

# *Archaeology Wales*

## **Llanfrechfra Grange Hospital, Cwmbran, Torfaen**

Archaeological Watching Brief



By  
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Report No. 1795


# Archaeology Wales

## Llanfrechfra Grange Hospital, Cwmbran, Torfaen

### Archaeological Watching Brief

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Report No. 1795

May 2019

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## Summary

*This report results from an archaeological watching brief undertaken by Archaeology Wales Ltd for Alun Griffiths on behalf of their client Dŵr Cymru Welsh Water associated with the installation of a new sewer at Llanfrechfa Grange Hospital, Cwmbran, NP44 8YN. The new sewer route is approximately 1.3km long, running from the Hospital at NGR ST 30949 94678 to an existing combined sewer at NGR ST 30897 93630. The associated Planning Application No. is 12/P/00348.*

*The development lies partially within the grounds of Llanfrechfa Grange estate, which was established in the mid 19<sup>th</sup> century. There is therefore potential for remains relating to post-medieval estate and agricultural activity to be present, along with a general prehistoric archaeological potential in the area.*

*The works revealed a sequence of natural soils overlaid with general agricultural soils and areas of modern made-ground and dumped deposits and modern services. Only one feature of potential archaeological interest was identified, a circular fire pit containing burnt charcoal and stone, underlying the topsoil, but otherwise containing no datable artefacts or associated archaeological features. All finds retrieved were either modern in nature or typical of late post-medieval and modern agricultural soils. The results indicate a low level of archaeological activity in the immediate vicinity of the development areas.*

*All work was undertaken to the Standards and Guidance for an Archaeological Watching Brief as set by the Chartered Institute for Archaeologists (2014).*

## Crynodeb

*Mae'r adroddiad hwn yn ganlyniad i friff gwylio archeolegol a gynhaliwyd gan Archaeology Cymru Cyf ar gyfer Alun Griffiths ar ran ei gleient Dŵr Cymru sy'n gysylltiedig â gosod ffos garthion newydd yn Ysbyty Llanfrechfa Grange, Cwmbran, NP44 8YN. Mae llwybr y ffos garthion newydd oddeutu 1.3km o hyd, ac mae'n rhedeg o'r Ysbyty yn NGR ST 30949 94678 i ffos garthion sy'n bodoli eisoes yn NGR ST 30897 93630. Y Rhif Cais Cynllunio cysylltiedig yw 12/P/00348.*

*Mae'r datblygiad yn gorwedd yn rhannol o fewn tir ystâd Llanfrechfa Grange, a sefydlwyd yng nghanol y 19eg ganrif. Felly, mae posibilrwydd bod adfeilion sy'n gysylltiedig â'r ystâd ôl-ganoloesol a gweithgaredd amaethyddol yn bresennol, ynghyd â photensial archeolegol cynhanesyddol cyffredinol yn yr ardal.*

*Datgelodd y gwaith gyfres o briddoedd naturiol wedi'u gorchuddio â phriddoedd amaethyddol cyffredinol ac ardaloedd o waddodion modern o'r tir ac wedi'u taflu a gwasanaethau modern. Dim ond un nodwedd o ddiddordeb archeolegol posibl a nodwyd, sef pydew tân crwn yn cynnwys siarcol wedi'i losgi a cherrig, o dan y pridd uchaf, ond, fel arall, nid oedd unrhyw arteffactau dyddiadwy neu nodweddion archeolegol cysylltiedig. Roedd yr holl nodweddion a ganfuwyd naill ai'n fodern o ran natur neu roeddent yn nodweddiadol o briddoedd*

*amaethyddol ôl-ganoloesol a modern. Roedd y canlyniadau'n dangos lefel isel o weithgaredd archeolegol yng nghyffiniau agos yr ardaloedd datblygu.*

*Gwnaed yr holl waith yn unol â'r Safonau a'r Canllawiau ar gyfer Briff Gwyllo Archeolegol fel y'u lluniwyd gan Sefydliad Siartredig yr Archeolegwyr (2014).*

## **1. Introduction**

### **Location and scope of work**

Archaeology Wales Ltd (AW) was commissioned by Alun Griffiths Contractors Ltd on behalf of their client Dŵr Cymru Welsh Water (DCWW) to undertake an archaeological watching brief during groundworks associated with the installation of a new sewer for the Llanfrechfa Grange Hospital, Cwmbran, NP44 8YN. The sewer route is approximately 1.3km long, beginning at the hospital at NGR ST 30949 94678, and runs to an existing combined sewer at NGR ST 30897 93630. The associated Planning Application No. is 12/P/00348.

The development lies at least partially within the grounds of Llanfrechfa Grange estate, which was established in the mid 19<sup>th</sup> century. There is therefore potential for remains relating to post-medieval settlement and agricultural activity to be present. Archaeological evaluation ahead of the hospital redevelopment work in 2015 revealed post-medieval features relating to the Grange, as well as isolated prehistoric finds.

Consequently, Glamorgan-Gwent Archaeological Trust – Curatorial Division (GGAT-CD) in its capacity as archaeological advisors to the local planning authority (Torfaen County Borough Council), recommended that an archaeological watching brief be undertaken during groundworks to mitigate the potential impact on the archaeological resource.

Prior to works commencing an approved Written Scheme of Investigation (WSI) was produced by AW in accordance with the *Standard and Guidance for Archaeological Watching Briefs* (ClfA 2014) and was designed to provide an approved methodology of archaeological work to be implemented during the construction works (Appendix II).

The watching brief took place from 10 September 2018 – 4 March 2019 under the supervision of Daniel Moore, Jennifer Muller, and James Evans. The project was managed by Philip Poucher of Archaeology Wales. The AW project number for the work is 2615 and the site code is LGH/18/WB and LGH/19/WB. The project details are summarised on the Archive Cover Sheet (Appendix III).

### **Topography and Geology**

The development area is a 1.3km route which runs from the grounds of Llanfrechfa Grange Hospital roughly south to an existing combined sewer by the A4042. The route skirts the eastern edge of the community of Llanyravon, a suburb of Cwmbran. Central Cwmbran lies approximately 2km to the north-west and Newport lies 7km to the south. It runs roughly level, at 85m OD, before crossing Caerleon Road and dropping down into the Afon Lwyd valley to the south-west, finishing at 35m OD.

The route runs principally through farmland of mixed arable and pasture land. From its northern end it starts in the hospital grounds adjacent to the main access road and follows the road east before turning south following an established footpath through the hospital grounds, running parallel with Caerleon Road. It skirts a modern housing development,

Mitchell Close, before exiting the hospital grounds in the south east corner. It then runs south-east, parallel to Caerleon Road, through two fields, then turns south-west, crossing under the road and across more farmland, bounding the residential developments of Bryn Rhedyn and Highfield Close, and ending at the A4042.

The underlying bedrock geology of the area is of the Raglan Mudstone Formation, composed of interbedded mudstone and sandstone. No superficial deposits are recorded on the northern part of the route. Where the route runs along Caerleon Road there are some superficial Devensian glaciofluvial deposits of sand and gravel, and at the very south of the route, where it meets Turnpike Road, there are alluvial deposits of clay, silt, sand and gravel (BGS 2018).

## **Archaeological and Historical Background**

The planned development works were undertaken within the grounds of Llanfrechfa Grange Hospital, formally part of the Llanfrechfa Grange estate, and neighbouring farmland. Llanfrechfa Grange is a post-medieval estate centred around Llanfrechfa Grange House, built in 1848 by Charles Prothero. The House is now a Grade II listed (Ref. 25494) building in the centre of the hospital grounds, listed as a good example of early 19th century Elizabethan revival architecture. The estate was bought by the Mitchell family in 1860, who enlarged the House including adding a chapel. After the death of Francis Mitchell in 1915 the house moved out of private ownership towards institutional use, including being used as a maternity hospital during WWII, and in 1953 it became a mental hospital. Aside from the House the only estate building remaining is the Lodge, which stood at the former south-west entrance. Any other original estate and farm buildings have been demolished. In the 1960s the hospital was expanded considerably with new residential and associated buildings.

Beyond the hospital grounds to the south the planned development runs through areas principally characterised by post-medieval farmland, either related to Llanfrechfa Grange or to neighbouring estates. The route crosses no other known archaeological sites.

To the north of the hospital there is evidence of post-medieval industrial activity, with a coal mine (PRN 00631g) and mill (PRN 00660g). Archaeological evaluation of land immediately to the north of the hospital in advance of building work in 2015 uncovered evidence of post-medieval activity related to Llanfrechfa Grange estate, as well as occasional prehistoric finds.

## **2. Methodology**

A watching brief complying with the Chartered Institute for Archaeologists (CIfA) *Standard and Guidance for Archaeological Watching Briefs* (2014) was undertaken during all intrusive ground work on the site that had the potential to reveal deposits of archaeological interest.

The watching brief was undertaken to allow the preservation by record of any archaeological deposits, the presence and nature of which could not be in advance of works. The watching brief also provides an opportunity, if needed, for the watching archaeologist to signal to all



interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard (CIfA, 2014).

The work occurred in two different phases. The first phase took place 10-13 September 2018 when nine trial trenches were dug along the route of the new sewer line in order to test the soil and search for service pipes/cables using a 2-tonne JCB with a toothless bucket. The second phase took place between 9 January and 4 March 2019, comprising the main excavation work for the installation of the sewer. The archaeological watching brief was maintained on the initial stripping of the topsoil and subsoil down to undisturbed natural levels covering the route of the sewer pipeline. For ease of reference the description of the works have been divided up on a field by field basis, starting at Field 1, and ending in Field 7. The groundwork commenced at the southern end of the route, therefore Field 1 lies at the southern end, with Field 7 at the northern end. The watching brief was maintained throughout the majority of the groundwork, unfortunately however groundworks undertaken in both Field 2 and for the last 160m of the route were undertaken without the presence of an archaeologist.

The remaining works were monitored by a suitably trained archaeologist. Sections and plans of the excavation were photographed using a 12MP digital camera. All the deposits encountered were recorded by means of a continuous context numbering system and recorded on pro-forma context sheets. All features and deposits are described in accordance with CIfA conventions. A register of all contexts and photographs was also made.

### **3. Watching Brief Results**

Because both the first and second phases of the work overlapped on the same route, the results of the trial trenches and the subsequent stripping have been combined to form a cohesive report. The results are set out by each field, starting with the field furthest from Llanfrechfa Hospital.

#### **Field 1 (Figure 3, Plates 1 – 7)**

Field 1 lay immediately next to the A4042 and contained Phase 1 trial trenches 5 – 9 and 1a. Trenches 5 – 9 were excavated 12 and 14 September 2018. From these trial trenches it was obvious that much of the field had no regular system of deposits due to previous modern activity, resulting in significant deposits of modern made-up ground overlying natural layers.

**Trench 5** was dug into the bank up to the A4042 using a 2-tonne machine with a toothless bucket. The trench was orientated east-west, and was 2.8m long by 2.9m deep. The natural deposit (030) was a friable, mid-brown pink clay, of which 0.2m was visible at the base of the trench. Overlying this was firm, mid-pink red clay silt (029) with very frequent sub-angular

stones of various sizes. It was 2.05m thick, and most likely part of the man-made bank from the building of the A4042. The subsoil overlying this was a loose, mid-orange brown clay silt (028) with poorly sorted, sub-rounded stones and rooting. It was 0.6m thick. The topsoil was a loose, mid-orange brown silt (027) that was 0.05m thick.

**Trench 6** was dug into the south-west edge of the field near the bank to the A4042, orientated north-east/south-west. It was 3.3m long and 1.56m deep. The basal natural deposit was a firm, mid-red brown silt clay (036) with frequent stones and gravels smaller than 0.05m. At least 0.23m was visible from the base of the trench. Above this was a firm, mid-yellow brown silt clay (035) with no inclusions that was 0.5m thick. Phase 2 excavations revealed modern material (plastic tape) within this deposit. Overlying this was a black tarmac surface (034) 0.23m thick. Directly over the tarmac was a loose, mid-pink brown sand clay (033) with frequent, poorly sorted sub-angular and sub-rounded stones. This deposit was 0.15m thick. The overlying subsoil was a loose, mid-grey brown clay sand (032) with frequent, poorly sorted, sub-rounded stones and boulders. This deposit, 0.3m thick, contained frequent modern waste, such as plastic, planks of wood, and discarded metal. The topsoil was a loose, dark grey brown clay silt about 0.15m deep. A 0.6m wide cut [037] into the basal layer (036) revealed a gas pipe {072} running north-west/south-east at the north-eastern end of the trench. This cut was filled by (038), a loose, mid-red brown sand.

Trenches 7-9 were dug to find the water main, though none were successful. **Trench 7** was dug into the south-centre part of the field. At 1.56m deep a deposit of hard, light blue grey compacted slag (041) was encountered. It measured in excess of the trench, at least 2m long and 1.5m wide. Because the machine could not break through it the trench was abandoned at this point. Above this deposit was the subsoil (040), a loose, mid-orange brown sand clay with frequent stones and gravel. It was 0.74m thick, and contained frequent modern waste, such as plastic and bricks. The topsoil was a loose, mid-orange brown silt (039) with no inclusions except for rooting from the grass. It was 0.04m deep. **Trench 8** was dug into the southern edge of the field, and measured 2m long by 0.6m wide. This trench was abandoned once it reached a depth of 1.2m. At its base was a loose, mid-brown grey sand (045) that was 0.3m thick. Overlying this was a loose, mid-grey black deposit of silt clay (044) which had a strong smell of oil, and contained modern waste such as a wood plank and a food wrapper. (044) was 0.3m thick. The subsoil was a loose, mid-orange brown sand clay (043) with frequent rocks and gravels. It was 0.55m thick.

**Trench 9** was located at the eastern-most point of Field 1. The trench, orientated north-east/south-west, was dug to a total depth of 1.64m, and was 0.6m wide by 2.1m long. The basal natural deposit was a firm, mid-red brown clay (052) with no inclusions and 0.5m thick. On top of this was a firm, mid-brown orange clay (051) with no inclusions and 0.3m thick. Overlying (051) was a firm, mid-orange grey clay (050) with no inclusions and 0.3m thick. Overlying this was a firm, mid-brown grey silt clay (049) with no inclusions and 0.26m thick. These deposits all appeared to be natural in origin. Above (049) was a firm, mid-brown red sand clay (048) with no inclusions and 0.08m thick, potentially also representing a natural deposit. The overlying subsoil was a loose, mid-grey brown silt (047) with no inclusions and 0.1m thick. The topsoil was a loose, dark grey brown silt (046) also 0.1m deep.

During the Phase 2 works an 8m wide and approximately 80m long swathe, orientated north-east/south-west, was stripped of its topsoil across Field 1 on 9 January 2019. In the centre of this strip, **Trench 1a** was dug to locate the water main. The trench was approximately 4.5m long, 2.3m wide and 2.4m deep. The basal natural deposit was a firm, mid-yellow brown clay (057) with frequent, sub-angular stones. This deposit in the trench was 0.45m thick. Cut [059] into this was the water main {060} at 2.4m deep. This was filled with a friable to loose, mid-orange brown clay with gravels and stone that measured approximately 0.7m long, 0.3m wide, and 0.77m deep. Overlying (057) was (056), a friable-loose, mid-grey black clay possibly mixed with soot. It contained very occasional sub-angular stones and was 0.2m thick. Above this was a friable, mid-grey brown clay (055), 0.11m thick, with occasional sub-angular stones approximately 0.05m in size. Above this was the subsoil, a friable, mid-orange brown sand clay (054)(same as 040) with frequent sub-rounded and sub-angular stones, about 0.03-0.01m in size. There was also frequent modern waste in this level, including bricks, tile, metal pipes and a tyre. The topsoil was a friable, mid-orange brown clay (053).

### **Field 2 (Figure 3 & 4, Plate 8)**

The route through Field 2 ran up a steep gradient, the topography of the field therefore making it unlikely that archaeological features, deposits or finds would be present. As a result a large section of Field 2 was stripped without an archaeologist present. However, once topsoil had been removed the stripped area was examined by an archaeologist. The area stripped was approximately 13m-wide and over 60m long. The topsoil stripped was a loose, mid-orange brown silt loam with sub-rounded stones of various sizes (071). The deposit was approximately 0.3m deep. The exposed natural subsoil comprised a mid yellow-brown clay sand with frequent sub-rounded stones of various sizes.

### **Field 3 (Figure 4 & 5, Plate 9)**

Areas of Field 3 were initially stripped without an archaeologist present, however, subsequent work including the excavation (Trench 3a) for the sewer pipe was watched and recorded. **Trench 3a** was orientated north-east/south-west, and measured 1.6m wide and 1.63m deep. The natural basal deposit was a loose, mid-red brown clay sand (064) with very frequent sub-angular stones. It was 0.8m thick within the trench. Overlying this was a further natural deposit, consisting of a loose, mid-brown orange clay sand (063) with very frequent cobbles, gravels and stones of varying sizes. This was 0.4m thick. The subsoil, 0.37m thick, was a loose, mid-red brown clay sand (062) with frequent rounded and sub-rounded stones of various sizes. The topsoil was a friable, mid-orange brown clay silt (061) and was 0.22m deep.

### **Field 4 (Figures 5 & 6, Plates 10 – 14)**

Field 4 contained Phase 1 Trench 4, dug on 11 September 2018, and was then stripped during the Phase 2 works on 14-15 January 2019. **Trench 4** was located in the northwest section of

Field 4 along the hedgerow bordering the B4236. It was orientated north-east/south-west and measured 3.3m long, 0.5m wide and 1.8m deep. The natural basal deposit was characterised by loose, mid-yellow orange clay sand (023) with frequent gravels and boulders of varying sizes. This had a thickness of 0.75m within the trench. Overlying this was a firm, dark orange red clay (022), which also appeared to be natural in origin, 0.9m thick, with occasional sub-angular and sub-rounded stones smaller than 0.07m in size. Cut into (022) was a gas pipe {026} about 0.6m from the surface. The cut [024] was not fully exposed as this part of the trench was only excavated to the top of the pipe. The fill of the cut (025) was firm, dark orange red clay with occasional sub-angular and sub-rounded stones of varying sizes. This was likely re-deposited from what was dug out to insert the pipe. Overlying (022) was the topsoil, a loose, mid-orange brown sand silt (020) with no inclusions and 0.2m deep.

As the topsoil (020) was stripped along the route a circular pit was exposed, located 20.5m north-west of the gate into this field from the B4236, and about 4.5m north-east of the hedge bordering the road. This was cut [067] into the subsoil (022), and measured approximately 1m in diameter. It ranged from 0.07m to 0.21m deep. The primary fill (066) of the pit was made up of a mixture of sub-rounded stones, from 0.15m – 0.2m in size, which were blackened by contact with fire, and burnt wood. The secondary fill (065) was a friable, mid-orange brown silt clay with small, sub-rounded stones and small pieces of sandstone. This looked very similar to the topsoil (020) and could have formed slowly over time once the pit had been abandoned. Unfortunately, there were no finds associated with the pit to date the feature. However, soil and wood samples were collected.

#### **Field 5 (Figure 5 & 7, Plate 15)**

Field 5 contained no Phase 1 test trenches, and the topsoil (068) was stripped in an approximate 8m wide section that ran the length of the field north-west/south-east. This reached a depth of 0.3m and was characterised by a loose, mid-orange brown clay silt with some gravel and small stones. The occasional fragment of modern pottery was retrieved from this deposit. The removal of the topsoil revealed an undisturbed natural subsoil of mid-orange brown sand silt with occasional small, sub-rounded stones.

#### **Field 6 (Figure 7, Plates 16 – 19)**

Field 6 contained Phase 1 Trenches 2 and 3, which were excavated on 10 September 2018. The field was stripped during the Phase 2 works in February 2019. Trench 2 was located in the north-east corner of the excavation area, just to the east of the furthest east house on Mitchell Close, and Trench 3 was located west of that behind the furthest west house on Mitchell Close. **Trench 2** was orientated north-east/south-west. It measured 2m long, 0.5m wide and went to a total depth of 2.24m. The length was later extended to a total of 10m in order to locate a gas pipe. The basal natural deposit was a firm, mid-yellow orange sand clay (007) with frequent gravels, cobbles and boulders of varying sizes. It had a thickness of 1.09m. Above this was a natural firm, mid-red orange clay (006) which contained a mix of gravels and

cobbles and was 0.91m thick. Cut [017] into this deposit was a gas pipe {019} (same as {016}), approximately 0.12m in diameter, running north-south. It appeared at a depth of 0.54m from the surface at the south-western end of the trench. The fill of the cut was a firm, mid-red orange clay (018) with a mix of gravels and cobbles of varying sizes, very similar to the deposit (006) into which it was cut, and was likely redeposited. Overlying (006) was the subsoil, a loose, mid-orange brown sand silt (005) with occasional small, sub-rounded stones. This deposit was 0.18m thick. The topsoil was quite thin here at 0.06m deep, and comprised of loose, mid-grey brown sand silt (004). **Trench 3** was orientated north-west/south-east, and measured 2m long, 0.5m wide and 2m deep. The natural basal deposit was a friable, mid-red orange sand clay (010) with yellow deposits and frequent sub-rounded stones, gravels and cobbles of various sizes. This deposit had a thickness of 1.73m. A land drain {013}, approximately 0.08m in diameter, was cut into (010), and was orientated north-west/south-east. The cut [011] was at a depth of 0.76m from the surface, and was filled with firm, mid-brown orange clay with very occasional rounded stones. Also cut [014] into (010) was the gas pipe {016} (same as {019}), approximately 0.6m from the surface and running east-west. It was filled with a firm, mid-brown orange clay (015) with very occasional sub-rounded stones. Overlying (010) was the subsoil, a loose, mid-orange brown sand silt (009) with occasional cobbles and gravels. This was 0.22m thick. The topsoil was comprised of a loose, mid-grey brown silt soil (004).

This sequence of layered deposits remained consistent throughout the majority of the stripped area. Towards the northern end of Field 6 was a large deposit of modern building waste (069) just below the topsoil (004), and in places partly intermingled with the topsoil. This deposit included brick, wood, glass, slate, metal and concrete, and was spread over an area up to 20m long, up to 0.4m thick.

### **Field 7 (Figure 7 & 8, Plates 21 – 22)**

The footpath running from Mitchell Close to Llanfrechfa Grange serves as the boundary between Field 6 and Field 7. During Phase 1 **Trench 1** was excavated in this northern part of the field. The trench measured 2m long, by 0.5m wide, and reached a depth of 2.3m. The natural basal deposit (003) comprised a friable, mid-brown orange silty-clay with frequent sub-rounded stones of varying sizes. This deposit was up to 2.2m thick. Overlying this was a thin (0.08m thick) subsoil (002) of loose mid-orange brown silty-clay with occasional sub-rounded stones. The topsoil (001) in this area was also thin, at 0.05m deep, and consisted loose mid grey brown clay silt.

During Phase 2 only the groundworks at the southern-most end of Field 7 was observed by an archaeologist. The upper deposit in this area comprised a relatively thick deposit of made-up ground, which was at least 0.45m deep. This deposit was a soft, mid-orange/red brown silty clay mixed with modern building rubble and continued for at least 130m (070) across the southern end of the field. This presumably represents a continuation of deposit (069) recorded within Field 6. Below this deposit undisturbed natural subsoil (002) was revealed throughout the stripped area.

## **4. Finds**

No finds of archaeological significance were recorded; all finds, located in the topsoil, were readily datable to the 19<sup>th</sup> and 20<sup>th</sup> century and comprised small fragments of pottery and broken glass typical of ploughsoil deposits, along with modern building rubble, and were therefore discarded on site.

## **5. Conclusion**

An archaeological watching brief was undertaken September 2018 and March 2019 during groundworks associated with the installation of a new sewer for the Llanfrechfa Grange Hospital, Cwmbran, a route of approximately 1.3km long. An archaeological watching brief on the groundwork was recommended by Glamorgan-Gwent Archaeological Trust, in their capacity as archaeological advisors to the local planning authority, in response to the planning application 12/P/00348.

The route lay partially within the grounds of the 19<sup>th</sup> and 20<sup>th</sup> century Llanfrechfa Grange estate, with the potential for further estate elements, post-medieval activity and prehistoric artefacts to be present in the area. The results of the watching brief however indicated low level activity in the immediate vicinity of the excavated area. Only one feature of potential archaeological interest was noted. A pit [067] was uncovered, measuring 1m in diameter, 0.2m deep, below the topsoil and cut into the underlying subsoil. The infilling material suggest the pit was used as a firepit, although it contained no dateable artefacts, and no associated features were revealed.

Throughout much of the route a sequence of natural soils, comprising largely of yellow to red sandy-clays with varying frequencies of stone inclusions, was uncovered, overlaid with natural subsoils and ploughsoils. Large areas of modern made-ground and dumped deposits were also noted, likely associated with nearby road and residential developments, and a number of modern services were also encountered. No finds of archaeological significance were recorded, all finds, located in the topsoil, were datable to the 19<sup>th</sup> and 20<sup>th</sup> century and typical of relatively recent ploughsoil assemblages.

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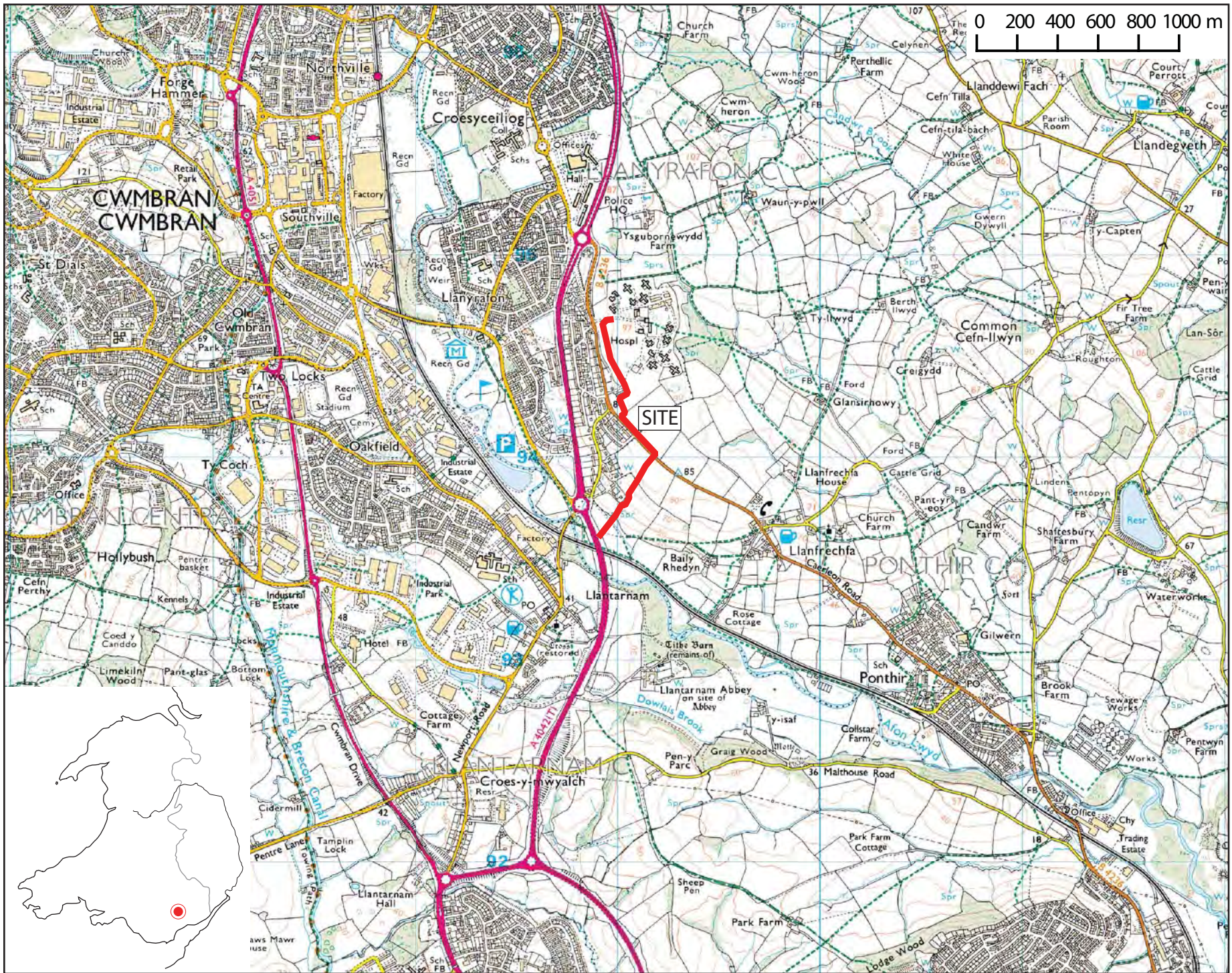


Figure 1: Location map, 1:25,000 @ A4

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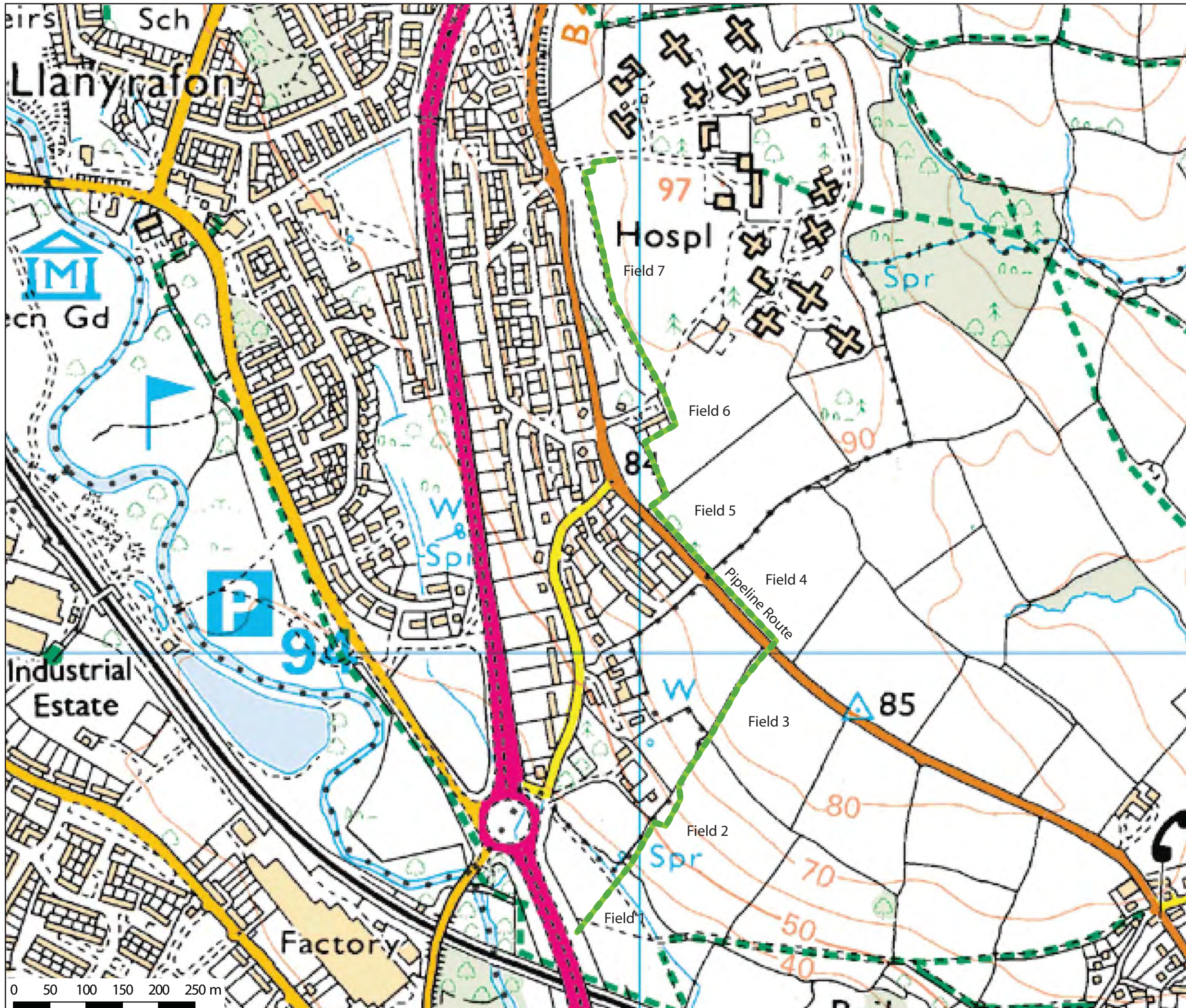
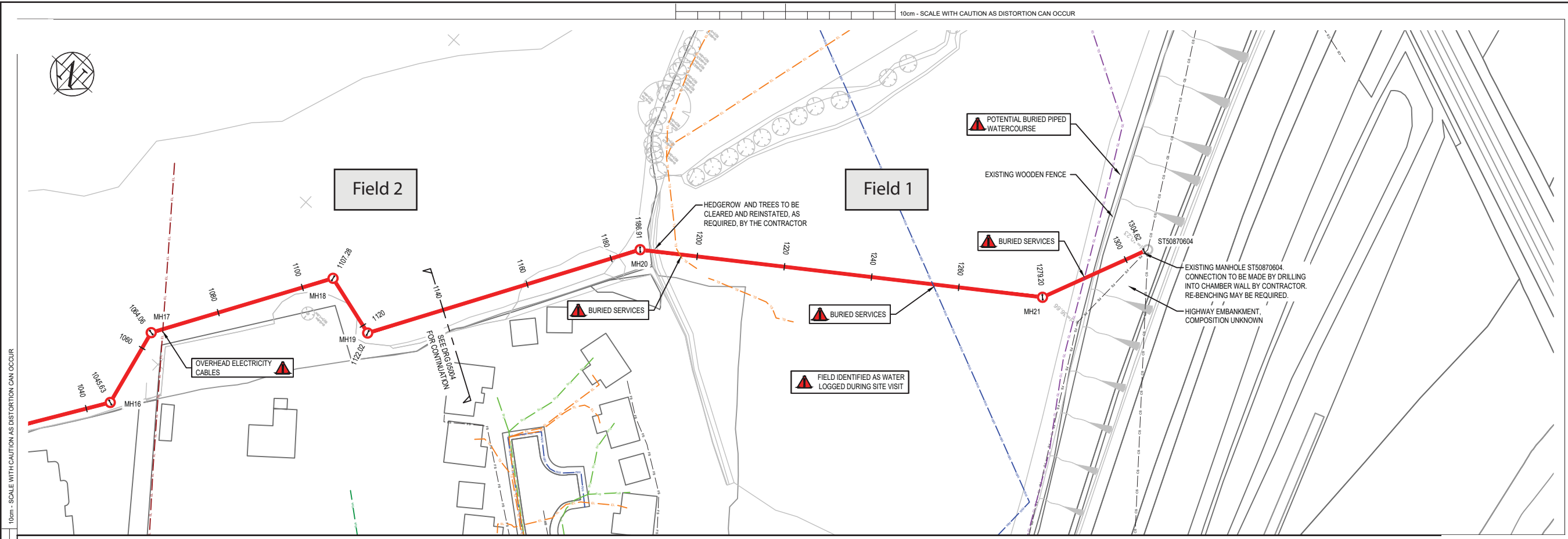


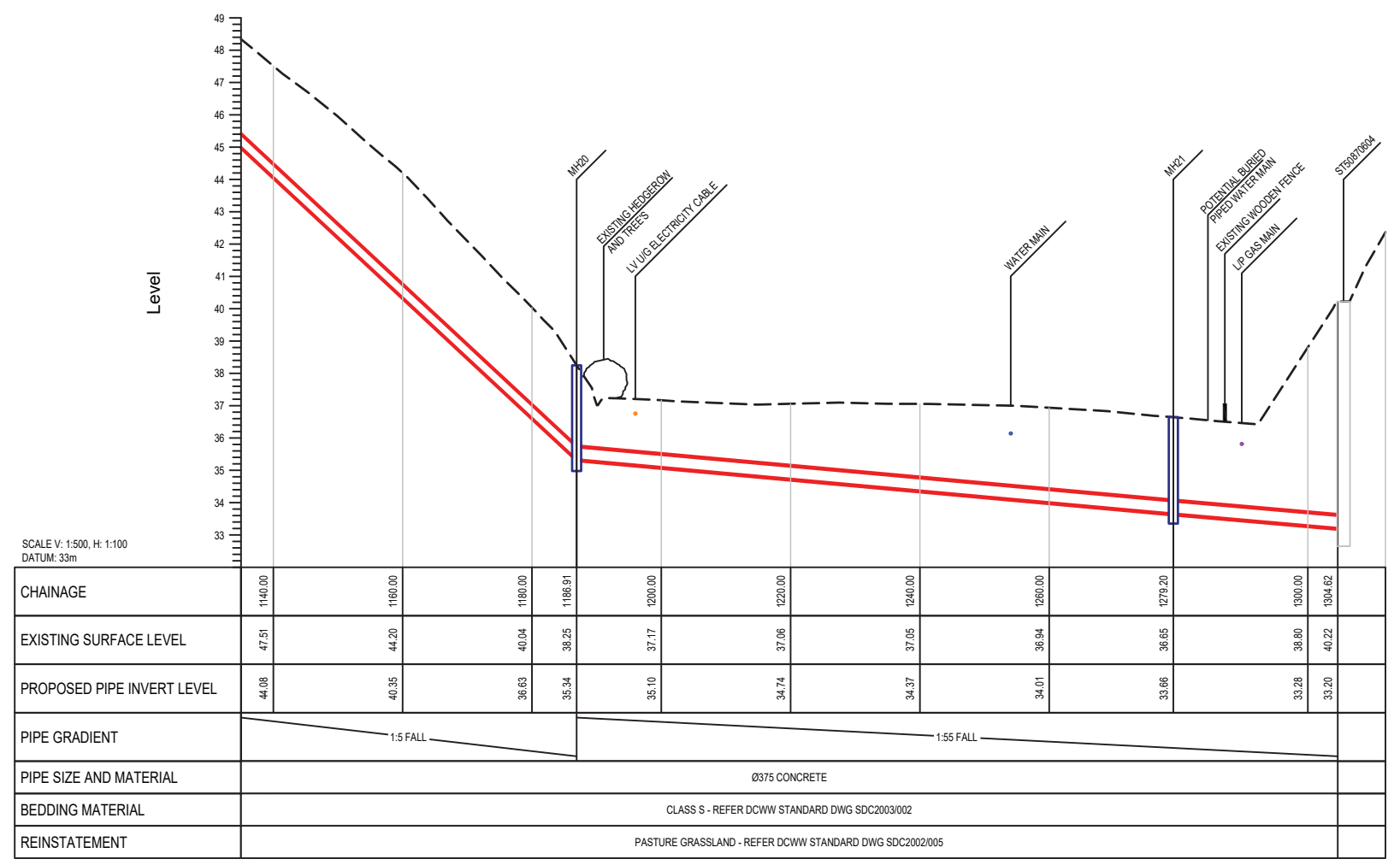
Figure 2: General route and location map. Labeled with field number identifiers used in the main report.

1:5000 @ A3

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PLAN  
SCALE 1:500



LONGITUDINAL SECTION - CH 1140 TO END

Figure 3: Detail of the sewer pipe route monitored as part of the archaeological watching brief. Original plan and section provided by Dwr Cymru/SWECO, drawing no.05005, rev.P1, created 27/7/18.

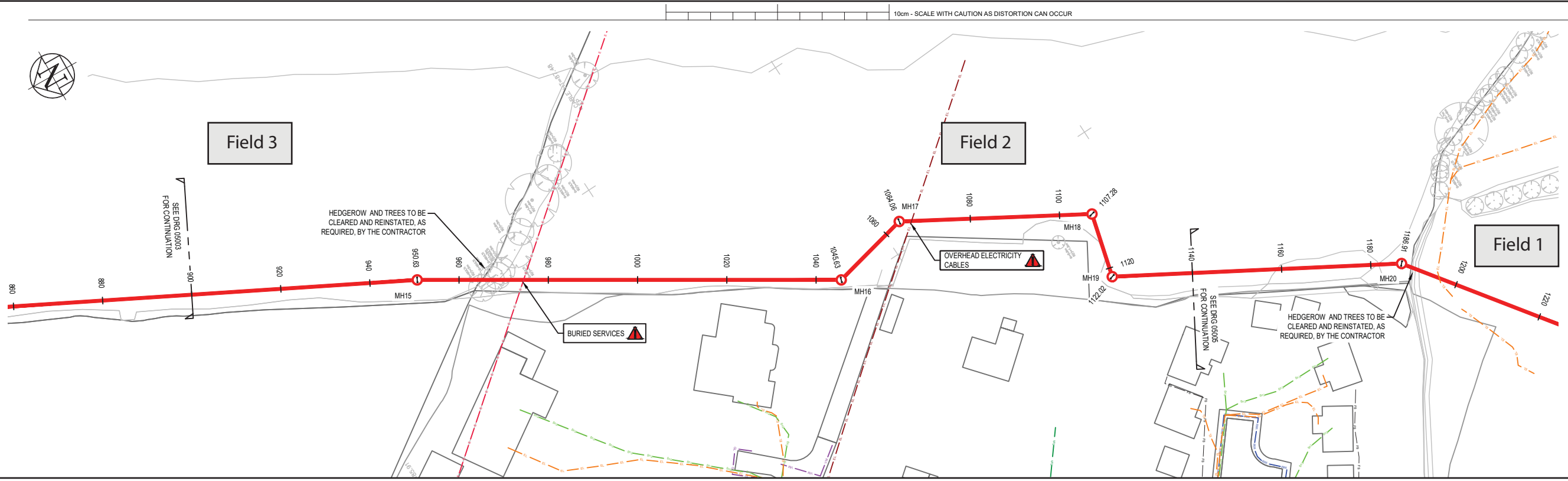
Annotated by AW, not reproduced to original scale.

Plan scale 1:1000 @ A3

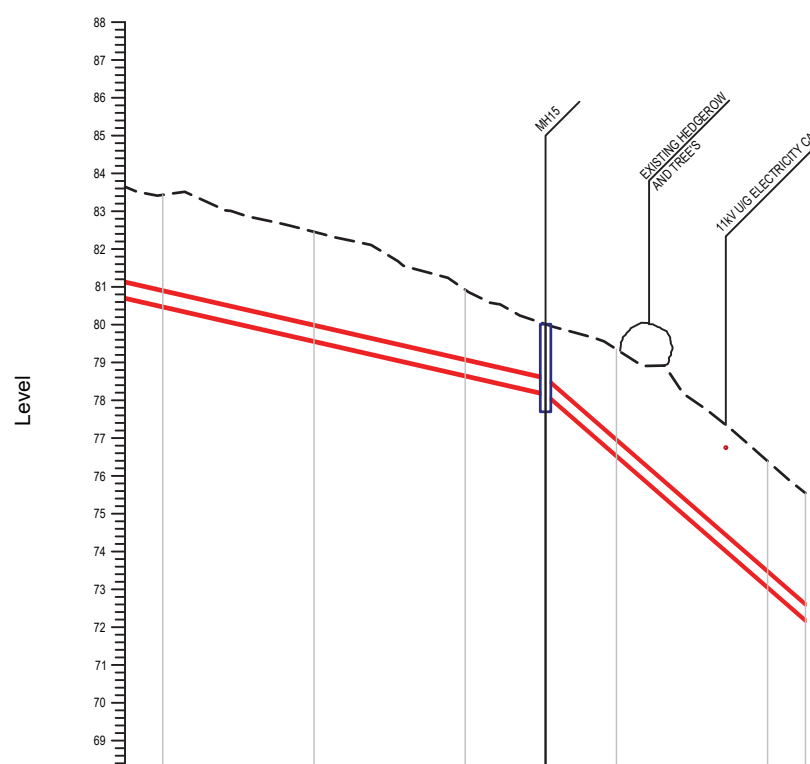
Section scale vertical 1:1000 @ A3  
Section scale horizontal 1:200 @ A3

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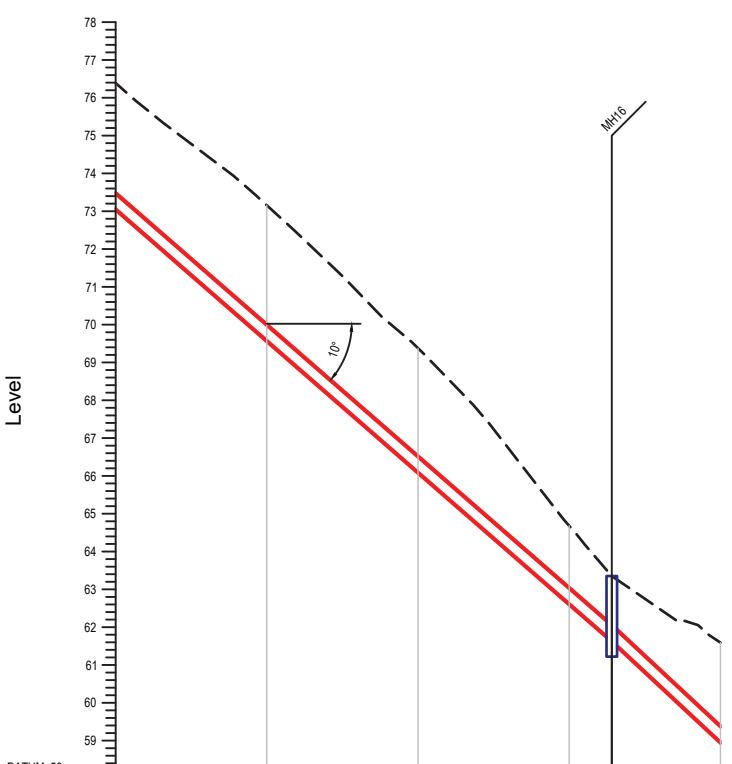


PLAN



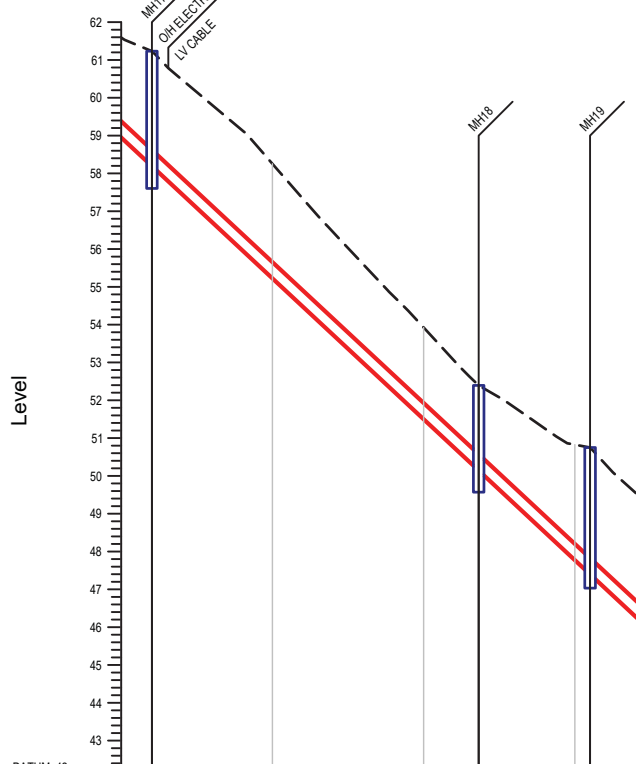
DATUM: 68m	900.00	920.00	940.00	960.03	960.00	980.00
CHAINAGE						
EXISTING SURFACE LEVEL	83.43	82.45	80.92	80.01	79.35	76.39
PROPOSED PIPE INVERT LEVEL	80.56	79.67	76.78	76.31	76.67	73.16
PIPE GRADIENT	1:23 FALL			1:6 FALL		
PIPE SIZE AND MATERIAL	Ø375 CONCRETE					
BEDDING MATERIAL	CLASS S - REFER DCWW STANDARD DWG SDC2003/002					
REINSTATEMENT	PASTURE GRASSLAND - REFER DCWW STANDARD DWG SDC2002/005					

LONGITUDINAL SECTION - CH 900 - CH 980



DATUM: 58m	980.00	1000.00	1020.00	1040.00	1045.63	1060.00
CHAINAGE						
EXISTING SURFACE LEVEL	76.39	73.16	69.38	64.68	63.35	61.59
PROPOSED PIPE INVERT LEVEL	73.16	69.65	66.15	62.64	61.65	58.98
PIPE GRADIENT	1:6 FALL				1:5 FALL	
PIPE SIZE AND MATERIAL	Ø375 CONCRETE					
BEDDING MATERIAL	CLASS S - REFER DCWW STANDARD DWG SDC2003/002					
REINSTATEMENT	PASTURE GRASSLAND - REFER DCWW STANDARD DWG SDC2002/005					

LONGITUDINAL SECTION - CH 980 - CH 1060



DATUM: 42m	1060.00	1084.06	1080.00	1100.00	1107.28	1120.00	1122.02
CHAINAGE							
EXISTING SURFACE LEVEL	61.59	61.23	58.25	53.93	52.39	50.83	50.75
PROPOSED PIPE INVERT LEVEL	58.98	56.22	55.25	51.53	50.17	47.80	47.42
PIPE GRADIENT	1:5 FALL						
PIPE SIZE AND MATERIAL	Ø375 CONCRETE						
BEDDING MATERIAL	CLASS S - REFER DCWW STANDARD DWG SDC2003/002						
REINSTATEMENT	PASTURE GRASSLAND - REFER DCWW STANDARD DWG SDC2002/005						

LONGITUDINAL SECTION - CH 1060 - CH 1140

Figure 4: Detail of the sewer pipe route monitored as part of the archaeological watching brief. Original plan and section provided by Dwr Cymru/SWECO, drawing no.05004, rev.P1, created 27/7/18.

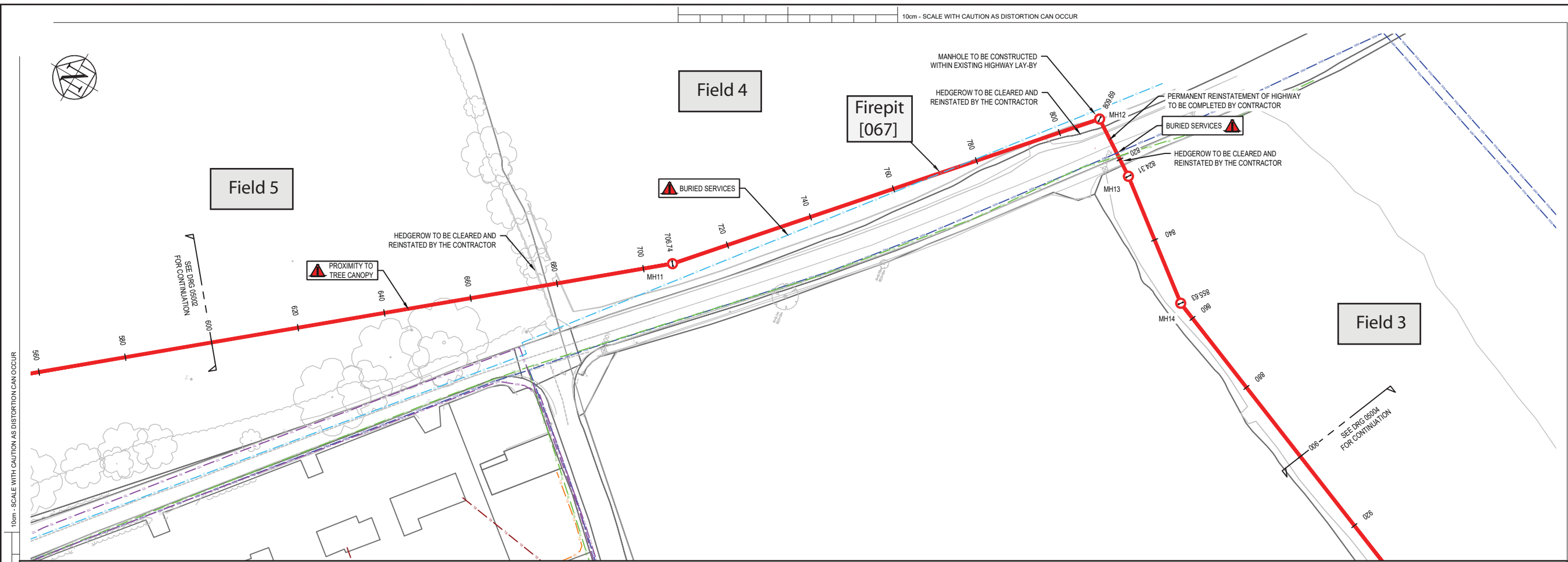
Annotated by AW, not reproduced to original scale.

Plan scale 1:1000 @ A3

Section scale vertical 1:1000 @ A3  
Section scale horizontal 1:200 @ A3

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PLAN

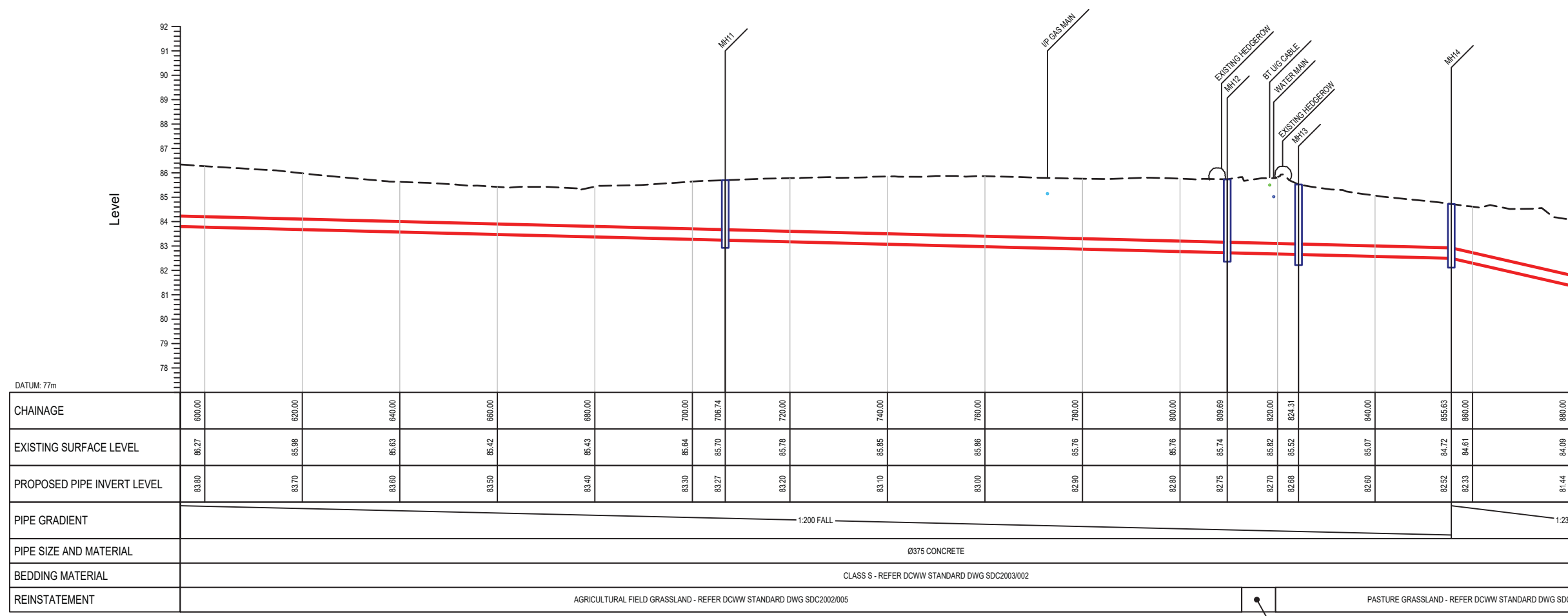
Figure 5: Detail of the sewer pipe route monitored as part of the archaeological watching brief. Original plan and section provided by Dwr Cymru/SWECO, drawing no.05003, rev.P1, created 27/7/18.

Annotated by AW, not reproduced to original scale.

Plan scale 1:1000 @ A3

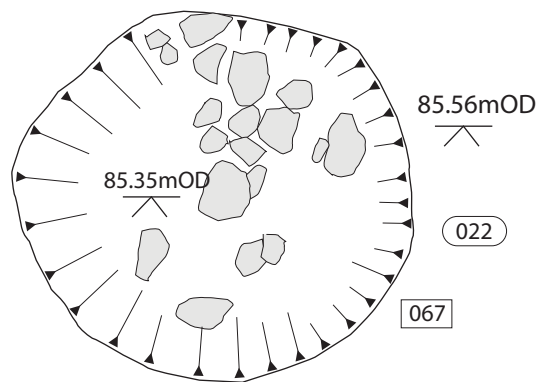
Section scale vertical 1:1000 @ A3  
Section scale horizontal 1:200 @ A3

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LONGITUDINAL SECTION - CH 600 - CH 900

Plan of pit [067]  
1:20



South-facing section of pit [067]  
1:10

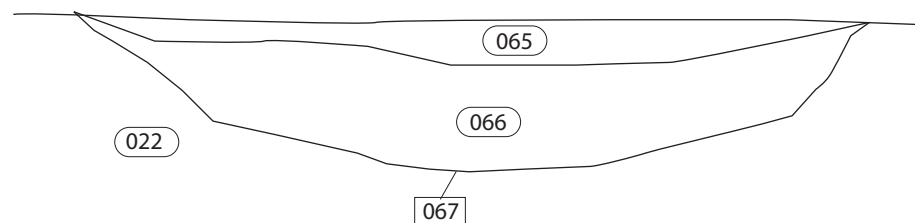
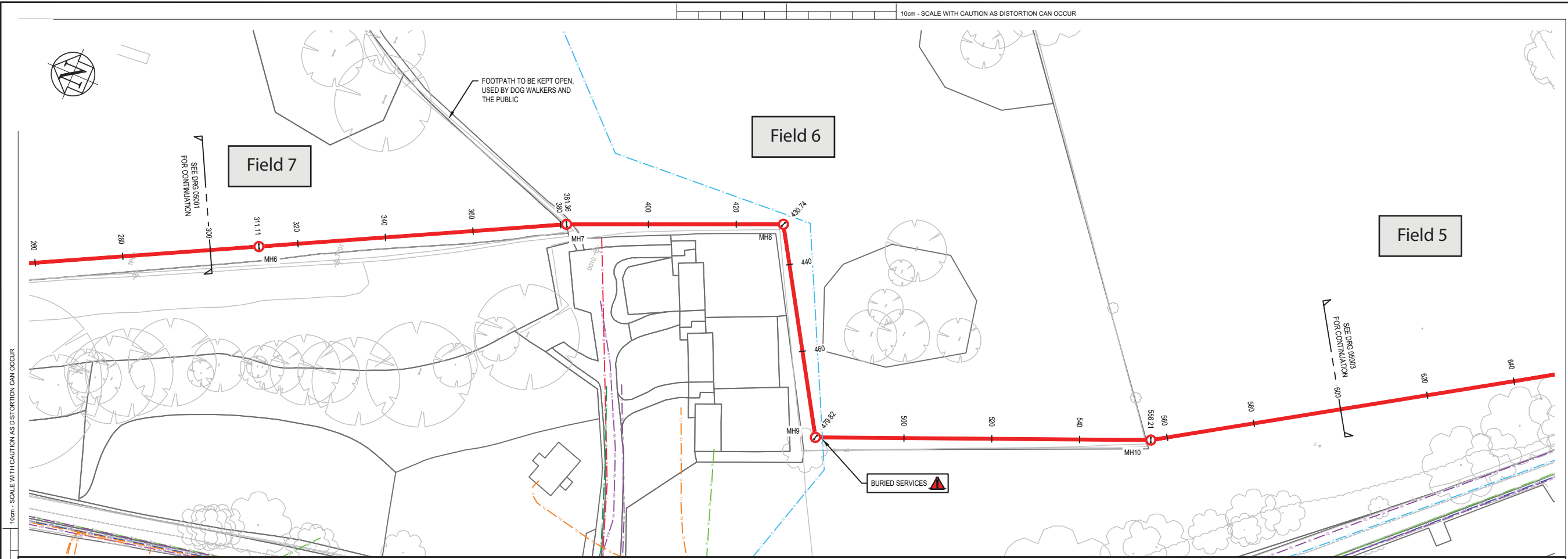
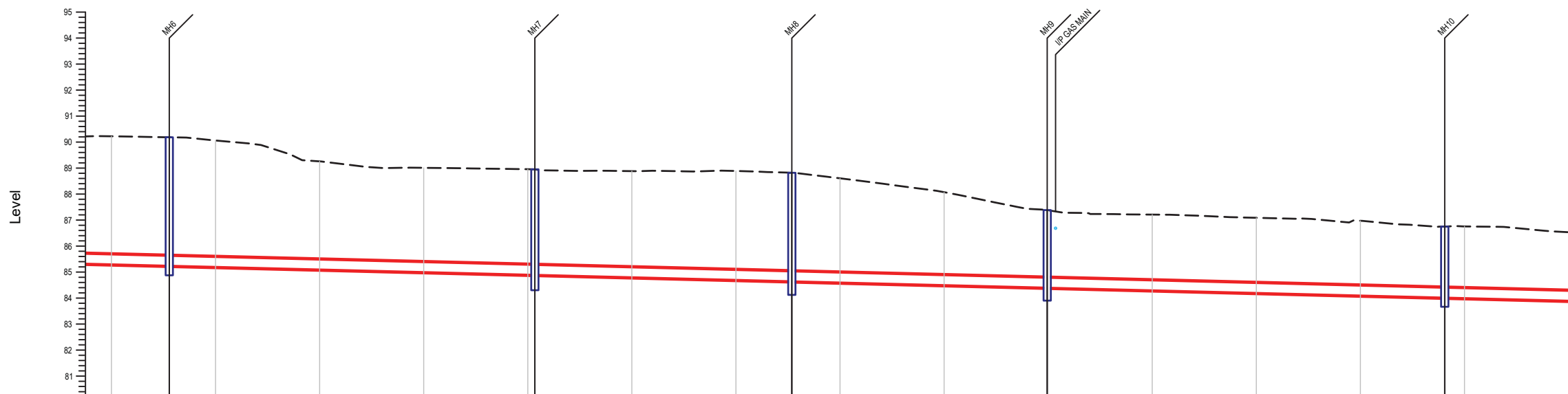


Figure 6: Plan and section of pit [067]



PLAN



CHAINAGE	300.00	311.11	320.00	340.00	360.00	380.00	381.36	400.00	420.00	430.74	440.00	460.00	479.82	500.00	520.00	540.00	556.21	580.00	
EXISTING SURFACE LEVEL	90.22	90.16	90.06	89.26	89.01	88.96	88.95	88.88	88.89	88.82	88.61	88.07	87.38	87.21	87.09	86.97	86.75	86.75	86.53
PROPOSED PIPE INVERT LEVEL	85.30	85.25	85.20	85.10	85.00	84.90	84.89	84.80	84.70	84.65	84.60	84.50	84.40	84.30	84.20	84.10	84.02	84.00	83.90
PIPE GRADIENT	1:200 FALL																		
PIPE SIZE AND MATERIAL	Ø375 CONCRETE																		
BEDDING MATERIAL	CLASS S - REFER DCWW STANDARD DWG SDC2003/002																		
REINSTATEMENT	PARK GRASSLAND - REFER DCWW STANDARD DWG SDC2002/005																		

LONGITUDINAL SECTION - CH 300 - CH 600

Figure 7: Detail of the sewer pipe route monitored as part of the archaeological watching brief. Original plan and section provided by Dwr Cymru/SWECO, drawing no.05002, rev.P1, created 27/7/18.

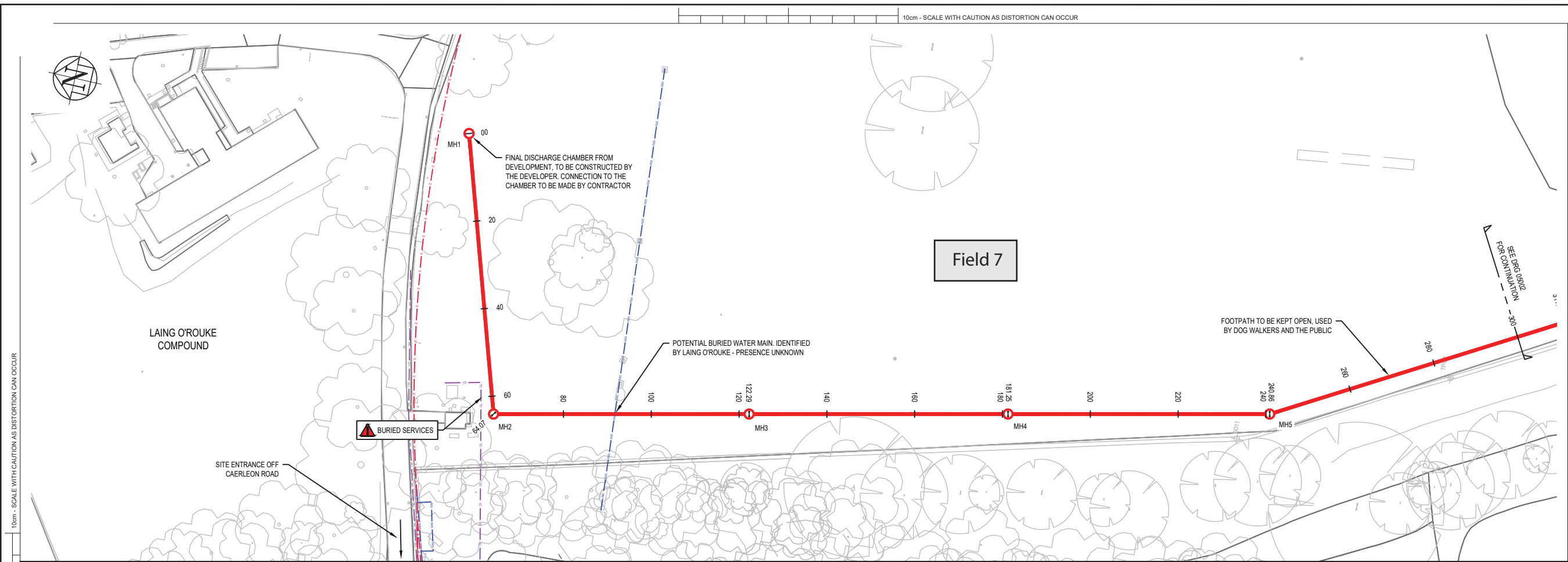
Annotated by AW, not reproduced to original scale.

Plan scale 1:1000 @ A3

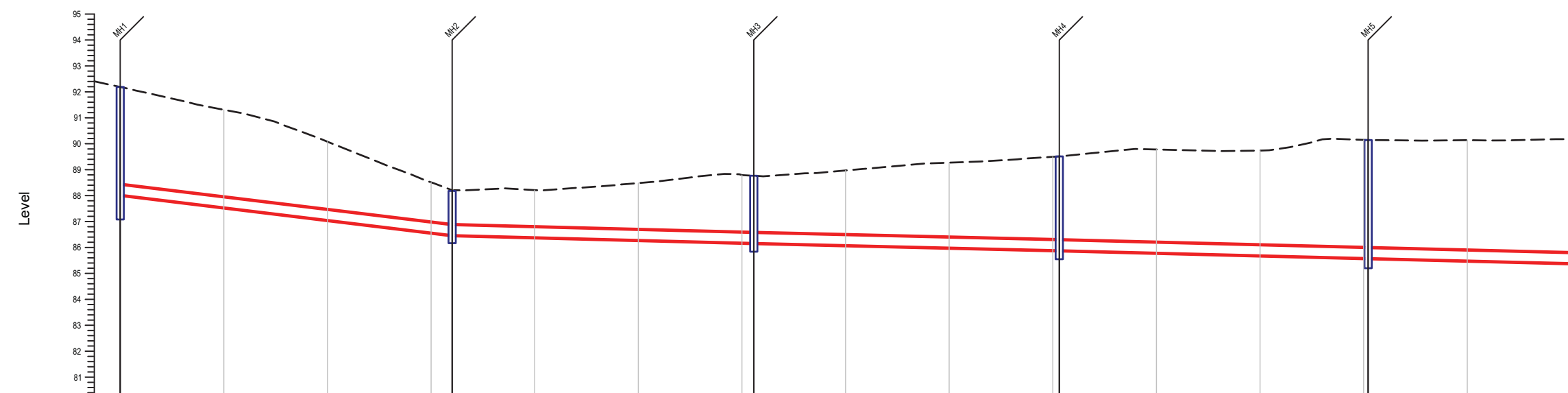
Section scale vertical 1:1000 @ A3  
Section scale horizontal 1:200 @ A3

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PLAN



CHAINAGE	00.00	20.00	40.00	60.00	64.07	80.00	100.00	120.00	122.29	140.00	160.00	180.00	181.25	200.00	220.00	240.00	240.86	280.00	
EXISTING SURFACE LEVEL	92.19	91.31	90.08	88.51	88.18	88.21	88.48	88.79	88.77	88.97	89.27	89.50	89.51	89.78	89.74	90.15	90.14	90.18	
PROPOSED PIPE INVERT LEVEL	88.03	87.55	87.06	86.58	86.48	86.40	86.30	86.20	86.19	86.10	86.00	85.90	85.89	85.80	85.70	85.60	85.60	85.50	
PIPE GRADIENT	1:41 FALL					1:200 FALL													
PIPE SIZE AND MATERIAL	Ø375 CONCRETE																		
BEDDING MATERIAL	CLASS S - REFER DCWW STANDARD DWG SDC2003/002																		
REINSTATEMENT	PARK GRASSLAND - REFER DCWW STANDARD DWG SDC2002/005																		

LONGITUDINAL SECTION - CH 00 - CH 300

Figure 8: Detail of the sewer pipe route monitored as part of the archaeological watching brief. Original plan and section provided by Dwr Cymru/SWECO, drawing no.05001, rev.P1, created 27/7/18.

Annotated by AW, not reproduced to original scale.

Plan scale 1:1000 @ A3

Section scale vertical 1:1000 @ A3  
Section scale horizontal 1:200 @ A3

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10cm - SCALE WITH CAUTION AS DISTORTION CAN OCCUR

10cm - SCALE WITH CAUTION AS DISTORTION CAN OCCUR



**Plate 1:** North-facing section of Trench 5, Field 1

**Plate 2:** North-west facing section of Trench 6, Field 1





**Plate 3:** North-east facing section of Trench 6 with gas pipe, Field 1

**Plate 4:** North-west facing section of Trench 7, Field 1



**Plate 5:** North-east facing section of Trench 8, Field 1

**Plate 6:** South-east facing section of Trench 9, Field 1



**Plate 7:** South-east facing section of Trench 1a, Field 1

**Plate 8:** Working shot of Field 2, facing north-east



**Plate 9:** West-south-west facing section of Trench 3a, Field 3

**Plate 10:** North-west facing section of Trench 4, Field 4



**Plate 11:** North-west facing section of Trench 4 with gas pipe, Field 4

**Plate 12:** Pit [67], pre-excitation, Field 4. Facing north-west



**Plate 13:** Pit [67], mid-excitation, Field 4. Facing north-west

**Plate 14:** Pit [67], post-excitation, Field 4. Facing north-west



**Plate 15:** Topsoil and subsoil, Field 5. Facing east

**Plate 16:** North-facing section of Trench 2, Field 6



**Plate 17:** Building material spread (069), Field 6

**Plate 18:** West-facing section of Trench 3, Field 6





**Plate 19:** West-facing section of Trench 3 with gas pipe, Field 6

**Plate 20:** North-facing section of Trench 1, Field 7



**Plate 21:** West-facing section of excavations in Field 7

# *Archaeology* *Wales*

## **APPENDIX I: Context List**

## Appendix 1: Context Register

<i>No.</i>	<i>Type</i>	<i>Description</i>	<i>Relationship</i>
001	Deposit	Topsoil, Trench 1	Above (002)
002	Deposit	Mid orange brown silt clay	Below (001)
003	Deposit	Mid brown orange silt clay	Below (002)
004	Deposit	Topsoil, Trench 2	Above (005)
005	Deposit	Mid orange brown sand silt	Below (004), same as (009)
006	Deposit	Mid red orange clay	Below (005)
007	Deposit	Mid yellow orange sand clay	Below (007)
008	VOID		
009	Deposit	Mid orange brown sand silt	Below (004), same as (005)
010	Deposit	Mid red orange sand clay with yellow	Below (009)
011	Cut	Cut of land drain {013}	Cut into (010)
012	Fill	Fill of land drain [011]	Above [011]
013	Object	Ceramic land drain in Trench 3	Above (012)
014	Cut	Cut for gas pipe {016}	Cut into (010)
015	Fill	Fill of cut [014]	Above {016}
016	Object	Gas pipe in Trench 3	Above [014], same as {019}
017	Cut	Cut for gas pipe	Cut into (006)
018	Fill	Fill of cut [017]	Above {019}
019	Object	Gas pipe in Trench 2	Above [017], same as {016}
020	Deposit	Topsoil Trench 4	Above (022)
021	VOID		
022	Deposit	Dark orange red clay	Below (020)
023	Deposit	Mid yellow orange clay sand	Below (022)
024	Cut	Cut for gas pipe	Cut into (024)
025	Fill	Fill of cut [024]	Above {026}
026	Object	Gas pipe in Trench 4	Above [024]
027	Deposit	Topsoil in Trench 5	Above (028)
028	Deposit	Mid orange brown clay silt	Below (027)

029	Deposit	Mid pink red clay silt	Below (028)
030	Deposit	Mid brown pink clay	Below (029)
031	Deposit	Topsoil in Trench 6	Above (032)
032	Deposit	Mid grey brown clay sand	Below (031)
033	Deposit	Mid pink brown sand clay	Below (032)
034	Deposit	Grey-black Tarmac surface	Below (033)
035	Deposit	Mid yellow brown silt clay	Below (034)
036	Deposit	Mid red brown silt clay	Below (035)
037	Cut	Cut for gas pipe	Cut into (036)
038	Fill	Fill of cut [037]	Above {072}
039	Deposit	Topsoil in Trench 7	Above (040)
040	Deposit	Mid orange brown sand clay	Below (039)
041	Deposit	Light blue grey compacted slag	Below (040)
042	Deposit	Topsoil in Trench 8	Above (043)
043	Deposit	Mid orange brown sand clay	Below (042)
044	Deposit	Mid grey black silt clay	Below (043)
045	Deposit	Mid brown grey sand	Below (044)
046	Deposit	Topsoil in Trench 9	Above (047)
047	Deposit	Mid grey brown silt soil	Below (046)
048	Deposit	Mid brown red sand clay	Below (047)
049	Deposit	Mid brown grey silt clay	Below (048)
050	Deposit	Orange grey clay	Below (049)
051	Deposit	Mid brown orange clay	Below (050)
052	Deposit	Mid red brown clay	Below (051)
053	Deposit	Topsoil in Trench 1a	Above (054)
054	Deposit	Mid orange brown sand clay	Below (053)
055	Deposit	Mid grey brown clay	Below (054)
056	Deposit	Mid grey black soot clay	Below (055)
057	Deposit	Mid yellow brown clay	Below (056)
058	Fill	Fill of cut [059]	Below (057)
059	Cut	Cut for water pipe {060}	Cut into (057)
060	Structure	Water main	Below (058)
061	Deposit	Topsoil in Trench 3a	Above (062)
062	Deposit	Mid red brown clay sand	Below (061)
063	Deposit	Mid brown orange clay sand	Below (062)
064	Deposit	Mid red brown clay sand	Below (063)
065	Fill	Secondary fill of fire pit [067]	Below (021)
066	Fill	Primary fill of fire pit [067]	Below (065)
067	Cut	Cut for fire pit	Cut into (022)

068	Deposit	Topsoil in Field 5	
069	Deposit	Modern CBM and rubbish layer	Below (004)
070	Deposit	Topsoil in Field 7	Same as (002)
071	Deposit	Topsoil in Field 2	
072	Object	Gas pipe in Trench 6	Below (038)

*Archaeology*  
*Wales*

**APPENDIX II:**  
**Written Scheme of Investigation**

WRITTEN SCHEME OF INVESTIGATION  
FOR AN ARCHAEOLOGICAL  
WATCHING BRIEF  
AT LLANFRECHFA GRANGE HOSPITAL, CWMBRAN

Prepared for:  
Sweco

Planning Application Number: 12/P/00348  
Project No: 2615

May 2018





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Figure 1. Site location

Figure 2. Site plan showing development site and route of pipework

## Summary

*This Written Scheme of Investigation details a programme of archaeological mitigation to be undertaken by Archaeology Wales at the request of Sweco on behalf of their client Dŵr Cymru Welsh Water (DCWW).*

*The archaeological mitigation will consist of a watching brief, and will be undertaken during ground works associated with the installation of a new sewer at Llanfrechfa Grange Hospital, Cwmbran, NP44 8YN. The new sewer route is approximately 1.3km long, running from the Hospital at NGR ST 30949 94678 to an existing combined sewer at NGR ST 30897 93630. The associated Planning Application No. is 12/P/00348.*

*The development lies partially within the grounds of Llanfrechfa Grange estate, which was established in the mid 19<sup>th</sup> century. There is therefore potential for remains relating to post-medieval settlement and agricultural activity to be present. Archaeological evaluation ahead of the hospital redevelopment work in 2015 revealed post-medieval features relating to the Grange, as well as isolated prehistoric finds.*

*Consequently it has been recommended that an archaeological watching brief is undertaken during ground works to mitigate the impact of the proposed development on the archaeological resource.*

*All work will be undertaken in accordance with the standards and guidelines of the Chartered Institute for Archaeologists (2014).*

## 1. Introduction and planning background

This Written Scheme of Investigation (WSI) details the methodology for a programme of archaeological mitigation (watching brief) to be undertaken in association with the installation of a new sewer at Llanfrechfa Grange Hospital, Cwmbran, NP44 8YN. The new sewer route is approximately 1.3km long, running from the Hospital at NGR ST 30949 94678 to an existing combined sewer at NGR ST 30897 93630. The associated Planning Application No. is 12/P/00348. The local planning authority is the Torfaen County Borough Council (TCBC).

The development lies at least partially within the grounds of Llanfrechfa Grange estate, which was established in the mid 19<sup>th</sup> century. There is therefore potential for remains relating to post-medieval settlement and agricultural activity to be present. Archaeological evaluation ahead of the hospital redevelopment work in 2015 revealed post-medieval features relating to the Grange, as well as isolated prehistoric finds.

This WSI has been prepared by Susan Stratton, Archaeology Wales Ltd (henceforth - AW) at the request of Sweco on behalf of their client **Dŵr Cymru Welsh Water** (DCWW).

The methodology set out in this WSI has been agreed with the Glamorgan-Gwent Archaeological Trust (GGAT) in its capacity as archaeological advisors to the local planning authority. GGAT has recommended that an archaeological watching brief is undertaken during ground works to mitigate the impact of the proposed development on the archaeological resource.

The recommendations made by GGAT for the watching brief are set out in an email to Sweco, sent on the 18/04/2018, GGAT file reference U2501.

The purpose of the archaeological mitigation (watching brief) is to provide the local planning authority with sufficient information regarding the nature of archaeological remains on the site of the development, the requirements for which are set out in Planning Policy (revised edition 9, 2016), Section 6.5 and Technical Advice Note (TAN) 24: The Historic Environment (2017). The work is to ensure that all buried artefacts and deposits are fully investigated and recorded if they are disturbed or revealed as a result of activities associated with the development.

All work will be undertaken to the standards and guidance set by the Chartered Institute for Archaeologists (2014). AW is a Registered Organisation with the CIFA.

## 2. Site Description

The development area is a 1.3km route which runs from the grounds of Llanfrechfa Grange Hospital roughly south to an existing combined sewer by the A4042. The route skirts the eastern edge of the community of Llanyravon, a suburb of Cwmbran. Central Cwmbran lies approximately 2km to the north-west and Newport lies 7km to the south. It runs roughly level, at 85m OD, before crossing Caerleon Road and dropping gently down into the Afon Lwyd valley to the south-west, finishing at 35m OD.

The proposed route runs principally through farmland of mixed arable and pasture land. It starts in the hospital grounds adjacent to the main access road and follows the road east before turning south following an established footpath through the hospital grounds, running parallel with Caerleon Road. It skirts a modern housing development, Mitchell Close, before exiting the hospital grounds in the south east corner. It then runs south-east, parallel to Caerleon Road, through two fields, then turns south-west, crossing under the road and across more farmland, bounding the residential developments of Bryn Rhedyn and Highfield Close, and ending at the A4042.

The underlying bedrock geology of the area is of the Raglan Mudstone Formation, composed of interbedded mudstone and sandstone. No superficial deposits are recorded on the northern part of the route. Where the route runs along Caerleon Road there are some superficial Devensian glaciofluvial deposits of sand and gravel,

and at the very south of the route, where it meets Turnpike Road, there are alluvial deposits of clay, silt, sand and gravel (BGS 2018).

### 3. Archaeological background

The planned development works are to be undertaken within the grounds of Llanfrechfa Grange Hospital, formally part of the Llanfrechfa Grange estate, and neighbouring farmland.

Llanfrechfa Grange is a post-medieval estate centred around Llanfrechfa Grange House, built in 1848 by Charles Prothero. The House is now a Grade II listed (Ref. 25494) building in the centre of the hospital grounds, listed as a good example of early 19<sup>th</sup> century Elizabethan revival architecture. The estate was bought by the Mitchell family in 1860, who enlarged the House including adding a chapel. After the death of Francis Mitchell in 1915 the house moved out of private ownership towards institutional use, including being used as a maternity hospital during WWII, and in 1953 it became a mental hospital. Aside from the House the only estate building remaining is the Lodge, which stood at the former south-west entrance. Any other original estate and farm buildings have been demolished. In the 1960s the hospital was expanded considerably with new residential and associated buildings.

Beyond the hospital grounds to the south the planned development runs through areas principally characterised by post-medieval farmland, either related to Llanfrechfa Grange or to neighbouring estates. The route crosses no other known archaeological sites.

To the north of the hospital there is evidence of post-medieval industrial activity, with a coal mine (PRN 00631g) and mill (PRN 00660g). Archaeological evaluation of land immediately to the north of the hospital in advance of building work in 2015 uncovered evidence of post-medieval activity related to Llanfrechfa Grange estate, as well as occasional prehistoric finds.

### 4. Objectives

This WSI sets out a program of works to ensure that the mitigation (watching brief) will meet the standard required by The Chartered **Institute for Archaeologist's Standard and Guidance for Archaeological Watching Briefs (2014)**.

The objective of the watching brief will be:

- to allow a rapid investigation and recording of any archaeological features that are uncovered during the proposed groundworks within the application area.
- to provide the opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief are not sufficient to support the treatment to a satisfactory or proper standard.

A written report will be compiled following the fieldwork. Sufficient desk-top research will be undertaken to ensure that the results of this work are properly understood, interpreted and reported.

The report will include a comprehensive assessment of the historic context within which the archaeological evidence rests and will aim to highlight any relevant research issues within regional, national and, if relevant, international research frameworks.

#### 4.1. Site Specific Research Aims

It is important to recognize that whilst primarily designed to mitigate impacts, developer-led archaeology is also regarded as research activity with an academic basis, the aim of which is to add to the sum of human knowledge. Curators recognize the desirability of incorporating agreed research priorities as a means of enhancing the credibility of the development control process, ensuring cost-effectiveness and legitimately maximizing intellectual return.

A research framework for the archaeology of Wales has been produced and currently in the process of review. This mitigation has the capacity to identify areas that may contribute to the published research aims in Post Medieval Wales (1539-1750) – Estates, Parks and Gardens. This was highlighted in the original document (Briggs 2007) which states a need to intensify studies of relict estates, recording all buildings, identifying horticultural and parkland features and tracing boundaries.

## 5. Timetable of works

### 5.1. Fieldwork

The programme of mitigation will be undertaken during ground works associated with the proposed development. A start date for the ground works has not yet been finalised. Archaeology Wales will update GGAT with the exact date.

### 5.2. Report delivery

The report will be submitted to the client and to GGAT for approval within three months of the completion of the fieldwork. Following approval a copy of the report will be submitted to GGAT. A copy of the report will also be sent to the regional Historic Environment Record.

## 6. Fieldwork

### 6.1. Detail

The work will be undertaken to meet the standard required by **The Chartered Institute for Archaeologist's Standard and Guidance for Watching Briefs (2014)**.

The Watching Brief will be carried out by a suitably qualified archaeologist on groundworks associated with the installation of a new sewer leading from Llanfrechfa Grange Hospital to the existing combined sewer by the A4042 (Figure 1 & 2), where sub-surface deposits are likely to be exposed or cut into. This will require excavation of the sewer line up to a depth of 6m below current ground level. The mechanical excavation will be undertaken by a tracked 360 degree excavator using a toothless ditching bucket wherever possible.

The site archaeologist undertaking the watching brief will be afforded the required access by the main contractor in order to observe and where necessary to record any archaeological remains revealed. Given the depths required for the groundworks, due consideration will be given to health and safety constraints in the ability of the site archaeologist to observe and record any archaeological remains. Groundwork will not be undertaken without the presence of the site archaeologist. The site archaeologist will record finds and less significant archaeological deposits and features without significant delay to the work program.

Where significant or complex archaeological deposits or features are encountered there will be a requirement for those areas to be fenced off and highlighted to all contractors employed on the site. Machines or contractors shall not enter this area until archaeological recording has been completed. If significant archaeological features are revealed during the work a meeting between the client, GGAT and AW will be called at the earliest convenience.

To comply with professional guidelines, a contingency allowing time for further, appropriate uninterrupted access to each such area, and for a small team of further archaeologists to be employed, should be provided. Contingency costs will be agreed in advance before any extension to the programme commences and will follow a site meeting between Archaeology Wales, the client and GGAT.

## 6.2. Recording

Recording will be carried out using AW recording systems (pro-forma context sheets etc) using a continuous number sequence for all contexts.

Plans and sections will be drawn to a scale of 1:50, 1:20 and 1:10 as required and related to Ordnance Survey datum and published boundaries where appropriate.

All features identified will be tied in to the OS survey grid and fixed to local topographical boundaries.

Photographs will be taken in digital format with an appropriate scale, using a 12MP camera with photographs stored in Tiff format.

The archaeologist undertaking the watching brief will have access to the AW metal detector and be trained in its use.

### 6.3. Finds

The professional standards set in the Chartered Institute for **Archaeologists' Standard and guidance for the collection, documentation, conservation and research of archaeological (2014)** will form the basis of finds collection, processing and recording.

All manner of finds regardless of category and date will be retained.

Finds recovered that are regarded as Treasure under *The Treasure Act 1996* will be reported to HM Coroner for the local area.

Any finds which are considered to be in need of immediate conservation will be referred to a UKIC qualified conservator (normally Phil Parkes at Cardiff University).

### 6.4. Environmental sampling strategy

Deposits with a significant potential for the preservation of palaeoenvironmental material will be sampled, by means of the most appropriate method (bulk, column etc). Where sampling will provide a significant contribution to the understanding of the site AW will draw up a site-specific sampling strategy alongside a specialist environmental archaeologist. All environmental sampling and recording and will **follow English Heritage's Guidelines for Environmental Archaeology (2002)**.

### 6.5. Human remains

In the event that human remains are encountered, their nature and extent will be established and the coroner informed. All human remains will be left *in situ* and protected during backfilling. Where preservation *in situ* is not possible the human remains will be fully recorded and removed under conditions that comply with all current legislation and include acquisition of licenses and provision for reburial following all analytical work. Human remains will be excavated in accordance with the Chartered **Institute for Archaeologist's Excavation and Post-Excavation Treatment of Cremated and Inhumed Human Remains: Technical Paper Number 13 (1993)**.

A meeting with GGAT, the client and AW will be called if the human remains uncovered are of such complexity or significance that the contingency arrangement (6.1 above) would not be of sufficient scope.

### 6.6. Specialist advisers

In the event of certain finds, features or sites being discovered, AW will seek specialist opinion and advice. A list of specialists is given in the table below although this list is not exhaustive.

Artefact type	Specialist
Flint	Kate Pitt (Archaeology Wales)
Animal bone	Richard Madgwick (Cardiff University)
CBM, heat affected clay, Daub etc.	Rachael Hall (APS)
Clay pipe	Hilary Major (Freelance)
Glass	Rowena Hart (Archaeology Wales)
Cremated and non-cremated human bone	Malin Holst (University of York)/Richard Madgwick (Cardiff University)
Metalwork	Kevin Leahy (University of Leicester)/ Quita Mold (Freelance)
Metal work and metallurgical residues	Dr Tim Young (GeoArch)
Neo/BA pottery	Dr Alex Gibson (Bradford University)
IA/Roman pottery	Jane Timby (Freelance)
Roman Pottery	Rowena Hart (Archaeology Wales)/ Peter Webster (Freelance)
Post Roman pottery	Stephen Clarke (Monmouthshire Archaeology)
Charcoal (wood ID)	John Carrot (Freelance)
Waterlogged wood	Nigel Nayling (University of Wales – Lampeter)
Molluscs and pollen	Dr James Rackham
Charred and waterlogged plant remains	Wendy Carruthers (Freelance)

#### 6.6.1. Specialist reports

Specialist finds and palaeoenvironmental reports will be written by AW specialists, or sub-contracted to external specialists when required.

## 7. Monitoring

GGAT will be contacted approximately two weeks prior to the commencement of archaeological site works, and subsequently once the work is underway.



Any changes to the WSI that AW may wish to make after approval will be communicated to GGAT for approval on behalf of Planning Authority.

GGAT will be given access to the site so that they may monitor the progress of the field evaluation. No area will be back-filled until GGAT has had the opportunity to inspect it unless permission has been given in advance. GGAT will be kept regularly informed about developments, both during the site works and subsequently during post-excavation.

## 8. Post-fieldwork programme

### 8.1. Archive assessment

#### 8.1.1. Site archive

An ordered and integrated site archive will be prepared in accordance with *The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales 2017* (National Panel for Archaeological Archives in Wales) and the guidelines of the Chartered Institute for Archaeologists upon completion of the project.

The site archive (including artefacts and samples) will be prepared in accordance with the National Monuments Record (Wales) agreed structure and deposited with an appropriate receiving organisation, in compliance with ClfA Guidelines (*Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*, 2014). The legal landowners consent will be gained for deposition of finds.

#### 8.1.2. Analysis

Following a rapid review of the potential of the site archive, a programme of analysis and reporting will be undertaken. This will result in the following inclusions in the final report:

- Non-technical summary
- Location plan showing the area/s covered by the watching brief, all artefacts, structures and features found
- Plan and section drawings (if features are encountered) with ground level, ordnance datum and vertical and horizontal scales.
- Written description and interpretation of all deposits identified, including their character, function, potential dating and relationship to adjacent features. Specialist descriptions and illustrations of all artefacts and soil samples will be included as appropriate.
- An indication of the potential of archaeological deposits which have not been disturbed by the development
- A discussion of the local, regional and national context of the remains by means of reviewing published reports, unpublished reports, historical maps, documents from local archives and the regional HER as appropriate.

- A detailed archive list at the rear listing all contexts recorded, all samples finds and find types, drawings and photographs taken. This will include a statement of the intent to deposit, and location of deposition, of the archive.

## 8.2. Reports and archive deposition

### 8.2.1. Report to client

Copies of all reports associated with the mitigation (watching brief), together with inclusion of supporting evidence in appendices as appropriate, including photographs and illustrations, will be submitted to the client and GGAT upon completion.

### 8.2.2. Additional reports

After an appropriate period has elapsed, copies of all reports will be deposited with the relevant county Historical Environment Record (CPAT), the National Monuments Record and, if appropriate, Cadw.

### 8.2.3. Summary reports for publication

Short archaeological reports will be submitted for publication in relevant journals; as a minimum, a report will be submitted to the annual publication of the regional CBA group or equivalent journal.

### 8.2.4. Notification of important remains

Where it is considered that remains have been revealed that may satisfy the criteria for statutory protection, AW will submit preliminary notification of the remains to Cadw.

### 8.2.5. Archive deposition

The final archive (site and research) will, whenever appropriate, be deposited with a suitable receiving institution. If artefacts are recovered, and dependent on the size of the final archive, the preferred receiving institution would be the Amgueddfa Pontypool, Park Buildings, Pontypool, Torfaen NP4 6JH. If the archive is not acceptable the archive will be deposited with Amgueddfa Cymru – National Museum Wales, Cardiff. If no artefacts are recovered then the archive will be deposited with the *National Monuments Record*, RCAHMW, Aberystwyth. Arrangements will be made with the receiving institution before work starts.

Although there may be a period during which client confidentiality will need to be maintained, copies of all reports and the final archive will be deposited no later than six months after completion of the work.

Copies of all reports, the digital archive and an archive index will be deposited with the *National Monuments Record*, RCAHMW, Aberystwyth.

Wherever the archive is deposited, this information will be relayed to the HER. A summary of the contents of the archive will be supplied to GGAT-CD.

#### 8.2.6. Finds deposition

The finds, including artefacts and ecofacts, excepting those which may be subject to the Treasure Act, will be deposited with the same institution, subject to the agreement of the legal land owners.

### 9. Staff

The project will be managed by Philip Poucher (AW Project Manager) and the fieldwork undertaken by suitable qualified and experienced AW archaeologists. Any alteration to staffing before or during the work will be brought to the attention of GGAT and the client.

## Additional Considerations

### 10. Health and Safety

#### 10.1. Risk assessment

Prior to the commencement of work AW will carry out and produce a formal Health and Safety Risk Assessment in accordance with *The Management of Health and Safety Regulations 1992*. A copy of the risk assessment will be kept on site and be available for inspection on request. A copy will be sent to the client (or their agent as necessary) for their information. All members of AW staff will adhere to the content of this document.

#### 10.2. Other guidelines

AW will adhere to best practice with regard to Health and Safety in Archaeology as set out in the FAME (Federation of Archaeological Managers and Employers) health and safety manual *Health and Safety in Field Archaeology (2002)*.

### 11. Community Engagement and Outreach

Wherever possible, AW will ensure suitable measures are in place to inform the local community and any interested parties of the results of the site investigation work. This may occur during the site investigation work or following completion of the work. The form of any potential outreach activities may include lectures and talks to local groups, interested parties and persons, information boards, flyers and other forms of communication (social media and websites), and press releases to local and national media.

The form of any outreach will respect client confidentiality or contractual agreements. As a rule, outreach will be proportional to the size of the project.

Where outreach activities have a cost implication these will need to be negotiated in advance and in accordance with the nature of the desired response and learning outcomes.

## 12. Insurance

AW is fully insured for this type of work, and holds Insurance with Aviva Insurance Ltd and Hiscox Insurance Company Limited through Towergate Insurance. Full details of these and other relevant policies can be supplied on request.

## 13. Quality Control

### 13.1. Professional standards

AW works to the standards and guidance provided by the *Chartered Institute for Archaeologists*. AW fully recognise and endorse the Chartered Institute for **Archaeologists' Code of Conduct**, *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* and the *Standard and Guidance for archaeological watching briefs* currently in force. All employees of AW, whether corporate members of the Chartered Institute for Archaeologists or not, are expected to adhere to these Codes and Standards during their employment.

### 13.2. Project tracking

The designated AW manager will monitor all projects in order to ensure that agreed targets are met without reduction in quality of service.

## 14. Arbitration

Disputes or differences arising in relation to this work shall be referred for a decision in accordance with the Rules of the **Chartered Institute of Arbitrators' Arbitration Scheme for the Institute for Archaeologists** applying at the date of the agreement.

*Archaeology*  
*Wales*

**APPENDIX III:**  
**Archive Cover Sheet**

# ARCHIVE COVER SHEET

## Llanfrechfra Grange Hospital, Cwmbran

Site Name:	Llanfrechfra Grange Hospital
Site Code:	LGH/18/WB & LGH/19/WB
PRN:	03687g (Llanfrechfra Grange)
NPRN:	45076 (Llanfrechfra Grange)
SAM:	-
Other Ref No:	-
NGR:	NGR ST 30949 94678 to ST 30897 93630
Site Type:	Installation of a new sewer main, route c.1.3km long, running through enclosed agricultural land to the south of Llanfrechfra Grange, on the outskirts of Cwmbran.
Project Type:	Watching Brief
Project Manager:	Philip Poucher
Project Dates:	September 2018 - May 2019
Categories Present:	-
Location of Original Archive:	AW
Location of duplicate Archives:	RCAHMW, Aberystwyth
Number of Finds Boxes:	0
Location of Finds:	-
Museum Reference:	-
Copyright:	AW
Restrictions to access:	None

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