ARCHAEOLOGICAL WATCHING BRIEF ON THE STITHIANS TO ROSKROW SWW PIPELINE, CORNWALL

Prepared on behalf of South West Water

by

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Summary

An archaeological watching brief was maintained during groundworks associated with a replacement water main from Stithians Reservoir (SW 7195 3635), in the parish of Stithians, to Roskrow Service Reservoir in St Gluvias (SW 7575 3530), Redruth, Cornwall. The work was undertaken by Exeter Archaeology between May and June 2009 in consultation with the Cornwall County Council Historic Environment Service.

A total of four linear features were uncovered all of which were interpreted as ditches; three were undated whilst one appears to be post-medieval in date. A small quantity of residual post-medieval pottery sherds were recovered throughout the route of the pipeline.

1. INTRODUCTION

This report describes the results of the archaeological recording undertaken along the route of a replacement water main from Stithians Reservoir (SW 7195 3635), in the parish of Stithians, to Roskrow Service Reservoir in St. Gluvias (SW 7575 3530) during May and June 2009. An assessment of the route was carried out by Exeter Archaeology (EA Report No. 08.54), which identified areas of archaeological interest. A watching brief was carried out during the contractors' works in accordance with the recommendations set out in the assessment report.

1.1 **The pipeline route**

The pipeline route covered a total distance of approximately 4.2km from the treatment works at Stithians Reservoir at its western extent to Roskrow Service reservoir at its eastern extent. It passes through fields predominately laid to rough and short pasture and crosses three minor roads and five watercourses. The topography of the route is gently undulating, with occasional steep-sided valleys.

The underlying geology of the area consists of Igneous Granite with alluvium in the stream valleys.

1.2 Archaeological and Historical Background

The area has been subjected to very little archaeological work and there were no previously recorded sites or monuments directly affected by the route. However, a desk-based assessment report (dba), carried out by Exeter Archaeology (Manning 2008), identified a number of features or areas of potential archaeological sensitivity with five of these close to the pipeline, or where topsoil stripping and trenching in advance of the main works might expose archaeological features. These include the following where the numbers given are those employed in the dba by Manning (see also Fig. 2):

12. Banks (SW 72220 36020)

• A number of irregular linear banks visible on 1964 aerial photographs have been identified as possible post-medieval tin stream-workings (HER).

16. Mill race (SW 72250 35956)

• A mill race associated with Tretheague Mill shown on OS 1888 map (HER) and the Tithe Map. As the mill is of medieval origin, the leat is also potentially early. Short sections of the leat seen during the walk-over survey were stone-lined, or concrete-lined.

25. Mound (SW 73080 35630)

• A sub-circular mound, c. 13m across, is visible on vertical aerial photographs on the north facing slope to the north-west of Trewince (HER). Some surface irregularities noted in this field during the walk-over survey but no sub-circular mound was identified at this location.

27. Field system (SW 73320 35510)

• The present field system in the vicinity of Trewince is considered to be of Medieval origin (HER).

29. Round (SW 73530 35580)

• A field shown on the Tithe Map was called 'Round Field' in the Tithe Apportionment (field 1645). The curving eastern boundary of the field has since been removed but was identified from aerial photographs during the National Mapping Programme. The name suggests the site of a round, or enclosure. The site lies on a moderate north-east slope at the end of a small spur with good views on three sides (site walk-over). The removed boundary position may coincide with a break in slope from which the ground drops more steeply into a stream valley.

2. PROJECT SPECIFICATION

The project was undertaken in accordance with a specification provided by the Historic Environment Planning Advice Officer (HEPAO), Cornwall County Council. The principal requirements were:

- Production of desk based assessment,
- areas highlighted in the assessment to be stripped of topsoil to the full width of the easement under supervision during watching brief,
- reporting and archiving as appropriate.

The watching brief was commissioned by South West Water and the impact and mitigation measures outlined in the assessment produced by Manning (2008) were used as basis for the undertaking of the watching brief.

3. METHODOLOGY

The pipeline passes through forty field boundaries comprising both revetted wall-bank and large hedge-bank types. Boundaries were to be identified and recorded using photography only. Existing gateways, where possible, were utilised although in some cases the boundaries were breached to provide access for plant. Where a field boundary was breached, the width of the breach was kept to a minimum c.5m for access and works. Additionally to these, five trackways and three roadways were breached.

The working corridor along the length of the pipeline was approximately 15m wide, of which 8.00m was stripped of topsoil to a depth of 0.30m using a tracked excavator fitted with a toothless grading bucket. This allowed for the identification of any features in plan. The excavation of the pipe-trench itself was observed wherever possible to identify any features exposed in section.

Machine excavation continued until either natural subsoil or the top of archaeological deposits were reached. Where archaeological deposits/features were exposed, areas

were cleaned back by hand, and investigated and recorded.

Features were, as a minimum, to be investigated where they crossed the proposed pipe trench, with further investigations where clarification was necessary.

Standard EA recording procedures were employed. Stratigraphic information was recorded on *pro-forma* single context record sheets, a drawn record was compiled in plan and section at scales of 1:10, 1:20, 1:50 or 1:100 as appropriate and a photographic record was prepared in black and white film and digital (colour) format.

4. RESULTS

4.1 Area stripping

Relevant detailed plans and sections are included as Fig 2. The general layer sequence observed across the stripped areas consisted of undisturbed natural subsoil encountered at a depth of approximately 300mm, overlain by grey brown silty clay topsoil. All features identified during the topsoil strip were observed to cut into the natural subsoil and were overlain by topsoil. Nothing of significance was observed where the pipeline easement passed across trackways and roadways all of which were considered to be post-medieval or modern. However, some observations were made with regard to features revealed as a result of the topsoil stripping and these observations are given below.

4.2 Field between boundaries 3-4 (Fig 2; plan 1, section 4)

The initial topsoil strip exposed two merged curvilinear ditches (107 and 108) towards the centre of the field (Pl. 3). A length of approximately 9m of these ditches was exposed. Both ditches were observed to be curving from east to southwest. Ditch (107) was 2.20m wide and 0.75m deep with gently breaking sides, which showed evidence of weathering; it had a concave base. Infilling the ditch were four clayderived silt deposits (110-113). No finds were recovered. It could be observed in section (see Fig.2) that ditch (107) had cut through the fill of an earlier ditch (108) perhaps as a replacement. Measuring c.1.20m wide and 0.35m deep with gradually breaking sides, ditch (108) contained a single clayey silt fill (109) which included large fragments of granite. No finds were recovered.

Located *c*.30m to the south of ditches (107 and 108) was a further curvilinear ditch (115) (Pl. 4). It was observed for a distance of at least 8.00m curving from south to northwest. Measuring 1.60m wide and with a depth of 0.70m the western side was steeply sloped while the opposing side had gently breaking slope; the ditch had a flat base. Infilling the ditch were several deposits, the first three (116-118) being slight lenses predominately composed of clayey silt included with quartzite flecking. The remaining deposits (119, 120, 122) were thick dark brown clay silts, deposit (120) containing large granite fragments on the western side of the cut. The incidence of such large fragments may indicate the collapsed remains of a former revetted hedge wall-bank. No finds were recovered from the fills of this ditch.

4.3 Field between boundaries 33-34 (Fig 2; plan 3, section 3)

Located within the eastern side of the field was ditch (104) aligned northeastsouthwest and measuring at least c.17m long (Pl. 1 and 2). At its northeast extent it split, just before the limit of excavation, into two separate smaller linear ditches (not separately numbered). The profile of the widest area of the ditch was gently sided with a flat base. The base was occasionally irregular, due to the nature of the inclusive granite fragments within the natural subsoil through which it was cut. From southwest to northeast the ditch became gradually thinner. Infilling the ditch was a single homogenous deposit consisting of a dark black to grey clayey sand. Included within the fill was a single pottery sherd of 19th century Staffordshire cream ware.

5. CONCLUSION

Discussion with the contractors prior to the commencement of works and following the completion of the dba allowed some changes to be made to the course of the pipeline which reduced the direct impact upon areas of potential archaeology. Thus, the pipeline works did not produce any conclusive evidence for features associated with the five areas of potential archaeological interest identified by Manning. In addition, no evidence was recovered which would indicate the presence of remains of the suspected round in Round Field (site 29 of the dba).

However, the results from the watching brief have been very consistent, with all exposed features probably relating to elements of post-medieval field systems. The alignment of the ditches exposed suggests that these boundaries represent, at least in part, ditches associated with former sub-divisions of the present fields.

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 6759, pending deposition at Truro museum. A report of the recording (including a pdf version of this document) has been submitted to the on-line database OASIS (On-line AccesS to the Index of archaeological investigationS), under OASIS ID: exeterar1-62250.

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Fig. 1 Location of site.



Fig. 2 The pipeline route, showing location of archaeological features.



Pl. 1 North-east facing section of slot through ditch (104). Scale 1m.



Pl. 2 Ditch (104) looking south-west. Scale 1m.



Pl. 3 North-east facing section of slot through ditches (107/108). Scale 1m.



Pl. 4 North facing section of slot through ditch (115). Scale 1m.