ORMESBY BECK, MIDDLESBROUGH, TEESSIDE



WATCHING BRIEF REPORT CP. No: 1441/11 01/08/2011

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DOCUMENT TITLE: Ormesby Beck, Middlesbrough, Teesside

DOCUMENT TYPE: Watching Brief Report

CLIENT: The Environment Agency

CP NUMBER: CP 1441/11

SITE CODE: ORB-A

PLANNING APP. No: -

OASIS REFERENCE: northpen3-105947

PRINT DATE: 01/08/2011

GRID REFERENCE: NZ 5090 1840

Quality Assurance

This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Institute for Archaeologists (IfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by North Pennines Archaeology Ltd on the preparation of reports.

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SUMMARY

North Pennines Archaeology Ltd were commissioned by The Environment Agency, to undertake an archaeological watching brief alongside a section of Ormesby Beck, a watercourse running northeast from the suburb of Ormesby, towards the River Tees north of the site (NGR NZ 5090 180). The site works being monitored are being carried out as part of flood prevention measures.

The work affects an area considered to be of some archaeological potential. Previous archaeological investigations revealed prehistoric evidence in the wider landscape that consisted of a Neolithic tree trunk coffin and a Neolithic hearth to the northern and eastern ends of Brigham Road respectively. Ormesby is thought to have Early Medieval origins, based on place name evidence. The village remained a separate entity until it was subsumed into the town of Middlesbrough in the 19th century and is now surrounded by an urban landscape. The section of the river bank under investigation has undergone little in the way of change over the centuries with the exception of the construction of the railway in the mid-19th century.

As a result of this potential, and in accordance with guidance given in Planning Policy Statement 5 and with local planning authority, an intermittent archaeological watching brief is required in order to establish the presence/absence of archaeological remains and their nature, extent and state of preservation.

The Archaeological Watching Brief was undertaken over 5 days between June 9th, 2011 and 6th July 2011. The watching brief monitored topsoil stripping and ground reduction. No archaeological remains were noted.

As this archaeological watching brief was conducted as part of a recommendation to observe groundworks in association with a flood prevention scheme, no further work is deemed necessary. However, given the high archaeological potential of the area, it is recommended that any future work be subject to a programme of archaeological investigation.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to thank The Environment Agency for commissioning the project, and for all assistance throughout the work. NPA Ltd would also like to thank Tees Archaeology, for all their assistance throughout the project.

North Pennines Archaeology Ltd would also like to extend their thanks to Groundworks Services, and all staff at the Ormesby Beck site, for their help during this project.

The archaeological watching brief was undertaken by Jocelyn Strickland, Sue Thompson and Mike McElligott. The report was written by Jocelyn Strickland and Mike McElligott and the drawings were produced by Jocelyn Strickland and Mike McElligott. The project was managed by Matt Town, Project Manager for NPA Ltd who also edited the report.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In March 2011, North Pennines Archaeology were invited by The Environment Agency to maintain an archaeological watching brief at alongside a section of Ormesby Beck, Middlesbrough, (NGR NZ 5090 1840; Figure 1). The site works being monitored are being carried out as part of flood prevention measures. The proposed works lie within a prehistoric landscape within the immediate vicinity of a previously recorded Neolithic tree trunk coffin and hearth. As a result, Tees Archaeology requested that all ground reduction be subject to a programme of archaeological observation and investigation. This is in line accordance with Planning Policy Statement 5 (PPS5) and local planning policy.
- 1.1.2 All groundworks associated with the flood prevention scheme had to be excavated under full archaeological supervision and all stages of the archaeological work were undertaken following approved statutory guidelines (IfA 2002), and were consistent with the specification provided by Matt Town (2011) and generally accepted best practice.
- 1.1.3 This report outlines the monitoring works undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

2 METHODOLOGY

2.1 Project Design

2.1.1 A project design was submitted by North Pennines Archaeology Ltd in response to a request by The Environment Agency, for an archaeological watching brief of the study area. Following acceptance of the project design by Tees Archaeology, North Pennines Archaeology Ltd was commissioned by the client to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA), and generally accepted best practice.

2.2 THE WATCHING BRIEF

- 2.2.1 The works involved a structured watching brief to observe, record and excavate any archaeological deposits from the development site. A watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, on a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed (IfA 2002).
- 2.2.2 The aims and principal methodology of the watching brief can be summarised as follows:
 - to determine the presence/absence, nature, extent and state of preservation of archaeological remains and to record them;
 - to carry out further excavation and recording work in adequate time, if intact archaeological remains are uncovered during the project;
 - to accurately tie the area watched by the archaeologist into the National Grid at an appropriate scale, with any archaeological deposits and features adequately levelled;
 - to sample environmental deposits encountered as required, in line with English Heritage (2002) guidelines;
 - to produce a photographic record of all contexts using colour digital, and 35mm monochrome formats as applicable, each photograph including a graduated metric scale;
 - to recover artefactual material, especially that useful of dating purposes;

- to produce a site archive in accordance with MAP2 (English Heritage 1991) and MoRPHE standards (English Heritage 2006).
- 2.2.3 An area of approximately 35,341.43m² was stripped of soil (topsoil and subsoil). The trenches formed a rectangular shape approximated to 3.6m x 1.2m, and were excavated to a depth of 2.3m 3m. In the other areas, the topsoil was stripped revealing natural substrate 0.12m below the surface and measured 94m 468m in length and 5m 55m in width (Figure 3). Archaeological monitoring and supervision of groundworks associated with the stripping commenced on 09/06/2011. A summary of the findings of the watching brief is included within this report.

2.3 THE ARCHIVE

- 2.3.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991) and according to the Archaeological Archives Forum recommendations (Brown 2007). The archive and copies of the report will be sent to the County Historic Environment Record at Tees Archaeology, Hartlepool, available upon request. The archive can be accessed under the unique project identifier NPA11, ORB-A, CP 1441/11.
- 2.3.2 North Pennines Archaeology, and Tees Archaeology, support the Online AccesS to the Index of Archaeological InvestigationS (OASIS) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION AND GEOLOGICAL CONTEXT

- 3.1.1 Ormesby lies within the urban and industrial landscape of the Tees Lowlands approximately 3.5 kilometres southwest of Middlesbrough, Teesside. The Tees Lowlands lie between the Cleveland Hills to the southeast, the Pennine Fringes to the west and merge into the Durham Magnesium Limestone Plateau to the north (Countryside Commission 1998). The site is located on the eastern banks of Ormesby Beck and is bounded to the west by a railway line and to the east by housing along Bradhope, Kentmere and Brigham Roads. The area is shown in Figure 3.
- 3.1.2 The underlying geology is largely of red mudstones and sandstones of Permo-Triassic age. Almost the whole of the area is underlain by thick deposits of glacial boulder clay, sand and gravel (*ibid*).

3.2 HISTORICAL CONTEXT

- 3.2.1 *Introduction:* this historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments specific to the study area.
- 3.2.2 *Prehistoric:* two prehistoric finds have been uncovered within the immediate vicinity of the site boundary, both dating to the Neolithic. A Neolithic tree trunk coffin (HER No. 297) was found immediately north of the site boundary. A Neolithic hearth (HER No. 317) was also found at the eastern end of Brigham Road (The Archaeological Practice 2010).
- 3.2.3 *Early Medieval:* Ormesby is thought to derive from the Saxon name *Orme* and the Viking suffix –by. This remained a separate village until it was amalgamated with the rapidly growing 19th century town of Middlesbrough. (*ibid*).
- 3.2.4 Cartographic analysis shows that the area within the site boundary has remained largely undeveloped with the exception of the railway during the mid-19th century (*ibid*).

3.3 Previous Work

3.3.1 The Archaeological Practice undertook an archaeological watching brief within the area of the present site boundary alongside a section of Ormesby Beck. A series of small trenches were monitored along the eastern and western banks of the beck. The trenches were excavated to depths of 2.7-3.8

metres and the window samples to depths of 1.1-1.3 metres. No archaeological finds or features were noted during the investigation (The Archaeological Practice 2010).

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 Introduction

4.1.1 The watching brief monitoring was undertaken over 5 days, which commenced on the 9th June 2011 and finished on the 6th July 2011. Topsoil stripping took place for the first two days followed by the excavation of 6 test pits on the 13th June 2011. On the 1st July, a section of the new channel being excavated was observed and on the final day, two sections of the new channel, north of the footbridge had a layer of contaminated soil removed (Figure 3).

4.2 Test Pits

- 4.2.1 Six test pits were excavated within the area of the site boundary. Three of these were excavated into made ground and three into the natural (Figure 3).
- 4.2.2 The first test pit (TP 102) was excavated 10 metres to the east of the footpath. Within this test pit the topsoil (**101**) measured 0.1m. This was located above 0.4m of a mid orange/brown silty clay subsoil (**102**) that contained modern brick, plastic, glass and stone. Directly beneath this was an orange/red clay natural (**103**). TP 102 was excavated to a depth of 2.5m. No archaeological features were noted within this test pit.



Plate 1: Test pit 102

4.2.3 The second test pit (TP 103) was located to the north of the footbridge on the eastern side of the stripped area and measured 3.0m in length by 1.20m in width and 3.0m in depth. The topsoil had already been stripped in this area to reveal mixed made ground consisting of mid brown silty clays (104). A land drain was encountered at *c.* 0.90m below the stripped surface. The natural subsoil that consisted of mottled stiff clay was encountered at a depth of 1.0m (103). The test pit was excavated to a depth of 3.0m. No archaeological features were noted within this test pit.



Plate 2: Test pit 103

4.2.4 The third test pit (TP 104) was excavated to the south and east of TP 102, also to the east of the railway line. The topsoil of this area had already been stripped to reveal loose light brown silty clay at a depth of 0.70m (104). This contained frequent inclusions of brick, metal and glass. A dark orangey brown firm silty clay (102) with occasional brick and stone was observed at a depth of 1.5m. A dark green/black silty clay (105) was observed at a depth of 1.70m. TP 104 measured 3.0m in length by 1.2m in width and 3.0m in depth. No archaeological features were noted within this test pit.



Plate 3: Test Pit 104

- 4.2.5 The three remaining test pits were located on the southern side of the footbridge. Test pit 105 was located approximately 12m west of the small footbridge over the present beck. This test pit consisted of 0.20m of loose silty dark grey brown topsoil (101) that contained the occasional modern potsherd. This sealed the natural subsoil that consisted of orange/brown clay (103) and contained an east/west aligned field drain at a depth of 0.60m. Test pit 105 measured 2.8m in length by 1.1m in width and 2.3m in depth. No archaeological features were noted within this test pit.
- 4.2.6 Test pit 106 was located approximately 18m west of the footpath. This test pit measured 2.2m in length by 1.0m in width and by 2.3m depth. This test pit consisted of a very shallow topsoil (101), 0.20m in depth that consisted of a brown silty clay and contained modern disturbances. An orange/brown sandy clay subsoil (102) was encountered at a depth of 1.20m that was overlaying the natural (103). No archaeological features were noted within this testpit.
- 4.2.7 The sixth test pit 107 was located to the south of Test pit 106. This final test pit consisted of a mid brown silty topsoil (101) that contained modern pottery. This sealed an orange silty clay subsoil (102). A field drain, aligned northwest/southeast, was encountered at a depth of 0.80m. Subsoil (102) was overlaying the natural (103). No archaeological features were noted within this test pit.



Plate 4: Test pit 105



Plate 5: Test pit 106



Plate 6: Test pit 107

4.3 TOPSOIL STRIP TO THE WEST OF BRIGHAM ROAD

- 4.3.1 One aspect of the watching brief covered the controlled stripping of the topsoil on ground in an open field to the west of Brigham Road (Figure 3).
- 4.3.2 The topsoil was stripped by a JCB 3cx with a toothless bucket. A trench measuring 94m in length by 5m in width was excavated to a depth of 0.12m. The grassy topsoil (106) was present across the site to a depth of 0.1m. Beneath the topsoil, the subsoil (102) was visible, this consisted of mixed orange-brown clay with modern disturbances. Thirty metres from the northern end of the trench, adjacent to a dead-end road, an area of red brick and copper wiring (107) was noted that measured a total length of 3.4m. Within this area of debris a possible red brick wall was noted that was aligned north/south that consisted of one course.
- 4.3.3 Within the same trench, a pocket watch (Small Find (SF) No. 1) and glass bottle (SF No. 2) were found, 23 metres further south of the building debris. The pocket watch was noted on the western side of the trench adjacent to the glass bottle, located on the eastern side.
- 4.3.4 No archaeological features were noted.



Plate 7: Topsoil stripped area to the west of Brigham Road, looking south



Plate 8: Area of building debris, looking north



Plate 9: Possible brick wall in area of building debris

4.4 CONTAMINATED SOIL STRIP TO THE EAST OF THE RAILWAY LINE

- 4.4.1 There was a layer of contaminated soil from made up land, all along the east side of the new channel at the northern end of the site. Two areas, which were observed, at both the northern and southern ends were excavated to see how deep this soil was and if there was anything else buried under it. Both areas were excavated using a 20 tonne tracked 360 excavator with a toothed bucket and a bulldozer (Figure 3).
- 4.4.2 The first area was located at the northern end of the new channel. It measured 14m in length by 13m in width and was excavated to a depth of 2.1m. The uppermost layer observed consisted of contaminated soil (108) and backfill which was mixed with a lot of modern rubbish. The natural substrate (103) which consisted of yellowish grey/reddish brown clay was visible 0.4m below the surface. No archaeological remains were noted.
- 4.4.3 The second area was located approximately 150m to the south of the first area and was to the north of the footbridge. It measured 55m in length by 15m in width. The soil (108) was removed, revealing the natural substrate (103), about 0.3m below the surface. A modern brick manhole was uncovered in the centre of the area and was still in use. No archaeological remains were noted.

4.5 NEW CHANNEL EXCAVATION TO THE WEST OF BRIGHAM ROAD

- 4.5.1 Only a small area of the new channel was observed during the excavation was it was located to the west of Brigham Road, at the southern end of the site and was between the locations of Test Pits 106 and 107. The channel was excavated using a 30 and 20 tonne tracked 360 excavator with a toothed bucket and a bulldozer (Figure 3).
- 4.5.2 The area for the location of the new the channel, from the south bank of the existing channel where it joins, to the end of the site had the topsoil already removed down to the natural substrate (103) which consisted of light orangey brown/grey sandy clay, along with approximately 150m of the channel on the southern side of the site. A 60m stretch of the channel was observed and it measured 8.9m to 13.5m in width and was approximately 1.5m deep. No archaeological features were noted though there were two modern ceramic land drains running parallel to the channel and were partially visible near top of the channel on both sides. It was also very difficult to see if any archaeological features due to warm weather conditions that had dried out the ground and both machines tracking over the area excavated immediately after it had been opened.



Plate 10: Contaminated soil strip to the east of the rail line, northern end

4.6 ARCHAEOLOGICAL FINDS

4.6.1 Two finds were recovered from the subsoil (**101**) during topsoil stripping of the open field to the west of Brigham Road. The finds include one *Spearhead* pocket watch and one glass bottle.



Plate 11: Contaminated soil strip to the east of the rail line, southern end



Plate 12: The new channel, west of the Brigham Road

5 FINDS

5.1 FINDS ASSESSMENT

- 5.1.1 A total of two finds from the same context were recovered during the watching brief. These were one *Spearhead* pocket watch and one glass bottle both from the subsoil (**101**) in the open field to the west of Brigham Road.
- 5.1.2 The finds were cleaned and packaged according to standard guidelines, and recorded under the supervision of F. Giecco (NPA Ltd Technical Director). The metalwork was placed in a stable environment and was monitored for corrosion.

5.2 GLASS

5.2.1 A glass bottle was recovered from the subsoil (101) in the trench located to the west of Brigham Road. This was rectangular in shape and was 0.15m centimeters in height. There were four faces on the bottle, three of which contained writing. One face read *Cecil* Wren, another with & *Co.* Ltd, and the third with Yarm. Cecil Wren bought a former paper mill in 1904 and converted it into a vinegar brewery. The company also manufactured a range of pickles and sauces. Cecil himself worked at the brewery until he was 96 years old. Upon his death the works closed. The buildings were demolished during the 1970s (http://www.wix.com/northeastengland/yarm-on-tees).

Context	Material	Quantity	Weight (kg)	Period
101	Glass	1	0.158	C20th
101	Metal	1	0.077	C20th

Table 1: Finds Table of Artefacts Recovered from the Watching Brief.

6 CONCLUSIONS

6.1 CONCLUSIONS

- 6.1.1 A total of 6 test pits were observed along with an area that was topsoil stripped for an access road, a section of the new channel and two areas that had a layer of contaminated soil removed during the course of groundworks at Ormesby Beck, Middlesbrough.
- 6.1.2 No archaeological features were observed in the 6 test pits; section of the new channel, the topsoil stripped and contaminated soil areas. Two land drains were visible along both sides of the section of the new channel that was observed and a modern brick manhole was uncovered in the second area that was stripped of contaminated soil, just to the north of the footbridge.
- 5.1.3 There were two finds, a pocket watch and small glass bottle, in the subsoil uncovered during the topsoil strip in the open field to the west of Brigham Road.

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APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description
101	Deposit	Dark grey/brown Topsoil
102	Deposit	Mid orange/brown clay Subsoil
103	Deposit	Natural
104	Deposit	Light brown silty clay Subsoil
105	Deposit	Dark grey/black silty clay Subsoil
106	Deposit	Grassy Topsoil
107	Deposit	Modern red brick building debris
108	Depoist	Contaminated Soil

Table 2: List of Contexts issued during Watching Brief

APPENDIX 2: FIGURES

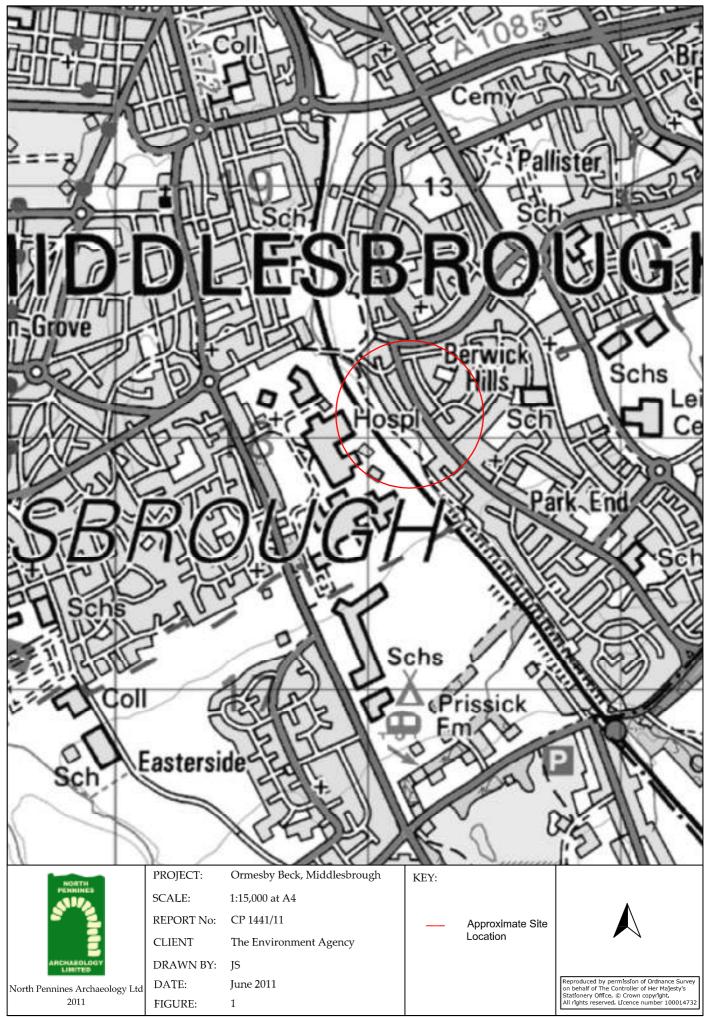


Figure 1 : Site Location

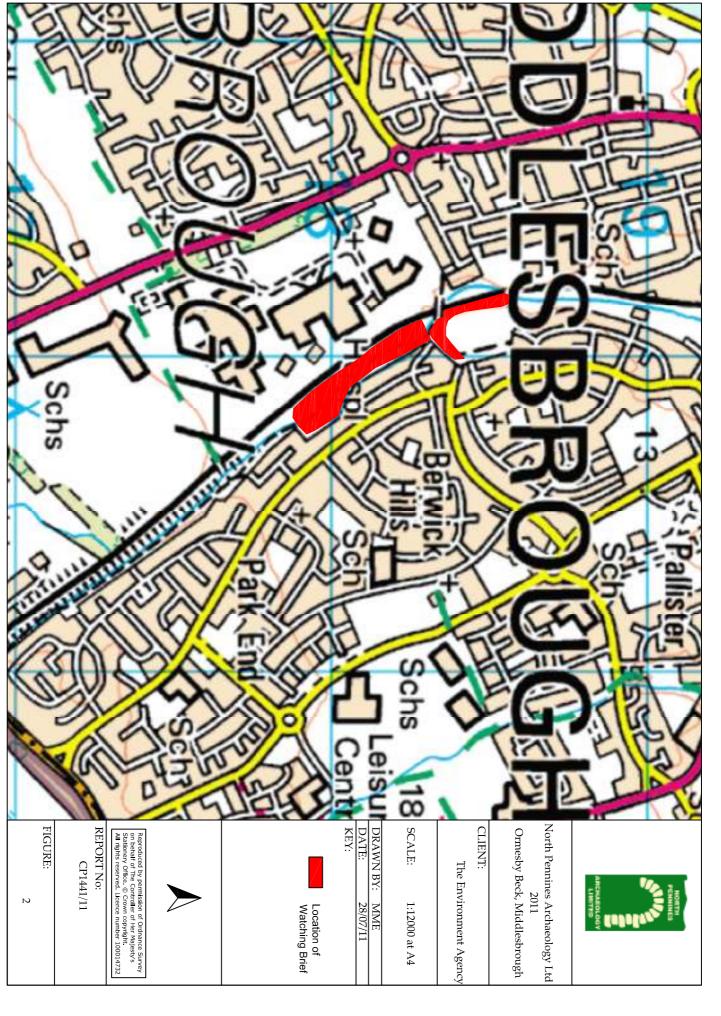


Figure 2: Location of Watching Brief

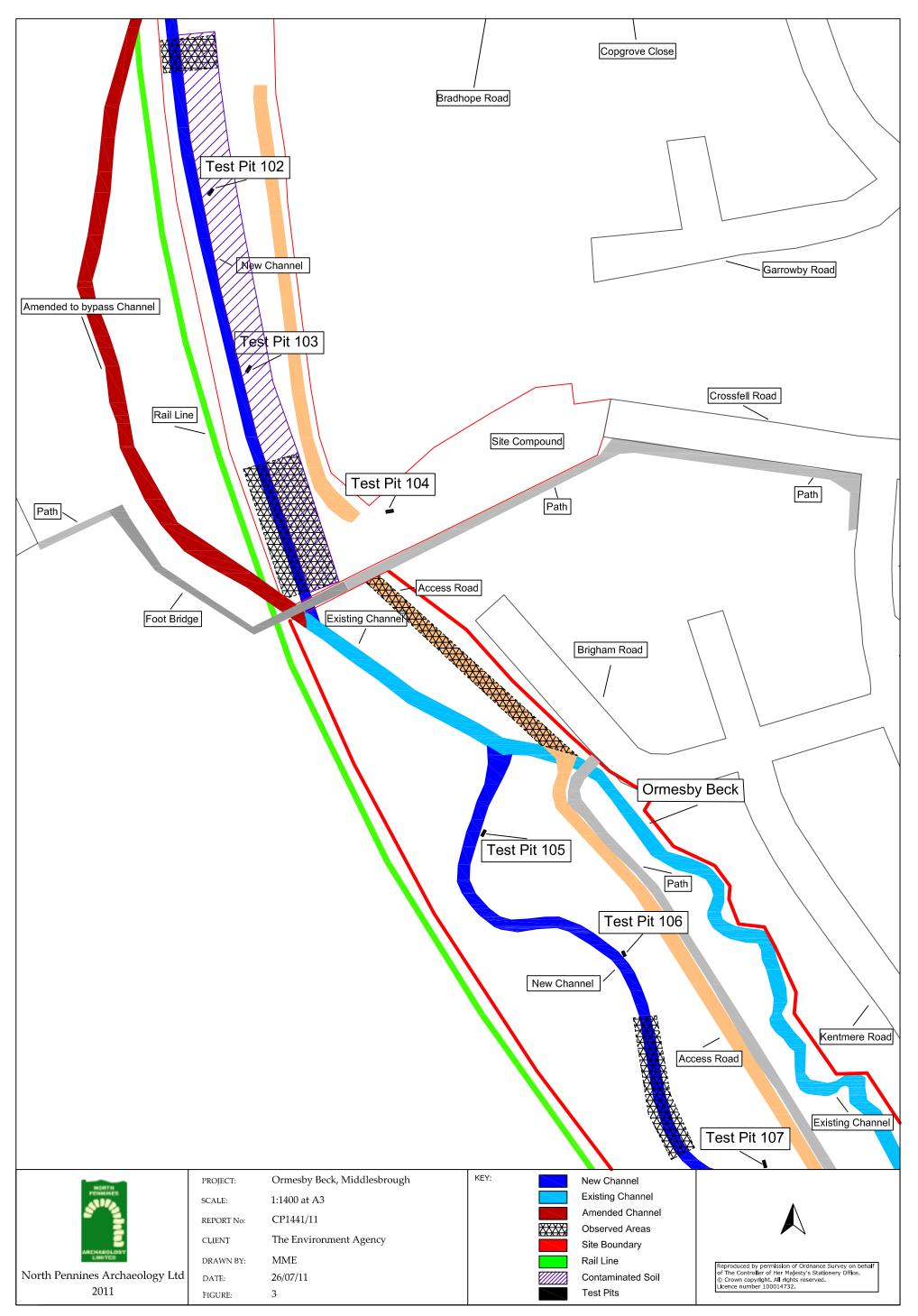


Figure 3: Location of Test Pits and Areas observed during exvacation