

**ARCHAEOLOGICAL WATCHING BRIEF
ON THE ST ENDELLION TO ST MABYN
PIPELINE, WADEBRIDGE CORNWALL**

**Prepared on behalf of
South West Water**

by
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Exeter Archaeology

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Summary

An archaeological watching brief was maintained during groundworks associated with a replacement water main between St Endellion (SX 99635 78486) and St Mabyn (SX 03567 72519), Wadebridge, Cornwall. The work was required by North Cornwall District Council and was undertaken by Exeter Archaeology between July and October 2008.

A total of 14 features were investigated, most of which appear to be post-medieval or modern in date. A small length of a curvilinear ditch was exposed which may have been prehistoric in date although no dateable finds were recovered. Small quantities of prehistoric worked flint and residual medieval and post-medieval pottery were recovered throughout the route of the pipeline.

Where the pipeline encountered hedges (including Cornish hedges) existing gaps in the hedges were sought and/or the easement was narrowed to the minimum width. A total of 12 hedges were breached where recording was possible.

1. INTRODUCTION

This report has been commissioned for South West Water (SWW) and presents the results of an archaeological watching brief undertaken by Exeter Archaeology (EA) between July and October 2008 during the installation of a replacement water main between St Endellion (SX 99635 78486) and St Mabyn (SX 03567 72519) near Wadebridge, Cornwall. The work was required by North Cornwall District Council as advised by Cornwall County Council's Historic Environment Service (CCCHES).

1.1 The site

The pipeline (figs. 1-2) covers a distance of 7km across rolling countryside, crossing three rivers and three parish boundaries; St Endellion, St Kew and St Mabyn. A total of 37 fields were traversed, most of which were arable or pasture, except fields 23-25 which form part of St Kew golf course. For part of its course the route closely follows the course of an unclassified road.

1.2 Geology

Brown soils dominate the area, along with smaller patches of Lithomorph soils. The Brown soils produce a mix of reddish loamy deposits over slate or slate rubble, sandstone and siltstone of the Bromsgrove, Yeolland Park, and Denbigh 2 soil series. The Lithomorph soils of the Powys soil series occur in the St Endellion area and consist of well drained loamy soils over rock (Soil Survey of England and Wales 1983).

1.3 Archaeological and historical background

The area has been subjected to very little archaeological work and there are no previously recorded sites or monuments directly affected by the route. However, an earlier desk-based assessment report, carried out by Cornwall Archaeological Unit (Tapper 2001) identified 13 areas of particular archaeological sensitivity that may be affected by the development, or whose outlying features may be revealed through topsoil stripping and trenching. These are likely to be prehistoric, Iron Age/Roman or medieval in date. In addition, much of the 7km of pipeline passes through 'Anciently Enclosed Land' indicating a high probability of survival of archaeological features.

2. PROJECT BRIEF AND AIMS

A brief for the recording project had been supplied by the Cornwall County Council Historic Environment Service (Copleston, 2008). The principal aim of the project, as outlined in the brief, was to monitor all groundworks likely to disturb potential archaeological deposits and to ensure their adequate investigation and recording prior to their removal.

The main site specific aims were to:

- i) establish the presence/absence of archaeological remains
- ii) determine the extent, condition, nature, character, date and significance of any archaeological remains encountered
- iii) establish the nature of activity on the site
- iv) identify any artefacts relating to the occupation or use of the site
- v) provide further information on the archaeology of the landscape between St Mabyn and St Endellion from any archaeological remains encountered

A supplementary site specific aim was to undertake progressive field observation (particularly with reference to Cornish hedges and other features not previously identified) as and when necessary, to supplement the desk-based assessment.

3. METHODOLOGY

All investigative work was undertaken according to a Written Scheme of Investigation prepared by EA in response to the project brief and subsequently approved by CCCHES.

Visits to site were made during or immediately after topsoil stripping and included the checking of all spoil heaps for the recovery of finds. All stripping was carried out using a toothless grading bucket to create a working corridor ranging between 4.5m and 6m wide. In areas where the topsoil stripping was insufficiently deep to expose natural subsoil, return visits were made during subsequent trenching operations. The pipe trench measured approximately 0.6m wide by 1.5m deep, although this varied depending upon the local topography. The pipeline route utilised existing gateways where possible and damage during hedge breaches was mitigated by use of a narrow (0.6m wide) toothed bucket. Disturbed hedgebanks were recorded although where the easement was narrowed to 0.6m the opportunity for a drawn section was reduced and in many cases only a written record was possible.

The standard EA recording system was employed; stratigraphic information was recorded on *pro forma* context record sheets and individual trench recording forms, plans and sections for each trench were drawn at a scale of 1:10, 1:20 or 1:50 as appropriate and a detailed black and white print and colour (digital) photographic record was made. Registers were maintained for photographs, drawings and context sheets on *pro forma* sheets. Finds and samples were labelled and bagged on site and taken to EA's offices for processing and cataloguing. Where hedgebank recording took place this was entered onto dedicated hedgebank morphology recording sheets.

4. THE RESULTS

4.1 Introduction

Relevant detailed plans and sections are included as Figs 3-10. A generally uniform overlying layer sequence of topsoil, former agricultural/colluvial subsoil, onto weathered natural subsoil was encountered in all areas. In most fields the subsoil contained patches of naturally occurring rock which included degraded shale and mudstone. The depth of the overlying deposits was on average 0.3-0.8m. For detailed context descriptions see Appendix 1. Where features were encountered these are detailed below.

4.2 Fields 15-16 (Figs. 3 and 7)

The initial topsoil strip exposed a curvilinear ditch (1021) at the southern end of field 15 (Plate 2). This curved from W to SE and measured 0.61m wide and 0.29m deep. The linear feature had gradually breaking sides which showed evidence of weathering, and a concave base. No finds were recovered from the two clay-based fills (1022) and (1023).

The topsoil strip in field 16 was insufficiently deep in places to expose natural subsoil. However a small, irregular, pit (1028) was uncovered at the SE end of the field. This measured *c.* 0.6m long, 0.52m wide and 0.1m deep. The edges were shallow and gradually inclined with a flat base. Although the pit contained only a single, charcoal rich, fill (1029) there was no evidence of *in situ* burning.

During the subsequent trenching operation four further features were identified in field 16. All appeared in the opposing sections of the trench and were probably the remains of linear features. Feature 1030 was linear in form and aligned approximately NE-SW (Plate 3). This probable ditch was 2.01m wide and 0.76m deep. It had a vertical SE edge, a gradually breaking NW edge and a concave base. The ditch contained two separate clay based fills (1031 and 1032). This feature appeared to be associated with linear feature 1033. This was aligned in an identical direction and measured 2.15m wide and 0.82m deep. It had sharply breaking sides and a flat base and was infilled with three clay based fills (1034, 1035 and 1036).

Additional elements of what may well be a contemporaneous field system were exposed further to the SE - features 1037 and 1040. Both were similar in character and lay broadly parallel to each other. Feature 1037 was *c.*1.95m wide and 1.02m deep, with gradually breaking sides and a concave base. It contained two clay based fills (1038 and 1039). Feature 1040 was *c.*1.8m wide and 1.2m deep, with gradually breaking sides and a concave base. It contained a single clay based fill (1041).

None of the linear features in field 16 produced datable evidence, although the uppermost deposits in all four were almost identical to the topsoil, suggesting that they are therefore probably post-medieval rather than prehistoric in date.

4.3 Field 28 (Figs. 4 and 8)

The initial topsoil strip in field 28 revealed two peri-glacial features and a single archaeological feature.

Peri-glacial feature 1019 was NW-SE aligned and exposed at the north end of the field. It measured 0.97m wide and 0.33m deep, with gradually breaking sides and a flat base and contained a single clay based fill (1020), a mixture of the overlying topsoil and natural subsoil. A second peri-glacial linear feature (1017) was uncovered at the far S end of Field 28. This was a small narrow ditch measuring 0.7m across and 0.2m deep and was aligned in a NE-SW direction. It was fairly shallow with gently sloping edges and a flat base, and contained a single fill (1018).

Immediately to the south of 1017 a large feature (1013) was partially exposed in section. This was *c.* 2.5m wide and 0.3m deep and contained three fills (1014, 1015 and 1016). The primary fill (1014) comprised layers of shillet laid flat with some fragments showing signs of burning. The overlying deposit (1015) was an extremely thin layer (0.02m thick) of charcoal, which was sealed under a burnt orange clay deposit (1016). The NW edge of the feature was sharply breaking and well defined. However, the SE edge was quite diffuse and truncated by roots. It was difficult to interpret the function of the feature, as it was only partially exposed, but it seems likely from the fills and inclusions that it was a small post-medieval or modern hearth or fire pit.

4.4 **Field 33** (Figs. 5 and 9)

Due to the presence of crops in this field there was no initial topsoil strip. Trenching revealed a large, slightly rounded V-shaped feature (1002), measuring 1.54m wide and 0.94m deep. This was visible in both sides of the trench and was therefore interpreted as an E-W aligned linear feature. It contained a single homogenous fill (1003) and produced no datable material. The feature was located in the northern half of the field, halfway down a steeply graded contour and may represent the remains of a post-medieval field boundary.

In the southern half of field 33 a diffuse feature (1004) was noted. This measured 1.39m wide and 0.28m deep and was only visible in the western trench section. The feature contained two fills (1005 and 1006). Due to the irregular form of the feature, the lack of finds or charcoal and the nature of its fills it is considered to be a naturally formed tree throw or animal disturbance.

4.5 **Field 37** (Figs. 6 and 9)

A linear feature (1009) was located along the eastern edge of the easement, aligned parallel with the existing hedgebank. It was visible for approximately 40m, with only the eastern edge exposed by the initial topsoil strip. Two separate sections were recorded. In both cases the feature contained redeposited natural infill (1007 and 1010) which produced no datable material. The ditch is likely to be contemporary with the existing hedge.

5. THE FINDS

5.1 **Introduction**

This is a small assemblage composed of prehistoric, medieval and post-medieval finds. The finds are itemised in Appendix 3 and briefly described below.

5.2 **Lithics**

A total of 4 pieces of worked flint were found. Three waste flakes were recovered from the topsoil in fields 9, 10 and 23, while a scraper was recovered from the topsoil in field 15.

5.3 **Medieval pottery**

Three sherds, weighing 30g, and medieval in character were recovered from the topsoil in fields 9 and 15.

5.4 **Post-medieval pottery**

The topsoil and subsoil layers produced 12 sherds of pottery, weighing 90g, which are post-medieval in character. Their presence is likely to be the result of manuring and consists of a variety of slip and coarsewares; 10 sherds of English industrial white ware, 1 sherd of English stoneware, and a single sherd of green glazed pottery. They generally fall between the 16th and 19th century in date.

6. DISCUSSION

The evidence for archaeological activity along the route of the pipeline is somewhat limited, both in terms of the number and the variety of features identified. Furthermore, the interpretation and dating of the exposed features is hampered by a

general lack of pottery, lithics and other dating evidence from secure contexts. The majority of features exposed comprise ditches, and most of these, based on the limited dating evidence available, ditch profiles and alignment with existing boundaries, are of probable post-medieval date.

6.1 Possible prehistoric activity

Evidence for early activity within the route of the pipeline is limited to a single feature, ditch 1021 in field 15. In contrast to the majority of the ditches exposed, its line was irregular and more difficult to discern. It also correlates poorly with the alignments of existing banks, and the sides of the ditch were markedly more weathered and eroded. The ditch also appeared to have suffered from a greater degree of truncation than those seen elsewhere within the site. Although no dating evidence was found, the general character of the ditch is not inconsistent with a boundary feature of prehistoric date.

6.2 Post-medieval activity

The principal concentration of post-medieval features was identified in field 16 and comprises two possible trackways that bisect the route of the pipeline on a broad NE-SW alignment. The northern track, formed by ditches 1037 and 1040 is approximately 5m wide, while the southern track comprises ditches 1030 and 1033 and is up to 7m wide. There was no indication that these would have featured any form of laid surface. The tracks share the same broad NE-SW orientation of elements of the existing field system, and in particular, correspond well with the alignment of an extant hedgebank to the north west.

6.3 The Hedgebanks

A total of 28 hedgebanks were broken through along the pipeline route although the narrowness and depth of the trench made their recording difficult. All were inspected but it was possible to obtain meaningful information from only 12 and these were recorded on dedicated hedgebank morphology sheets which are lodged with the archive. The recorded sample includes 8 stone-revetted Cornish hedgebanks, 2 examples where stone revetting was observed on only one side of the bank and 2 examples where no revetting was found to be present; all 12 are itemised in Appendix 2 of this report. All hedges had prominent earthen banks made from the same material as the subsoil with mature trees or shrubs. No buried soils were present and apart from the northern hedge bounding field 35, which produced a glass bottleneck of late 17th-early 18th-century origin, no datable evidence was recovered. The banks varied in size between 1-3 metres wide and 1-2 metres high. A number of hedges had double or single flanking ditches, but the majority were simple unditched banks.

7. CONCLUSION

The results from the watching brief have been very consistent, with virtually all exposed features relating to elements of a post-medieval field system and contemporary trackways. The alignment of many of the ditches exposed suggests that these boundaries represent, at least in part, former sub-divisions of the present fields.

A single ditch segment in field 15 provides the only potential evidence for early, possibly prehistoric activity. This interpretation however is far from secure, being

based solely on marked differences in the characteristics of the ditch in comparison with all others exposed; it is not supported by any dating evidence.

The recovery of flint artefacts along the pipeline route does clearly indicate a low level of prehistoric activity within the area, although since these were all unstratified, little can be said of their wider significance. The presence of unstratified medieval and post-medieval pottery likewise tell us little other than they were probably deposited through the process of manuring.

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 6597, pending deposition at Truro museum (TRURI:2008.96). Details of the trench evaluation, including a pdf copy of this report have been submitted to the on-line archaeological database OASIS (exeterar1-60900).

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BIBLIOGRAPHY

Copleston, P. 2008 Brief for Archaeological Recording and Supplementary Assessment.

Soil Survey of England and Wales. 1983. Legend for the 1:250,000 Soil Map of England and Wales.

Stead, P. 2008 A Written Scheme of Investigation for archaeological monitoring and recording at the SWW T70 St Mabyn to St Endellion Water pipeline. Unpublished document.

Tapper, B.P. 2001 Pipeline Rehabilitation, St Endellion-De Lank, China Down – Delabole and Lower Moor sections, Cornwall. Archaeological Assessment, Cornwall Archaeological Unit.

APPENDIX 1: CONTEXT DESCRIPTIONS

Context	Plot	Depth (b.g.s)	Description	Interpretation
1000	33	0m-0.52m	Dark reddish brown silty loam with moderate amounts of sub-angular shillet fragments < 0.10m	Topsoil
1001	33	0.52m+	Grey brown with patches of yellow and orangey brown silty clay shillet	Natural subsoil
1002	33	0.52m-1.46m	E-W aligned, 1.54m wide v-shaped feature seen in opposing sections of the pipe trench.	Undated feature, possible boundary/enclosure ditch
1003	33	0.52m-1.46m	Homogenous mid orange brown silty loam with frequent shillet fragments < 0.10m and moderate amounts of roots	Primary and only fill of 1002
1004	33	0.52m-0.8m	Shallow, 1.39m wide u-shaped feature only evident in western section of pipe trench. Unknown orientation	Probable natural feature
1005	33	0.52m-0.8m	Mid orangey brown silty clay with common amounts of sub-angular shillet fragments < 0.05m	Primary and basal fill of 1004
1006	33	0.52m-0.66m	Pale yellow brown silty clay with sparse sub-angular shillet < 0.05m	Secondary fill of 1004
1007	37	0m-0.8m	Dark reddish brown clay silt with occasional small sub-angular shillet fragments < 0.03m	Topsoil
1008	37	0.8m+	Highly patchy grey shillet with pockets of yellow, orange silty clay shillet	Natural subsoil
1009	37	0.8m-0.95m	N-S aligned linear running parallel with the existing hedge line, of which only eastern edge is visible. Width unknown.	Undated feature, probably contemporary with the hedgebank
1010	37	0.8m-0.95m	Dirty greyish yellow silty clay with frequent sub-angular shillet fragments < 0.03m	Primary fill of 1009
1011	28	0m-0.44m	Mid brown clay silt with abundant shillet fragments < 0.03m	Topsoil
1012	28	0.44m+	Grey clay shillet	Natural subsoil
1013	28	0.44m-0.76m	Part of oval feature extending 0.6m from the eastern edge of the topsoil easement and 2.4m wide	Possible post-medieval hearth with flue/fire pit
1014	28	0.62m-0.76m	Mid brown clay silt with abundant large sub-angular shillet fragments > 0.10m	Primary and basal fill of 1013
1015	28	0.6m-0.62m	Thin lense of black friable clay with abundant charcoal	Secondary fill of 1013
1016	28	0.44m-0.6m	Very clean, burnt orange clay deposit	Uppermost fill of 1013
1017	28	0.44m-0.64m	SW-NE aligned, 0.74m wide u-shaped ditch	Undated ditch, possibly post-medieval in date
1018	28	0.44m-0.64m	Greyish brown clay silt with abundant shillet fragments < 0.05m	Primary and basal fill of 1017
1019	28	0.44m-0.77m	SW-NE aligned, 0.97m wide slightly stepped u-shaped profile	Undated ditch, possible post-medieval in origin
1020	28	0.44m-0.77m	Mid orangey brown clay silt with frequent concentrated sub-angular shillet fragments < 0.04m	Undated ditch, possible post-medieval in origin
1021	15	0.66m-0.95m	E-W aligned curvi-linear ditch 0.81m wide, with u-shaped profile.	Undated curvi-linear ditch
1022	15	0.75m-0.85m	Dark greyish brown silty clay with occasional small fragments of shillet	Primary and basal fill of 1021
1023	15	0.66m-0.85m	Dark grey/orangey brown clay silt with occasional large stones < 0.3m and small fragments of shillet fragments < 0.02m, and rare charcoal flecks and root activity	Secondary fill of 1021
1024	15	0m-0.6m	Dark orangey brown clay silt, with frequent amounts of shillet fragments < 0.10m	Topsoil
1025	15	0.66m+	Mix of yellow, brown and blue clay shillet	Natural subsoil
1026	16	0m-0.5m	Dark reddish brown silty clay with frequent shillet fragments < 0.05m	Topsoil
1027	16	0.5m+	Highly patchy yellow, purple, grey and blue clay shillet	Natural subsoil
1028	16	0.5m-0.6m	Small, shallow pit 0.6m long and 0.52m wide. Slightly irregular in plan and edges with flat base	Undated pit feature
1029	16	0.5m-0.6m	Greyish brown clay with frequent shillet fragments measuring < 0.10m and an abundance of charcoal	Primary, and only fill of 1028
1030	16	0.5m-1.26m	E-W aligned feature seen in opposing sections of the pipe trench. Open u-shaped profile measuring 0.98m wide	Possible ditch or elongated pit, paired with 1033
1031	16	0.76m-1.26m	Greyish brown clay with moderate amounts of shillet fragments < 0.05m	Primary and basal fill of 1030

Context	Plot	Depth (b.g.s)	Description	Interpretation
1032	16	0.5m-0.76m	Dark reddish brown silty clay with moderate charcoal flecks and frequent amounts of shillet fragments < 0.05m, very similar to the topsoil	Secondary and uppermost fill of 1030
1033	16	0.5m-1.32m	E-W aligned feature in opposing sections of the pipe trench. Open u-shaped profile measuring 1.34m wide	Possible ditch or elongated pit, paired with 1030 and of post-medieval origin
1034	16	0.82m-1.32m	Greyish brown silty clay deposit with frequent sub-angular shillet fragments < 0.05m	Primary fill of 1033
1035	16	0.74m-0.82m	Yellow clay deposit with shillet fragments < 0.05m	Secondary fill of 1033
1036	16	0.5m-0.74m	Dark reddish brown silty clay with frequent shillet fragments < 0.05m and charcoal flecks, very similar to the topsoil. Produced pieces of post-medieval brick	Uppermost fill of 1033.
1037	16	0.50m-1.52m	E-W aligned feature seen in opposing sections of the pipe trench. Open u-shaped profile measuring 1.9m wide	Possible ditch of elongated pit, paired with 1040
1038	16	1.26m-1.52m	Orangey brown silty clay with frequent shillet fragments < 0.05m	Primary and basal fill of 1037
1039	16	0.5m-1.26m	Dark reddish brown silty clay with frequent shillet fragments < 0.05m, very similar to the topsoil	Secondary and uppermost fill of 1037
1040	16	0.5m-1.7m	E-W aligned feature seen in opposing sections of the pipe trench. V-shaped profile measuring 1.8m wide	Possible ditch or elongated pit, paired with 1037
1041	16	0.5m-1.7m	Dark reddish brown silty clay with frequent shillet fragments < 0.05m and flecks of charcoal, very similar to the topsoil	Single fill of 1040
1042	12	0.4m-0.49m	N-S aligned linear, 7.28m long and 0.45m wide. Truncated at both end with shallow open u-shaped profile. Backfilled with topsoil	Undated linear, interpreted as field drain/plough scar
1043	13	0.45m-0.54m	NW-SE aligned linear extending 3.9m NW of the eastern edge of topsoil easement, 0.34m wide. Shallow open u-shaped profile. Backfilled with topsoil	Undated linear, interpreted as field drain/plough scar

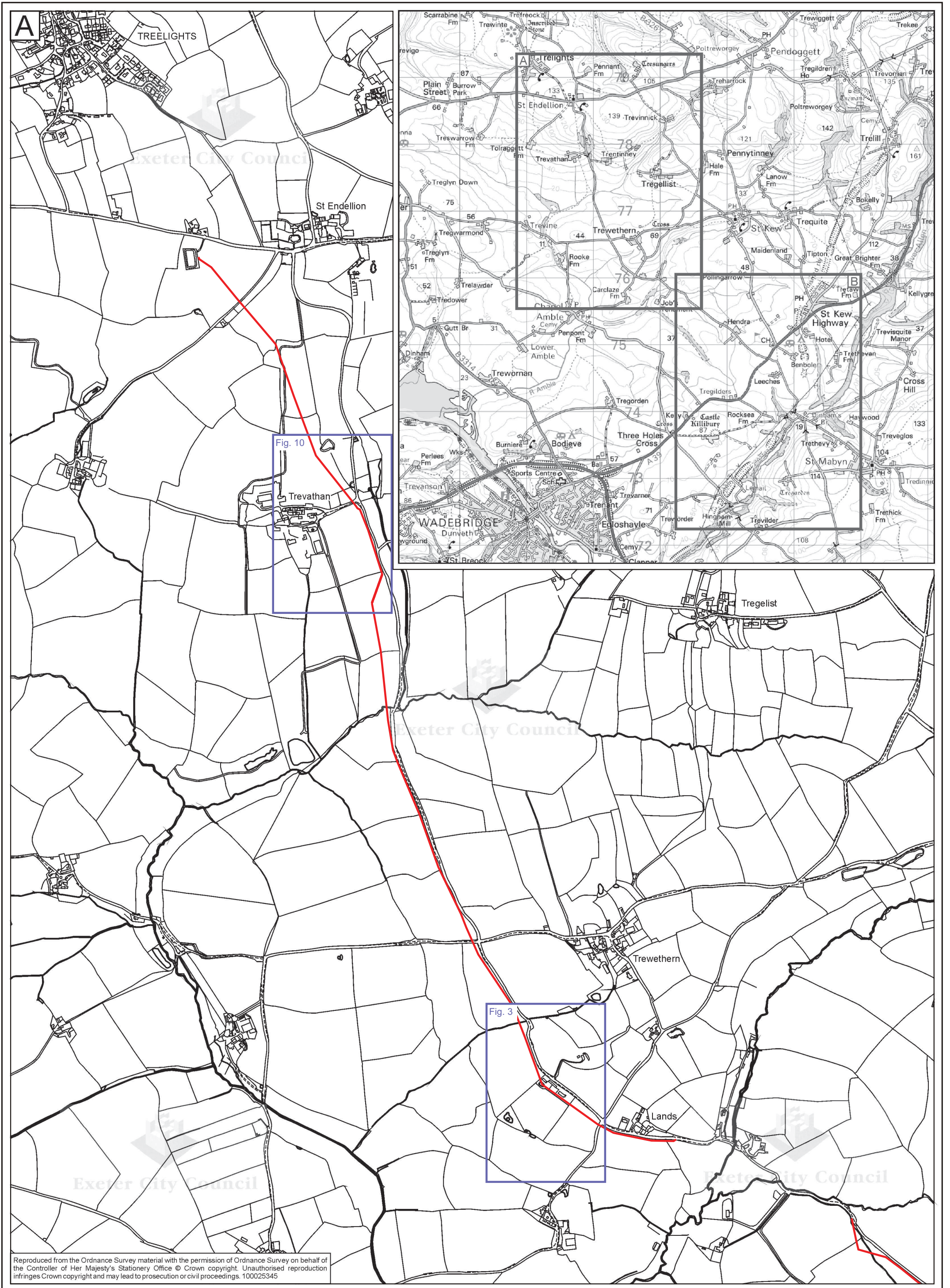
APPENDIX 2: HEDGEBANK MORPHOLOGY

(* = evidence for full Cornish Hedge i.e. stone revetment on both sides)

Hedgebank	NGR and Field No.	Bank Size (width x height)	Ditch Size (width x depth)	Description/Comments
*1	SW 995784 Fields2/3	1.7m x 1.6m		Randomly coarsed shillet revetted stone bank with earth core comprised of dark brown silty loam topsoil. The revetment stones cover the top of the bank in addition to the sides. Straight field boundary between fields 2 and 3. Thick, but immature hedge lining.
*2	SW 996783 Fields3/4	2.4m x 1.7m		Randomly coarsed, one stone thick shillet block revetted stone facing with earth core comprised of topsoil. The revetment stones cover the top of the bank in addition to the sides. Dense, but immature hedge lining. Borders fields 3 and 4.
*3	SW 998778 Field 7	2.3m x 1.42m		Large shillet blocks randomly coarsed and arranged as a facing on both sides of an earth bank. The revetment stones cover the top of the bank in addition to the sides. The bank has been constructed of a lower redeposited shillet natural 0.8m thick and an upper topsoil layer 0.6m thick. The hedge lining is a mature treeline including oak and sycamore. Borders field 7 and unclassified road leading north to St Endellion.
*4	SX 000770 Fields 10/11	1m x 1.9m	Northside ditch 1.6m x 0.7m Southside ditch 1.5m x 0.8m	Earth bank consisting of 1.4m of redeposited topsoil overlying a 0.1m layer of clay which in turn overlies 0.4m of redeposited shillet. The revetment stones cover the top of the bank in addition to the sides. Hedge lining is dense and mature. Borders fields 10 and 11. Flanked by ditches.
5	SX 000769 Fields 11/12	3.1m x 1.6m		Earth bank comprised of light greyish brown silty clay redeposited topsoil. Borders fields 11 and 12 and has a dense hedge line.
6	SX 001767 Fields 12/13	1.95m x 1.18m		Earth bank comprised of silty clay topsoil with the remains of a shillet stone facing on one side. Hedge lining is dense and mature.
*7	SX 006759 Field18	2.14m x 1.83m		Earth bank comprised of reddish brown silty clay with shillet inclusions. Shillet block facing on both sides of bank. The addition of a fence to the south side of the bank has allowed a silt deposit similar to the topsoil to have built up. Hedge lining is dense and mature. Borders field 18 and the road into Chapel Amble.
8	SX 013756 Fields 20/21	3m x 1.5m		Earth bank comprised of dark brown clay silt topsoil. Borders fields 20 and 21. Hedge lining dense and shrubby.
9	SX 029742 Fields 27/28	1.2m x 1.6m	Northside ditch 0.45m x 0.4m	Earth bank comprised of redeposited topsoil. Shillet revetting and small, in-filled shallow ditch on northern side only. Hedge lining is dense with immature elm trees. Borders fields 27 and 28.
*10	SX 033732 Fields 33/34	2m x 1.9m		Earth bank comprised of redeposited topsoil. Drystone shillet revetting to both sides of bank. Has a domed earthen cap consisting of 0.8m of mid-brown silty clay Also noted was 0.2m of buried soil, comprised of light yellowish brown clay shillet. Borders fields 33 and 34. Hedge lining dense and mature.
*11	SX 034731 Field 34	1m x 2.5m		Earth bank comprised of redeposited topsoil. Shillet block revetting on both sides of bank, which is a lot deeper on the southern side of the hedge. A thin lense 0.2m of shillet overlaid a 0.3m thick layer of buried topsoil in the southern edge where the drystone walling is at its deepest. Borders field 34 and the road into St Mabyn. Hedge lining dense and mature.
*12	SX 034730 Field 35	2m x 1.8m		Earth bank comprised of redeposited topsoil. Shillet block revetting to both sides of the bank. Borders plot 35 and road into St Mabyn. Hedge lining dense and mature.

APPENDIX 3: FINDS QUANTIFICATION

Field	Context	Material	Quantity	Weight	Date	Comments
3	Unstratified	Post-medieval pottery	9 sherds 8 vessels	38g	19C	English industrial white ware
		Post-medieval pottery	1 sherd 1 vessel	2g	PM	Green glazed North Devon coarseware
9	Unstratified	Lithic	1	20g	Pre	Utilised flint pebble
		Medieval pottery	2 sherd 2 vessels	10g	13-15C	Unglazed Cornish micaceous ware, possibly Lostwithiel ware
10	Unstratified	Lithic	1	12g	Pre	Struck flint flake
15	Unstratified	Lithic	1	12g	Pre	Flint scraper
		Medieval pottery	1	20g	13-15C	Unglazed Cornish micaceous ware, possibly Lostwithiel ware
		Post-medieval pottery	1	14g	15-19C	North Devon gravel-tempered ware
16	1036	Stone	1	1050g		Undated stone sample
23	Unstratified	Lithic	1	4g	Pre	Pebble flint waster
		Post-medieval pottery	1	36g	19C	English stoneware
		CBM	1	30g	PM	Unglazed tile
28	1014	Fired clay	2			Undated brick or tile, most likely post-medieval
	1014	Plaster/mortar	2			Undated, most likely post-medieval
34	Hedge bounding field 34 and roadside	Glass	1 sherd 1 vessel	96g	PM	Green glass bottle neck



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Fig. 1 Location of pipeline (northern part). Scale 1:10,000.

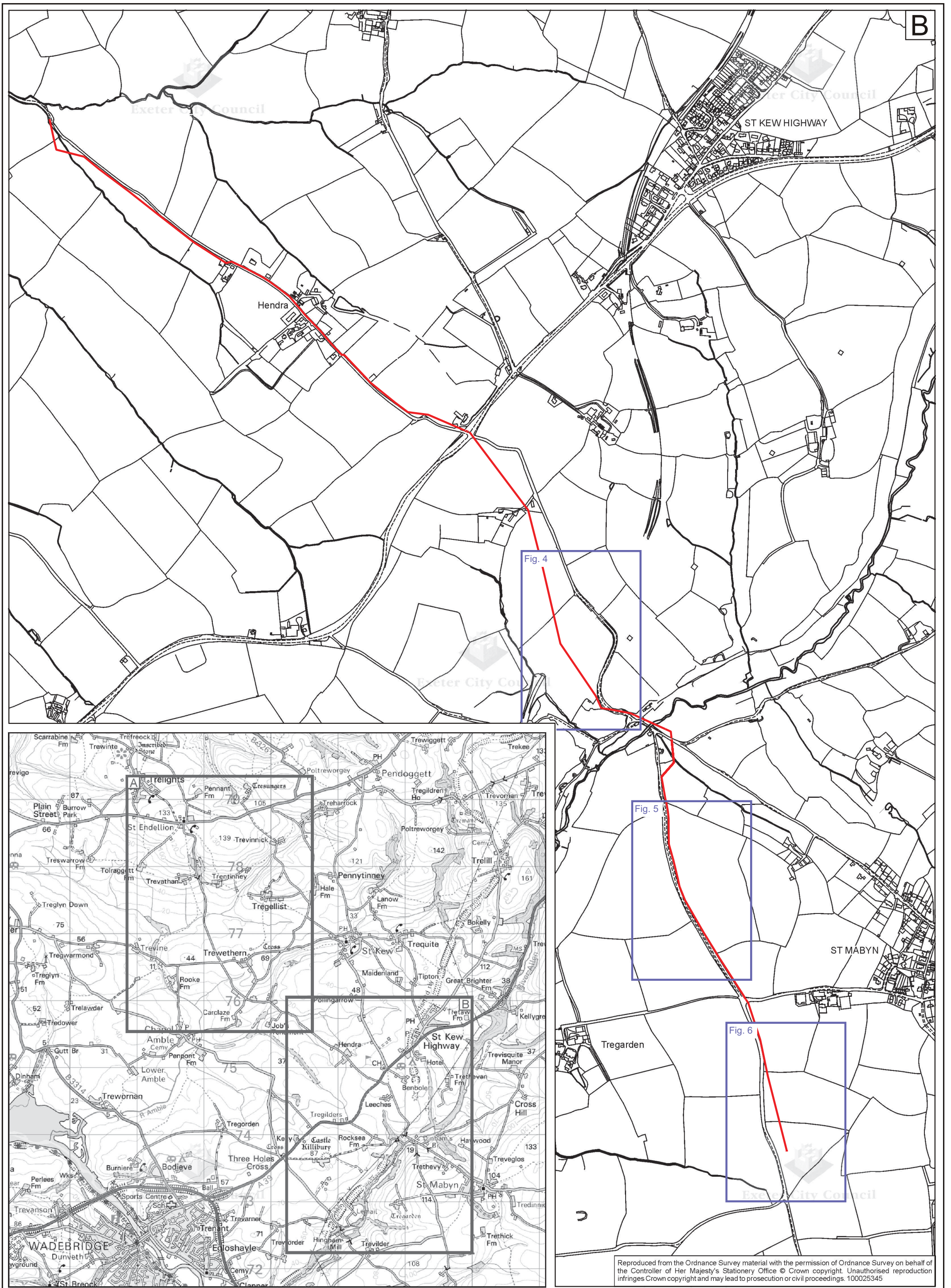


Fig. 2 Location of pipe line (southern part). Scale 1:10,000.

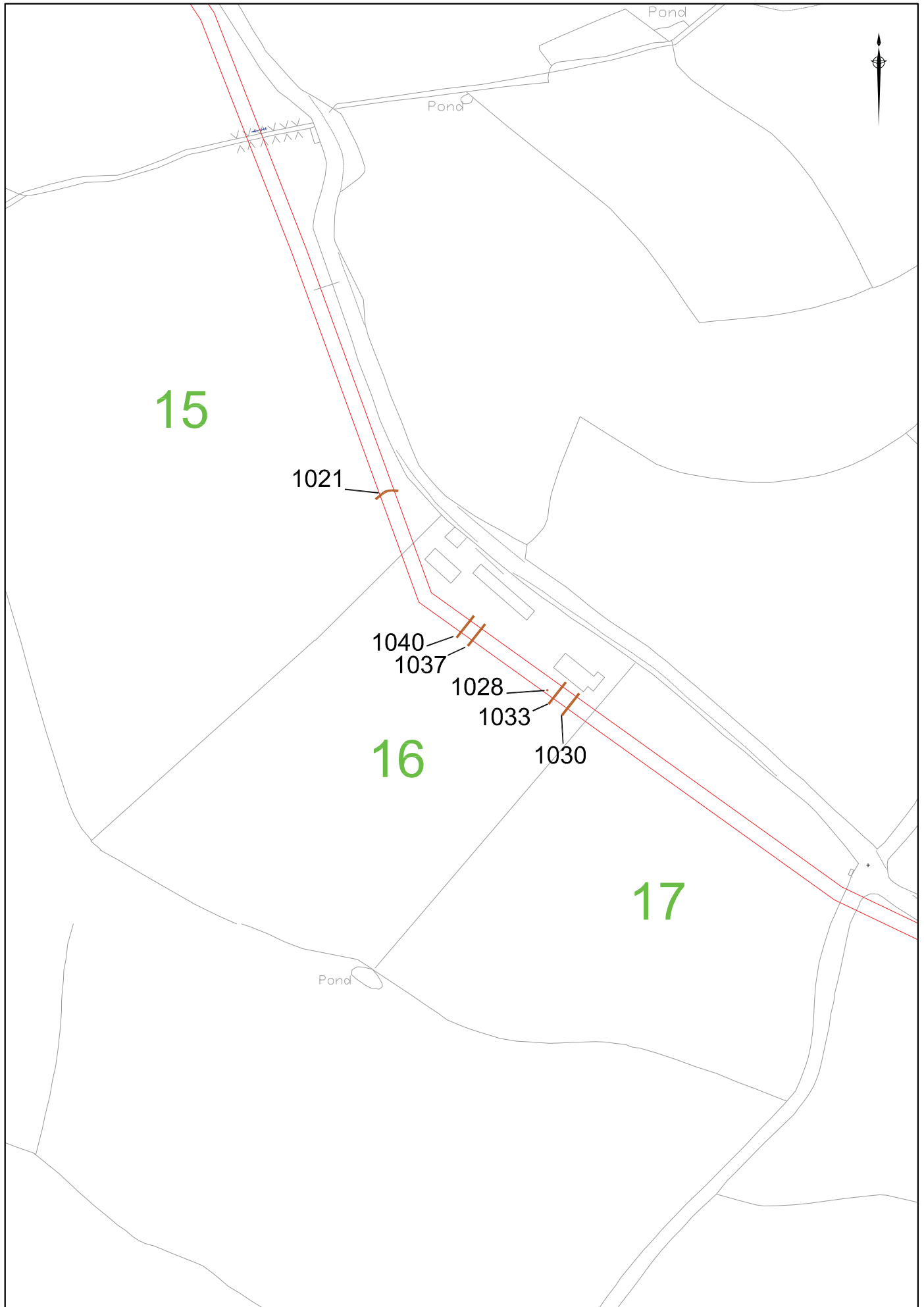


Fig. 3 Fields 15-17 showing easement (red) and location of archaeological observations (brown). All rights reserved. © Crown copyright South West Water WR 98035. Scale 1:2000.

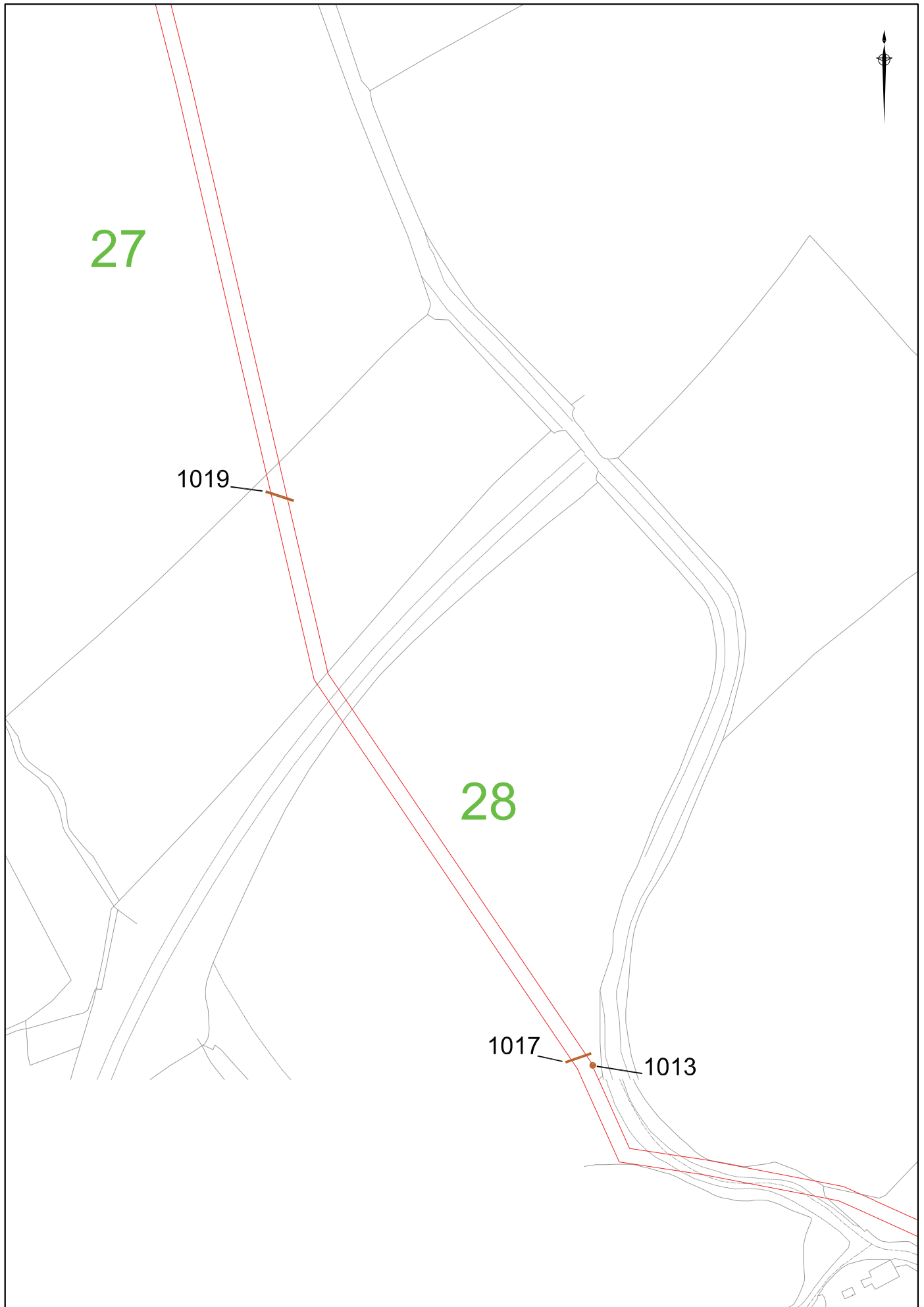


Fig. 4 Field 28 showing easement (red) and location of archaeological observations (brown). All rights reserved. © Crown copyright South West Water WR 98035. Scale 1:2000.

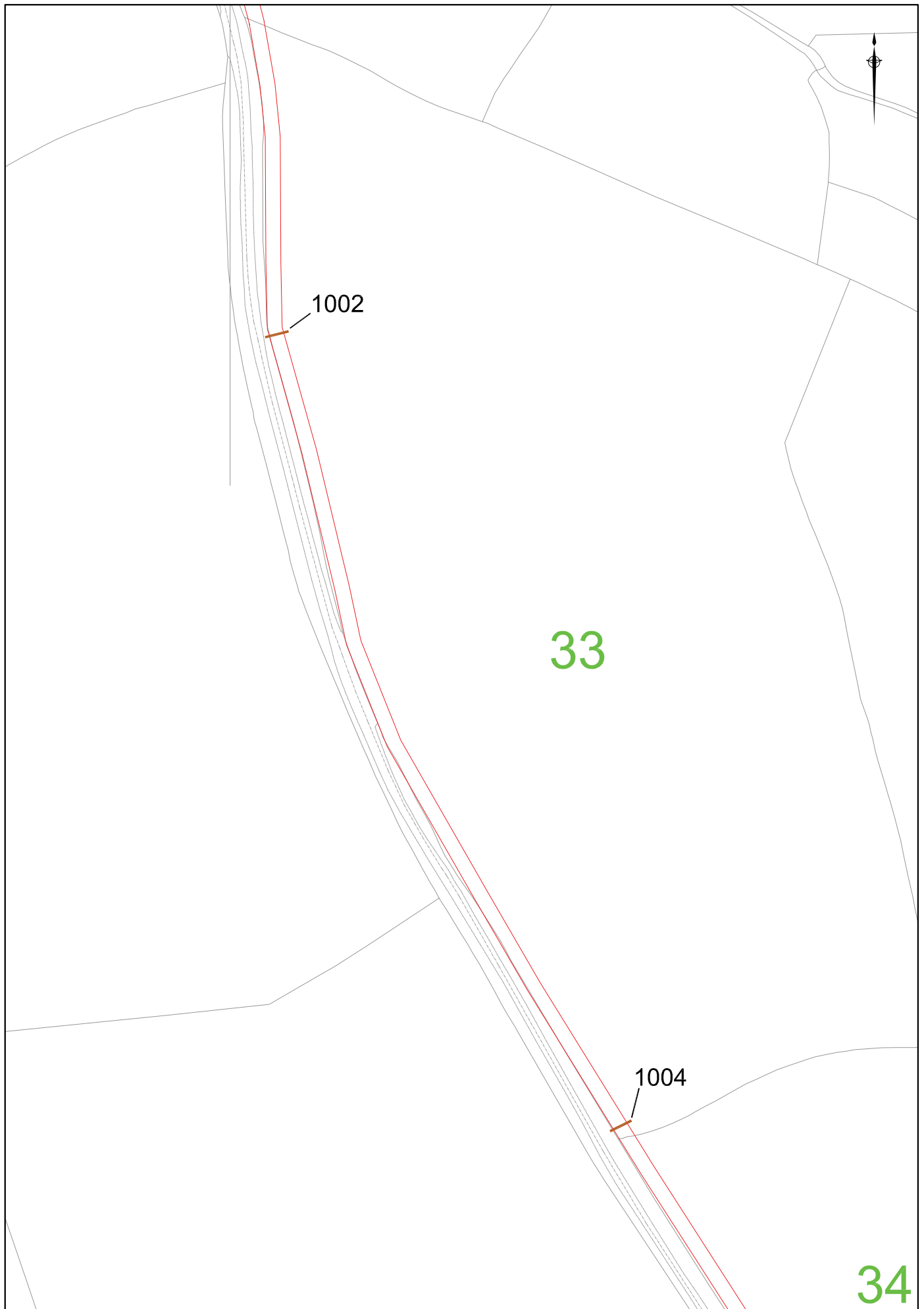


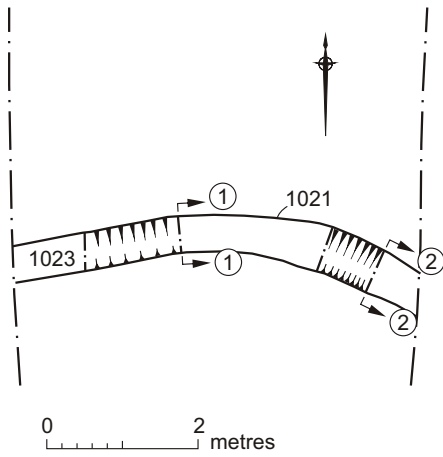
Fig. 5 Field 33 showing easement (red) and location of archaeological observations (brown). All rights reserved. © Crown copyright South West Water WR 98035. Scale 1:2000.



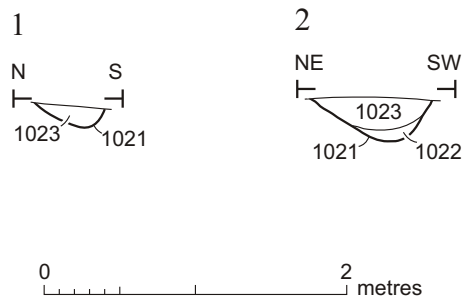
Fig. 6 Fields 35-37 showing easement (red) and location of archaeological observations (brown). All rights reserved. © Crown copyright South West Water WR 98035. Scale 1:2000.

Field 15

Plan

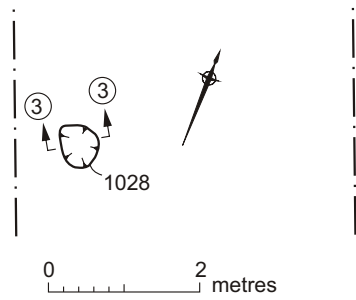


Sections

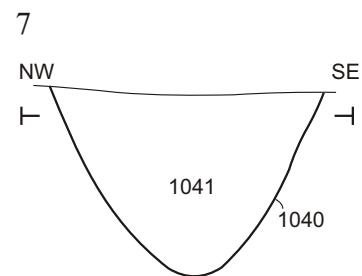
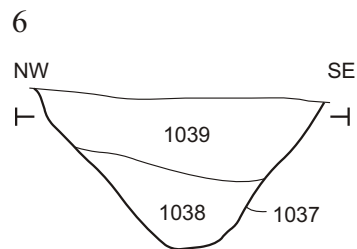
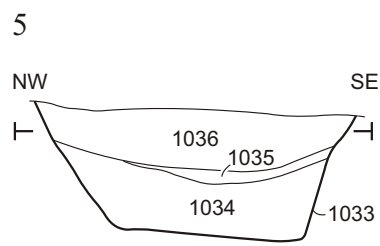
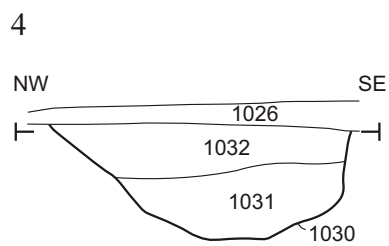
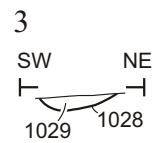


Field 16

Plan



Sections

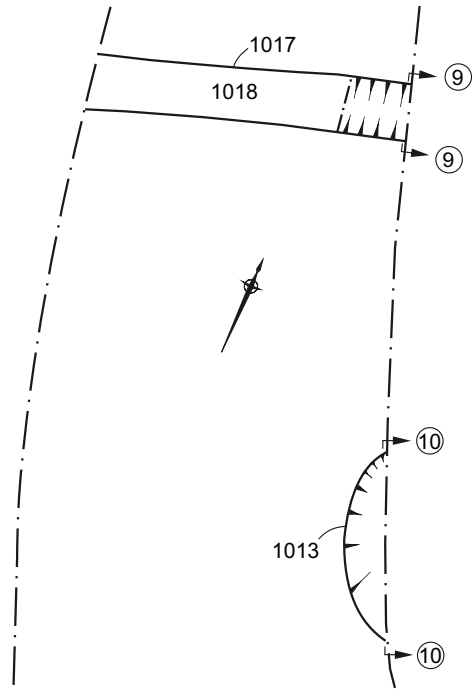
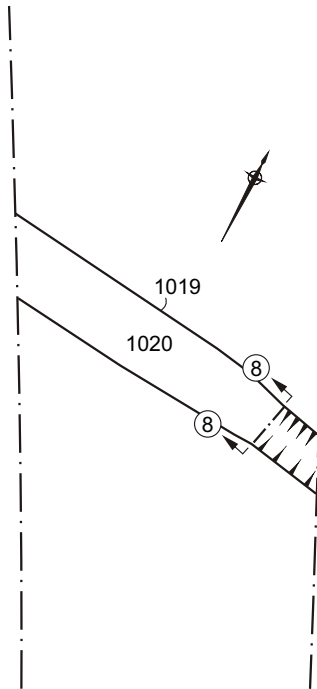


datum height arbitrary

Fig. 7 Plans and sections Fields 15 and 16

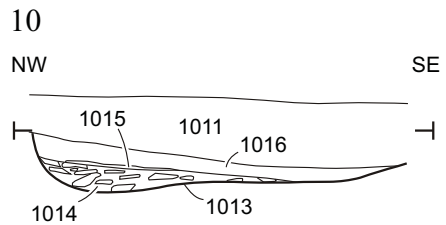
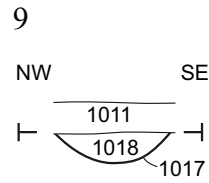
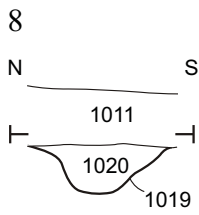
Field 28

Plans



0 2 metres

Sections



0 2 metres

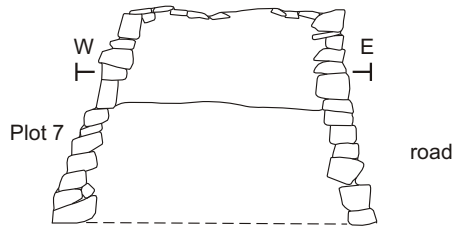
datum height arbitrary

Fig 8 Plans and sections Field 28

Field 7

Section

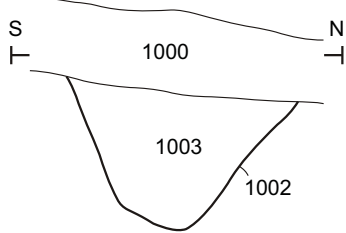
11



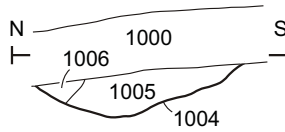
Field 33

Sections

12



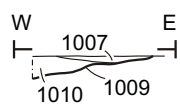
13



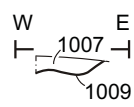
Field 37

Sections

14



15



datum height arbitrary

Fig. 9 Sections Fields 7, 33 and 37.

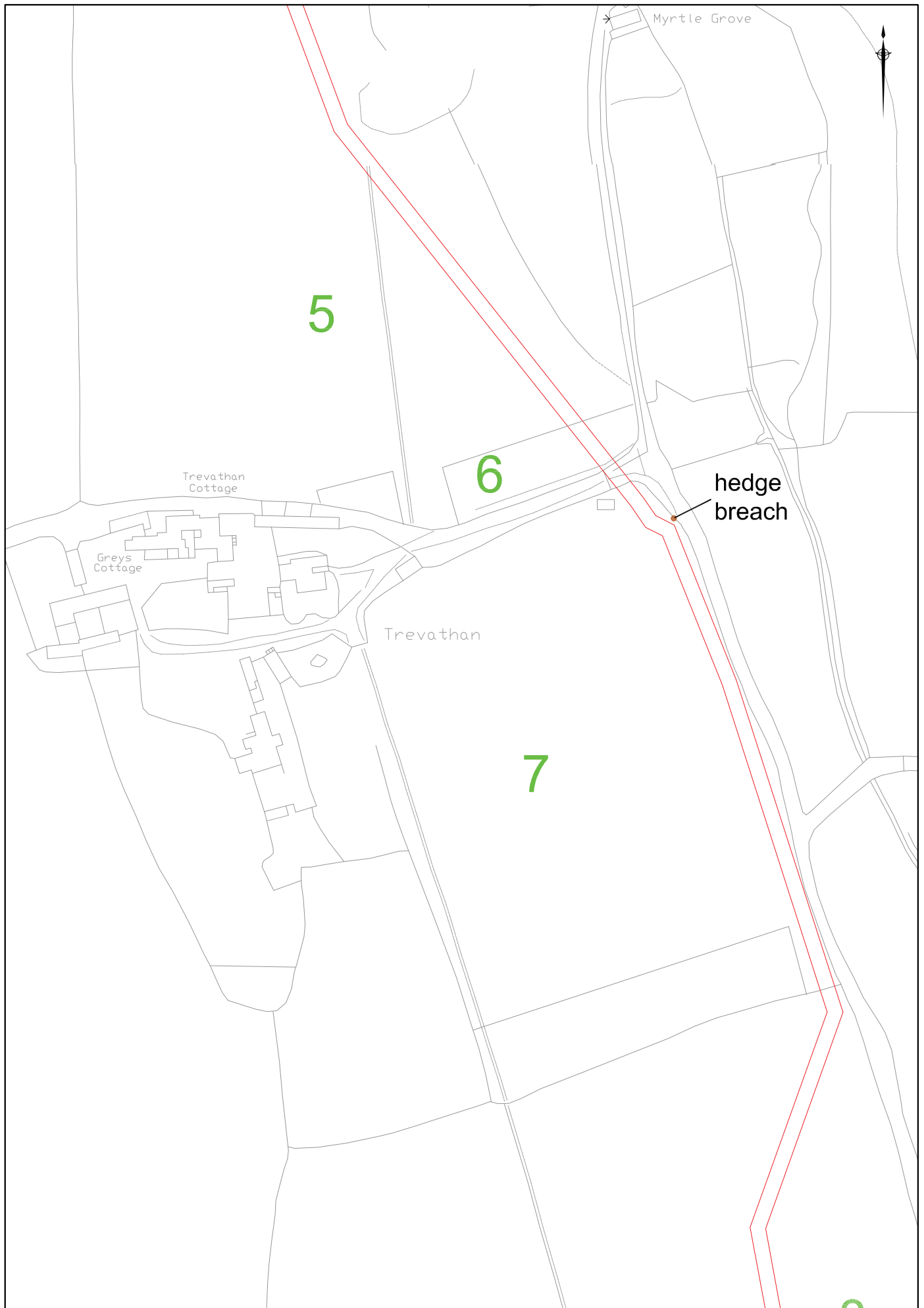


Fig. 10 Field 7 showing easement (red), and location of hedge breach. All rights reserved. © Crown copyright South West Water WR 98035. Scale 1:2000.



Pl. 1 General view of pipeline. Looking south.



Pl. 2 Section through ditch (1021). Looking south-east. 0.25m scale.



Pl. 3 Section through ditch (1030). Looking north-east. 1m scale.