Archaeological investigations at the site of the former Seymour Colliery Staveley, Derbyshire

For Derbyshire County Council

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Summary

- Outline planning permission has been granted to Derbyshire County Council for mixed use development of land adjacent to the former Seymour Colliery, Staveley, Derbyshire. The Derby and Derbyshire Development Control Archaeologist (DDDCA) recommended that an archaeological condition be attached to this planning permission in order to secure a programme of works to evaluate the archaeological potential of the site and subsequently mitigate the damage or loss caused by the development to any below ground remains.

- An enclosure was known from aerial photographs directly to the east of the south of the development area, with further possible features within the site. A geophysical survey of the site was undertaken and this identified a number of potential archaeological features (Stratascan 2014) including the route of a former tramway towards the north of the site and two possible circular structures/enclosures.

- Trent and Peak Archaeology was commissioned by Derbyshire County Council to undertake a six trench archaeological evaluation on the site prior to development targeting features identified by the geophysical survey. This aimed to clarify the character, date, state of preservation and depth of any archaeological features identified.

- During the evaluation a curvilinear feature was identified in one of the trenches and a pit in another. DDDCA recommended areas be stripped around these features. The curvilinear feature was identified as the eaves drip gully of a roundhouse and DDDCA advised eight further 30m trenches be excavated. Further pits, a posthole and further possible curvilinear feature were identified. DDDCA advised two further 10m square areas be stripped and a ditch and large pit containing early Bronze Age pottery were identified in one of these. DDDCA recommended approximately 3,900 square metres be stripped and recorded.

- Three phases of activity were identified at the site. The earliest phase comprised two pits and two postholes dating to the early Bronze Age. The second phase was undated but based on the site morphology is of probable Later Prehistoric origin. This comprised a circular structure, a possible second structure, a field boundary, a line of stakeholes and a number of associated pits. The final phase comprised a Post-Medieval fence line.

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1 Introduction

1.1 Outline planning has been granted for mixed use development of land adjacent to the former Seymour Colliery, Staveley, Derbyshire (Figure1). Trent and Peak Archaeology were commissioned by Derbyshire County Council to undertake an archaeological evaluation on the site prior to development. Evaluation trenches targeted anomalies identified during a geophysical survey previously carried out by Stratascan (Stratascan 2014) (Figure2).

1.2 An enclosure is known from aerial photographs directly to the east of the south of the proposed development area while further possible features were visible within the site (Figure3, Plate 1). It has been suggested the enclosure may date to the Iron Age or Romano-British Period (Brightman and Waddington, 2011).

1.3 The site comprises two parcels of land, with a total area of 16 ha. The centre of the site is located at NGR SK 45456 74313 (Figure 1). The proposed development site consists of the former colliery site and five arable fields. A valley bisects the centre of the site from east to west. A former mineral railway line runs across the site running north east-south west. The level of the site varies between 71.77m OD at the north of the site to 59.48m OD in the valley at the centre of the site and 67.78m OD at the south of the site.

1.4 The work was carried out in response to a request for archaeological investigation by the Derby and Derbyshire Planning Control Archaeologist (DDDCA) in line with the *National Planning Policy Framework* (DCLG 2012). Initially six trenches, three measuring 30m and three measuring 50m in length, targeting previously identified geophysical anomalies were excavated (Figure 2). Following this initial stage of works DDDCA recommended a controlled strip of two areas focusing on the archaeological features identified. During the excavation one of these features was identified as the eaves drip gully of a round house. DDDCA recommended 8 further trenches be excavated to identify any further archaeology in the area. Several pits were found in these trenches and DDDCA recommended two further areas measuring 10m by 10m be stripped around some of these features. Further archaeology was identified and DDDCA recommended that an area of approximately 3,900 square metres be stripped and recorded. This report documents all phases of this work.

2 Topography and Geology

2.1 The proposed development site is located to the south of the village of Woodthorpe, which is situated approximately 7km north east of the market town of Chesterfield.

2.2 British Geological Service Mapping shows the site is situated on the Pennine Middle Coal Measures Formation. This is inter-bedded grey mudstone, siltstone, pale grey sandstone and common coal seams, with a bed of mudstone containing marine fossils at the base. It was formed around 298 to 359 million years ago in the Carboniferous period. The superficial geology is alluvium comprising gravels, sand, silt and clay (http://mapapps.bgs.ac.uk/geologyofbritain/ home.html).

3 Historical and Archaeological Background

3.1 There are no designated heritage assets within the site. Derbyshire's Historic Environment Record (HER) lists two designated heritage assets and four non-designated heritage assets within a 1km radius of the site (centred on SK 45456 74313). The two designated heritage assets comprise a Grade II listed former chapel (HER13016, LB352060) 410m to the north-west of the development area which was built in 1849 to replace an earlier 17th century

chapel and the site of its associated 17th century almshouses (HER13076, LB352060), now demolished.

3.2 An enclosure has been identified from aerial photographs taken in 2001 directly to the east of the southern end of the proposed development area (Figure 3, Plate 1). Some features that were thought to be related to this enclosure are shown on this photograph within the site limits. The enclosure is recorded on the English Heritage Pastscapes website as "A large rectilinear enclosure, probably Prehistoric, visible as a cropmark on aerial photographs". Brightman and Waddington have suggested it may be Iron Age/Romano-British (2011). Further non designated heritage assets within 1km comprise the find spot of a Bronze Age flint scraper (HER13003) found 855m to the north-west of the site; Woodthorpe Hall (HER13023) an early 18th century farmhouse located 800m to the north-east of the site which incorporates the remains of a medieval hall which is thought to have been built in c1400; the route of the Clowne branch of Midland Railway (HER99015) and the site of the former Seymour Colliery and its associated housing (HER13057) which was situated to the immediate west of the development area. The colliery went into production in 1858 and its height was producing 1,100 tons of coal a day. It closed in 1919 and the former miner's houses were demolished in 1932.

3.3 A geophysical survey of the proposed development site was undertaken during 2014 (Stratascan 2014). The survey identified a series of possible archaeological anomalies comprising two horse shoe shaped features, a number of possible pits and the line of a former tram line used by the colliery. Field boundaries and drains as well as a water main were also identified (Figure 2).

4 Aims and Objectives

4.1 To validate the results of the 2014 geophysical survey and provide information on the extent, date, character, condition, significance and quality of archaeological remains within the development site.

4.2 To assess the artefactual and environmental potential of the archaeological deposits encountered.

4.3 To assess the impact of previous land use on the site.

4.4 To inform formulation of further measures, if required, to mitigate impacts of the proposed development on surviving archaeological remains.

4.4 To produce a site archive for deposition with an appropriate museum and to provide information for accession to the Derbyshire HER.

4.5 The discovery of any buried archaeological remains identified within the proposed development area could offer an opportunity to address research priority 3D highlighted in the East Midlands Updated Research Agenda and Strategy (Knight, Vyner and Allen, 2012):

> "Asses the regional air photographic and LIDAR resource"

5 Methodology

5.1 The original methodology can be summarised as:

5.2 Excavation of 6 evaluation trenches (Figure 2) within the proposed development site:

Trench	Length	Purpose
1	50m	Test geophysical anomaly thought to be tram line
2	50m	Test geophysical anomalies thought to be series of pits
3	50m	Test geophysical anomaly thought to be tram line
4	30m	Test geophysical anomalies thought to be series of pits
5	30m	Test geophysical anomalies thought to be structure/small enclosure
6	30m	Test geophysical anomalies thought to be structure/small enclosure
TOTAL	210m	

5.3 Potential archaeological remains were identified in Trenches 4 and 5 in the form of a pit and a curvilinear gully. DDDCA requested that areas be stripped around these features and any further features be recorded (Figure 4). The area around the pit measured 10m by 10m while the area round the curvilinear gully measured approximately 19m by 19m. Further archaeology was identified and during the course of this work DDDCA requested eight more 30m evaluation trenches be excavated, representing a 4% sample of the surrounding area (Figure 4).

Trench	Length	Purpose
7	30m	Identify features in wider area of known archaeology
8	30m	Identify features in wider area of known archaeology
9	30m	Identify features in wider area of known archaeology
10	30m	Identify features in wider area of known archaeology
11	30m	Identify features in wider area of known archaeology
12	30m	Identify features in wider area of known archaeology
13	30m	Identify features in wider area of known archaeology
14	30m	Identify features in wider area of known archaeology
TOTAL	240m	

5.4 Several pits and linear features were identified as well as a posthole. DDDCA requested that two further areas be stripped, one around the posthole in Trench 10 and the other around a feature in Trench 8 which was originally thought to relate to an anomaly

identified in the geophysical survey (Figure 2). The area stripped around the feature in Trench 8 measured 14m by 11m while the area around the posthole in Trench 10 measured 10m by 10m (Figure4). Further archaeology was identified in these stripped areas including a large pit containing early Bronze Age pottery. DDDCA advised an area totalling approximately 3,900 square metres should be stripped and recorded (Area 20) (Figure5).

5.5 Trenches and open areas were located using a Leica System 1200 GPS. Trench locations and open areas were scanned with a Cable Avoidance Tool (CAT) prior to excavation.

5.6 Trenches and open areas were excavated using a mechanical excavator fitted with a toothless ditching bucket under continuous archaeological supervision, down to a depth either of undisturbed natural deposits or the upper surface of archaeological deposits. Each trench was cleaned by hand to assist in the identification and interpretation of exposed archaeological features, and the nature of identified features was assessed by sample excavation sufficient to determine date, nature, extent and condition. All exposed features were investigated.

5.7 The location of any artefacts recovered in the subsoil or in features was recorded three-dimensionally or by context if appropriate. All artefacts were treated in accordance with UKIC guidelines and Fist Aid for Finds (1998). Environmental samples were recovered in accordance with the agreed environmental sampling strategy.

5.8 All excavations were recorded at an appropriate scale by GPS survey, measured drawing and photography. The features and deposits encountered were recorded on individual context recording sheets. Sections of excavated features were also recorded (at a scale of 1:10 or 1:20 as appropriate). Spot heights were recorded relative to Ordnance Datum.

5.9 All works were carried out in accordance with an approved Written Scheme of Investigation prepared by Trent & Peak Archaeology (Taylor 2014) and the Chartered Institute for Archaeologist's *Standards and Guidance for an archaeological field evaluation* (CIfA 2014a) and *archaeological excavation* (CIfA 2014b)

6 Results

6.1 Of the six trenches originally excavated four contained no features of archaeological significance.

Trench 1

6.2 Trench 1 was located in the north east part of the site (Figure 2). It was targeted on a former tram line that had been identified in the geophysical survey (Stratascan, 2014). The trench was orientated east northeast and was 50m long by 1.8m wide (Plate 2). Natural light grey yellow clay (1001) was overlain by dark brown clay silt topsoil (1000) up to 0.25m thick. No evidence of the tram line was identified in the trench. Five stone filled field drains, recorded collectively as [1002], were identified and recorded. Three of these drains were orientated north-south, running directly down the slope of the field to the north, while the remaining two drains were orientated north east-south west and north west-south east. A further shallow gully [1004] was identified to the east of the centre of the trench orientated roughly north-south. It was filled by (1005), a dark grey brown clay silt that contained modern glass and pieces of wood.

6.3 None of the features identified in this trench were considered to be archaeologically significant and no samples or artefacts were retained.

Trench 2

6.4 Trench 2 was located towards the north of the site (Figure 2). It was targeted on a group of features identified by the geophysical survey as potential pits. It was orientated west northwest-east southeast and was 50m long by 1.8m wide (Plate 3). Natural light grey yellow clay (2001) was overlain by dark brown clay silt topsoil (2000) which was up to 0.25m thick. Areas of iron panning (2004) were identified in the surface of the natural clay which may have been the cause of the geophysical anomalies. Five stone filled field drains, recorded collectively as [2002], were identified. Four of these drains were orientated north northeast-south southwest while the remaining drain was orientated north northwest-south southeast.

6.5 None of the features identified in this trench were archaeologically significant and no artefacts were retrieved.

Trench 3

6.6 Trench 3 targeted the tram line previously identified by geophysical survey (Fig 2). It was 50m long by 1.8m wide and was aligned east northeast-west southwest (Plate 4). Natural brown yellow silt clay subsoil (3001) was overlain by grey brown clay silt topsoil (3000) up to 0.3m thick. Four stone filled field drains, all recorded as [3002], were identified in the trench. Three of the drains were orientated north-south with the remainder orientated north west-south east. To the east of the centre of the trench shallow linear [3004] was identified. This was up to 0.3m wide and 0.2m deep and ran through the width of the trench orientated north-south. It was filled by mid grey silt clay (3005) which contained modern fragments of ceramic building material. This feature may have been the same as [1004] recorded in Trench 1.

6.7 None of the features identified in this trench were considered to be archaeologically significant and no samples or artefacts were retained.

Trench 6

6.8 Trench 6 was located at the very south east of the site and was target on an anomaly identified during geophysics, originally thought to be a structure/small enclosure (Figure 2). The trench was 30m long and 1.8m wide (Plate 5). Natural brown yellow clay silt (6002) was covered by brown silt clay subsoil (6001) that was up to 0.3m thick. This was covered by dark grey brown clay silt topsoil (6000) that was up to 0.2m thick. Three plough scrapes ran across the trench orientated north west-south east.

6.9 None of the features identified in this trench were considered to be archaeologically significant and no samples or artefacts were retained.

Strip Map and Record

6.10 As has been outlined in Section 5 of this report, archaeological features were identified in Trenches 4 and 5, resulting in a requirement for further trenching and an area of controlled stripping of topsoil. The spread of features resulted in DDDCA recommending an area of 3,900 square metres being stripped and recorded (Figure 5). This area was recorded as Area 20. In this report the features identified in Trenches 7, 8, 9, 10 and 14 are included with the description and discussion on this larger area. Two narrow linear features were recorded in Trench 11 while nothing of archaeological significance was recorded in Trenches 12, 13 and 15.

Trenches 12, 13 and 15

6.11 These three trenches were excavated to the north of Area 20 (Figure 4). Each was excavated down to natural yellow grey clay silt subsoil. This was intermittently covered by light brown clay silt subsoil which appeared to have been ploughed away in places. A layer of dark grey brown clay silt topsoil, up to 0.35m thick, covered the entire area. Trenches 12 and 13 (Plates 6 and 7) were excavated to identify any further archaeology in the area while Trench 15 (Plate 8) was excavated to try and establish the orientation of a linear feature identified in Trench 11 described below. This feature did not continue into Trench 15.

Trench 11

6.12 The general stratigraphy of Trench 11 was the same as that of Trenches 12, 13 and 15 above. Two north east-south west aligned linear features were identified at the northern end of Trench 11 (Figs 4 and 17, Plate 9). The larger southern feature, [11002], had steep sides and flat base and was filled by (11003), a light red brown clay silt that appeared derivative of the subsoil (Plate 10). It was 0.58m deep. Very shallow linear [11004] was located 0.8m further to the north. This was similarly aligned and contained a similar red brown clay silt fill (11005) but was only 0.08m deep and had a rounded base. No artefacts were recovered from either of these features. They were similarly aligned to ditch [20054], outlined below, and are thought to be Iron Age in date.

Area 20 (Figure 5)

6.13 Area 20 measured approximately 75m by 55m. It was stripped using a mechanical excavator down to natural grey yellow silt subsoil (20002) that was yellow brown in places (Plate 11). This natural subsoil contained pockets of lignite. Limestone outcropped to the north of the centre of the site at the peak of the hill. The site was intermittently covered by light red brown subsoil (20001) which was up to 0.2m thick at the south of the site. The whole site was covered by dark grey brown clay silt topsoil (20003) that was up to 0.35m thick.

Early Bronze Age Activity (Figure 5)

6.14 The site contained two features which have been securely dated to the Early Bronze Age and two further features which have been tentatively dated to this period by association. Due to the paucity of finds from the site it is possible that some of the features assigned to the Later Prehistoric/Iron Age? Phase of activity, all of which are undated, could be Bronze Age in origin.

Pits and Associated Features (Figure 5)

6.15 Pit [10011] measured 1.9m east-west by 1.45m north-south and 0.55m deep (Figure 6, Plates 12 and 13, Figure7 Dr86). It was oval in plan with a sharp break of slope at the top of the pit, steep sloping sides and a concave base. Primary fill (10014) was a brown yellow silt that appeared to be derivative of the surrounding natural subsoil. Its sterility suggested it had been deposited soon after the pit was originally dug. Its secondary fill (10010) was a charcoal rich dark grey clay silt that contained several small pieces of burnt bone and five pieces of Beaker pottery. This pottery was from two vessels, with a single sherd with incised banding from one, and four sherds with dense comb impressed decoration from the other (Appendix 4). A single flint flake was also recovered from this context (see Appendix 5). Upper fill (10009) was a light brown clay silt up to 0.35m deep which appeared derivative of the subsoil. Environmental samples of (10010) and (10009) were processed and found to contain charred hazel nut shell (Corylus avellana), indeterminate charcoal and a small amount of unidentified charred grain and seed (see Appendix 6).

6.16 Posthole [10008] was identified approximately 2m west of pit [10011] and is thought to be related. It was circular in plan measuring 0.25m in diameter and was 0.25m deep (Figure 6, Plate 14). It had near vertical sides and a rounded base. Its fill, (10007) was a red brown clay silt similar to (10009). An environmental sample of (10007) was processed and found to contain a very small amount (<1g) of burnt mammal bone as well as small quantities of indeterminable charcoal and charred grain (see Appendix 6). There were no packing stones identified within the fill and no evidence of a post having rotted in situ, suggesting it was removed when it went out of use. No other postholes were identified in the vicinity. It may have held a post used to mark the location of the pit.

6.17 Pit [20072] was recorded approximately 7.5m north west of [10011]. It was slightly larger than [10011], measuring 2.26m east-west by 1.65m north-south and was 0.88m deep (Figure 6, Plates 15 and 16, Figure7 Dr139). The fills of the pit were similar to those in pit [10011]. The earliest was a redeposited natural deposit, (20077), up to 0.42m deep. It contained a single flint edge trimmed blade which may date to the Mesolithic or Early Neolithic periods (Webb, Appendix 5). It is thought to be residual in this context. Fill (20077) was covered by charcoal rich dark grey silt clay (20076) which contained 16 sherds of early Beaker pottery and flecks or burnt bone. The pottery sherds represented the partial remains of four separate vessels. A total of eight sherds from the base, body and rim of an 'S' profiled vessel covered with fingernail impressed decoration were identified. The remaining sherds were small and often abraded (Percival, Appendix 4). Two thumbnail scrapers recovered from this context are also thought to date to this period and reinforce the suggestion that this deposit represents midden waste from a domestic context. A Mesolithic flint Microburin and a further undated retouched tool were also recovered from this context (Webb, Appendix 5). The earlier Microburin is thought to be residual. A sample of (20076) was processed and found to contain small quantities (1g) of burnt mammal bone and a quantity of charcoal as well as snail shells (Wilson, Appendix 6). Context (20076) was covered by a series of three brown silt clays (20073, 20074 and 20075). An environmental sample of (20073) was processed and also found to contain a very small amount (2g) of burnt mammal bone as well as small quantities of indeterminable charcoal and charred seed including fat hen (Chenopodium Album) and hazelnut shells (Corylus avellana). A sample of (20075) also contained hazelnut shells, charcoal and snail shells (Wilson, Appendix 6). Fill (20073) contained a chert Scaline Triangle which is thought to date to the Mesolithic period and an undated flint flake (Webb, Appendix 5). This Mesolithic tool is thought to be a residual find.

6.18 Pit/posthole [20052] was located 1.5m south west of pit [20072]. It was circular in plan with an average diameter of 0.49m, had vertical sides and a flat base and was filled by red sandstone in a dark orange brown clay silt matrix (20053). It was 0.3m deep (Figure 6, Plate 17, Figure 7 Dr132). An environmental sample of (20053) was processed and found to contain a quantity of indeterminable charcoal as well as hazelnut shells (Corylus avellana) and charred seed including plantain (Wilson, Appendix 6). This pit/posthole is thought to be associated with pit [20072] due to its proximity.

6.19 Percival suggests that the presence of the abraded and mixed Beaker pottery with burnt animal bone in charcoal rich contexts means these pits may have been used to deposit midden material brought in from elsewhere (Appendix 4). Both pits appear to have been left open for a period allowing some of the material excavated in their creation to slump back into them. The charcoal rich materials containing the burnt bone and pottery were then deposited. Pit [10011] appears to have been subsequently backfilled in a single action while [20072] may have been backfilled in stages.

Later Prehistoric/Iron Age? Activity (Figure 5)

6.20 No dating evidence was retrieved from any of the features assigned to the Later Prehistoric/Iron Age phase of activity. Morphologically the roundhouse is likely to be of later prehistoric origin, as is the large cropmark enclosure recorded to the northeast of the site. It is therefore suggested that, given the absence of any dating material, that the

majority of the Area 20 features are associated to these presumed later prehistoric features. However, it is entirely possible that some of these features may be earlier or later in date.

Round house (RH1) (Figure 8)

6.21 This comprised a penannular gully, [5002], which enclosed a space measuring 9.01m east west by 7.71m north south (Plates 21 and 22) equating to approximately 50m². The gully ranged between 0.47m and 0.81m wide and between 0.12m and 0.35m deep (Figure 9 Dr14). The gully generally had a sharp break of slope at the top of the feature with steep sloping sides and a rounded base (Plates 23 and 24). It was filled by (5003) a mid brown clay silt which appeared to be derivative of the subsoil in the area. At the west of the feature 50% of this fill was made up of red mudstone. The presence of the mudstone in only one area suggests it was not used as a packing material for posts. Stone may have been kept in that area for cooking although no charcoal concentrations or heat shattered stones were observed. An environmental sample of (5003) was processed and found to contain a very small amount (<1g) of burnt bone as well as small quantities of indeterminable charcoal, charred grain and seed (Appendices 5 and 7).

6.22 This curvilinear gully is thought to represent the eaves drip gully of a sub circular structure. There was no evidence of post or stakeholes in this gully. The low quantity of environmental remains and lack of material culture suggest that the building was either in use for a very short period of time or was only used intermittently. A gap in the gully approximately 0.35m across at the south east of the gully is thought to represent a narrow entrance to the structure.

6.23 Shallow oval pit/depression [5007] measured 1.1m long by 0.54m wide and was 0.15m deep. It was recorded directly to the south east of the entrance and was filled by (5008) which was the same as (5003). It may have represented a hollow created by people entering and leaving the structure.

6.24 Three shallow postholes were recorded within the interior of the structure, [5015] towards the north west (Plate 25), [5019] towards the north east (Plate 26) and [5017] towards the south east. Two of the postholes had a diameter of 0.32m (Figure 8) while [5019] had a diameter of 0.45m. They ranged between 0.11m and 0.15m deep. All three postholes were filled by red brown clay silt, very similar to both the subsoil in the area and (5003), the material that filled the surrounding gully. The fill of posthole [5017], (5018), was 70% red mudstone. This may have been used as a packing material to secure a post. The posts had evidently been removed from all of the postholes as no remains were evident during excavation.

Pits surrounding RH1 (Figure 8)

6.25 Three pits were recorded around the exterior of RH1. Pit [5013] was located to the north west (Plate 27), [5009] to the north east and [5011] to the south. All three pits were oval in plan with [5011] much narrower (0.68m) that the other two and [5009] much shorter (1.56m) than the others. The three pits were between 0.28m and 0.56m deep and all had steep sides and rounded bases (Figure 8). All three were filled by mid brown silt clay similar to the fills of those features making up RH1. Two pieces of bone were recovered from the fill of [5011]. These were both fragments of a long bone from an unidentified mammal (Wilson, Appendix 3). A sample of the bone was sent for radiocarbon dating but was not suitable for this process. No further faunal remains or artefacts were recovered from the fills of these features.

Possible Enclosure/Structure (Figure 7)

6.26 Three curvilinear gullies were recorded at the eastern edge of the site which may represent the partial remains of a structure or enclosure. The most northerly of the gullies, [20070] was 6.8m long and continued beyond the edge of the excavation to the

east. (Plate 20) It was up to 0.58m wide and 0.11m deep. Approximately 0.50m to the south of [20070] there was a similar gully, [20078], 3.3m long which also extended beyond the limits of the excavation (Figure 8). A further short length of gully, [20080], ran for 1.1m from [20078] to the south. These two gullies had similar dimensions to [20070]. They were filled by an orange brown clay silt. There was no evidence of posts or other structural remains and the limited area of these features exposed by excavation inhibits interpretation.

Boundary Ditch [20054] and Associated Features (Figure 5)

6.27 Ditch [20054] was recorded running east northeast-west southwest across the northern part of the site terminating approximately 4m from the eastern extent and 1.6m from possible boundary ditch [20062] (Figs 6, 10 and 11). It ran for approximately 55m and continued on beyond the western extent of the site. It had a gradual break of slope at the top with gradually sloping sides and a rounded base (Plate 28). It was between 0.6m and 1.05m wide and between 0.3m and 0.4m deep. It was filled by red brown clay silt (20055) which appeared to be derivative of the surrounding subsoil. This ditch/gully appears to have been a field boundary. The ditch was identified during the geophysical survey previously carried out by Stratascan (2014) but was wrongly labelled as a ditch backfilled in the 1930's. This survey shows the ditch continues on for a further 250m before joining another ditch running across it at right angles (Figure 10).

6.28 Features [20056] (Figure12 Dr114) and [20060] were both located to the north of the eastern terminus of ditch [20054]. They were rectangular and were both just under 2m long with near vertical sides and flat base (Figure 10, Plate 29) Feature [20064], to the south of the ditch, had more gradual sides and a less regular base. All of these features were filled by mid brown clay silt similar to the fill of ditch. These features are all thought to be related to the gap between this field boundary and the possible field boundary outlined below and may represent gate posts.

Possible Boundary Ditch (Figure 10)

6.29 Towards the north east of Area 20 two short ditches were excavated. Linear [20062] was 7.3m long, up to 0.6m wide and 0.3m deep (Figure 10, Plate 18). It had steep sides and a flat base. This linear appeared to continue approximately 11m to the north as [20068] which was similarly aligned and had similar dimensions (Figure 10, Plate 19). These two features may represent a field boundary identified by the geophysical survey previously carried out (Figure 2). In the geophysical report this feature was labelled an undated ditch which does not appear on any maps from 1877 onwards. The geophysical survey shows this linear feature continuing on beyond the limits of the site to the north east and stopping part way across the site to the south. No material culture or organic remains were recovered from these features.

Pits [4003], [4005], [4007] and [4009] (Figure 10)

6.30 Four features were identified at the north east of the site. This area had previously been identified as possibly containing a number of pits by the geophysical survey and a trench had been excavated (Trench 4, Figure 2) targeting these. Pit [4003] was 1.1m long by 0.7m wide and up to 0.32m deep and was orientated north east-south west (Figure 10, Plate 30). It was sub oval in plan with steep sloping sides and a rounded base

6.31 Pit [4005] was located at the north edge of the site. It measured 0.4m in diameter and was up to 0.14m deep. It had steep sloping sides and a flat base (Plate 31). It was filled by (4006), a loose mid grey brown clay silt that contained frequent large pieces of red mudstone and occasional flecks of charcoal. It may have represented a truncated posthole with the mudstone used as packing around a post. The post appeared to have been removed when the feature went out of use as the packing stones were evenly spread around the fill of the feature. There were no other postholes in this area and no artefacts were recovered from the fill of the posthole.

6.32 Two further pits, [4007] and [4009], were identified in this area. Both were roughly oval in plan and had concave sides and flat bases. Both were filled with 80% red mudstone with grey brown silt clay ((4008) and (4010) respectively). Both may be the result of root action. A number of other root related features were identified in this area as well as a rabbit warren.

Pits [20042], [20044], [20046] and postholes [20048], [20050] (Figure 6)

6.33 A cluster of three pits and two postholes was identified at the north of the site to the west of early Bronze Age pit [20072].

6.34 Three pits were grouped together directly to the west of pit [20072]. These pits, [20042], [20044] and [20046] (Figure6), ranged between 0.75m and 0.44m long, 0.34m and 0.6m wide and 0.08m and 0.19m deep (Figure7 Dr109). All three pits were sub oval in plan with gradual sloping sides and rounded bases (Plate 32). Postholes [20048] and [20050] were both circular in plan. Posthole [20048] had a diameter of 0.21m (Figure7 Dr110) and [20050] of 0.3m. Both had vertical sides and flat bases. All five of these features were filled by brown clay silts similar to those that filled RH1 and many of the other features on the site. No artefacts were recovered from any of these features. There purpose is unclear. The postholes may be part of a structure that continues on beyond the northern limit of the site. The postholes contained several stones which may have been used to pack around a post although these stones were spread throughout the fills. This suggests the posts held in them were removed when they went out of use.

Stakehole Gully [20086] and Associated Features (Figure 11)

6.35 Stakehole gully [20086] was identified at the west of the site. It ran for approximately 12m orientated roughly north west-south east (Plates 33 and 34). It was between 0.05 and 0.2m wide and between 0.04 and 0.15m deep (Figure 12). Four sections of this gully were excavated. Cut into the base of this gully in each section was between 8 and 12 stakeholes. These stakeholes averaged 0.1m in maximum diameter with the largest 0.2m and the smallest 0.05m. They ranged in depth between 0.07m and 0.14m. All were filled by orange brown clay silt (20087). A sample of (20087) was processed and found to contain a very small quantity of burnt bone (<1g) with indeterminate charcoal and a small quantity of charred seeds (Appendices 5 and 7).

6.36 Postholes [20108] and [20110] were located half way along the stakehole gully on its east side. They were both sub circular in plan with diameters of 0.3m and 0.35m respectively. Both were 0.08m deep and had steep sides with slightly rounded bases and both were filled with grey brown clay silt. Pit [20084] was located at the southern end of gully [20086] on its east side. It was sub circular in plan with gradual irregular sides and an undulating base. It was filled by orange brown clay silt (20085) similar to that which filled the gully to the west.

6.37 Pit [20040] was located approximately 5m west of gully [20086]. It was sub oval in plan and had a steeply defined eastern edge with the base sloping down to the west (Figure 12, Plate 35). It was filled by orange brown clay silt similar to that which filled gully [20086].

6.38 No artefacts were recovered from any of these features.

6.39 Stakehole gully [20086] may represent part of an animal enclosure made up of a palisade up against field boundary [20054]. Postholes [20108] and [20110] may have held supporting posts for this palisade. The purpose of pits [20084] and [20040] is unclear.

Pits east of Stakehole Gully [20086] (Figures 11)

6.40 A cluster of three circular pits was recorded approximately 15m north east of gully [20086]. The most westerly of these pits, [14006] was circular in plan with convex sides

and base. It was filled by (14005), a brown clay silt that was similar to the fills of RH1 and other features across the site. Pits [14008] and [14010] were located approximately 2.3m to the east of this. They were also circular in plan and were similar in profile to pit [14006] with concave sides and base (Figure 11, Plate 36). Both also contained archaeologically sterile brown clay silt fills ((14007) and (14009) respectively) which appeared derivative of the surrounding subsoil. No artefacts were obtained from these features and their purpose is unclear.

Pits [9002], [9004], [20032], [20027], [20028] and [7005]. (Figures 13)

6.41 A cluster of six pits was recorded towards the western part of the site.

6.42 Pit [9002] measured 3.14m by 0.82m and was up to 0.34m deep. It was orientated ENE-WSW. It's profile comprised regular steep sloping sides and a concave base (Figure 13, Figure 15 Dr102).

6.43 Pit [9004] was located approximately 2m to the south west of [9002]. It measured 4m long and 1.2m at its widest point and was up to 0.4m deep. It orientated east southeast-west northwest. The shape of the base suggested it may have represented two intercutting pits however this was not clear due to the single homogenous fill (Plate 37).

6.44 Pits [20032] and [20027] appeared to be inter-cutting pits at the south west of this group (Plate 38). Both had gradual sloping sides and rounded bases (Figure 13, Figure 15 Dr102). Pit [20032] was roughly circular in plan with a diameter of approximately 1m. It was cut into (20031), the fill of [20027], which appeared to have had similar dimensions.

6.45 Oval pit [20028] was located to the west of [20027] and [20032]. It was orientated north east – south west and measured 2.1m by 1m by 0.48m deep. It had very steep sides and an undulating base (Plate 39). Approximately 0.4m to the north west of this pit was posthole [20029]. This was circular in plan with very steep sides and a rounded base. It was 0.18m deep and had a diameter of 0.26m.

6.46 Pit [7005] was located at the southwest edge of this group. It measured over 1.4m north east-south west by 0.38m north west-south east and was up to 0.2m deep

6.47 No artefacts were recovered from any of these features. Each pit was filled by an orange brown clay silt apart from [7005] which was filled by brown grey silt (7006). The fill of pit [20027], (20031) was a shade darker than the fills of the other pits. The purpose of these pits is unclear.

Pits [20026], [20008], [20016], [20020], [20018], [7003], [20010] and [20014] (Figure 14)

6.48 Eight pits were identified in the southwest part of the site ([20026], [20008], [20016], [20020], [20018] (Figure15 Dr98), [7003], [20010] and [20014] (Figure14). The largest of these pits, [20026] continued on beyond the limits of the site to the west. It was 2.7m long within the site, 1.2m wide at its widest point and 0.5m deep. It had very steep sides and a slightly irregular rounded base (Plate 40). A sample of its fill (20030) was processed and found to contain a small quantity of charcoal as well as possible barley (hordeum vulgare) grains (Appendices 5 and 7).

6.49 The remaining features in this area comprised sub circular or oval pits. The largest of these, [7003], measured 1.4m by 0.6m and was 0.12m deep (Figure 14) and the smallest [20010] measured 0.7m by 0.58m and was 0.17m deep. Other than [7003] all of the features in this area had steep sloping sides and flat/rounded bases (Figure 14, Plates 41 and 42). They were all filled by light brown clay silts similar to the fills of many of the features across the site. A flint end and side scraper was recovered from (20017), the fill of [20018]. These artefacts were in use from the Palaeolithic through to the Bronze Age (Webb, Appendix 5). No further artefacts were recovered from any of these features and their purpose is unclear.

Pits [8005], [8007], [20003], [8009], [20012], [20006], [20106] and [20082] (Figs 14 and 16)

6.50 Eight pits were recorded in the southeast part of the site. These were [8005], [8007], [20003], [8009], [20012], [20006], [20106] and [20082] (Figs 14 and 16). The three largest pits were [20106], [8005] and [20012]. Pit [20012] was located at the southwest edge of the group. It was oval in plan, measuring 1.7m by 0.9m and was 0.15m deep. It was orientated north-south with gradual sloping sides and an undulating base (Figure 14, Plate 43).

6.51 Pit [20106] (Figure 8) was located at the very northern edge of the group. It measured 2.8m by 1m wide and was 0.33m deep. It was oval in plan and was also orientated north-south. It had gradually sloping sides and an undulating base (Plate 44).

6.52 Pit [8005] measured 3.95m by 0.9m wide and was up to 0.6m deep (Plate 45). It was orientated north east-south west and had steep irregular sloping sides and a rounded base (Figure 14). It was cut through small pit [8007]. The shape and size of [8007] was unclear due to this truncation. A sample of (8004), the fill of pit [8005] was processed and found to contain a very small quantity of burnt mammal bone (<1g) as well as charcoal and a small quantity of charred seeds including possible pea (Pisum sp.). Snail shells were also present (Appendices 5 and 7).

6.53 The remaining four pits in the area were all sub circular/oval and measured between 1.1m and 0.83m in maximum diameter and were between 0.19m and 0.45m deep. All had steep sloping sides and flat/rounded bases.

6.54 They were all filled by light brown clay silts similar to the fills of many of the features across the site. No artefacts were recovered from any of the features and their purpose is unclear.

Post Medieval

Pit [8009] (Figure 14)

6.55 Pit [8009] had a diameter of approximately 1.1m. It was filled by a charcoal rich clay silt. This pit is thought to be relatively modern as it contained very large hard lumps of charcoal and was cut through the subsoil (Figure 14, Figure15 Dr90, Plate 46).

Fence Line (Figure 11)

6.56 A post-medieval fence line was recorded on the site. This was recorded running roughly north west-south east across the very west end of the site. It was made up of eleven postholes, nine towards the northwest part of the site (postholes [2088, 20090, 20092, 20094, 20096, 20098, 20100, 20102, 20104] and two at the very south west (postholes [20022 and 20024 (Figure11)]. The postholes were rectangular and averaged 0.3m by 0.2m by 0.15m deep (Plate 47, Figure12 Dr131). They were filled by dark grey brown clay silt that appeared to be derivative of the topsoil at the site. Posthole [20102] cut through (20055), the fill of possible 18th century ditch [20054]. No artefacts were recovered from any of the features. They are thought to represent a post-medieval or modern fence line.

7 Conclusion

Early Bronze Age

7.1 Evidence of Early Bronze Age activity in the East Midlands is scarce (Cooper, 2006) and much of the known archaeological resource from this period in Derbyshire is located towards the uplands of the north and west of the county. Most of these sites are ritual or funerary monuments with over 400 barrows (Hodges and Smith, 1991) although cave sites, field systems and habitation sites are also known. There is a significant cluster of barrows between Bradwell and Brassington some 15 to 20km to the west of this site, including the monument complexes and field systems of Gibbet Moor, Beeley Moor and around Leash Fen on the moors above Gardom's Edge (Brightman and Waddington 2011). There are a scatter of monuments to the east of the site, again predominantly made up of barrows as well as several cave dwellings such as Pinhole Cave at Creswell Crags. The prevalence of upland sites in the area most likely reflects their better preservation away from Medieval and Post-medieval ploughing, quarrying and landscaping. Most remains from the lower lying areas dating to the Bronze Age comprise isolated finds spots, of flint scatters and odd finds including barbed-and-tanged arrowheads, perforated axe-hammers and scrapers (ibid.).

7.2 There is a dearth of information from the general Staveley area from this period, presumably due to little development having taken place. Indeed Brightman and Waddington state that only 170 Bronze Age sites have been found in the Coalfields Area (Plate 48) mainly made up barrows/cairns (73) and findspots (34). Near Dronfield at Hall Farm and Birchin Lee Farm, approximately 10km to the north west of this site, evidence was recovered in the 1920s for two early Bronze Age cremations in inverted pots, one a Collared Urn, the other a food vessel. A substantial amount of lithic artefacts including polished shale tools were also recovered. It was thought at the time that the cremation in the Collared Urn had been under a barrow as a large amount of stone was noted in the soil in the vicinity (Hart 1981). This site was on a well-defined plateau between 220-240m AOD which commands views in almost all directions.

7.3 At Tibshelf Services, approximately 14km to the south of the site, an evaluation carried out by Cotswold Archaeological Trust in 1995 revealed a terminal of a possible enclosure ditch containing a saddle quern, lithics and 135 sherds of late Bronze Age pottery (Brightman and Waddington 2011).

7.4 The size and nature of the pits found on this site is similar to pits found within barrows in the greater area such as at Weston 1 (Reaney 1968) located approximately 20km to the south however the bone recovered from them has been identified as coming from a large mammal (Appendices 5 and 7) and Sarah Percival has suggested that the features contain redeposited midden waste. She suggests this due to the mixture of vessel sherds, their varying state of preservation and that sherds from similar vessels have been found previously in midden material (Appendix 4). Beaker pottery found in funerary environments often dates to the period 2500-1500 BC (Clay 2006) whereas dating evidence for non-funerary Beaker sherds suggests the features might date to between 2490 and 2200 BC (Percival, Appendix 4). Two thumbnail scrapers recovered from the pits reinforce the idea the midden material was from a domestic source. Further lithics are either undated or considered residual (Webb, Appendix 5). Sample processing has identified further burnt animal bone in posthole [10008] and burnt hazelnut shells from both of the pits as well as posthole [20052] (Appendices 5 and 7).

7.5 In pit [10011] the midden material appears to have been sealed in a single action while pit [20072] appears to have been filled in at least three phases. The presence of the two postholes near to the pits suggests posts were set as markers of the pits. The posts appear to have been taken from the postholes before they rotted away.

Later Prehistoric/Iron Age?

7.6 Information for the Iron Age in Derbyshire is scarce. The uplands contain a substantial number of farmsteads and small settlement sites which are thought to be of late prehistoric or Romano-British date while many more un-investigated cropmark enclosures in the Trent Valley may date to this period.

7.7 There are eight known hillforts within the Peak District. Few of these have been investigated archaeologically (Brightman and Waddington 2011).

7.8 Excavation at Mam Tor, Gardom's Edge and Ball Cross Hillforts have all identified quantities of Late Bronze Age pottery with some activity dated to the early Iron Age (Hart 1981).

7.9 There are only thirteen possible Iron Age sites known within the Coalfield Area. Six enclosures, including the one directly to the east of this site, have been identified by aerial photography carried out by English Heritage in 2001. These have been attributed to the Iron Age or possibly Romano-British period but this is based only on form and none have been investigated (Brightman and Waddington 2011). Three, including this one, are rectilinear and located in fields to the west of Bolsover. These were thought to be either Romano-British or Iron Age, as similar enclosures are known from further south near Ockbrook and Borrowash. The nearest of these enclosures, apart from the enclosure directly to the east of this site, is a curvilinear earthwork (EH Pastscapes Monument No. 1433489) approximately 500m north of Shuttlewood and approximately 1km south east of the site (Heritage Gateway).

7.10 The remaining sites in the area recorded on the Derbyshire HER represent six spot finds of which the nearest are two querns and two coins. Their exact find locations are unknown. The final feature is a ditch recorded in the centre of Chesterfield during unpublished excavations by the University of Manchester Archaeology Unit. It was known to pre-date the Roman constructions in the town, but little more is known about the feature (Brightman and Waddington 2011).

7.11 The possible enclosure identified to the east of this site appears to be rectilinear in plan measuring approximately 100m north - south by 70m east – west. There is a possible circular structure to the west of the centre of the enclosure and may be further structures outside of the enclosure to the north east and south west. The structure RH1 is also visible in the aerial photographs (Plate 1). Further possible features visible in the photograph were not identified.

7.12 The features identified at the site from this period appear to represent a circular structure, a further possible structure or small enclosure and associated field boundaries and pits.

7.13 Structure RH1 had a diameter of between 7.71m and 9.01m which fits comfortably within the national size range of this monument type (Hunter and Ralston 2009). The structure is thought to have comprised at least three central posts with an external wattle and daub or cob wall. Rainwater runoff from the roof would have formed the surrounding shallow gully. The entrance to the structure appears to have been at the south east which is common. Other than the three post holes no internal features were identified.

7.14 Within the wider East Midlands area a variety of building types occur in the late Bronze Age/Iron Age. Rectangular posthole and beam-slot building (Eye Kettleby, Leicestershire; Deeping St James), circular structures (Kirby Muxloe, Glen Parva, Deeping St James, Gardom's Edge and Crick) and double-ring roundhouses (Willow Farm, Castle Donington, Leicestershire; Ridlington, Rutland and Swarkestone Lowes, Derbyshire) are all known from this period. A post-built semi-circular structure of similar date has been identified at Gamston. These are typologically thought to represent working areas (Cooper 2006).

7.15 The lack of organic material and material culture recovered from RH1 and all of the other features which are considered Iron Age suggests that the site was in use for a very short period of time or that it was only used occasionally. No artefacts were recovered from any other features attributed to this period. The purpose of the pits that were spread across the extent of the site is unclear.

Post-Medieval

7.16 The Post-Medieval features identified on the site represent a charcoal rich pit and a fence line.

8 Discussion

8.1 The original trial trench evaluation demonstrated some correspondence between magnetic anomalies identified during geophysical survey and archaeological features. No remains of the tramline were identified in Trenches 1 and 3, while anomalies that were thought to be pits in Trench 2 were found to be areas of iron panning. Pits were identified in Trench 4 as had been suggested and a circular structure recorded in Trench 5 also correlated with geophysical survey results. A suggested circular building or enclosure in Trench 6 was not identified. Iron Age ditch [20054] was also identified during the geophysical survey but has been interpreted as modern.

8.2 At least three phases of activity were identified across the site.

8.3 Two pits and two postholes have been dated to the Early Bronze Age. These pits both contain a charcoal rich fill containing Beaker pottery and burnt animal bone. The charcoal rich deposits in the pits are thought to represent midden deposits brought to the site and put into the pits in a ritual manner. The pits then appear to have been backfilled. The postholes related to each one may have held posts to mark the pits.

8.4 The probable Later Prehistoric/Iron Age phase of the site was represented by a circular structure, two field boundaries with associated stakehole line and a number of pits. The structure entrance was recorded at its south east and three postholes were recorded within its interior. The spread of pits covering the site contained similar material to the foundation trench of RH1 and are thought to be related. Due to a lack of evidence their purpose is unclear.

8.5 The identification of these features is an important addition to the local record, especially those of probable Iron Age date, which are particularly unusual in the area. The sparsity of material culture from the features postulated as Iron Age in date is striking. If this dating is correct and the low level of survival of material culture is typical of settlement sites in the locality then it would support speculation that the current dearth of Iron Age sites may be more apparent than real.

8.6 In looking at features related to monuments previously identified by Aerial photography this project has had an opportunity to address research priority 3D, as set out in the recent East Midlands Updated Research Agenda and Strategy (Knight, Vyner and Allen 2012). This is to "Asses the regional air photographic and LiDAR resource". It suggests that the enclosure dates to the Iron Age although this is due solely to the morphology of the structure identified on the site which is thought to be related.

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Appendix 1: Context Register

Context	*Trench/Area*	*Description*
1000	1	Topsoil
1001	1	Natural subsoil
1002	1	Cut of field drain
1003	1	Stony fill of filed drain [1002]
1004	1	Cut of shallow modern gully
1005	1	Fill of gully [1004]
2000	2	Topsoil
2001	2	Natural subsoil
2002	2	Cut of field drain
2003	2	Fill of field drain
2004	2	Iron panning lens
3000	3	Topsoil
3001	3	Natural subsoil
3002	3	Cut of field drain
3003	3	Fill of field drain [3002]
3004	3	Cut of shallow modern gully
3005	3	Fill of gully [3004]
4000	4	Topsoil
4001	4	Subsoil
4002	4	Natural subsoil
4003	4	Cut of pit
4004	4	Fill of pit [4003]
4005	4	Cut of posthole
4006	4	Fill of posthole [4005]
4007	4	Cut of pit
4008	4	Fill of pit [4007]
4009	4	Cut of pit
4010	4	Fill of pit [4009]
5000	5	Topsoil

Context	*Trench/Area*	*Description*
5001	5	Subsoil
5002	5	Cut of ring ditch
5003	5	Fill of ring ditch [5002]
5004	5	Same as 5002
5005	5	Same as 5003
5006	5	Natural subsoil
5007	5	Cut of pit
5008	5	Fill of pit [5007]
5009	5	Cut of pit
5010	5	Fill of pit [5009]
5011	5	Cut of pit
5012	5	Fill of pit [50011]
5013	5	Cut of pit
5014	5	Fill of pit [50013]
5015	5	Cut of posthole within ring ditch
5016	5	Fill of posthole [5015]
5017	5	Cut of posthole within ring ditch
5018	5	Fill of posthole [5017]
5019	5	Cut of posthole within ring ditch
5020	5	Fill of posthole [5019]
6000	6	Topsoil
6001	6	Subsoil
6002	6	Natural subsoil
7000	7	Topsoil
7001	7	Subsoil
7002	7	Natural subsoil
7003	7	Cut of pit
7004	7	Fill of pit [7003]
7005	7	Cut of pit
7006	7	Fill of pit [7005]
8001	8	Topsoil

Context	*Trench/Area*	*Description*
8002	8	Subsoil
8003	8	Natural subsoil
8004	8	Fill of linear [8005]
8005	8	Cut of linear
8006	8	Fill of truncated pit [8007]
8007	8	Cut of truncated pit
8008	8	Burnt fill of pit [8009]
8009	8	Cut of pit cutting subsoil
9000	9	Topsoil
9001	9	Natural subsoil
9002	9	Cut of linear
9003	9	Fill of linear [9002]
9004	9	Cut of oval pit
9005	9	Fill of oval pit [9004]
10000	10	Topsoil
10001	10	Subsoil
10002	10	Natural subsoil
10003	10	Upper fill of pit [10006]
10004	10	Secondary fill of pit [10006]
10005	10	Primary fill of pit [10006]
10006	10	Cut of pit
10007	10	Fill of posthole [10008]
10008	10	Cut of posthole
10009	10	Upper fill of pit [10011]
10010	10	Secondary fill of pit [10011]
10011	10	Cut of pit
10012	10	Fill of gully [10013]
10013	10	Cut of gully
10014	10	Primary fill of pit [10011]
11000	11	Topsoil
11001	11	Natural subsoil

Context	*Trench/Area*	*Description*
11002	11	Cut of ditch
11003	11	Fill of ditch [11002]
11004	11	Cut of shallow linear
11005	11	Fill of shallow linear [11004]
11006	11	Subsoil
12000	12	Topsoil
12001	12	Natural subsoil
13000	13	Topsoil
13001	13	Subsoil
13002	13	Natural subsoil
14000	14	Subsoil
14001	14	Topsoil
14002	14	Natural subsoil
14003	14	Fill of modern linear [14004]
14004	14	Cut of modern linear
14005	14	Fill of pit [14006]
14006	14	Cut of pit
14007	14	Fill of pit [14008]
14008	14	Cut of pit
14009	14	Fill of pit [14010]
14010	14	Cut of pit
14011	14	Fill of linear [14012]
14012	14	Cut of linear
1500	15	Topsoil
1501	15	Subsoil
1502	15	Modern machine-cut trench
1503	15	Topsoil/natural mix fill of [1502]
1504	15	Natural
20000	20	Topsoil
20001	20	Subsoil
20002	20	Natural

Context	*Trench/Area*	*Description*
20003	20	Ovoid shaped pit
20004	20	Dark orange brown clay silt upper fill of [20003]
20005	20	Mid orange brown clay silt primary fill of [20003]
20006	20	Oval shaped pit
20007	20	Red brown clay silt fill of [20006]
20008	20	Oval/sub-circular shaped pit
20009	20	Mid orange brown clay silt fill of [20008]
20010	20	Small oval pit
20011	20	Mid reddish brown clay silt fill of [20010]
20012	20	Elongated oval shaped pit
20013	20	Mid orange brown clay silt fill of [20012]
20014	20	Irregular shaped feature
20015	20	Mid orange brown clay silt fill of [20014]
20016	20	Bell-shaped pit
20017	20	Dark strong brown clay silt and sandstone packing fill of [20016]
20018	20	Small circular pit cutting [20020]
20019	20	Mid orange brown clay silt fill of [20018]
20020	20	Pit cut by [20018]
20021	20	Light orange brown clay silt fill of [20020]
20022	20	Posthole/pit
20023	20	Dark orange brown clay silt fill of [20022]
20024	20	Posthole
20025	20	Mid orange brown clay silt fill of [20024]
20026	20	Elongated pit/terminus of NE/SW linear
20027	20	Oval pit cutting [20032]
20028	20	Elongated oval pit
20029	20	Posthole
20030	20	Mid orange brown clay silt fill of [20026]
20031	20	Dark orange brown clay silt fill of [20027]
20032	20	Pit cut by [20027]
20033	20	Mid orange brown clay silt fill of [20032]

Context	*Trench/Area*	*Description*
20034	20	Mid-dark orange brown clay silt fill of [20028]
20035	20	Light orange brown clay silt and stone packing of [20029]
20036	20	Possibly machine cut trench
20037	20	Light orange brown silty clay upper fill of [20036]
20038	20	Redeposited natural secondary fill of [20037]
20039	20	Mid-dark reddish brown clay silt primary fill of [20037]
20040	20	Irregular oval shaped pit/tree throw
20041	20	Mid orange brown clay silt fill of [20040]
20042	20	Oval shaped posthole
20043	20	Dark reddish brown clay silt fill of [20042]
20044	20	Base of oval shaped pit
20045	20	Dark orange brown clay silt fill of [20044]
20046	20	Oval shaped pit
20047	20	Dark orange brown clay silt fill of [20046]
20048	20	Oval shaped posthole
20049	20	Dark orange brown clay silt fill of [20048]
20050	20	Posthole
20051	20	Mid-dark orange brown clay silt fill of [20050]
20052	20	Oval shaped pit/large posthole
20053	20	Dark orange brown clay silt and stone packing fill of [20051]
20054	20	NE/SW aligned linear ditch
20055	20	Mid-dark orange brown clay silt fill of [20054]
20056	20	Rounded-off rectangle shaped pit
20057	20	Dark yellowish brown clay silt and natural fill of [20056]
20058	20	Posthole
20059	20	Dark orange brown clay silt fill of [20058]
20060	20	Rounded-off rectangle shaped pit
20061	20	Mid-dark orange brown clay silt fill of [20060]
20062	20	NW/SE aligned ditch segment
20063	20	Mid-dark orange brown clay silt fill of [20062]
20064	20	Irregular shaped pit/tree throw

Context	*Trench/Area*	*Description*
20065	20	Mid orange brown clay silt fill of [20064]
20066	20	VOID
20067	20	VOID
20068	20	NW/SE aligned ditch segment
20069	20	Mid orange brown clay silt fill of [20068]
20070	20	NW/SE aligned linear ditch segment
20071	20	Mid-dark orange brown clay silt
20072	20	Large oval pit containing Bronze Age Pot
20073	20	Mid grey brown silty clay upper fill of [20072]
20074	20	Mixed green brown silty clay loam fill of [20072]
20075	20	Dark grey brown silty clay tertiary fill of [20072]
20076	20	Dark grey silty clay burnt secondary fill of [20072] containing Bronze Age pot
20077	20	Redeposited natural primary fill of [20072]
20078	20	NW-SE aligned linear
20079	20	Mid orange brown clay silt fill of [20078]
20080	20	N-S aligned linear/pit cutting [20078]
20081	20	Dark orange brown fill of [20080]
20082	20	Small ovoid pit
20083	20	Mid brown red silty clay fill of [20082]
20084	20	Small oval pit/tree throw
20085	20	Mid-dark orange brown clay silt fill of [20084]
20086	20	NNW-SSE aligned line of stakeholes
20087	20	Mid orange brown clay silt fills of [20086]
20088	20	Rectangular modern posthole
20089	20	Dark grey brown clay silt fill of [20088]
20090	20	Rectangular modern posthole
20091	20	Dark grey brown clay silt fill of [20090]
20092	20	Rectangular modern posthole
20093	20	Dark grey brown clay silt fill of [20092]
20094	20	Rectangular modern posthole
20095	20	Dark grey brown clay silt fill of [20094]

Context	*Trench/Area*	*Description*
20096	20	Rectangular modern posthole
20097	20	Dark grey brown clay silt fill of [20096]
20098	20	Rectangular modern posthole
20099	20	Dark grey brown clay silt fill of [20098]
20100	20	Rectangular modern posthole
20101	20	Dark grey brown clay silt fill of [20100]
20102	20	Rectangular modern posthole
20103	20	Dark grey brown clay silt fill of [2102]
20104	20	Rectangular modern posthole
20105	20	Dark grey brown clay silt fill of [20104]
20106	20	Large ovoid pit
20107	20	Dark orange brown clay silt fill of [20106]
20108	20	Shallow posthole
20109	20	Grey brown clay silt fill of [20108]
20110	20	Shallow posthole
20111	20	Grey brown clay silt fill of [20110]

Appendix 2: The worked flint by Peter Webb

Introduction

Excavations carried out by Trent & Peak Archaeology in November and December 2014 at the site of proposed development land adjacent to the former Seymour Colliery at Staveley, Derbyshire recovered nine chipped stone artefacts. All of the lithics were recovered from stratified contexts: one from pit [10011], one from pit [20018] and seven from pit [20072].

Methodology

Artefacts were studied individually under 20x magnification hand-lens for signs of retouch and indications of use-wear to allow categorisation based on tool form, presence of retouch and use-wear.

Results

Context	Feature	ES number	Material	Source	Piece type	Tool type	Comment
(10010)	[10011]	ES7 1of 3	Flint	Nodule	Debitage	Flake	15% cortex
(20017)	[20018]	ES24 1of2	Flint	Nodule/gravel	Retouched tool	End-and-side scraper	
(20073)	[20072]	ES13 1of2	Flint	Gravel	Debitage	Flake	
(20073)	[20072]	ES13 2of2	Chert	Gravel	Retouched tool	Microlith. Scalene triangle	Type 7a (Jacobi 1978)
(20076)	[20072]	ES16 1of4	Flint	Nodule	Retouched tool	Thumbnail scraper	
(20076)	[20072]	ES16 1of4	Flint	Gravel	Debitage	Microburin	
(20076)	[20072]	ES16 1of4	Flint	Nodule	Retouched tool	Miscellaneous retouch	
(20076)	[20072]	ES16 4of4	Flint	Nodule	Retouched tool	Thumbnail scraper	90% cortex
(20077)	[20072]	ES17 1of2	Flint	Nodule/gravel	Retouched tool	Edge-trimmed blade	

Discussion

The material recovered from the Seymour Colliery site is composed predominantly of possible nodule flint (67%), with occasional gravel flint (22%) and rare (11%) chert pieces. With no flint seams in the vicinity of the site, the nodule material is likely derived from clay with flint deposits, with the remaining materials from local tertiary gravel sources. The small size of all of the pieces indicates that access to the raw materials was limited and tools curated and retouched until it was no longer practical to do so.

Of the nine pieces recovered, six (67%) are retouched tools and the remainder debitage. Debitage is usually undiagnostic, and the two flakes bear this out. The microburin, however, indicates the production of microliths, and as such Mesolithic activity at the site. This suggestion is consolidated by the presence of the scalene triangle microlith (Figure 18,1), recovered from the same feature. Whilst the two pieces are of composed of different materials, and as such cannot represent the production of the same tool, they both indicate Mesolithic activity. The edge-trimmed blade could also belong to this period, though may equally be Early Neolithic in date.

The thumbnail scrapers (Figure 18, 2 and 3), both recovered from the same context within the same pit, are characteristically Early Bronze Age in date and indicated domestic activity through the possible preparation of skins. Similarly, the end- and side-scraper (Figure 18,4) suggests domestic activity, though it is not diagnostic of a particular period in prehistory, being of a type produced from the Palaeolithic through to the Bronze Age. Its size and production on a blade, however, suggest that it is likely to relate to the Mesolithic activity identified through the microlith.

The presence of the thumbnail scrapers complements the ceramic evidence in the dating of pit [20072] to the Early Bronze Age. This would indicate that the Mesolithic artefacts within the same feature are residual in nature, and that the other material from this period is similarly residual, and as such do not date their respective features

Conclusions

The restricted number of artefacts recovered means that only tentative conclusions can be reached as to the activity represented by the assemblage. This in itself, along with the absence of primary cortical flakes and objective pieces indicate that extensive knapping was not carried out at the site. The diagnostic artefacts suggest that there were two periods of use; the Mesolithic and Early Bronze Age, though this is not to rule out continued use of the site in between.

The Mesolithic activity is likely to have been related to hunting, as indicated by the presence of a single microlith (crop processing would require multiple microliths), whilst the microburin would suggest at the production of microlithis. This would suggest that the site was a hunting camp that saw the repair of hunting equipment.

The Bronze Age activity on the site represented by the lithic evidence is relatively inconclusive as to site type. Scrapers are a common tool form utilised on all site types, and as such cannot indicate site function.

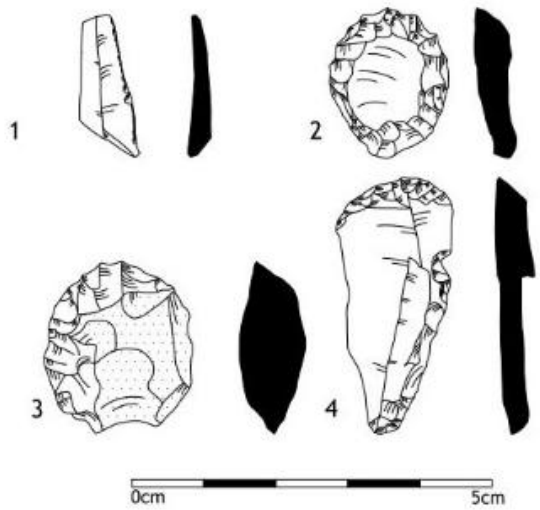


Fig 18 Retouched tools

Recommendations for further analysis

No further analysis is required but the flint assemblage should be retained as part of the site archive for future reference.

Appendix 3 : The Prehistoric Pottery by Sarah Percival

Introduction

A total of 21 sherds weighing 199g were collected from the fills of two pits. All the sherds are from later Neolithic early Bronze Age Beakers. A maximum of six vessels were represented, each by fragmentary sherds of varying size and condition including some fresh and some heavily abraded pieces. The context of recovery suggests that the Beaker is derived from domestic rather than funerary activity.

Fabric

Four fabrics were identified in two fabric groups. Grog-tempered fabrics, G1-G3, form the most numerous group contributing 98% of the total assemblage (196g). These fabrics are characterised by the presence of moderate to fine sub-angular inclusions of pale crushed grog within a fine clay matrix. One fabric, G1, contains sparse pieces of fine angular burnt flint up to 3mm alongside the grog.

Fabric Code	Fabric Description	Quantity	Weight (g)
G1	Fine salmon pink orange fabric of silty clay with moderate sub-angular pale grog, sparse angular flint.	14	180
G2	Crumbly pale orange silty clay with common sub-rounded grog	5	8
G3	Fine silty pale orange fabric with fine grog inclusions	1	8
Q1	Fine sandy reduced fabric with moderate small rounded quartz and sparse shell	1	3
Total		21	199

Quantity and weight of prehistoric pottery by fabric

Grog forms a common component of Beaker assemblages both nationally and regionally and is found locally in pottery from Willington Derbyshire (Cooper 2013, Table 3; Woodward and Tinsley, 2009) and Whitemoor Haye, Staffordshire, (Ixer 2002) which each produced a similar range of grogged fabrics to those found here.

The reduced sandy fabric Q1 is represented by a single sherd, a rim found in pit 20072. The fabric contained sparse shell inclusions, again similar to Beaker sherds found at Willington (Woodward and Tinsley 2009, 85).

Form and Decoration

The assemblage comprises sherds from a maximum of six vessels. These include eight sherds from the rim, body and base of a highly decorated vessel from pit 20072 (Fig 19, P1, P2 and P3). The Beaker has profuse fingernail-impressed decoration formed of lightly pinched 'crow's feet' which cover the rounded, lower body down to the base of the vessel which is stepped (Fig 19, P2 and P3). The rim is flat and slightly in-turned (Fig 19, P1) and is decorated with pinched fingernail impressions forming a horizontal band beneath the rim and vertical panels below. The form of the Beaker is uncertain but the in-turned neck and bulbous body suggest it could be an 'S' profile Beaker, perhaps of Clarke's late northern type (Needham 2005, fig.10; Clarke 1970, fig.VII.) Paired fingernail decoration is noted on several funerary Beakers from Derbyshire (Clarke 1970, fig. 910)

The remainder of the vessels are represented by small scrappy sherds. An abraded sherd in heavily grogged fabric G2, from pit 20076, has possible incised decoration (not illustrated). A rim from a third vessel, in sandy fabric with sparse shell is out-turned with a rounded rim terminal and is perhaps from a globular Beaker (Fig 19, P4). The fourth vessel represented within the assemblage from pit 29972 has dense comb-impressed decoration forming in-filled lozenges (P5, cf Clarke 1970, fig. 934).

Sparse remains from a further two Beakers were found in pit 10011. These comprise a fresh body sherd with incised (?horizontal) bands filled with fingernail impressed or incised vertical slashes perhaps opening into filled panels (P6) being similar to an example from Edingthorpe, Norfolk (Bamford 1982, fig.38, c). The last vessel is represented by four small abraded but joining body sherds with complex comb-impressed decoration probably forming a filled lozenge (not illustrated).

Deposition

The Beaker was recovered in small quantities from two pits which each had multiple fills. These appeared to comprise layers of sterile fill from the surrounding subsoil interspersed with a dark deposit containing artefacts including large and small pot sherds from several vessels in varying states of preservation. These darker, artefact producing layers perhaps represent dumps taken from midden deposits (Woodward 2002, 1041).

Discussion

The Beakers display a range of fingernail, comb-impressed and incised decoration, a mix commonly found within domestic assemblages (Bamford 1982) and perhaps represent redeposited refuse with a long pre-burial circulation, collected from storage in a midden, incorporated into the fills of pits and covered over with sterile subsoil. Pit 20072 includes a proportion of a single vessel decorated with fingernail-impressed decoration, alongside smaller scraps of pottery from three further vessels. It is possible that the more complete vessel was recognisable to the depositor and had been deliberately retrieved for deposition, in practices comparable with those suggested for the formation of Beaker deposits at Windmill Hill and Lockington (Woodward 2002, 1041).

Frances Healy has recently reviewed dating evidence for non-funerary Beaker deposits, suggesting that they began around 2490-2200 cal BC (955 probability), probably 2350-2239 cal BC (68% probability) (Healy 2012, 158).

Recommendations for further analysis

No further analysis of the Bronze Age pottery is required but the assemblage should be retained as part of the site archive for future reference.

Illustrated Sherd Catalogue

P1: Beaker, fabric G1, sherd AAE, Pit 20072, fill 20076

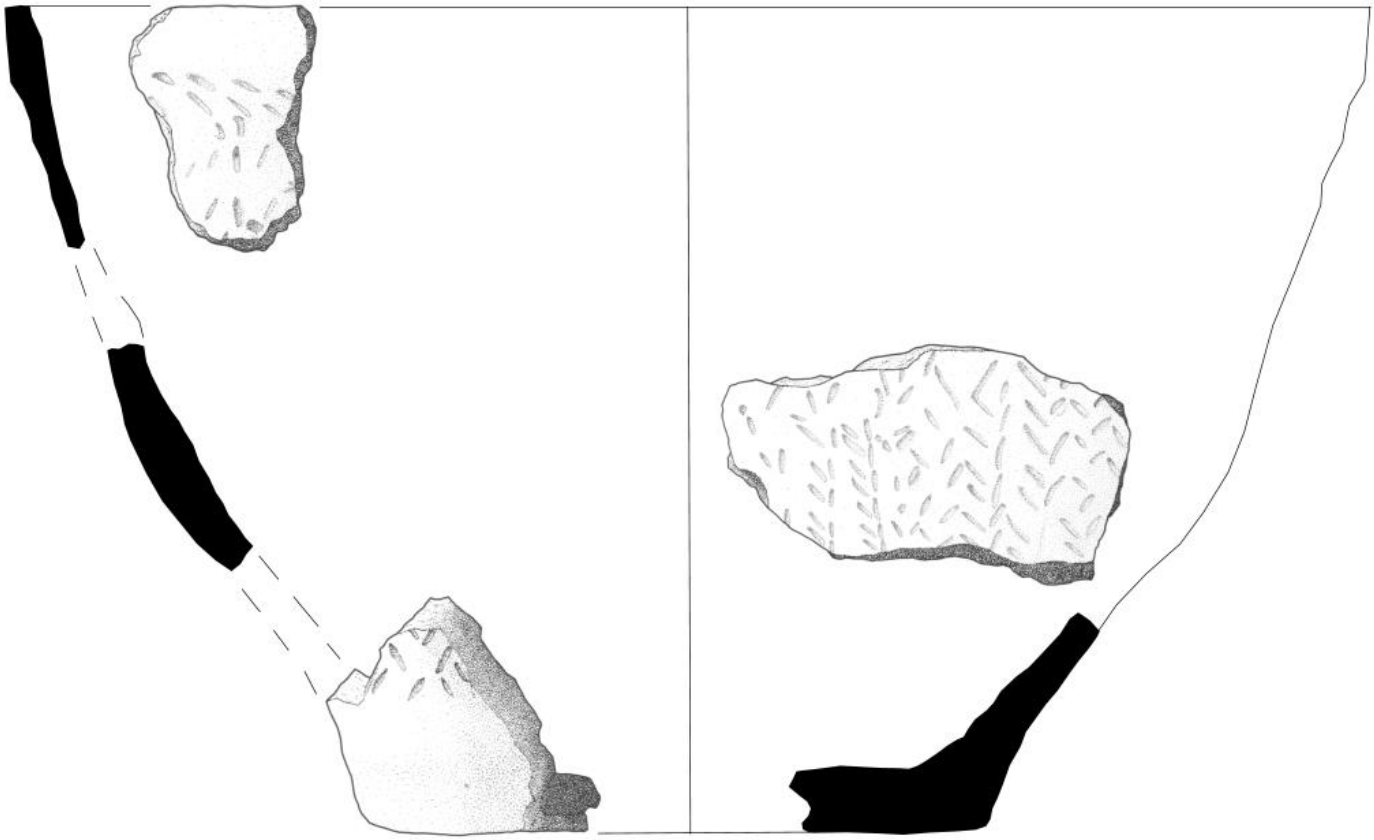
P2: Beaker, fabric G1, sherd AAD, Pit 20072, fill 20076

P3: Beaker, fabric G1, sherd AAB, Pit 20072, fill 20076

P4: Beaker, fabric Q1, sherd AAM Pit 20072, fill 20077

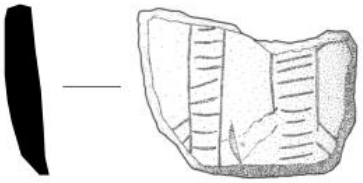
P5: Beaker, fabric G1, sherd AAH, Pit 20072, fill 20076

P6: Beaker, fabric G3, sherd AAK, Pit 10011, fill 10009



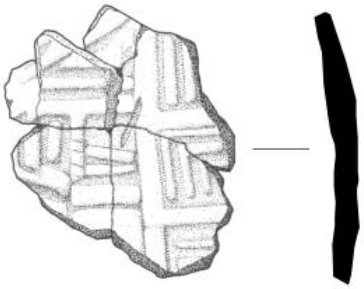
P1, P2 and P3: Beaker, fabric G1, sherds AAB, AAD and AAE. Pit [20072], fill (20076).

2.5cm



P6: Beaker, fabric G3, sherd AAK. Pit [10011], fill (10009)

P4: Beaker, fabric Q1, sherd AAM. Pit [20072], fill (20077)



P5: Beaker, fabric G1, sherd AAH. Pit [20072], fill (20076)

2.5cm

Appendix 4: The Faunal Remains by Alison Wilson

Bone was recovered from a single context (5012)/[5011] and consisted of two separate fragments of long bone from an unidentified mammal. The fragments are both weathered, with considerable flaking of the bone surface suggesting a burial environment which cycled between wet and dry throughout the year. The assemblage is unfortunately not large enough to be able to draw any real conclusions about animal husbandry or butchery but does suggest that domesticated animals were probably present on the site during its occupation.

Quantification of faunal remains

Context	Taxa	Element	Weight
(5012)	Unidentified	Long bone	0.31g
(5012)	Unidentified	Long bone	2.92g

Recommendations for further analysis

No further analysis of the animal bone is required. Given its limited archaeological value it is recommended that the animal bone assemblage be discarded.

Appendix 5: The Palaeoenvironmental remains by Alison Wilson

Introduction

This report provides an assessment of the palaeo-environmental samples retrieved from the site of the former Seymour Colliery, Staveley, Derbyshire.

As part of the environmental sampling strategy, a total of 26 samples were taken from various contexts. The sample size was 30 litres when possible, although 10 litre samples were taken when features were too small for full sampling.

The samples are listed in table form below, with a brief description of the deposit from which the samples were taken and any environmental material found.

Method

The soil samples were processed in the following manner;

Sample weight and volume was measured prior to processing and a sub-sample was removed in case any further analysis should be required. The samples were then processed using a 'Siraf' flotation tank (Williams 1973), using a sieve with a 250µ mesh and an internal 1mm mesh for the residue.

Both the residues and flots were dried. A total of 434 litres of soil were processed in this way.

The weight and volume of the residue was recorded, before it was sorted by eye for any environmental and archaeological finds. These were picked out, noted on the assessment sheet and bagged. A magnet was run through the residue in order to recover any magnetised material such as hammerscale.

The flot of each sample was studied using 10x magnification and the presence of environmental finds noted and their abundance and species recorded on the assessment sheet. The flots were

then bagged and along with the finds from the residue constitute the material archive of the samples.

Table 1: environmental finds from feature [5017], fill (5018)
Environmental sample no: 01
Sample volume before processing: 8 litres
Sample weight before processing: 10 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 11- 50 indet. comminuted fragments, most <2mm
Charred seed	An abundance of 1-10

Table 2: environmental finds from feature [5002] fill (5003)
Environmental sample no: 02, 03, 04
Sample volume before processing: 73 litres
Sample weight before processing: 87.5 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 11-50 indet. comminuted fragments <2mm
Charred grain	Abundance 1-10, indet.
Charred seed	Abundance 1-10, indet.
Snail	Abundance 11-50, indet.
Large mammal bone	<1g residue - burnt

Table 3: environmental finds from feature [4004] fill (4005)
Environmental sample no: 05
Sample volume before processing: 7 litres
Sample weight before processing: 9 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 11-50 indet. comminuted fragments <2mm

Table 4: environmental finds from feature [5013] fill (5014)
Environmental sample number: 06
Sample volume before processing: 10 litres
Sample weight before processing: 14 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 11-50 indet. comminuted fragments, most <2mm
Charred seed	Abundance 1-10, indet.
Snail	Abundance 11-50, indet.

Table 5: environmental finds from feature [10011] fill (10010)
Environmental sample number: 07
Sample volume before processing: 28 litres
Sample weight before processing: 30 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance >250 indet. comminuted fragments, most <2mm
Charred grain	Abundance 1-10, indet.
Charred seed	Abundance 1-10, Hazelnut shell

Table 6: environmental finds from feature [10011] fill (10009)
Environmental sample number: 08
Sample volume before processing: 18 litres
Sample weight before processing: 20 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance >250 indet. comminuted fragments, most <2mm
Charred seed	Abundance 1-10, Hazelnut shell, indet. stem

Table 7: environmental finds from feature [50011] fill (50012)
Environmental sample number: 09
Sample volume before processing: 39 litres
Sample weight before processing: 42 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 1-10 indet. comminuted fragments, most <2mm
Charred seed	Abundance 1-10, indet.
Snail	Abundance 11-50, indet.

Table 8: environmental finds from feature [10008] fill (10007)
Environmental sample number: 10
Sample volume before processing: 3 litres
Sample weight before processing: 4 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance >250 indet. comminuted fragments, most <2mm
Charred grain	Abundance 1-10, indet.
Large mammal bone	<1g residue - burnt

Table 9: environmental finds from feature [20052] fill (20053)
Environmental sample number: 12
Sample volume before processing: 16 litres
Sample weight before processing: 21 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 51-150 indet. comminuted fragments <2mm
Charred grain	Abundance 1-10, indet.
Snail	Abundance 1-10, indet.

Table 10: environmental finds from feature [20072] fill (20073)
Environmental sample number: 13
Sample volume before processing: 18 litres
Sample weight before processing: 23 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 51-150 indet. comminuted fragments, most <2mm
Charred seed	An abundance of 1-10 seeds, Hazel nutshell, Fat hen
Large mammal bone	2g in residue - burnt

Table 11: environmental finds from feature [20072] fill (20072)
Environmental sample number: 14
Sample volume before processing: 16 litres
Sample weight before processing: 20 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance >250 indet. comminuted fragments, most <2mm

Table 12: environmental finds from context: 0735b
Environmental sample number: 14
Sample volume before processing: 6 litres
Sample weight before processing: 5 kilograms
% of processed sample examined: 33%

Material	Quantity
Charcoal	Abundance 1 - 10 indet. comminuted fragments <2mm
Charred seed	Abundance 1-10, indet

Table 13: environmental finds from feature [20072] fill (20075)
Environmental sample number: 15
Sample volume before processing: 17 litres
Sample weight before processing: 22.5 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 51-150 indet. comminuted fragments <2mm
Charred seed	Abundance 1-10 – Hazel nutshell
Snails	Abundance 1-10, indet.

Table 14: environmental finds from feature [20072] context (20076)
Environmental sample number: 16
Sample volume before processing: 29 litres
Sample weight before processing: 39 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance >250 indet. comminuted fragments <2mm
Large mammal bone	1g in residue - burnt
Snails	Abundance 1-10, indet.

Table 15: environmental finds from feature [20072] fill (20077)
Environmental sample number: 17
Sample volume before processing: 16 litres
Sample weight before processing: 20.5 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 1-10 indet. comminuted fragments <2mm
Snails	Abundance 1-10 – indet.

Table 16: environmental finds from feature [20050] fill (20051)
Environmental sample number: 18
Sample volume before processing: 4 litres
Sample weight before processing: 6 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 1-10, indet. comminuted fragments <2mm
Charred seed	Abundance 1-10 – indet.
Snails	Abundance 1-10, indet.

Table 17: environmental finds from feature [20052] fill (20053)
Environmental sample number: 19
Sample volume before processing: 34 litres
Sample weight before processing: 43.5 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 51-150 indet. comminuted fragments, most <2mm
Charred seed	Abundance 1-10, Hazel nutshell, plantain and indet.
Snails	Abundance 1-10, indet.

Table 18: environmental finds from feature [14006] fill (14005)
Environmental sample number: 20
Sample volume before processing: 10 litres
Sample weight before processing: 12.5 kilograms
% of processed sample examined: 100

Material	Quantity
Charcoal	Abundance 11-50 indet. comminuted fragments <2mm
Charred grain	Abundance 1-10, indet.
Snail	Abundance 1-10, indet.

Table 19: environmental finds from feature [20086] fill (20087)
Environmental sample number: 21
Sample volume before processing: 20 litres
Sample weight before processing: 26 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 151-250 indet. comminuted fragments <2mm
Charred seeds	Abundance 1-10, indet.
Large mammal bone	<1g in residue - burnt

Table 20: environmental finds from feature [20027 fill (20031)
Environmental sample number: 22
Sample volume before processing: 10 litres
Sample weight before processing: 14 kilograms
% of processed sample examined: 33%

Material	Quantity
Charcoal	Abundance 11-50 indet. comminuted fragments <2mm

Table 21: environmental finds from feature [20026] fill (20030)
Environmental sample number: 23
Sample volume before processing: 18 litres
Sample weight before processing: 25 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 11-50 indet. comminuted fragments <2mm
Charred grain	Abundance 1-10, possible barley

Table 22: environmental finds from feature [20018] fill (20017)
Environmental sample number: 24
Sample volume before processing: 16 litres
Sample weight before processing: 21 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 51-150 indet. comminuted fragments <2mm
Charred seed	Abundance 1-10, indet.
Snails	Abundance 1-10, indet.

Table 23: environmental finds from feature [8005] fill (8004)
Environmental sample number: 25
Sample volume before processing: 20 litres
Sample weight before processing: 24.5 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 51-150 indet. comminuted fragments <2mm
Charred seed	Abundance 1-10, possible pea, grass and indet.
Snails	Abundance 11-50, indet.
Large mammal bone	<1g in residue - burnt

Table 24: environmental finds from feature [20070] fill (20071)
Environmental sample number: 26
Sample volume before processing: 9 litres
Sample weight before processing: 12 kilograms
% of processed sample examined: 100%

Material	Quantity
Charcoal	Abundance 1-10 indet. comminuted fragments <2mm
Snails	Abundance 1-10, indet

Results

Residues

The samples washed down to produce residues of varying proportions of sub-rounded gravel

Feature [20072] contained 4 pottery sherds, identified as Beaker, and 5 pieces of worked flint. Features [10011] and [20018] also contained single fragments of worked flint. Small fragments of burnt animal bone were found in features [5002], [8005], [10008], [20072] and [20086]. Magnetic material was also recovered, but analysis revealed these to be stone possibly magnetised as a result of exposure to prolonged and intense heat.

Flots

All flots contained charcoal in varying quantities as yet unidentified, these were comminuted fragments measuring less than 2mm.

The charred botanical remains include a small number of cereal grains in a poor state of preservation, some possibly barley (hordeum vulgare), with weed seeds and fragments of hazel nutshell (Corylus avellana).

There was also a high concentration of complete snail shell present in most of the flots.

All of the samples contained modern seeds likely to have been introduced to the contexts through bioturbation and other post depositional processes.

Conclusion

The quantity and quality of the environmental remains is quite low. Although limited, the occurrence of grain and nutshell does suggest some degree of cereal processing and foraging taking place within the vicinity

Recommendations for further study

It is recommended that a full assessment of the material from the two Bronze Age pits, including charcoal identification, be undertaken to help provide evidence regarding local vegetation and land utilisation which will be of considerable value to overall interpretation.

Full assessment of the palaeoenvironmental material from the Bronze Age pits has been completed and is presented in Appendix 7.

Appendix 6: Radiocarbon Dating

A fragment on animal bone retrieved from gully [5011] was sent to Beta Analytic Inc. for Radiocarbon dating. Pretreatment of the bone was completed but failed to yield any separable collagen and therefore could not be dated.

Collagen or tooth proteins can be degraded or removed in nature by many processes including but not limited to bleaching by the sun, leaching by water, partial heating, burning or cooking, microbial activities, replacement by other mineral species (typically SiO2 or CaCO3) or natural degradation due to extreme age (typically in excess of 20,000 years old).

No other material suitable for radiocarbon dating, was retrieved from the site.

Appendix 7: Botanical Analysis by Sharon Carson and Jennifer Miller

Summary

Samples from two pits attributed to the Early Bronze Age from Staveley, Derbyshire were processed for retrieval of botanical material. Carbonised remains recovered were submitted for specialist identification and interpretation. Pit [10011] contained predominately oak charcoal within the two fills, with occasional fragments of hazel nutshell and charcoal from other woodland resources, collectively suggestive of input from domestic hearth waste. This was further corroborated by the presence of carbonised cereals, potentially lost during the parching stage of processing. Pit [20072] also contained a range of botanical components likely to reflect redeposition of domestic hearth waste material, although cereal grains were not recovered from this feature. Hazel charcoal was especially prevalent within the primary and secondary fills of Pit [20072], which may reflect intentional selection of this wood, whether for fuel or from wattlework. By contrast, subsequent fills contained more oak charcoal; this may reflect a change in provenance of the deposits. Collectively, the botanical assemblages are entirely consistent with the Early Bronze Age occupation suggested by the pottery typology.

Introduction

Trent and Peak Archaeology were commissioned by Derbyshire County Council to conduct an archaeological evaluation on the site at the former Seymour Colliery, Staveley, Derbyshire prior to redevelopment. An enclosure and other features were identified from aerial photography. Among these features, two pits attributed to the early Bronze Age were excavated and interpreted as having been used for redeposition of midden waste material. In Pit [10011] the midden material appears to have been sealed in a single action, whereas Pit [20072] appears to have been filled in at least three phases. Both features appear to have been left open for some time allowing some of the spoil from their creation to slump back into them.

A range of samples recovered from pit features [10011] and [20072] were selected by Trent and Peak Archaeology for specialist processing and analysis. Following standard Siraf flotation and sorting for botanical components, charcoal fragments and seeds were submitted to the Dickson Laboratory for identification and full interpretation. It was anticipated this would contribute towards the understanding of the site and provide evidence for the nature and land use of the occupied area over time.

Methodology

Botanical Material Identification

Charcoal identification was undertaken using the reflected light of a Brunel SP80 metallurgical microscope at x40 magnification. Depending upon volume present, 100% of the charcoal >4mm fragment size, or a representative sample thereof, was identified as completely as preservation would allow. Charcoal <4mm fragment size was scanned, and if necessary and feasible a selection was identified to ensure the identified material provided an accurate representation of the species composition for each sample analysed. The total volume of charcoal present was recorded. Carbonised and uncarbonised cereals, seeds and other macroplant remains were 100% identified as specifically as preservation would allow using a Nikon 93756 binocular microscope at variable magnifications of between X8 - X40 with associated Schott cold light source.

Charcoal identification was undertaken with reference to Schweingruber (1990). Confirmation of cereal morphology was achieved with reference to Jacomet (1987), whilst seed identification was confirmed by comparison with images within Beijerinck (1947) and Cappers (2006) and the Dickson botanical reference collection. Plant nomenclature follows Stace (1997) except cereals, which conform to Zohary & Hopf (2000).

Results

Results from the sampled features are presented and discussed below in group order and detailed results of analysis are tabulated separately.

Pit [10011]

Large oval pit [10011] contained secondary fill (10010), described as charcoal rich grey clay silt containing burnt bone and beaker pottery, and tertiary fill (10009) described as light brown clay silt similar to the subsoil.

Context (10010) Sample <7>

The secondary fill of Pit [10011] contained a number of charcoal fragments predominantly identified as oak (*Quercus*) and hazel (*Corylus*) with other mixed woodland resources including ash (*Fraxinus*), apple type (Maloideae) and cherry type (Prunoideae). Tentative evidence for cereal processing was present, in the form of a limited number of carbonised cereal grains including one spelt/emmer, two possible wheat and three indeterminate fragments. These were potentially lost during parching of the grains ahead of storage or further processing. One carbonised probable dock (*cf Rumex sp*) seed was also recovered; this taxon is a weed commonly associated with cultivation. Fragments of carbonised hazel nutshell also allude to consumption practices and collectively, the botanical assemblage has probably derived from domestic hearth waste.

Context (10009) Sample <8>

A limited number of small charcoal fragments were identified predominantly as oak with occasional hazel. These were recorded together with two fragments of carbonised hazel nutshell. Collectively, the limited botanical assemblage is likely to reflect residual domestic occupation materials including hearth waste, redeposited within the pit. The predominance of oak may be an artefact of preservation but is more likely to reflect availability of oak as a resource for fuel and structural purposes. This correlates with the beaker pottery found to suggest a prehistoric date for the deposition of materials within Pit [10011].

Pit [20072]

Pit [20072] contained five consecutive fills: (20077, 20076, 20075, 20074 & 20073). The pit was located to the north west of pit [10011] and was slightly larger in size. However, the fill appeared to have a similar morphology and contained similar components within the primary and secondary fills.

Context (20077) Sample <17>

Context (20077) was the primary fill of Pit [20072]. It was described as redeposited natural material derived from the surrounding soil, from which only two fragments of charcoal were submitted for analysis, identified as oak. This limited assemblage cannot lend any significant interpretative value to the context, although the finds are in keeping with the taxon assemblage recovered from other fills of the pit and suggest redeposited background scatter.

Context (20076) Sample <16>

In stark contrast to the underling fill, secondary fill (20076) contained an abundance of charcoal, mainly hazel, with occasional fragments of cherry type, and rarer apple type and alder (*Alnus*). The predominance of hazel charcoal may be reflective of the local availability or intentional selection. Hazel is commonly used within wattle panelling and other structural features and charcoal may have derived from re use of such materials.

Three small indeterminate calcined bone fragments, all less than 5mm in size were also noted. Due to the diminutive size of the fragments they were not further identifiable, although all were considered mammalian. Such fragments may have derived from deposition of domestic hearth waste material.

Context (20075) Sample <15>

Tertiary fill (20075) contained occasional small fragments of charcoal, predominantly hazel with some cherry type, apple type and oak. However, the fragments were small round wood, reflecting small branches or twigs; as such they are likely have derived from kindling within a hearth.

Context (20074) Sample <14>

A small number of charcoal fragments, mostly oak with occasional hazel and cherry type were noted within this fourth fill. Small twigs or branches of hazel and cherry type possibly reflect kindling within a hearth. Two carbonised seeds were also identified; one possible sedge (*cf Carex sp*) and one knotweed (Polygonaceae). Preservation was poor and neither could be identified more specifically. However, both Cyperaceae and Polygonaceae include species that are agricultural weeds. They could also have derived from thatching or flooring rushes or have had incidental provenance.

Context (20073) Sample <13>

Very small charcoal fragments were identified from this final (fifth) fill of Pit [20072], predominantly oak with two fragments of hazel. Fragments of hazel nutshell and one possible dock seed were also recorded. The limited botanical assemblage may be tentatively interpreted as domestic occupation materials including hearth waste, specifically reflecting the inclusion of carbonised hazel nutshell.

Discussion

Both of the pits analysed are attributed to the Early Bronze Age by pottery typology, which concurs with the predominance of oak within many of the fills. The charcoal assemblage from Pit [10011] was dominated by oak, with other charcoal taxa recorded including especially hazel, with small quantities of cherry type and apple type. Together this charcoal assemblage probably reflects collection of fuel from local mixed woodland resources and is entirely consistent with Early Bronze Age occupation.

The predominance of oak charcoal in the samples reflects availability of oaks within the local environment. None of the oak fragments appeared to have derived from large structural timbers, suggesting small branches or twigs instead. This further supports the interpretation of local woodland resources. Instances of hazel, apple type and cherry type charcoal could reflect either reuse of structural wattle panelling for fuel or collection of branches for small scale domestic hearth fuel/ kindling. Other indicators of domestic hearth material also support the suggestion that the pits contain domestic midden waste.

Hazel charcoal was also particularly abundant within fill (20076) of Pit [20072], with instances of cherry type and apple type and alder which consisted primarily of fragments from smaller round wood or twigs. Hazel would have grown abundantly within the local woodland understory and is a frequent component of prehistoric domestic hearth waste. As with Pit [1011], presence here could reflect local gathering for hearth fuel, although the possibility cannot be discounted that the assemblage derived from the reuse of wattle panelling between oak structural uprights or roofing structures that have fallen out of use.

Few fills from the pits contained carbonised cereals or seeds of commonly associated cereal crop weeds, of which fill (10010) of Pit [10011] was the most prolific, albeit only containing a limited quantity of grains including emmer/spelt and possible wheat. As such, they do not provide any significant interpretative value related to processing and consumption practices. However, presence of them does imply cereal processing activities were undertaken within the vicinity, at least to some degree. One carbonised probable dock seed was also recovered from this fill, which may have been growing as a crop weed. Finds of emmer/spelt are not dissimilar to other cereal assemblages of the same period within the area. Both emmer and spelt wheats attributed to the Bronze Age were recovered from pits near a barrow at Lockington (Monckton 2007), and spelt and hazelnut shells were also present in Later Neolithic– Earlier Bronze Age pits at Langford, Nottinghamshire (Clay 2006).

Carbonised cereal grains and carbonised commonly associated crop weed seeds are often recorded together in archaeological contexts representing cereal processing waste, as the weed

seeds are difficult to remove by winnowing or sieving (Kenward & Hall 1995). Many typical cornfield weeds produce very few seeds and are unlikely to be gathered independently. The amount of weeds in prehistoric and medieval crops was high and it is likely that they were collected as a by product in the course of cereal harvesting (Behre 2008). Such remains were rare within the fills of both pits, so may not reflect the true extent of cereal processing within the vicinity. Cereal grains which were intended for consumption would only be charred accidently and so even in societies that are dependent on cereals, charred grains are relatively rare (Bishop *et al* 2009). The waste of cereals would have been avoided as much as possible and the deposits may not reflect the actual availability of such food items or the scale of processing (Monckton 2002).

Despite the intensification of cereal cultivation and the availability of such food resources within the Bronze Age, considerable reliance on collected food resources persisted. Carbonised hazel nutshell fragments were recovered from both fills of Pit [10011] and fill (20073) of Pit [20072], attesting to the exploitation of this valuable source of calories throughout prehistory. Hazelnut shell is the unwanted waste products of consumption, which would either be deliberately discarded, often onto domestic fires, or possibly used as kindling (Bishop *et al* 2009). Evidence of such corroborates the interpretation of pits utilised for the deposition of domestic hearth waste material. However, it has also been suggested that the presence of hazel nutshell in pits may also be the result of storage of the food product for subsequent removal and consumption at another location or at a later date (Monckton 2002). Given the manually shattered appearance of nutshell within the pit fills examined here, that scenario is considered unlikely to be the case at this site, though. Hazel nutshells are commonly recovered from archaeological sites of many periods, ranging from the Mesolithic to later prehistoric and historic periods; the nuts are thought to have been one of the most important plant foods before the introduction of cereal cultivation. Rich in many vital nutrients including fats, starch and sugar, hazel nuts are likely to have formed an invaluable food source when other foods and crops were not available (Dickson & Dickson 2000), including before the harvest when cereal stocks would have been low.

One carbonised indeterminate small partial rhizome was recovered within pit fill (10010). The presence of such, although with only one example, could also represent a potential food source. Bracken roots and rhizomes have been used as a food source (Dickson & Dickson 2000), and many other storage roots, rhizomes and tubers have been used since antiquity, forming an important source of carbohydrates, especially to earlier populations. However, carbonised rhizome remains may also represent turf collected as a source of fuel (Bishop *et al* 2009). This practice is often recorded from marginal communities, including the Northern Isles of Scotland, but would have been widespread (Dickson & Dickson 2000). Turf has been used throughout history to bank down fires and cool flames for cereal processing.

Modern contaminants

Two of the seeds submitted for further analysis were identified as uncarbonised fat hen (*Chenopodium album*) seeds; one from fill (10010) and one from (20073). These uncarbonised botanical remains are more than likely modern contaminants incorporated into the deposits by bioturbation (eg worm action or root penetration), especially considering that they were in upper fills. The presence of such highlights the possibility for the introduction of contaminants and other material that may not be contemporaneous with the other components within the features. However, the scarcity of uncarbonised materials would suggest that the potential for contamination here is not extensive.

Table of Botanical Results

	Feature	pit		pit				
	Cut	10011		20072				
	Context	10010	10009	20077	20076	20075	20074	20073
	Sample	7	8	17	16	15	14	13
Total Charcoal								
Charcoal >4mm		50ml	5ml	<<5ml	100ml	<5ml	<5ml	<5ml
Charcoal <4mm		10ml	0ml	0ml	10ml	<<5ml	0ml	0ml
% ID >4mm		50	100	100	25	100	100	100
AMS option (charcoal/cereal/nutshell) Y / N		Y	Y	N	Y	Y	Y	Y
Charcoal	**common name**							
Alnus	alder	-	-	-	1 (0.19g)	-	-	-
Corylus	hazel	10 (1.40g)	2 (0.03g)	-	48 (6.58g)	11 (0.52g)	3 (0.12g)	2 (0.06g)
Fraxinus	ash	1 (0.13g)	-	-	-	-	-	-
Maloideae	apple type	4 (1.58g)	-	-	1 (1.96g)	1 (0.12g)	-	-
Prunoideae	cherry type	1 (0.26g)	-	-	3 (0.70g)	4 (0.21g)	3 (0.10g)	-
cf Prunoideae	*cf* cherry type	-	-	-	-	-	1 (0.12g)	-
Quercus	oak	32 (3.99g)	23 (1.87g)	2 (0.20g)	-	1 (0.05g)	10 (0.72g)	14 (0.91g)
Cereals (carbonised)	**common name**							
Triticum spelta/dicoccum	spelt/emmer	1	-	-	-	-	-	-
cf Triticum sp	*cf* wheat	2	-	-	-	-	-	-
Indeterminate cereal fgmt	indet cereal fgmt	3	-	-	-	-	-	-

Table of Botanical Results continued

	Feature	pit		pit				
	Cut	10011		20072				
	Context	10010	10009	20077	20076	20075	20074	20073
	Sample	7	8	17	16	15	14	13
Macros (carbonised)	**common name**							
cf Alnus/Carpinus fruit	*cf* alder/hornbeam fruit	-	1	-	-	-	-	-
cf Carex sp VPC	*cf* sedge VPC	-	-	-	-	-	1	-
Corylus nutshell fgmt	hazel nutshell	4	2	-	-	-	-	3
Polygonaceae	knotweeds	-	-	-	-	-	1	-
cf Rumex sp	*cf* docks	1	-	-	-	-	-	1
Macros (uncarbonised)	**common name**							
Chenopodium album	fat hen	1	-	-	-	-	-	1
Other (carbonised)								
Bark fgmt NFI		-	-	-	-	1	-	-
Rhizome indet.		1	-	-	-	-	-	-

Appendix 8: Archive and Publication

The site archive will be deposited with Weston Park Museum, Sheffield under the Accession Number SHEFM:2015.297. Details of the archive content are tabulated below. The anticipated date of deposition is January 2016.

A short summary of the project will be submitted to the *Derbyshire Archaeological Journal* for publication

Field Records	***Number***
Context sheets	200
Drawing record sheets	3
Photographic record sheets	1
Environmental sample record sheets	1
Finds record form	1
Site drawings on A3 permatrace sheets	38
Photographic film	2
Digital images	192
Flint Artefacts	9
Pottery sherds	21
Charcoal (g)	22
Documents	***Number***
Written scheme of investigation	1
Risk Assessment	1
Client report	1

Appendix 9: OASIS data collection form

OASIS DATA COLLECTION FORM: England

Printable version

OASIS ID: trentpea1-218766

Project details

Project name	Seymour Colliery, Staveley
Short description of the project	An archaeological trial trench evaluation and strip, map and record exercise was carried out at the site of the Former Seymour Colliery, Staveley , Derbyshire.Three phases of activity were identified at the site. The earliest phase comprised two pits and two postholes dating to the early Bronze Age. The second phase is thought to date to the Iron Age and comprises a circular structure, a possible second structure, a field boundary, a line of stakeholes and a number of associated pits. The final phase comprised a Post-Medieval fence line.
Project dates	Start: 24-11-2014 End: 23-01-2015
Previous/future work	Yes / No
Type of project	Recording project
Site status	None
Current Land use	Cultivated Land 2 - Operations to a depth less than 0.25m
Monument type	ROUNDHOUSE Late Prehistoric
Monument type	PITS Early Bronze Age
Monument type	PITS AND DITCHES Uncertain
Significant Finds	POT Early Bronze Age
Investigation type	"Full excavation"
Prompt	National Planning Policy Framework - NPPF

Project location

Country	England
Site location	DERBYSHIRE BOLSOVER OLD BOLSOVER Seymour Colliery, Staveley
Postcode	S433DA

Study area	150000.00 Square metres
Site coordinates	0 0 445456 00 00 N 374313 00 00 E Point
Height OD / Depth	Min: 66.00m Max: 67.00m

Project creators

Name of Organisation	Trent and Peak Archaeology
Project brief originator	Development Control Archaeologist
Project design originator	Edmund Taylor
Project director/manager	Edmund Taylor
Project supervisor	John Winfer
Type of sponsor/funding body	County Council
Name of sponsor/funding body	Derbyshire County Council

Entered by	ed taylor (etaylor@yorkat.co.uk)
Entered on	24 July 2015

OASIS:

Please e-mail Historic England for OASIS help and advice

Figures

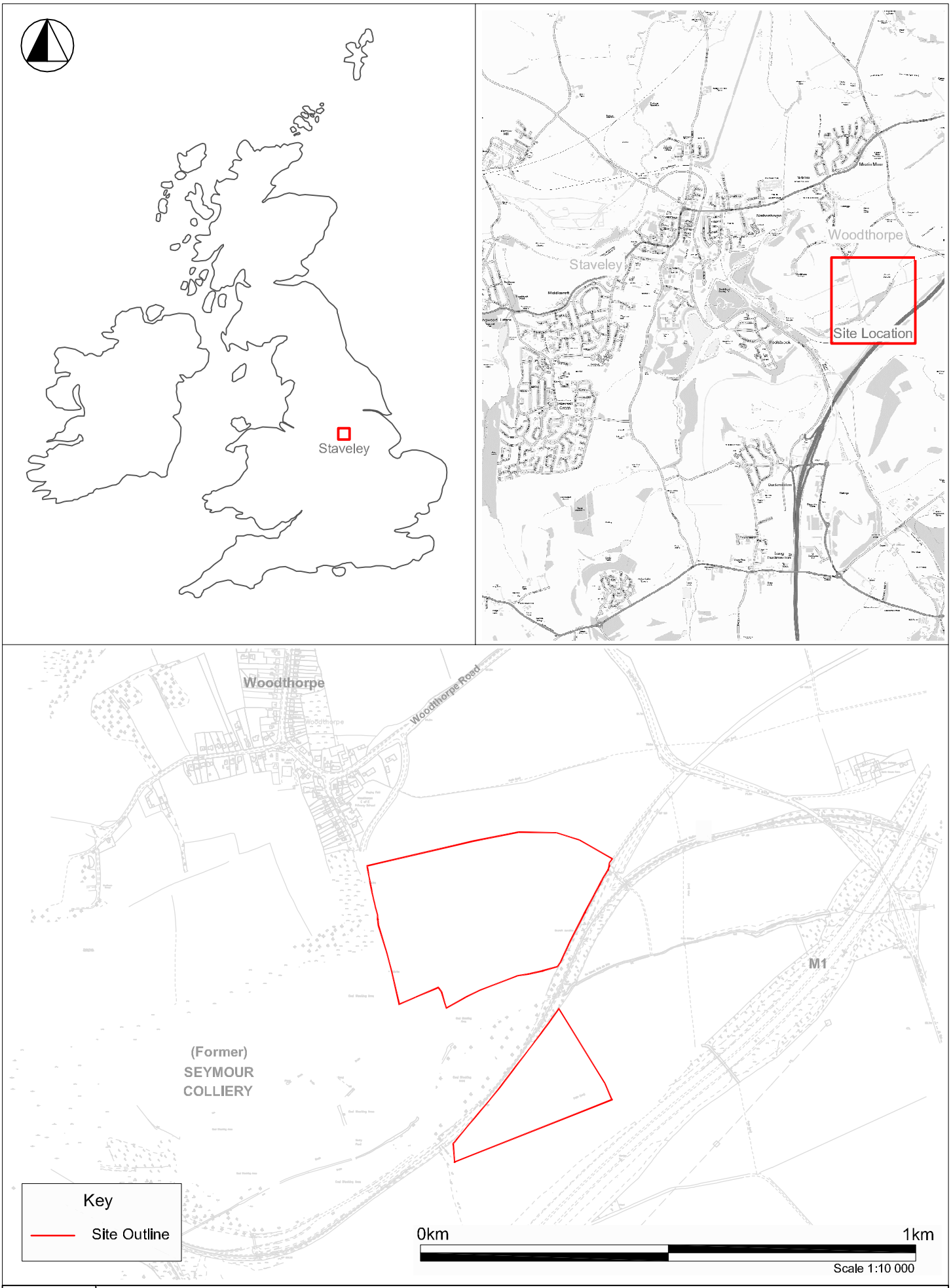
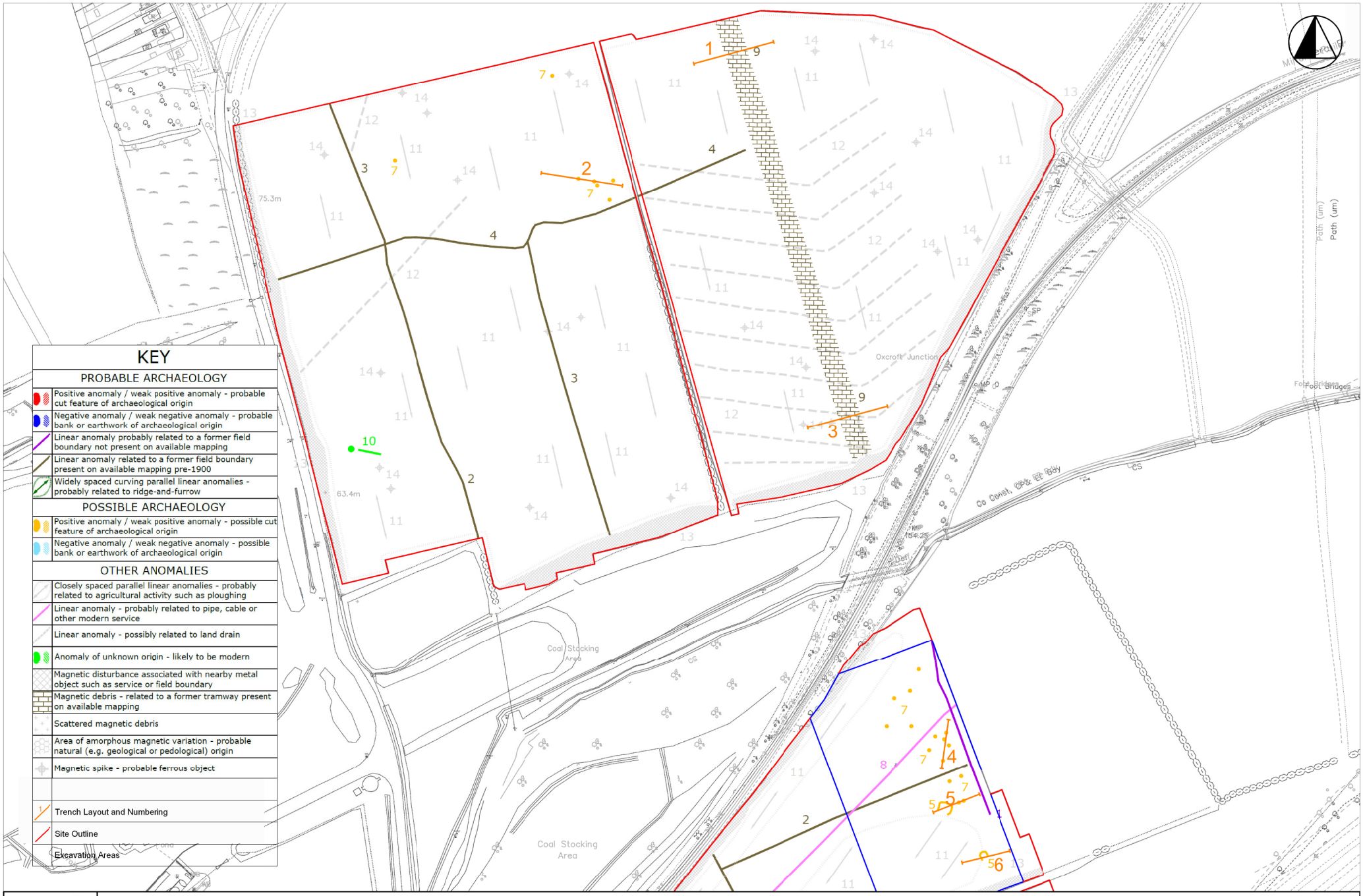


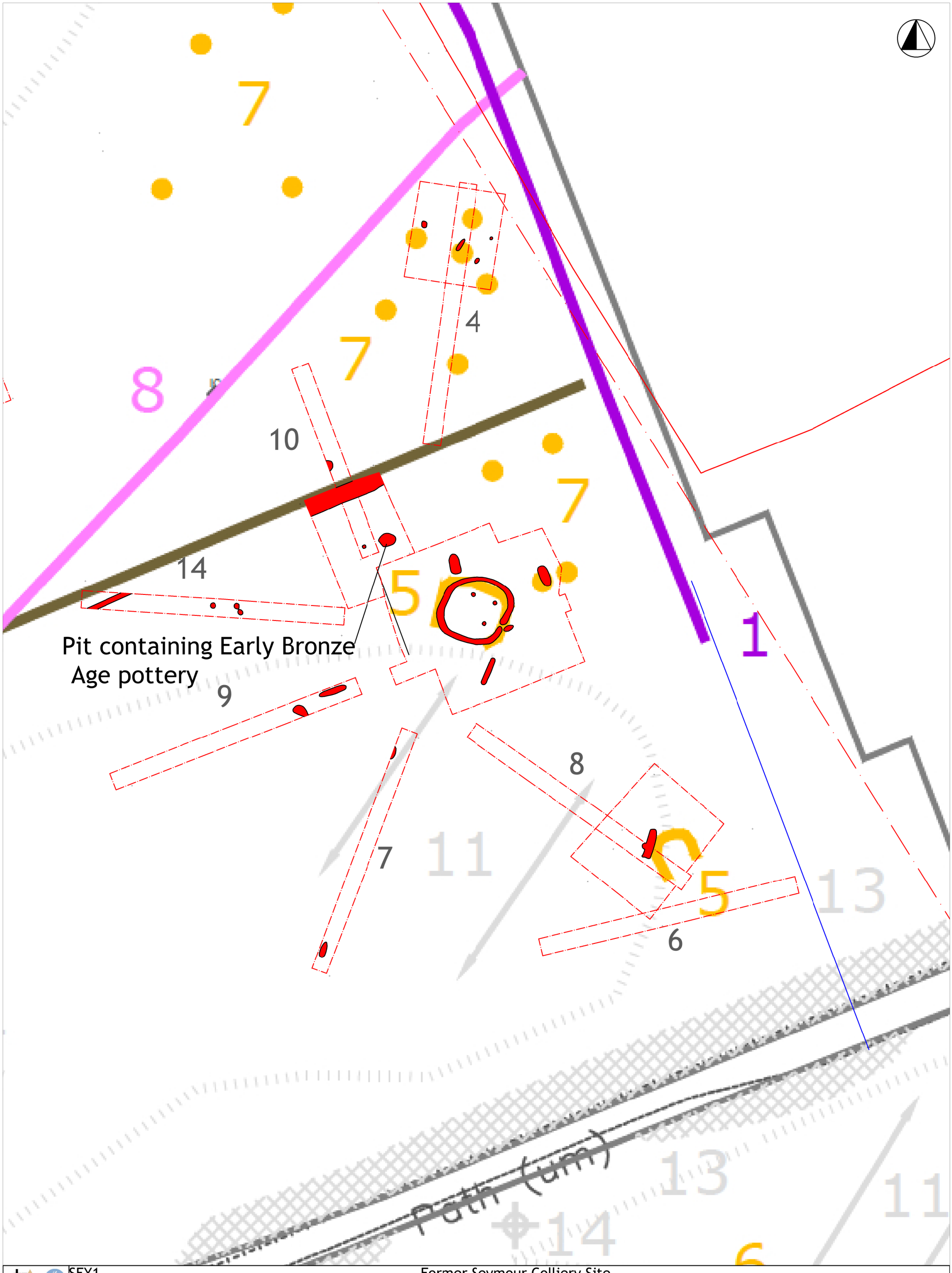
Figure 1: Location Map



Trent & Peak ARCHAEOLOGY

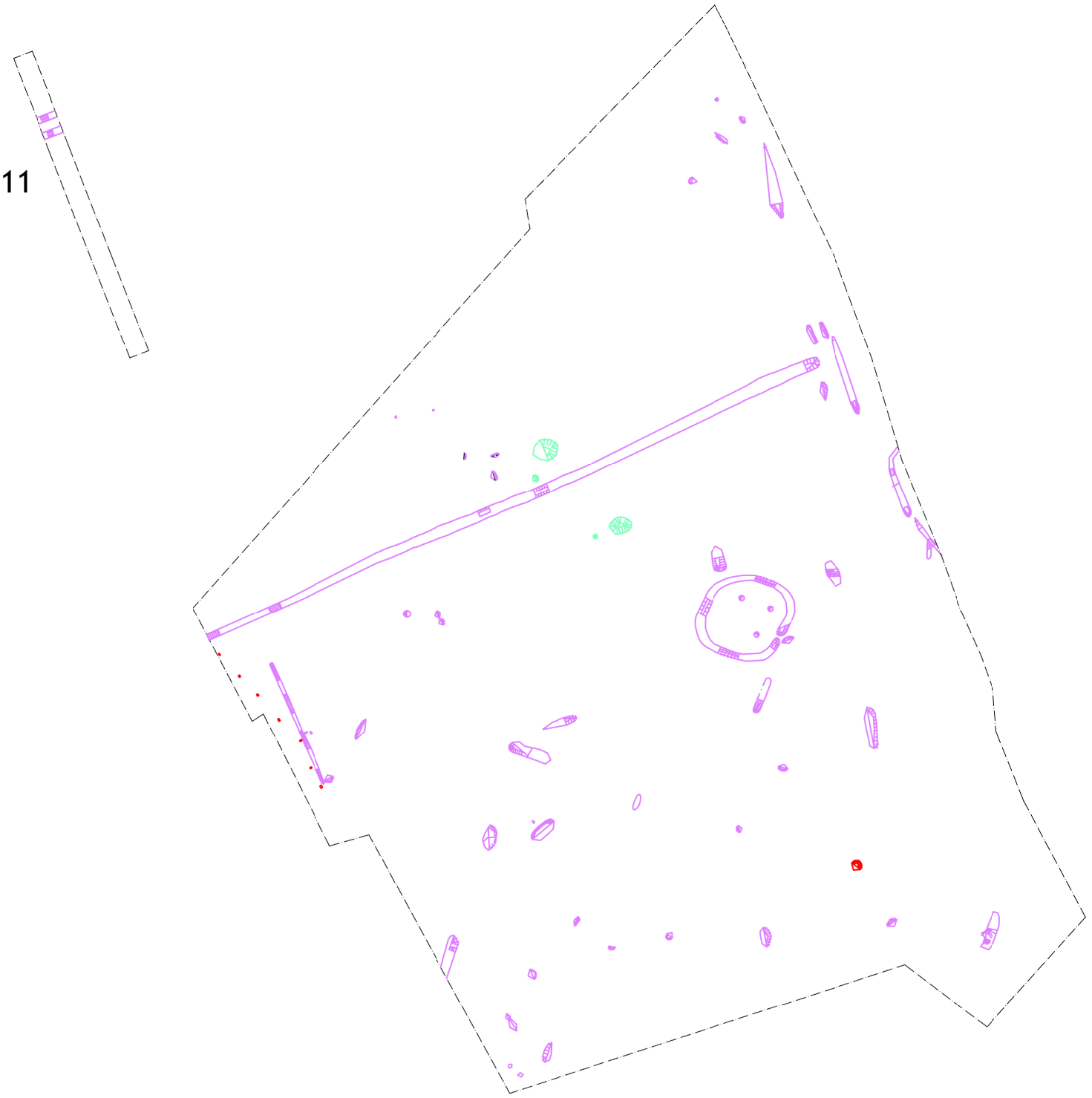
Figure 2: Trench locations with geophysical survey results (Stratascan 2014)
Scale: 1/300 at A4

Trent & Peak ARCHAEOLOGY	SEY1	Former Seymour Colliery Site	
	Figure 3	Plan of area 20 with cropmark enclosure	Revised by: TQ
	Not to scale	Initials: TQ	Date: 25/06/2015



Trent & Peak ARCHAEOLOGY	SEY1 Figure 4 Scale at A3- 1:500	Former Seymour Colliery Site Additional trenches and strip, map and sample areas Initials:TQ

Trench 11



Post Medieval

Late Prehistoric/Iron Age

Early Bronze Age

0 m 50 m

Trent & Peak Archaeology

SEY1 Figure 5 Scale at A3- 1:500	Former Seymour Colliery Site Plan of Area 20 and Trench 11 Initials:TQ	Revised by: JW Date: 03/06/2015

67.502

67.580

[20048]

DR#110

67.764

[20054]

DR#139

[20072]

[20042]

67.331

[20044]

[20054

DR#109

[20052]

[20046]

67.248

DR#86

[10011]

[10008]

67.144

67.290

(501

[5013]

[14010]

(14009)

[14008]

67.241

67.183

(5003)

[5002]

67.369

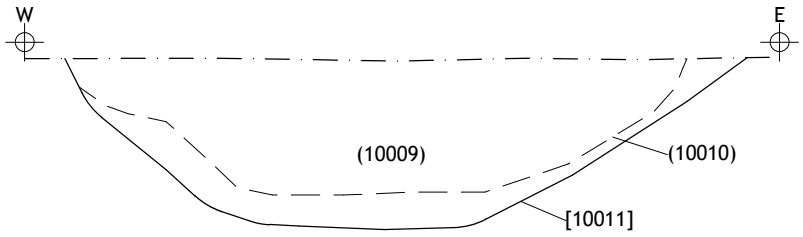
DR#128

0 m

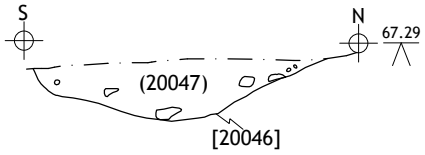
10 m

Trent & Peak Archaeology

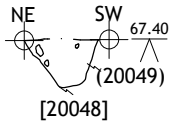
SEY1 Figure 6 Scale at A3- 1:100	Former Seymour Colliery Site Plan of the Northen Features Initials:TQ	Revised by: TQ Date: 25/06/2015



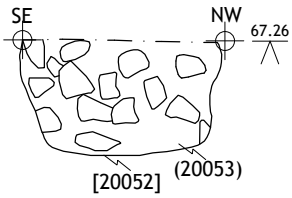
Dr86 South facing section



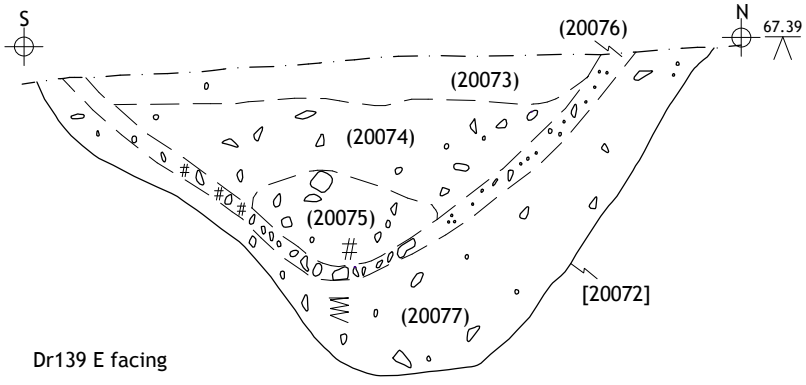
Dr109 E facing



Dr110 NW facing, scale - 1:10



Dr 112 NE facing, Scale - 1:10



Dr139 E facing

SEY1	Former Seymour Colliery Site	
Figure 7	Drs. 86, 109, 110, 132, 139	Revised by:TQ
Scale at A4 - 1:20	Initials:TQ	Date: 25/06/2015

Trent & Peak ARCHAEOLOGY

[20054]

[20070]

[20078]

DR#125

[20080]

67.290

(5014)

[5013]

[5009]

(5010)

67.534

67.429

DR#93

DR#39

67.232

[5015]

(5003)

[5002]

[5019]

DR#38

67.183

DR#37

[5017]

[5007]

(5003)

67.164

[5002]

DR#14

(5003)

[5002]

[5011]

67.110

[20106]

67.280

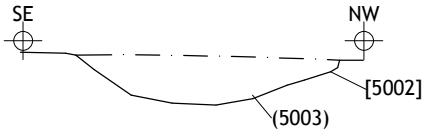
67.219

0 m

10 m

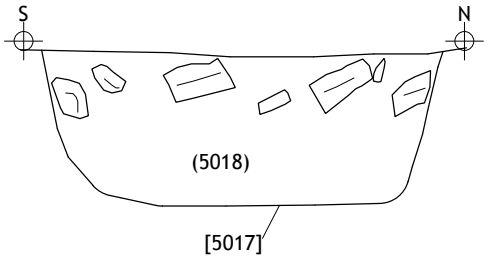
Trent & Peak Archaeology

SEY1 Figure 8 Scale at A3- 1:100	Former Seymour Colliery Site Plan of the Eastern Features Initials:TQ	Revised by: TQ Date: 25/06/2015

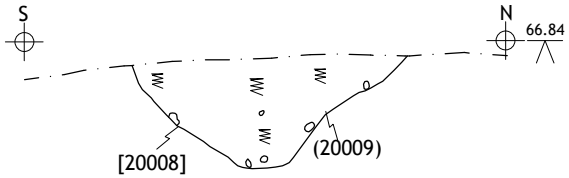


Dr14 South West facing section of ditch [5002]

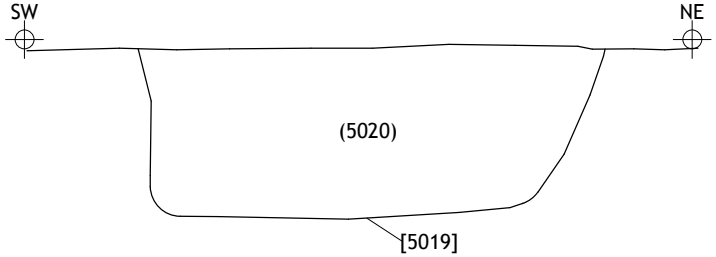
Dr39 NW facing section showing posthole [5015] (5016)



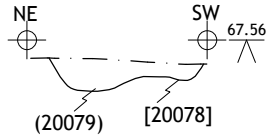
Dr37 East facing section showing posthole [5017] (5018)



Dr93 E section



Dr38 SE facing section showing posthole [5019] (5020)



Dr125 NW facing at terminus

Trent & Peak ARCHAEOLOGY

SEY1	Former Seymour Colliery Site	
Figure 9	Drs. 14, 37, 38, 39, 93, 125	Revised by:TQ
Scale at A4 - 1:20	Initials:TQ	Date: 25/06/2015

[4005]
67.530
[4007]
[4003]
67.606
[20068]
[4009]
67.610
[20056]
[20060]
DR#14
[20058]
67.613
[20062]
[20054]
67.582
[20064]
67.570
67.545
67.552
0 m
10 m
Trent & Peak Archaeology

SEY1
Figure 10
Scale at A3- 1:100

Former Seymour Colliery Site
Plan of the North Eastern Features
Initials:TQ

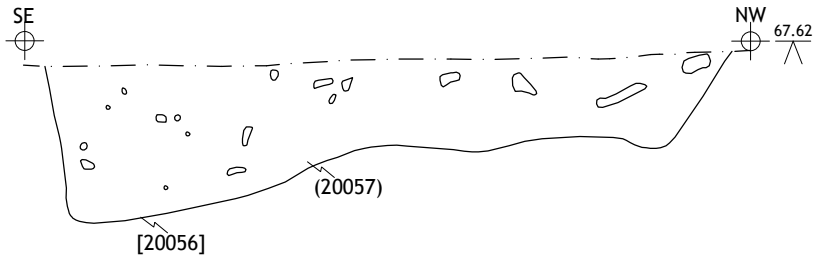
Revised by:ED
Date: 25/06/2015

[20050]
67.400
67.061
66.978
(14005)
[14006]
66.810
[20092]
[20086]
66.740
[20094]
66.758
66.744 [20096]
DR#131
[20110]
[20108]
[20040]
[20100]
[20102]
[20184]
[20104]
66.625
0 m
10 m
Trent & Peak Archaeology

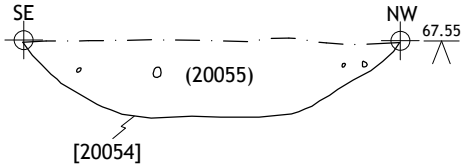
SEY1
Figure 11
Scale at A3- 1:100

Former Seymour Colliery Site
Plan of the North Western Features
Initials:TQ

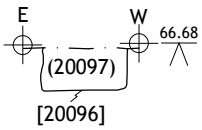
Revised by:TQ
Date: 25/06/2015



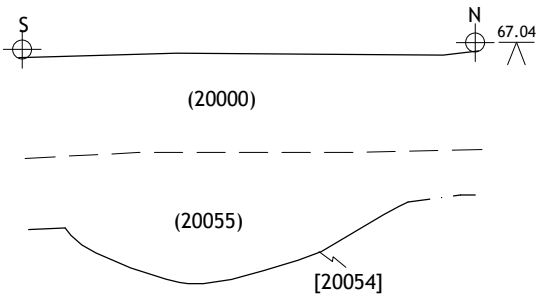
Dr114 NE facing



Dr130 NE facing



Dr131 N facing



Dr147 SW facing

SEY1	Former Seymour Colliery Site	
Figure 12	Drs. 114, 130, 131, 147	Revised by:TQ
Scale at A4 - 1:20	Initials:TQ	Date: 25/06/2015

Trent & Peak ARCHAEOLOGY

66.758

[20040]

[20108]

[20184]

[20104]

66.625

66.751

66.787

[9003]

DR#128

[9002]

[7004]

(9005)

[9004]

[20029]

[20028]

[20027]

66.732

[20032]

DR#102

66.622

[20008]

[20026]

[20016]

66.377

[20020]

[20018]

DR#98

[7003]

(7004)

[20024]

[20022]

0 m

10 m

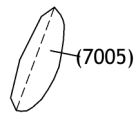
Trent & Peak Archaeology

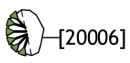
Trent & Peak ARCHAEOLOGY

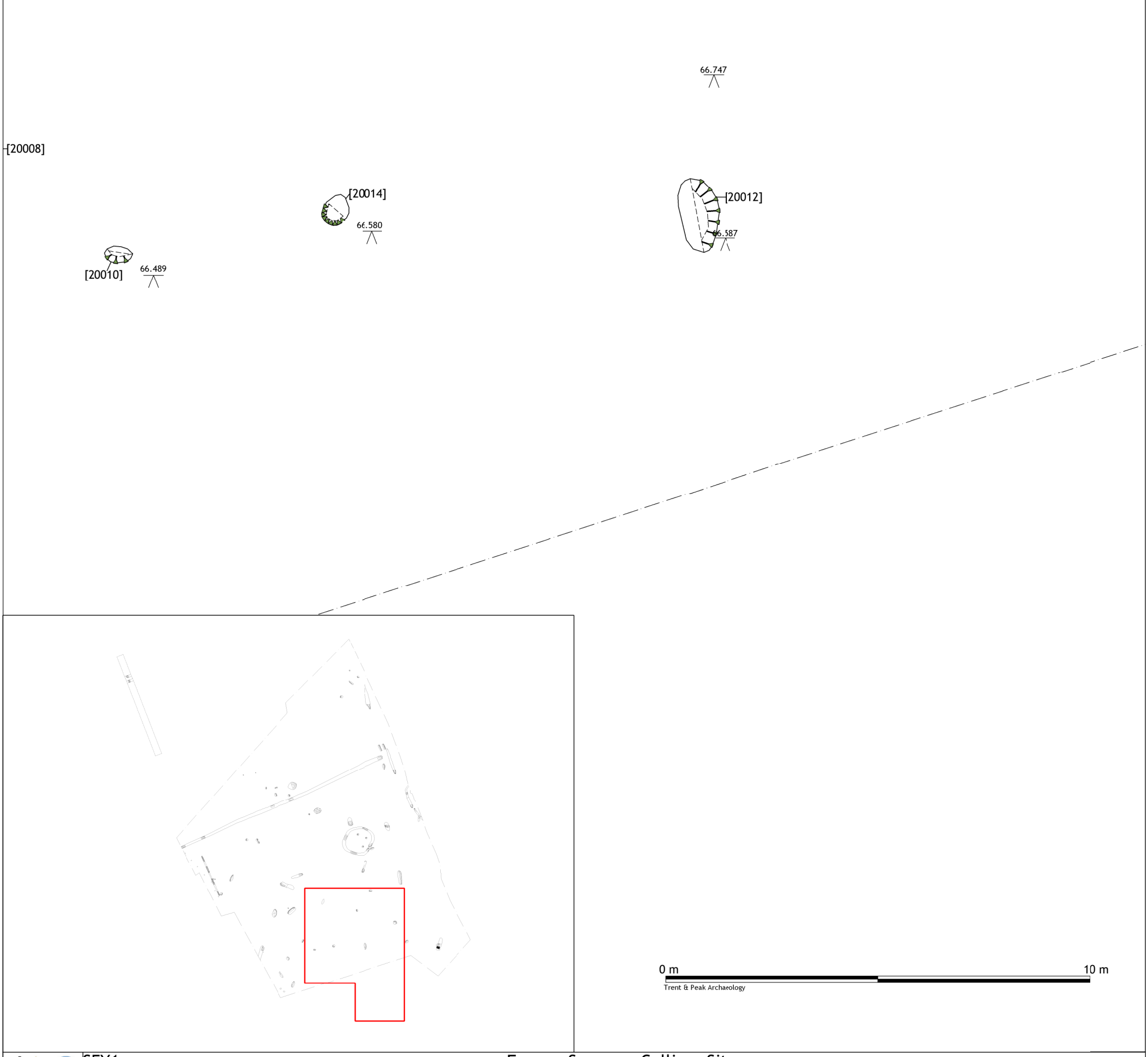
SEY1
Figure 13
Scale at A3- 1:100

Former Seymour Colliery Site
Plan of the South Western Features
Initials:TQ

Revised by:TQ
Date: 25/06/2015





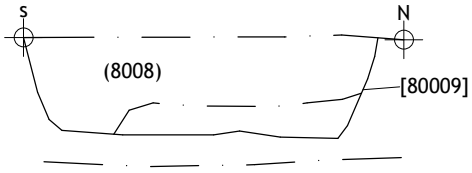


Trent & Peak ARCHAEOLOGY

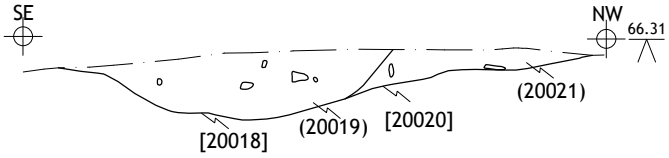
SEY1
Figure 14
Scale at A3- 1:100

Former Seymour Colliery Site
Plan of the Southern Features
Initials:TQ

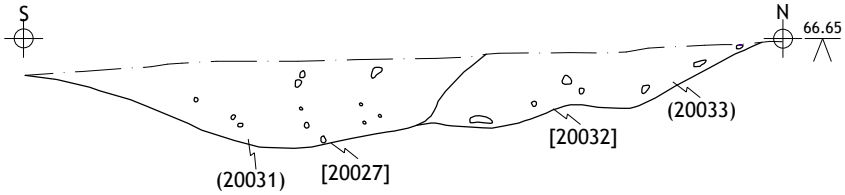
Revised by:Tq
Date: 25/06/2015



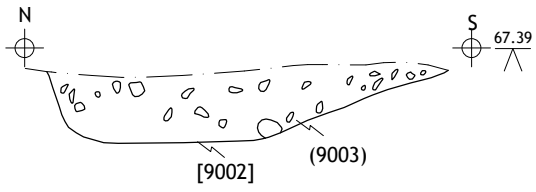
Dr90 East facing section of [8009]



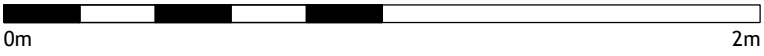
Dr98 NE section



Dr102 E section



Dr128 W facing



SEY1	Former Seymour Colliery Site	
Figure 15	Drs. 90, 98, 102, 128	Revised by:Tq
Scale at A4 - 1:20	Initials:TQ	Date: 25/06/2015

Trent & Peak ARCHAEOLOGY

DR#90

[8009]

66.975

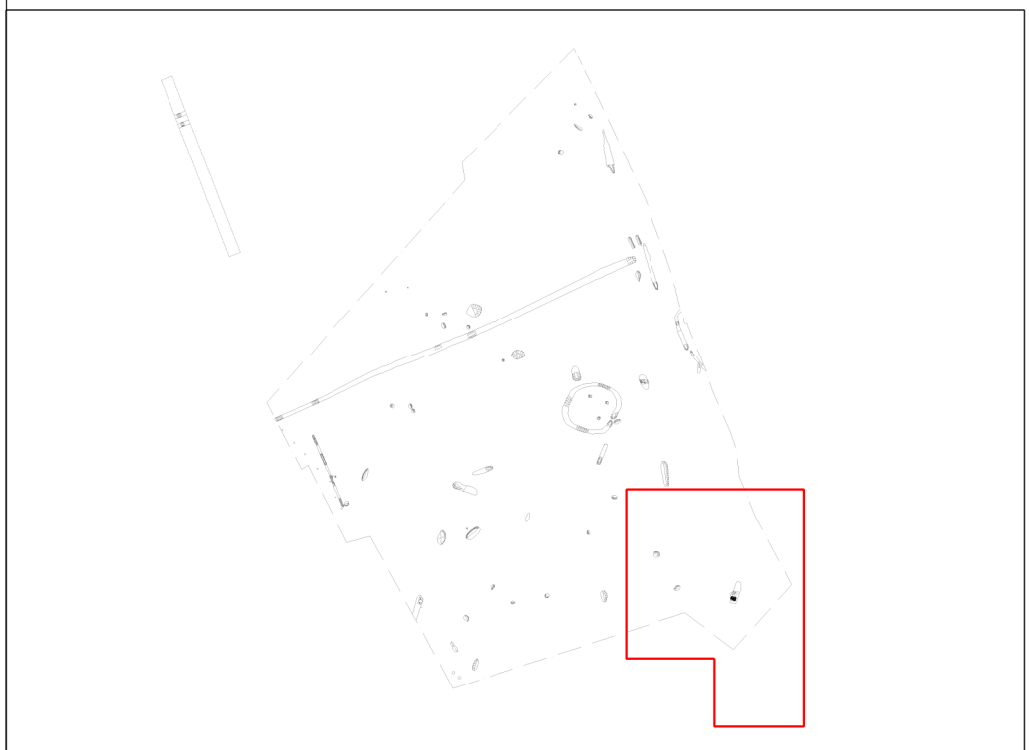
67.327

[20003]

66.928

[8007]

67.180



0 m

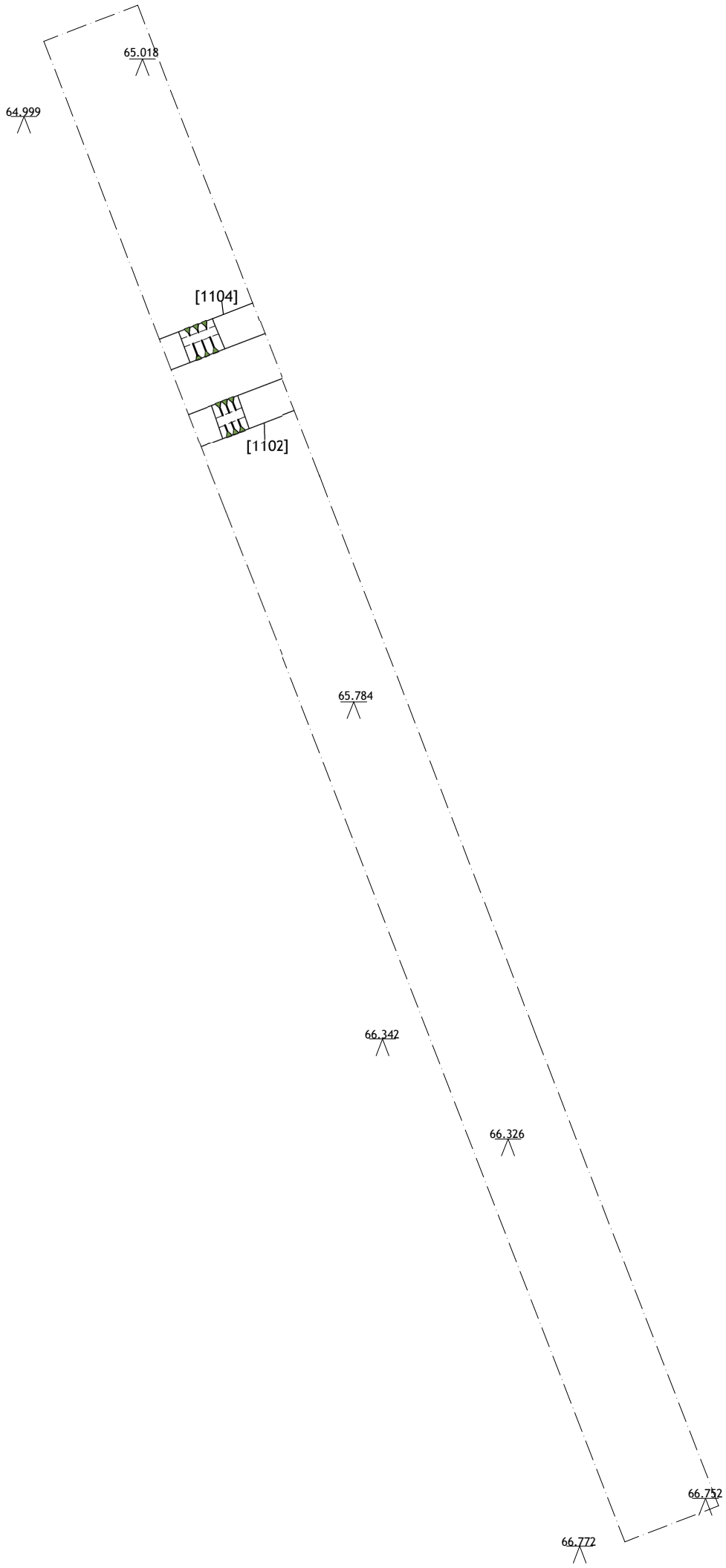
10 m

Trent & Peak Archaeology

SEY1
Figure 16
Scale at A3- 1:100

Former Seymour Colliery Site
Plan of the South Eastern Features
Initials:TQ

Revised by:TQ
Date:25/06/2015



0 m 10 m

Trent & Peak Archaeology

SEY1 Figure 17 Scale at A3- 1:100	Former Seymour Colliery Site Plan of Trench 11 Initials:TQ	Revised by: TQ Date: 25/06/2015

Plates

Plate 1: Aerial photograph NMR 17592_03 of south of site looking south

(EH Reproduction Permission No. 4281)

Plate 2: Trench 1 looking ESE

Plate 3: Trench 2 looking WNW

Plate 4: Trench 3 looking ENE

Plate 5: Trench 6 looking ENE

Plate 6: Trench 12 looking WSW

Plate 7: Trench 13 looking NNW

Plate 8: Trench 15 looking south east

Plate 9: Trench 11 looking south east

Plate 10: Sections of linear features [11002] and [11004] looking south west

Plate 11: Aerial photograph of Area 20 looking west

(Courtesy of Derbyshire County Council)

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Plate 12: Section of pit [10011] looking north

Plate 13: Pit [10011] post excavation looking east

Plate 14: Section of posthole [10008] looking north west

Plate 15: Section of pit [20072] looking south west

Plate 16: Pit [20072] post excavation looking west

Plate 17: Pit/posthole [20052] post excavation looking SSE

Plate 18: Section of [20062] looking north

Plate 19: Section of ditch [20068] looking north

Plate 20: Curvilinear features [20070] and [20078] looking south east

Plate 21: RH1 during excavation looking north

Plate 22: RH1 looking north west

Plate 23: Section of curvilinear [5002] looking north east

Plate 24: Section of curvilinear [5002] looking south west

Plate 25: Section of Posthole [5015] looking south east

Plate 26: Section of Posthole [5019] looking north west

Plate 27: Section of Pit [5013] looking north

Plate 28: Section of ditch [20054] looking west

Plate 29: Section of linear [20056] showing [20060] in background looking south west

Plate 30: Overcut section of pit [4003] looking south east

Plate 31: Section of posthole [4005] looking east

Plate 32: Section of pit [20042] looking west

Plate 33: Stakehole gully [20086] looking north west

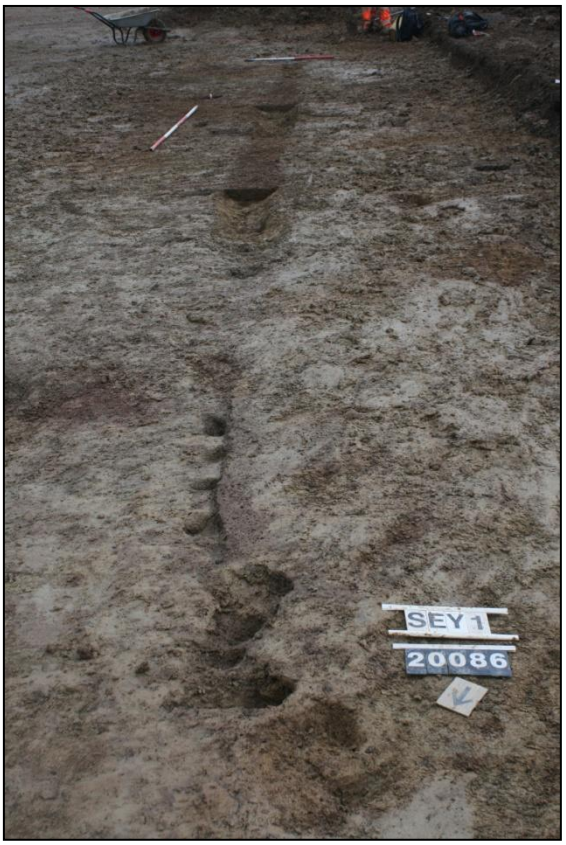

Plate 34: Stakehole gully [20086] looking south east

Plate 35: Section of pit [20040] looking east

Plate 36: Section of pits [14008] and [14010] looking south west

Plate 37: Section of pit [9004] looking north east (wrongly numbered)

Plate 38: Section of pit [20027] looking west

Plate 39: Section of pit [20028] looking north west

Plate 40: Section of pit [20026] looking west

Plate 41: Section of pit [20016] looking south west

Plate 42: Section of pit [20018] looking west

Plate 43: Section of pit [20012] looking west

Plate 44: Section of pit [20106] looking west

Plate 45: Section of pit [8005] looking north east

Plate 46: Section of pit [8009] looking west

Plate 47: Section of posthole [20092] looking south west

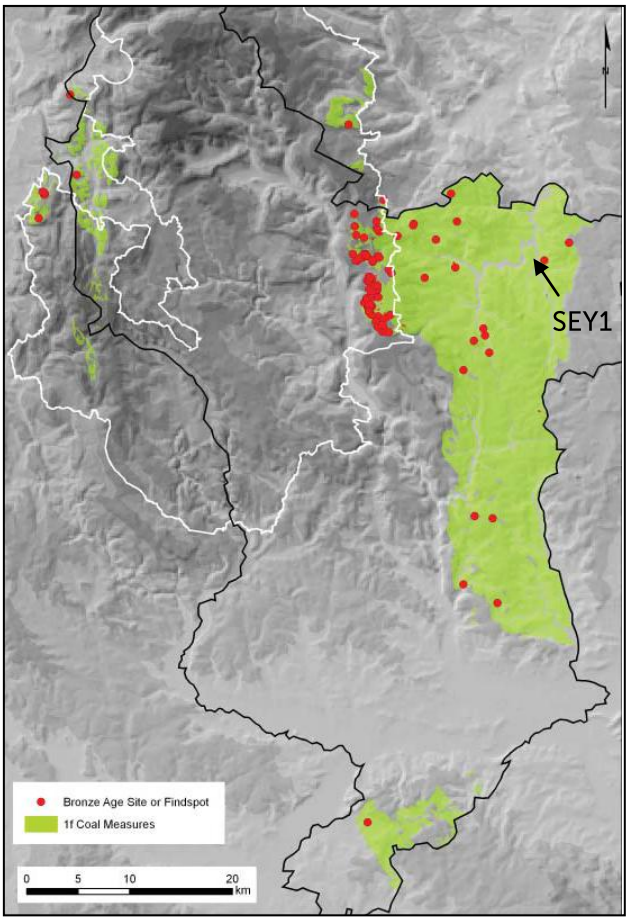

Plate 48: Coal Measures of Derbyshire showing spread of known Bronze Age sites (from Brightman and Waddington 2011)