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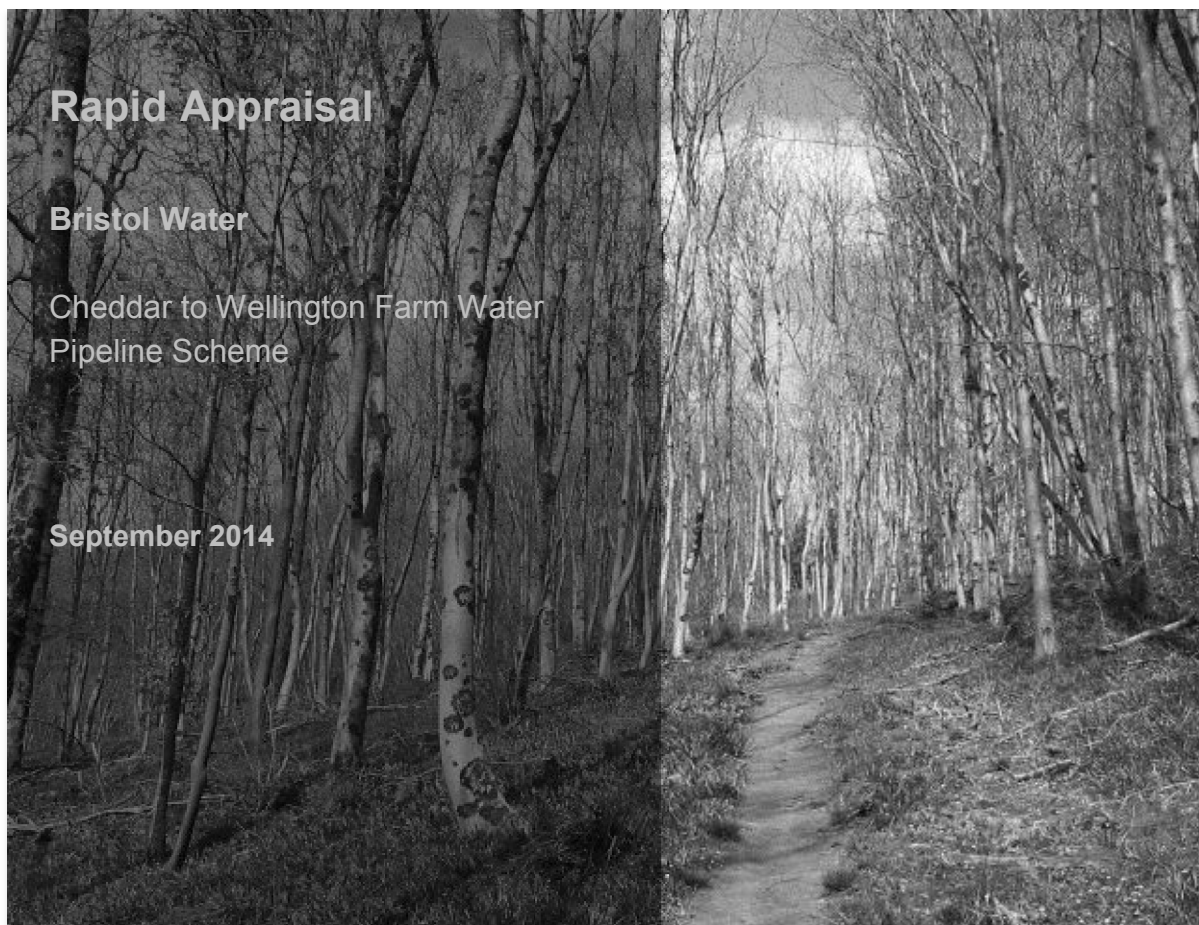
Working throughout England and Wales

Rapid Appraisal

Bristol Water

Cheddar to Wellington Farm Water
Pipeline Scheme

September 2014



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Cover: View looking NE through woodland at Long Wood immediately S of pipeline route

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1 Executive Summary

The results of this rapid appraisal of a two sections of works on a proposed water pipeline scheme from Cheddar to Wellington Farm (Priddy), located in woodland to the south-east of a prehistoric henge monument at Gorsey Bigbury and to the south of Lower Farm (Charterhouse), based upon a consultation of readily available sources of archaeological and historical information, has determined that the potential for revealing significant archaeological remains, in overall terms, may be assessed as **Moderate**:

- Evidence of prehistoric activity has been identified within a 100 metre radius of the site, towards the north-west, in the form of an extensive flint scatter of Mesolithic and Neolithic date. However, the location of Gorsey Bigbury henge monument to the north-west, Long Wood barrow to the south-west and a second flint scatter to the south-east of the site raises the possibility that further evidence of prehistoric features and finds might be identified in this area.
- The southern section of the pipeline route is located in close proximity to an area where evidence of post-medieval surface lead and calamine mining has been identified, while evidence of water management features associated with lead mining activity has also been identified about 40-50m to the east of the pipeline easement. The remains of two water grist mills and associated water management features of post-medieval date are located approximately 60m N of the northern section of the pipeline route.

Whilst the scope of the proposed work is limited, there is at least **Moderate** potential for encountering evidence of prehistoric occupation (in the form of flint scatters) and similarly **Moderate** potential for encountering evidence of deposits and features associated with post-medieval lead and calamine extraction in the vicinity of the pipeline easement.

Summary conclusion: In view of the potential for encountering evidence of prehistoric activity and post-medieval industrial and water management features in close proximity to the pipeline, BA proposes that a programme of archaeological observation should be maintained during the proposed pipeline works only in these two specific areas.

2 Introduction

Border Archaeology (BA) was instructed by Bristol Water to carry out a rapid appraisal in respect of two sections of pipeline to be exposed for the renewal of a water mains pipeline running from Cheddar to Wellington Farm near Priddy (Somerset).

The two sections of pipeline route are located to the south-east of Gorsey Bigbury prehistoric henge monument and to the south of Lower Farm (Charterhouse). These two areas are located within a wooded area known as Long Wood which contains a number of carboniferous limestone caves or swallets, such as 'Rhino Rift' (see Fig. 1). The grid reference for the sections of pipeline route are NGR ST 48581 55682 – ST 48559 55660 (the northern section) and ST 48540 55534 – ST 48563 55513 (the southern section) (*Fig. 1*). The northern sections extends for 26 metres and the southern section extends for 32 metres, giving a total area of investigation of 58 metres.

A copy of this Appraisal will be supplied to Bristol Water and remitted to Somerset Council for their approval.

3 Site Description

The predominant soil type in the immediate vicinity of the study area consists of typical paleo-argillic brown earths of the NORDRACH (581a) series. This consists of well drained fine silty over clayey soils (stoneless or with chert stones), often deep and with shallow silty soils over limestone in places. This are located on mainly flat or gently sloping ground, with bare rock in places on brows or steeper valley sides. The underlying geology consists of Aeolian silty drift over Carboniferous limestone (SSEW, 1983).

To the north and east of the study area, the chief soil type consists of brown rankers of the Crwbin (313c) series. This consists of very shallow and shallow well drained loamy soils over limestone, often on steep slopes, where limestone pavement and other rock exposures are common. The underlying geology consists of Carboniferous limestone (SSEW, 1983).

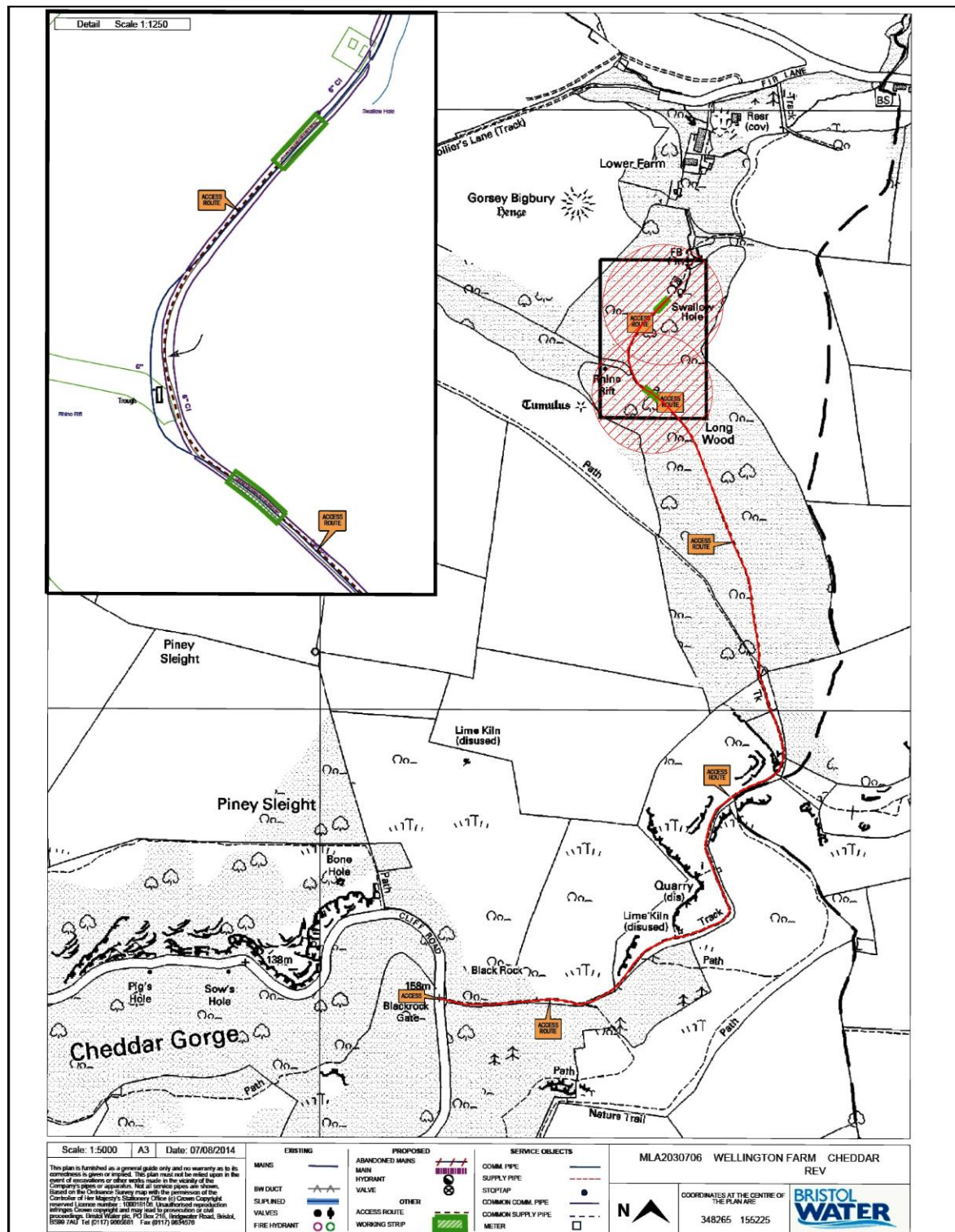


Fig. 1: Scheme location plan. The plan shows the pipeline route (red) and the location of the areas of proposed works (green). The red circles indicate a radius of 100m around the areas of investigation.

4 Methodology

4.1 Consultation of Archaeological Records

4.1.1 Research Aims

This rapid appraisal seeks to identify any known or potential archaeological resource within the study area and to establish its character, extent, quality and importance, within a local, regional and national context.

4.1.2 Research Methods

The research carried out for this rapid appraisal consisted of the following elements:

4.1.3 Evaluation and Study of Archaeological Databases

The Somerset HER and the National Monuments Record were both consulted and lists obtained of all known archaeological sites, listed buildings and scheduled ancient monuments in the study area (the search corridor was defined as 100m on either side of the pipeline route).

4.1.4 Evaluation and Study of Primary Sources

Primary documentary sources relating to the study area (including deeds, estate rentals and sale catalogues) were consulted

4.1.5 Evaluation and Study of Secondary Sources

All readily available published and unpublished works relating to sites and structures of archaeological and historical interest within the study area were examined.

4.1.6 Evaluation and Study of Cartographic Evidence

Historic maps dating back to the early 19th century were consulted at Somerset Records Office, including the 1811 Ordnance Survey surveyor's drawing and copies of the Ordnance Survey 1st edition 6 inch and 1st revision six inch maps, as well as later OS 1:2500 and 1:10000 scale maps (c.1960 to present). Collections of aerial photographs relating to the study area, including vertical and oblique images dating back to 1946, were consulted using the Somerset HER website.

5 Assessment of Archaeological Records

• Prehistoric

Within 100 metres of the area of investigation there is evidence of prehistoric activity in the form of a flint scatter 60 metres to the north of the site (PRN 11424). During the excavation of the nearby site of Gorsey Bigbury (SM 109), a number of Mesolithic and Neolithic flints were found in a general scatter in the fields surrounding the monument. Furthermore, it has been suggested that one of the finds is an Upper Palaeolithic burin (Burrow *et al.* 1984).

There are some secondary sites of prehistoric activity in the vicinity which, despite being outside of a 100 metre radius of the area of investigation, may impact upon the archaeological potential of the location; the most notable of these being the prehistoric site of Gorsey Bigbury (SM 109 & PRN 11439) and the associated barrow at Long Wood (PRN 11440). Gorsey Bigbury is 191 metres to the north of the northern area of investigation in Long Wood and is recorded as a 'henge' monument with a single causeway to the north, a circular rock-cut ditch about 22 metres in diameter, an external rampart of earth and stones and a flat central area without any form of upright (ApSimon 1951, 186; ApSimon *et al.* 1976, 155). The monument was originally investigated between 1931 and 1934 (Jones 1938) and limited excavations were again carried out on the site in 1965 (Tratman 1966).

These excavations uncovered disturbed Bell Beaker burials and occupation deposits, including a large variety of pot sherds (representing at least 100+ beakers and a few sherds of Neolithic "B" ware), animal bones, 4,000 flint artefacts and charcoal (ApSimon *et al.* 1976, 155; Russell & Williams 1999), and these beaker burial and occupation deposits have since been given a radio-carbon date centring on 1900-1700 BC (ApSimon *et al.* 1976).

A recent reinterpretation of the excavated evidence has suggested four distinct phases of activity at Gorsey Bigbury: firstly the construction of the henge itself; secondly the construction of a stone cist in the ditch terminal containing burials, a barbed and tanged arrowhead, other flintwork and sherds of beaker pottery; thirdly the removal of most of the bones from the cist and their placement in the ditch terminals; and finally the deposition of large numbers of beaker sherds, flint and animal bones in the ditch (Lewis 2011, 101-2).

Associated with Gorsey Bigbury, and listed as part of the same scheduled monument (SM 109), are the earthworks of a probable barrow located about 100m metres to the south-west of the area of investigation on the edge of Long Wood (PRN 11440). The barrow is sub-oval in form and measures up to 21m in length by up to 18m in width and a 1999 geophysical survey (PRN 16501) showed that the oval mound is in fact two confluent round barrows (Lewis 1999).

There is also a second flint scatter (PRN 11445) recorded about 200m to the south of the area of investigation, which comprised a large mixed scatter including a few Mesolithic elements (consisting of blades, blade cores, reject flakes, one microlith and one microburin) and a majority of Neolithic implements (including cores, scrapers and two leaf-shaped arrowheads). A Beaker industry is also represented by the presence of a few scrapers, four scale flaked knives and two unpolished discoidal tools, probably knives (Everton & Day 1972).

• Roman

No archaeological evidence for Roman activity has been recorded in the vicinity of the study area.

- **Medieval**

No archaeological evidence for Medieval activity has been identified in the vicinity of the study area.

- **Post-Medieval**

Located approximately 60m to the N of the northern section of the pipeline are the sites of two post-Medieval water grist mills mentioned in deeds dated to 1699, known as Chedderford Higher and Lower Mill (Burgess 1989). There are extant masonry remains presumed to be Chedderford Higher Mill in Long Wood built into the bank of the stream (PRN 12756), and the remains of a stone-lined leat presumably used to power the two mills. A stone slab footbridge survives just to the south.

To the south of the site there are also extensive surface workings within Long Wood relating to nineteenth century lead and calamine mining. These include the mine workings themselves (PRN 10411) and the associated leat constructed by the Mendip Hills Mining Company in order to provide water to the mine works (PRN 28793). The leat was cut through the rock and the line is visible on the RAF aerial photographs of 1946, although it is now less clear (Stanton & Clarke 1984).

A ruined building and quarry of probable post-medieval date (PRN 11468) are recorded at NGR ST 48630 55790, about 100m NE of the study area, consisting of extant walls within a small quarry. There is a short length of curved wall attached to the quarry face, which might possibly represent a kiln and the site as a whole may be connected either with the mining works to the south or the mills to the west.

Monument No.	Description	NGR	Date
10411	Surface lead and calamine workings	ST 48700 55500	Post-Medieval
11424	Flint scatter	ST 48400 55800	Palaeolithic-Neolithic
11439	Gorsey Bigbury henge	ST 48420 55820	Neolithic-Bronze Age
11440	Long Wood Barrow	ST 48430 55490	Neolithic-Bronze Age
11445	Flint scatter	ST 48800 55700	Mesolithic-Bronze Age
11468	Undated ruined building and quarry	ST 48630 55790	Post-Medieval?
12756	Chedderford Higher Mill	ST 48610 55780	Post-Medieval
16501	Geophysical Survey (1999) – Long Wood Barrow	ST 48430 55510	Modern Event
28793	Nineteenth-century lead mine water supply	ST 49510 55170	Post-Medieval

Table 1: Gazetteer of Archaeological Events and Monuments in the immediate vicinity of the route

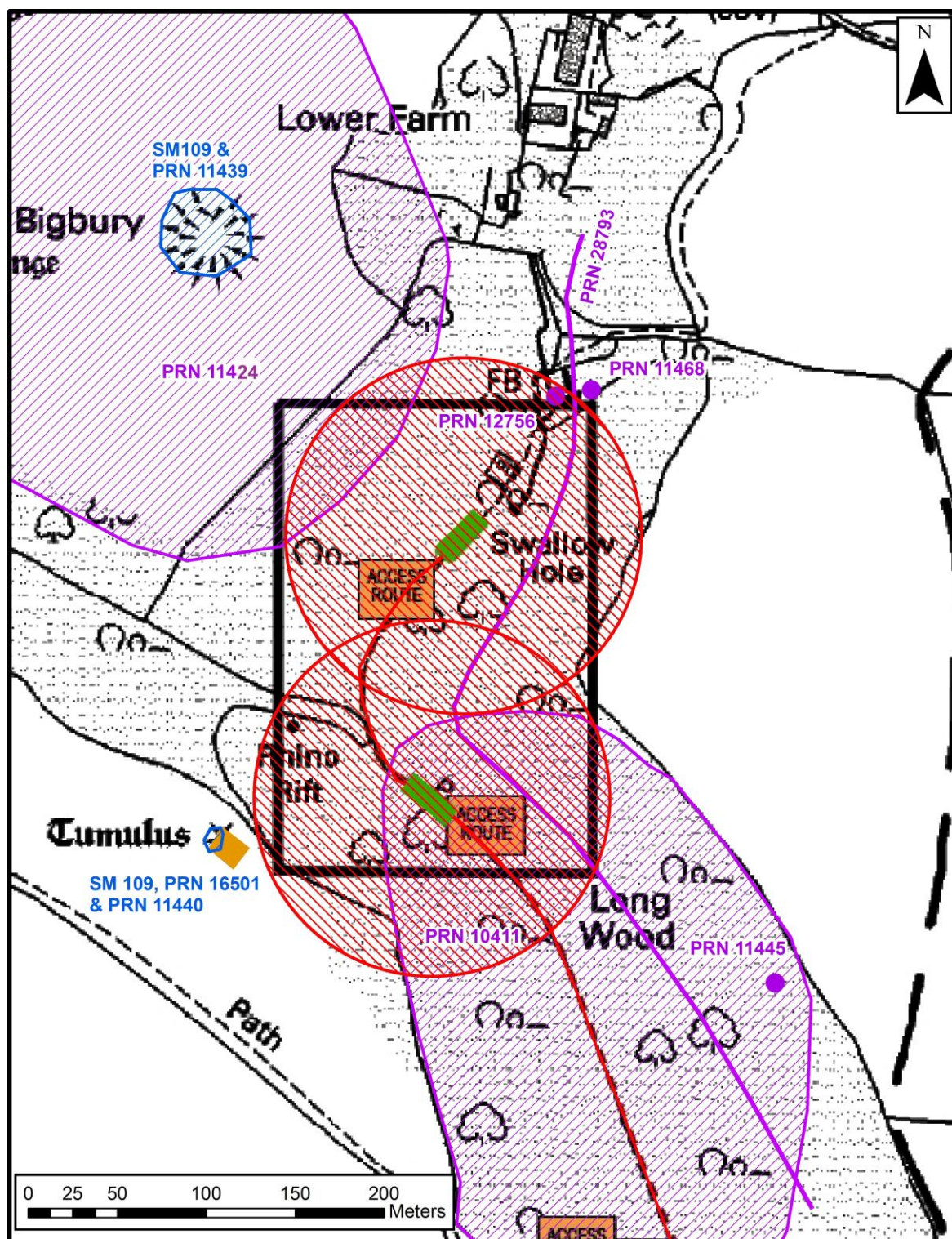


Fig. 2: Plan showing archaeological events and monuments recorded in the Somerset Historic Environment Record in the vicinity of the route. The plan shows the pipeline route (red), the location of the areas of investigation (green) and the location of sites listed in the Somerset HER in the vicinity of the study area. The red circles indicate a search radius of 100m around the two sections of pipeline.

6 Map Regression and Aerial Photography

The Ordnance Survey surveyor's drawing of Mendip district, dated 1811 (**Fig. 3**), represents an early topographically reliable depiction the landscape of this part of Somerset; although it only includes rough depictions of field boundaries. The heavy hachuring present denotes the rugged nature of the terrain but, apart Lower Farm at the roads in its vicinity, there is very little of note on this map. Certainly there is no evidence of the mills or mine workings listed in the Somerset HER.

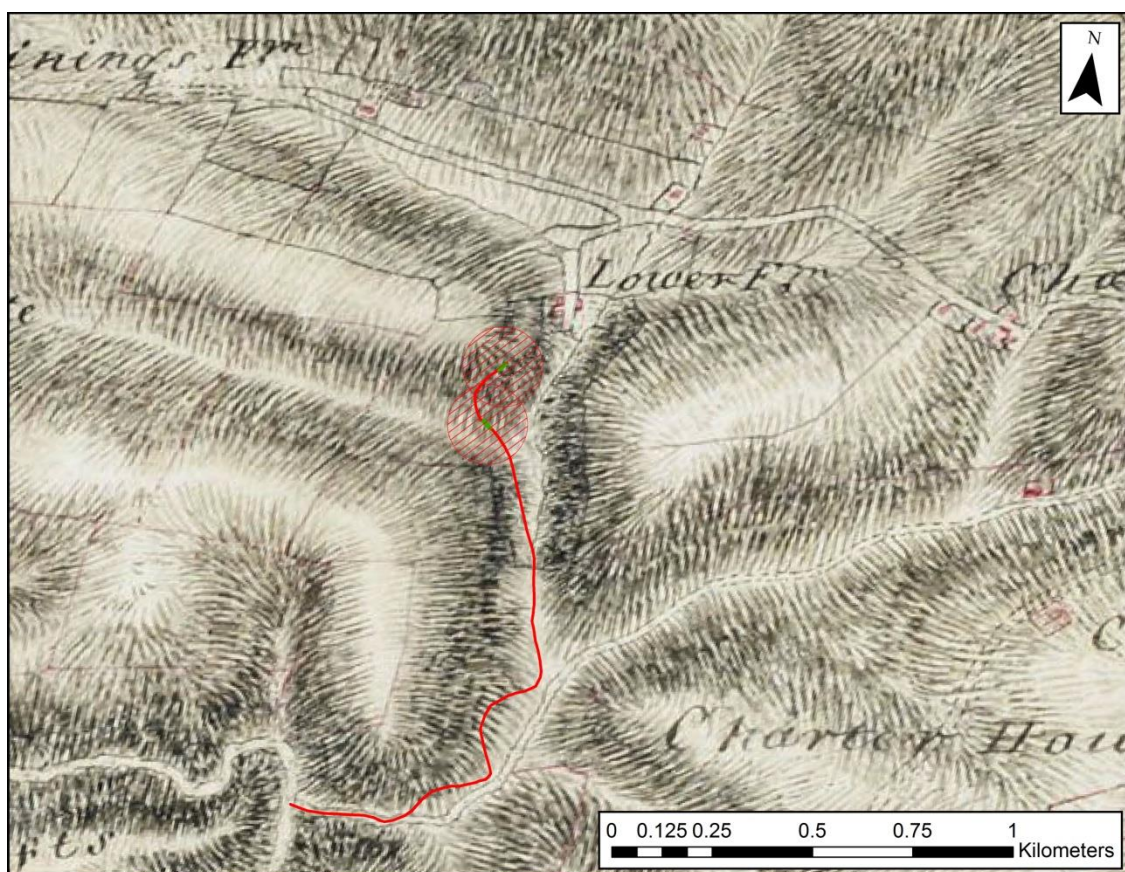


Fig. 3: Extract from Ordnance Survey surveyor's map of Mendip district dated 1811 showing the study area denoted in red

(Reproduced by courtesy of Somerset Record Office)

The Ordnance Survey 1st edition 6 inch map dated 1886 (**Fig. 4**) shows the wooded nature of the landscape surrounding the area of investigation, and provides a detailed picture of the surrounding field systems. However, as with the 1811 surveyor's map, there is very little evidence for any activity in the surrounding area, and there is no evidence for either the mill or the mine workings recorded in the Somerset HER. The Ordnance Survey 2nd edition 6 inch map of dated 1904 (**Fig. 5**) provides a great deal of continuity, differing very little from the earlier 1st edition 6 inch map. Later, more modern, Ordnance Survey mapping of the study area indicates that the landscape covered by the investigation area has hardly changed in form since it was first mapped in the nineteenth century.

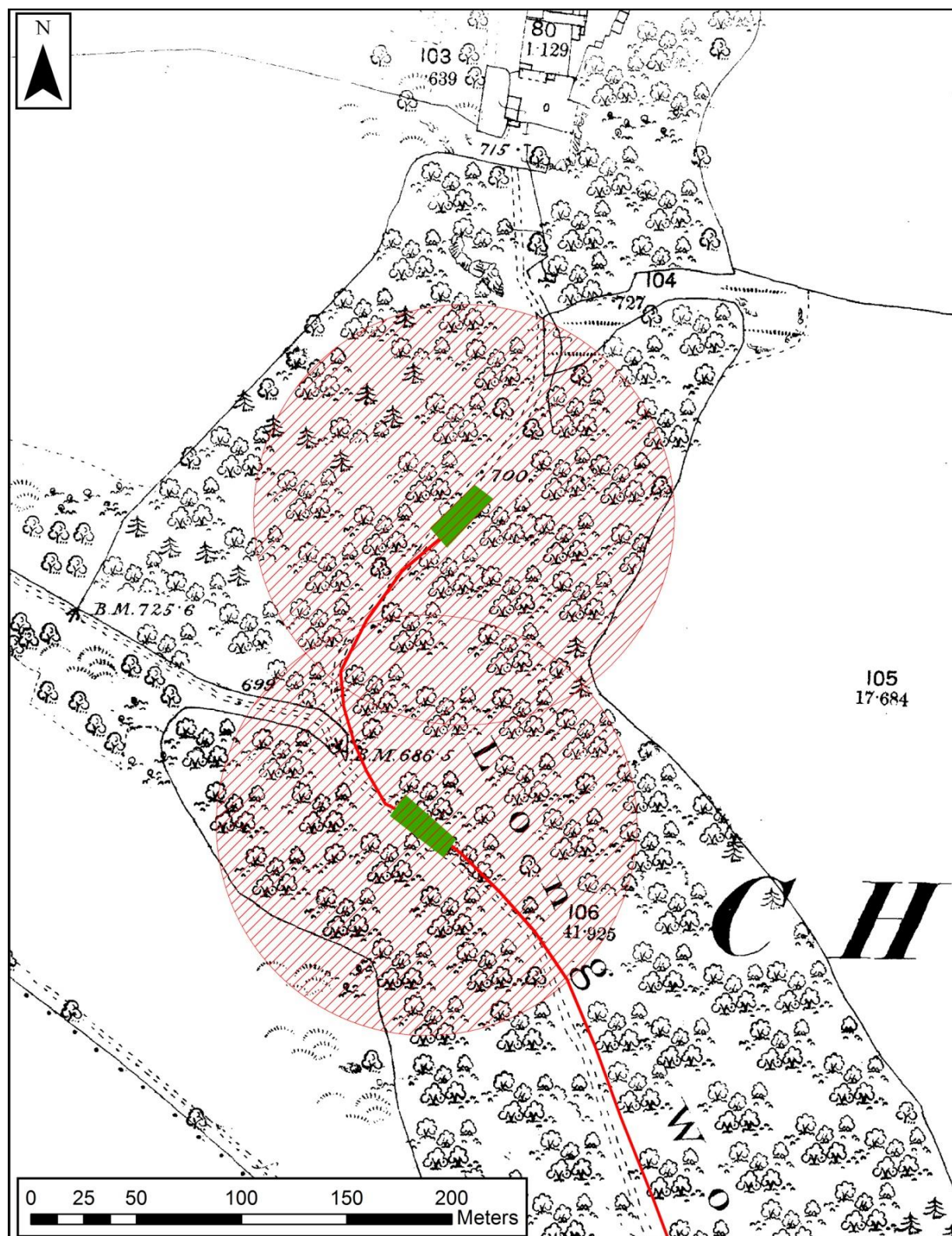


Fig. 4: Extract from the OS 1st edition 6 inch map of 1886
(Reproduced by courtesy of Somerset Record Office).

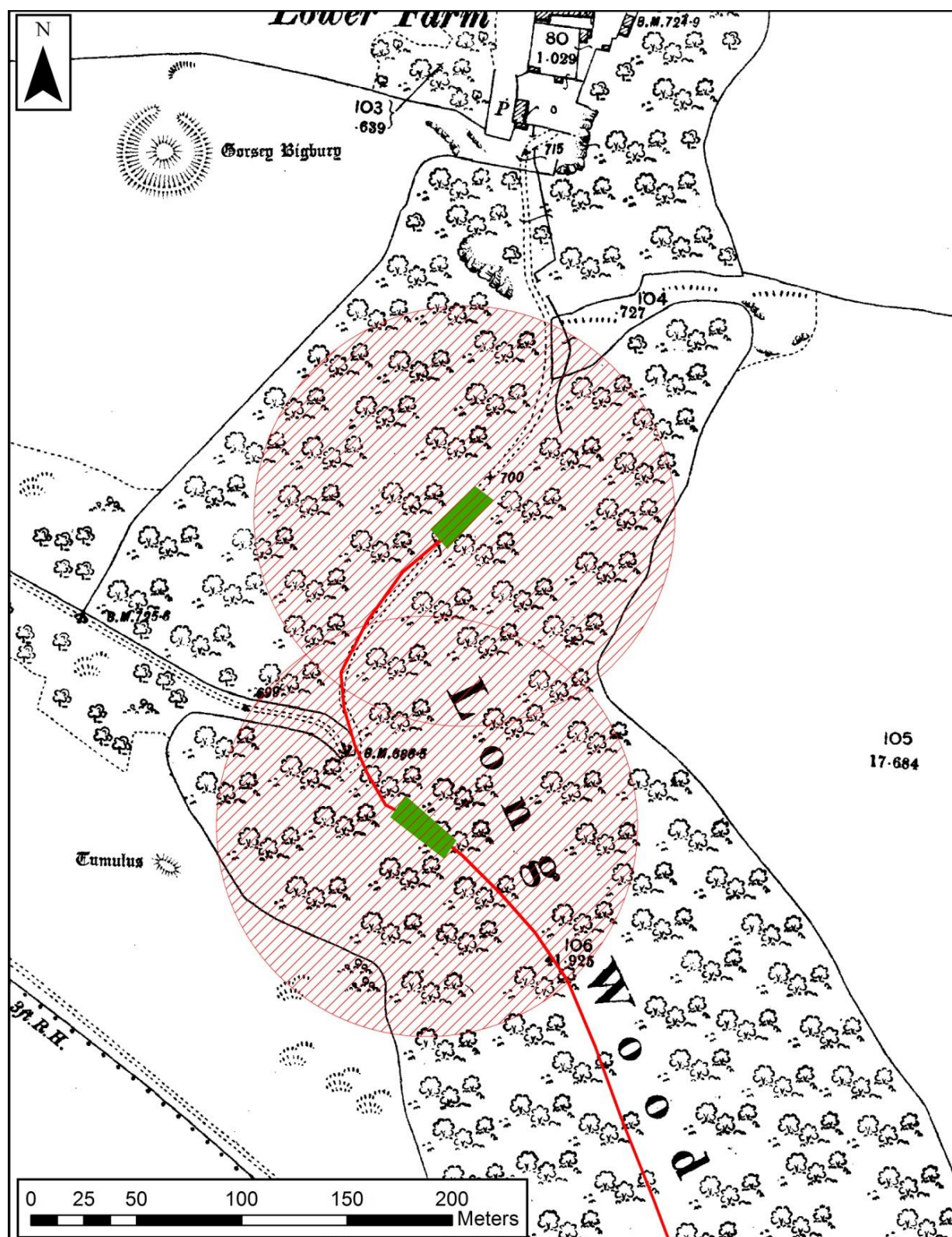


Fig. 5: Extract from the OS 2nd edition 6 inch map of 1904
(reproduced by courtesy of Somerset Record Office)

- **Aerial Photography**

Aerial photographs relating to the study area were consulted at the Somerset Historic Environment Record; including RAF vertical photos dated 1946 and more recent vertical and oblique aerial photos of the area (2001). From these sources it is difficult to ascertain anything about the site as it is so heavily wooded. The only visible features of note are the leats associated with the nineteenth century lead mines, Lower Farm and the Gorsey Bigbury earth circle and round barrow, although the last two of these are outside of a 100m radius of the site.

7 Conclusions

This rapid appraisal of readily available sources of archaeological and historical information concerning the work to be carried out on two sections of a proposed water pipeline scheme from Cheddar to Wellington Farm (Priddy), situated to the east of Gorsey Bigbury prehistoric henge monument, has reached the following conclusions:

1/The site lies about 60m E of an area of prehistoric flint scatters recorded on the Somerset HER and furthermore it lies to the SE of the prehistoric site of Gorsey Bigbury, to the NW of another area of prehistoric flint scatters and the NE of the barrows at Long Wood.

2/The site also lies in close proximity of an area of post-medieval surface lead mining and water management associated with both the lead extraction industry and the sites of two water grist mills located in Long Wood to the N of the pipeline route.

3/Little archaeological work has been carried out within 100m of the area of investigation, with the only HER events in the vicinity being the excavations at Gorsey Bigbury in the 1930s and 1960s and the 1999 geophysical survey of Long Wood barrow.

Whilst the scope of the proposed work is limited, there is at least **Moderate** potential for encountering evidence of prehistoric occupation (in the form of flint scatters) and similarly **Moderate** potential for encountering evidence of deposits and features associated with post-medieval lead and calamine extraction in the vicinity of the pipeline easement.

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9 References

9.1 Primary Sources

OS surveyor's map of Axbridge and environs - 1811

OS 1st Edition 6 inch map – 1886

OS 2nd edition 6 inch map – 1904

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