

Old Stratford To Kiln Farm Water Main Replacement



Archaeological Evaluation Report



October 2014

Client: Anglian Water

OA East Report No: 1667

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NGR: SP 7875 3964 to SP 7960 3962

Old Stratford to Kiln Farm Water Main

Archaeological Evaluation

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Summary

Between 15th September and 17th October 2014 Oxford Archaeology East carried out an evaluation along the route of a new water main running between Old Stratford, Northamptonshire (SP 7875 3964) and Kiln Farm, Milton Keynes (SP 7960 3962). In total, 21 trenches were excavated along the route. Within these trenches, Romano-British remains were found on the western side of the route in Northamptonshire, beneath the footprint of a temporary compound. The remains consisted of ditches, gullies and pits. Early to Mid Roman Pottery and lead artefacts from the features indicate relatively high status and possibly ritual activity within the vicinity. Trenching along the rest of the pipe route indicated the land had seen little activity that survived in the archaeological record.

Within the pipe route in Northamptonshire, two fields were found to contain surviving ridge and furrow earthworks. A topographic survey was undertaken within these fields to preserve the furrows by record, and give guidance to their reinstatement.

The stripping of topsoil was monitored along the route of the pipeline where it ran parallel with the A422 in the westernmost part of the route. No archaeological features were recorded, although a single Roman coin and a sherd of greyware pottery were recovered from the topsoil.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 An archaeological evaluation and watching brief were conducted at land between Old Stratford, Northamptonshire (SP 7875 3964) and Kiln Farm, Milton Keynes (SP 7960 3962). In total, 21 trenches were excavated and approximately 1km of topsoil stripping was monitored along the route approximately 7.8km in length. In total, 821.4 linear metres was trenched along the route.
- 1.1.2 This archaeological work was undertaken in accordance with Briefs issued by Lesley-Ann Mather of Northamptonshire County Council and Nick Crank, Senior Archaeological Officer for Milton Keynes council. These Briefs were supplemented by a Specification prepared by OA East.
- 1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the proposed pipeline, in accordance with the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government March 2012). The results will enable decisions to be made by the Local Planning Authority with regard to the treatment of any archaeological remains found.
- 1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

1.2 Geology and topography

- 1.2.1 The proposed route of the pipe starts within the north-western corner of Old Stratford (80m OD) and runs for 5.3km around Old Stratford, following the A422 and lower ground associated with the Great Ouse (35m OD). The pipeline ends in a new development to the south of Wolverton, within the Milton Keynes area. The majority of land the proposed route travels through is currently arable land.
- 1.2.2 The geology along the route is varied, comprising boulder clay, sand and gravels and river terrace gravels associated with the Great Ouse (BGS: Geology of Britain Viewer; <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> accessed 29/09/14).

1.3 Archaeological and historical background

- 1.3.1 A thorough background was written for the desk-based-assessment undertaken by OA East in 2013 (Clarke 2013). This and the Brief written by Lesley-Ann Mather (Mather 2013) have been referenced below to form the basis of the following section.

Northamptonshire

- 1.3.2 The proposed route of the pipe in Northamptonshire runs through a landscape rich in archaeology. Prehistoric records are known nearby, including a possible Bronze Age barrow (SMR 1184)
- 1.3.3 The main heritage asset the route runs near are cropmarks dating to the Romano-British period (SMR 1238). Other Roman remains in the area include the proposed route for Watling Street to the north-west (SMR 447/1).

- 1.3.4 During the 18th century, the Stony Stratford Hoard was recovered from a field in the parish of Old Stratford. The exact location of the hoard is uncertain, though it is likely from one of the fields near the A422 that the pipe route runs through. The hoard contained fragments of around 30 silver plaques with figures of Mars, Apollo and other gods, plus two chain head-dresses and three fibulae (EH Monument Number 343084). The discovery of this hoard has led people to believe a Roman Temple may be located nearby.
- 1.3.5 Extensive medieval or post-medieval ridge and furrow earthworks are recorded in fields to the west of the River Great Ouse (SMR 5649/0/3; Mathers 2013).
- 1.3.6 Possible World War 2 searchlight batteries (SMR 1237/1) are also recorded on the Historic Environment Record (HER)

Milton Keynes

- 1.3.7 The HER records below are within a 500m radius from the centre of the pipeline; hereafter this will be referred to as the study area.
- 1.3.8 Two cropmarks are listed within the study area. Both were identified from aerial photographs in the field immediately to the east of the site (Monument no. 342912). One of these comprises a ring-ditch and central pit which probably represent a round barrow of the Bronze Age period. The other feature was identified as 'Reservoir Field Cropmark', an undated rectangular feature, probably representing a ditched enclosure.
- 1.3.9 There are three Roman findspots listed and located between the site and the Roman Road of Watling Street approximately 400m to the north east. A Denarius of the emperor Hadrian was found in the garden of No.58 Calverton Road (Monument no. 343141) describes 2nd to 3rd century Roman pottery sherds found during the digging of house foundations at No.73 Chestnut Avenue. In addition, a Roman pot was discovered with cremated bone in it to the west of Watling Street.
- 1.3.10 Two findspot entries are recorded to the south of the site, around Calverton, that date from the medieval period. Spurs, coins, arrowheads, pottery and spearhead were found in 19th century. Originally they were attributed a Roman origin but are now thought to be early medieval in date. Metal detecting has also recovered a 'Norman' type horseshoe, a trade token and a medieval button with 'Bucks Yoeman' inscribed. One medieval findspot recorded to the north of the site describes the finding of a silver halfpenny of Henry VI (AD1435-1438) and a complete medieval ampulla (glass bottle).
- 1.3.11 Manor Farm in Calverton, located approximately 400m to the south of the site, is described as having a probable late medieval origin with later phases of construction through the 15th and 16th centuries. The adjacent All Hallows Church was completely rebuilt between AD1818-1824 in a 12th to 14th century style. There are further records within the 500m search area relating to buildings in Calverton, to the south of the site, which date to a post-medieval to modern date.
- 1.3.12 In addition an old post-medieval gravel quarry pit is was documented in AD1880 immediately to the north of the site in (Clarke 2013).

1.4 Acknowledgements

- 1.4.1 The author would like to thank BSP Associates for commissioning and funding the works on behalf of Anglian Water. Thanks are also due to Nick Crank, Senior Archaeological Officer at Milton Keynes Council, and Lesley-Ann Mather, County

Archaeological Advisor for Northamptonshire County Council, both of whom visited and monitored the site.

- 1.4.2 Fieldwork was directed by the author; excavation and recording of features was undertaken by Zoe Clarke, Malgorzata Kwiatkowska and Chris Swain. Machine excavation was undertaken by Lattenbury Plant Hire and Anthill Plant Hire.
- 1.4.3 The trench set-out and earthwork survey were undertaken by the author.

2 AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The objective of this evaluation was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the proposed pipeline route.

2.2 Methodology

- 2.2.1 The Briefs (Crank 2013 & Mather 2013) required that archaeological trenching be opened along the 7.8km route of the pipeline from the south of Old Stratford to the edge of the current housing development being undertaken in Milton Keynes West. This comprised 11 x 50m trenches along the line of the pipe within Northamptonshire and a further six 50m trenches within Milton Keynes. An additional four trenches totaling 150m were to be excavated within the compound area east of the A422. Once on site, some trenches were moved or shortened due to issues with access down the route, and the location of an existing pipeline.
- 2.2.2 Monitoring of the topsoil strip running adjacent to the A422 was also required to evaluate if the construction of the road has impacted upon any possible archaeology within this area.
- 2.2.3 Furthermore to this, a topographic survey of ridge and furrow located within the easement in Northamptonshire was also required. A resolution of 1m was used and the survey undertaken in accordance with level 2 guidelines set out by English Heritage (2007). The topographical data were processed through Leica GeoOffice then interpolated and analysed using QGIS 2.1.0. A digital terrain model (DTM) was produced at a resolution of 0.2m x 0.2m by interpolating the recorded points using a Triangulated Irregular Network (TIN).
- 2.2.4 Machine excavation was carried out under constant archaeological supervision with a tracked 12 tonne 360° -type excavator using a 1.8m wide toothless ditching bucket.
- 2.2.5 The site survey was carried out using a Leica GS08 Smartnet GPS.
- 2.2.6 Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 2.2.7 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.
- 2.2.8 Environmental bulk samples were taken from well stratified features deemed to have potential for preserved plant remains.
- 2.2.9 Site conditions were dry and overcast, with occasional sunshine.

3 RESULTS

3.1 Introduction

3.1.1 The results of the evaluation are presented by trench in number order. Trenches with no archaeology are not discussed. Feature and deposit descriptions are written in stratigraphic order, starting with the earliest. Full trench and context lists can be found in Appendix A.

3.2 Northamptonshire Trenches

3.2.1 Trenches 1 to 4 (Fig. 3) were located at the western end of the pipeline route requiring evaluation, directly opposite the A422 and to the south of Old Stratford. These trenches had an average of 0.31m of topsoil, overlying the geology, with no subsoil being located in the trenches. Trenches 5 to 15 were spaced out along 1.1km of pipe route, numbered from west to east towards the River Great Ouse (Fig. 2).

Trench 1

3.2.2 Trench 1 was the westernmost trench within the compound area. It measured 32.4m in length and was aligned north-northeast to south-southwest. The trench contained four gullies (**2**, **4**, **17** and **19**), a cluster of quarry pits (**6**, **8** and **11**), a ditch (**13**), a pit (**20**) and three furrows, one of which was excavated (**15**). A rolled lead sheet was recovered from the subsoil of the trench.

3.2.3 Ditch **13** was located at the northern end of the trench, aligned east to west. The feature was 1.64m wide, 0.32m deep with a wide U-shaped profile. The sole fill (**12**) was a mid yellowish brown friable silty sand with frequent stone inclusions. Animal bone, early Roman pottery and a single piece of glass were recovered from the fill. Sample 1 was taken from the ditch.

3.2.4 Directly to the south of ditch **13**, was a cluster of quarry pits (**6**, **8** and **11**). Pit **11** (Plate 1; Figure 3 & 4) was sub circular in plan, 2.15m in diameter, 0.76m deep with a wide U shaped profile. Basal fill **10** was a light yellowish brown silty clay, 0.17m thick, with occasional stone inclusions. Upper fill **9** was a mid greyish brown clayey sand, 0.48m thick, with occasional stone inclusions.

3.2.5 Pit **8** (Plate 1; Figure 3 & 4) was sub-circular in plan, 1.2m in diameter, 0.36m deep, with a wide U-shaped profile. Fill **7** was a light yellowish brown silty clay with occasional stone inclusions. The feature truncated earlier pit **11**.

3.2.6 Pit **6** (Plate 1; Figure 3 & 4) was sub-circular in plan, 1.25m in diameter, 0.41m deep, with a wide U-shaped profile. Fill **5** was a light greyish brown clayey silt with regular stone inclusions. Animal bone was recovered from the fill. The feature truncated earlier pit **11**.

3.2.7 To the south of this pit cluster were gullies **2** and **4**. Gully **2** was aligned north-west to south-east, 0.42m wide and 0.5m deep with a U-shaped profile. The fill (**2**) was a mid greyish brown silty clay, with occasional gravel inclusions. Roman pottery was recovered from the fill.

3.2.8 Gully **4** was aligned west-northwest to east-southeast, 0.45m wide and 0.3m deep with a square profile. The fill (**3**) was a mid greyish brown silty clay with occasional gravel inclusions. Roman pottery was recovered from the fill.

- 3.2.9 Two furrows, which were not excavated, were located to the south of these gullies. They measured 1.75m and 1.5m in width and were aligned northwest to southeast.
- 3.2.10 At the southern end of the trench was located pit **21**, gullies **17** and **19**, and furrow **15**. Pit **21** was 0.55m in diameter, 0.2m deep and circular in plan with a shallow U-shaped profile. Fill 20 was a mid yellowish grey sandy clay with occasional stone inclusions.
- 3.2.11 Gully **17** was aligned north-west to south-east, 0.3m wide and 0.35m deep with a square profile. Fill 16 was a mid greyish brown silty clay with occasional stones. The feature was truncated by furrow **15**.
- 3.2.12 Gully **19** ran parallel with gully **17**, on a north-west to south-east alignment. The feature was 0.38m wide and 0.25m deep, with a U-shaped profile. Fill 18 was a mid greyish brown silty clay with occasional stone inclusions.
- 3.2.13 Truncating gully **17** was furrow **15**. The furrow was 2.1m wide and 0.25m deep, with a wide shallow U-shaped profile and was aligned north-west to south-east. The sole fill of the furrow (14) was a mid greyish brown silty clay, with rare stone inclusions.

Trench 2

- 3.2.14 Trench 2 was the northernmost trench in the compound, 35m in length and aligned west-northwest to east-southeast. The trench contained a pit (**23**), posthole (**25**), two ditches (**27**, **29**) and a gully (**31**).
- 3.2.15 At the eastern end of the trench was gully **31** was aligned north to south, measuring 0.36m wide and 0.17m deep with a square profile. Fill 30 was a light brownish grey silt clay with occasional stone inclusions. The feature was truncated on the same alignment by later ditch **29**.
- 3.2.16 Ditch **29** was aligned north to south, measuring 0.73m wide and 0.31m deep with a U-shaped profile. Fill 29 was a mid grey clayey sand with occasional stone inclusions. The feature truncated earlier ditch **31** on the same alignment.
- 3.2.17 To the west of ditch **29** was ditch **27** (Plate 3; Fig. 3). The feature was aligned north to south, 0.9m wide and 0.36m deep with a U-shaped profile. Fill 26 was a mid brownish grey silty clay with occasional small stone inclusions.
- 3.2.18 Located 6m to the west of ditch **27** was pit **23**. The pit was sub circular in plan, 0.75m in diameter and 0.16m deep with a wide U-shaped profile. Fill 22 was a light greyish brown clayey silt with occasional stone and charcoal inclusions.
- 3.2.19 Next to pit 23 was posthole **25**, which was sub-circular in plan, 0.5m in diameter and 0.21m deep with a U-shaped profile. Fill 24 was a mid greyish brown clayey sand with occasional stone inclusions.

Trench 3

- 3.2.20 Trench 3, which was located in the centre of the compound, measured 21.5m in length and was aligned north-east to south-west. The trench contained a natural hollow (53), two postholes (**55** and **59**) and ditch (**57**).
- 3.2.21 Located at the north-eastern end of the trench was a natural hollow (53). This was a light yellowish brown silty sand, over 2.32m wide and 0.07m thick, with frequent gravel inclusions. Two sherds of Roman pottery were recovered from the fill.

- 3.2.22 Posthole **55**, located 1.5m to the southwest of the natural hollow (53), was sub-circular in plan, with a diameter of 0.41m and measuring 0.12m deep, with a U-shaped profile. Fill 54 was a mid yellowish brown silty sand with occasional gravel inclusions.
- 3.2.23 Ditch **57**, 1.75m to the south-west of posthole **55**, was aligned north-west to south-east, 1.37m wide and 0.34m deep, with a wide U-shaped profile. Fill 56 was a mid greyish brown silty sand with frequent stone inclusions. Animal bone and Roman pottery were recovered from the fill.
- 3.2.24 Located 3.75m to the south-west of ditch **57**, was pit **59**. This feature was sub-circular in plan, with a diameter of 0.72m and measuring 0.06m deep, with a wide U-shaped profile. Fill 58 was a light yellowish brown silty sand with frequent gravel inclusions.

Trench 4

- 3.2.25 Trench 4 was the southern most trench in the compound, 39m in length and aligned west north-west to east south-east. The trench contained three ditches (**37**, **52** and **60**), two postholes (**50** and **63**), three gullies (**35**, **39** and **48**), three pits (**33**, **44** and **46**) and two unexcavated furrows. A lead object was recovered from the subsoil of the trench.
- 3.2.26 At the westernmost end of the trench was pit **33**. This feature was circular in plan, 0.8m in diameter, 0.2m deep with a wide u-shaped profile. Fill 32 was a mid greyish brown silty clay with occasional stone inclusions. Roman pottery was recovered from the fill.
- 3.2.27 Directly to the east of pit **33** was gully **48** and posthole **50**. Gully **48** was aligned north-west to south-east, 0.6m wide, 0.25m deep with a U-shaped profile. Fill 47 was a mid greyish brown silty clay with regular manganese inclusions.
- 3.2.28 Posthole **50** was sub-circular in plan, 0.4m in diameter, 0.25m deep with a square shaped profile. Fill 49 was a mid yellowish brown silty clay with occasional stone inclusions.
- 3.2.29 Directly to the east of gully **48** was pits **44** and **46**. Pit **46** (Fig. 4) was sub-circular in plan, 0.8m wide, 0.2m deep with a bowl shaped profile. Fill 45 was a light brownish orange clayey sand with occasional stone inclusions. The feature was truncated by later pit **44**.
- 3.2.30 Pit **44** (Fig. 4) was sub-circular in plan, 1.05m in diameter and 0.38m deep with an irregular profile. Basal fill 43 was a light greyish orange sandy clay, 0.38m thick, with occasional small stone inclusions. Upper fill 42 was a light brownish grey sandy clay, 0.3m thick, with occasional small stone inclusions. The feature truncated earlier pit **46**.
- 3.2.31 Located 3m to the east of pit **46** was gully **35**, which was aligned north-east to south-west, 0.7m wide and 0.3m deep with a U-shaped profile. Fill 34 was a light greyish orange clayey sand with occasional stone inclusions. The gully was cut by a later furrow, which was unexcavated.
- 3.2.32 Parallel to gully **35** was gully **39**, which was aligned north-east to south-west, measured 0.4m wide and 0.38m deep with a U-shaped profile. Fill 38 was a mid greyish orange sandy clay with occasional stone inclusions. The feature was cut by later ditch **37**, on the same alignment and was truncated by a later furrow.
- 3.2.33 Ditch **37** was aligned north-east to south-west, 0.8m wide and 0.32m deep with a wide U-shaped profile. Fill 36 was a light greyish brown silty clay with occasional stone inclusions. A small rolled lead sheet and a moderate amount of early Roman pottery was recovered from the fill. The feature cut earlier gully **39** and was truncated by a furrow.

- 3.2.34 Directly to the east of ditch **37** was ditch **52**. The ditch was aligned north-west to south-east, measured 0.9m wide, 0.3m deep with a wide U-shaped profile. Fill 51 was a mid greyish brown silty clay with occasional stone inclusions.
- 3.2.35 At the eastern end of the trench was ditch **60** and posthole **63**. Ditch **60** (Plate 4; Fig. 3 & 4) was aligned north-east to south-west, measured 1m wide and 0.52m deep with a U-shaped profile. Fill 61 was a mid brownish grey silty clay with common charcoal inclusions. Roman pottery was recovered from the fill.
- 3.2.36 Posthole **63** was sub-circular in plan, 0.4m in diameter, 0.3m deep with a U-shaped profile. Fill 62 was a mid greyish brown silty clay with occasional charcoal inclusions.

Trench 6

- 3.2.37 Trench 6 was located to the east of the compound area, within the same field. The trench was 50m in length, aligned east to west and contained two parallel ditches, 3.5m apart (**40** and **77**) and a possible furrow, all located at the eastern end of the trench.
- 3.2.38 Ditch **40** was aligned north to south, 0.7m wide, 0.2m deep with a bowl-shaped profile. Fill 41 was a dark brownish grey silty clay with rare charcoal inclusions.
- 3.2.39 Ditch **77** was aligned north to south, 0.65m wide, 0.11m deep with a bowl-shaped profile. Fill 76 was a light greyish brown sandy silt with occasional stone inclusions.

Trench 8

- 3.2.40 Trench 8 was aligned north-west to south-east and measured 50m long. The trench contained three small ditches (**67**, **69** and **71**) all on a north-east to south-west alignment and 0.5m apart. A furrow was also located at the north-westernmost end of the trench, which was 2m wide and 0.08m deep.
- 3.2.41 Ditch **67** was 0.62m wide, 0.09m deep with a wide U-shaped profile. Fill 66 was a mid yellowish brown silty sand with occasional stone inclusions.
- 3.2.42 Ditch **69** was 0.7m wide, 0.18m deep with a wide U-shaped profile. Fill 68 was a light brown silty sand with occasional stone inclusions.
- 3.2.43 Ditch **71** was 0.6m wide, 0.08m deep with a wide U-shaped profile. Fill 70 was a mid greyish brown silty clay with occasional stone inclusions.

Trench 10

- 3.2.44 Trench 10 was aligned north-west to south-east and measured 57m long. The trench contained two ditches and three tree throws. The tree throws were all in the north-western end of the trench. They were excavated and planned, though no further records were taken, as the features contained no artefacts.
- 3.2.45 At the south-eastern end of the trench was ditch **75**. The feature was aligned east to west, measured 0.6m wide, 0.3m deep and had a U-shaped profile. Fill 74 was a mid yellowish brown silty clay with occasional stone inclusions.
- 3.2.46 Located 16m to the northwest of ditch **75** was ditch **73**. This was aligned north-east to south-west, measured 0.85m wide, 0.28m deep and had a wide U-shaped profile. Fill 72 was a light brownish grey silty clay with occasional stone inclusions.

Trenches 11 and 12

- 3.2.47 These two trenches were targeted on a possible barrow earthwork. Trench 11 was aligned north-west to south-east and 22.3m long. Trench 12 was also aligned north-west to south-east and was 21m long. Trench 11 had an average of 0.22m of topsoil overlying 0.2m of subsoil. Trench 12 had an average of 0.25m of topsoil overlying

0.13m of subsoil. No archaeological features or evidence of a barrow was seen in either trench.

3.3 Milton Keynes Trenches

3.3.1 No archaeologically significant features were seen in the six evaluation trenches excavated along the route of the pipe in Milton Keynes. Trench 16, located nearest to the River Great Ouse contained three furrows, all aligned north to south and measured 2m in width. The only other feature in the trenches was a small undated tree throw, excavated in Trench 19.

3.4 Archaeological Monitoring of Topsoil Strip

3.4.1 Topsoil stripping by Anglian Water was monitored along the route of the pipe where it follows the A422 (Fig. 2; Plate 6), in the westernmost part of the pipe route. An average thickness of 0.45m of topsoil was removed, which overlay a sandy clay natural. No archaeological features were recorded.

3.4.2 Monitoring of the pipeline topsoil strip was undertaken where the pipe route was directly opposite to compound area. An average thickness of 0.31m of topsoil was removed, which overlay a natural of sandy gravels. No features were seen during stripping, indicating that the archaeology observed in Trenches 1 to 4 within the compound area was on the periphery of activity located to the south of pipe route.

3.4.3 Monitoring was also undertaken near the River Great Ouse in Milton Keynes (Fig. 2), in the Pocket Park Picnic Area. A total of 0.1m of topsoil were stripped off, uncovering heavily disturbed modern made ground. The made ground was 0.55m thick, overlying a natural of sandy clay. No archaeological features were identified during the excavation.

3.5 Topographic Survey

3.5.1 The results of the topographic survey undertaken over the ridge and furrow in Northamptonshire can be seen on Fig. 4. Post-processing the data has resulted in a clear image of the furrows in the two fields. The earthworks are on a north-east to south-west alignment in the southern field, and a possible headland is visible at the northern limit of the southern topographic survey. The possible barrow earthwork is also clearly visible within the results. The northern topographic survey shows the furrows on an east-northeast to west-southwest alignment.

3.6 Finds Summary

3.6.1 A total of 364g of pottery was recovered from the evaluation, all dating from the early to Mid Roman period. Three small pieces of lead; possibly weights, and a small sherd of glass were recovered from ditches within the compound area: evidence of relatively high status Roman occupation within the area. In addition, a single abraded sherd of Romano-British pottery, 2nd to 3rd century, and a highly corroded Roman coin were recovered from the topsoil during monitoring of top soil stripping adjacent to the A422.

3.7 Environmental Summary

3.7.1 A total of two bulk samples was taken from two separate ditches (**13** and **60**) within the compound area. Both samples were devoid of plant remains.

4 DISCUSSION AND CONCLUSIONS

4.1 The Pipe Route through Northamptonshire

- 4.1.1 The majority of archaeology encountered during the evaluation was located within the section of the pipeline that ran through Northamptonshire. Within the compound area directly to the east of the A422 (Figs. 2 & 3), a not insignificant amount of Roman archaeology was recorded. From the relatively small finds assemblage recovered from the features, it is evident that there was Roman activity of moderately high status within the area. The Northamptonshire HER has an entry located directly to the south of the pipe route (SMR1238) that is described as being a Roman settlement, possibly with funerary activity. The three lead objects recovered from subsoil and ditch **37** could also indicate ritual or funerary activity within the area; there is a small possibility that the artefacts are curse tablets, though this seems unlikely (Appendix B.1). However, the fact that three lead artefacts along with a small amount of imported pottery have been recovered from this small area of the site does support the theory of quite high status occupation being within the vicinity. The Stony Stratford Hoard, uncovered during the 18th century is thought to be from this or a nearby field. Due to this hoard's religious connotations, it has been proposed that a temple may lie nearby. The archaeology located within the evaluation trenches would suggest that this could be the case, with these remains being on the periphery of this activity.
- 4.1.2 Archaeology in the remaining trenches leading towards the River Great Ouse was sparse, with a number of small undated ditches being recorded. Surviving ridge and furrow earthworks were located in two of the fields to be stripped. These were subject to a topographic survey, the results of which are shown on Fig. 4. These earthworks were found not to be masking any earlier archaeology.
- 4.1.3 The Northamptonshire HER also records a possible Bronze Age Barrow, part of which falls within the route of the pipeline (SMR 1184). Upon excavation of trenches 11 and 12, no evidence of a barrow was seen. The earthwork appears to have been created during the excavation of a pipe route during the 1970's, directly to the north of the mound. As the ridge and furrow that the former pipe easement truncated was not reinstated, it is probable that excess soil removed during stripping was left in a mound, to later be interpreted as a possible barrow during the Open Fields Project.

4.2 The Pipe Route through Milton Keynes

- 4.2.1 The lack of archaeology within the proposed route of the pipe in Milton Keynes indicates that the land has seen no significant activity (that is visible in the archaeological record) prior to the medieval period. The westernmost field evaluated contained surviving ridge and furrow earthworks, which upon investigation were found to not be masking any earlier features.

4.3 Significance

- 4.3.1 The evidence uncovered during the evaluation indicates that the majority of the land the pipe route runs through has seen little human activity that is evident within the archaeological record. The Roman remains seen within the compound area indicate that relatively high status remains, possibly associated with the Stony Stratford hoard, lie within the area and the pipe easement appears to be on the very edge of this activity.

APPENDIX A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description				Orientation		N-S
Trench contained a ditch, four gullies, a posthole, a cluster of quarry pits and two furrows. Consists of topsoil (0.28m) overlying a natural of sandy gravels				Avg. depth (m)		0.28
				Width (m)		1.8
				Length (m)		32.4
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
1	Fill	-	0.5	Gully	Pottery	C1-C3
2	Cut	0.42	0.5	Gully	-	-
3	Fill	-	0.3	Gully	Pottery	C1-C3
4	Cut	0.45	0.3	Gully	-	-
5	Fill	-	0.41	Pit	Animal bone	-
6	Cut	1.25	0.41	Pit	-	-
7	Fill	-	0.36	Pit	-	-
8	Cut	1.2	0.36	Pit	-	-
9	Fill	-	0.48	Pit	-	-
10	Fill	-	0.17	Pit	-	-
11	Cut	2.15	0.76	Pit	-	-
12	Fill	-	0.32	Ditch	Pottery, Bone & Glass	C1-C3
13	Cut	1.64	0.32	Ditch	-	-
14	Fill	-	0.25	Furrow	-	-
15	Cut	2.1	0.25	Furrow	-	-
16	Fill	-	0.35	Gully	-	-
17	Cut	0.3	0.35	Gully	-	-
18	Fill	0.38	0.25	Gully	-	-
19	Cut	0.38	0.25	Gully	-	-
20	Fill	0.55	0.2	Pit	-	-
21	Cut	0.55	0.2	Pit	-	-

Trench 2

General description	Orientation	E-W
Trench contained two postholes, three ditches and a tree throw. Consists of topsoil (0.35m) overlying a natural of sandy clays.	Avg. depth (m)	0.35
	Width (m)	1.8
	Length (m)	35

Contexts

context no	type	Width (m)	Depth (m)	comment	finds	date
22	Fill	-	0.16	Pit	-	-
23	Cut	0.75	0.16	Pit	-	-
24	Fill	-	0.21	Posthole	-	-
25	Cut	0.5	0.21	Posthole	-	-
26	Fill	-	0.36	Ditch	-	-
27	Cut	0.9	0.36	Ditch	-	-
28	Fill	-	0.31	Ditch	-	-
29	Cut	0.73	0.31	Ditch	-	-
30	Fill	-	0.17	Gully	-	-
31	Cut	0.36	0.17	Gully	-	-

Trench 3

General description	Orientation	NE-SW
Trench contained a natural hollow, posthole and ditch. Consists of topsoil (0.37m) overlying a natural of sandy gravels.	Avg. depth (m)	0.37
	Width (m)	1.8
	Length (m)	21.5

Contexts

context no	type	Width (m)	Depth (m)	comment	finds	date
53	Layer	2.32+	0.07	Natural hollow	Pottery	-
54	Fill	-	0.12	Posthole	-	-
55	Cut	0.41	0.12	Posthole	-	-
56	Fill	-	0.34	Ditch	Animal Bone & Pottery	C1-C3
57	Cut	1.37	0.34	Ditch	-	-

Trench 4

General description	Orientation	E-W
Trench contained three ditches, two postholes, three pits, three gullies and a furrow. Consists of topsoil (0.4m) overlying a natural of sandy clays.	Avg. depth (m)	0.4
	Width (m)	1.8
	Length (m)	39

Contexts

context no	type	Width (m)	Depth (m)	comment	finds	date
32	Fill	-	0.2	Pit	Pottery	C1-C3
33	Cut	0.8	0.2	Pit	-	-
34	Fill		0.3	Gully	-	-
35	Cut	0.7	0.3	Gully	-	-
36	Fill	-	0.32	Ditch	Lead	-
37	Cut	0.8	0.32	Ditch	-	-
38	Fill	-	0.38	Gully	-	-
39	Cut	0.4	0.38	Gully	-	-
42	Fill	-	0.3	Pit	-	-
43	Fill	-	0.08	Pit	-	-
44	Cut	1.05	0.38	Pit	-	-
45	Fill		0.2	Pit	-	-
46	Cut	0.8	0.2	Pit	-	-
47	Fill	-	0.25	Gully	Pottery	C1-C3
48	Cut	0.6	0.25	Gully	-	-
49	Fill	-	0.25	Posthole	Pottery	C1-C3
50	Cut	0.4	0.25	Posthole	-	-
51	Fill	-	0.3	Ditch	-	-
52	Cut	0.9	0.3	Ditch	-	-
60	Cut	1	0.52	Ditch	-	-
61	Fill	-	0.52	Ditch	Pottery	C1-C3
62	Fill	-	0.3	Posthole	-	-
63	Cut	0.4	0.3	Posthole	-	-

Trench 5

General description	Orientation	WNW-ESE
Trench devoid of archaeology. Consists of topsoil (0.3m) overlying a natural of sandy gravels.	Avg. depth (m)	0.3
	Width (m)	1.8
	Length (m)	50

Trench 6						
General description				Orientation		E-W
Trench contained two ditches. Consists of topsoil (0.27m) overlying a natural of sandy gravels.				Avg. depth (m)		0.27
				Width (m)		1.8
				Length (m)		50
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
40	Cut	0.7	0.2	Ditch	-	-
41	Fill	-	0.2	Ditch	-	Post-Med?
76	Fill	-	0.11	Ditch	-	Post-Med?
77	Cut	0.65	0.11	Ditch	-	-
Trench 7						
General description				Orientation		WNW-ESE
Trench devoid of archaeology. Consists of topsoil (0.25m) and subsoil (0.2m) overlying a natural of sandy gravels.				Avg. depth (m)		0.45
				Width (m)		1.8
				Length (m)		50
Trench 8						
General description				Orientation		NW-SE
Trench contained three ditches. Consists of topsoil (0.33m) and subsoil (0.22m) overlying a natural of sandy clay.				Avg. depth (m)		0.55
				Width (m)		2
				Length (m)		50
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
66	Fill	-	0.09	Ditch	-	-
67	Cut	0.62	0.09	Ditch	-	-
68	Fill	-	0.18	Ditch	-	-
69	Cut	0.7	0.18	Ditch	-	-
70	Fill	-	0.08	Ditch	-	-
71	Cut	0.6	0.08	Ditch	-	-
Trench 9						
General description				Orientation		NW-SE
Trench devoid of archaeology. Consists of topsoil (0.3m) and subsoil (0.3m) overlying a natural of sandy clay.				Avg. depth (m)		0.6
				Width (m)		1.8
				Length (m)		43

Trench 10						
General description				Orientation		NW-SE
Trench contained two ditches and three tree throws (unexcavated). Consists of topsoil (0.24m) and subsoil (0.26m) overlying a natural of sandy gravels.				Avg. depth (m)		0.5
				Width (m)		2
				Length (m)		57
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
72	Fill	0.85	0.28	Ditch	-	-
73	Cut	0.85	0.28	Ditch	-	-
74	Fill	0.6	0.3	Ditch	-	-
75	Cut	0.6	0.3	Ditch	-	-
Trench 11						
General description				Orientation		NW-SE
Trench devoid of archaeology. Consists of topsoil (0.2m) and subsoil (0.2m) overlying a natural of silty gravels.				Avg. depth (m)		0.4
				Width (m)		1.8
				Length (m)		22.5
Trench 12						
General description				Orientation		NW-SE
Trench devoid of archaeology. Consists of topsoil (0.25m) and subsoil (0.12m) overlying a natural of sandy gravels.				Avg. depth (m)		0.37
				Width (m)		1.8
				Length (m)		21
Trench 13						
General description				Orientation		NW-SE
Trench devoid of archaeology. Consists of topsoil (0.19m) and subsoil (0.3m) overlying a natural of clay.				Avg. depth (m)		0.49
				Width (m)		1.8
				Length (m)		25
Trench 14						
General description				Orientation		NW-SE
Trench devoid of archaeology. Consists of topsoil (0.24m) overlying a natural of clay.				Avg. depth (m)		0.24
				Width (m)		1.8
				Length (m)		50
Trench 15						
General description				Orientation		NW-SE
Trench devoid of archaeology. Consists of topsoil (0.3m) overlying a natural of clay.				Avg. depth (m)		0.3
				Width (m)		1.8
				Length (m)		50

Trench 16		
General description	Orientation	NW-SE
Trench devoid of archaeology. Consists of topsoil (0.3m) overlying a natural of clay and Fossiliferous Limestone. Contained three N-S aligned furrows.	Avg. depth (m)	0.3
	Width (m)	2
	Length (m)	50
Trench 17		
General description	Orientation	NE-SW
Trench devoid of archaeology. Consists of topsoil (0.21m) and subsoil (0.4m) overlying a natural of Fossiliferous Limestone.	Avg. depth (m)	0.65
	Width (m)	2
	Length (m)	25
Trench 18		
General description	Orientation	E-W
Trench devoid of archaeology. Consists of topsoil (0.41m) overlying a natural of cornbrash limestone.	Avg. depth (m)	0.41
	Width (m)	2
	Length (m)	50
Trench 19		
General description	Orientation	NW-SE
Trench devoid of archaeology. Consists of topsoil (0.22m) and subsoil (0.3m) overlying a natural of sandy clay.	Avg. depth (m)	0.52
	Width (m)	2
	Length (m)	50
Trench 20		
General description	Orientation	NW-SE
Trench devoid of archaeology. Consists of topsoil (0.3m) and subsoil (0.4m) overlying a natural of sandy clay.	Avg. depth (m)	0.7
	Width (m)	2
	Length (m)	50
Trench 21		
General description	Orientation	NW-SE
Trench devoid of archaeology. Consists of topsoil (0.27m) and subsoil (0.11m) overlying a natural of sandy clay.	Avg. depth (m)	0.38
	Width (m)	2
	Length (m)	50

APPENDIX B. FINDS REPORTS

B.1 Metalwork

By Chris Howard-Davis

Introduction

- B.1.1 Three lead items were submitted for assessment (SF 2, 3, 4). Two of the items (SF 3 and 4) were unstratified and came from separate trenches, the third was from fill 36 (ditch **37**). All were in fair condition, having a light coating of white corrosion products obscuring their surfaces.
- B.1.2 The artefacts are catalogued below:

Roll of lead sheet. It comprises a rectangle of sheet, rolled tightly and flattened. L: 57mm; W: c 11mm; Th sheet: c 1.5-2mm XNNOSK13, 36, SF 2

Roll of lead sheet. It comprises a rectangle of sheet, rolled tightly and then an edged tool has been used to secure the edge. Possibly an informal weight of the type used to weight or secure netting. L: 60mm; W: 43mm; Th: 1.5-4mm. XNNOSK13, 99999, SF 3

Flat oval fragment of lead, probably cast. The undulating surface suggests that it was formed on a rough surface. A raised area is reminiscent of a human legs and torso, but this could well be fortuitous. Otherwise the object is likely to have been used structurally, with molten lead run-in to secure some structural element. L: 43mm; Diam: c 10mm; Th sheet: 2mm XNNOSK13, 99999, SF 4

Discussion

- B.1.3 None of the above objects are in any way chronologically diagnostic, and little guidance can be inferred from their stratigraphic position. SF 2 and SF 4, being rolls of thin sheet, could be curse tablets (*defixiones*) as these are on occasion rolled sheet, but a brief review of the literature suggests that rolled curse tablets are usually larger (<http://www.csad.ox.ac.uk/rib/ribiv/jp4.htm>; accessed 27/10/14), and the estimated original dimensions of these two objects (43 x 26mm and 57 x 42mm respectively) would seem small in comparison with tablets from elsewhere, for instance Bath (Tomlin 1988) or Uley (Tomlin 1993). In addition, curse tablets seem to be consistently very thin sheet (often <1mm), and often loosely rolled and flattened with the ends folded over, rather than just tightly rolled. Thus, whilst it cannot be entirely ruled out, it is most likely that SFs 2 and 4 are not curse tablets, and have either served as *ad hoc* weights, or are small fragments of sheet intended for recycling.
- B.1.4 There are many other uses to which lead is put, and it is most likely that the third object, SF 3, has been used in a structural context.

Conservation

- B.1.5 The objects are all well packed and in a stable environment. Unless their potential identification as curse tablets is pursued, they will not require further conservation. Should further clarification of their identification be required, cleaning and explorative conservation would see the fragments unrolled under laboratory conditions, which is vital in order to ensure a correct reading, and a definitive identification made.

Coin

- B.1.6 A single coin, SF 5, was recovered from topsoil during monitoring of stripping adjacent to the A422. The coin is an illegible copper alloy Roman *sestertius*. It is in very poor condition (50% remaining), with only a vague outline of bust visible on obverse. Max width: 36mm. Exact date uncertain.

B.2 Pottery

By Alice Lyons

Introduction and methodology

- B.2.1 A total of 60 sherds, weighing 364g (0.38 EVE) of Early to Mid Romano-British pottery was recovered during this project. The pottery was recovered primarily from ditch fills (Table 1) and was severely abraded with an average sherd weight of only 6g. No surface residues (such as soot or lime-scale) were recorded as surviving on the material.

Feature	Sherd Count	Weight (g)	Weight (%)
Ditch	36	194	53.30
Gully	9	55	15.11
unstrat	2	43	11.81
Pit	8	41	11.26
Post hole	2	16	4.40
Furrow	1	14	3.85
Layer(natural)	2	1	0.27
Grand Total	60	364	100.00

Table 1: The pottery by weight

- B.2.2 The Roman pottery was analysed following the guidelines of the Study Group for Roman Pottery (Darling 2004). In addition the national fabric series (Tomber and Dore 1998) and Tyers (2006) were used for reference.
- B.2.3 The total assemblage was studied and a full catalogue was prepared (Appendix B.3). The sherds were examined using a hand lens (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types present. Broad fabric forms (jar, bowl) were recorded. The sherds were counted and weighed to the nearest whole gramme and recorded by context. Decoration, residues and abrasion were also noted. OA East currently curates the pottery and archive until final deposition.

Fabrics and Forms

Fabric	CODE	Sherd count	Weight (g)	Weight (%)
Sandy grey ware	SGW	32	142	39.01
Nene Valley colour coat	NVCC	5	55	15.11
Grey ware grog with oxidised surfaces	GW(GROG)(OX SURFACES)	4	54	14.84
Central Gaulish samian	SAM(CG)	4	30	8.24
Shell tempered ware	STW	4	25	6.87
Pink grog tempered ware	PGROG	3	22	6.04
Sandy grey ware (fine)	SGW(FINE)	3	18	4.95
Grey ware	GW(SOFT)	1	9	2.47
Grey ware with a grog temper	GW(GROG)	2	7	1.92
Sandy oxidised ware	SOW	2	2	0.55
Grand Total		60	364	100.00

Table 2: The Roman Pottery fabrics, listed in descending order of weight

- B.2.4 The majority of the pottery within this assemblage consists of utilitarian coarse wares, the most common of which are sandy grey wares found in a limited range of jar/bowl forms. Most were undecorated although one example retained faint traces of a burnished cross-hatch design. The manufacturing source of this material is unknown, but it likely to be fairly local, and influenced by the Black Burnished ware 2 industry which flourished in eastern Britain during the Antonine period (Tyers 1996, 186-187). A few finer grey ware jar and beaker fragments were also found.
- B.2.5 In addition a small number of grog tempered jar/bowl coarse ware fragments typical of the early Roman era were retrieved. Another (finer) grog tempered fabric, with a distinctive pink colour, that is thought to have replaced the early coarse grog tempered vessel types was also found in small numbers (Lyons 2014, 317).
- B.2.6 Another common utilitarian coarse ware found in small numbers was manufactured from clay containing fossilised shell fragments. Although several regional production centres are known for this material type (Tomber and Dore 1998; 115 & 156), a local source seems likely for this material (Marney 1989, 174).
- B.2.7 The small amount of undiagnostic Sandy oxidised wares, probable flagon fragments, were also found. It is not certain where these vessels were manufactured although they may be of Verulamium type (Tyers 1996, 199-201).
- B.2.8 Within this small assemblage four pieces of central Gaulish samian were recovered and where they could be assigned to a form they are of plain dish or platter type (Dr 18 and Dr 18/31: Webster 2005). These early to mid 2nd century vessels had clearly been well used before deposition as their slip had been worn away around the rim.
- B.2.9 Other fine wares were not well represented within the group but comprise a small number of Nene Valley colour coat jar/bowl fragments consistent with manufacture in the late 2nd to 3rd centuries (Tyers 1996, 173-174).

B.2.10 Notably absent from this assemblage are any specialist wares such as amphora (Tyers 1996 85-105) or mortaria (Tyers 1996, 116-135).

Conclusion

B.2.11 This is a small assemblage of Early to Mid Roman pottery which consists of locally produced utilitarian coarse wares and finer non local table wares. Unfortunately the assemblage is in poor condition suggesting it has been subject to extensive post-depositional disturbance. Certainly none of the pottery had been deliberately placed, rather it has found its way into the ditches, gullies and pits (possibly) as detritus. It may have originated from a nearby settlement which although largely reliant on local goods did have some access to traded vessels from the wider Roman Empire. This type of assemblage appears typical for the period and the region (Marney 1989, 7-12, Lyons 2104: 315-318, Stansbie 2014; 325). The assemblage therefore although small is an interesting glimpse into Roman life and adds to the growing corpus of data from this region pertinent to this period.



B.3 Pottery Catalogue

Key: B=Base, BEAK = beaker, C= century, D=decorated body sherd, Dsc= Description, E = early, FLAG = flagon, FBEAK = folded beaker, g = gramme, IND=indeterminate, L=late, M = mid, R=rim, SJAR = storage jar, U= undecorated body sherd. *For fabric codes see RBpot Table 2

Context	Cut	Trench	Feature type	Fabric*	Dsc	Form	Sherd Count	Weight (g)	Spot date
1	2	1	Gully	SGW	RUD	JAR (everted rim)	4	24	E/MC2-C3
5	6	1	Pit	SGW	U	JAR	3	5	LC1-C4
12	13	1	Ditch	SGW	U	JAR/BOWL	14	52	LC1-C4
14	15	1	Furrow	PGROG	U	SJAR	1	14	C2-C3
32	33	4	Pit	SGW	B	JAR	3	29	LC1-C4
32	33	4	Pit	GW(GROG)	U	JAR	1	6	C1-E/MC2
32	33	4	Pit	SOW	U	FLAG	1	1	MC1-C3
34	35	4	Gully	SGW	U	JAR	1	3	LC1-C4
34	35	4	Gully	SOW	U	FLAG	1	1	MC1-C3
47	48	4	Gully	SAM(CG)	R	DISH (Dr18/31)	1	21	120-150
47	48	4	Gully	SGW(FINE)	UD	FBEAK	2	6	MC2-EC4
49	50	4	?Post hole	GW(SOFT)	B	JAR	1	9	MC1-C2
49	50	4	?Post hole	SGW	U	JAR/BOWL	1	7	LC1-C4
53	0	3	Layer(natural)	SAM(CG)	U	IND	2	1	C2
56	57	?	Ditch	SAM(CG)	R	PLAT (Dr18)	1	8	100-120
56	57	?	Ditch	GW(GROG)(OX SURFACES)	U	JAR/BOWL	3	15	C1-C2
61	60	4	Ditch	PGROG	U	JAR	1	4	C2-C3
61	60	4	Ditch	STW	U	JAR	4	25	C1-C4
61	60	4	Ditch	SRW(GROG)	U	JAR/BOWL	1	1	C1-E/MC2
61	60	4	Ditch	NVCC	U	JAR/BOWL	1	4	LC2-C4
61	60	4	Ditch	NVCC	D	JAR/BOWL	4	51	C3-C4



XNNOSK13

v.1

61	60	4	Ditch	SGW	RUD	JAR/BOWL	2	8	LC1-C4
61	60	4	Ditch	SGW	U	JAR/BEAK	3	6	LC1-C4
61	60	4	Ditch	SGW(FINE)	D	JAR/BEAK	1	12	
61	60	4	Ditch	SGW(Q)	U	JAR/BOWL	1	8	C2-C4
99999	u/s	u/s	u/s	PGROG	U	JAR	1	4	C2-C3
99999	u/s	u/s	u/s	GW(GROG)(OX SURFACES)	U	JAR	1	39	C1-MC2

B.4 Glass

By Pat Moan

- B.4.1 A single fragment of blown vessel glass was recovered from context 12 (ditch **13**, Trench 1). The fragment is of the relatively dark natural blue-green metal typical of the earlier Roman period. The fragment is 9mm by 8mm in size with no diagnostic features surviving to identify the form of vessel.

B.5 Worked Stone

By Pat Moan

- B.5.1 A single fragment of lava quern, weighing 198g, was recovered from context 61 (ditch **60**, Trench 4). The fragment does not survive well enough to discern the diameter of the quern and is highly weathered with no surviving outer edges.

APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Faunal Remains

By Chris Faine

- 4.3.1 One hundred and ninety grammes of animal bone were recovered from the evaluation. Twenty-five fragments were recovered of which six were identifiable to species. Context 56 contained no identifiable fragments. Context 5 (pit 6, Trench 1) contained portions of sheep/goat humerus. A partial horse astragalus was recovered from context 12 (ditch 13, Trench 1) along with a heavily shattered cattle metacarpal. All elements were from adult animals and no evidence of butchery was observed.

C.2 Environmental samples

By Rachel Fosberry

- C.2.1 Two bulk samples were taken from features within the evaluation trenches in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of any further archaeological investigations.
- C.2.2 The samples were taken from ditches 13 (Sample 1, fill 12) and 60 (Sample 2, fill 61) both of which are provisionally dated to the Roman period.

Methodology

- C.2.3 The total volume (up to 18 litres) of each bulk sample was processed by water flotation (using a modified Siraff three-tank system) for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. Both flot and residues were allowed to air dry. A magnet was dragged through each residue fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60.

Results

- C.2.4 Both of the samples were devoid of plant remains other than modern rootlets and sparse charcoal fragments which suggests that neither ditch was used for the discard of occupational refuse. A single fragment of pottery was recovered from the residue of fill 61 of ditch 60.

APPENDIX D. BIBLIOGRAPHY

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Electronic Resources

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- <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> Geology of Britain View Accessed 29/09/14

APPENDIX E. OASIS REPORT FORM

Project Details

OASIS Number	oxfordar3-192881		
Project Name	Old Stratford to Kiln Farm Water Main		
Project Dates (fieldwork) Start	15-09-2014	Finish	17-10-2014
Previous Work (by OA East)	No	Future Work	No

Project Reference Codes

Site Code	XNNOSK13	Planning App. No.	
HER No.		Related HER/OASIS No.	

Type of Project/Techniques Used

Prompt: Direction from Local Planning Authority - PPS 5

Development Type: Pipelines/Cables

Please select all techniques used:

<input type="checkbox"/> Aerial Photography - interpretation	<input type="checkbox"/> Grab-Sampling	<input type="checkbox"/> Remote Operated Vehicle Survey
<input type="checkbox"/> Aerial Photography - new	<input type="checkbox"/> Gravity-Core	<input checked="" type="checkbox"/> Sample Trenches
<input type="checkbox"/> Annotated Sketch	<input type="checkbox"/> Laser Scanning	<input type="checkbox"/> Survey/Recording Of Fabric/Structure
<input type="checkbox"/> Augering	<input type="checkbox"/> Measured Survey	<input type="checkbox"/> Targeted Trenches
<input type="checkbox"/> Dendrochronological Survey	<input type="checkbox"/> Metal Detectors	<input type="checkbox"/> Test Pits
<input type="checkbox"/> Documentary Search	<input type="checkbox"/> Phosphate Survey	<input checked="" type="checkbox"/> Topographic Survey
<input checked="" type="checkbox"/> Environmental Sampling	<input type="checkbox"/> Photogrammetric Survey	<input type="checkbox"/> Vibro-core
<input type="checkbox"/> Fieldwalking	<input type="checkbox"/> Photographic Survey	<input type="checkbox"/> Visual Inspection (Initial Site Visit)
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Rectified Photography	

Monument Types/Significant Finds & Their Periods

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
Ditch	Roman 43 to 410	Pottery	Roman 43 to 410
Ridge & Furrow	Uncertain	Glass	Roman 43 to 410
	Select period...	Lead	Roman 43 to 410

Project Location

County	Northants	Site Address (including postcode if possible)
District	South Northamptonshire	Deanshanger Road, Old Stratford Northants
Parish	Old Stratford	
HER	Northants Museum Services	
Study Area	4755 linear m	National Grid Reference SP 7875 3964

Project Originators

Organisation	OA EAST
Project Brief Originator	Lesley-Ann Mather & Nick Crank
Project Design Originator	James Drummond-Murray
Project Manager	James Drummond-Murray
Supervisor	Pat Moan

Project Archives

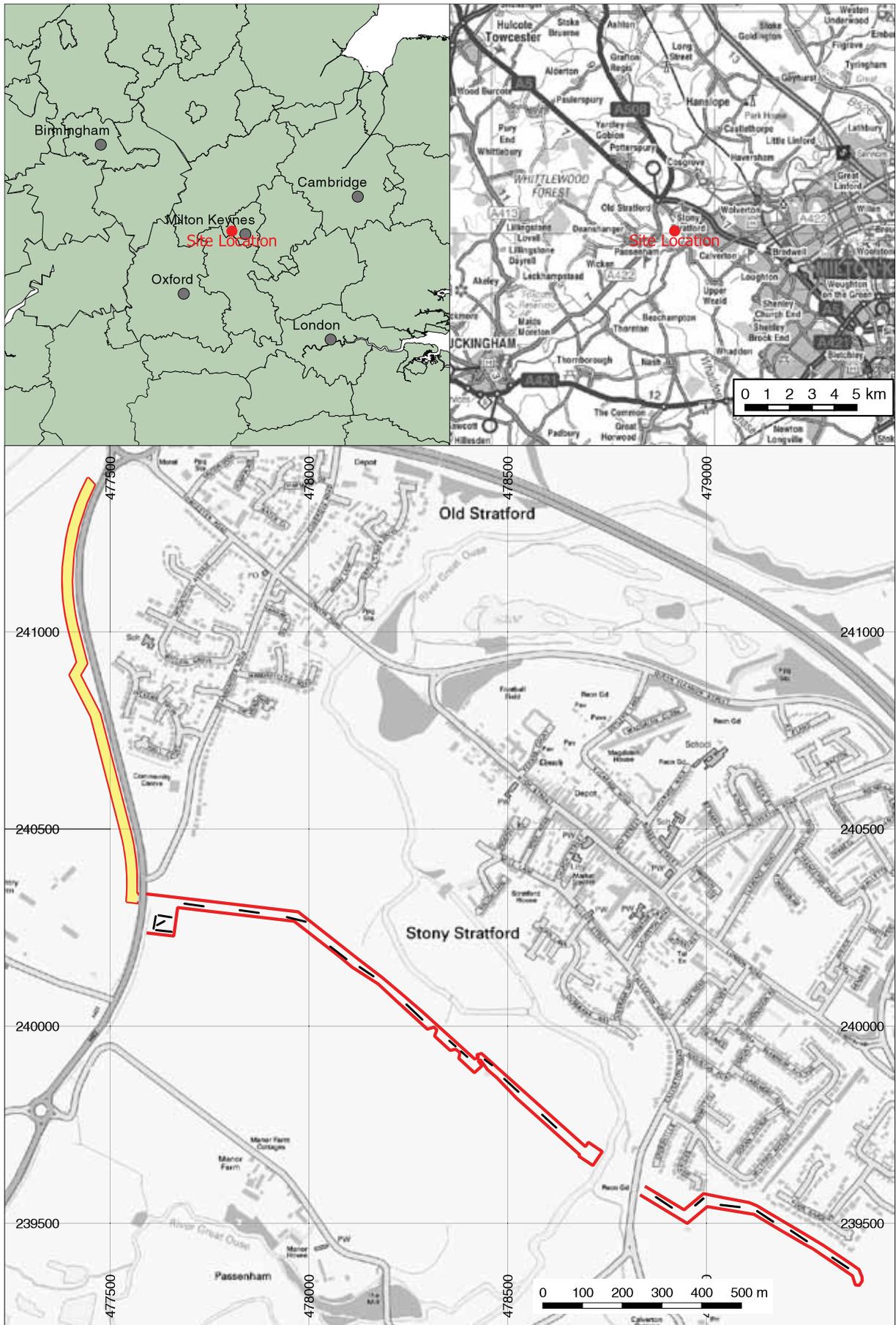
Physical Archive	Digital Archive	Paper Archive
Northants Museum Services.	OA East	Northants Museum Services
XNNOSK13	XNNOSK13	XNNOSK13

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ceramics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stratigraphic		<input type="checkbox"/>	<input type="checkbox"/>
Survey		<input type="checkbox"/>	<input type="checkbox"/>
Textiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Bone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Stone/Lithic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

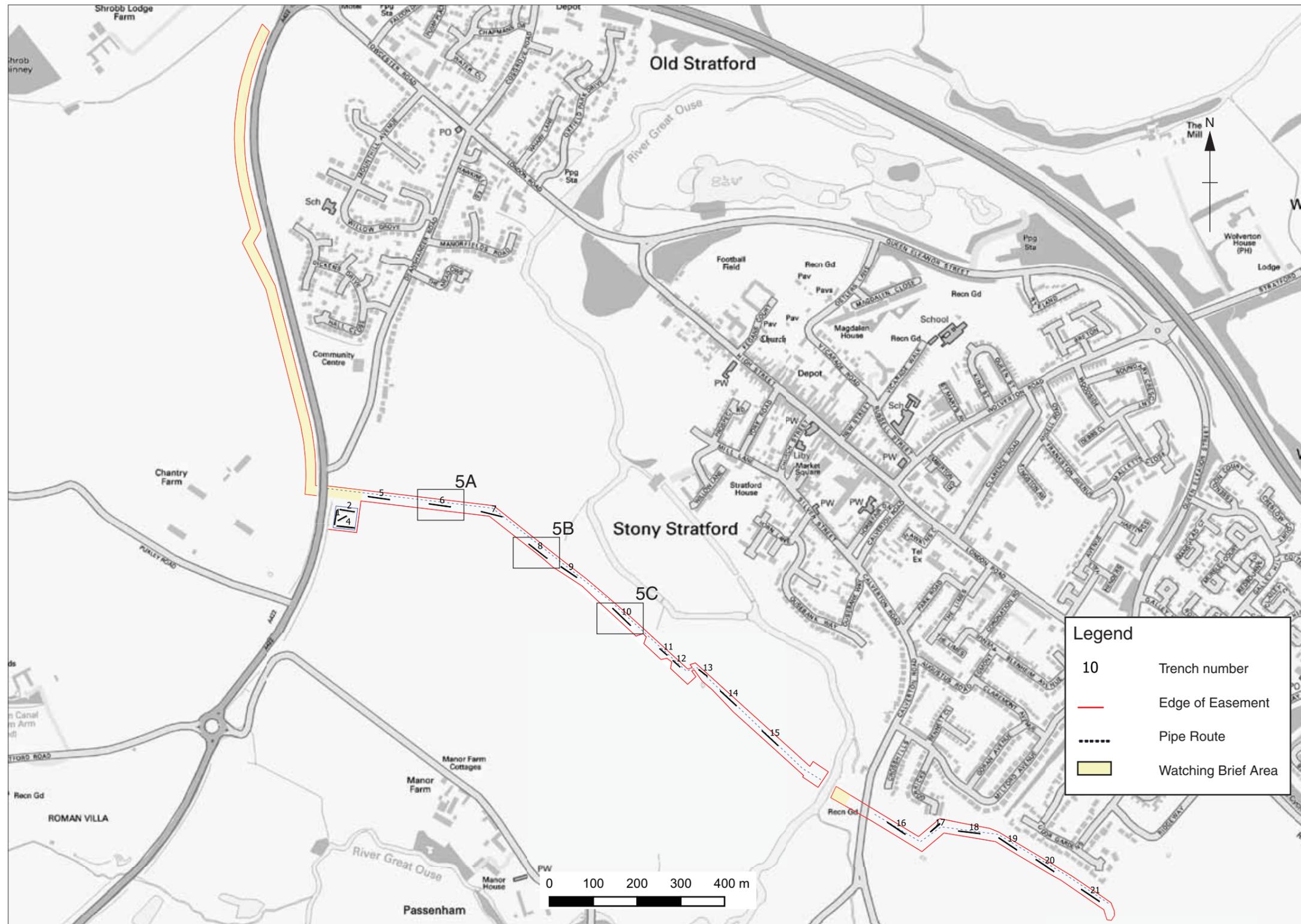
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<input checked="" type="checkbox"/> GIS	<input checked="" type="checkbox"/> Context Sheet
<input type="checkbox"/> Geophysics	<input type="checkbox"/> Correspondence
<input checked="" type="checkbox"/> Images	<input type="checkbox"/> Diary
<input type="checkbox"/> Illustrations	<input type="checkbox"/> Drawing
<input type="checkbox"/> Moving Image	<input type="checkbox"/> Manuscript
<input type="checkbox"/> Spreadsheets	<input type="checkbox"/> Map
<input checked="" type="checkbox"/> Survey	<input type="checkbox"/> Matrices
<input checked="" type="checkbox"/> Text	<input type="checkbox"/> Microfilm
<input type="checkbox"/> Virtual Reality	<input type="checkbox"/> Misc.
	<input type="checkbox"/> Research/Notes
	<input type="checkbox"/> Photos
	<input checked="" type="checkbox"/> Plans
	<input checked="" type="checkbox"/> Report
	<input checked="" type="checkbox"/> Sections
	<input type="checkbox"/> Survey

Notes:



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Figure 1: Site location showing archaeological trenches (black) & watching brief area (yellow) in pipeline route (red)



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Figure 2: Route of Pipeline showing location of Trenches 1-21 and Watching brief areas

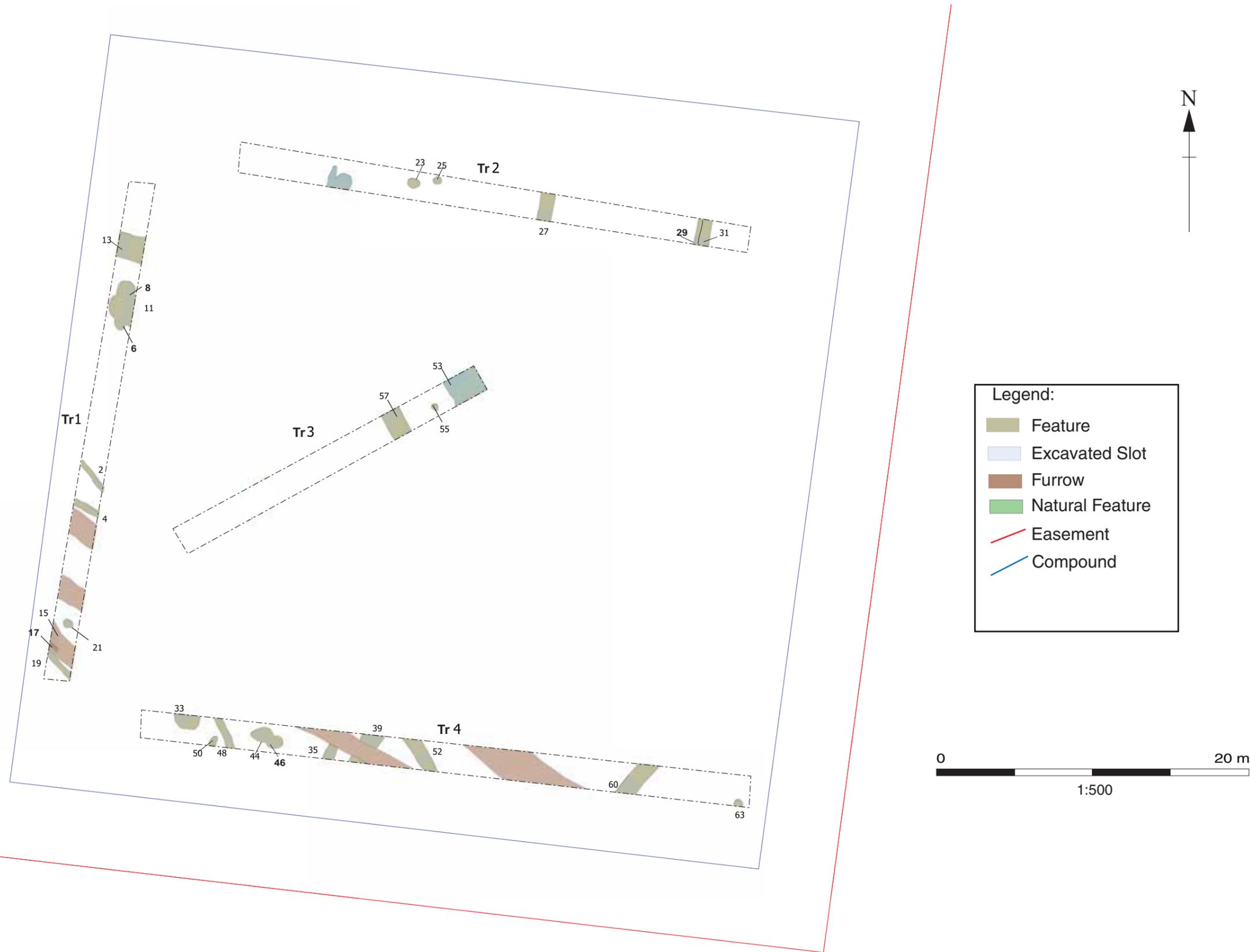


Fig. 3: Plan of Trenches 1 to 4, located within the proposed compound area

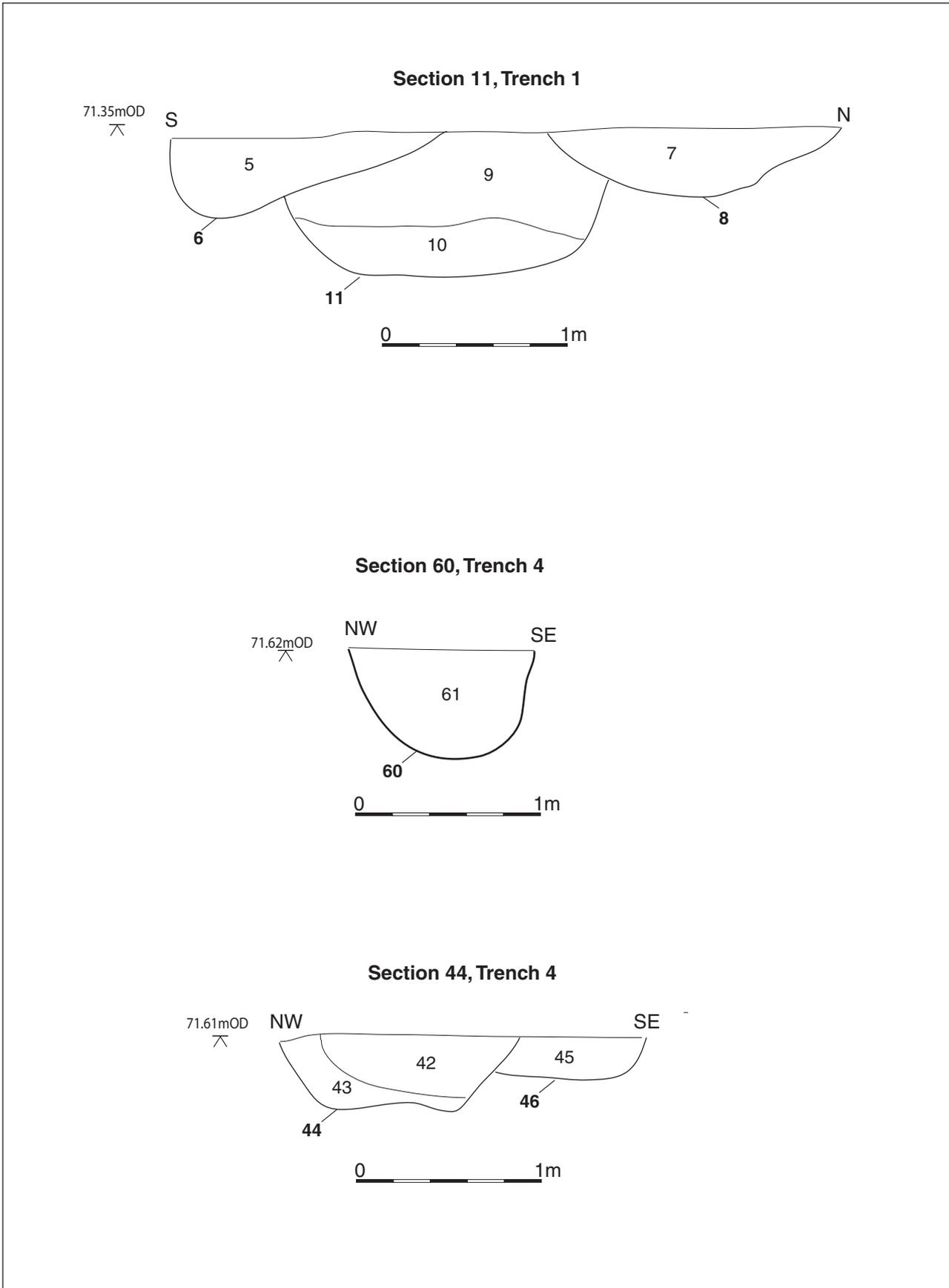


Figure 4: Section 11, Trench 1 and Sections 44 and 60, Trench 4

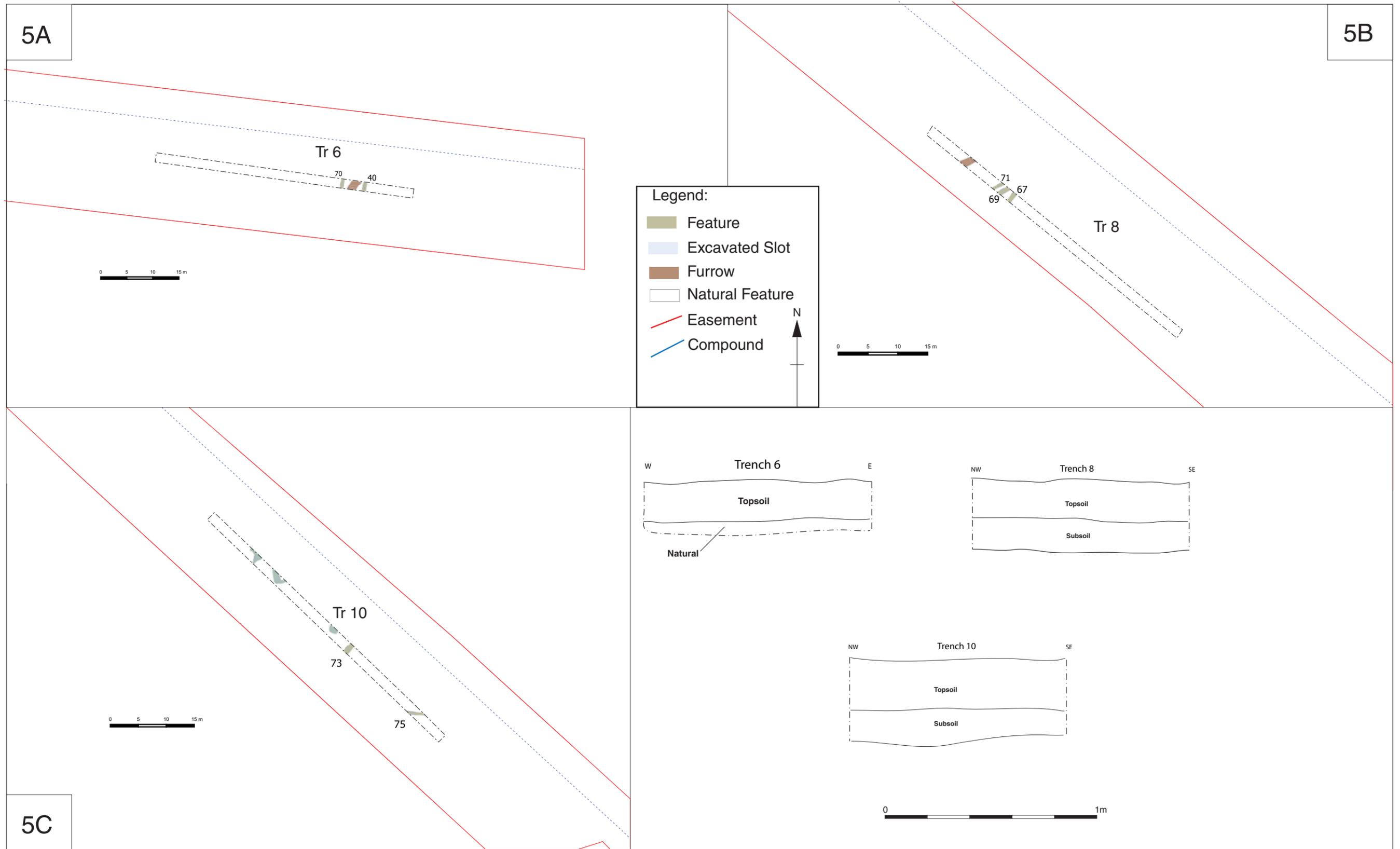


Figure 5: Plan of Trenches 6, 8 and 10, and representative baulk sections.

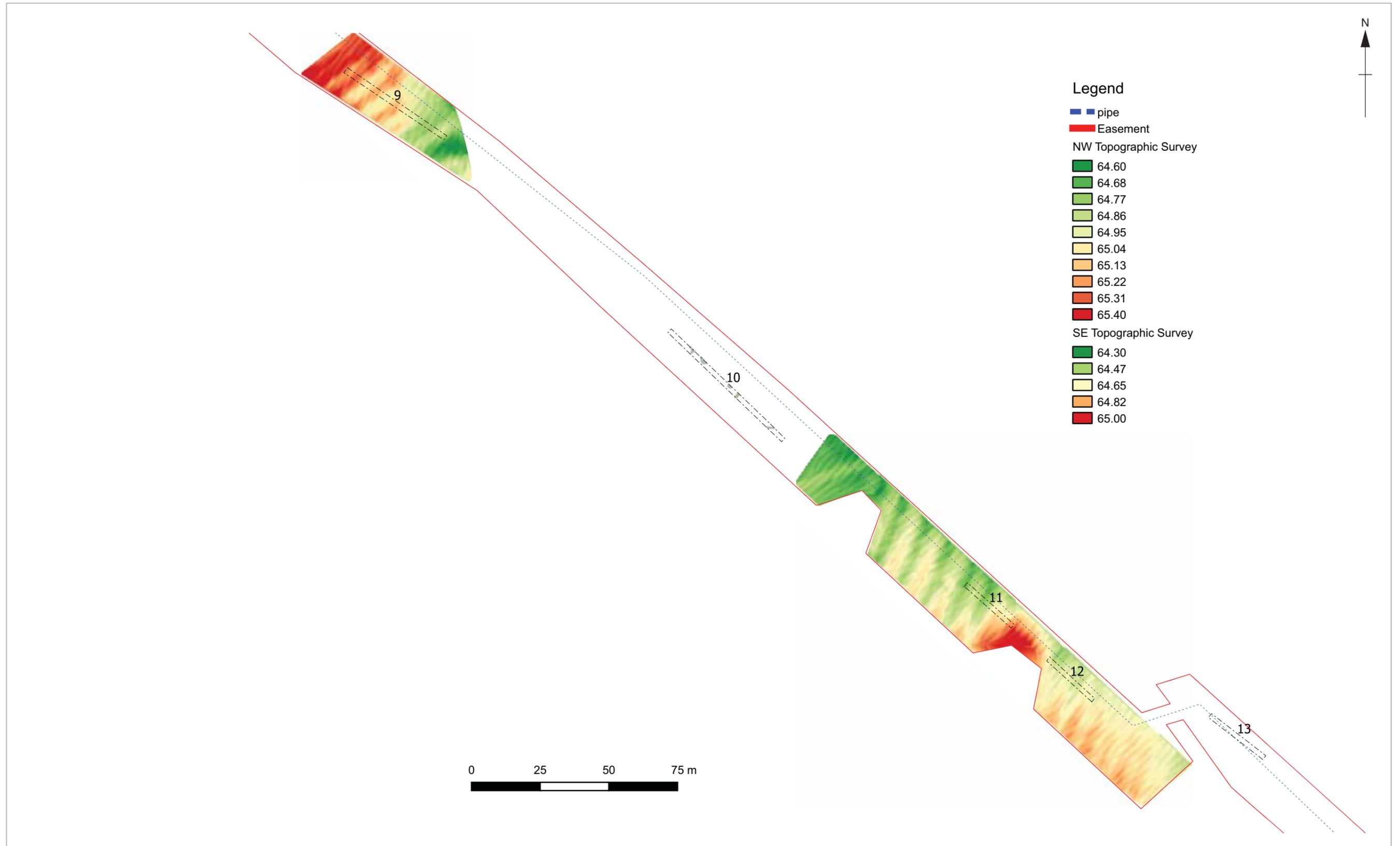


Figure 6: Topographic Survey showing ridge and furrow



Plate 1: Intercutting pits 6, 8 & 11, Trench 1, looking north-west



Plate 2: Trench 1, looking south



Plate 3: Ditch **27**, Trench 2, looking north



Plate 4: Ditch **60**, Trench 4, looking north-east



Plate 5: Trench 19, looking north-west



Plate 6: Topsoil stripping in watching brief area.



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