

Proposed 132kV Underground Cable, Avonmouth, Bristol

NGR 3531118211 - 3516817983

Archaeology and Cultural Heritage Assessment

Bristol HER No. 24952

Prepared by:
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On behalf of:
Western Power Distribution

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archaeology

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Report prepared by Mark Corney
with contribution by John Chandler

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Fig. 1: Location of recorded heritage assets

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Summary

A largely desk-based assessment of the potential historic environment issues relating to the proposed 132kV underground cable route at Avonmouth, Bristol, has examined available data sources. The proposed cable is approximately 2.2km in length, running across land currently in a derelict and overgrown state after the demolition of the factory buildings. For most of its course, the proposed cable is immediately to the west of, and parallel to, the railway line linking Avonmouth and Severn Beach. There is one designated heritage asset within the surrounding defined study area, a Scheduled Monument comprising a Second World War anti-aircraft battery. This is unlikely to pose a constraint to installation of the cable. The application site does not lie within a conservation area but lies close to the eastern boundary of Unit 29 of The Severn Estuary SSSI . There are 31 records of archaeological finds or deposits within the defined study area. The area was, historically, a mix of salt marsh and enclosed pasture. From the late nineteenth century the area was steadily developed as part of the port and related facilities at Avonmouth; these include a factory for the production of mustard gas shells and dating from the First World War. There is no evidence to suggest that the site contains buried archaeological deposits that should be considered significant. The extent of twentieth century development is likely to have significantly reduced the potential for the survival of medieval or earlier deposits on the site.

1. INTRODUCTION

1.1 This report sets out the results of a largely desk-based archaeology and cultural heritage assessment of the route for a 132kV underground cable at Avonmouth, Bristol, between 3531118211 and 3516817983 (Fig. 1). The study has been prepared for Western Power Distribution.

1.2 The study was undertaken by AC archaeology Ltd during November 2010. The aim of the report is to provide an assessment of the known heritage assets that may contribute to the historic environment of the proposed cable route.

1.3 The principal area examined comprises a level strip of land, approximately 2.2km in length and follows the line of the railway line between Avonmouth and

Severn Beach. The route lies at approximately 8m OD and the underlying geology is alluvium.

2. METHODOLOGY

2.1 The study has comprised a desk-based assessment, as defined by the Institute for Archaeologists *Standards and Guidance*, of the heritage assets that contribute to the historic environment of the proposed cable route and of a surrounding zone (a strip of land extending up to 100m either side of the proposed route) intended to provide an immediate context. Records beyond this immediate study zone have also been included where they are considered relevant to the understanding of previous land use in the area.

2.2 The scope of the study included designated heritage assets (world heritage sites, scheduled monuments, listed buildings, conservation areas, battlefield sites, registered parks and gardens) and non-designated assets (archaeological sites and finds, historic buildings, other historic landscape features or other locally-designated features, or areas, of cultural heritage importance). It also notes significant designations not related to the historic environment such as Sites of Special Scientific Interest.

2.3 The following data sources have been examined:

- Historic maps and documents held at Bristol Record Office and Bristol Central Library;
- Archaeological, historic building or other heritage designation information held by Bristol City Historic Environment Record (BCHER);
- Archaeological, historic building and other heritage designation information held by English Heritage in its National Monuments Record (NMR) at Swindon;
- Other published or unpublished information, and;
- A site inspection carried out by Mark Corney on 23rd November 2010.

3. LEGISLATION AND GUIDANCE

3.1 Relevant protection, guidance and policies relating to the protection, maintenance and enhancement of archaeological sites and other aspects of cultural heritage may be summarised as follows:

Planning Guidance for Archaeology and the Historic Environment

3.2 General policy and guidance for the conservation of the historic environment under development control procedures are now contained in *Planning Policy Statement 5: Planning for the Historic Environment* (formerly Planning Policy Guidance notes 15 and 16), released 23rd March 2010. Archaeological sites, buildings, parks and gardens, battlefields or other aspects of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are now considered *heritage assets* under a unified policy system. The relevant policies are listed below:

- Policy HE1: Heritage assets and climate change
- Policy HE2: Evidence base for plan-making
- Policy HE3: Regional and local planning approaches
- Policy HE4: Permitted development and Article 4 directions
- Policy HE5: Monitoring indicators
- Policy HE6: Information requirements for applications for consent affecting heritage assets
- Policy HE7: Policy principles guiding the determination of applications for consent relating to all heritage assets
- Policy HE8: Additional policy principle guiding the consideration of applications for consent relating to heritage assets that are not covered by Policy HE9
- Policy HE9: Additional policy principles guiding the consideration of applications for consent relating to designated heritage assets
- Policy HE10: Additional policy principles guiding the consideration of applications for development affecting the setting of a designated heritage asset

Policy HE11: Enabling development

Policy HE12: Policy principles guiding the recording of information relating to heritage assets

Listed Buildings/Structures

3.3 Buildings of national, regional, or local historical and architectural importance are protected by the Planning (Listed Buildings and Conservation Areas) Act, 1990. Buildings designated as ‘Listed’ are afforded protection from physical alteration or effects on their historical setting.

Local Authority Plan Policies

3.4 Relevant saved policies for the management of archaeology and cultural heritage are set out in the *Bristol Local Plan adopted 1997*.

Policy NE2

Prominent or strategically important landscape features which make a significant contribution to the landscape character of the city, including green hillsides, promontories, ridges, valleys, gorges and man-made landscapes will be protected. Development which would have a significant adverse effect on identified features of importance as defined on the Proposals Map will not be permitted.

Policy NE9

Historic parks and gardens and other designed landscapes of national and local importance shown on the Proposals Map and described in the Schedule will be protected. Development which would adversely affect the character or appearance of historic landscapes and their settings will not be permitted.

Policy B13

Development should preserve Listed Buildings, their features and settings, and preserve or enhance the character or appearance of the city’s designated

Conservation Areas, as defined on the Proposals Map. Development which conflicts with these objectives will not be permitted.

Policy B17

Extensions to buildings that contribute to the character of a Conservation Area should not dominate the original building by virtue of their scale, materials or location. Large, unsightly or bulky extensions which would conflict with the form, or harm the appearance of the building and would fail to preserve or enhance the character or appearance of the Conservation Area, will not be permitted.

Policy B22

(i) There will be a presumption in favour of preserving any archaeological features or sites of national importance, whether scheduled or not.

(ii) Development which could adversely affect sites, structures, landscapes or buildings of archaeological interest and their settings will require an assessment of the archaeological resource through a desk-top study, and where appropriate a field evaluation. Where there is evidence of archaeological remains, development will not be permitted except where it can be demonstrated that the archaeological features of the site will be satisfactorily preserved in situ, or a suitable strategy has been put forward to mitigate the impact of development proposals upon important archaeological remains and their settings; or, if this is not possible and the sites are not scheduled or of national importance, provision for adequately recording the site prior to destruction is made, preferably by negotiating a planning agreement to ensure that access, time and financial resources are available to allow essential recording and publication to take place.

Further clarification of the archaeological context for new developments is provided by the Bristol Local Development Framework Supplementary Planning Document Number 7, adopted March 2006.

4. HISTORICAL DEVELOPMENT OF THE SITE

By John Chandler

Introduction

4.1 This section of the report presents a sequence of historic maps relevant to the route of the proposed cable. The study corridor lies within the ancient Gloucestershire parish of Henbury, crossing three of its constituent tithings, Kings Weston, Lawrence Weston and Stowick. Extracts from a selection of maps is included as Appendix 1. Where possible the proposed cable route is shown as a red line.

History of the site

4.2 The area was surveyed c.1770 by the noted cartographer Isaac Taylor, who produced maps at three different scales. The finest is a volume of maps and surveys of farms which made up the Southwell estate in Henbury, dated 1772, but these do not cover the whole study area (BRO 26570). A rougher map, of 1773, covers most of Henbury parish, as well as Shirehampton in Westbury on Trym (BRO Bristol Plan 230). The area is of course included also on his printed map of Gloucestershire, 1777, and on another small-scale map of the Bristol area by Benjamin Donn, dated 1769. Together these maps provide a detailed and reliable snapshot of the pre-industrial landscape of the later 18th century, including field and minor names.

4.3 The Henbury tithe map of 1840, which is damaged in places, covers the whole study area (BRO EP/A/32/22), and a much better estate map of the southern (Kings Weston) portion also survives (BRO 31965/53). Ordnance Survey coverage of the area begins in the 1880s, and 6-inch scale maps published in 1889, 1903, 1920, 1938, 1955 and 1965 depict its industrialisation. A large-scale Goad insurance plan of 1928 is also included (BRO 35033/2b). The area of the study corridor was transformed in the 20th century by major industrial complexes, so that at first glance it is hard to equate the 1770s maps with the modern landscape. The most useful map for this purpose is the 1903 Ordnance Survey revision, which superimposes the railway line (opened from Avonmouth

to Severn Beach in 1900) on the earlier topographical features. From this it is clear that the study corridor is confined to the former riverbank and saltmarsh or flat riverside meadowland known along the Severn estuary as warths (confused on the early maps with the spelling 'wharf'). Through these warths drain streams and rhines, and these outlets are termed pills or gouts. The study corridor, from north to south, begins at Stup Pill, also known as Chittening Pill, crosses Mitchells Gout (the boundary between Stowick and Lawrence Weston tithings) and New Gout or Holes Mouth (boundary between Lawrence Weston and Kings Weston), and extends almost to Elbury Gout (boundary between Kings Weston and Shirehampton). On the landward side of the railway line the early topography is characterised by the wandering course of a seawall with closes of pasture and some arable on the inland side. Some names and features along this sea wall may be of archaeological interest, including possible settlement names Rockingham and Luckingham, an area of subrectangular enclosures next to Rockingham called the borough, and the Mere Bank Rhine leading to New Gout, described on early Ordnance Survey maps as a Roman Road (but not considered in Margary's survey of Roman roads). The curiously named Madam Closes preserve a medieval name (Maddam is recorded in 1492 (Smith 1964, 134), but are unexplained.

5. HERITAGE ASSETS

5.1 One designated and thirty-one non-designated heritage assets have been identified during this study. All are shown on Fig. 1, described in Appendix 2 and summarised below.

Designated assets

5.2 There are no designated heritage assets on the route of the proposed cable. One designated heritage asset lies within the broader study area; this is a heavy anti-aircraft battery, Scheduled Monument No. 28885 (Site 17) located approximately 100m to the east of the proposed cable route.

5.3 The eastern boundary of Unit 29 of The Severn Estuary SSSI (Unit ID No 1016664), a recognised Littoral Sediment habitat of 341ha, lies 250m to the west of the proposed cable. This is not shown on Fig. 1.

Non-designated assets

5.4 Archaeological investigations within the study area have identified Bronze Age peat deposits (Site 13) and possible Romano-British flood deposits (Site 21).

5.5 Two Medieval assets have been recorded. Ridge and furrow cultivation remains (Site 23) have been identified from air photographs and a ditch (Site 21) was recorded during an archaeological excavation.

5.6 Seven Post-medieval assets have been recorded within the study area. Pits were recorded (Site 21) during an archaeological excavation. The remains of a Victorian coastal battery (Site 19) survive within later Second World War defences and a rifle range is shown on the salt marsh on early Ordnance Survey maps (Site 32). Site 2, 6, 18, 30 and 31 are all buildings or farms that are shown on historic mapping and which no longer survive.

5.7 There are eighteen Modern non-designated heritage assets recorded within the study area. Sites 1, 9 and 16 comprise the remains of possible groynes and a sea wall. Sites 5, 11, 13 and 29 are historic structures primarily associated with First World War munitions production at the National Filling Factory (Site 10). Sites 3, 12, 19, 20, 22 and 25-28 are all associated with Second World War activities in the area and include a coastal battery, searchlight positions, barrage balloon sites, air-raid shelters and factory buildings.

5.8 Five undated assets have been recorded. These include two drains (Sites 4 and 24), an enclosure, a wreck (Site 7) and human remains (Site 8), the latter two offshore.

6. SITE CONDITIONS

6.1 The site was inspected on 23rd November 2010.

6.2 In its current state the length of the route is comparatively level and, apart from minor deviations at the northern and southern extremities, runs immediately to the west of the Avonmouth to Severn Beach railway line (Plate 1). The northernmost 1.2km of the route is sited on rough, open ground with intermittent dumps of rubble and concrete probably derived from demolished Second World War features (Plate 2) clearly visible immediately to the east of the railway line.



Plate 1: View to the south-west showing railway line and fuel storage depot within Avonmouth Port Authority land. The proposed cable trench route is adjacent to the railway line



Plate 2: Brick and concrete rubble dump; view to north-east from 3530018210

West of the railway line is a strip of rough pasture 50m to 75m wide with salt marsh beyond. A number of drains are crossed by the railway line and the proposed cable route (Plate 3). At the southern end the line is on concreted or tarmac covered land within the boundary of the Avonmouth Port Authority.



Plate 3. Drain crossed by railway line and overground pipelines at 3529018190. View to west

7. ASSESSMENT OF SIGNIFICANCE

Introduction

7.1 This assessment report has provided a summary of all recorded heritage assets within the study area as a result of a search of a range of archaeological and related databases. Each source has its own limitations. Aerial photographs are of variable effectiveness depending on geology, land use and weather conditions, while certain types of remains produce no cropmarks or soilmarks. Documentary sources were seldom compiled for archaeological purposes, contain inherent bias, and provide a comprehensive basis of assessment only for the last two hundred years. National and county databases are also limited in that they only provide a record of known archaeological data.

7.2 PPS5 states, in Policy HE6.1, that

Local planning authorities should require an applicant to provide a description of the significance of the heritage assets affected and the contribution of their setting to that significance. The level of detail should be proportionate to the importance of the heritage asset and no more than is sufficient to understand the potential impact of the proposal on the significance of the heritage asset. As a minimum the relevant historic environment record should have been consulted and the heritage assets themselves should have been assessed using appropriate expertise where necessary given the application's impact. Where an application site includes, or is considered to have the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where desk-based research is insufficient to properly assess the interest, a field evaluation

7.3 PPS5 provides no terminology or criteria for ranking the significance of non-designated assets. It is therefore necessary to define a method for the assessment of individual heritage features. In the absence of a nationally accepted means of ranking the importance of archaeological and cultural heritage assets (other than the Secretary of State's non-statutory criteria for the

assessment to national importance), a set of terms has been applied in order to provide a comparison of the relative importance of any cultural heritage features present on the site. The gradings are set out in Table 1 below and included on the data tables in Appendix 2.

| GRADING | | GRADES OF SIGNIFICANCE |
|---------|------------------------------|---|
| A | National significance | Any designated or other asset considered to be of national significance due to its archaeological, architectural, artistic or historic interest. The asset would score high using the non-statutory criteria for assessing scheduled monuments. |
| B | Regional/County significance | Any asset considered to be of regional or county significance due to its archaeological, architectural, artistic or historic interest. The asset would score moderate using the non-statutory criteria for assessing scheduled monuments. |
| C | Local significance | Any asset considered to be of local significance due to its archaeological, architectural, artistic or historic interest. The asset would score low using the non-statutory criteria for assessing scheduled monuments. |
| D | Not significant | Any asset that is not considered to be of archaeological, architectural, artistic or historic interest significance |

Table 1: Grading of Importance of cultural heritage assets

Assets of National Significance

7.4 Site 17 lies 100m to the east of the proposed cable trench and is a Scheduled Monument. Although of modern date it is of national significance for the historic interest in the part it played in the history of warfare. The Second World War was a defining moment in European history and one of the significant developments in warfare during this time was the emergence of strategic bombing, targeted and concentrated raids on military installations, industrial sites and, later, civilian areas to cause maximum physical and psychological damage. Bristol and the Avonmouth Docks were significant and strategic assets for the war effort against Nazi Germany. Although the buildings are of no great age and appear unremarkable in aesthetic terms, they are of great historical value in increasing our understanding of the significance of this period in European

history by illustrating the resources applied to the ultimately successful defence of Britain.

7.5 Although not designated, the National Filling Factory No 23 (Site 10) could be considered to be of national significance. The site was established in 1917 to manufacture mustard gas as a response to German use of it earlier in the First World War. Again, the surviving structures are unremarkable in aesthetic terms but the site is of great historical value for the part it played in the development and use of these agents in the fight against Germany during another significant period in world history.

Assets of Regional/County Significance

7.6 Thirteen assets within the study area are considered to be of Regional /County significance for the archaeological information they provide. Four (Sites 5, 11, 14 and 29) are associated with the First World War munitions factory (Site 10, see above) and although they are no longer standing structures they are considered to have group historic value for the vital part they played in the factory operations and in the greater events of that period. The remaining nine assets (Sites 3, 12, 19, 20, 22, 25, 26, 27 and 28) are associated with the Second World War defence of the ports of Avonmouth and Bristol. Without evidence to the contrary it is believed that there will be surviving archaeological remains on these sites which would contribute evidential value to the significance of the site.

Assets of Local Significance

7.7 Prehistoric Site 13, Medieval Site 23, Post-medieval Sites 2, 6, 18, 21, 30 and 31, Modern Sites 1, 9 and 16 and Undated Sites 7, 8, 15 and 24 are considered to be of local significance for the archaeological information they provide in the development of the prehistoric and Romano-British environment and the post-Roman to pre-industrial landscape of the region. Site 13 has demonstrated the survival of Bronze Age peat deposits and site 21 is a possible Romano-British inundation deposit overlain by medieval agricultural activities. Site 15, an undated enclosure, may relate to the documentary evidence for the pre-industrial landscape and Site 23 provided unequivocal evidence for

cultivation in the medieval or early post-medieval period. The proximity to surviving buildings associated with First World War munitions production (Site 10) to the proposed cable is noted but is unlikely to impact upon any associated features.

7.8 Site 32, a rifle range depicted on maps from 1889, is considered to be of low or no significance. It would have been a fairly insubstantial structure and appears to have been destroyed by modern development. It can therefore have little evidential value.

Assets of no significance

7.9 Site 4, an archaeological evaluation identifying four pence posts and a drain (all undated) is considered to be of no significance in terms of the archaeological information it provides.

8. COMMENTS

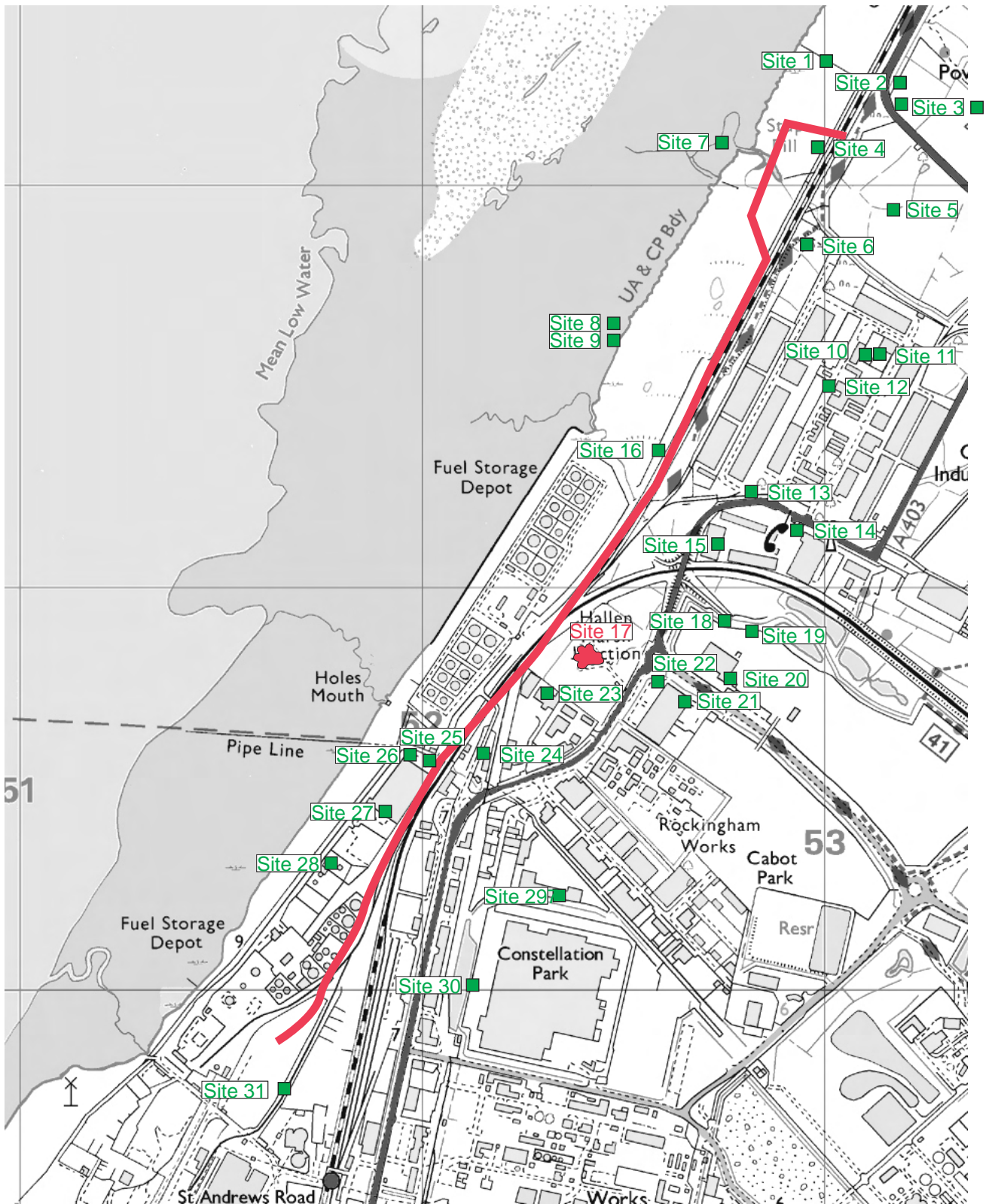
8.1 The route of the proposed cable does not contain any Scheduled Monuments, Listed Buildings or other statutorily protected heritage assets. One Scheduled Monument lies within the broader study area. It is considered unlikely that the monument and its setting will be affected by the proposed cable.

8.2 There is evidence for archaeological deposits within the broader study area. Peat formation in the Severn Estuary began between 6000 and 4000 CAL BC and continued is believed to have continued until c. 200 CAL BC. Mesolithic sites may underlie this peat. Human activity has been recorded on the Estuary during the Middle Bronze Age and Iron Age (Bell, 2000) and the records of Bronze Age peat deposits within the study area suggests the possibility of surviving archaeological deposits. The historical study (section 4) indicates that the site was open land until the later nineteenth century when it was developed as part of the Avonmouth port complex. The extent of the subsequent development may have significantly affected the survival of any pre-medieval archaeological deposits on the site although the records of peat deposits, possible Romano-British flood deposits, remains of ridge and furrow and a possible undated sea

defence bank within 150m of the proposed cable should be noted. The potential for survival of archaeological deposits is strongest along the northernmost 1.2km of the route, beyond the boundary of the Avonmouth Port Authority.

9. REFERENCES

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- BRO 31965/53: Plan of the Kings Weston estate . . . the property of P W S Miles, undated (c.1860s)
- BRO 35033/2b: Goad fire insurance plan of Avonmouth, 1928
- BRO Bristol Plan 230: Rough map by Isaac Taylor covering Henbury, Kingsweston, Lawrence Weston, Stowick and Shirehampton, 1773
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PROJECT

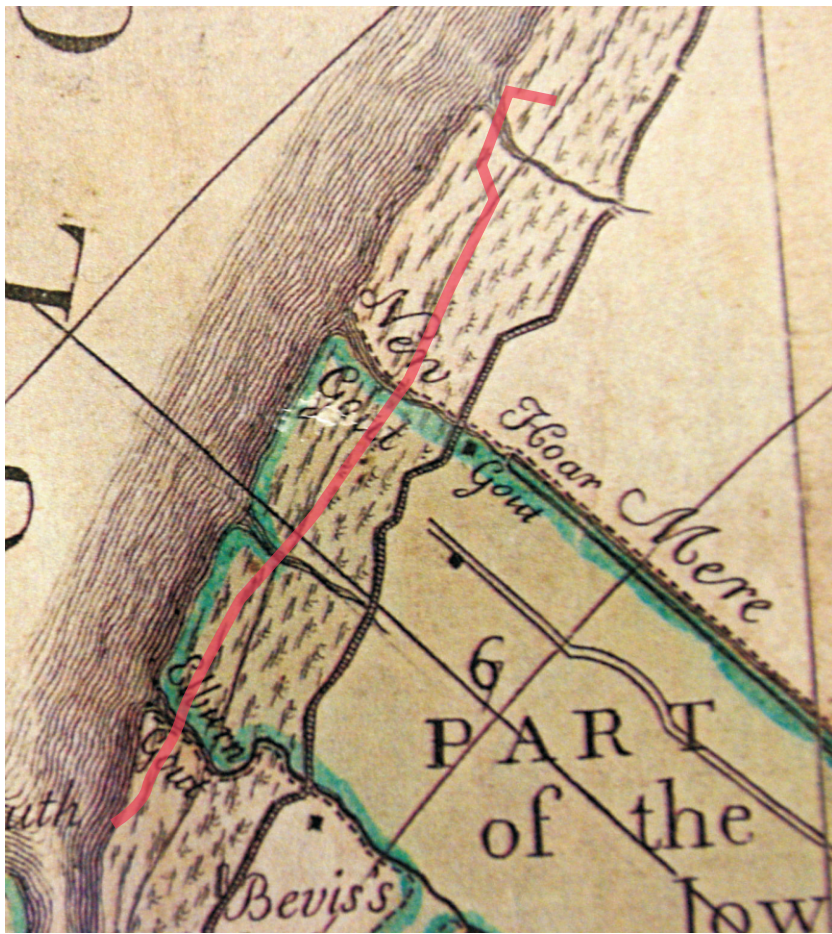
Avonmouth 132kV Cable

TITLE

Fig. 1:
Location of recorded heritage assets

- Route of proposed cable
- Site 1 ■ Designated heritage asset
- Site 1 ■ Non-designated heritage asset

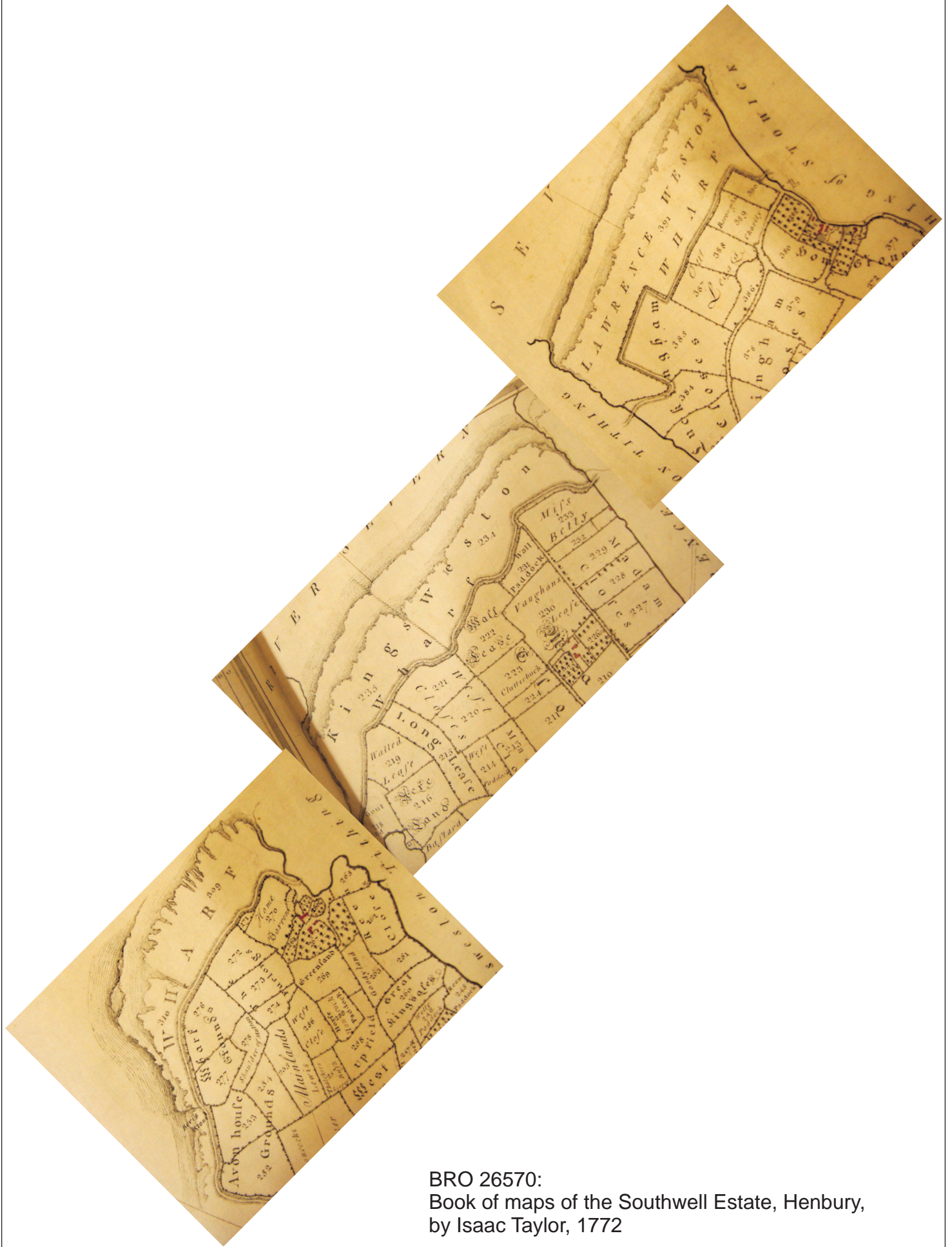
Appendix 1: Extracts from historic mapping



Donn, Benjamin,
Map of the country eleven miles around
Bristol, 1769



Taylor, Isaac,
Map of Gloucestershire, 1777



BRO 26570:
Book of maps of the Southwell Estate, Henbury,
by Isaac Taylor, 1772



BRO 26570:
 Book of maps of the Southwell Estate, Henbury,
 by Isaac Taylor, 1772

| CROMWELL FARM. | | |
|----------------|---------------------------------------|-------------------------|
| 105 | Cox's Lease. | 1 2 1/2 |
| 104 | D. | 2 1/2 24 |
| 103 | D. | 2 1/2 36 |
| 102 | Home ground. | 3 1/2 12 |
| 101 | D. | 4 1/2 15 |
| 100 | Two Kingstons. | 10 1/2 15 |
| 99 | Little D. | 8 1/2 14 |
| 98 | Home ground. | 6 1/2 29 |
| 97 | D. | 6 1/2 30 |
| 96 | Two Orchards. | 1 1/2 0 |
| 95 | Home ground. | 1 1/2 0 |
| 94 | D. | 6 1/2 14 |
| 93 | Hazels. | 2 1/2 22 |
| 92 | D. | 7 1/2 14 |
| 91 | Madam clofe. | 6 1/2 3 |
| 90 | D. | 6 1/2 10 |
| 89 | Orchard. | 1 1/2 29 |
| 88 | D. | 1 1/2 25 |
| 87 | Paddock. | 2 1/2 22 |
| 86 | Rayford Clayland. | 6 1/2 24 |
| 85 | Orchard lease. | 2 1/2 21 |
| 84 | Madam clofe. | 2 1/2 21 |
| 83 | D. | 2 1/2 18 |
| 82 | D. | 8 1/2 22 |
| 81 | Miss Helena. | 10 1/2 29 |
| 80 | Madam clofe. | 3 1/2 5 |
| 79 | D. | 4 1/2 0 |
| 78 | D. | 2 1/2 0 |
| 77 | D. | 2 1/2 28 |
| 76 | West Paddock. | 8 1/2 17 |
| 75 | Long lease. | 6 1/2 3 |
| 74 | Acres land. | 6 1/2 18 |
| 73 | Paddock. | 4 1/2 10 |
| 72 | Good land. | 4 1/2 10 |
| 71 | Walled lease. | 4 1/2 0 |
| 70 | Walled lease. | 4 1/2 19 |
| 69 | D. | 4 1/2 24 |
| 68 | D. | 4 1/2 24 |
| 67 | Madam clofe. | 4 1/2 0 |
| 66 | D. | 4 1/2 17 |
| 65 | Orchard. | 2 1/2 10 |
| 64 | Madam House & Orchard &c. | 1 1/2 28 |
| 63 | D. | 6 1/2 24 |
| 62 | Clofe. | 2 1/2 0 |
| 61 | D. | 4 1/2 19 |
| 60 | D. | 7 1/2 8 |
| 59 | Vaughans Lease. | 2 1/2 18 |
| 58 | Wall paddock. | 1 1/2 18 |
| 57 | Little Madam, Old house & Orchard &c. | 1 1/2 20 |
| 56 | Miss Betty clofe. | 3 1/2 0 |
| 55 | East Wharf, is a 36 acre Plot. | 28 1/2 100 |
| 54 | East D. | 17 1/2 10 D. - 23 1/2 0 |
| 53 | East D. | 23 1/2 10 |
| | Residue of A 223. | 266 2 3 |



ROCKINGHAM FARM.

| | | | | | |
|-----|--|---------|-----|-------------|-------|
| 344 | Cold Arbour Clofe. | 1 1 25 | 356 | Bare leafe. | 4 0 0 |
| 344 | Dc. | 0 0 12 | 374 | Dc. | 4 0 0 |
| 364 | Rockingham Clofe, or leafe. | 11 0 57 | 374 | Paddock, | 6 0 0 |
| 366 | Chace way leading to Madon. | 0 2 14 | 388 | Wall leafe. | 3 0 0 |
| 367 | Paddock, in two parts. | 3 0 07 | | | |
| 368 | Dc. | 1 0 10 | | | |
| 368 | Dc. | 1 0 1 | | | |
| 371 | Home Ground | 2 3 17 | | | |
| 371 | Dc. | 1 2 31 | | | |
| 372 | Dc. | 1 0 14 | | | |
| 372 | Rockingham Paddock. | 1 1 36 | | | |
| 375 | Dc. | 5 2 33 | | | |
| 377 | Clofe, or leafe. | 6 3 0 | | | |
| 378 | Dc. | 7 0 25 | | | |
| 379 | Dc. | 3 3 17 | | | |
| 384 | Home Ground. | 1 3 25 | | | |
| 384 | Dc. | 1 3 10 | | | |
| 384 | Dc. | 6 2 28 | | | |
| 385 | Rockingham, Half of, or gardeners Orchard. | 3 1 26 | | | |
| 385 | Dc. | 11 0 17 | | | |
| 385 | Out leafe. | 2 0 18 | | | |
| 387 | Dc. | 4 2 7 | | | |
| 388 | Dc. | 5 1 17 | | | |
| 388 | Wall Leafe. | 2 0 0 | | | |
| | | 39 2 10 | | | |

BRO 26570:
Book of maps of the Southwell Estate, Henbury,
by Isaac Taylor, 1772

| A | | | B | | |
|-----|----------------------------------|----------|-----|----------------------|---------|
| 267 | The House & orchards late Seager | 1 1/2 P | 233 | Mainlands | 4 1/2 P |
| 268 | Do | 1 1/2 P | 234 | Holly Paddock | 3 1/2 P |
| 269 | Do | 2 1/2 P | 235 | Thatchers bush Clofe | 2 1/2 P |
| 270 | Clofe | 2 1/2 P | 236 | Bread furrows | 7 1/2 P |
| 271 | Hone Bottom | 2 1/2 P | 237 | Five Acres | 3 1/2 P |
| 272 | Do | 2 1/2 P | 238 | Orchard | 1 1/2 P |
| 273 | Parlange | 2 1/2 P | 239 | Burke leafe | 3 1/2 P |
| 274 | Do | 2 1/2 P | 240 | Six Acres | 6 1/2 P |
| 275 | Shoulder of Mutton | 2 1/2 P | 241 | Seven P | 7 1/2 P |
| 276 | Wharf Ground | 2 1/2 P | | | |
| 277 | Do | 2 1/2 P | | | |
| 278 | Avon house Ground late England | 4 1/2 P | | | |
| 279 | Do | 4 1/2 P | | | |
| 280 | Do | 4 1/2 P | | | |
| 281 | Mainlands | 4 1/2 P | | | |
| 282 | West Clofe | 4 1/2 P | | | |
| 283 | Thatchers bush | 4 1/2 P | | | |
| 284 | Upfield | 4 1/2 P | | | |
| 285 | Holly Paddock | 4 1/2 P | | | |
| 286 | Great Kingdale | 4 1/2 P | | | |
| 287 | Clofe | 4 1/2 P | | | |
| 288 | Do | 4 1/2 P | | | |
| 289 | Goody land | 4 1/2 P | | | |
| 290 | Orchard | 4 1/2 P | | | |
| 291 | Clofe | 4 1/2 P | | | |
| 292 | Reen Paddock | 4 1/2 P | | | |
| 293 | Holly Paddock | 4 1/2 P | | | |
| 294 | West P | 4 1/2 P | | | |
| 295 | West Clofe | 4 1/2 P | | | |
| 296 | Six Acres | 4 1/2 P | | | |
| 297 | Bean Clofe | 4 1/2 P | | | |
| 298 | 1/2 Paddock | 4 1/2 P | | | |
| 299 | Houfse garden & orchards | 4 1/2 P | | | |
| 300 | Five Acres | 4 1/2 P | | | |
| 301 | Lower Broad Furrows | 4 1/2 P | | | |
| 302 | Marsh ground | 4 1/2 P | | | |
| 303 | Do | 4 1/2 P | | | |
| 304 | Upper Broad Furrows | 4 1/2 P | | | |
| 305 | Collins Paddock | 4 1/2 P | | | |
| 306 | Pyora P | 4 1/2 P | | | |
| 307 | Rufly leafe | 4 1/2 P | | | |
| 308 | Rufly leafe | 4 1/2 P | | | |
| 309 | Square Cap | 4 1/2 P | | | |
| 310 | Four Acres | 4 1/2 P | | | |
| 311 | The Wharf, late Seager | 13 1/2 P | | | |
| 312 | Do | 13 1/2 P | | | |
| 313 | Brought down | 13 1/2 P | | | |
| 314 | Bundies | 5 1/2 P | | | |
| 315 | Widdenhans | 7 1/2 P | | | |



BRO 26570:
 Book of maps of the Southwell Estate, Henbury,
 by Isaac Taylor, 1772



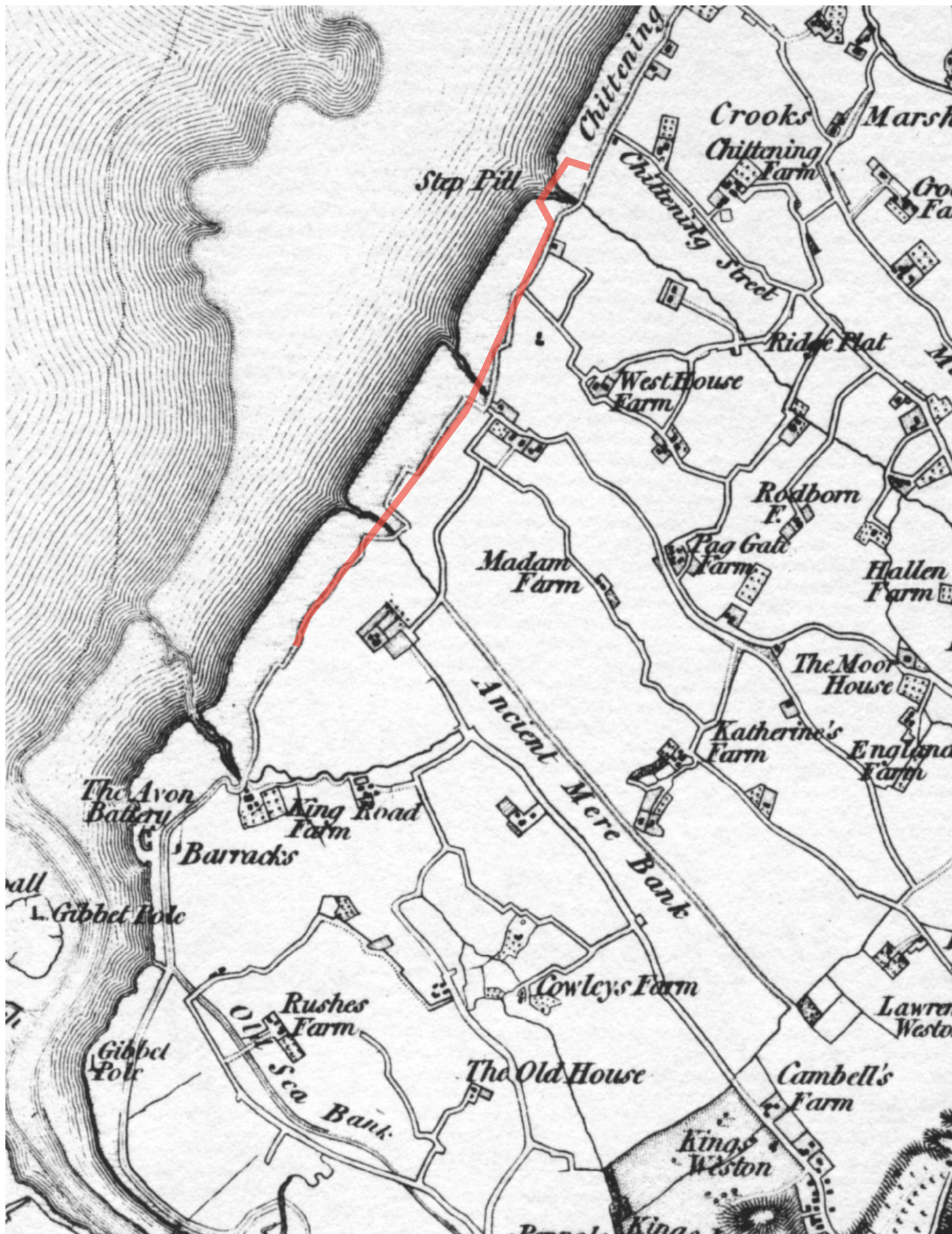
BRO Bristol Plan 230: Rough map by Isaac Taylor covering Henbury, Kingsweston, Lawrence Weston, Stowick and Shirehampton, 1773



BRO Bristol Plan 230: Rough map by Isaac Taylor covering Henbury, Kingsweston, Lawrence Weston, Stowick and Shirehampton, 1773



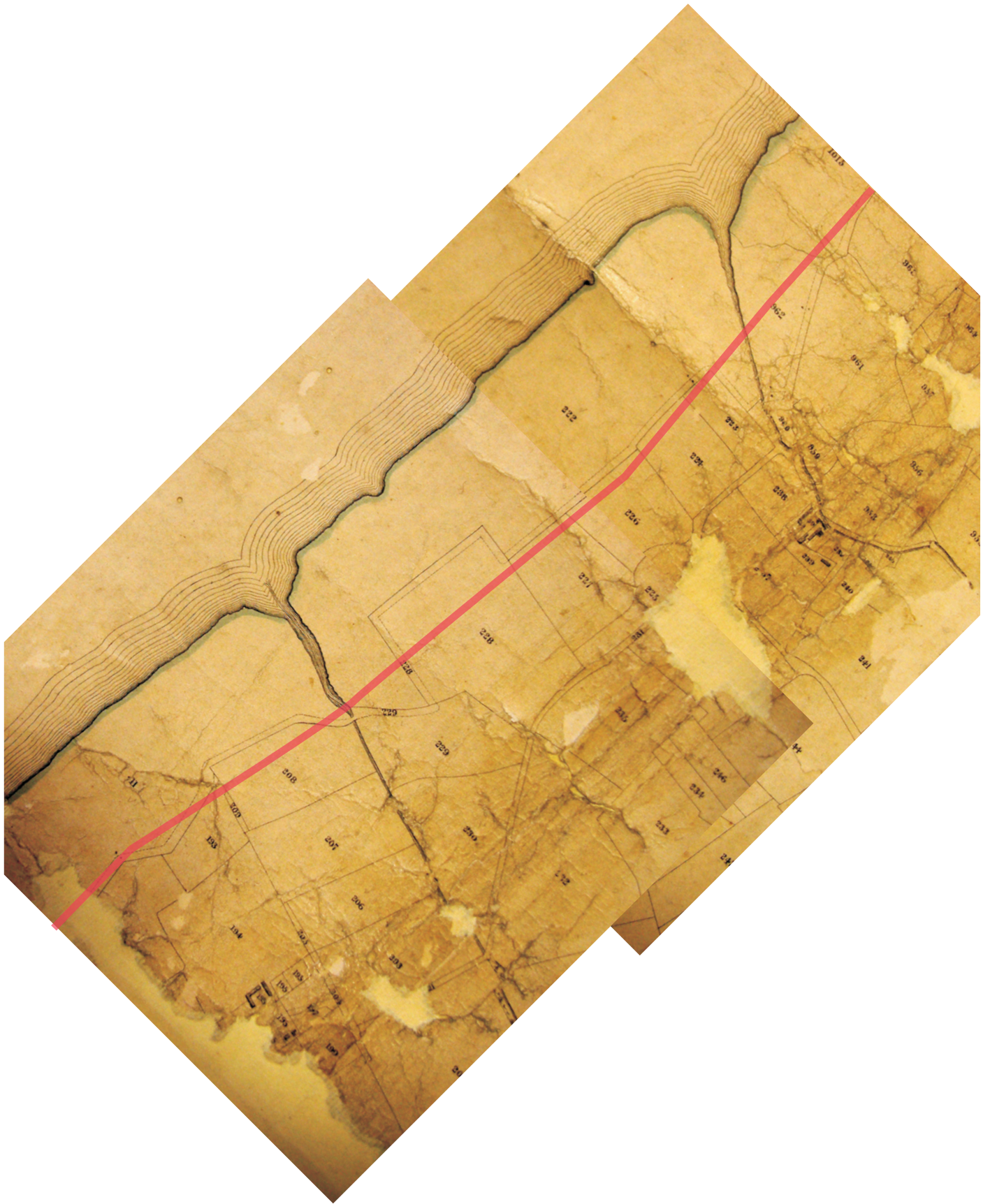
BRO Bristol Plan 230: Rough map by Isaac Taylor covering Henbury, Kingsweston, Lawrence Weston, Stowick and Shirehampton, 1773



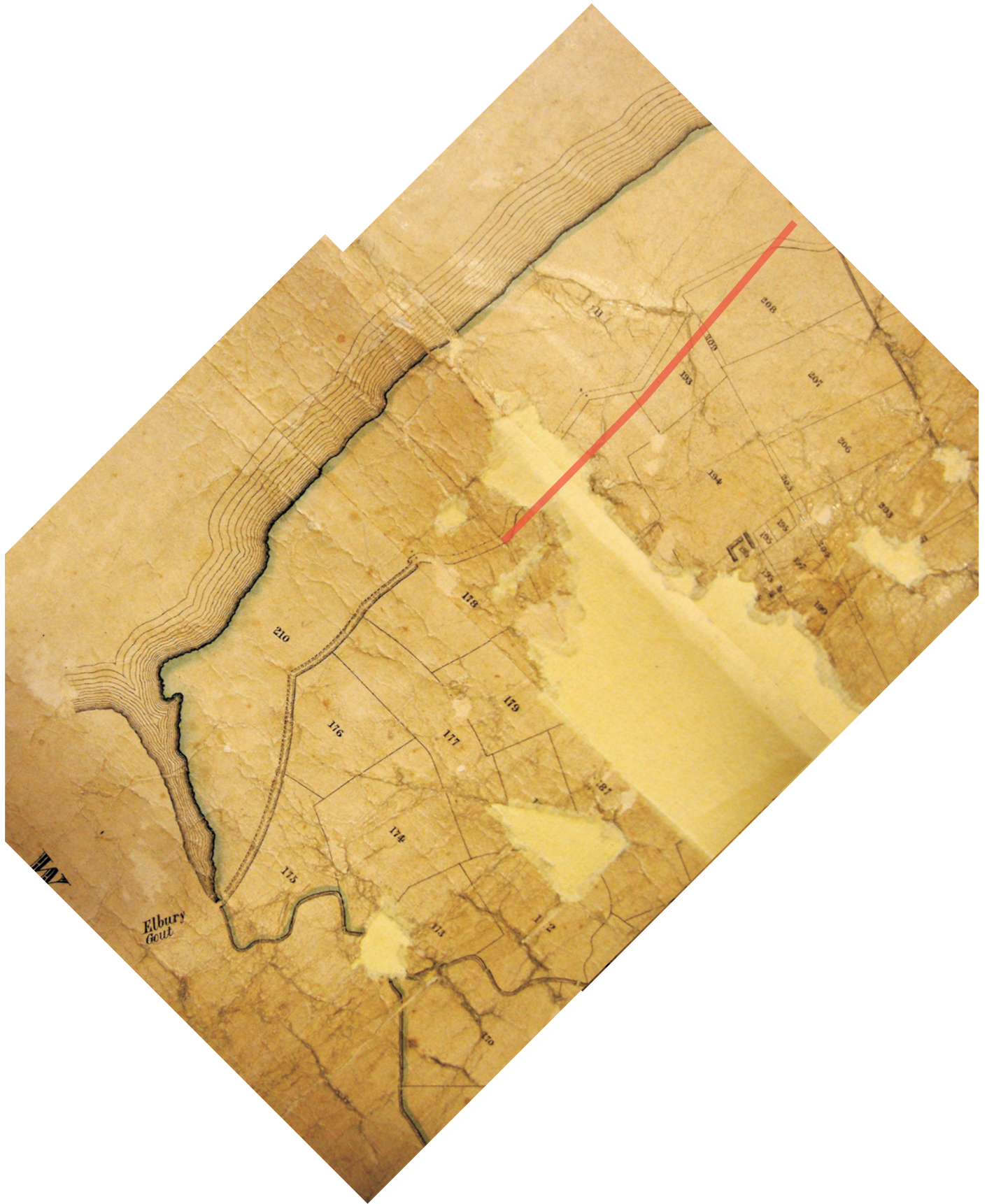
Ordnance Survey 1-inch scale first series , sheet 35, published 1830



BRO EP/A/32/22:
Henbury tithe map and apportionment, 1840



BRO EP/A/32/22:
Henbury tithe map and apportionment, 1840



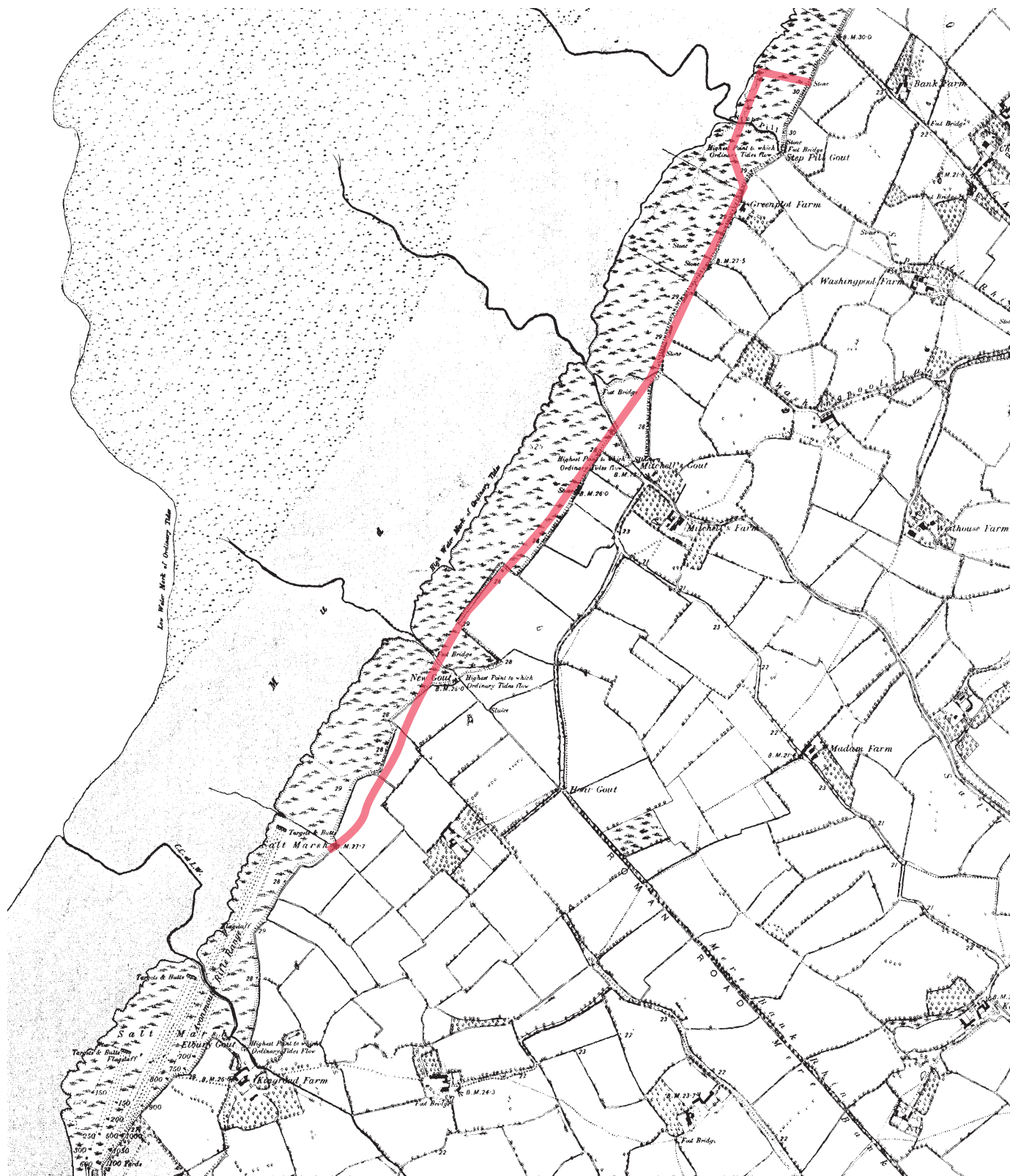
BRO EP/A/32/22:
Henbury tithe map and apportionment, 1840



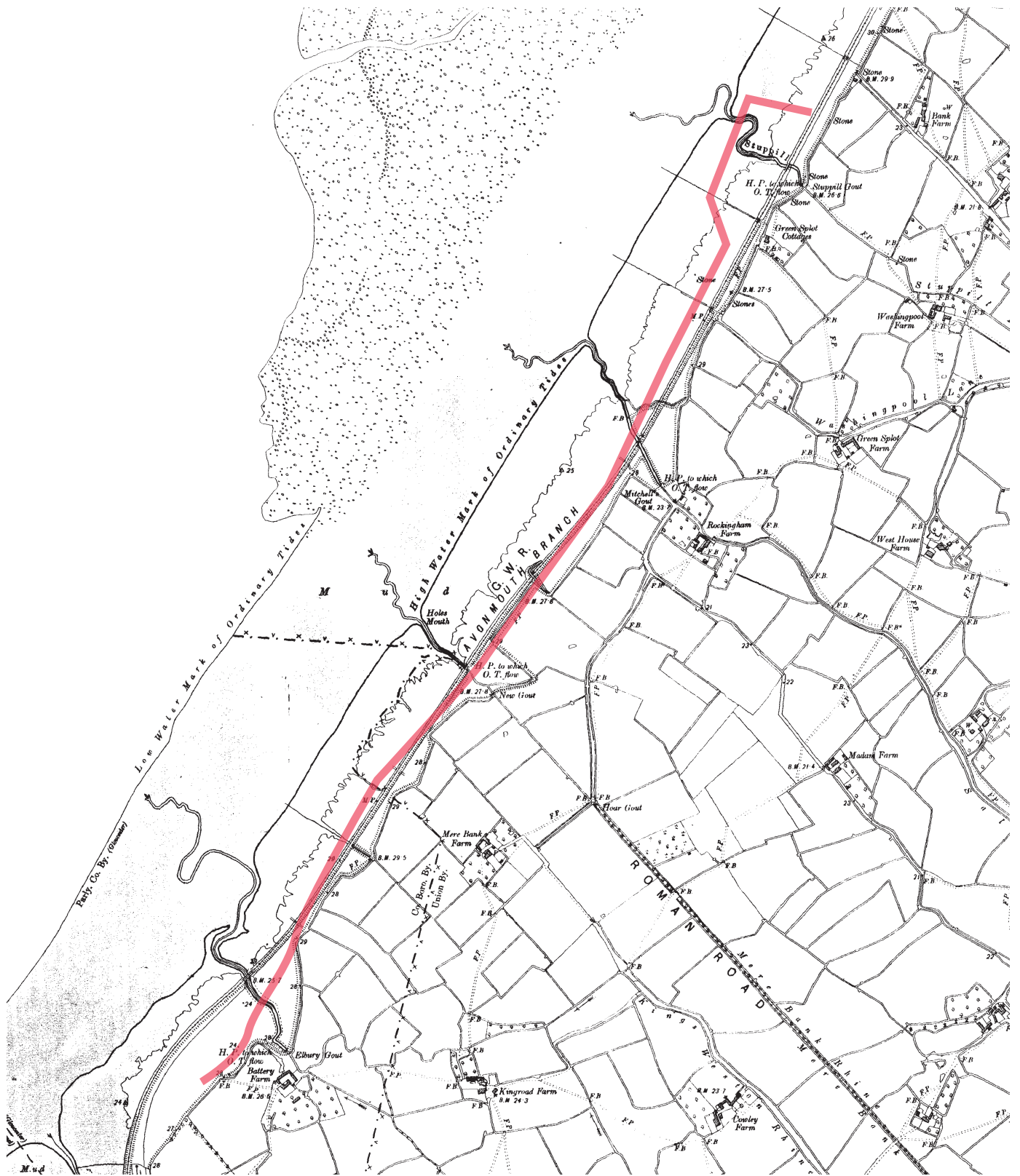
BRO 31965/53:
Plan of the Kings Weston estate...the property of PWS Miles, undated (c.1860s)



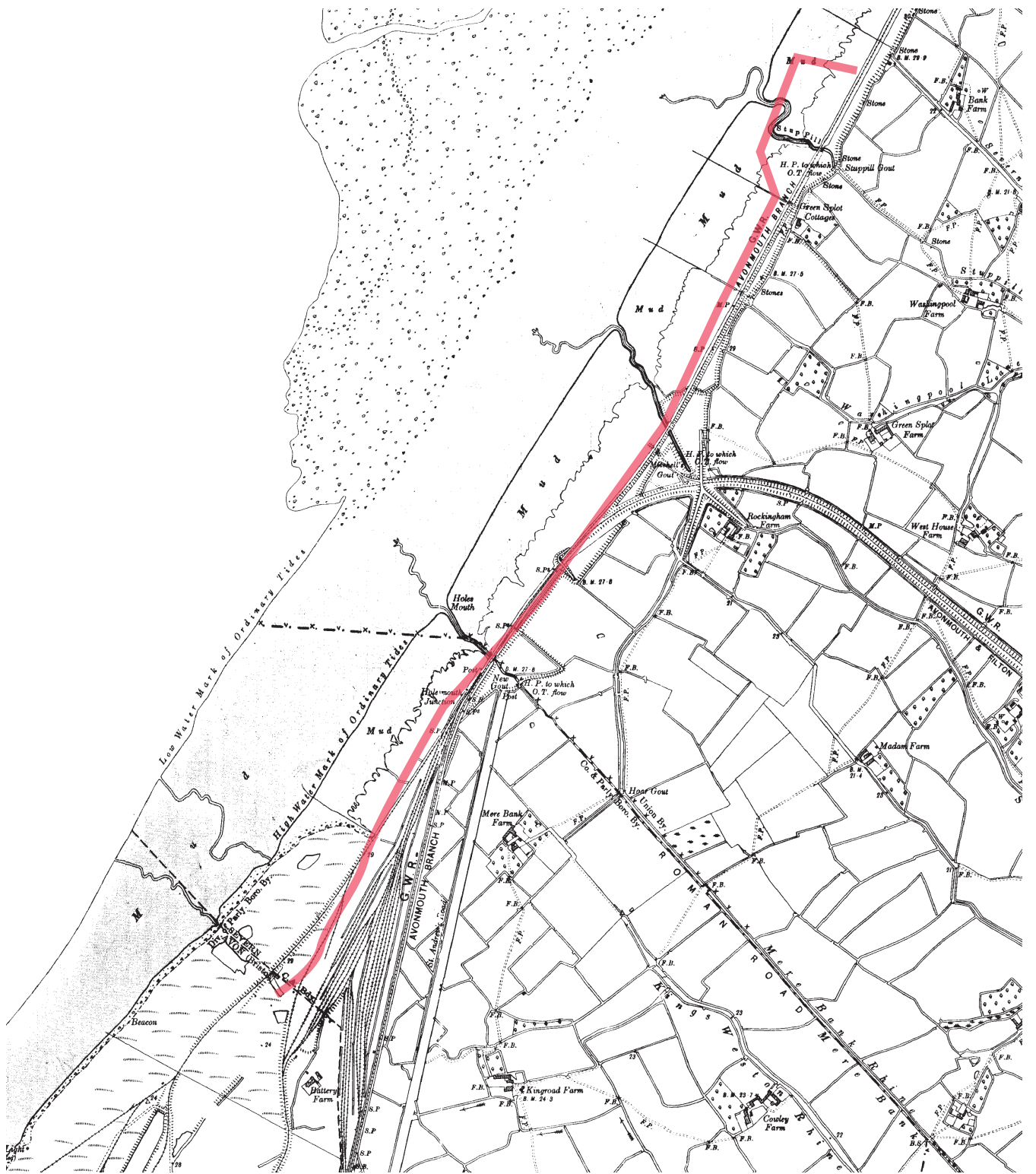
BRO 31965/53:
Plan of the Kings Weston estate...the property of PWS Miles, undated (c.1860s)



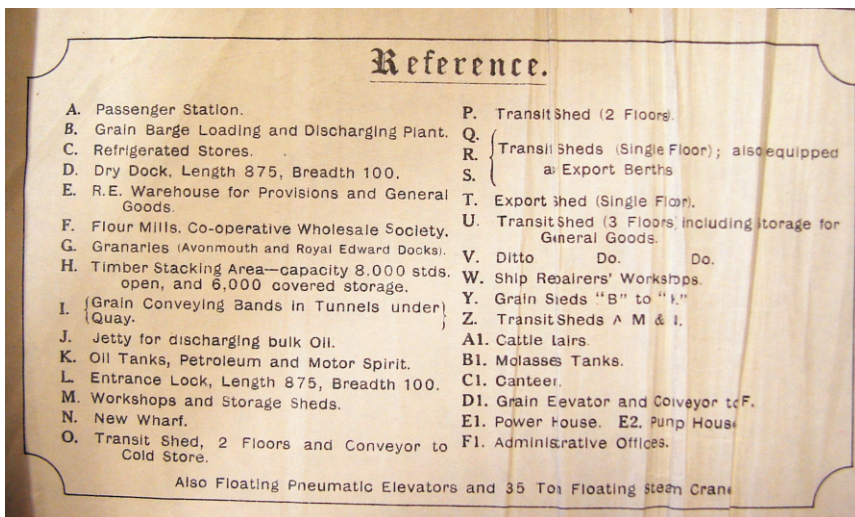
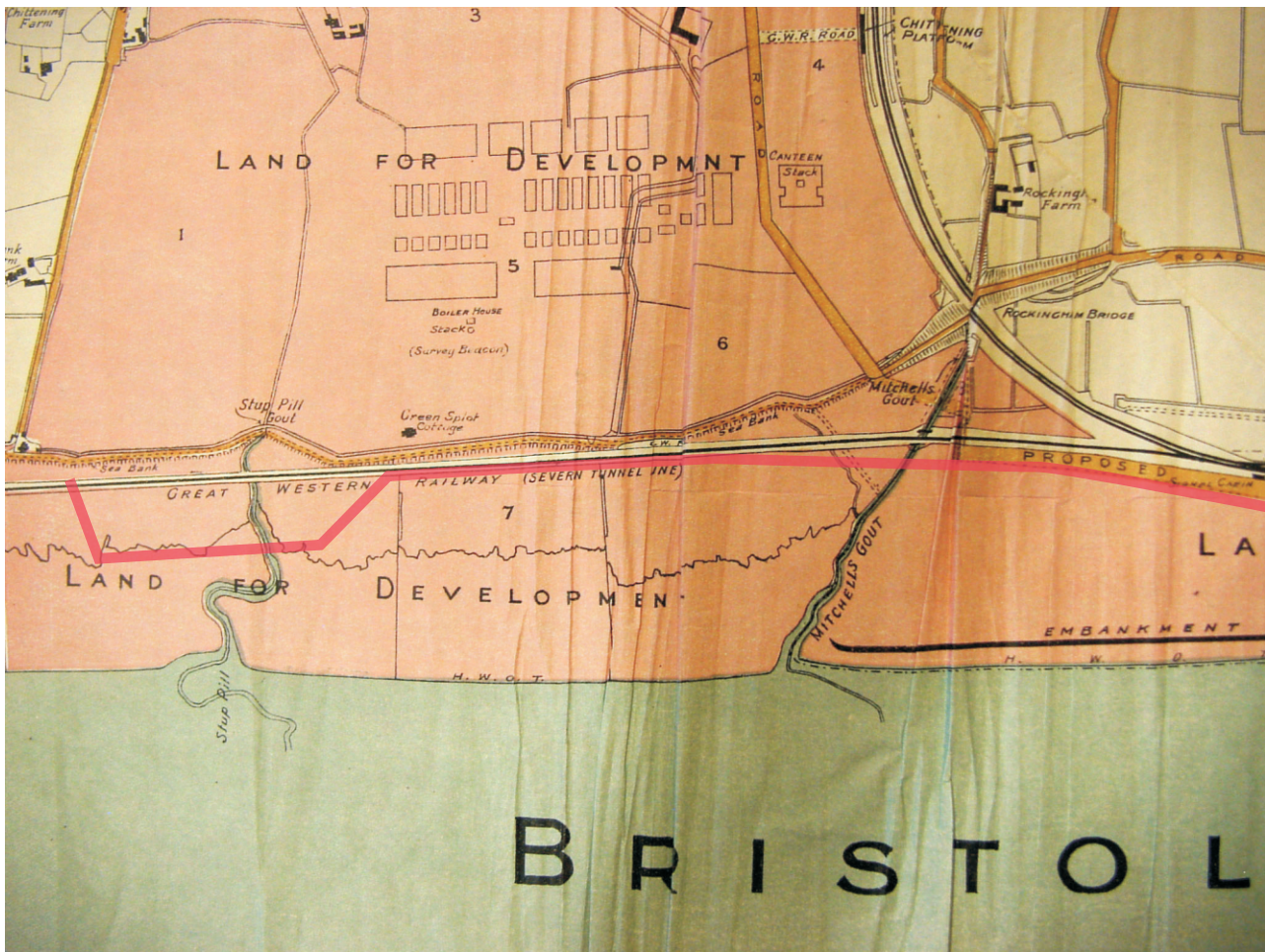
Ordnance Survey 6-inch sheet Gloucestershire 67, published 1889

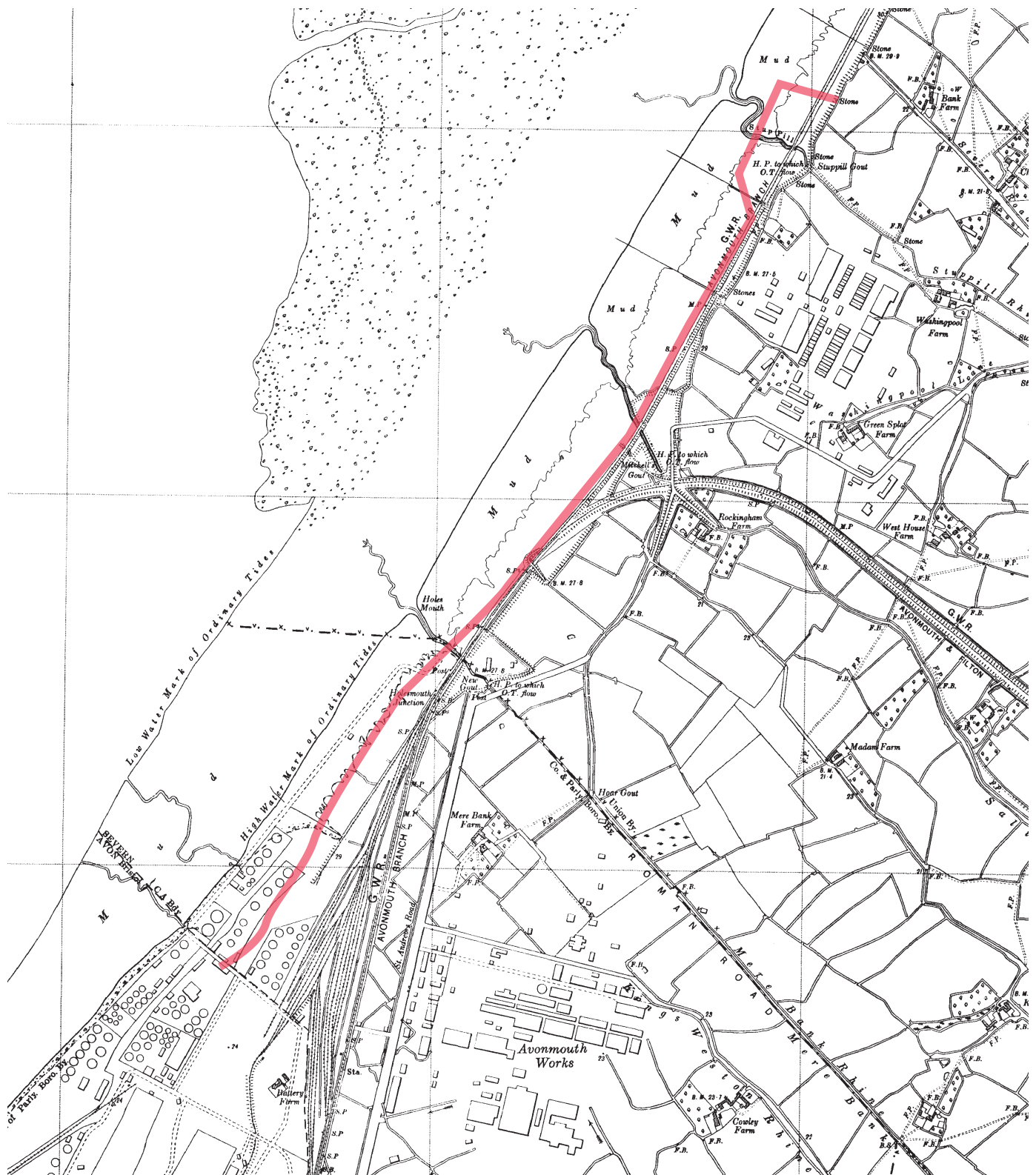


Ordnance Survey 6-inch sheet Gloucestershire 67SW, published 1903

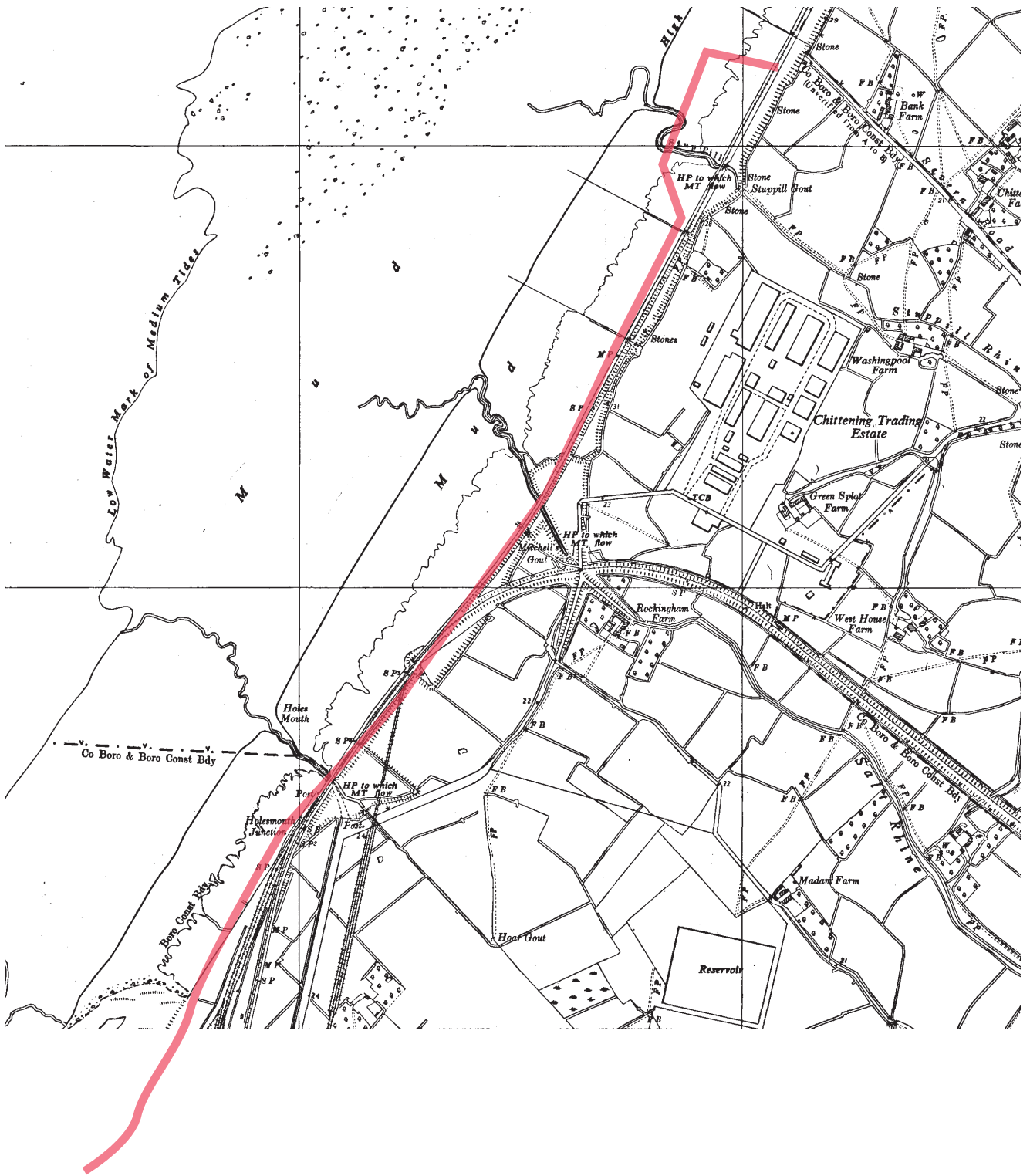


Ordnance Survey 6-inch sheet Gloucestershire 67SW, revision published 1920

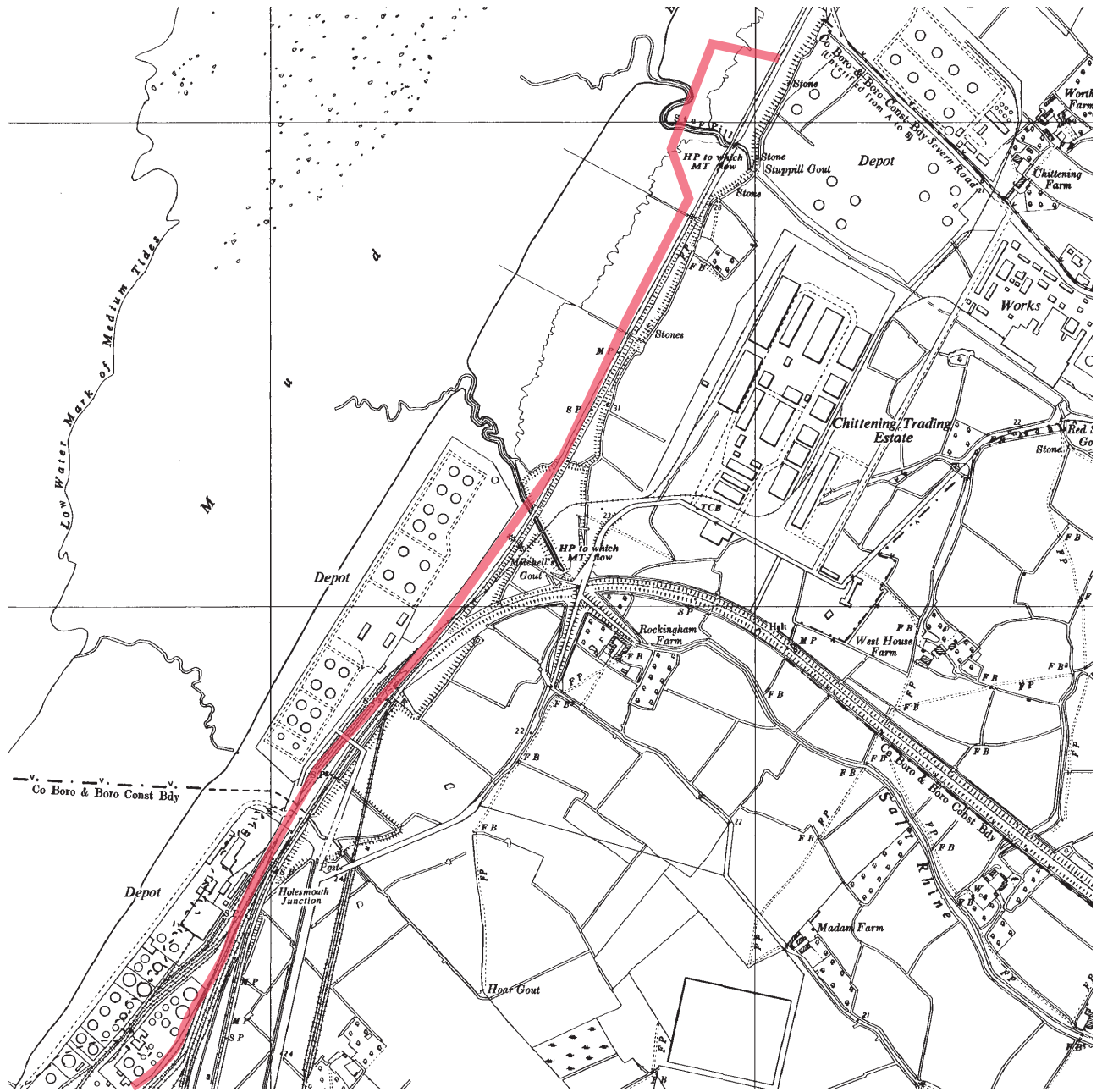




Ordnance Survey 6-inch sheet Gloucestershire 67SW, revision published 1938



Ordnance Survey 6-inch sheet ST58SW, revision published 1955



Ordnance Survey 6-inch sheet ST58SW, revision published 1965

Appendix 2: Summary of heritage assets

| HERITAGE ASSETS WITHIN STUDY AREA | | | | | | | | |
|-----------------------------------|-------------------|---------|----------|-----------|--|---------------|-------------|--------------|
| Site No | HER/NMR Reference | Easting | Northing | Form/Type | Description | Period | Designation | Significance |
| 1 | 1465117 | 353020 | 182300 | Structure | A possible 20th century groyne comprising a row of wooden stakes extending at right angles to the shore. Visible on air photographs. | Modern | None | C |
| 2 | 2168M | 353107 | 182154 | Site of | Site of a building (possibly two adjoining dwellings) were depicted on a map of 1830 and again in 1915. Archaeological deposits relating to this building will almost certainly survive | Post-medieval | None | C |
| 3 | 1465043 | 353210 | 182230 | Site of | A Second World War barrage balloon site is visible on air photographs. This is one of eight barrage balloons used during the war to protect factories and military sites situated around Avonmouth. Site no longer visible. | Modern | None | B |
| 4 | 20027 | 352932 | 181977 | Survey | Evaluation trenches were excavated following a desk-based assessment of the area. Four fence posts and a drain were recorded along with the sequence of clay deposits | Undated | None | D |
| 5 | 1465074 | 353240 | 181910 | Site of | A 20th century oil depot visible on air photographs and located in the north part of the National Filling Factory. Standard camouflage on the roof suggests it was also used during the Second World War. The site has been levelled | Modern | None | B |
| 6 | 2169M | 352897 | 181749 | Site of | Green Splott Cottages. Appear to have been in existence by 1830 and appear on 1915 Ordnance Survey map but were apparently demolished in 1917 to make way for the National Filling Factory No23. | Post-medieval | None | C |
| 7 | 1313833 | 352750 | 182100 | Site of | Survey undertaken of a wreck to the east of Stup Pill identified its form as that of a clipper/yacht or river collier. | Undated | None | C |
| 8 | 22007 | 352450 | 181543 | Site | Human remains were discovered in the inter-tidal zone at Chittingen Warth in 2003. The remains were radiocarbon dated but no further information is known | Not known | None | C |
| 9 | 1465118 | 352540 | 181660 | Structure | A possible 20th century groyne comprising a row of wooden stakes extending at right angles to the shore. Visible on air photographs. | Modern | None | C |

Appendix 2: Summary of heritage assets

| HERITAGE ASSETS WITHIN STUDY AREA | | | | | | | | |
|-----------------------------------|--|---------|----------|------------------|--|-------------|------------------------------|--------------|
| Site No | HER/NMR Reference | Easting | Northing | Form/Type | Description | Period | Designation | Significance |
| 10 | 2750M 22346 21401 21851 22114 21402 22339 21992 22113 20717 | 353050 | 181510 | Site of | National Filling Factory No.23, Chittening. Established by the Ministry of Munitions in 1917 to manufacture the blister agent mustard gas in response to German use of the weapon earlier in the First World War. Nobel's Explosives began work but progress was slow and a strike stopped work in 1918 resulting abandonment of the site and production moving to a factory elsewhere in Avonmouth. The Chittening factory was re-equipped for filling artillery shells and began operation in July 1918, with part of the site given over to the production of a vomiting and lachrymatory agent and later produced mustard gas shells. Production was hazardous with 1213 injuries within the first 5 months. The complex was served by a railway line. The site was arranged on a grid pattern with dirty and clean changing houses, engine shop, repair shop, laundry, boiler house, canteen and other ancillary buildings. A building survey and desk studies have established that at least 11 of the buildings survive. It is not known what happened to the site after the war but most of the buildings were extant for some time afterwards. Numerous photos and plans of the site survive. Disturbance associated with earlier structures has been recorded during archaeological monitoring undertaken on the site. | Modern | None | A/B |
| 11 | 3104M | 353085 | 181518 | Site of | Northern hospital at the National Filling Factory No.23. The northern of two hospitals on the site was built in 1918. It was extant in 1946 but subsequently demolished | Modern | None | B |
| 12 | 1416206 | 353000 | 181500 | Site of | The remains of two Second World War air raid shelters for 50 persons at a fuel depot. | Modern | None | B |
| 13 | 1076967 | 352820 | 181220 | Survey | Two evaluation trenches identified Bronze Age peat deposits | Prehistoric | None | C |
| 14 | 3100M | 352900 | 181150 | Site of | Canteen at National Filling Factory. The building was constructed in 1918 was c. 53m x 43m with a series of northlight roofs. The building was extant in 1946 but subsequently demolished. | Modern | None | B |
| 15 | 2043M | 352700 | 181100 | Enclosure | Enclosure to the east of Smoke Lane (now just north of the railway. Three sides of a square survive with another possible small square enclosure to the west | Undated | None | C |
| 16 | 2091M 2186M | 352550 | 181330 | Structure | Seawall. A long low bank running along the water from 150m SSW of Stup Pill. It is probably remnant sea-walling. | Modern | None | C |
| 17 | 2085M 22364 | 352423 | 180823 | Extant structure | Heavy Anti-aircraft battery 520m east of Holes Mouth. The site comprises four octagonal gunpits around a central command post which was unusual in comprising three separate structures. The magazine was on the north-west side. It is partially sunken and surrounded by an earth bank. The site was operational from Feb 1940 until the end of the war. The battery was equipped with four 3.7 inch static guns, had a GL Mk II radar by June 1942 and was re-equipped with 4.5 inch guns by Jan 1943. The latest documentary reference to the site, dated Jan 1946, suggested that the battery was decommissioned during that year | Modern | Scheduled Monument No. 28885 | A |

Appendix 2: Summary of heritage assets

| HERITAGE ASSETS WITHIN STUDY AREA | | | | | | | | |
|-----------------------------------|-------------------|---------|----------|--------------------|--|---------------------------|-------------|--------------|
| Site No | HER/NMR Reference | Easting | Northing | Form/Type | Description | Period | Designation | Significance |
| 18 | 2173M | 352725 | 180923 | Site of | Rockingham Farm. An 1830 map depicts two buildings in a yard and an attached orchard. By 1915, a range of buildings had evolved although construction of a bridge over the adjacent railway had intruded slightly | Post-medieval | None | C |
| 19 | 2036M | 352800 | 180900 | Enclosure | Moat 7 Enclosure. 1941 coastal battery, which housed two 6-inch naval guns to protect the approaches to the Bristol Channel ports. Displaced Victorian seven-ton rifled muzzle loaded gun barrel, made in 1868. Between the two 1941 gun positions are the remains of the original Victorian battery | Post-medieval Modern | None | B |
| 20 | 2233M | 352750 | 180780 | Extant structure | Remains of a concrete and steel structure, possibly the remains of a searchlight position associated with the Anti-aircraft battery | Modern | None | B |
| 21 | 20227 | 352705 | 180815 | Site | Three enclosures, a medieval ditch and a series of Post-medieval pits were identified during an excavation in 1997. The excavator concluded that the enclosures were used for agriculture rather than settlement. A blue-grey clay layer, assumed to represent Roman period flooding levels, was recorded. A former field boundary was identified. | Medieval Post-medieval | None | C |
| 22 | 1465033 | 352600 | 180760 | Site of | A Second World War barrage balloon site is visible on air photographs. This is one of eight barrage balloons used during the war to protect factories and military sites situated around Avonmouth. Site no longer visible. | Modern | None | B |
| 23 | 20081 | 352330 | 180660 | Documentary | Extant ridge and furrow recorded during a desk-based assessment of land at Avonmouth | Medieval | None | C |
| 24 | 9451 | 352162 | 180573 | Ditch | A substantial ditch, interpreted as land drainage feature, was recorded during an archaeological evaluation undertaken in 1993 | Undated? | None | C |
| 25 | 1465052 | 352000 | 180570 | Site of | Two Second World War air raid shelters are visible on air photographs immediately north of a factory, to which they would have provided shelter for the workers. Demolished by 1976 | Modern | None | B |
| 26 | 1465049 | 351960 | 180600 | Extant structure?? | A possible Second World War observation post or pillbox. The entrance was on the northeast side with a z-shaped trench leading to it. The trench was levelled by 1976 but the observation post was still in situ in 1993. | Modern | None | B |
| 27 | 1465048 | 351900 | 180450 | Site of | A Second World War factory located along the coast was recorded from air photographs. A few large Nissen huts had been demolished by 1969, by 1976 only two warehouse type buildings survived and by 1990 all associated structures had been demolished and replaced by a modern warehouse. | Modern | None | B |
| 28 | 1465029 | 351780 | 180310 | Site of | A Second World War barrage balloon site. This is one of eight barrage balloons used during the war to protect factories and military sites situated around Avonmouth. Site no longer visible. | Modern | None | B |

Appendix 2: Summary of heritage assets

| HERITAGE ASSETS WITHIN STUDY AREA | | | | | | | | |
|-----------------------------------|-------------------|---------|----------|--------------|--|---------------|-------------|--------------|
| Site No | HER/NMR Reference | Easting | Northing | Form/Type | Description | Period | Designation | Significance |
| 29 | 3233M | 352418 | 180225 | Site of | H.M. Hembury. In Dec 1916, Nobel's Explosives Company was invited to establish a factory here. Work began to create a plant for the manufacture of propellant nitrocellulose powders. Only part of the site was completed before it was abandoned in 1917. The site was derelict before the Second World War and is now completely built over. | Modern | None | B |
| 30 | 2174M | 352133 | 180069 | Cartographic | Mere Bank Farm. The site was recorded on an 1830 map (although not named). In 1915 a house and a series of outbuildings with a yard was recorded there. The site was waste ground in 1991. Archaeological deposits almost certainly survive. | Post-medieval | None | C |
| 31 | 24644 | 351692 | 179805 | Documentary | Post-medieval agricultural and wharf land and an early sea defence was identified by a desk-based assessment undertaken in 2008 | Post-medieval | None | C |
| 32 | - | 351532 | 179953 | Cartographic | A rifle range with butts and targets is first shown on the Ordnance Survey map of 1889 | Post-medieval | None | C/D |

Appendix 2: Summary of heritage assets

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