

**ARCHAEOLOGICAL INVESTIGATION
OF THE CHOAKFORD TO LANGAGE
GAS PIPELINE, SPARKWELL, SOUTH HAMS**

Prepared on behalf of Laing O' Rourke

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Contents

Summary

1. Introduction	1
1.1 Pipeline Route	1
1.2 Geology	1
2. Historical and Archaeological Background	1
3. Aims and Objectives	1
4. Methodology	2
5. Results	2
5.1 Area 1	2
5.2 Area 3	2
5.3 Area 4	3
5.4 Area 5	3
5.5 Area 7	3
5.6 Area 8	3
5.7 Area 9	4
5.8 Area 10	6
5.9 Area 11	6
5.10 Area 12	8
6. The Finds	9
6.1 Prehistoric pottery	9
6.2 Forms	10
6.3 Decoration and surface treatments	11
6.4 Residues and use wear	11
6.5 Discussion	11
6.6 Late pre-roman Iron Age/Romano-British pottery	12
6.7 Medieval and post-medieval pottery	12
6.8 The Lithics	12
6.9 Stone objects	13
6.10 Finds summary	13
7. Palaeoenvironmental assessment and dating potential	13
7.1 Results	13
7.2 Comment	13
8. Discussion	13
8.1 Prehistoric and Roman	14
8.2 Medieval and post-medieval	15
9. Conclusion	15
10. Further Publication	15
Site Archive	15
Acknowledgements	15
References	16

List of Illustrations

- Fig. 1 Route of pipeline and location of areas
- Fig. 2 Plan and section of ditch 103 in Trench 1
- Fig. 3 Plan and section of ditch 809 in Area 3
- Fig. 4 Plan and sections, Area 4
- Fig. 5 Sections of features in Areas 5 and 7
- Fig. 6 Plan of Trench 7, Area 9
- Fig. 7 Sections of features in Area 9
- Fig. 8 Plan and sections of additional trench, Area 9
- Fig. 9 Plan and sections of Trenches 3 and 4, Area 11
- Fig. 10 Plan and sections of the additional trench, Area 11
- Fig. 11 Plan and sections, Trench 5, Area 12
- Fig. 12 Prehistoric pottery

Summary

An archaeological assessment followed by a series of controlled watching briefs, evaluations and excavations were carried out by Exeter Archaeology between March and June 2007 on the Choakford to Langage Gas Pipeline; the works were associated with contemporary construction works for the Langage Energy Centre. The work, which included the monitoring of topsoil removal along the length of the gas pipeline, and was commissioned by Laing O' Rourke.

A number of partially exposed prehistoric occupation areas were recognised along the pipeline. In the northwestern extent of the route, an enclosed settlement and associated features of mid to late Bronze Age date were excavated. In the southeastern area a similar settlement enclosure of middle to late Iron Age date, with the possible remains of a later Romano-British structure were exposed and investigated.

The archaeological investigations have established that prehistoric settlement activities of different periods are represented at a number of points along the pipeline. These areas of occupation generally occupy the higher ground and were located at opposing ends of the pipeline. A range of pottery and lithic artefacts from the late Neolithic through to the Romano-British period were recovered which illustrate the length of occupation of the area although such occupation cannot be demonstrated to be continuous over such a breadth of time.

1. INTRODUCTION

This report details the results of a series of archaeological investigations undertaken by Exeter Archaeology (EA) between March and June 2007 during construction of the Choakford to Langage gas pipeline.

The work, commissioned by Laing O'Rourke, involved a controlled watching brief, evaluation and excavation along the Choakford to Langage Gas Pipeline.

1.1 Pipeline Route

The pipeline originated at the Choakford Above Ground Installation (AGI), SX 5888 5464 and finished south of Langage Dairy Farm, SX 5723 5608 (Fig 1). The route, within the parish of Sparkwell immediately to the east of Plymouth, was approximately 2.3km long and traversed a total of 12 plots most of which were under pasture, 3 small streams and the main A38 Exeter to Plymouth road.

1.2 Geology

Palaeozoic slates, mudstones, and siltstones dominate the solid geology of the area. Along the pipeline route, well-drained, fine loamy soils overlie slate or slate rubble of the Denbigh 1 and 2 soil series (Soil Survey of England and Wales 1983).

2. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

A full discussion of the historical and archaeological background is contained within EA report no. 06.75 *Archaeological Assessment of Choakford to Langage Gas Pipeline*, produced for Centrica Energy at the request of Devon County Council (DCC) in 2006.

The report concluded that: 'There is evidence of prehistoric activity in the immediate area (at the Langage Energy Centre itself) and also over a wider area, and consequently there is a strong likelihood of material from this period surviving along the pipeline route.' In addition, the route passes through fields originally laid out close to medieval settlement sites. Although the land has probably always been used for agricultural purposes, there is the possibility that one or more of the settlement site(s) were once larger than at present, despite there being no direct cartographic or documentary evidence for this. A field between Leigh and Langage was named 'Great Crockers Field' in 1840/41, which may be indicative of a former pottery industry. Advance evidence of any pre-medieval occupation, or of an extended early medieval settlement, is only likely to be revealed during construction work, or as a result of geophysical and/or geotechnical investigations undertaken prior to development works. It is considered that archaeological evidence on the route of the earlier A38 (on the line of the medieval or earlier route) will have been destroyed or truncated by the dualling of the A38 in the 1970s. Palaeoenvironmental material may be present in preserved deposits sealed beneath both existing and former hedgebanks. There is also the potential for waterlogged material surviving along the course of the streams and within buried features such as boundary ditches" (Turton & Ives 2006).

3. AIMS AND OBJECTIVES

All archaeological investigation was undertaken in accordance with method statements prepared by EA (2007), submitted to, and approved by the Devon County Historic Environmental Service Archaeology Officer prior to commencement on site. The project consisted of a controlled watching brief and field evaluation, with provision for more detailed investigation dependent on results. The principle aim was

to monitor all groundworks associated with the construction of the pipeline and to ensure the adequate investigation and recording of significant archaeological features or deposits exposed.

4. METHODOLOGY

A geophysical survey carried out by Substrata in 2005 highlighted the potential for archaeology in seven different parts of the pipeline corridor. The relevant areas were evaluated by trenching (Fig. 2). Additional trenches were excavated in Areas 9 and 11, where further clarification of the nature and extent of the archaeological features and deposits present was required.

Once the trenches had been investigated and recorded the removal of topsoil from the 30m wide pipeline easement commenced. Machining was carried out under the supervision of an archaeologist using a 360° mechanical excavator fitted with a 2m wide toothless grading bucket.

All features and deposits were recorded using the standard EA recording system comprising *pro forma* context record sheets and trench recording forms. Sections and plans for each trench were drawn at 1:10, 1:20, 1:50 or 1:100, as appropriate. A detailed black and white print and colour digital photographic record was made. Registers were maintained for photographs, drawings and context sheets. Finds and samples were labelled and bagged on site and taken to EA's office for processing and cataloguing.

5. RESULTS

Work commenced in May 2007 and comprised the field evaluation and subsequent excavation of archaeological deposits in Areas 1 through to 12 (Fig 2). All Areas were found to contain archaeological features, with the exception of Areas 2 and 6.

5.1 Area 1

Evaluation Trench 1 was excavated in order to investigate a linear anomaly detected by geophysical survey. The trench measured 18.4m long, 1.5m wide, and varied in depth between 0.29m and 0.51m (Fig. 6). The recorded trench section showed a stratigraphic sequence of 0.22m of mid-brown clay silt topsoil (100), overlying c.0.48m of light yellowish brown clay silt colluvium (101), which in turn overlay slate bedrock (102).

A northeast-southwest aligned ditch (103) was visible approximately 7.5m from the northwestern end the trench and measured 3.5m wide and 0.52m deep (Fig 6.1). The sides were gently sloping with an irregular, though generally flat base. The sole fill (104) comprised orange-brown silty clay with frequent slate fragments and rare charcoal. The homogenous nature of the deposit suggests the ditch was deliberately backfilled. Other than charcoal flecks, no datable material was present within the fill of the ditch.

Trench 2 was located directly west of Trench 1 and measured 9.3m long, 0.55m wide, and 0.35m deep. A similar soil profile to that recorded in Trench 1 was observed, but no archaeological features or deposits were present.

5.2 Area 3

An area measuring 100m by 25m was machine stripped in order to investigate a linear anomaly identified by the geophysical survey (Fig 7).

A ditch (809) traversed the stripped area on a northeast-southwest alignment and was visible for c.43m. The ditch measured 1.75m wide, 0.25m deep and exhibited a shallow, asymmetrical profile steeper in the northwestern edge (Fig 7.1). It contained a single fill (808) of clean greyish brown clay, which produced no finds. The position and alignment of the ditch suggests it represents a former continuation of existing field boundaries, present to the east and west of the stripped easement.

5.3 Area 4

Although no features were identified by the geophysical survey, topsoil removal revealed two parallel northwest-southeast ditches, spaced approximately 2.5m apart (Fig. 8).

The easternmost ditch (834) was 3.9m wide and 0.54m deep. The western edge was moderately steep, whilst the eastern edge sloped very gradually up from the rounded base (Fig 8.1). The ditch contained two fills; the lower (835) comprised mottled reddish brown clay with bluish grey patches, and the upper (836) was dark greyish brown silty clay. Seven worked flint and chert flakes were recovered from fill 836.

The western most ditch (837) was slightly narrower, but deeper than 834. It measured 2.26m wide, 0.62m deep and although its profile was very similar to that of 834 it was better defined (Fig. 8.2). It also contained two fills, the lower (839) comprising mottled brown clay, and the upper (838) comprising orange brown silty clay. No finds were recovered from either fill.

5.4 Area 5

Topsoil stripping revealed a northeast-southwest aligned ditch (813). It was visible for c.9.2m and measured 2.4m wide and 0.64m deep with a shallow U-shaped profile, slightly more open in the northwestern edge (Fig. 9.1). It contained a single fill (814), which comprised dark brown clay with frequent small stones. Although no dateable material was present the ditch seems likely to represent a former continuation of existing field boundaries.

5.5 Area 7

Two parallel east-west aligned ditches (801, 807), spaced 1.8m apart were exposed. Both were seen immediately below the topsoil (803), and cut through colluvial subsoil (804). Ditch 801 measured 4.4m wide, 0.4m deep and contained two fills. The lower fill (802) was a soft grey waterborne silt and was overlain by orange brown clay silt (800) which contained frequent slate fragments (Fig. 9.2).

The second ditch (807) was 2.4m wide and 0.3m deep (Fig. 9.3). The sole fill (806) comprised soft grey silt similar to 802. It was noted in the field that ditch 801 conformed to the orientation and spacing of current field boundaries, but no dateable material was present in either ditch

5.6 Area 8

This area contained evaluation Trench 6, which was T-shaped. The north-south component measured 1.6m wide and 73.3m long, the east-west component was the same width and measured 12.7m long.

Of five features that were present in the main north-south part of the trench, all appeared to be natural disturbance. They comprised three irregularly linear features (630, 632 and 638), perhaps resulting from animal activity, and two small, irregular

sub-circular features (634 and 636), probably tree root-holes. No artefacts were recovered from any of the features.

No features or deposits were present in the east-west part of the trench

5.7 Area 9

Trench 7 was 1.6m wide and 123m long. It was located in an area identified by the geophysical survey as containing a potential large ditched enclosure, with internal features. All features were investigated, some of which were found to be naturally derived, and others the result of post-war ploughing.

The potential enclosure ditches were present in either end of the trench, spaced approximately 100m apart in positions predicted by the geophysical survey. In each case additional paired ditches were also present in close association (Fig 10).

Ditch 702 was located at the southern end, crossing the trench on a northeast-southwest alignment and was 1m wide and 0.8m deep. The steeply sloping sides met the narrow, flat base abruptly (Fig. 11.1). The primary fill (741) comprised slate fragments weathered in from the edges, whilst the upper fill (703) comprised orange brown silty clay with rare slate fragments and charcoal flecks. A second ditch (742) was visible 1.5m south of 702, and orientated along a similar alignment. It was 2m wide and 0.92m deep with an irregular, but generally rounded profile. It had been truncated in its northwestern edge by a later re-cut (749, Fig. 10). The later ditch appeared as a steep sided, flat-based cut 0.54m wide and 0.62m deep. The fill of which (750) comprised orange-brown silty clay with occasional sub-angular slate inclusions.

Towards the north end of the trench lay ditch 715, aligned northwest-southeast. It measured 0.9m wide and 0.55m deep, its profile (Fig. 11.2) being less sharply defined than that of ditch 702, perhaps due to variation in the natural substrate. The sole fill (730) comprised orange-brown clay silt. A further ditch (747) was exposed approximately 2m to the south of ditch 715. It was 1.6m wide and 0.64m deep with a shallow, rounded profile. The primary fill (746) comprised loose slate fragments within a matrix of grey silt and was overlain by orange-brown silty clay (748) which contained occasional large stones. Ditch 747 had been cut along the southern edge by a later ditch on a similar alignment. The later ditch (749) was 0.84m wide and 0.4m deep with steep sides and a rounded base. It contained a single fill consisting of orange-brown silty clay with occasional sub-angular slate fragments similar to that within 749 for which reason it was allocated the same context number.

A number of features were identified within the area between ditches 702 and 715.

This included the terminal of a ditch, aligned northwest-southeast (716/717), which lay some 11m to the south of ditch 747. Against the eastern edge of the trench the ditch measured 1.52m wide and 0.73m deep and had an open, rounded profile (Fig.11.5). In this area the ditch contained three fills; the primary fill (727) consisted of a greyish brown gritty clay with slate fragments, above which was a brown silt, 0.5m thick (726). The silt (726) was sealed by a deposit of loose brown loam (725) containing frequent stones and slate fragments, which lay directly beneath the modern topsoil (700). The ditch greatly reduced in depth across the width of the trench and at the western trench edge measured 1.4m wide and only 0.2m deep (Fig. 11.6).

To the south of ditch 716/717 three further ditches, at least one of which had probably been recut, and all on a northeast-southwest alignment, were recorded (Fig. 10). The most northerly ditch (735) lay approximately 5m south of ditch 716/717. The profile

of the ditch was open and rounded with a slight step evident on either side, perhaps suggestive of re-cutting (Fig. 11.4). This ditch measured 1.12m wide and 0.34m deep and contained three separate fills. The primary fill (736) consisted of a light brown silty clay which appeared to represent weathered material from the southern edge of the ditch. A blue-grey very compact clay (737) with frequent fragments had been followed the resultant tip-line from southern side of the ditch. The uppermost layer, a mid brown silty clay (738) containing frequent large sub-rounded stones, was sealed by modern topsoil (700).

Against the western edge of the trench ditch 735 had been cut by a pit (739). Sub-circular in plan, the pit was 0.79m wide and 0.27m deep. The southern edge of the pit was almost vertical, whilst the northern edge sloped moderately and had a slight step that dropped to meet a flattish base. The fill (740) comprised orange-brown loamy soil similar to the topsoil.

The second ditch (734) was recorded 18.5m south of ditch 735. It had an open V-shaped profile and measured 0.8m wide and 0.48m deep. The single fill (733) comprised orange-brown silt with very occasional slate fragments and sub-angular stones. The southwestern edge of the ditch was lost to the western edge of a parallel ditch (732), representing a re-cutting (Fig. 11.3).

Ditch 732 followed the southwestern edge of 734 across the width of the trench with no deviation of alignment. The open, steep-sided profile was slightly more rounded in the base than that of 734, but of similar size, being 0.85m wide and 0.49m deep. The single fill (731) comprised mottled orange-brown clay silt with occasional slate fragments and small sub-angular stones.

The most southerly ditch (724) was located 14m to the south of ditch 734. The profile was wider and shallower than that of the ditches to the north, measuring 1m wide and 0.3m deep. The profile was notably asymmetrical, the northwestern side being much steeper than that to the southeast. The fill (723) consisted of orange-brown clay silt with rare small sub-angular stones.

Located twenty-six metres south of ditch 724 and adjacent to the western edge of the trench, a well-defined terminal of a ditch (704) was visible. The ditch was aligned northwest-southeast and measured 1.17m wide and 0.57m deep (Fig. 10). The sides of the ditch sloped gradually at the top, but became almost vertical where they met the base, which was rounded; the terminal had a shallow sloping edge. The ditch contained a primary fill (705), comprising a pale grey silty clay with slate fragments, which was restricted to the southern part of the feature, and a secondary fill (706) consisting of a dark orange-brown, silty clay.

Fourteen metres to the south of ditch 704, and adjacent to the western edge of the trench, part of a sub-circular pit (709) was evident. The visible extent of the pit measured 0.46m long and 0.24m deep with sides that sloped steeply to an irregular, concave base. The sole fill (710) comprised orange-brown clay silt with occasional small fragments of slate.

Only a single feature (pit 755) was present outside the area enclosed by ditches 702 and 715. This pit was located 0.5m north of ditch 715 and extended from the western edge of the trench; it was only partially exposed (Fig. 10). The pit was sub-circular, measuring 0.5m wide and 0.08m deep, and contained a single fill (756) comprising orange-brown silty clay, from which a single sherd of Middle Bronze Age pottery was recovered.

Additional trench in Area 9

In order to provide a more accurate evaluation of the extent and density of features within the suspected enclosure, an additional trench, 3m wide and 133m long, was excavated parallel with the line of Trench 7, 8m to the east (Fig. 12).

A number of features were exposed in the additional trench, including a ditch (829) aligned northeast-southwest, located 17m from the southern end of the trench. The ditch measured 0.92m wide and 0.72m deep and had steep sloping sides and a narrow, flat base (Fig. 12.1). The primary fill of the ditch (828) comprised a reddish-brown silty matrix with frequent slate inclusions, whilst the upper fill (827) comprised reddish-brown clay silt. The ditch appears to be an eastward continuation of southern enclosure ditch 702.

A second ditch (818), aligned northwest-southeast was located 9m from the northern end of the trench. This feature was 0.5m wide and 0.35m deep with moderate to steep sloping sides and a slightly rounded base (Fig. 12.2). The sole fill (817) comprised reddish-brown clay silt with occasional slate inclusions. The ditch appears to be an eastward continuation of northern enclosure ditch 715.

Three small pits or postholes were present within the area defined by the enclosure. Pit 824 was visible against the western edge of the trench and 8.5m to the south of ditch 818. Although partially beyond the edge of the excavated area, the pit was irregularly oval or sub-rectangular in shape, measuring 1.4m long and 0.64m wide by 0.42m deep (Fig. 12). The primary fill of the pit (826) comprised grey, weathered slate fragments, whilst the upper fill (825) comprised orange-brown silty clay.

Pit 821 was located 3.5m to the south of pit 824, and was of a similar size and shape in plan. The feature contained a primary fill (823) and secondary fill (822), which were, respectively, very similar to those within pit 824. The features may have been contemporary and may represent postholes.

The third pit (832) was located in the southern half of the trench 30m to the north of ditch 829. This pit was sub-circular in plan, measuring 0.95m long and 0.55m wide by 0.3m deep. No finds were recovered from any of the features within this area.

5.8 Area 10

A small curvilinear gully (815) was observed during topsoil stripping. The feature, aligned approximately east-west and visible for 9m, was 0.5m wide, 0.34m deep and had a sharp V-shaped profile. The sole fill (816) comprised loose orange-brown silty clay with frequent large sub-rounded stones. No artefactual material was present within the fill.

5.9 Area 11

Evaluation Trenches 3 and 4 were opened in Area 11 (Fig. 13). Trench 4 measured 24m long and 1.6m wide and was aligned east-west across the strip. Present within the trench were a pair of ditches, aligned northwest to southeast, one of which had been re-cut, and a small pit.

The eastern-most ditch (423) was 1.7m wide and 0.65m deep, with an open V- shaped profile. The sole fill (422) comprised yellowish-brown silty clay with occasional slate and sub-angular burnt stones near its base.

Along the western edge of 423 was a shallow, flat-based re-cut (421) measuring 1.2m wide and 0.23m deep (Fig. 13.1). The sole fill (420) comprised orange-brown clay silt. The third ditch (419) lay parallel to 421/423, some 7.5m to the west. This ditch had an open, shallow profile, 0.85m wide and 0.1m deep, and contained a single fill (418) of orange-brown clay silt with occasional small slate fragments and pebbles. The similar alignment of ditches 419 and 421 suggests an association of purpose.

Adjacent to the northern trench edge, 1.6m to the west of 419, was the remains of a shallow, round-based pit (417). Sub-circular in plan, the pit measured 1m long, 0.45m wide, and 0.07m deep. The sole fill (416), comprised orange-brown clay silt. No dateable material was recovered from any of the features.

Trench 3, aligned east to west in the western part of Area 11, measured 42m long and 1.6m wide. A ditch, aligned northeast to southwest, and a large rounded pit were exposed in the trench (Fig. 13).

The ditch (308) occupied the first 16m of the western part of the trench before turning to the south and passing beyond the edge of excavation. Three segments of the ditch were excavated and sections drawn. All of the sections showed a slightly rounded V-shaped profile, 1m wide and between 0.33m and 0.6m deep. The western segment contained a single primary fill (309) consisting of a pale yellow silty clay (Fig 13.2). The central and eastern segments contained 309 as the primary material overlain by secondary fill (310) consisting of a light yellowish brown silty clay with moderate to frequent sub-angular stones (Fig. 13.3 & 13.4). A total of 45 sherds of mid to late Iron Age pottery were recovered from fill 309.

Approximately 4m east of ditch 308 was a large circular pit (328) measuring 2.8m in diameter and 1.15m deep. The pit contained four fills; the primary fill (327) comprised yellowish-grey sandy silt with frequent fragments of slate derived from weathering of the edges. This was succeeded by a deposit of orange-brown silt with occasional rounded pebbles, stone fragments, and charcoal (326). Above 326 was a deposit of yellowish-brown silty clay (325), which was sealed by the uppermost fill (324), a brownish-grey silty clay.

Additional trench in Area 11

In order to gain a better understanding of the extent and nature of the features exposed in Trench 3, an additional trench, measuring 26m long and 4.75m wide was opened across the centre of the easement. This revealed the continuation of ditch 308, a second, parallel ditch, and a number of pits and postholes (Fig. 14).

The continuation of ditch 308 was completely excavated by hand, but no further artefactual material was recovered (Plate 2).

In the western part of the additional trench, 16m west of, and parallel with, ditch 308, was a ditch (846). The ditch (Fig. 14) had a rounded profile 0.8m wide and 0.38m deep, and contained single fill (847) comprising a yellow clay silt with large stone inclusions. The entire exposed length of the feature was excavated, but no datable material was recovered.

At its northern extent ditch 846 was cut by a large, irregular pit (853) which extended north beyond the edge of excavation. The visible part of the pit measured 2.40m wide and 0.34m deep and had steep sloping sides and a shallow concave base. The pit contained three separate fills. The primary fill (852) was a pale brownish-yellow silty clay; this was overlain by a greyish-brown silty clay with frequent charcoal (851).

The uppermost fill (850) comprised pale yellow silty clay with rare slate fragments. A small quantity of Romano-British pottery, slag, and the upper part of a large beehive quern of Elvan stone were recovered from the fills.

Also exposed within the trench were three large post-pits, which together appeared to form an arc between pit 853 and the northwestern edge of ditch 803. The first pit (848) was located against the northern edge of excavation approximately 1.5m northwest of ditch 308. Sub-circular to oval in plan, it measured 1.4m long and 1.1m wide. The profile (Fig 14.3) consisted of steeply sloping, almost vertical sides, with a stepped base, reaching a maximum depth of 0.48m. The sole fill (849) comprised orange-brown silty clay with large sub-angular stones that were concentrated within the deeper northwestern part of the pit. The stones were perhaps packing to provide support for a large timber post, a hypothesis supported by the drawn profile of the pit which illustrates the possible arrangement.

Approximately 0.75m southeast of pit 848, close to the edge of ditch 308, was an irregular, almost triangular posthole (854). The feature measured 0.4m long and 0.3m wide by 0.5m deep and had a V-shaped profile. It contained a single fill (855) consisting of an orange-brown silty clay.

The second pit (845) was located approximately 1.5m southwest of pit 848. The pit was sub-circular in plan, measuring 1.2m long and 1.1m wide by 0.38m deep (Fig. 14.2). The sides of the pit were variable in their degree of slope, and were irregular where the pit was cut into slate bedrock. The base was slightly rounded and irregular. The pit contained a single fill (844) consisting of a mid to dark brown silty clay with medium to large sub-rounded stones that occurred with noticeable frequency along the top edge of the deposit. It was noted in the field that the deposit might represent deliberate backfill.

A solitary posthole (856) was located some 0.6m to the south of pit 845. The feature was circular in plan, measuring 0.4m in diameter and 0.45m deep, and contained a single fill (857) of orange- brown silty clay.

The third pit (Pit 840) was circular in plan, 1.5m in diameter and 0.56m deep (Fig. 14.1), with fairly steeply sloping sides and a slightly concave base. The pit contained three fills; the primary deposit (841) was a dark brown silty clay, with abundant slate fragments, overlain by an orange-brown clay silt with occasional small slate inclusions (842). The uppermost fill (843), a mid to dark brown silty clay, was separated from 842 by a thin deposit of stones and slate fragments. The pit was located 3.5m west of 845 and 4.5m southeast of feature 853. It is noticeable when viewing these features in plan (Fig. 14) that the projection of the arc formed by 848, 845 and 840 might suggest that feature 853 also belongs within the group.

The features may represent a series of large post-pits forming part of a structure of later date than ditch 846, and perhaps co-existent with ditch 308. There is some evidence that the pits were deliberately backfilled following disuse.

5.10 Area 12

Trench 5 was positioned to investigate a number of anomalies identified during the geophysical survey. The trench measured 1.6m wide, 29.5m long and was aligned northeast-southwest. Three linear features were exposed in the trench (Fig. 15).

The most southerly feature exposed was of an eroded hollow of a former trackway (503), on a northwest-southeast alignment, which was located approximately 9m from the southern end of the trench. The feature measured 3.74m wide and 0.46m deep

(Fig. 15.1). At the base of each edge of the feature were the remains of slightly irregular ruts 0.2m to 0.3m wide, between 0.06m and 0.12m deep and spaced 1.3m to 1.4m apart. The ruts were filled with greenish-grey clay silt (504) which contained occasional small sub-rounded stones and slate fragments. Above this lay a thick deposit of orange brown silty clay with frequent slate fragments (505). No dateable material was recovered from the feature and the period of its use is uncertain.

Two ditches (506 and 509) were located 11.5m east of the trackway, on a northwest-southeast alignment. Ditch 506 was the original cut, whilst 509 appeared to represent a later re-cut. Ditch 506 was 1.1m wide and 0.35m deep, with an open, rounded profile. The primary fill (507) was a greenish-grey silty clay with occasional small sub-rounded stones and organic material. The upper fill (508) comprised dark brown silty clay with abundant slate fragments (Fig. 15.2).

Ditch 509 truncated the southwestern edge of 506. The broad, shallow cut was 1.55m wide and 0.29m deep, with a slightly irregular rounded base. The sole fill (510) consisted of homogenous dark brown silty clay with abundant slate fragments, similar to the upper fill of 506.

Although no dateable material was recovered from either ditch, their origin appears to be post-medieval. Both ditches cut the colluvium immediately beneath the modern topsoil, and they appear to represent the below ground continuation of an extant hedgeline close to the excavation area.

6. THE FINDS

An interesting assemblage of finds was recovered during the Langage to Choakford excavations, consisting of prehistoric, Romano-British, medieval and post-medieval pottery, lithics, worked stone, slag, and fired clay. The finds are itemised in Table 1 and described below.

6.1 Prehistoric Pottery

A total of 46 sherds of prehistoric pottery weighing 240g were recovered during archaeological investigations along the pipeline. An undiagnostic, rock tempered bodysherd from a large Middle Bronze Age vessel was recovered from pit 755 in Area 9 (Fig 16.1).

The remainder of the assemblage was considered to be Iron Age in date and was recovered from the primary fill of ditch 308. Two fabric groups and six fabric types were identified. These included grog-tempered (fabric code G1 and G2) and quartz-tempered sandy wares (fabric code Q1 to Q4), of which sandy wares were the most common (Table 2). The quartz fabrics are visually homogenous, but have been microscopically distinguished on the basis of the slight variation in inclusions, size and frequency (full fabric descriptions are discussed in Appendix 2). Each fabric is representative of one vessel.

Area	Context	Feature Number	Category	Quantity	Weight
1	Unstratified		Worked lithics	3	12g
3	Unstratified		Post medieval pottery	1	18g
4	Unstratified		Worked lithics	2	6g
	836	834	Worked lithics	7	42g
9	756	755	Middle Bronze	1	36g

			Age pottery		
	Unstratified		Worked lithics	1	34g
	Unstratified		Quernstone	1	676g
11	309	308	Iron Age pottery	45	204g
	309	308	Worked lithics	1	2g
	849	848	Worked lithics	1	2g
	850	853	Romano-British pottery	1	2g
	852	853	Romano-British pottery	1	10g
	852	853	Slag	3	114g
	852	853	Quernstone	1	
12	Unstratified		Medieval pottery	6	24g
	Unstratified		Worked lithics	1	2g

Table 1: Finds listing

The quartz-tempered wares from Langage are comparable to fabric group B identified at Mount Batten (Cunliffe *et al* 1988) and the sandy wares identified on the Iron Age sites at Black Horse and Long Range (Fitzpatrick *et al* 1999). These fabrics are “tempered with the decay products of granite...Fabrics of this kind are most likely to have been made from clays found on, or at the edge of granite massifs, the closest being the southern fringe of Dartmoor” (Cunliffe *et al* 1988, 23).

Fabric	No. Sherds	Weight (g)	Average Weight
G1	1	42	42
G2	18	54	3
Q1	1	6	6
Q2	5	14	2.8
Q3	7	30	4.2
Q4	13	58	4.6
Total	45	204	62.6

Table 2: Langage Iron Age Pottery fabric totals

Fabric G1 is a rather unusual fabric within the assemblage but is of possible Cornish origin (pers. comm. H. Quinnell). The fabric occurs as a diagnostic bead rim (Fig. 16.2), which is a common form within Late Iron Age assemblages.

One fabric type unparalleled elsewhere is oxidised grog fabric G2. A similar fabric was identified at Blackhorse (Fitzpatrick *et al* 1999, 417), but was unoxidised with smaller grog inclusions. The G2 fabric occurs as an extremely abraded sherd, its form is uncertain and has not been illustrated, but could be part of a broken lug attachment (pers. comm. H. Quinnell). It has been included in the Iron Age section on the basis of its association with other Iron Age pottery recovered from the same context. The example may represent an unidentified localised fabric recipe, or perhaps a residual find incorporated through modern ploughing. However, no later artefacts were recovered from the area, which lends to the former interpretation of the fabric being a previously unidentified later prehistoric type.

6.2 Forms

There are only two diagnostic rim forms present within the assemblage. The first is an everted necked rim in fabric Q2, and most likely derives from a small globular jar with a rim diameter of 180mm (Fig.16.3).

A large, partially burnished bead rim, in fabric G1 represents the second form and is from an ovoid/globular storage jar with a rim diameter of 230mm (Fig 16.2). Although this form is fairly common within Mid to Late Iron Age assemblages the sheer size of this particular vessel is unusual.

Only one example of a base was present within the assemblage, and is an abraded out-flared form (Fig 16.4). No special features were discovered, although the example did exhibit traces of burnishing and a thin incised line on the exterior where the wall meets the base, which could be decoration or a coil join.

6.3 Decoration and surface treatments

A number of sherds exhibit surface treatments, but only one sherd (the everted rim) has been decorated, in this instance with a line of cream/buff slip just below the rim. There are four other fragments (two rims and two bodysherds) belonging to this vessel but none exhibit any other form of decoration, which may be due to the fabric being very abraded with any previous slip or decoration not having survived the depositional processes. A high proportion (15 sherds) of the assemblage exhibit signs of burnishing on external surfaces and the G2 fabric sherds have smoothed external surfaces.

6.4 Residues and use wear

The presence of soot and carbonised matter has been noted on thirteen body sherds belonging to the Q4 fabric vessel. The external surfaces have fine cracks and signs of overtiring as well as burnt residue on their internal surfaces. The occurrence of such factors generally indicates the cooking of food suggesting a domestic origin. However, due to the fragmentary nature and the lack of form, it is difficult to be sure if the charcoal residues were obtained through domestic processes or as a result of later bonfire ashes adhering to the surfaces.

6.5 Discussion

The assemblage from Langage is very limited and fragmentary, with pottery being recovered from just two features. The one example of Bronze Age pottery from Area 9 (pit 755) was the only stratified artefact to be recovered from this area. The sherd shares similarities with rock tempered fabrics identified at Hayne Lane, Castle Hill (Fitzpatrick *et al* 1999), Clyst Honiton (Simpson *et al* 1989) and Heatree, Manaton (Quinnell 1991). Therefore, on fabric association it would appear that the rock tempered Bronze Age sherd from Langage could be assigned a similar date range of second/first millennium BC.

The sandyware component of the Iron Age assemblage recovered from Area 11 (ditch 308) is comparable with the group B fabrics from Mount Batten, Plymouth (Cunliffe *et al* 1988). The two Langage vessel forms represented by the bead rim and everted rim can also be found within the Mount Batten assemblage (*ibid*, 42, fig. 27: P34, P12 & P13). According to Cunliffe, bead rims generally belong to the Middle or Late Iron Age and may be local to the south-west, while the everted rims may be south-western versions of Roman forms (1988, 39-40). The everted rimmed vessel could also be interpreted as belonging to the Glastonbury or South-Western ceramic style of the Mid to Late Iron Age. It lacks the decoration normally associated with this tradition, but could be due to the fragmentary nature of the representative sherds.

The sandy micaceous fabric Q4 shares similarities with South Devon Ware pottery which first appears in the early Roman period in Devon. It is thought to derive from a local native Iron Age tradition and it is possible that the sherds in this assemblage represent a precursor to this Roman fabric.

Unparalleled fabric type G2 could indicate a previously unidentified Iron Age fabric type, but requires further petrological analysis before any definite interpretation can be ascertained.

In conclusion, despite the size of the assemblage the prehistoric pottery represents Bronze Age and Iron Age activity. The number of different Iron Age fabrics recovered from a single context indicates several pottery sources were being utilised during the occupation of the site. Whilst many of the sherds are probably local products the presence of a possible Cornish fabric (G1), suggests trade connects were in existence. The potential Roman precursory fabric, Q4 and the possible Roman copy (represented by the everted rim) may also suggest trade connections existed. This trading connection is reinforced by Cunliffe's findings at Mount Batten only 8.5k to the southwest (Cunliffe *et al* 1988) which have supported the interpretation of Mount Batten as a significant prehistoric trading post which continued as such into the Roman period.

6.6 Late pre-Roman Iron Age/Romano-British pottery

Two sherds of pottery were recovered from pit 853 (Table 1). The first, a small undiagnostic bodysherd was recovered from uppermost fill 850. The sherd is very similar to prehistoric Q4 fabric discussed above, and may be of late pre-Roman Iron Age or early Romano-British date. The second sherd, recovered from primary fill 852, is a bodysherd from a large storage jar of South Devon Ware which dates from the mid second to fourth centuries AD.

6.7 Medieval and post-medieval pottery

All the medieval and post-medieval pottery was recovered as unstratified surface finds. The medieval assemblage comprised seven sherds of Upper Greensand-derived fabric, very similar to both the Iron Age and Romano-British pottery. One sherd has incised decoration and dates to the 15th or 16th centuries. A single sherd of post-medieval pottery from the rim of a large bowl with remains of external slip and yellow glaze was recovered and dates to the 17th or 18th centuries.

6.8 The Lithics

The lithic assemblage comprises 16 pieces of worked flint and chert. A single small unstratified flake from Area 4 has been struck from dark, dull Portland Chert.

Another large unstratified primary flake recovered from Area 9 has been struck from a mottled greenish brown chalk flint, which has also been heated. The remainder are derived from a mottled mid- to dark grey flint. The rolled appearance of external surfaces on eight flints suggests that this material comes from a beach or river environment.

A number of flakes, with cortex from ditch 834 have only been partially worked. These pieces, and a number of unstratified primary flints with large areas of cortex recovered throughout the course of excavation, suggest that initial preparation of raw material was undertaken on site.

All but five of the flints represent waste flakes or chips. Two of these from linear feature 834, in Area 4 are burnt, and an unstratified flint from the same area shows signs of blade manufacture. The remains of broken flint blades have been recovered from pit 848 and ditch 308; the example from this feature also exhibited a notch, which most likely occurred through use rather than being deliberately added (Gent *pers.comm.*). Another unstratified flake from the topsoil in Area 1 shows signs of

blade manufacture, as does the surface find from Area 12. None are strongly diagnostic, but they probably derive from a later prehistoric flake industry of Neolithic or Bronze Age date.

6.9 Stone objects

Two stone quern fragments were recovered. The first fragment was an unstratified surface find from Area 9, and is a part of a granite rotary quern. The second quern stone was recovered from pit 853. It is a fragment from the upper half of a Beehive quern, made from white Elvan stone found on Dartmoor. Both querns are indicative of domestic use in the late Iron Age or Roman periods. The recovery of two querns from the same site is of interest as they are not common finds in Devon. Despite their rarity, it is common to find querns deposited in the base of pits or post-holes, especially in a domestic context, which may represent ritual activity rather than pragmatic use (pers. comm. S. Watts).

6.10 Finds summary

The finds are indicative of intermittent activity in the area from the Neolithic to the post-Medieval periods. The pottery assemblage is largely mid to late Iron Age in date and is most likely contemporary with the quern stones. The sherd of South Devon ware is the only firm indication of Romano-British activity.

7. PALAEO-ENVIRONMENTAL ASSESSMENT AND DATING POTENTIAL

7.1 Results

Bulk samples were taken from a number of different features throughout the course of the excavations. EA staff using the standard method of flotation processed the samples, which involved hand floating the samples into a nest of sieves with a minimum mesh size of 1mm, 500 μ & 250 μ . The resultant floats were then oven dried. Table 3 presents the results of the assessment.

Sample	Context	Comment
300	203	Wood charcoal, moderate quantity
301	703	Wood charcoal, small quantity
302	588	Wood charcoal, moderate quantity. Some pieces up to 2cm.
303	552	Wood charcoal, moderate quantity. Some pieces up to 2cm.
304	304	Wood charcoal, moderate quantity

Table 3: Results of the palaeoenvironment assessment

7.2 Comment

The floats contained purely wood charcoal, with no other carbonised taxa evident. All floats contained sufficient carbonised material for radio carbon dating, and there were no intrusive elements in any of the floats (modern rootlets etc.).

8. DISCUSSION

A relatively large number of archaeological features were exposed along the length of the Langage to Choakford pipeline, occurring both in isolation and in larger groups. It is clear that the majority of features are either prehistoric or post-medieval in date. The Roman and medieval periods are poorly represented not only in terms of features present in the landscape, but also by a general paucity of finds (Table 1).

8.1 Prehistoric and Roman

Evidence of prehistoric activity appeared confined to the more elevated portions of the route with significant occurrences of features in Areas 9 and 11. In both cases, the activity appears to be associated with enclosed settlements of later prehistoric date, located on the south and west facing slopes of a series of spurs that overlook the upper reaches of a network of streams which eventually join the River Yealm below Brixton. In the lowlands the density of archaeology decreases, however Area 4 showed potential for concentrations of more significant deposits to be present.

In Area 4 a pair of concentric ditches 834 and 837 were excavated but there was limited opportunity to establish any firm conclusion regarding the extent or character of the area enclosed. The nature of the artefactual evidence remains inconclusive, other than that the activity seems most likely to have occurred during the mid to late Bronze Age or Iron Age periods, however a slightly later date remains a possibility.

Area 9 was located within the northeastern corner of an apparently sub-rectangular enclosure towards the northwestern end of the route. Little dateable material was recovered from the enclosure ditches themselves, or indeed, from any of the features present within the enclosed area. A single sherd of middle to late Bronze Age pottery was recovered from a small feature in close proximity to the outer edge of the northern enclosure ditch. With a degree of circumspection the pottery may suggest a likely date for the occupation of the enclosure itself, parallels for which have been identified elsewhere in lowland Devon (Fitzpatrick *et al* 1999).

The nature of the enclosed area remains unclear. Whilst a number of features were investigated in Trench 7, the excavation of a parallel trench immediately to the east demonstrated that the density of features dropped off markedly towards the periphery of the enclosure.

The curvilinear gully, 815 in Area 10, a short distance north of Area 9, may represent the remains of a circular round house.

Area 11 in the southeastern end of the route contained a number of features associated with Iron Age, and perhaps Romano-British occupation. A ditched enclosure was apparent in the geophysical survey, but the form and extent exposed in excavation remains unclear. Two broadly parallel ditches were present with ditch 308 producing a relatively large quantity of pottery, which ranged in date from the mid to late Iron Age.

Immediately north of ditch 308, an arc of large post-pits appears to represent the southern side of a sizable circular roundhouse. The presence of a Beehive quern fragment in the westernmost pit would not be considered an unusual occurrence in such a context. The same feature also contained a sherd of Romano-British pottery dating from the second to fourth centuries AD. This later date suits the stratigraphic evidence, which indicates the post-hole structure is located in such close proximity to the edge of the ditch as to reasonably preclude the presence of an inner bank at the time of their occupation.

The features in Area 11 appear to represent one or more Iron Age enclosures, which continued to be occupied or were resettled during the Romano-British period. Unfortunately, due to the lack of contextual and artefactual evidence, the continuity in occupation, or the longevity of the enclosure, and the nature of the settlement activity during these periods remains uncertain.

8.2 Medieval and post-medieval

A feature of uncertain date is the hollow way present in Area 12. The hollow way does not appear to respect any of the extant field boundary alignments, which are of later post-medieval origin. Former elements of post-medieval enclosures, which are no longer evident on the ground, were represented by single ditches in Areas 3 and 5, and paired ditches in Areas 7 and 12.

9. CONCLUSION

The archaeological investigation revealed a significant occurrence of prehistoric activity along the pipeline. Whilst the exact nature of this activity has not been resolved with certainty in all cases, it is demonstrated that elements of Bronze Age, Iron Age, and Romano-British settlements are represented.

10. PROPOSALS FOR FURTHER STUDY AND PUBLICATION

There has been a significant increase in the number of recorded prehistoric sites to the east of Plymouth in the decades either side of the turn of the 21st century, although little is yet known in detail about these sites, with the exception of a Bronze Age cemetery at Elburton just to the south-west (Watts and Quinnell, 2001).

It is intended that the Iron Age pottery assemblage recovered from feature 308 (Area 11) of the Choakford to Langage pipeline investigation should be subject to further study and analysis. The assemblage, although not large, has been identified as belonging to the late Iron Age, possibly even to the late pre-Roman Iron Age. This is a period which is significant in the Southwest, being a time when Roman influence on the indigenous Iron Age culture may be seen in the finds evidence from sites close to the prehistoric entrepot at Mount Batten, Plymouth where trading with continental Europe may have resulted in Roman pottery and other goods entering Britain before the Roman invasion of AD43. The results and implications of further study of the finds and their associated archaeological features will be placed in context and will form the basis of an archaeological note to be published in a forthcoming edition of the *Proceedings of the Devon Archaeological Society*.

SITE ARCHIVE

The site records have been compiled into a fully integrated site archive which is currently held at Exeter Archaeology's offices under project number 6181, pending deposition at the Plymouth City Museum and Art Gallery. Details of the investigation, including a pdf copy of this report, have been submitted to the on-line archaeological database OASIS (exeterar1-64797).

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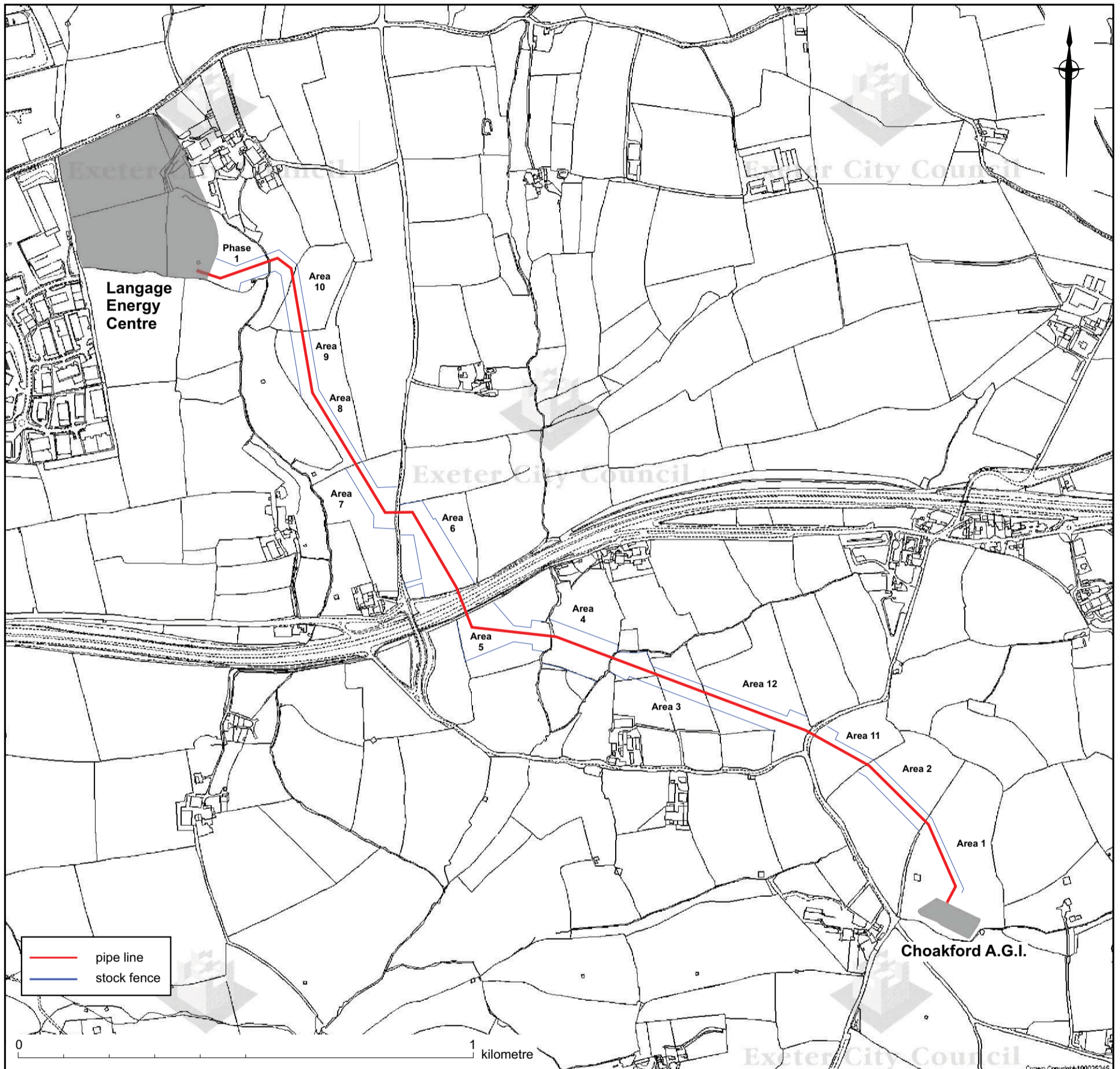


Fig. 1 Route of pipe line (with stock fence) and location of areas. Reproduced from Ordnance Survey mapping with the permission of The Controller of Her Majesty's Stationery Office. © Crown copyright Exeter City Council 100025345.

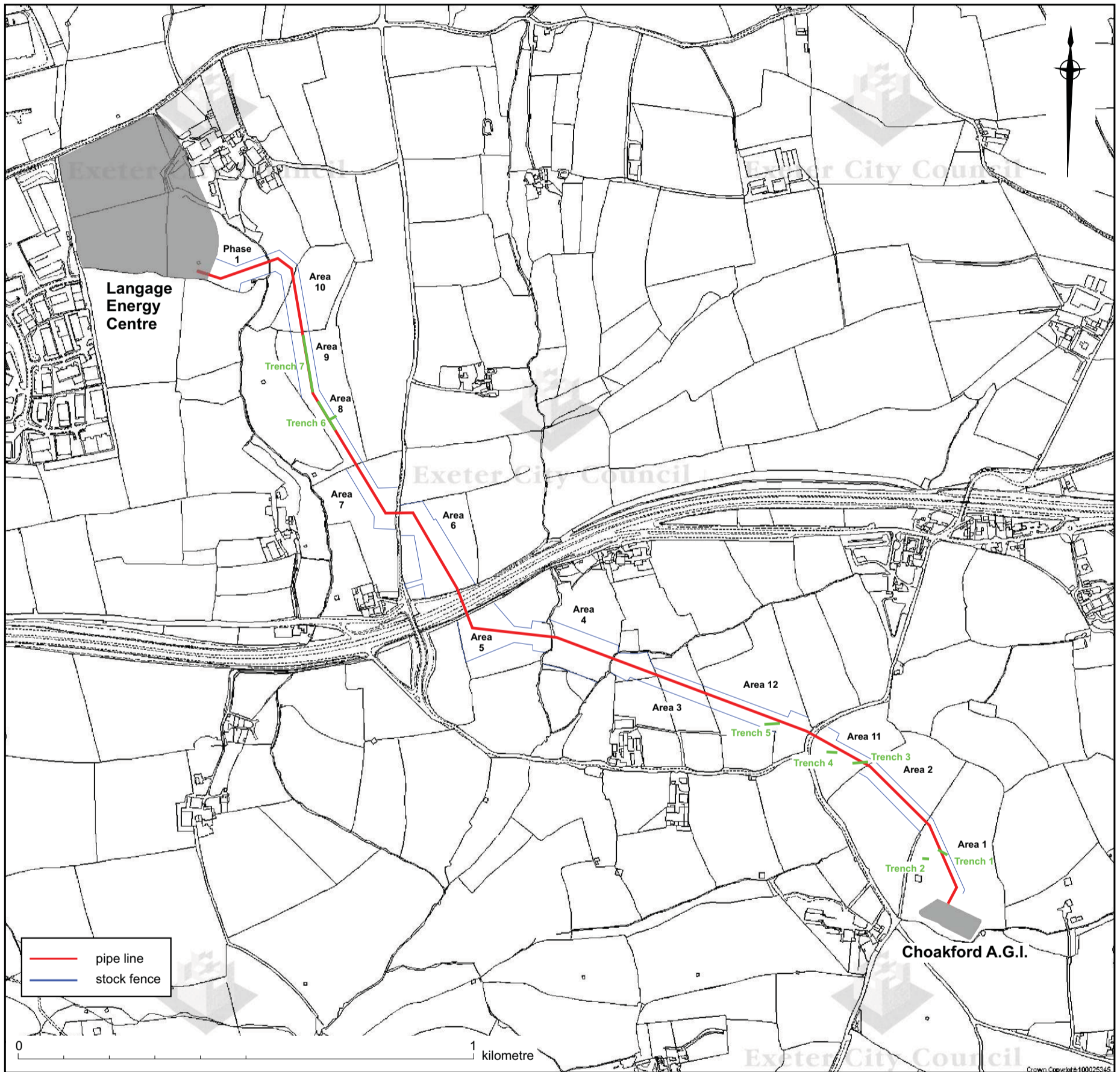


Fig. 2 Trench locations. Reproduced from Ordnance Survey mapping with the permission of The Controller of Her Majesty's Stationery Office. © Crown copyright Exeter City Council 100025345.

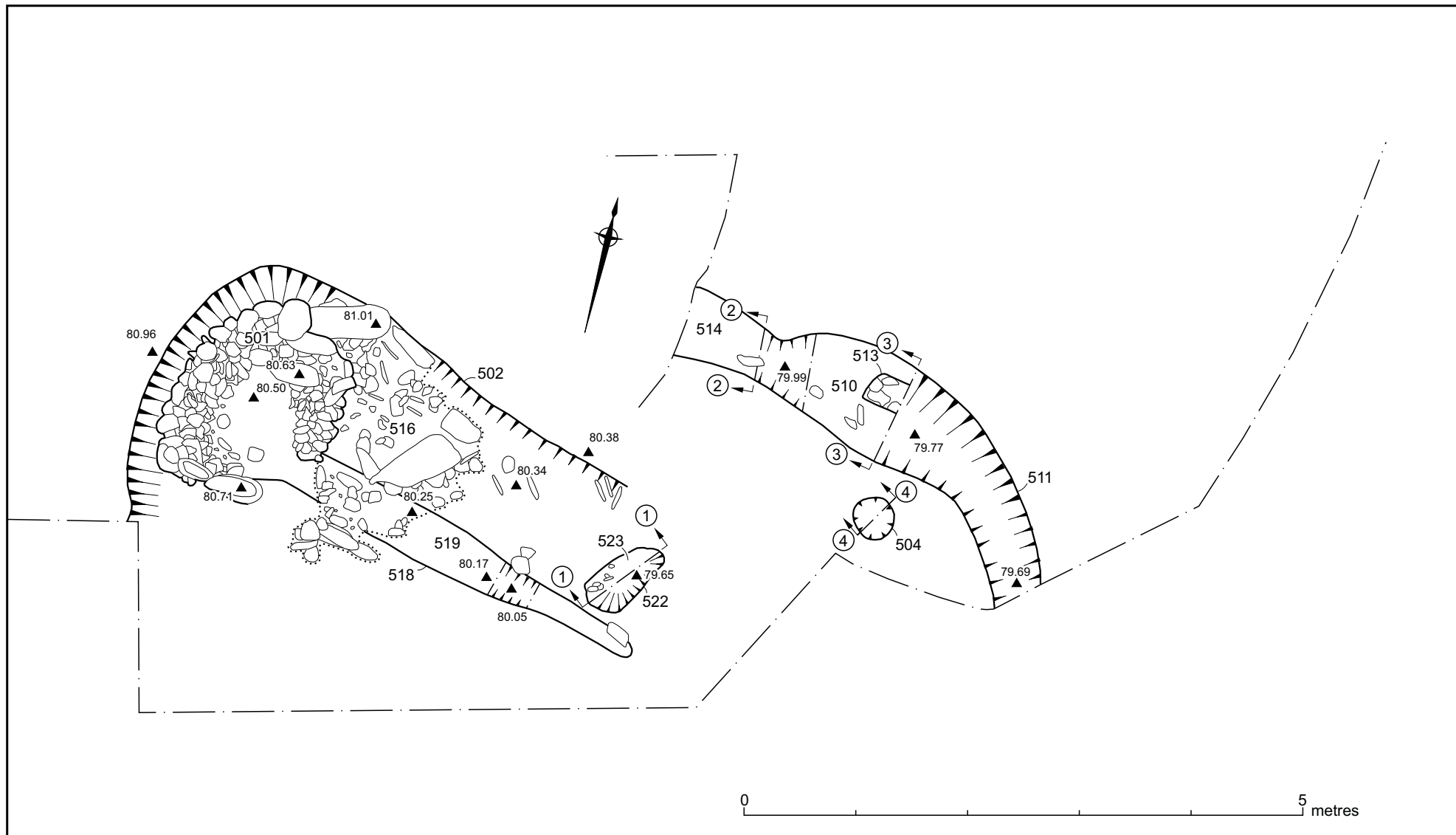


Fig. 3 Phase 1: Plan of kiln or oven 502, and associated features.

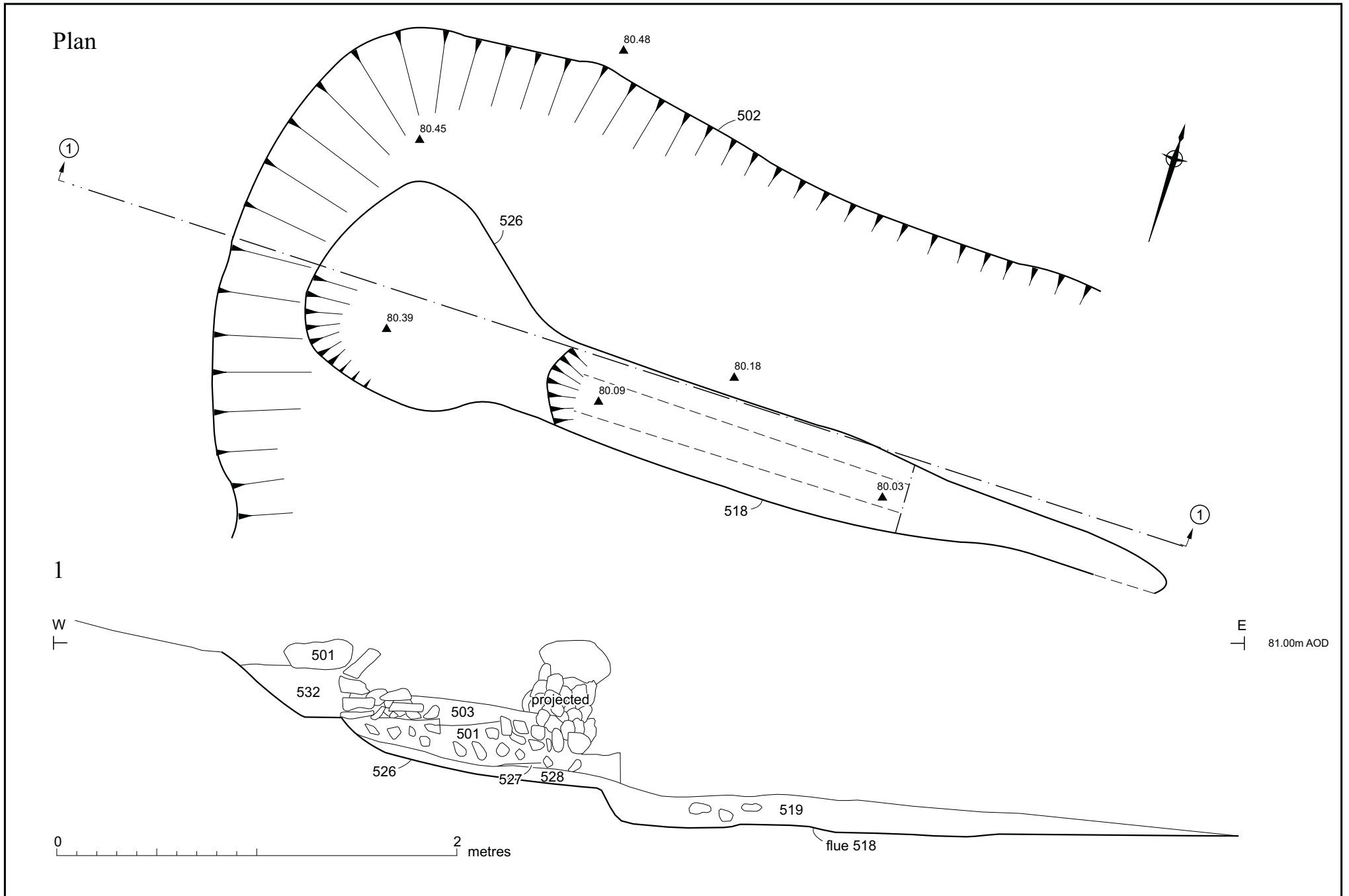


Fig. 4 Phase 1: Post-excavation plan and south-facing section of kiln or oven 502.

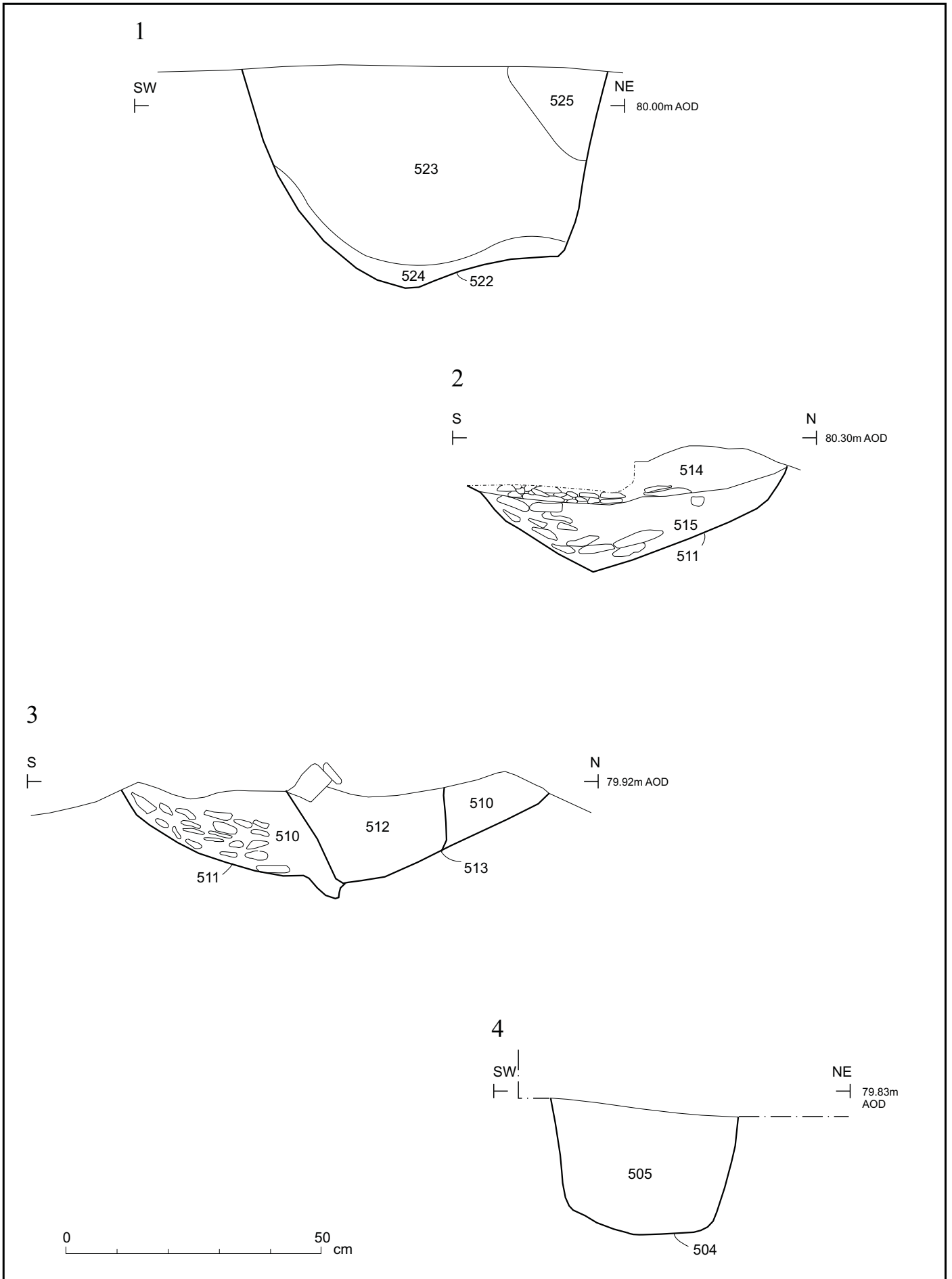


Fig. 5 Phase 1: Sections of features associated with the kiln or oven 502.

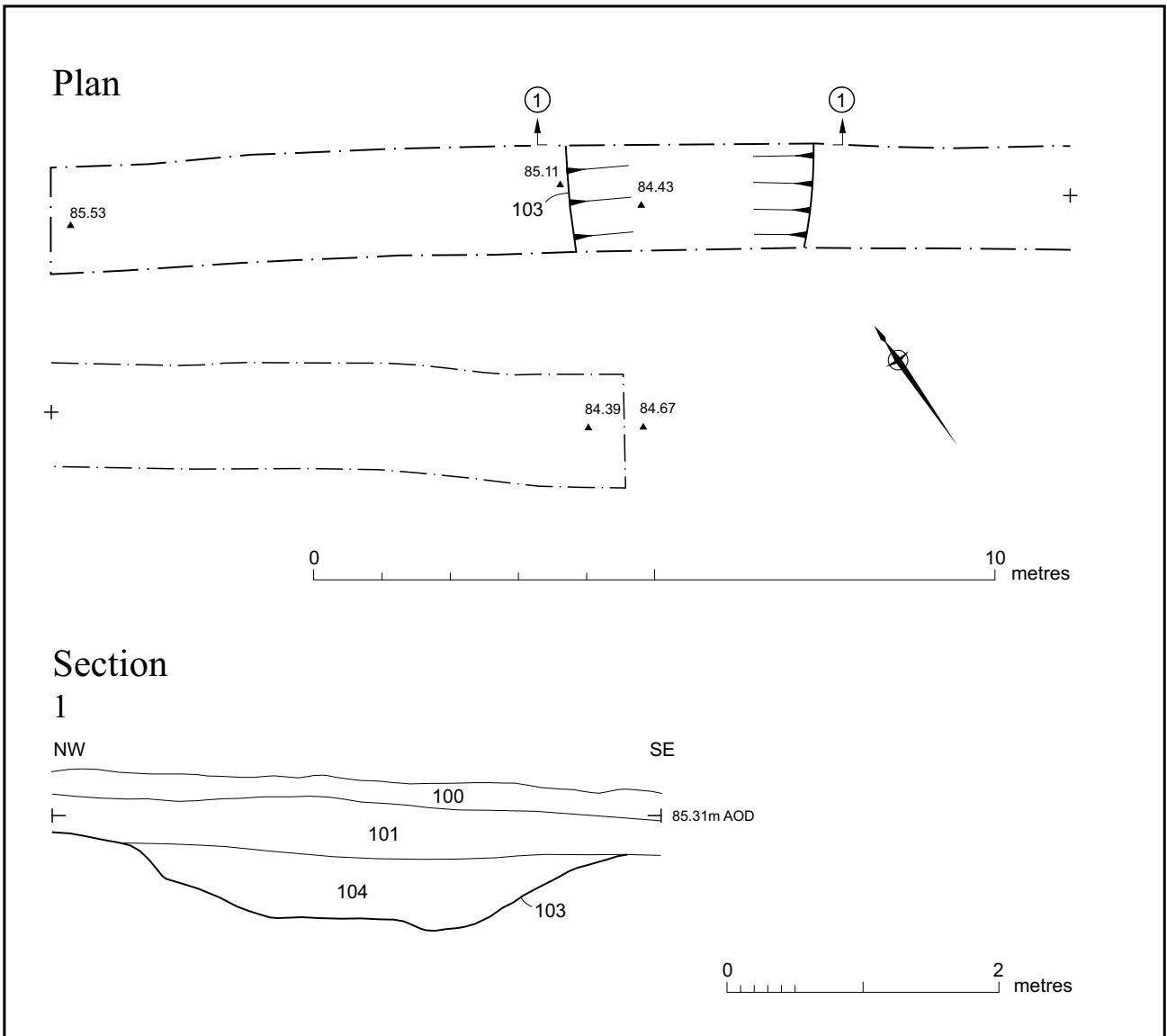


Fig. 6 Plan and section of feature 103 in Trench 1.

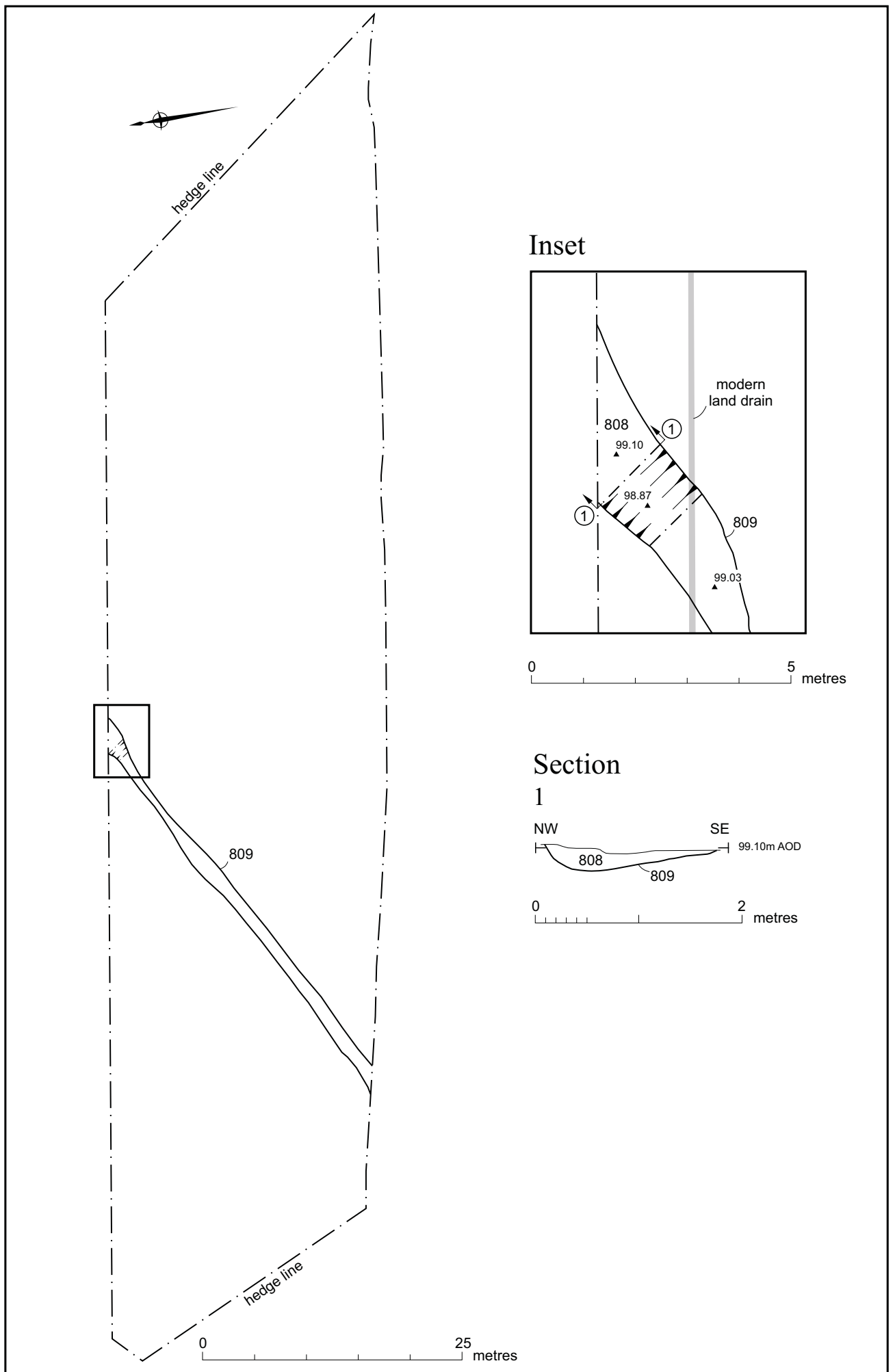


Fig. 7 Plan and section of feature 809 in Area 3.

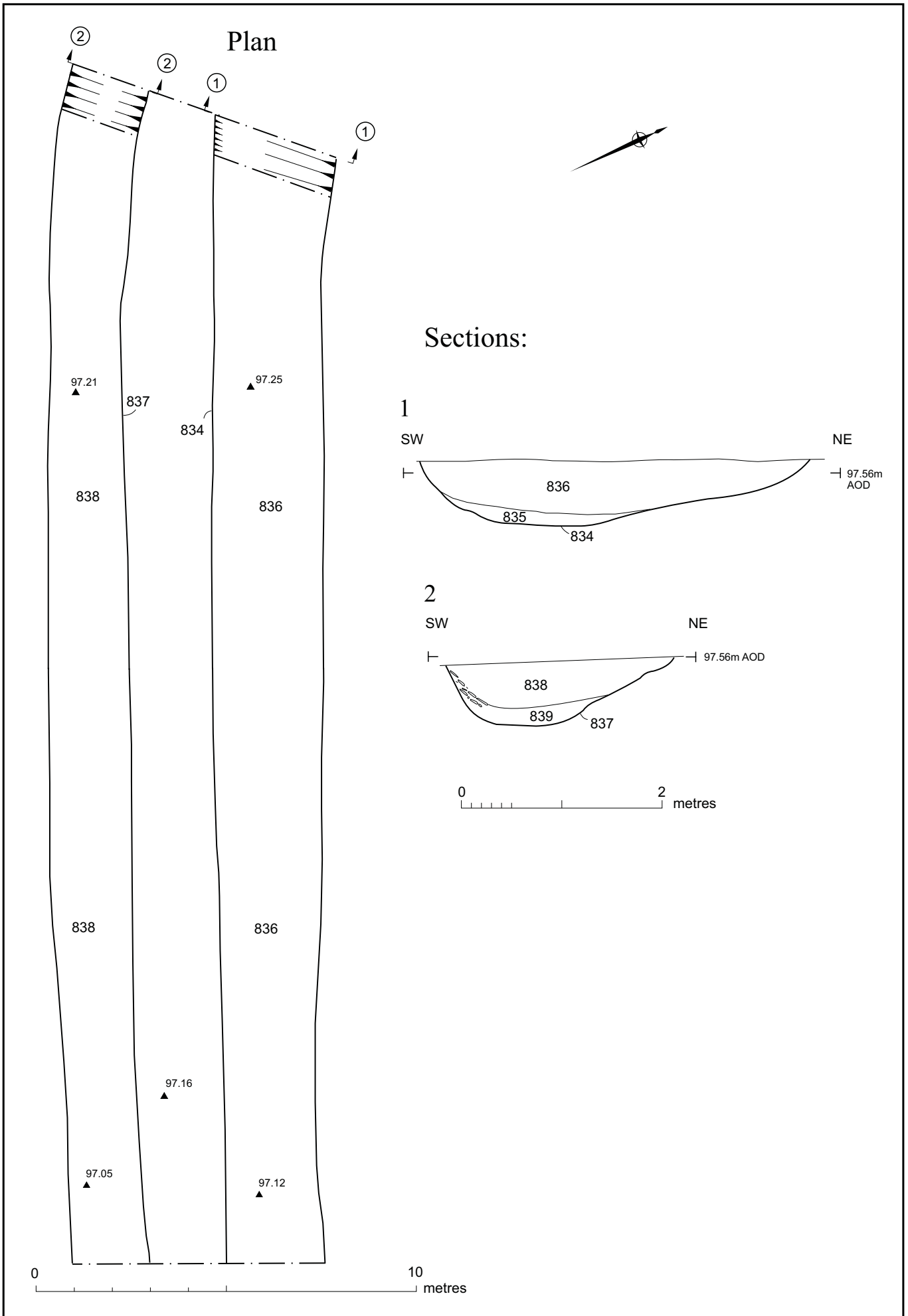


Fig. 8 Plan and sections, Area 4.

Sections:

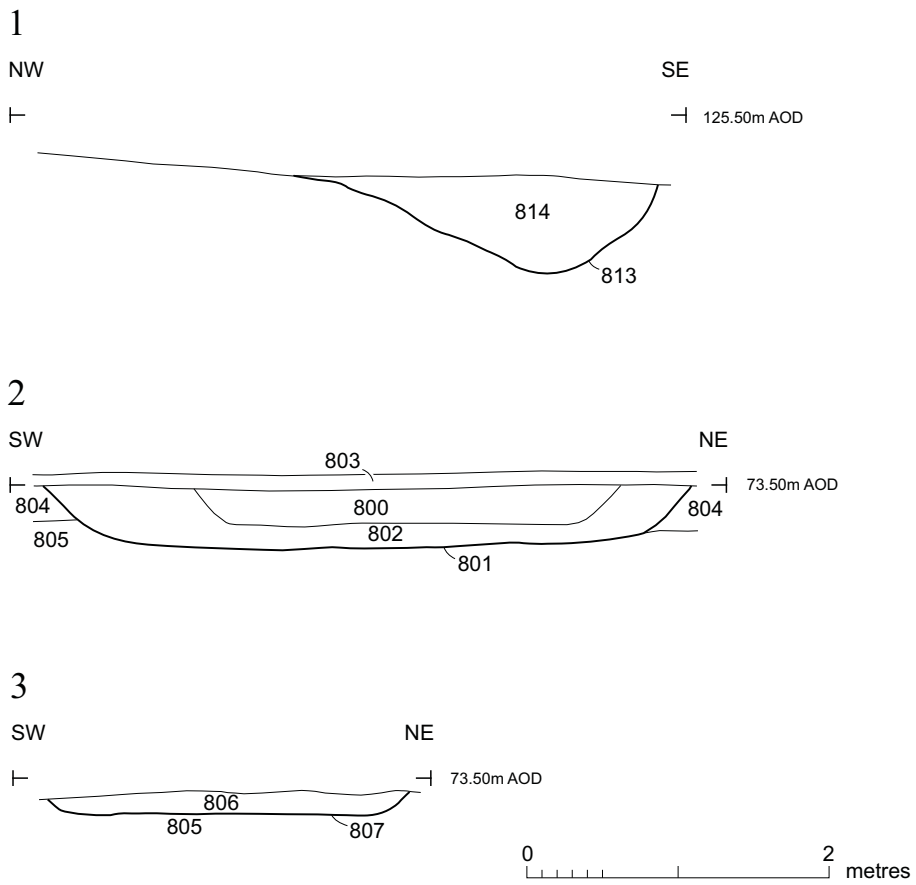


Fig. 9 Sections of features in Area 5 and Area 7.

Plan

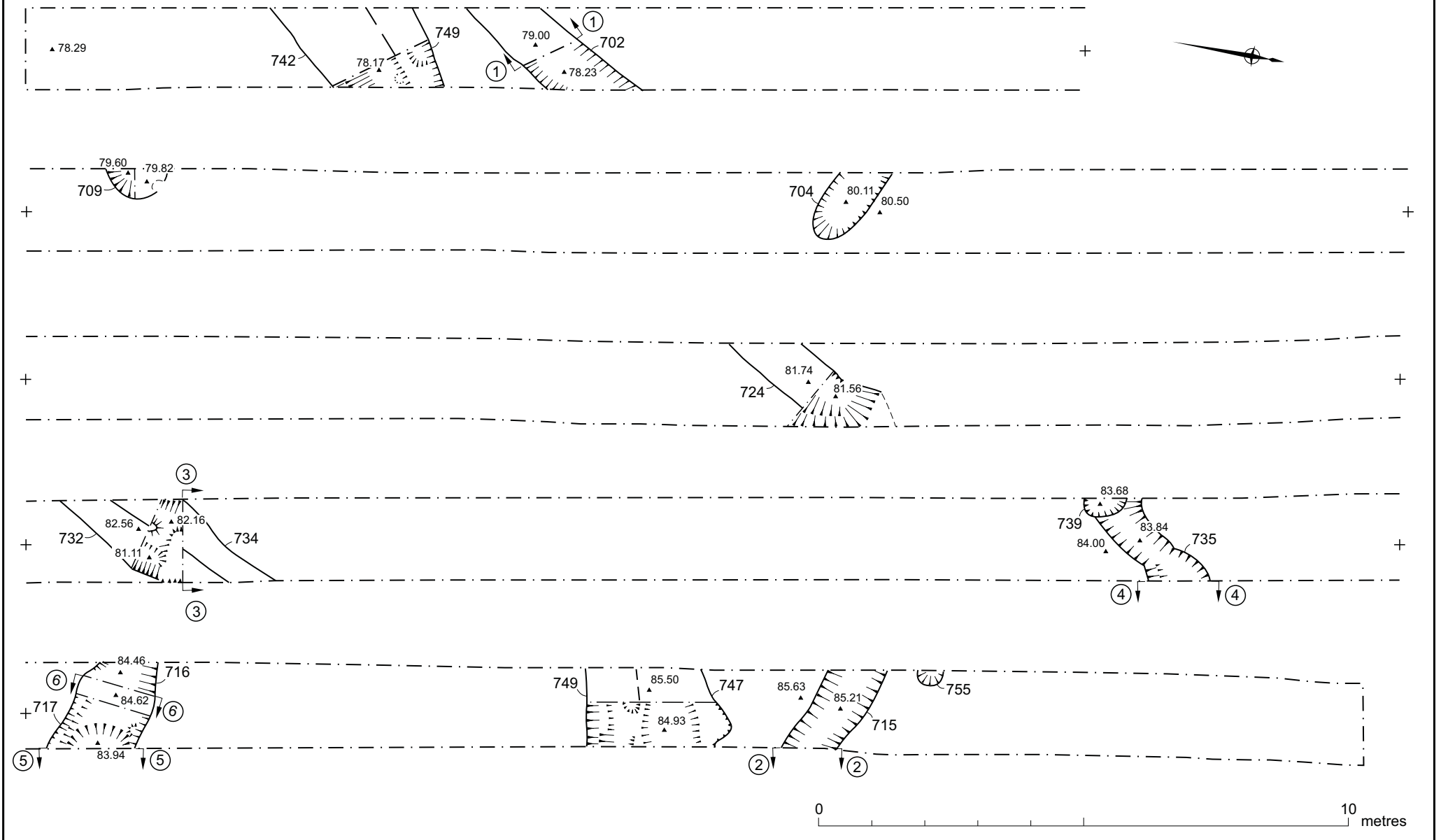


Fig. 10 Plan of Trench 7, Area 9.

Sections:

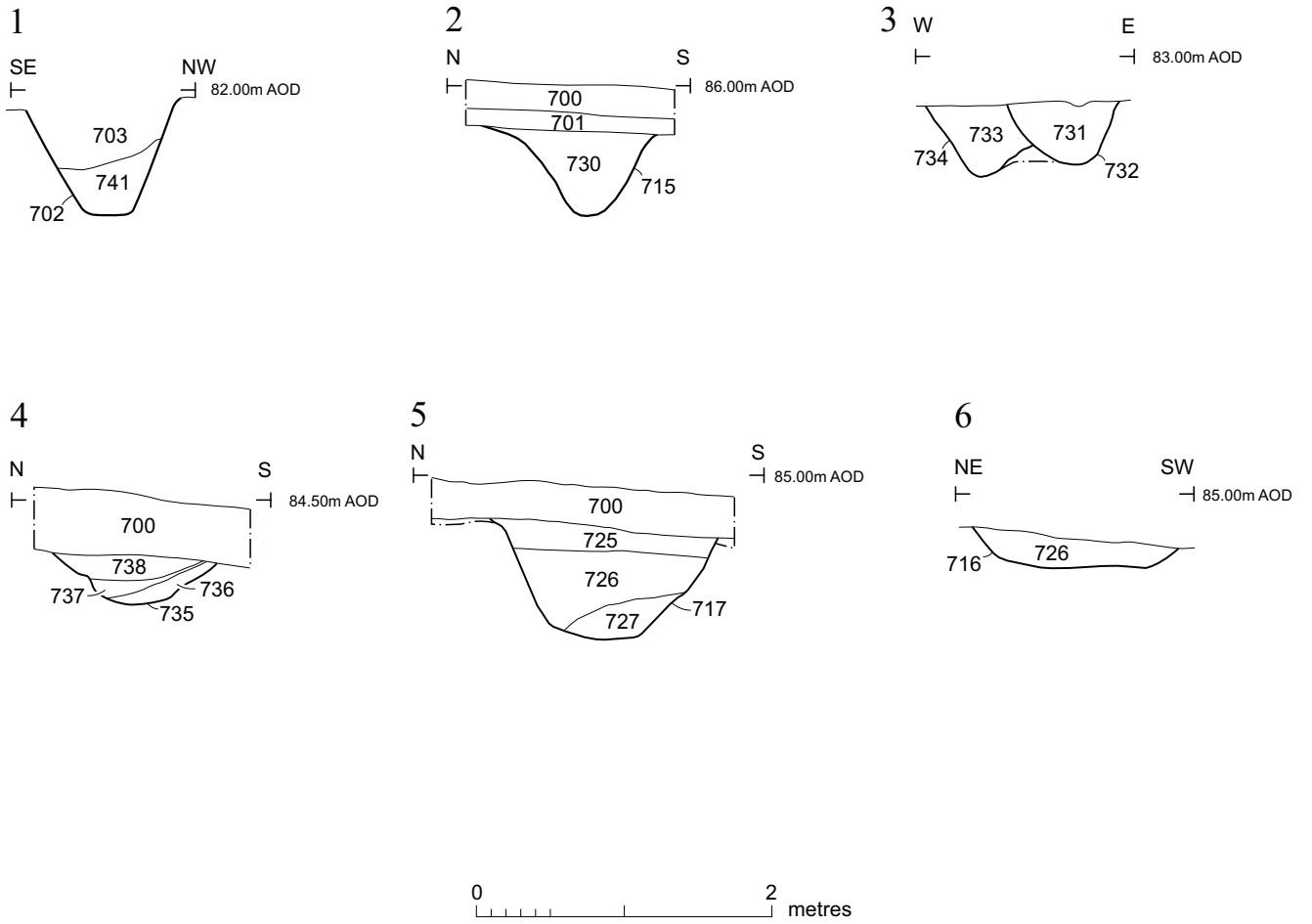
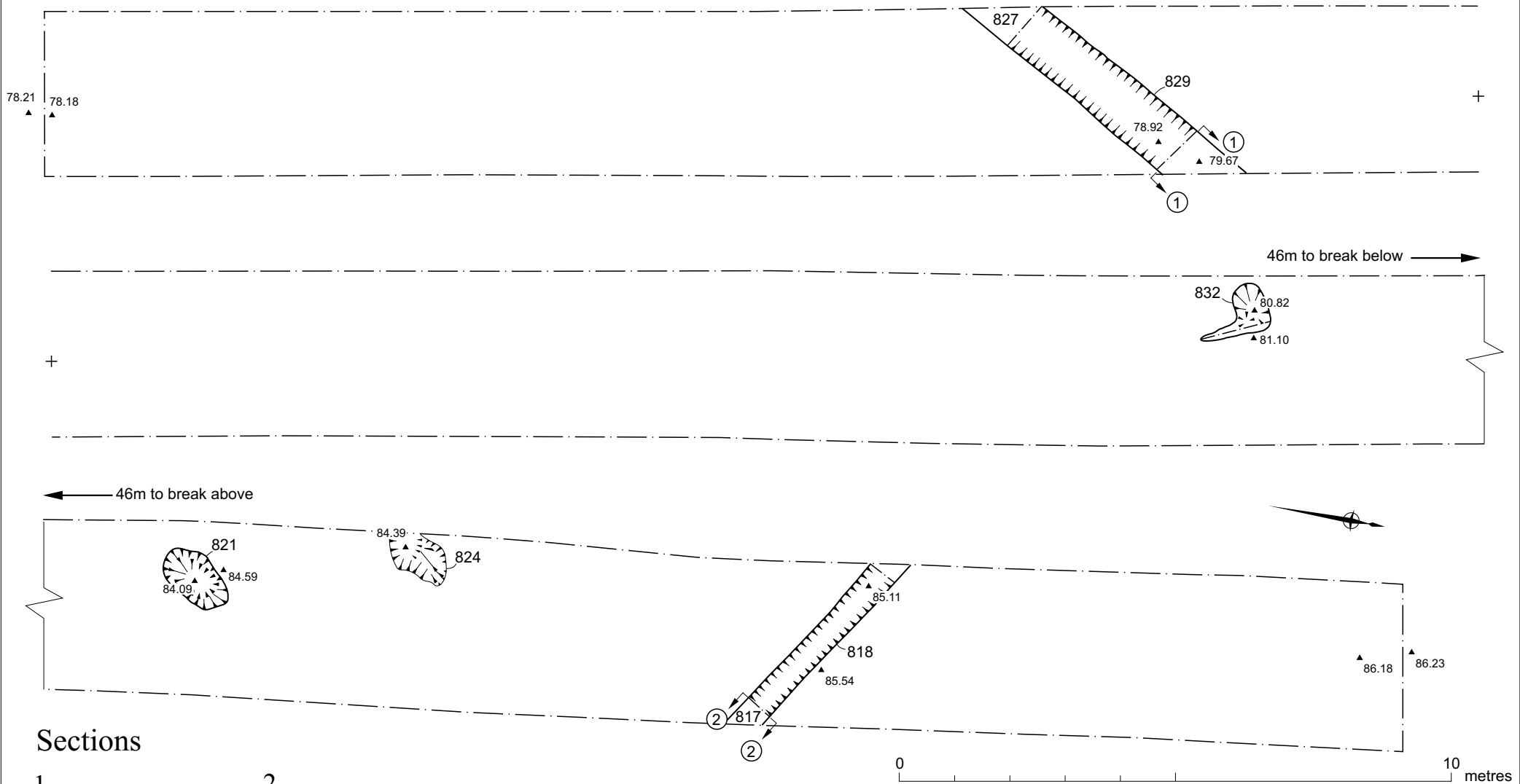


Fig. 11 Sections of features in Area 9.

Plan



Sections

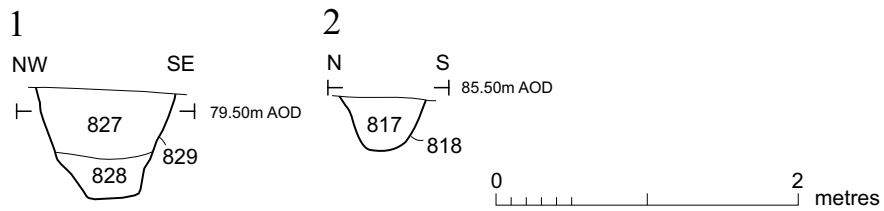
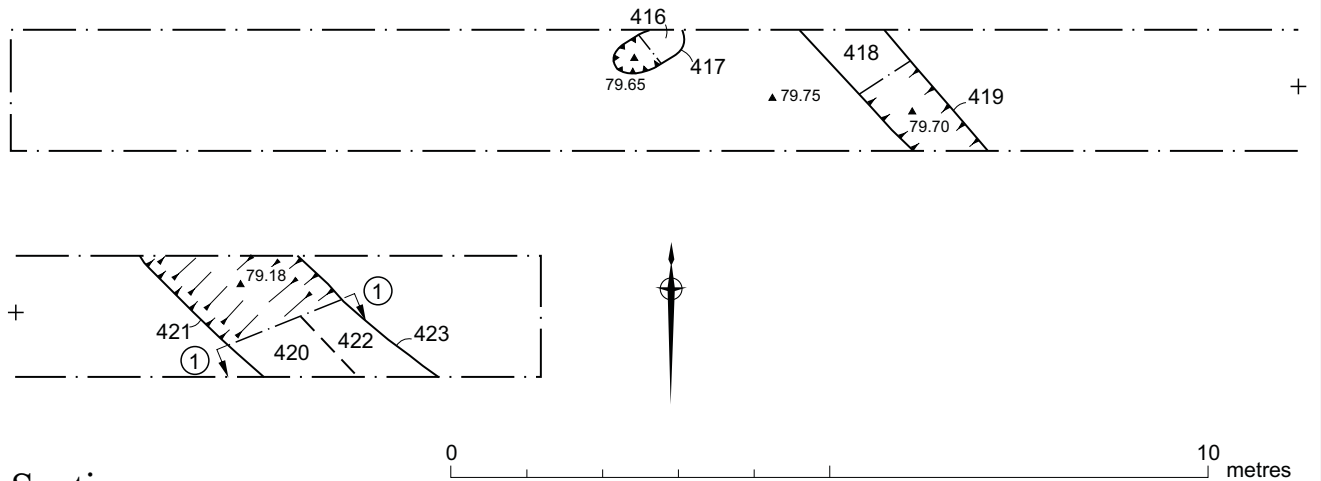
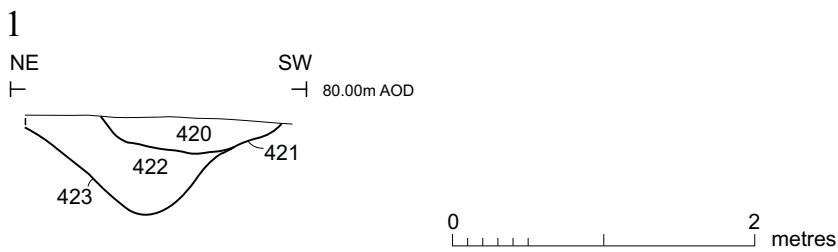


Fig. 12 Plan and sections in additional trench, Area 9.

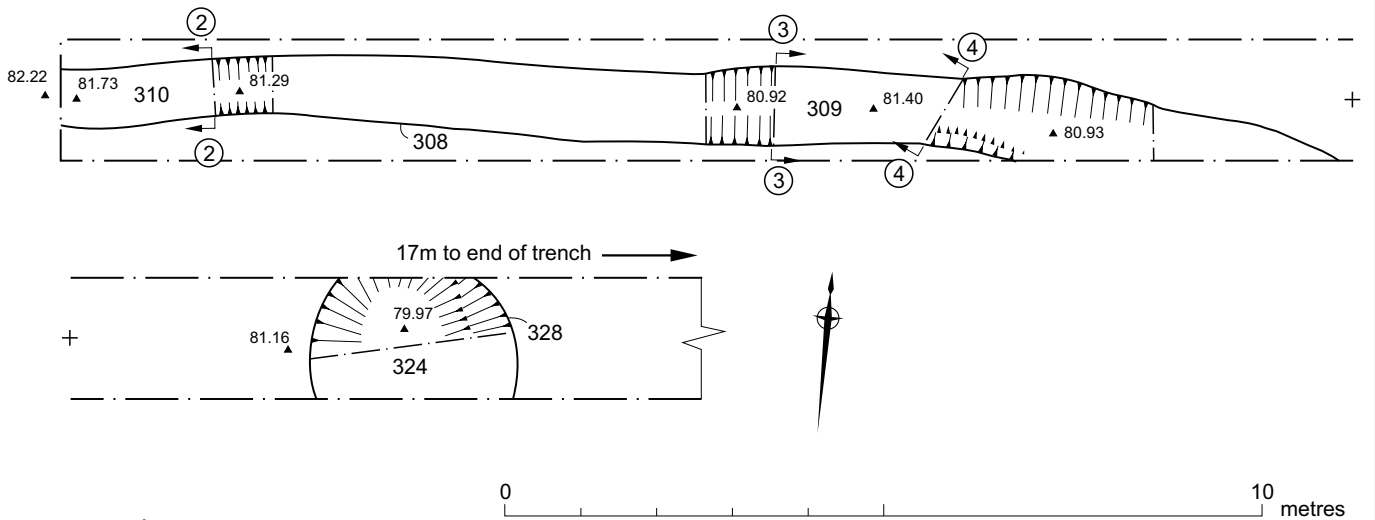
Plan 1 Trench 4



Section 1



Plan 2 Trench 3



Sections:

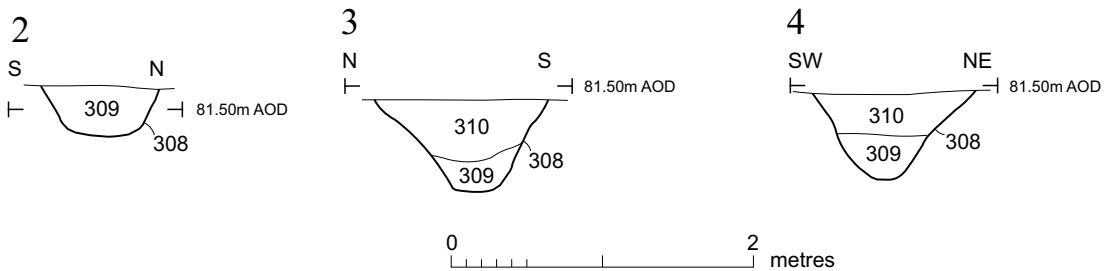
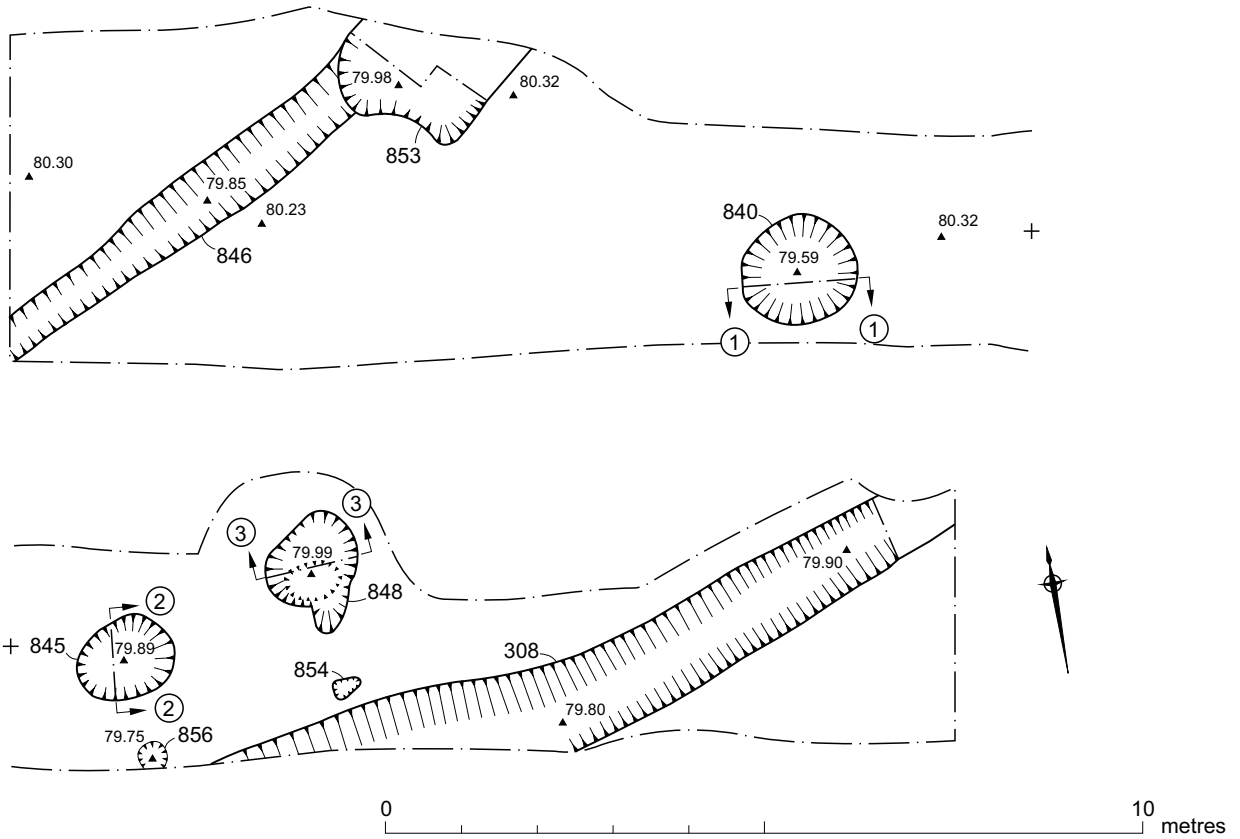


Fig. 13 Plan and sections of Trenches 3 and 4, Area 11.

Plan



Sections:

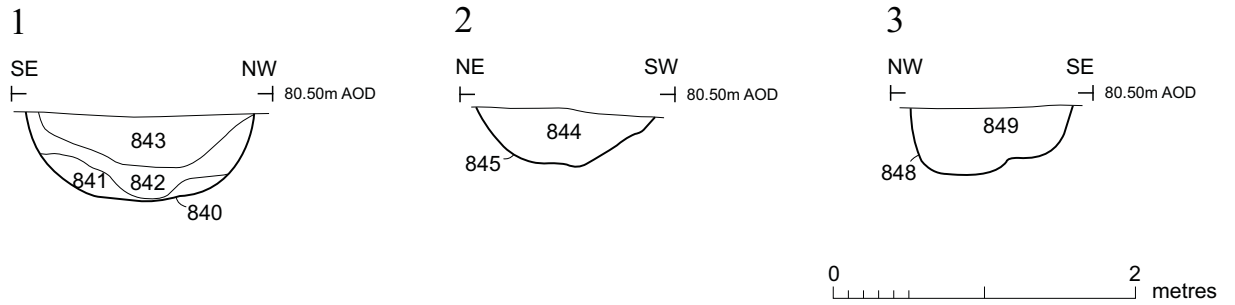


Fig. 14 Plan and sections of the additional trench, Area 11.

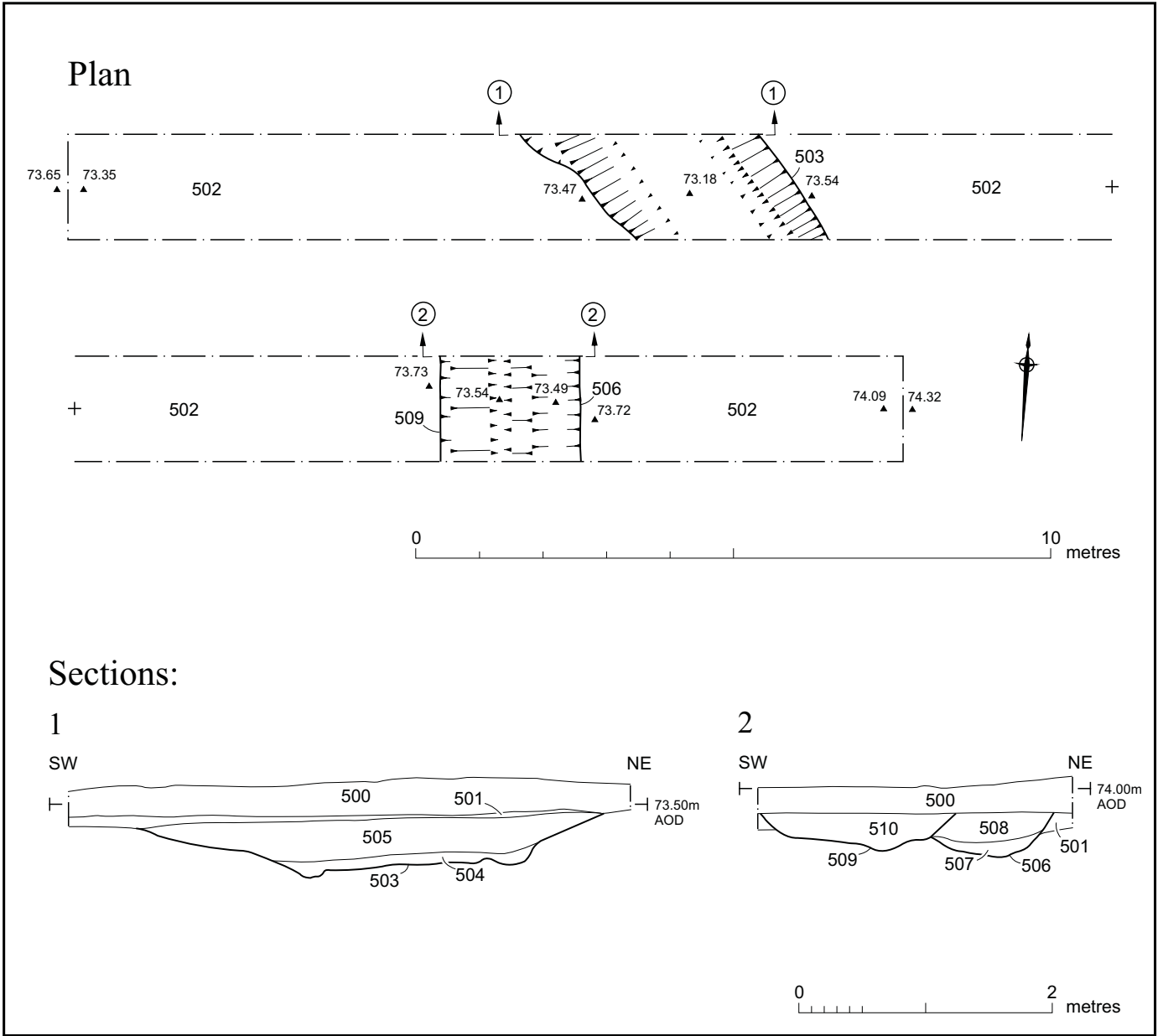


Fig. 15 Plan and sections, Trench 5, Area 12.

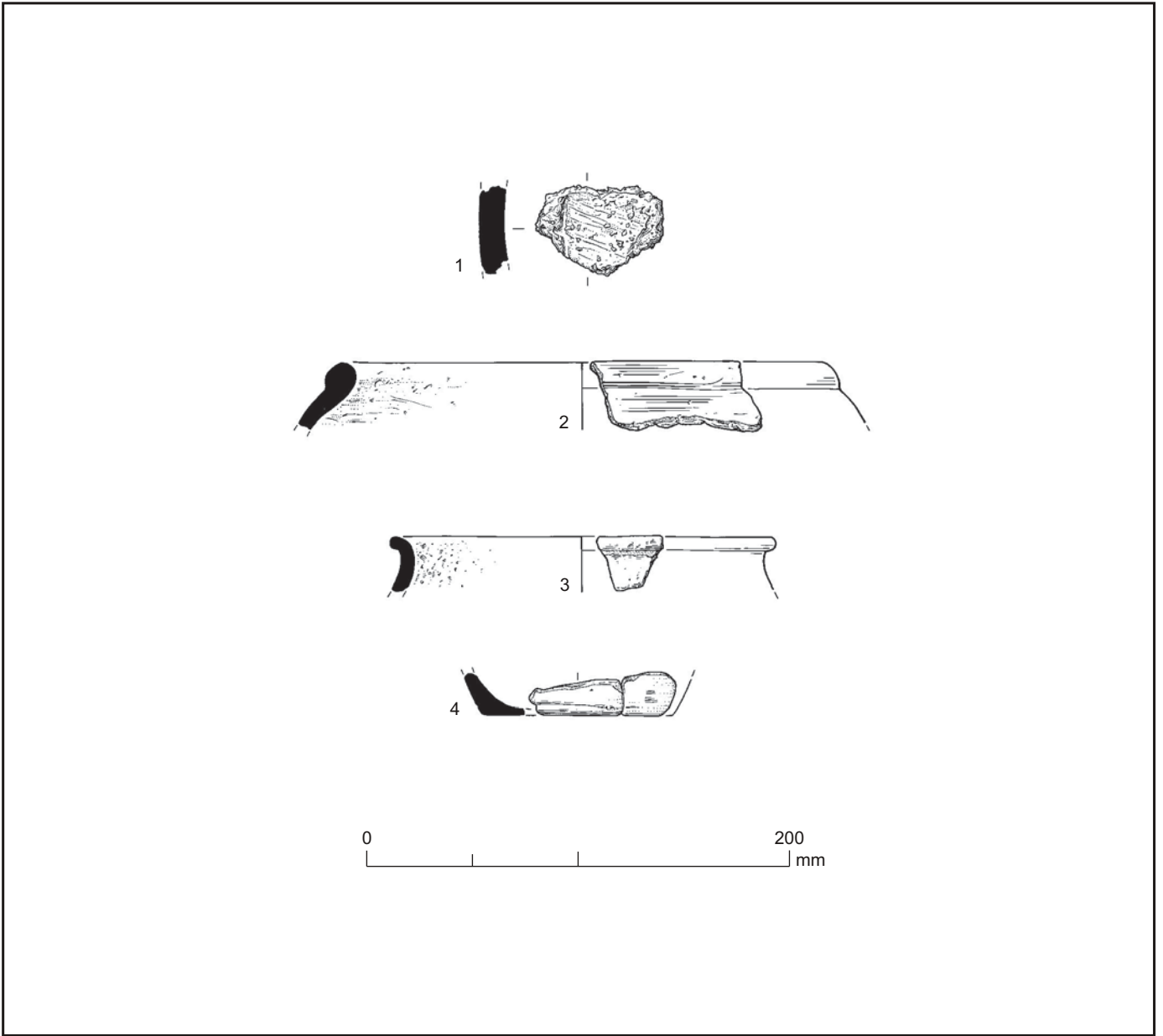


Fig. 16 Bronze Age and Iron Age pottery.