this case using fabric and form codes adapted by the author from several sources in East Anglia.

A full breakdown of reference codes can be seen in Appendix \*1, and the entire recorded pottery and CBM assemblage can be viewed in Appendix \*2.



#### **Pottery**

A total of twenty-six pottery sherds (268g) were recovered from five different contexts (Gully fill 1005, Natural fills 1007, 1007 TP1, 1007 TP2 and Ditch fill 1012).

Gully fill 1005 contained the largest number of sherds (15 @ 136g) and is dated from the mid-late 1<sup>st</sup> century. The majority of sherds display only slight abrasion but have a fairly low average weight of 9g.

Most of the fabrics are either unsourced sandy grey wares (GRS) or Romanising type wares (BSW). However single sherds of both Colchester buff ware (COL BU) and southern British grog-tempered ware (SOB GT) are also present.

Two base fragments were noted as well as a single jar rim, which is in fabric GRS. Although only a small proportion of the top part of the jar survives it appears to be in the Cam 266 style (Symonds and Wade 1999, 479). It displays a curved beaded rim with an offset neck and is dated from the mid-later 1<sup>st</sup> century, possibly slightly later. This alongside fabrics SOB GT and COL BU provides the dating for the context.

Natural fill 1007 (including its two attendant test pits) contained a total of nine sherds (113g). Despite the fact that the average sherd weight for this assemblage is a reasonable 12.5g, as a whole the sherds in this context are predominantly abraded. The sherds associated with Test Pit 1 (GRS) are not closely datable and the single sherd in Test Pit 2 is in fabric BSW, which is dated from the mid 1st-2nd century?+. The main group from 1007 also contained two GRS and BSW sherds. A single small jar rim was recorded in fabric GRS. However, it is too small to accurately identify it beyond its general class of vessel, although the rim style is similar to that of Cam268 (Symonds and Wade 1999, 479) and it is therefore possibly dated from the 2nd to early 4th century. A single sherd each (both of which are abraded) of Hadham oxidised and reduced ware were noted (HAD OX/RE). The oxidised version of this Hertfordshire fabric is represented by a small rim fragment belonging to a late bowl, which is dated from the late 3rd-4th century.

The condition of the pottery and the range of fabrics present, suggests that as a whole this is a mixed fill, with perhaps some earlier Roman pottery present. Its date is based upon fabric HAD OX and its accompanying form. The potential identification of a Cam

Birch Airfield, Blind Lane, Birch, Colchester, Essex Archaeological Evaluation Project Number 1134



268 jar may indicate that the latest date for the fill may be no later than the early  $4^{th}$  century.

Ditch fill 1012 contained two body sherds of fabric BSW, which is dated from the mid  $1^{st}$  to  $2^{nd}$  century?+.

**CBM** 

A total of seven fragments of CBM (636g) were retrieved from four different contexts (Natural fills 1007, 1007 T/P1, 1007 T/P2 and Land drain fill 1010). The fragments are fairly small and in terms of condition may be classed as between abraded and slightly abraded.

Four of the fragments were retrieved from Natural fill 1007, all of which are dated to the Roman period. A measurement of their respective depths, based upon statistical data from a considerable Roman CBM assemblage from the small town of Ware in east Hertfordshire (Fawcett 1998), indicates that present are individual brick, flat tile/brick, flat tile and *imbrex* fragments. The flat tile depth which is 16mm may possibly be a *tegula* mid-section.

All of the fabrics are oxidised, and with the exception of one, contain medium sand alongside common grog and black iron ore (occasionally red) and varying amounts of silver mica. The remaining fabric contains abundant ill-sorted quartz and sparse black iron ore.

The final fragments of CBM are all joining pieces of late post-medieval/modern field drain (3 @ 110g). These were retrieved from the Land Drain context 1010 and are in a typical, dense well sorted quartz based fabric associated with that period.

Conclusion

Although this is only a small quantity of Roman pottery and CBM, and for the most part it cannot be considered well dated, it nevertheless provides further information to supplement the existing record for Roman activity in the Birch airfield area.



Examination of the pottery has shown that it depicts some form of Roman rural activity from the mid-late  $1^{st}/2^{nd}$  century and thereafter from the late  $3^{rd}-4^{th}$  century. Little more can be said about the nature of this activity, for instance in the sense of status, economy or function, based upon this small assemblage.

The presence of small fragments of Roman roof tile and structural brick suggests the possibility that some form of building may have been present around the vicinity (or perhaps further a field) of the evaluated area. The nature of the sites more modern use however, alongside the condition of the CBM fragments (including some of the pottery sherds) as well as the type of context they were recovered from, means that at this stage of the investigation, caution should be employed with respect to any firm interpretation of this assemblage.

#### Recommendations for further work

The pottery and CBM assemblages will require no further examination. However should another phase of work be undertaken on the site, any future assemblages that might be recovered and subsequently analysed, should take into account this current pottery and CBM assemblage.

#### **Bibliography**

Brodrib, G., 1987, Roman brick and tile, Sutton, Gloucester

Fawcett, A. R., 1998, A catalogue of Roman building material from Allen & Hanbury, Glaxo and Ware sites (AH76, 77, 78, 79, 76-79, 83, 84, 85, 86, HAT 11, 39, 54, 57, 106, 111,113, 143, 156, 164, 180, 188, & G. W. East). Herts Archaeological Trust Report No?

Going, C. J., 1987, *The mansio and other sites in the south-eastern sector of Caesaromagus: the Roman pottery*, Research reports/Council for British Archaeology 62, London

Symonds, R & Wade, S., 1999, *Roman pottery from excavations in Colchester, 1971-86*, Colchester Archaeological Report 10, Colchester Archaeological Trust, Colchester

Tomber, R and Dore, J., 1998, *The national Roman fabric reference collection: A handbook*, MoLAS Monograph 2, London: Museum Archaeology Service



#### SAMPLE FLOT AND RESIDUE ASSESSMENT

RAF BIRCH,

TIPTREE, ESSEX

Author: M Law

Doc Ref: LP2192E-EAR-v1.0

Site Code ECC 3570

Date: May 16

www.lparchaeology.com

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- 1. Introduction
- 2. Methodology
- 3. Data Assessment
- 4. The Molluscan Assemblage
- 5. Statement of Potential and Recommendations

#### 1. INTRODUCTION

- **1.1.** This report is an assessment of the flot and heavy fraction residues from two samples from fills of features at RAF Birch, near Tiptree, Essex.
- **1.2.** The samples were processed and sorted by L P : Archaeology's Environmental Archaeology specialist following standard procedures (Kenward et al. 1980).

#### 2. METHODOLOGY

**2.1.** Two samples were presented for assessment. They were processed using flotation sieving. Flot was retained on a 250 micron mesh and the residue on a 1mm mesh.



#### 2.2. FLOT

**2.2.1.** Flots were scanned under a low power binocular microscope whilst wet and were air dried before material was extracted. Identifications were made with comparison to a reference collection.

#### 2.3. HEAVY FRACTION RESIDUE

**2.3.1.** The residue resulting from the flotation process was air dried and scanned under a low power binocular microscope. The remaining residue (geological material) was discarded.

#### 3. DATA ASSESSMENT

**3.1.** The flot and residue were sorted and assessed by the project environmental archaeologist.

#### 3.2. OVERVIEW OF PRESERVATION CONDITIONS AND PRESERVATION TYPE

**3.2.1.** Although shells were well preserved, bone was fragmentary and abraded. A single broken fragment of an elder (Sambucus nigra L.) was seen in (but not extracted from) the flot of sample <1>. The partial survival of this very robust seed, and absence of other seeds, suggests poor conditions for organic preservation.

#### 3.3. DIVERSITY IN THE FLOTS AND RESIDUES

- **3.3.1.** In general, very little was recovered from the samples. Mollusc shell was reasonably well preserved throughout both samples.
- **3.3.2.** The residue of sample <2> also contained a single, very abraded, piece of cortical bone, up to 14mm in length, and a single piece of charcoal, up to 5mm length.



#### 4. THE MOLLUSCAN ASSEMBLAGE

- **4.1.** The molluscan assemblage was identified with comparison to a reference collection. Ecological information is derived from Evans (1972), Kerney and Cameron (1979) and Davies (2008). Nomenclature follow Anderson (2008).
- **4.2.** The assemblage from sample <1>, taken from a natural feature, is dominated by a group of terrestrial taxa indicative of open conditions (short sward grassland), such as Pupilla muscorum, Vertigo pygmaea, Vallonia cf. excentrica and, most frequently, Vallonia costata. Trochulus hispidus is a catholic species, tolerant of a wide range of habitats, while Oxychilus cellarius is more usually associated with shaded habitats, perhaps taking advantage of locally more shaded conditions in the feature. The second most frequent taxon is Anisus leucostoma, an amphibious snail which suggests that the feature was subject to seasonal flooding. Cecilioides acicula is a subterranean snail widely thought to be a medieval arrival in Britain (Davies 2010).

The relatively high number of snail species and shells in this feature suggests that the fill accumulated relatively slowly.

**4.3.** Sample <2>, taken from the fill of a Romano-British pit, contained a far smaller assemblage, most likely the result of relatively rapid infilling of the feature. Like Anisus leucostoma, Radix balthica is an amphibious species indicative of seasonal flooding. The residue of this sample contained an internal plate of a slug of the Limacidae family, which is tolerant of a wide range of terrestrial conditions.

#### 5. STATEMENT OF POTNETIAL AND RECOMMENDATIONS

- **5.1.** The non artefactual / ecofactual element of the sorted residue has been weighed and discarded.
- **5.2.** The snail assemblage provides some insight into environmental conditions on areas of the site, although the small size of the assemblage constrains its interpretative potential. Other materials are too rare to carry any interpretative value. The charcoal from sample <2> is not suitable for radiocarbon dating. No further work is judged to be necessary.



**5.3.** It is recommended that all material be retained within the site archive to be made available for future study.

#### **REFERENCES**

Anderson, R., 2008. An Annotated List of the Non-Marine Mollusca of Britain and Ireland.

London: The Conchological Society of Great Britain and Ireland.

Davies, P., 2008. Snails: archaeology and landscape change. Oxford: Oxbow.

Davies, P., 2010. Land and freshwater molluscs. In T. O'Connor and N.Sykes, eds., Extinctions and

Invasions: a social history of the British fauna. Oxford: Windgather Press. pp.175-180.

Evans, J.G., 1979. Land Snails in Archaeology. London: Seminar.

Kenward, H.K., Hall, A.R., and Jones, A.K.G., 1980. A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. Science

and Archaeology, 22. pp. 3-15.

Kerney, M.P., and Cameron, R.A.D., 1979. A Field Guide to the Land Snails of Britain and North-West Europe. London: Collins.

#### Birch Airfield, Blind Lane, Birch, Colchester, Essex Archaeological Evaluation Project Number 1134

#### APPENDIX 3 - CONCORDANCE OF FINDS

SITE NAME: SOLAR FARM, BLIND LANE, BIRCH, COLCHESTER, ESSEX

SITE CODE: ECC3570 P. NUMBER: 1134

FEATURE	FEATURE	LAYER/FILL	LAYER/FILL	TEST PIT NO	SPOT	POTTERY	СВМ
CONTEXT	TYPE	CONTEXT	DESCRIPTION		DATE	/g(sherds)	/g(number)
1003	Gully	1005	Upper Fill		Mid/late 1stC	136g (15)	
1006	Natural Feature	1007	Primary Fill		Late 3rd/4th C	95g (6)	282g (2)
			Primary Fill	1	Roman	105g (3)	
			Primary Fill	2	Roman	11g (1)	149g (1)
1009	Land Drain	1010	Primary Fill		PMed/mod		110g (3)
1011	Ditch	1012	Primary Fill		Mid1st-2nd C	21g (2)	



#### **APPENDIX 4 - OASIS FORM**

# OASIS DATA COLLECTION FORM: **England**

List of Projects | Manage Projects | Search Projects | New project | Change your details | HER coverage | Change country | Log out

Printable version

OASIS ID: britanni1-232967

#### **Project details**

Project name Solar Farm, Birch Airfield, Blind Lane, Birch, Colchester

of the project

Short description In December 2015 and April 2016, Britannia Archaeology Ltd (BA) undertook a trial trench evaluation on Birch Airfield, Blind Lane, Birch, Colchester, Essex as part of a remedial scheme of archaeological works, subsequent to the erection of a solar farm at Birch Airfield, Blind Lane, Birch, Colchester Essex (TL 9130 1971) (Fig. 1). A brief issued by Colchester Borough Council (CBC) (Tipper, J.; 24th November 2015) required two trenches to be opened on the northern part of the solar farm. The archaeological background suggested that the site had a specific potential for the Roman period. The evaluation revealed three main phases of activity at the site. The first phase relates to Roman occupation. All of the Roman features encountered in the evaluation are indicative of those found in an agricultural landscape with a focus on cultivation rather than habitation at this specific location. The second phase activity relates to the late Roman and post Roman agricultural activity while the third and final phase of activity on the site relates to post medieval and modern activity associated with agriculture and the eventual construction of the airfield. Overall the evaluation was successful in identifying further phases of Roman activity in the vicinity of RAF Birch in the form of agricultural features suggesting nearby occupation. Given the sites proximity to monument record MCC 7567, a Roman road running through the north of the airfield site this is perhaps unsurprising. The evidence encountered in the evaluation will help to contribute to the understanding of Roman occupation in the wider historical landscape.

Project dates Start: 14-12-2015 End: 18-12-2015

Previous/future

work

No / Not known

project reference codes

Any associated ECC3570 - Sitecode

Type of project Field evaluation

Site status None

Current Land use

Cultivated Land 1 - Minimal cultivation

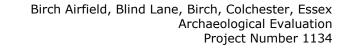
Monument type DITCH Roman Significant Finds CERAMICS Roman Methods & "Sample Trenches"

techniques

Development

type

Service infrastructure (e.g. sewage works, reservoir, pumping station, etc.)





Direction from Local Planning Authority - PPG16 Prompt

Not known / Not recorded

Position in the

planning process

**Project location** 

Country England

Site location ESSEX COLCHESTER BIRCH Solar Farm, Birch Airfield, Blind Lane, Birch,

Colchester

Postcode CO5 9XH

Study area 0 Square metres

Site coordinates TL 9130 1971 51.842653450677 0.777380982575 51 50 33 N 000 46 38 E Point

Height OD /

Depth

Min: 0m Max: 0m

**Project** creators

Name of Britannia Archaeology Ltd

Organisation

Project brief originator

Local Authority Archaeologist and/or Planning Authority/advisory body

Project design

originator

Martin Brook

Project

Martin Brook director/manager

Project Martin Brook

supervisor

Type of

sponsor/funding

body

Name of

sponsor/funding

body

Push Energy

Developer

**Project** archives

Physical Archive Colchester Museum

recipient

Physical Archive ECC3570

Physical Contents "Ceramics", "Environmental"

Digital Archive

recipient

Colchester Museum

Digital Archive

ECC3570

Digital Media

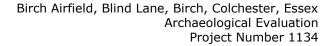
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available

Paper Archive

recipient

Colchester Museum





Paper Archive ID ECC3570

Paper Contents "Stratigraphic"

Paper Media "Context

available sheet", "Correspondence", "Drawing", "Photograph", "Plan", "Report", "Section", "Survey

Project bibliography 1

Grey literature (unpublished document/manuscript)

Publication type

Title Birch Airfield, Blind Lane, Birch, Colchester, Essex

Author(s)/Editor M. Brook

(s)

Other R1131

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Date 2016

Issuer or Britannia Archaeology Ltd

publisher

Place of issue or Bury St Edmunds

publication

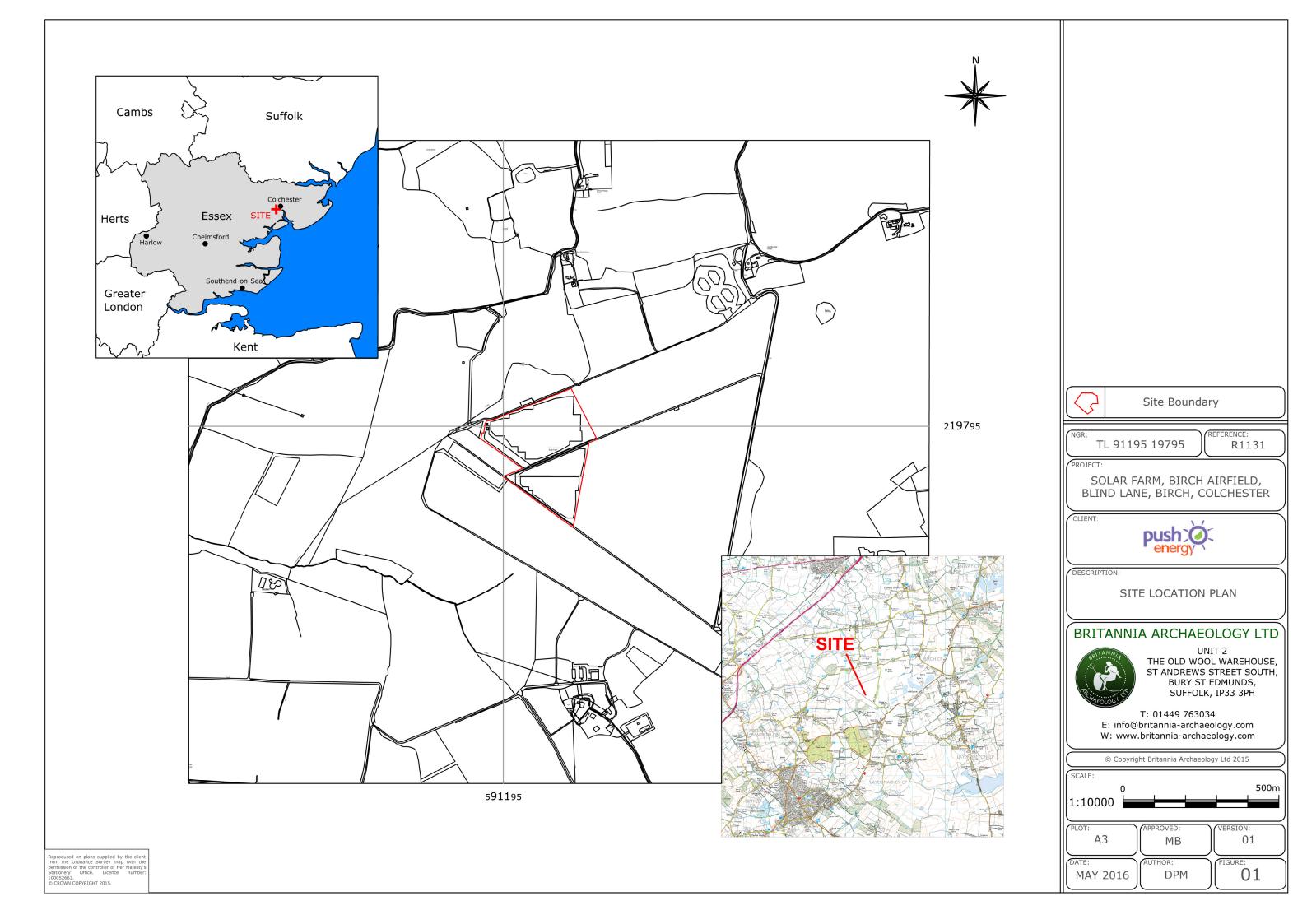
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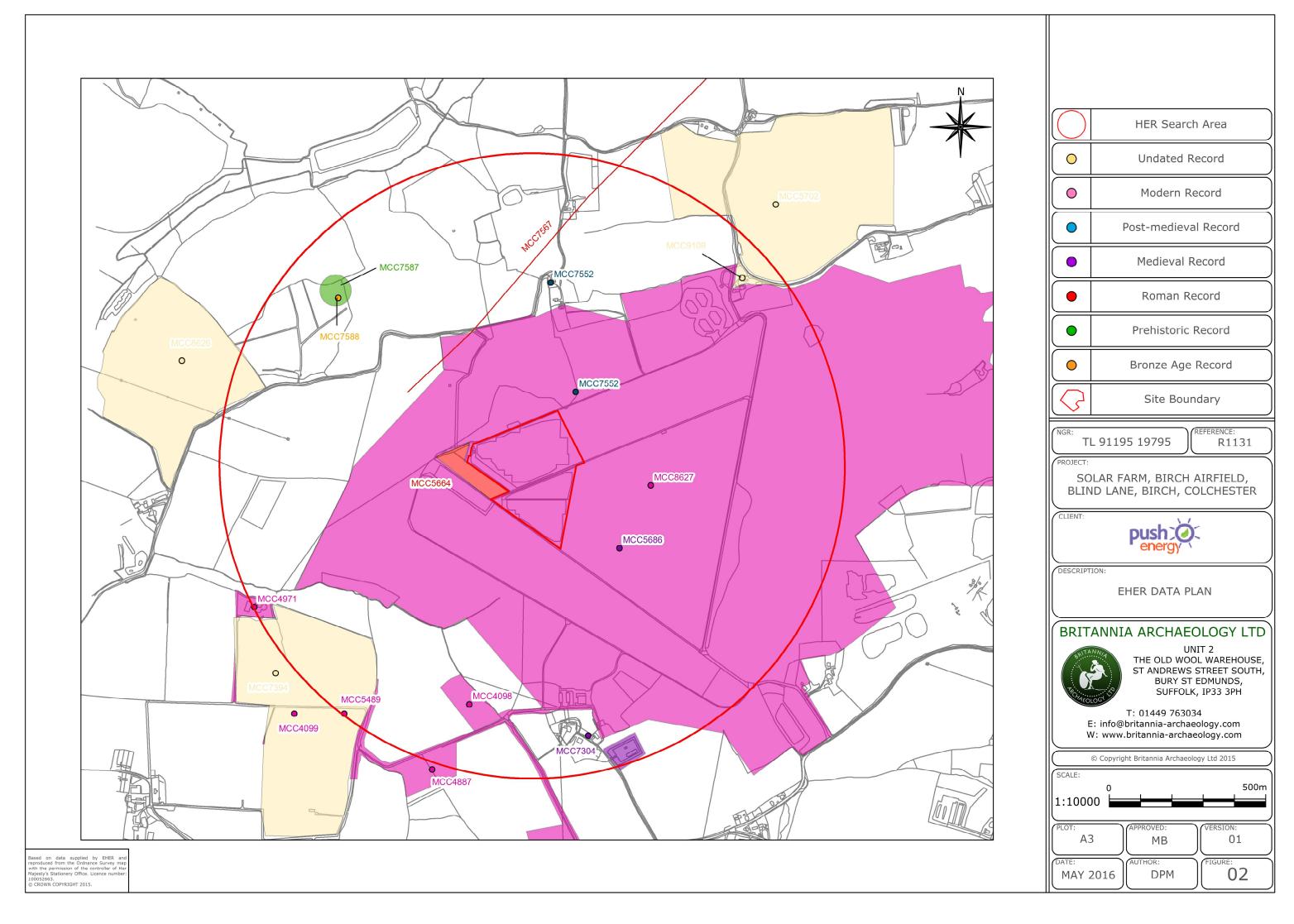
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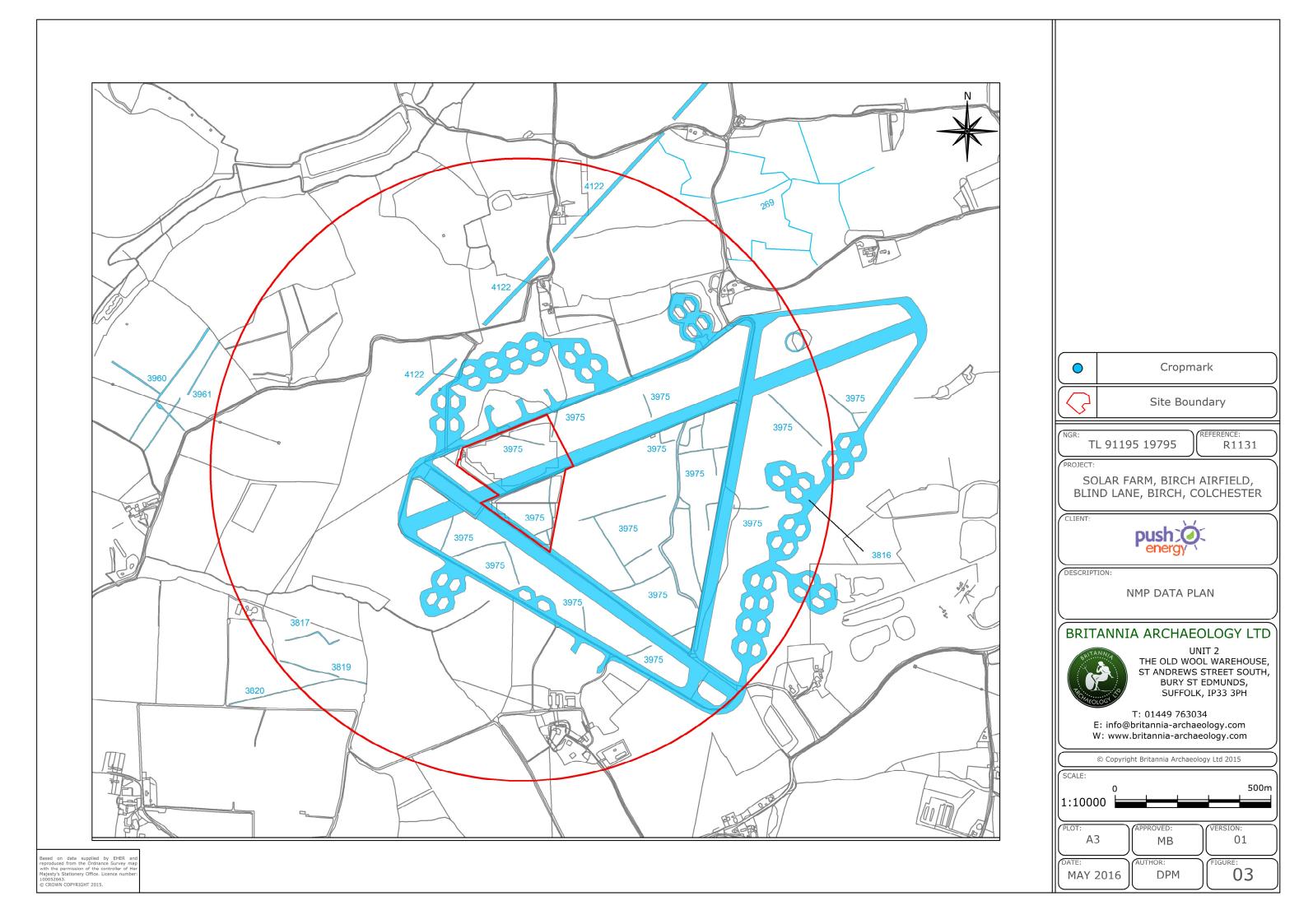
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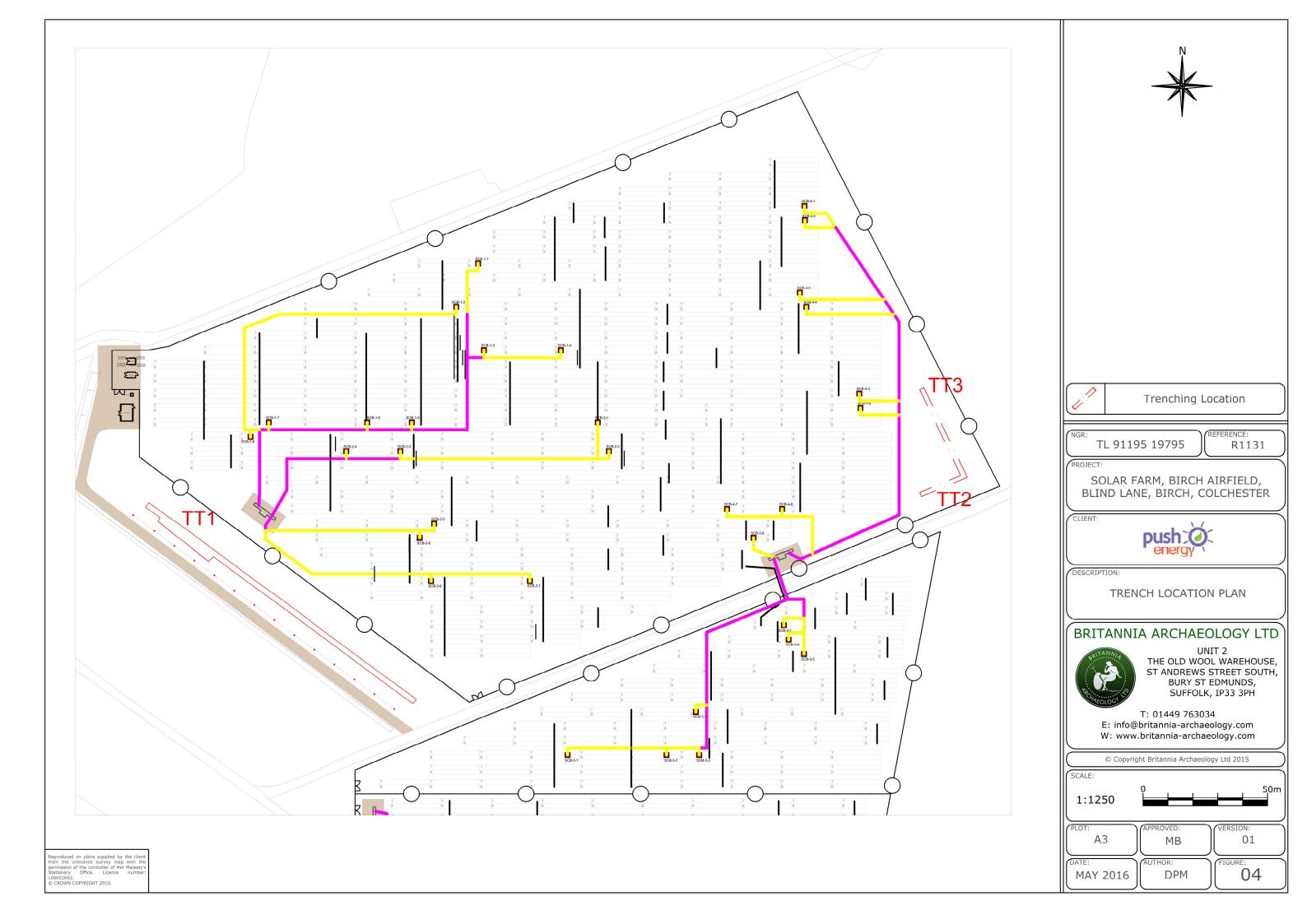
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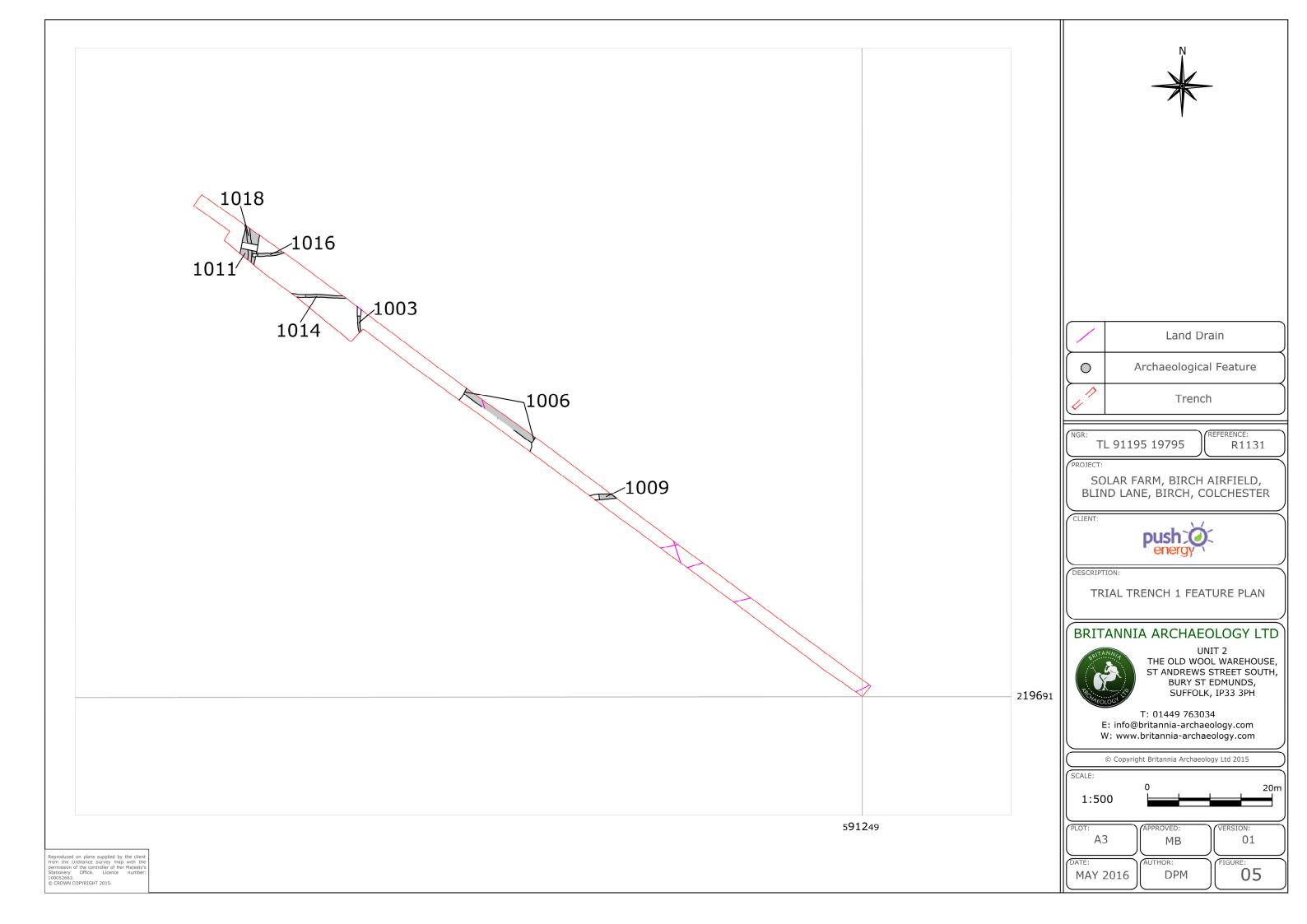
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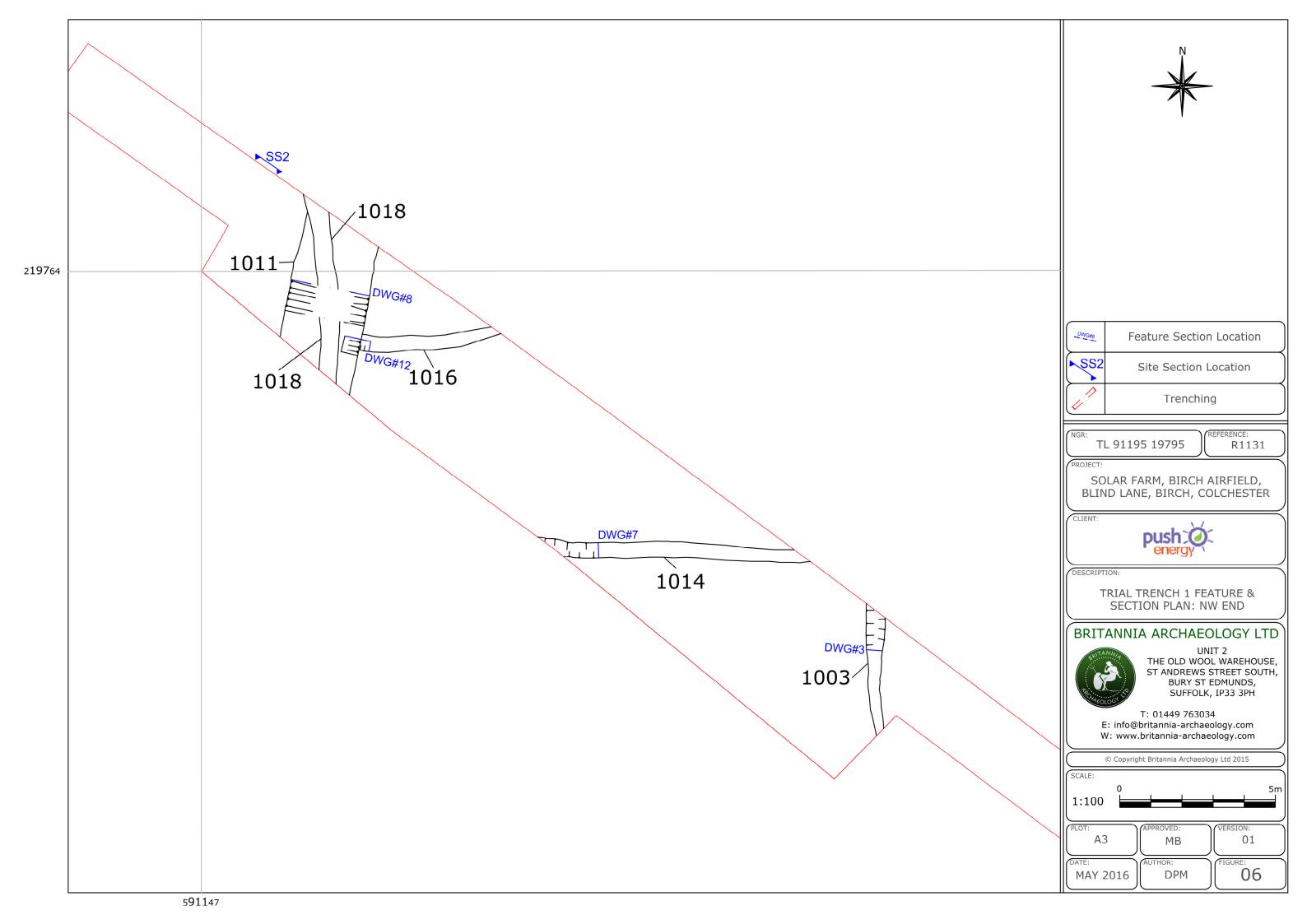


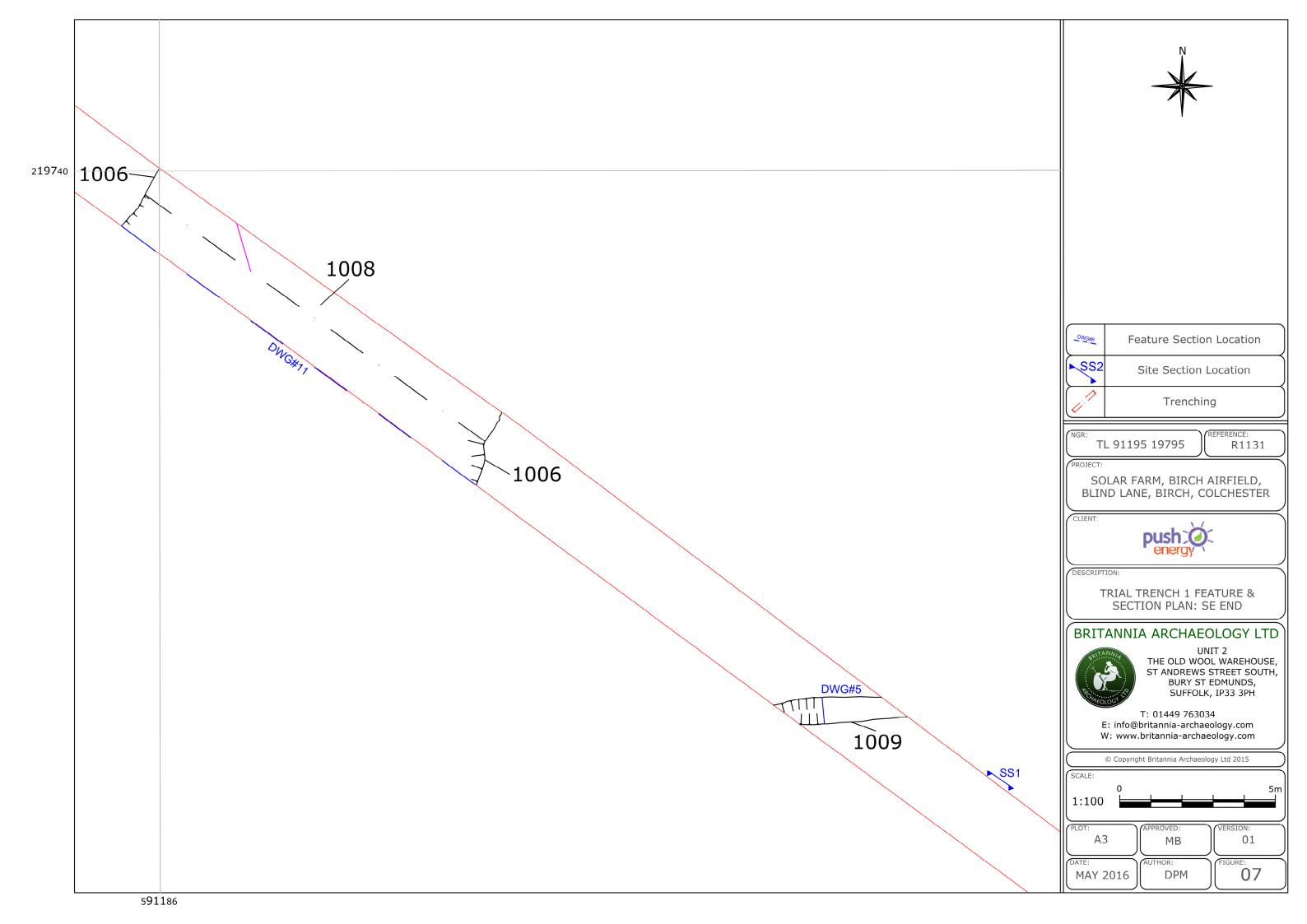


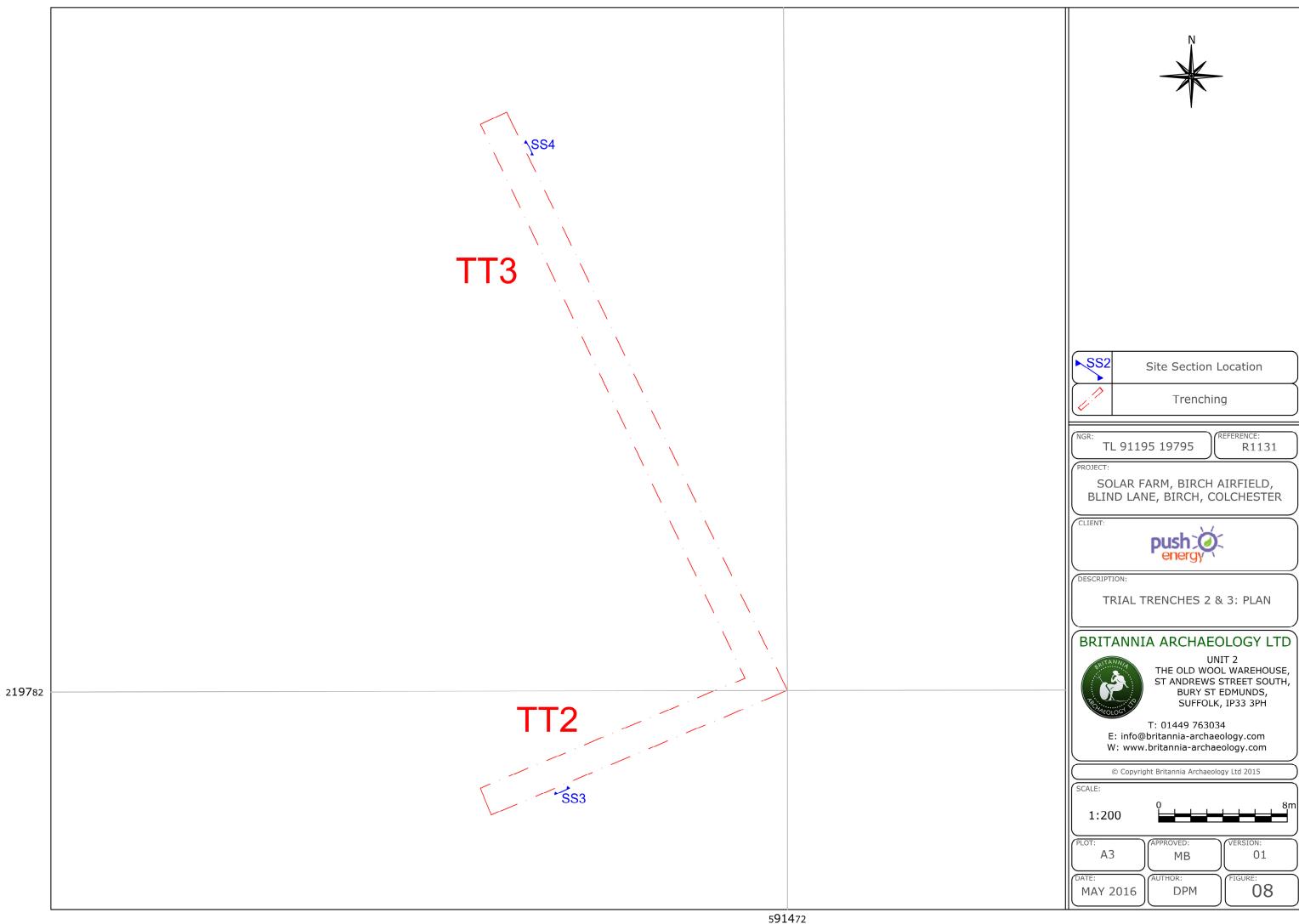


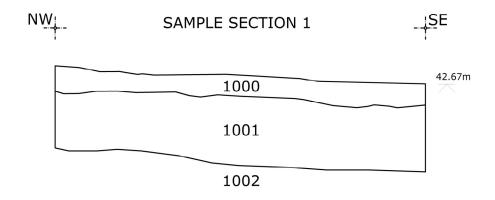






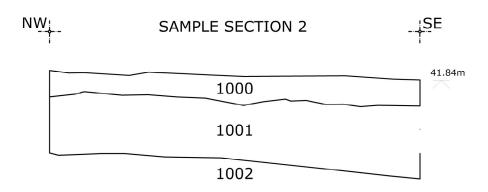








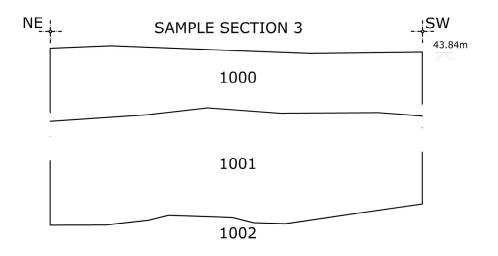
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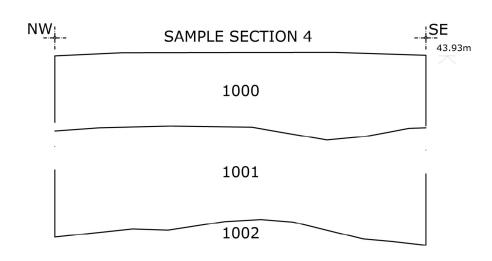
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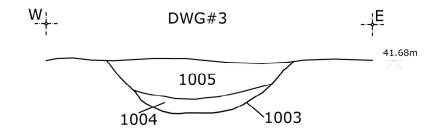
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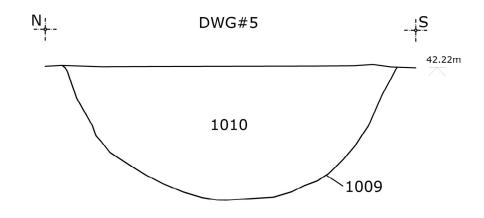
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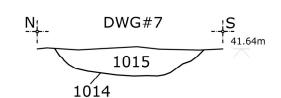
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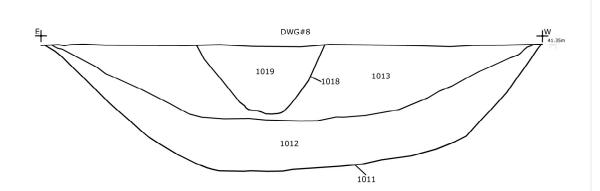


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DWG#7: DP7: VIEW E



DWG#8: DP8: VIEW S



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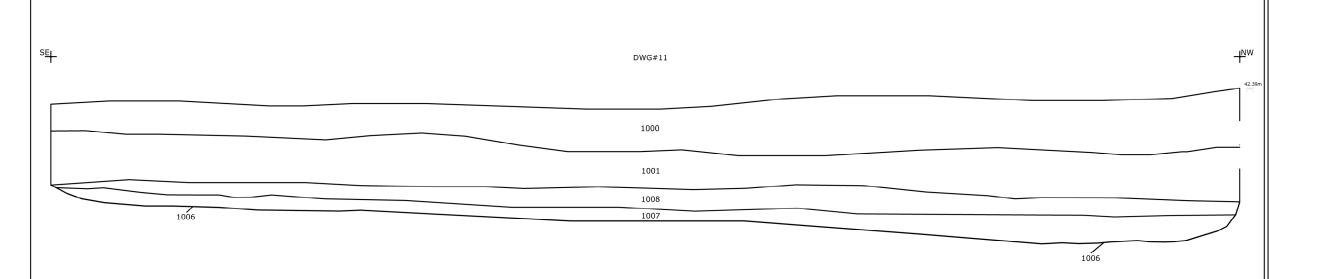
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SCALE

A3 MB VERSION O1

MAY 2016 DPM 12







DWG#11: DP9: VIEW SW

TL 91195 19795

FERENCE:
R1131

PROJECT:

SOLAR FARM, BIRCH AIRFIELD, BLIND LANE, BIRCH, COLCHESTER

CLIENT



DESCRIPTION

FEATURE SECTIONS

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SCALE:

PLOT:
A3

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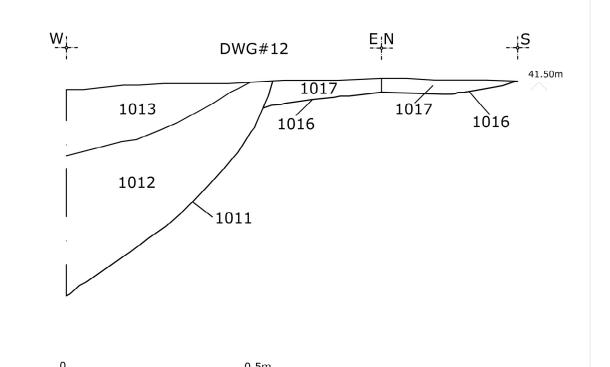
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AUTHOR:
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MAY 2016

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MAY 2016