

CERAMICS COURTYARD

CUMBRIA INSTITUTE OF ART AND DESIGN, CARLISLE

Cumbria

Archaeological Evaluation Report



Oxford Archaeology North

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SUMMARY

Oxford Archaeology North (OA North) was commissioned by Swarbrick Associates on behalf of the Cumbria Institute of the Arts to undertake an archaeological evaluation on the campus of the Cumbria Institute of the Arts, Carlisle (NY 40370 57290). The work took place following an application for scheduled monument consent and planning permission to roof over a courtyard between existing buildings. The fieldwork was undertaken in June 2004.

The College is situated in an area which has been identified as being of high archaeological importance and is statutorily protected as a Scheduled Monument (County Sites and Monuments Record 5782, Scheduled Monument 28484). The main college building is situated between the line of Hadrian's Wall and the probable course of the associated *Vallum*, c200m to the south-east of the Wall. It is also only approximately 60m north-east of the north-eastern defences of the Roman fort of Stanwix, the largest fort on Hadrian's Wall.

The excavation of the two trenches has shown that archaeological features are present on the site sealed below 1.2-1.3m of post-medieval overburden and possible alluvial or colluvial deposits. Alluvial/colluvial deposits are up to 0.7m thick and are heavily gleyed in patches showing that they were laid in wet conditions. Sealed beneath these deposits was a ditch aligned north-west to south-east, which is almost at right angles to Hadrian's Wall and the *Vallum*. The full profile of the ditch was not seen but it certainly exceeds 2m in width and 1m in depth with steeply sloping sides. On the basis of the finds in the fill the ditch would appear to date to the post-medieval period. Cut by the ditch in Trench 2 was a deposit of orange sandy silt with a high proportion of stone inclusions, which may well relate to a putative parade ground seen in the 1996 excavations by CAU on the site.

The impact of the proposed works on the archaeology known to exist on the site is not yet clear as a final foundation design has not yet been determined. However, it is clear that should the final design involve the disturbance of ground to a depth of greater than 1.2m below the current ground surface then significant archaeological deposits relating to the putative parade ground associated with Stanwix Roman fort will be disturbed. There is also the potential for as yet unidentified features and deposits to be disturbed which may currently be sealed beneath the parade ground.

Once a design for the foundations of the proposed structure has been finalised a program of archaeological mitigation will need to be designed accordingly.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to thank the Cumbria Institute of the Arts and Chris Harper of Swarbrick Associates for commissioning the work. Thanks are also due to Mike Collins of English Heritage for his help and advice in the course of the project.

The fieldwork was undertaken by Paul Gajos and Dave McNicol. Paul Gajos compiled this report, the drawings were by Emma Carter and the finds report was by Jo Dawson and Sean Phillips. The report was edited by Jamie Quartermaine and Alan Lupton. The project was managed by Jamie Quartermaine.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Following an application for scheduled monument consent and planning permission to undertake works within the campus of the Cumbria Institute of the Arts at Carlisle (NY 40370 57290) (Fig 1) Oxford Archaeology North (OA North) was commissioned by Swarbrick Associates to undertake an archaeological evaluation of the site. The proposed works consist of the roofing in of a courtyard between existing buildings. These buildings lie adjacent to the Roman fort at Stanwix and a section of Hadrian's Wall, both of which are Scheduled Monuments (SM 28484) and the whole boundary complex is part of the Hadrian's Wall World Heritage Site. The work, which consisted of the excavation of two trenches, was carried out on the 21st and 22nd of June 2004.

1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 1.2.1 The site is located within the campus of the Cumbria Institute of the Arts, Brampton Road, Carlisle (NY 40370 57290) (Fig 1). The site is currently an open space covered with tarmac located between workshop buildings used by the college.
- 1.2.2 The site lies at approximately 26m OD. The underlying geology consists of Triassic mudstones and siltstones (British Geological Survey 1982), while the soils of the surrounding area are of the Clifton series, which is typical stagnogley soil (Soil Survey 1983).

1.3 ARCHAEOLOGICAL BACKGROUND

- 1.3.1 *Stanwix Fort*: excavations of the fort at Stanwix in the 1930s by Simpson, Hogg and Richmond established the positions of the south gate, and the defences on the north-eastern, south-eastern and south-western sides. Internal buildings, including a granary were located in the playground of Stanwix Primary School (Simpson and Hogg 1935). In the 1980s, an excavation in the car park of the Cumbria Park Hotel, immediately north of the school playground, located the stone footings of the north-western fort wall and an interval tower, together with two ditches beyond (McCarthy 1999). This demonstrated that the fort had been enlarged in the Antonine period, projecting it north of Hadrian's Wall. The other key discovery was that of a ditch underlying the interval tower, which was clearly earlier than the enlargement of the fort and was presumed to be associated with Hadrian's Wall, the foundations of which had been discovered by Simpson and Hogg in 1932-4 (Simpson and Hogg 1935; McCarthy 1999, 163).
- 1.3.2 In 1997, Carlisle Archaeological Unit (CAU 1997) carried out further work in the playground of the Primary School, in advance of the construction of an extension to the school (McCarthy 1999, 164). The earliest identifiable feature consisted of a turf deposit, overlain by a substantial deposit of clay; this turf deposit was either part of a rampart or perhaps evidence of the Turf Wall that predates the stone version of Hadrian's Wall to the west of the River Irthing. There were no obvious

front or rear faces to this turf deposit, but it was located some metres south of the stone Hadrian's Wall discovered in the 1930s (Simpson and Hogg 1935). The walls located by Simpson and Hogg were not found, but stone and cobbled surfaces and rubble deposits were identified and were presumed to have belonged with the walls found in the 1930s. Timber buildings erected after the deposition of Huntcliff ware in the fourth century were also discovered (McCarthy 1999).

- 1.3.3 In 1997 and 1998, CAU dug two further trenches in a narrow passage immediately adjacent to the north-western side of the Victorian school, locating the inner ditch and the stone footings of the fort wall (McCarthy 1999). Other work in Stanwix in 1993 revealed two phases of walls and surfaces (CAU 1993).
- 1.3.4 **The Fort Environs:** in 1986, CAU excavated some deeply stratified deposits, including remains of buildings, at the former Miles MacInnes Hall in Scotland Road, demonstrating the existence of extramural development beyond the west gate of the fort (McCarthy 1999).
- 1.3.5 Between the fort and the rising ground to the north-east centred on Wall Knowe, is an area of lower ground, where investigations by CAU, in the grounds of Cumbria College of Art and Design, in 1996 revealed an extensive clay platform up to 0.5m thick, which was provisionally interpreted as the parade ground for the fort (*ibid*). Between this putative parade ground and the east gate of the fort is a raised area which was tentatively identified as a tribunal (*ibid*). The clay identified as a parade ground sealed an old ground surface, with extensive areas of plough marks, and field boundary ditches, including some discovered in 1976 by the Central Excavation Unit (Smith 1978). In 1998, excavations by CAU identified further buildings and possible industrial debris near to the entrance to Cumbria College of Art and Design on Brampton Road (CAU 1998). The investigation also identified a large ditch, interpreted as the *Vallum*, even though it was c75m to the south of the position shown on OS maps.
- 1.3.6 An excavation and watching brief was carried out at the College in 1999 by LUAU (1999). Excavation to the south-west of the main college building (Fig 2, Phase 2a) revealed only twentieth century features, and suggested that modern disturbance had been substantial due to the building being terraced into the slope. However, a watching brief at the main gate (Fig 2, Phase 2b) revealed a dump containing Roman pottery, the butt-ends of two possible beam slots, a larger linear feature, a pit, a posthole, and a possible kiln. The evidence suggests Roman occupation close to Brampton Road, probably terminating by the late third century AD. No evidence for the *Vallum* was present in this area (LUAU 1999) despite its proximity to the feature identified by CAU (1998).
- 1.3.7 A watching brief was undertaken at the same time by Newcastle University's Archaeological Practice on extensions on the south-east side of the main college building (Fig 2, Phase 3). The excavations failed to uncover any archaeology to the depth of the pile caps, except for a thick ploughsoil and hillwash. A much deeper excavation was undertaken for the construction of a lift-shaft, however, which revealed an extensive area of cobbling similar to that encountered by the CAU evaluations (1993) to the north of the College building. Large postholes and slots were also discovered, apparently contemporary with the cobbled area; these were cut by ditches and overlain by burnt deposits. The deposits appeared to concentrate in the east end of the trench, with the west end showing truncation from the point at

which the college building has been terraced into the slope (A Rushworth *pers comm*).

- 1.3.8 An evaluation and watching brief were carried out in June 2000 by LUAU (2000a) to the north of the main college building (Fig 2, Phase 4). The watching brief on a pipe trench revealed a deposit of clay and cobbles running approximately two thirds the length of the trench. The evaluation was between the pipe trench and the main college building to the south, and revealed mainly nineteenth and twentieth century features and soil horizons. However, excavation in the centre of the trench revealed the same deposit of clay and cobbles as identified in the watching brief. This deposit consisted of two phases of clay / cobble surfaces abutting a metalled surface at the western exposed end; Roman tile, brick and pottery were embedded in both clay surfaces. The brief provided only for the recording of features that would be affected by the proposed development, so little examination or interpretation of the deposit was possible. A sondage, however, revealed the depth of the deposit to be c0.3m. These clay and cobble surfaces correspond to those identified by the 1996 excavations by CAU (McCarthy 1999), which were then interpreted as a parade ground (LUAU 2000a).
- 1.3.9 A programme of evaluation trenching was undertaken in August 2000 (LUAU 2000b) in the walled garden to the east of the college (Fig 2, Phase 5). This involved the excavation of three trenches, of which those in the center and east of the garden uncovered only natural deposits and features associated with the garden. However, in the western trench a 'V'-profiled ditch was identified, which had a marked steepening of gradient towards the base. The ditch was orientated north/south, lying parallel to the eastern edge of the fort at Stanwix. The fills contained few diagnostic finds and appeared to demonstrate a very short period of use, with the ditch apparently having been backfilled very quickly. It was tentatively suggested that this was a ditch of Roman military origin and may predate the fort at Stanwix, and may be part of a temporary camp or earlier fort.

2. METHODOLOGY

2.1 TRIAL TRENCHING

- 2.1.1 The programme of evaluation consisted of two trenches which were intended to be 5m by 1.6m in extent and excavated down to the level of archaeological deposits, natural subsoil or a depth of 1.2m. The positions of the trenches, in accordance with the project design, had to be altered slightly to avoid live services (Fig 3). The northern half of Trench 1 had to be moved to the north-west in order to avoid a drain and the alignment of Trench 2 had to be altered from east/west to north-east/south-west in order to avoid a live electricity cable (Fig 3).
- 2.1.2 The trenches were excavated under constant archaeological supervision using a mechanical excavator fitted with a 1.6m wide, toothless ditching bucket to the level of the natural or of potential archaeological deposits. Where potential archaeological deposits were encountered, the trenches were hand cleaned and the deposits excavated manually in order to assess their date, character and extent. The trenches were accurately located by differential GPS (accurate to +/- 0.25m).
- 2.1.3 Once deposits believed to be natural had been encountered in both trenches and recording had been completed deeper test pits within the trenches were excavated by mechanical excavator, fitted with a 0.5m wide bucket, down to solid geology. This was at the request of the engineers to provide information on ground conditions and was undertaken in accordance with the project brief (*Section 5.2*). However, the interpretation of the natural subsoil proved to be mistaken and a ditch was revealed in the section of the deeper test pit in Trench 2. Trench 2 was then expanded to the north-west so that the ditch could be examined by manual excavation. The full extent of the ditch could not be excavated due to vandalism occurring overnight resulting in the collapse of the section, as a consequence for health and safety reasons this precluded further detailed investigation.
- 2.1.4 A complete record of all features and horizons was made, comprising of a full description and preliminary classification of features or structures revealed on OA North pro-forma sheets, and their accurate location in plan. A photographic record in colour slide and monochrome formats was also compiled.

2.2 ARCHIVE

- 2.2.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*) and in accordance with current IFA and English Heritage guidelines (English Heritage 1991). The archive will be deposited in the Cumbria Record Office with a copy to the Cumbria SMR.

3. EVALUATION RESULTS

3.1 TRENCH 1

- 3.1.1 Trench 1 was excavated in the north-east quadrant of the courtyard and was aligned approximately north/south, measuring 5.1m by 1.6m (Fig 3). The northern 2m of the trench was moved to the west in order to avoid services. The trench was dug to a depth of 1.2m.
- 3.1.2 The stratigraphy consisted of modern hardstanding and levelling deposits to a depth of 0.25m below the current ground surface. Below these deposits was a mid-brown silty clay, **4**, to a depth of 0.46m which overlay a dark-grey silty clay, **5**, to a depth of 0.8m. Both of these deposits are thought to represent buried ploughsoils. A single sherd of post-medieval pottery was recovered from layer **5**. Sealed below the ploughsoil deposits was what appeared to be a gleyed colluvial or alluvial deposit of very sandy silt. This deposit, **6**, was light-grey in colour with c30% orange mottles and had a very diffuse horizon with layer **7** which was of the same consistency as **6** but was orange-brown in colour. It seems likely that these two deposits were formed at the same time and that the difference in colour was due to patchy localised gleying. These deposits exceeded 1.2m in depth from ground level. The deposits corresponded with similar deposits in Trench 2, **15** and **16** (Section 3.2.2), which as a result of the excavation of a sondage was demonstrated to be redeposited natural, it is therefore probable that these deposits was also redeposited natural.

3.2 TRENCH 2

- 3.2.1 Trench 2 was located in the south-west quadrant of the courtyard and was aligned north-east/south-west (Fig 3). Trench 2 initially measured 5m by 1.6m and was excavated to a depth of 1.2m. The stratigraphy revealed in this trench was much the same as in Trench 1; Modern hardstanding and levelling deposits (**1**, **2** and **3**) overlay buried ploughsoil, **14** (same as **5**). Layer **14** in turn overlay deposits of gleyed sandy silt, **15** and **16** (the same as **6** and **7** seen in Trench 1) which extended lower than 1.2m from the current ground surface.
- 3.2.2 The alluvial/colluvial layers seen in both trenches were initially taken to be natural subsoil and so deeper sondages were machined through them to inform the engineers of ground conditions. Upon excavation of the deep sondage in Trench 2 a ditch, **8**, was revealed in section which had been sealed by layer **15**. The trench was then extended by 1.6m in width and 3.2m in length to the north-west so that a section could be safely hand dug through the ditch.
- 3.2.3 The ditch, **8**, (Fig 4) crossed the southern end of the trench on a north-west/ south-east alignment and was only visible at a depth of 1.25m below ground level (24.46mOD). The full width of the ditch could not be established as it extended beyond the limits of the trench but was certainly greater than 2m. The ditch was excavated to a depth of 1m revealing that the northern edge of the ditch was steeply sloping at an angle of c60°. The base of the ditch was not seen as overnight vandalism had resulted in the sections of the ditch collapsing; it was not possible to extend the trench because of services and the depth of the exposed section meant

that it was not possible to safely excavate the trench further. The uppermost fill of the ditch, **9**, was a deposit of sandy silt up to 0.6m thick which appeared to have formed by fairly rapid silting. A sherd of Romano-British pottery and some late medieval/early post-medieval tile fragments were recovered from this layer. Underlying layer **9** was layer **10**, which was a dark-grey silty clay, with sparse inclusions. This layer appears to have been dumped into the ditch as a deliberate episode of backfilling, evidenced by the presence of large lumps of reddish brown clay randomly dispersed throughout the layer. Fragments of late medieval/early post-medieval tile and a flint strike-a-light were recovered within this deposit. Observed during excavation, but not recorded in the section as a result of the trench collapse, was a very dark-grey highly organic layer, **17**, underlying **10**. This layer presumably formed under very wet conditions whilst the ditch was in use.

- 3.2.4 Ditch **8** was seen to cut layer **11** (Fig 4), which comprised a 0.3m thick deposit of mid-orange-brown very sandy silt with a soft consistency and c40% small to medium sub-rounded to rounded stones. This layer is considered to be the same as a deposit identified from previous excavations at the college (McCarthy 1999, LUAU 2000a) which had been interpreted as a putative Roman parade ground. A buried soil horizon, **12**, (Fig 4) consisting of a 0.1m thick layer of very dark-grey, highly organic material, was sealed by layer **11**. Natural sand deposits were seen below layer **12**.

4. THE FINDS

4.1 INTRODUCTION

- 4.1.1 In total, 12 artefacts were recovered from the site, comprising pottery, ceramic building material, unidentified ceramics, daub, and stone (see Table 1). The bulk of the finds were recovered from the top fill **9** of ditch **8**, but finds were also retrieved from the lower fill **10** of the same ditch, and from the plough soil **5**.

	Plough soil 5	Top ditch fill 9	Lower ditch fill 10
Ceramic building material	0	2	1
Daub	0	4	0
Pottery	1	1	0
Stone	0	0	1
Unidentified ceramic	0	2	0

Table 1: Type of finds from different contexts

- 4.1.2 It was not possible to date some of the artefacts, but others could be more confidently dated, one to the Roman period, and the rest to the post-medieval period. Details of the finds are set out below.

4.2 CERAMIC FINDS

- 4.2.1 **Pottery:** one small, abraded fragment of low-fired oxidised gritty pottery was recovered from ditch fill **9**. It is thought to date to the second century AD, and to have been made locally. The other pottery fragment was recovered from the plough soil, **5**, and was from the base of a mottled ware vessel. It is in good condition, and dates to the late seventeenth or early eighteenth century.
- 4.2.2 **Ceramic Building Material:** two pieces of tile were recovered, one from the top fill, **9**, and one from the lower fill, **16**, of ditch **8**. They were similar to each other in appearance, both being made of a high-fired fabric with quartz inclusions. The tile from upper fill **9** was the corner of an unglazed ridge tile, and showed clear signs of having been sand cast. The other fragment was smaller, and may have come from a flat roof tile. Both tiles are thought to date to the post-medieval period. The brick fragment, which was recovered from upper fill **9**, remains undated.
- 4.2.3 **Daub:** four lumps of daub were recovered from upper ditch fill **9**. They were predominantly oxidised and very low fired, and only one of them retained an original surface. This surface was reduced, and slightly higher fired than the rest, and it had preserved in it two possible wood impressions.
- 4.2.4 **Unidentified Ceramic:** the poor condition and small size of the two fragments of unidentified ceramic meant that it was not possible for them to be identified as either pottery or ceramic building material. They remain undated.

4.3 STONE

- 4.3.1 A single piece of worked flint was recovered from lower ditch fill **10**. The piece measures 25mm by 25mm with a maximum thickness of 10mm, is triangular in section and appears to a central section broken off from a larger blade. The form of the piece and the use wear that is clearly visible around the edges are consistent with a flint chard used with a strike-a-light. The dating of the artefact is problematic as flint strike-a-lights are known from prehistory through to modern times.

4.4 CONCLUSION

- 4.4.1 The assemblage of finds was too small to allow confident interpretation. Although the date of the ditch appears on present evidence to be post-medieval, the evidence remains inconclusive.

5. DISCUSSION

5.1 EVALUATION SUMMARY

- 5.1.1 The excavation of the two trenches has shown that archaeological features are present on the site sealed below 1.2-1.3m of post-medieval overburden and possible alluvial or colluvial deposits.
- 5.1.2 The alluvial/colluvial deposits (**5**, **6**, **15** and **16**) were up to 0.7m thick and were heavily gleyed in patches showing that had been laid in wet conditions. The site lies at 10m to 15m above the current flood plain of the River Eden and the only high ground in the area from which colluvium could have originated is Wall Knowe to the north-east of the site, which is only c5m higher than the site itself. It was this apparent lack of a source for the alluvial/colluvial material that led to the belief that these deposits were post-glacial in origin and that, as outlined in the project brief, deeper excavation to inform on ground conditions for engineering purposes would be appropriate.
- 5.1.3 It was demonstrated that in actuality the alluvial/colluvial deposits were not natural subsoils, but sealed a ditch, **8**, of post-medieval date in Trench 2. The ditch was aligned north-west / south-east, which is almost at right angles to Hadrian's Wall and the *Vallum*, and its profile exceeds 2m in width, 1m in depth and had steeply sloping sides (Fig 4). A range of finds was recovered from the ditch fills; this included a single sherd of Romano-British pottery dating to the second century AD which was recovered from the upper fills. These fills also included tiles of late medieval/ early post-medieval date and a flint strike-a-light; flints of this form are known to occur from prehistory right through to modern times. Despite the presence of the Romano-British pottery, which is taken to be residual, the assemblage would appear to indicate that the ditch was of late medieval / early post-medieval date.
- 5.1.4 The excavation of ditch, **8**, in Trench 2 revealed a deposit of orange sandy silt with a high proportion of stone inclusions, **11**, which had been cut by the ditch. This deposit may well relate to the putative parade ground seen in the 1996 excavations by CAU which revealed an extensive clay platform up to 0.5m thick sealing an old ground surface (McCarthy 1999) and again in June 2000 when evaluation and watching brief work was being undertaken by LUAU revealed a deposit of clay and cobbles c.0.3m thick (LUAU 2000a). There are, however, some differences between these deposits. Those recorded in 1996 and 2000 were both described, as having a compact clay matrix whereas layer **11** was loose sandy silt. The deposits are all of a similar thickness and a buried soil similar to that seen in 1996 (McCarthy 1999) was seen underlying layer **11** in Trench 2.

5.2 IMPACT AND RECOMMENDATIONS

- 5.2.1 **Impact:** the impact of the proposed works on the archaeology known to exist on the site is not yet clear as a final foundation design has not yet been determined. However, it is clear that, should the final design involve the disturbance of ground to a depth of greater than 1.2m below the current ground surface, then significant archaeological deposits relating to the putative parade ground associated with

Stanwix Roman fort will be disturbed. There is also potential for as yet unidentified features and deposits to be disturbed which may currently be sealed beneath the parade ground.

- 5.2.2 **Recommendations:** once a design for the foundations of the proposed structure has been finalised a program of archaeological mitigation will need to be designed accordingly. Such a programme will need to record only those archaeological deposits and features that will be directly impacted by the development.

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APPENDIX 1 PROJECT BRIEF

APPENDIX 2

SUMMARY CONTEXT LIST

Context No	Trench	Description	Depth
1	1, 2	Tarmac	0.0-0.02m
2	1, 2	Modern cobbles	0.02-0.14m
3	1, 2	Levelling for cobbles	0.14-0.25m
4	1	Mid-light brown silty clay	0.25-0.46m
5	1	Dark-grey silty clay, ploughsoil	0.46-0.8m
6	1	Alluvial/colluvial grey sandy silt	0.8-1.2m
7	1	Alluvial/colluvial orange sandy silt	1.0-1.3m
8	2	Ditch cut	1.25-2.25m
9	2	Ditch fill	1.25-1.85m
10	2	Ditch fill	1.85-2.1m
11	2	Re-deposit orange sandy silt	1.25-1.55m
12	2	Organic, buried soil	1.55-1.65m
13	2	Natural yellow sand	1.65m+
14	2	Dark-grey silty clay, ploughsoil	0.32-0.6m
15	2	Alluvial/colluvial grey sandy silt	0.6-1.25m
16	2	Alluvial/colluvial orange sandy silt	0.8-1.2m
17	2	Ditch fill	2.1-2.25m

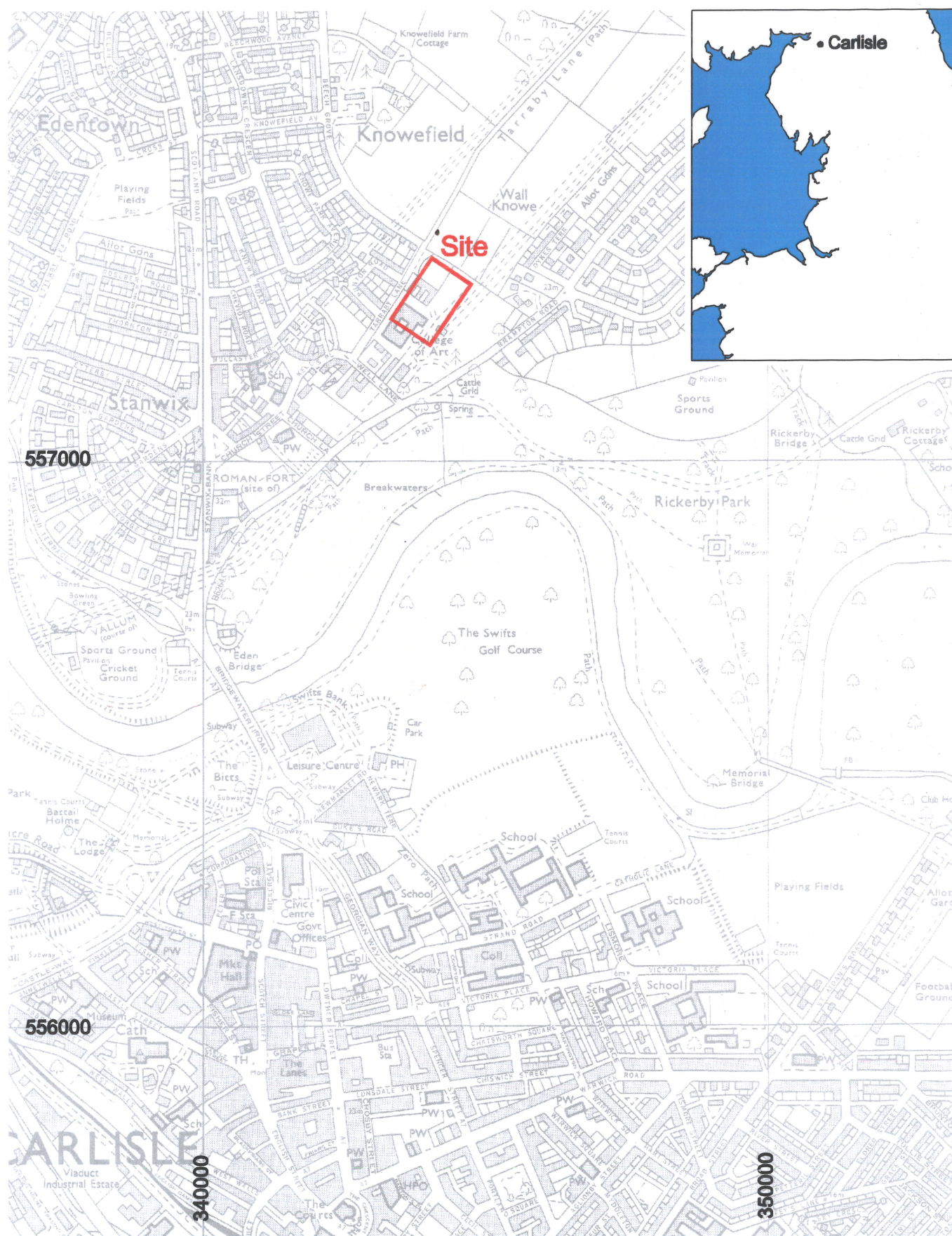
ILLUSTRATIONS

Figure 1: Location map

Figure 2: Previous Interventions at the Cumbria Institute of the Arts

Figure 3: Trench Locations

Figure 4: Plan of Trench 2 and Section of Ditch 8

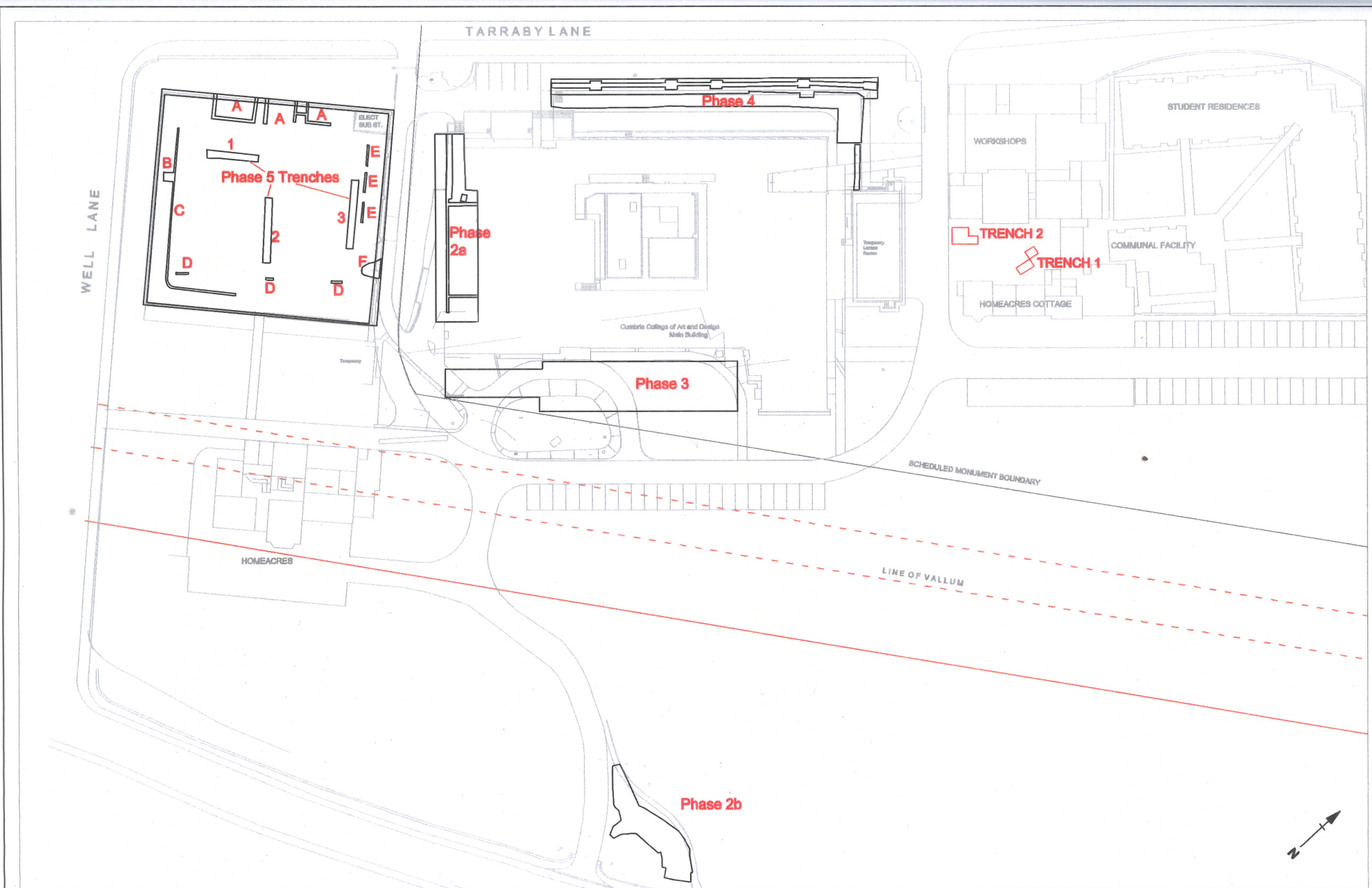


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0 500
metres

Figure 1: Location map



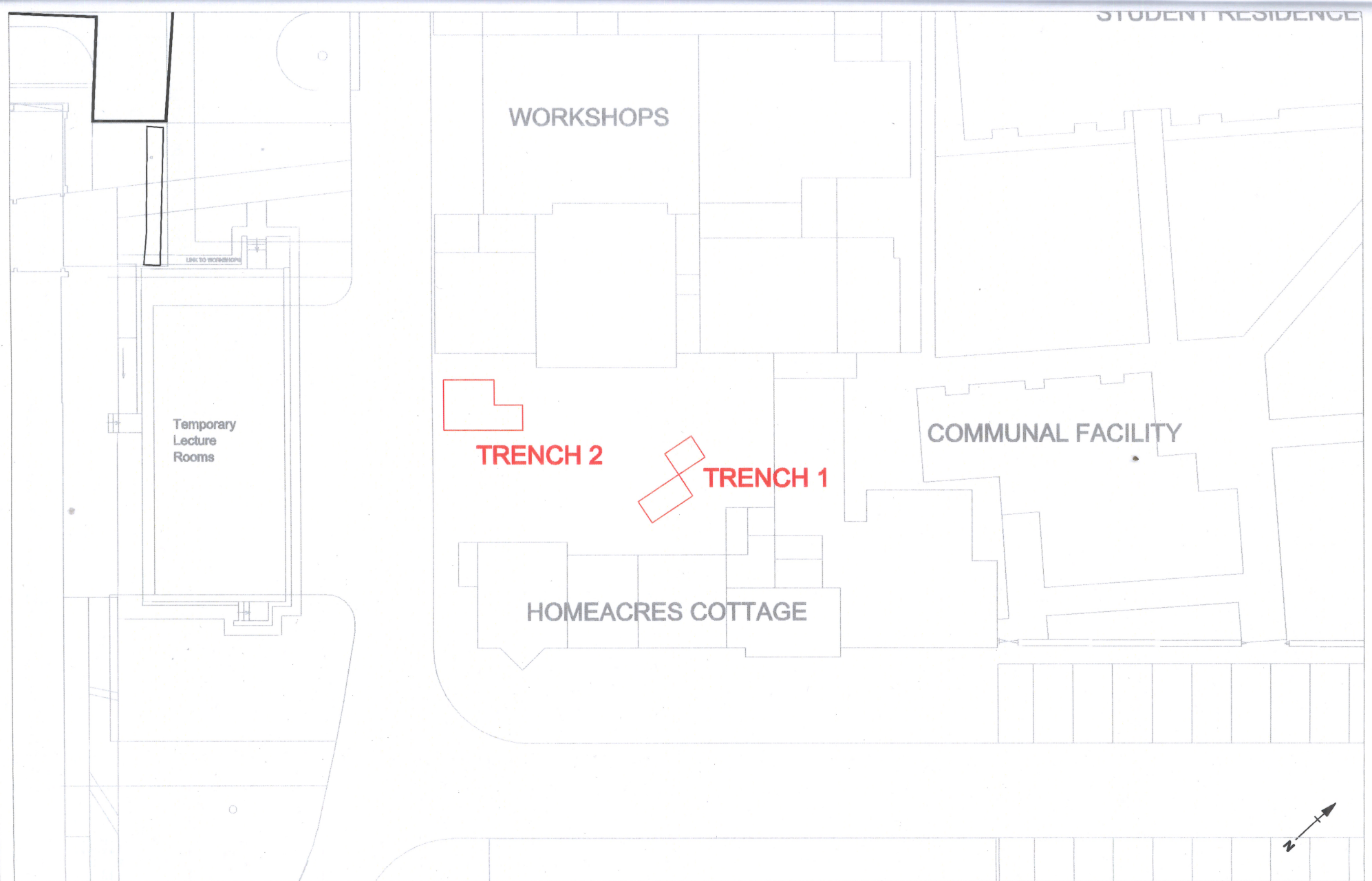
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Scale 1:1000

0 20m



Figure 2: Previous interventions at the Cumbria Institute of the Arts

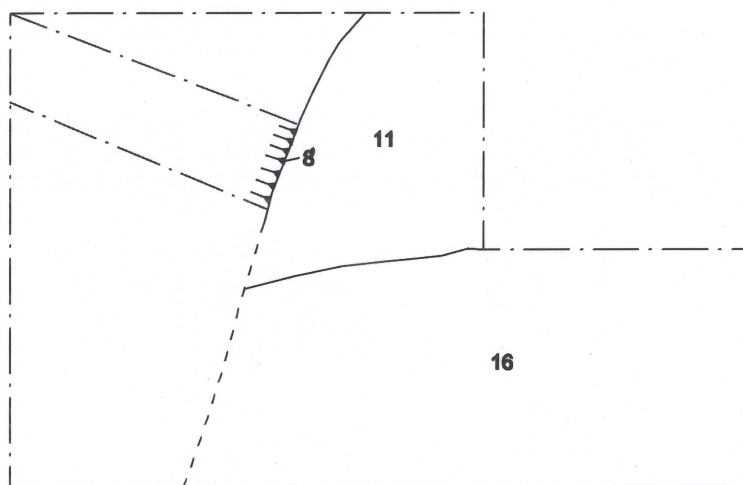


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0 10m

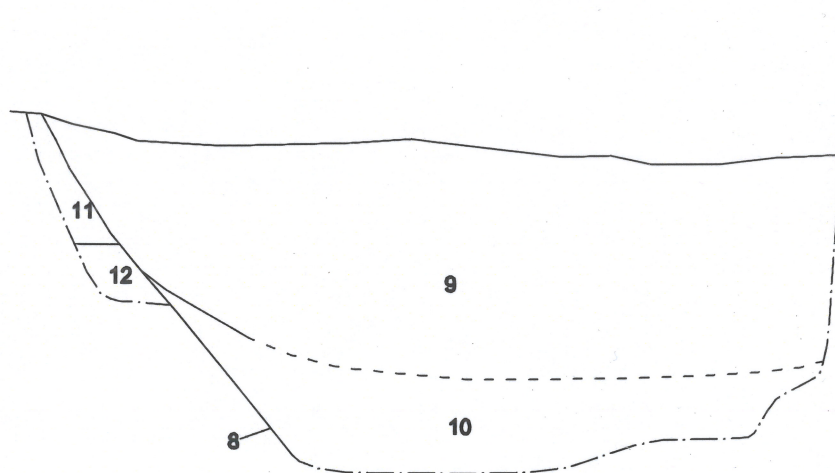


Figure 3: Trench Location Plan



0 1m

Plan of Trench 2 at 1:50



0 0.5m

Section through Ditch 8 at 1:20



Figure 4: Plan of Trench 2 and Section of Ditch 8