

Fairbourne Flood Defences Renewal, Fairbourne, Gwynedd

Archaeological Building Recording and Watching Brief



Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

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SUMMARY

Gwynedd Archaeological Trust was commissioned by Natural Resources Wales to complete a programme of archaeological building record and watching brief during remedial works to the main embankment and flood defences at Fairbourne, Gwynedd, on the south side of the Afon Mawddach. The embankment was located across the Mawddach Estuary, which comprised sandbanks, marshlands and a substantial area of reclaimed land.

A lime kiln on a rock outcrop on the Fairbourne Embankment was fully investigated and recorded, and a photographic record maintained. It was found to be early 19th century in date, and to have been out of use for some considerable time. It was built on land owned by the Reverleys of Bryngwin, and was presumably accessed by sea. Lime was usually burnt for improving agricultural soils mixed balls of small coal and clay was used for ballast in the cargo boats that plied the Mawddach, was ideal fuel for the coastal limekilns. Once the embankment was fully operational, it was presumably far more difficult of access, and its use went into decline.

A brick works site, used to create bricks for the development of Fairbourne in the late 19th century, is noted on the Ordnance Survey maps close to Fairbourne village at SH61781302. It was avoided by the ground works carried out, although a borrow pit was excavated to the west of it. Ephemeral archaeological evidence, in the form of one single course of brickwork, and waste material which presumably originated in the brickworks, was identified and recorded.

The watching brief was completed during the excavation of a borrow pit close to the right angled junction in the embankment, groundworks for a haul road and topsoil stripping on the embankment; rock outcropping, estuarine deposits and watercourses were noted, but no significant archaeological deposits or activity were identified.

1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) was commissioned by *Natural Resources Wales* (NRW) to complete a programme of archaeological mitigation during remedial works to the main embankment and flood defences at Fairbourne, Gwynedd (NGR SH62701390; Figure 01). The works were completed adjacent to the village of Fairbourne on the south side of the Afon Mawddach, along the Meirionnydd coast. The western boundary of the area was defined by the shingle beach fronting Barmouth Bay at Fairbourne; the eastern boundary by the inlet that extended north from the small settlement at Arthog into the Mawddach estuary, and the northern boundary by the estuary itself. The estuary is a designated SSSI, and the Mawddach estuary a Landscape of Special Historic Interest (Cadw 2001).

An archaeological assessment of the scheme proposals was completed in advance by *Castling Archaeology* (Frost, 2009). The assessment concluded that there was significant evidence for the development of the area and the embankment from the mid-19th century onwards, including the Cambrian railway in the 1860s and the development of Fairbourne as a resort. A lime kiln of probable 18th century date was also identified on the route of the scheme. The assessment suggested that the scheme may provide an opportunity to research and record sub-surface deposits, along with identifying potential palaeoenvironmental evidence including submerged land surfaces and archaeological evidence of small scale coastal industries, fishing, transport, lime burning and communication.

The scheme was monitored by Gwynedd Archaeological Planning Service (GAPS) and NRW. In response to the results of the archaeological assessment, the agreed mitigation included:

1. Avoidance of known sites: this included a brickworks at NGR SH61781320 and a lime kiln at SH62491408;
2. Building Recording: the production of a written and photographic record of the lime kiln to an English Heritage Level 2 standard as defined in *Understanding Historic Buildings: a guide to good recording practice* (2006);
3. Watching Brief: continuous archaeological observation of the groundworks during the excavation of any borrow pits and the stripping of compound areas;
4. Watching Brief: intermittent archaeological observation during general groundworks;
5. Palaeoenvironmental mitigation for any identified peat deposits, to be followed by geoarchaeological assessment
6. Community Outreach.

GAT completed a project specification in advance of works that defined the project scope (cf. Appendix I). The archaeological mitigation was completed between the 25th February 2013 and the 2nd July 2013. All work was undertaken by GAT in accordance with the following standards and guidance:

- Chartered Institute for Archaeologists, 2014. *Standard and Guidance for Archaeological Watching Brief*;
- Chartered Institute for Archaeologists, 2014. *Standard and guidance for Historic Desk Based Assessment*;
- English Heritage, 1991. *Management of Archaeological Projects (MAP2)*;
- English Heritage *Understanding Historic Buildings: a guide to good recording practice* (2006);
- Historic England, 2015. *Management Of Research Projects in the Historic Environment (MORPHE)*; and
- *Guidelines for digital archives Royal Commission on Ancient and Historic Monuments of Wales* 2015.

2 METHODOLOGY

2.1 Level 2 Building Record

The requirements were for a building record of a lime kiln commensurate with English Heritage *Understanding Historic Buildings: a guide to good recording practice* (2006) Level 2.

A Level 2 record will typically consist of the following English Heritage '*Understanding Historic Buildings: a guide to good recording practice*' (2006) requirements:

- *drawings* sometimes 1, sometimes one or more of 2–7
- *photography* 1, 2, 4
- *written record* 1–3, 6

A Level 2 record is defined as a descriptive record, made in circumstances similar to those of Level 1 but when more information is needed. It may be made of a building which is judged not to require any fuller record, or it may serve to gather data for a wider project.

Both the exterior and the interior of the lime kiln (as far as possible) were viewed, described and photographed. All elevations, and the top of the kiln were photographed using a 1m scale, and contextualising shots were taken. A measured sketch plan and elevations were taken, and detailed written description made of the entire structure, and its physical context. The building record presents conclusions regarding the building's development and use, and a limited discussion about its cultural context (Section 4, below).

2.2 Watching Brief

An archaeological watching brief was maintained during the general groundworks as well as the following areas:

- borrow pit adjacent to former brickworks
- borrow pit by the sea wall adjacent to right-angle in the embankment
- work on Fairbourne embankment

. The watching brief was maintained between the 25th February 2013 and the 2nd July 2013.

2.3 Fieldwork Methodology

- All watching brief attendances, photographic records and building records were completed using GAT pro-formas;
- Photographic images were taken using a Nikon D3100 camera set to maximum resolution (4608 × 3072; 14 effective megapixels). The images were converted to TIFF for archiving using Adobe Photoshop; the photographic record was archived in *Microsoft Access* (archive reference G2315_Fairbourne_FD_001 to G2315_Fairbourne_FD_190; cf. Appendix II);
- Following the completion of the fieldwork, a programme of fieldwork archiving was completed, based on following:
 1. Pro-formas: all cross referenced and complete;
 2. Photographic Metadata: completed in *Microsoft Access* and cross-referenced with all pro-formas;

In support of the archaeological mitigation programme, a desk top study was also completed. This comprised a study of readily available primary and secondary documentary, cartographic, pictorial, aerial/ground photographic, and oral sources in order to provide a historical framework for the mitigation area. The examined sources included:

- The Historic Environment Record at the Gwynedd Archaeological Trust;
- The National Library of Wales, Aberystwyth (where the records are not available at the County Archives);
- The Royal Commission on Ancient & Historical Monuments in Wales, Crown Buildings, Plas Crug, Aberystwyth; and
- Records held at Meirionnydd Record Office, Dolgellau.

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 Introduction

An archaeological assessment of the scheme was completed by *Castlering Archaeology* (Frost 2009). The following is a brief summary of the archaeological and historical background for the scheme, with additional research also completed to support the Level 2 Building Record.

3.2 Location and Statutory Designations

The site is located on the south side of the estuary of the Afon Mawddach (centred on NGR 627139), which rises in the hills of Snowdonia and flows into Barmouth Bay (Fig. 1). The area lies close to, but outside, the Snowdonia National Park. The flat lands of the study area are known as Morfa Mawddach. The study area and estuary are part of those recorded on the *Register of landscapes of Outstanding Historic Interest in Wales* as Area 09 (HLA 09), which consists of *the tidal estuary of the Mawddach, located in a wide glacial valley, with its sandbanks and marshy flatlands that extend inland. It principally comprises the mudflats and sandbanks of the estuary, and the viaduct that carries the Cambrian Railway north to Barmouth* (Cadw 2001, paragraph 7.5). A foot ferry still crosses the estuary from Penrhyn Point to Barmouth, east of Fairbourne. The study area is located within the Mawddach Estuary Landscape Character Area (PRN 18339) which is described as ‘comprising *‘the tidal estuary of the Afon Mawddach, with its sandbanks and marshy flatlands, as far inland as the present A470. It has drainage/flood banks at its inland end and is crossed here and at its mouth by bridges. The latter is a viaduct constructed as part of the Cambrian Railway in 1867, while the trestle bridge further inland (built in 1879 across from Penmaenpool) is one of only a few wooden structures of its kind in Britain’.*

3.3 Topography and Geology

The underlying geology of the coastal flats around Fairbourne and the Mawddach estuary consists of Cambrian beds of siliceous sandstone, but overlaid by alluvium and peat. The hill land immediately to the south-west, however, consists of Ordovician shales into which have intruded bands of igneous basalt, quartz-dolerites and diorites (Smith and George 1961). The Mawddach is a drowned estuary, which formed within a deep glacial valley as sea-levels rose after the end of the last glacial period, from c. 10,000 BC. Tidal movement caused the build-up of off-shore sand bars at the river mouth, eventually causing a major

build-up of alluvial sediment on the valley floor. The rock outcrops of Fegla Fawr, Fegla Fach and Ynysgyffylog must once have been islands. Eventually marshes developed on the salt flats, leading to development of a thick peat cover. Elsewhere, such coastal peats have been shown to date from c. 6000 BC through to the first millennium BC. They are a valuable source of environmental information and in places have also produced much archaeological information.

3.4 Prehistoric and Medieval

Owing to the lack of evidence of prehistoric date from the peatlands in the Mawddach estuary, it has been suggested that they were generally inaccessible marshland until historic times. This area however is considered to be that where the Nannau bronze urn was found in 1826, a Late Bronze Age object of c.700 BC, now in the National Museum of Wales (Smith 2002, 6). The exact find spot for this item remains unknown however, but prehistoric peat beds are located at NGR SH64551486 (PRN 17221). An undated mound or knoll has been identified at NGR SH64681475 (PRN 17222), which may be a prehistoric feature.

It is thought that the tenement of Ynysgyffylog, located on the low lying tidal estuary of the Afon Mawddach, known as Morfa Mawddach, is first mentioned in a deed of 1457, when it is held by Rhys ap Howell ap Cadwalader as a *liber tenens* (ie. he is a free tenant) from Meuric Vychan (Gwynedd Archives; Z/DM/1). The medieval crossing of the estuary is likely to have been from Penrhyn Point to Barmouth at the mouth of the estuary. It is thought that the crossing may have been controlled by monks, possibly from Cymmer Abbey, and after the reformation by local fishermen. The crossing is described by Giraldus Cambrensis in 1188, and later in 1569, when Welsh landing places were recorded under Elizabeth I (Milner 1996, 13).

In medieval times and prior to the construction of the embankment and the draining of the marshland, the route on the south side of the estuary followed the high ground with branches leading down to isolated settlements at Frig and Arthog and to the ferry crossing.

3.5 Post-medieval

The land of the study area is mentioned, along with its neighbours in a rent roll for the Ynisgyffylog estate in 1791, when it along with Tythin Bach is occupied by John Hartley at an annual rent of £28 (Gwynedd Archives; Z/DJ/125). The embankment is also mentioned for the first time in that document when William Edward of Talwin Bach is 'allowed 17s 8½d towards mending the embankment at Ynusgyffylog (*ibid.*).

The earliest elements of the embankment are shown on an estate map of the Bryngwyn estate (Dolgellau Archives ZDJ/155; Fig.2). The river appears close to the embankment to the north, but the embankment is shown crossing fields A10 Glas Traeth, A12 and A11. The rock outcrop is described as Ynys Graig (A15). The names suggest that the area was less silted up then than now, and had a maritime character. An area of Turbary is noted to the south-east of the study area, which is an area where householders had the right to cut peat and turf for the fire (*ibid.*). This gives some indication of the character of the land at that time.

The land on which the embankment was situated was the property of a number of landowners in the early 19th century. In 1839, when the tithe map of the parish of Llangelynin was produced, the area of the lime kiln was the property of Hugh Reverely of Bryngwyn, Dolgellau (No. 82 Ynysgyffylog). The land divisions are noted in Table 1 below, taken from the apportionment which accompanies the tithe map, with the field numbers noted on the plan (Fig.3).

Landowner	Occupier	Plan Nos.	Name and Description of Land and Premises	State of Cultivation	Quantities in Statute Measure
					A R P
Hugh Revereley Esq.		78 78a 78b	Brynmeirid		30
		77 77a	Murneuodd		25
		82	Ynysgyffylog		90
		84	Tyddynbach		15
		87 87a	Feglefawr		160
		88	Feglefach		80
		104	Tyddynbachinde		20
John Jones	William Vaughan	75	Ynysfaig		350

Landowner	Occupier	Plan Nos.	Name and Description of Land and Premises	State of Cultivation	Quantities in Statute Measure
					A R P
		75a 75b 75c			
	Thomas Jones	81	Penrhyn		70
	Hugh James	73	Ynysfiog		20
Robert Jones	Lewis Evans	80	Bwlchgwyn		400
Richard Williams M.D.	Lewis Pugh	83 83a	Tyddyn Jeffry		300
	Edward Owen	91	Deildre		150
John Anwyl	Owen Roberts	79 79a 79b	Panterion		80

Landowner	Occupier	Plan Nos.	Name and Description of Land and Premises	State of Cultivation	Quantities in Statute Measure
					A R P
		79c			
Lewis Williams Esq.	Robert Owen	74	Henddôl		50
Mr. Anthony Morgan	Anthony Thomas Morgan	59 59a 59b 59c 59d	Hendreuchaf		203 2 5
Reginald Fowden Esq.	Reginald Fowden Esq.	89 89a 89b	Arthog		300
	Evan Owen	98	Trawsdir		5
	David Rees	90	Bwlchyrhendre		15

Landowner	Occupier	Plan Nos.	Name and Description of Land and Premises	State of Cultivation	Quantities in Statute Measure
					A R P
		90a			
	Edward Ellis	94 94a	-		60
	John Lewis	97 97a	Craigennen		20
	Lewis Jones	95	Merddynbwbach		5
	Cadwalader Ellis and John Edwards	96	Tan y Graig		6
Lewis Evans	Lewis Evans	86	Garthfog		70
Rev. Robert Owen	David Lewis	100 100a 100b 100c	Tyddynbach		40

Landowner	Occupier	Plan Nos.	Name and Description of Land and Premises	State of Cultivation	Quantities in Statute Measure
					A R P
		100d			
	John Williams	110 110a	Tyncelin		5 2 -
Morris Pugh Esq.	William Price	85	Bronllettyvan		250
Rev. John Morris Edward	William Griffith	72	Cefnfensedd		200
Rice Owen Annwyl Esq.	David Jones	67 67a 67b	Gwastagoed uchaf		26
Anne Jones (Friog)	Anne Jones	76 76a 76b	Friog		5
John Jones Jnr	John Jones	99	Tyncoed		40

Landowner	Occupier	Plan Nos.	Name and Description of Land and Premises	State of Cultivation	Quantities in Statute Measure A R P
		99a			
John Jones Senr	John Jones Junr	101	Ynysgream		10

Table 1: Land divisions based on tithe apportionment for Llangelynin parish (1839)

A lime kiln is shown on the 1st to 3rd editions 25 inch County Series Ordnance Survey maps, dating from 1889 to 1914 (Fig. 4), and is noted to be disused. It was probably in operation from the late 18th century to the mid-19th century. Lime was generally burnt for improving agricultural soils, and it has been stated that mixed balls of small coal and clay, used for ballast in the cargo boats that plied the Mawddach, was ideal fuel for the coastal limekiln (Harrison 1996). West of the limekiln an outlet channel with sluice gate necessitates a turn in the embankment. The channel created may once have formed a small creek where boats could have brought fuel for the limekiln (Frost 2009).

3.6 The Development of Fairbourne

The Aberystwyth and Welsh Coast Railway reached the area in the early 1860s and by 1865 it had become part of the Cambrian Railways. The railway ran north from Towyn to Morfa Mawddach and had to be constructed on a ledge above the shoreline on what is now the south end of Fairbourne beach. Progress was slow and during this time a coach ran from Llwyngwryl to the ferry at Penrhyn Point, bringing about an increase in the traffic. The construction of the railway bridge spanning the Mawddach estuary between Fairbourne and Barmouth, Barmouth Bridge, in 1867 finally opened up a fast crossing of the Mawddach. The Ordnance Survey maps also show the reclaimed estuary land to the south of the embankment and the unimproved salt marsh to the north. The embankment was completed in more or less its modern form by the time of the 1st edition Ordnance Survey map of 1889. There is a considerable amount of stone revetting that survives, particularly at the eastern end of the embankment.

Sir Arthur McDougall, the inventor of self-raising flour, purchased the Ynysfaig Estate and some adjacent land west of the Cambrian Railway in 1895, with a view to developing a seaside town. This was originally to be called South Barmouth, although the name Fairbourne was eventually agreed upon. It was to be built with a certain amount of infrastructure, including a coastal tramway, golf links and pavilion, tennis courts and a new station. The station was one of the first elements of the infrastructure built by the McDougall estate in 1898-9, which was bought out by the railway company after two very successful years of operation (Harrison 1966). A brick and tile works was constructed to facilitate this (PRN 13911; NGR SH61741316). This lay close to the proposed works, on the reclaimed land just to the north-east of the development of Fairbourne itself, but some way south of the embankment.

Development proceeded slowly, with some development along beach road and Belgrave Road, including a post office and a few shops. By 1908 a small grid of streets had been laid out and a number of terraces and an area of shops near the railway station had been built (Fig. 5). The ultimate vision for the town was never realised, with much open space remaining on the drained marshland which was intended for development (ZM/897/2 in Milner 1996). The McDougall estate, having first changed hands and becoming in 1911 the Fairbourne Estate Company, was broken up and sold off in August 1917 (Gwynedd Archives ZF/42), which included, as lot 188, the '*estate brickyard with workshops and storing shops, built in wood and corrugated iron*'. The works is shown on an image of Fairbourne in 1908, in addition to the Ordnance Survey Maps, where it can be seen to be of a fairly ephemeral nature (Fig. 5). The brickyard does not appear to have survived the sale, and was presumably demolished soon afterwards. Fairbourne survives today as a somewhat truncated version of Sir Arthur McDougall's vision at the turn of the 20th century.

4 LEVEL 2 BUILDING RECORD

An English Heritage *Understanding Historic Buildings: a guide to good recording practice* (2006) Level 2 building record was completed for a lime kiln that was built into the embankment at NGR SH62491408.

It is built of coursed rough shale fieldstone blocks (up to 1.2m by 0.6m), and is between 1.4m and 2.1m high and approximately 4.5m square (Plates 01-06). At no point does the overall height of the structure rise above the rock outcrop to the west of it (Plate 05). It is built into the east side of a rock outcrop which has in turn been built into the flood defence embankment, and is surrounded to the east by salt marsh. It has stoke holes to the north and south (Plates 02 and 04), and a circular entrance hole for the limestone above.

The round opening in the roof of the kiln is about 1.5m wide at the top, although it tapers downwards and is about 1m wide at the internal roof level (Plate 04). The main structure consists of up to eleven courses of stonework. The north facing side contains the main fire opening, with substantial voussoirs 0.6m high at the base of the kiln, and angled slab stones above (up to 1.2m by 0.5m), with a depth of opening of about 2.1m. The rake-out opening is on the south side, which is similar to that on the northern side, except there are no voussoirs, and is larger to facilitate the raking out (0.8m by 0.4m), and has substantial angled roof slates to the opening. The depth of the opening is 1.8m, with the large roofing slabs up to 1.4m by 0.5m. The east elevation is roughly coursed rubble masonry. The mortar appears to be a lime mix, with small stone, shale and shelly inclusions.

The structure would appear to be a late 18th century or early 19th century lime kiln, built into the east bank of a rock outcrop. It would appear to have been accessible by boat in the time prior to the construction of the flood defence embankment. There are no obvious land access tracks to it, so subsequent to the construction of the embankment it would presumably have been accessed along the embankment.

The lime kiln is not shown on a Bryngwyn estate map of Ynysgyffyllog of 1804, although the rock outcrop is noted (ZDJ/155). It is shown on the 25 inch 1st edition County Series map of 1892. It is clearly earlier than the flood defence bank, but appears to be one of a number of kilns along the Mawddach estuary, and was probably associated with coastal trade. Whilst it cannot be closely dated, it would appear to date from sometime after 1804, probably nearer the earlier date. On 31st October 1892 Ynysgyffyllog, Ynys Fechan, Fegla Fawr and Fegla Fach were sold by the Bryngwin Estate by public auction (they were bought by Solomon

Andrews in 1894). The land close to the embankment is described as arable, and the limekiln is not mentioned. However on the accompanying map to the sale it is described as an 'old limekiln', suggesting that it had gone out of use by this time (Gwynedd Archives ZF/11).

5 WATCHING BRIEF

5.1 Introduction

A partial watching brief was carried out during the ground works associated with the improvements to the embankment. This work was very extensive, and only limited amounts of it were observed, and no significant new archaeological observations were made. A comprehensive watching brief was also carried out during the borrow pit excavations in April 2013, and also as part of preparatory works for the construction of the site compound.

5.2 Borrow Pit Adjacent to former brickworks

The remains of a former brickworks is noted on the 2nd edition 25 inch Ordnance Survey map of 1901 at NGR SH61781320, close to the areas of late 19th and early 20th century development in Fairbourne (Plates 7-10). Close to this area, but to the west of it, a borrow pit was excavated, covering an area of 8,000m². The main site of the brickworks, where the wooden and corrugated iron buildings were formerly located, and as shown on the 25 inch Ordnance Survey Maps, was avoided. During the stripping of this adjacent area a topsoil depth of up to 0.4m was noted, overlying rubble and brick at the east end, covering an area of about 24m by 40m, which was close to the location of the brickworks. This deposit was quite shallow (about 0.3m), and overlay a light yellowish brown clay about 0.25m thick which in turn overlay a blue grey waterlogged clay. Earlier geotechnical testing had indicated that at a depth of 0.6m a peat deposit would be encountered. These were not reached during the borrow pit excavation, which was restricted to the clay deposits above. These clay deposits overlying peat are consistent with natural estuarine deposits overlying earlier peat formation. The excavation work generally avoided the brickworks area, with clay excavated to the west of it (Plate 09). However a single course of brickwork, two bricks wide, running WNW-ESE was noted at SH61741315. The purpose of this is unclear, and it does not appear to have any foundations.

At the eastern end of the borrow pit excavation there was much late 19th century to early 20th century waste, consisting of glass, pottery and stoneware jars noted within the topsoil. This material although unstratified, is probably waste material from the time that the brickworks was in use (Plate 10).

5.3 Borrow Pit by the sea wall adjacent to right-angle in the embankment

The triangular borrow pit adjacent to the sea wall (centred on NGR SH61381384; Figure 1) covering an area of about 11,000m² was topsoil stripped to a depth of 0.2-0.3m onto a light yellowish brown clay. This was shown to cover the whole of the area of the borrow pit, and to be an estuarine deposit which predated the construction of the sea wall. No evidence of any archaeological deposits was encountered during the clay extraction to a depth of 0.6m which followed the topsoil stripping. It can be suggested that it represents a natural layer deposited before the drainage of the marshland.

5.4 Work on Fairbourne Embankment

An intermittent watching brief was carried out during the ground works associated with the haul road construction and embankment stripping. This stratigraphy at the eastern end of the scheme revealed no new archaeological features, with the exception of modern service trenches. A light yellow brown clay lay below 0.4m of topsoil, which was a rich dark loamy silt. The removal of topsoil along most of the length of the embankment was carried out subsequent to the works, along with the construction of a haul road (Plates 11-16). Apart from areas of boggy ground, which was built up and no deposits were observed, estuarine clay was observed below the topsoil.

On the east side of the flood embankment, immediately south of the lime kiln, a 170m length of ground between 3.5m and 15m was stripped to a depth of between 0.25m and 0.4m. This included the stripping of the eastern sloping side of the embankment. The embankment was seen to be constructed of a compacted clay bank reinforced with shale rubble material, which included some quite large blocks (up to 0.7m by 0.5m). Some slippage of this material was noted to the east of the bank, and this was repaired as part of the remedial works.

The stripped area consisted of up to 0.45m of silty clay below wet reeds/couch grass which overlay a mid orangy-brown natural clay and sand deposit. This was only visible in patches where the natural soils protruded at a shallow depth of about 0.25m. Rock outcropping was also noted in places.

5.5 Fairbourne Compound Excavation

The ground works at the Fairbourne site compound area were very limited in scope. They consisted of a chipped stone layer placed over a *terram* membrane to protect the ground surface below, following very limited topsoil stripping which did not reveal the subsoil deposits. A pipe culvert was inserted across a drainage channel at SH61291332, although

this was removed at the end of the project. There were therefore no archaeological deposits observed during the compound area preparation.

6 CONCLUSIONS

The lime kiln on the Fairbourne Embankment at NGR SH62491408 was fully investigated and recorded, and a photographic record maintained. It was found to be early 19th century in date, and to have been out of use for some considerable time. It was built on land owned by the Reverley's of Bryngwin, and was presumably accessed by sea. Lime was usually burnt for improving agricultural soils and it has been claimed that mixed balls of small coal and clay was used for ballast in the cargo boats that plied the Mawddach, was ideal fuel for the coastal limekilns. Once the embankment was fully operational, it was presumably far more difficult of access, and its use went into decline.

The watching brief at the Fairbourne site compound provided little information, since it was constructed on made ground, and little excavation work was undertaken.

The brick works site was avoided by the ground works carried out, although a borrow pit was excavated to the west of it. Ephemeral archaeological evidence, in the form of one single course of brickwork, and waste material which presumably originated in the brickworks, was identified and recorded. No significant archaeological evidence was encountered during the excavation of the borrow pit at NGR SH61411386- SH61381384, close to the sea wall, other than the identification of pre-drainage estuarine deposits.

The landscape over which the embankment was constructed was one of tidal estuary, at the mouth of the Afon Mawddach. Its sandbanks and marshy flatlands extend beyond the area of the embankment and include a substantial area of reclaimed land. Peatland within the work area, identified during the assessment phase, indicated that the Mawddach estuary was probably once open water, although none of the peat was observed during the excavation works. An intermittent watching brief was carried out during the ground works of haul road construction and topsoil stripping on the embankment. Some rock outcropping and watercourses were noted, but no significant archaeological deposits.

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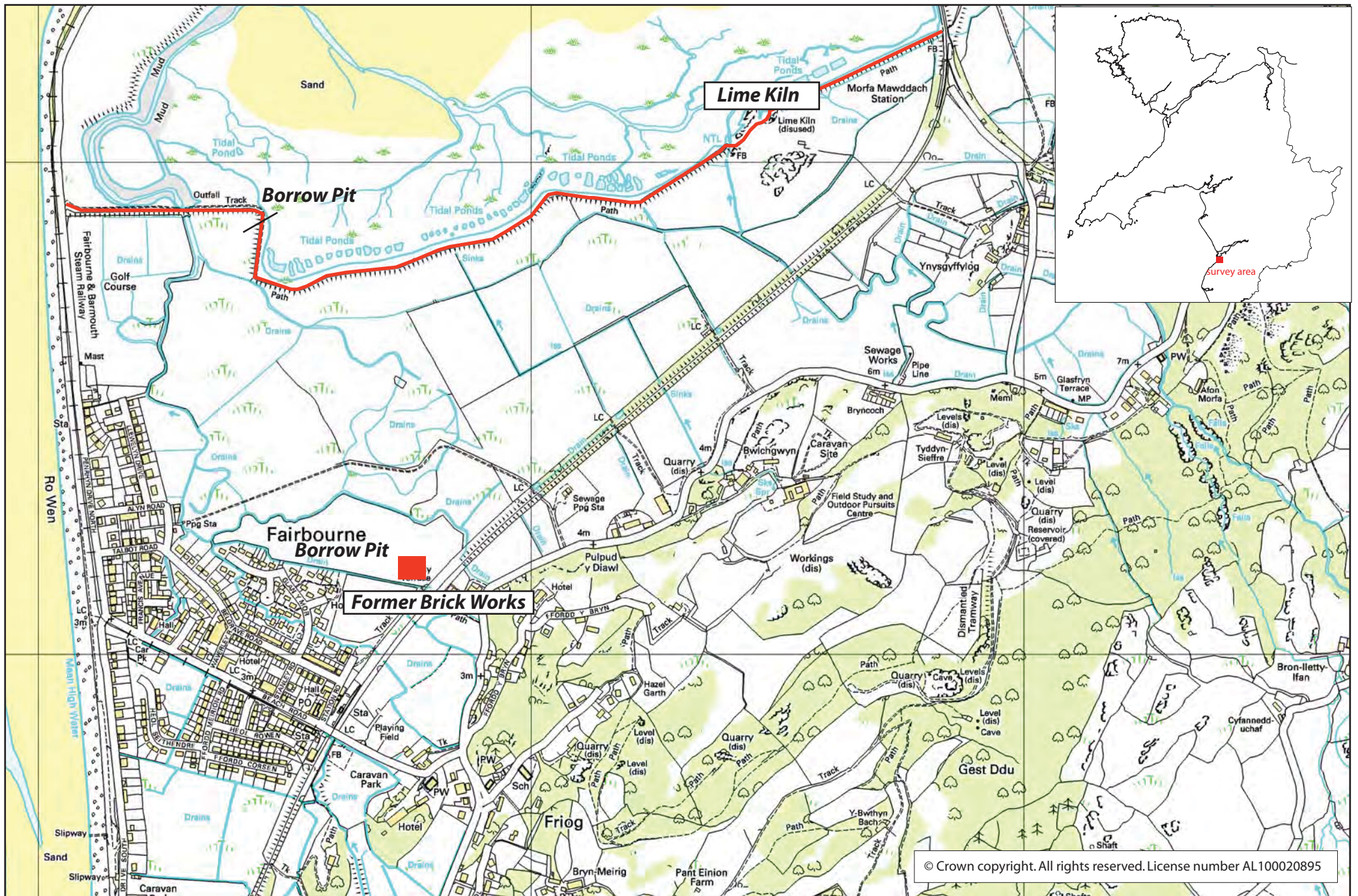


Fig. 1 The Location of the Fairbourne Embankment and Associated Features (annotated in red). Map Ordnance Survey 1:10 000 series sheet SH 61 SW. Scale 1:10 000 @A4

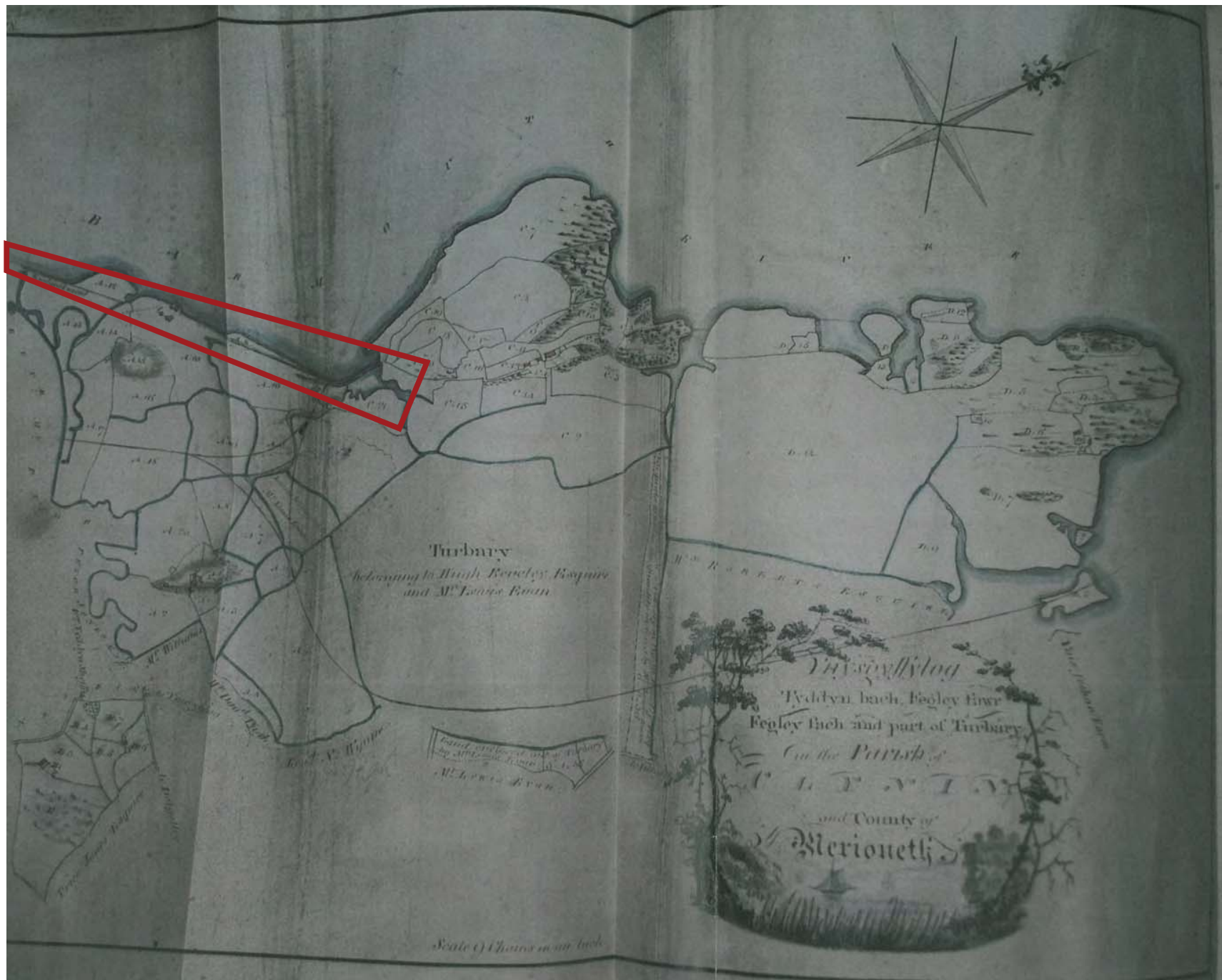


Fig. 2 The Fairbourne Flood Defences in 1804, showing that the embankment (highlighted) had been started by then, although the lime kiln is not shown. The route of the railway line has been added later (Dolgellau Archives Z/DJ 155).



Figure 03: Tithe Map of the parish of Llangelynin of 1839 showing the Fairbourne Embankment (highlighted in red)



Figure 04: The Fairbourne Embankment in 1901, shown on the 25 inch 2nd edition Ordnance Survey Merioneth County Series Map, sheet XXXVI.10-11,14-15. Scale 1:10000@A4.



Plate 01: The Lime Kiln on the Fairbourne Embankment, viewed from the east. Scale 1m



Plate 02: The Lime Kiln viewed from the south. Scale 1m



Plate 03: The Lime Kiln on the Fairbourne Embankment, viewed from the west. Scale 1m



Plate 04: The Lime Kiln viewed from the north, showing hole into which the lime and fuel was shovelled. Scale 1m



Plate 05: The Lime Kiln on the Fairbourne Embankment, viewed from the west, showing relationship with the rock outcrop built into the Fairbourne embankment. Scale 1m



Plate 06: The Lime Kiln viewed from the east south east, showing hole into which the lime and fuel was shovelled. Scale 1m



Plate 07: Excavation work on the borrow pit adjacent to the former brickworks site



Plate 08: Evidence of brick rubble within the topsoil, presumably related to the works at the Fairbourne Brickworks. Scale 1m



Plate 09: Excavation work on the borrow pit adjacent to the former brickworks site, showing double thickness of brickwork, which does not appear to be structural



Plate 10: Evidence of a rubbish pit at the former Fairbourne Brickworks site. Scale 1m



Plate 11: Topsoil strip adjacent to the embankment. View looking east



Plate 12: Fairbourne embankment, showing shale and clay make-up. View from the north. Scale 1m



Plate 13: Topsoil strip of haul road east of the lime kiln. View looking west. Scale 1m



Plate 14: Use of the haul road adjacent to the lime kiln and Fairbourne Embankment. Scale 1m



Plate 15: Stripped Topsoil showing clay and shale make-up of the embankment. View looking west. Scale 1m



Plate 16: New section of Fairbourne Embankment removing the right-angled junction at the west end of the scheme.

APPENDIX I

Gwynedd Archaeological Trust Project Design for Archaeological Mitigation

APPENDIX I: PROJECT DESIGN

FAIRBOURNE

MAIN EMBANKMENT RENEWAL PROGRAMME

**PROJECT DESIGN FOR
ARCHAEOLOGICAL RECORDING AND WATCHING
BRIEF
(G2315)**

Prepared for

Natural Resources Wales

APRIL 2013

Ymddiriedolaeth Archaeolegol Gwynedd

Gwynedd Archaeological Trust

FAIRBOURNE MAIN EMBANKMENT RENEWAL PROGRAMME

PROJECT DESIGN FOR ARCHAEOLOGICAL RECORDING AND WATCHING BRIEF

Prepared for Natural Resources Wales, April 2013

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1.0 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been asked by *Natural Resources Wales* to provide a project design for completing a programme of archaeological recording and a watching brief during works to the main embankment and flood defences at Fairbourne, Gwynedd. The works are being carried out adjacent to the village of Fairbourne on the Meirionnydd coast, on the south side of the Afon Mawddach. The western boundary of the area is defined by the shingle beach fronting Barmouth Bay at Fairbourne. The eastern boundary is defined by the inlet that extends north from the small settlement at Arthog into the Mawddach estuary, and the northern one by the estuary itself. The flat lands of the estuary on which the current flood bank is situated is known as Morfa Mawddach. The works are centred on NGR **SH 627139**.

The estuary is a designated SSSI, and the Mawddach estuary is a Landscape of Special Historic Interest (Cadw 2001).

This design forms part of a larger archaeological programme of works: an archaeological assessment has already been completed for the project (Frost 2009).

A detailed brief has not been prepared for this by Gwynedd Archaeological Planning Service (GAPS). However archaeological mitigation has been proposed by Ed Wilson, the Senior Archaeologist at the *Environment Agency*, in agreement with GAPS, in response to the archaeological assessment carried out by *Castlering Archaeology* (Frost 2009). These were detailed in an email dated 1st February 2013 and recommended:

7. Avoidance of known sites, such as the brickworks site at NGR SH 61781320 and the Lime kiln at SH 62491408
8. Building Recording- the production of a written and photographic record of the lime Kiln at NGR SH 62491408 and to include documentary research.
9. Continuous archaeological observation of the ground works during the excavation of any borrow pits and the stripping of compound areas during the proposed works
10. Intermittent archaeological observation during general ground works
11. Palaeoenvironmental work on any identified peat deposits, to be followed by geoarchaeological assessment
12. Community Outreach

The current design, taking into account the above considerations, conforms to the guidelines specified in the *IFA Standard and Guidance for Archaeological Evaluation* (Institute for Archaeologists, 1994, rev. 2001 & 2008).

Please Note: the project design and cost estimates are only valid for six months after the date of submission. After this period Gwynedd Archaeological Trust should be contacted.

2.0 BACKGROUND

2.1 ARCHAEOLOGICAL ASSESSMENT

Castlering Archaeology completed an archaeological assessment of the proposed flood alleviation scheme in August 2009 (Report **316**). The report concluded that:

Flood alleviation schemes of this size are generally considered to have the potential to reveal hitherto unknown archaeological remains as well as possible artefactual evidence. The scheme may provide an opportunity to research and record sub-surface deposits, which may otherwise remain unknown. The scheme may provide potential to uncover palaeoenvironmental evidence including submerged land surfaces; evidence of small scale coastal industries, fishing, transport, lime burning and communication; the relationships between the coast and inland upland settlements as well as the recovery of chance finds and the possibility of well-preserved timbers which may be suitable for dendrochronology. The potential to uncover buried archaeological deposits and/or chance finds will depend on the proposed depth of excavation associated with the on-site works (Frost 2009).

Significant evidence for the development of the area and the embankment from the mid 19th century onwards was identified, including the Cambrian railway in the 1860s and the development of Fairbourne as a resort. A lime kiln of probable 18th century date was also identified on the route of the scheme.

2.2 ARCHAEOLOGICAL WORKS

The pre-construction building recording at the lime kiln (NGR SH 624931408) was carried out in February 2013.

3.0 METHOD STATEMENT

3.1 ARCHAEOLOGICAL WATCHING BRIEF AND BUILDING RECORDING

3.1.1 Intensive Archaeological Observation

The excavation of the borrow pits, including that close to the former brickworks site, will be observed with an archaeological watching brief. This will take place between 8th April and 29th April 2013, with the archaeologist present during sensitive ground disturbance. The laying of compound hard standing and culverts has involved minimal excavation works, therefore the opportunities to carry out watching brief activity has been limited.

3.1.2 Partial Archaeological Observation

An intermittent archaeological watching brief will be carried out during the ground works of the entire flood defences scheme work. This will be more intensively carried out in the areas close to the site of the former brickworks (NGR 61781320) and the lime kiln (NGR SH 62491408). These sites are to be fenced off and avoided, but an archaeologist will be present during the adjacent works to record any archaeological information recovered. The details and timings of this will be arranged with the on-site contractor, but is expected that the work in the area of the Brick works Lime Kiln will be carried out between 15th and 20th April 2013. Archaeological project work is currently expected up to 6th July 2013, if further work is required, the project design will be updated.

3.1.3 Palaeoenvironmental Work

In the event of the recovery of peat deposits, these will be sampled and specialist advice sought to enable an agreed programme of sampling and dating to be undertaken.

3.1.4 Building Recording

The building recording at the Lime Kiln (NGR SH 62491408) has been completed, and the results of this will be incorporated into the archaeological report.

3.1.5 Toolbox Talks

The archaeologist will give toolbox talks to site workers in order that operatives are aware of the location and known extent of heritage assets in the vicinity of the ground works. This is seen as an ongoing process, with initial talks having already been given. This will be repeated with operatives in advance of ground works in the archaeologically sensitive areas, and updated on a regular basis, as and when required.

3.2 REPORT

Following completion of the stages outlined above, a report will be produced that will include:

1. Introduction
2. Project Design
3. Methods and techniques
4. Archaeological Background
5. Results
6. Summary and conclusions
7. List of sources consulted.

The report will include the following:

- a) a copy of the agreed specification
- b) a site location plan based on current OS mapping
- c) all identified features plotted on an appropriately scaled plan of the development site
- d) appropriately scaled plans and sections showing identified features and significant finds
- e) full dimensional and descriptive detail of all identified features

Provision will also be made for all archaeological work on site, including the post-excavation analysis, conservation of artefacts, any supplementary scientific analysis and for the subsequent publication of results in an appropriate journal.

The project will be monitored by Gwynedd Archaeological Planning Services, who will be regularly updated on progress by the archaeological contractor (GAT).

- A paper report plus digital report and archive on optical disc will be provided to GAPS;
- A paper report will be provided to Historic Environment Record, Gwynedd Archaeological Trust (1 set);
- A paper report plus digital report and archive on optical disc will be provided to Royal Commission on Ancient and Historic Monuments, Wales (1 set).
- A paper report and/or digital report will be provided to the client (1 set)

3.3 ARCHIVE

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. All plans, photographs and descriptions will be labelled and cross-referenced, and lodged in an appropriate place (to be decided in consultation with the regional Historic Environment Record) within six months of the completion of the project.

3.4 COMMUNITY ENGAGEMENT

The trust will provide a small display of the archaeological information generated by the project for local residents. This could potentially take place in one of the site buildings as part of a wider project open day, perhaps as part of the opening of the scheme.

4.0 FURTHER ARCHAEOLOGICAL WORKS

- **The identification of significant archaeological features during the evaluation stage may necessitate further archaeological works. This will require the submission of new cost estimates to the contractor and may be subject to a separate project design, to be agreed by the GAPS prior to implementation.**
- This design does not include a methodology or cost for examination of, conservation of, or archiving of finds discovered during the evaluation, nor of any radiocarbon dates required, nor of examination of palaeoenvironmental samples associated with any peat deposits. The need for these will be identified in the post-fieldwork programme (if required), and a new design will be issued for approval by GAPS.

5.0 ENVIRONMENTAL SAMPLES

If necessary, relevant archaeological deposits will be sampled by taking bulk samples (a minimum of 10.0 litres and maximum of 30.0 litres) for flotation of charred plant remains. Bulk samples will be taken from waterlogged deposits for macroscopic plant remains. Other bulk samples, for example from middens, may be taken for small animal bones and small artefacts.

Specific palaeoenvironmental strategies for any peat deposits will be discussed with the Client and GAPS if encountered in the archaeological work and input from a specialist will be sought during the fieldwork on an appropriate sampling strategy.

6.0 HUMAN REMAINS

Any finds of human remains will be left *in-situ*, covered and protected, and both the coroner and the GAPS Archaeologist informed. If removal is necessary it will take place under appropriate regulations and with due regard for health and safety issues. In order to excavate human remains, a licence is required under Section 25 of the Burials Act 1857 for the removal of any body or remains of any body from any place of burial. This will be applied for should human remains need to be investigated or moved.

7.0 SMALL FINDS

The vast majority of finds recovered from archaeological excavations comprise pottery fragments, bone, environmental and charcoal samples, and non-valuable metal items such as nails. Often many of these finds become unstable (i.e. they begin to disintegrate) when removed from the ground. All finds are the property of the landowner, however, it is Trust policy to recommend that all finds are donated to an appropriate museum where they can receive specialist treatment and study. Access to finds must be granted to the Trust for a reasonable period to allow for analysis and for study and publication as necessary. All finds would be treated according to advice provided within *First Aid for Finds* (Rescue 1999). Trust staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff, ARCUS at Sheffield and BAE at Birmingham.

7.1 UNEXPECTED DISCOVERIES: TREASURE TROVE

Treasure Trove law has been amended by the Treasure Act 1996. The following are Treasure under the Act:

- *Objects other than coins* any object other than a coin provided that it contains at least 10% gold or silver and is at least 300 years old when found.
- *Coins* all coins from the same find provided they are at least 300 years old when found (if the coins contain less than 10% gold or silver there must be at least 10. Any object or coin is part of the same find as another object or coin, if it is found in the same place as, or had previously been left together with, the other object. Finds may have become scattered since they were originally deposited in the ground. Single coin finds of gold or silver are not classed as treasure under the 1996 Treasure Act.
- *Associated objects* any object whatever it is made of, that is found in the same place as, or that had previously been together with, another object that is treasure.
- *Objects that would have been treasure trove* any object that would previously have been treasure trove, but does not fall within the specific categories given above. These objects have to be made substantially of gold or silver, they have to be buried with the intention of recovery and their owner or his heirs cannot be traced.

The following types of finds are not treasure:

- Objects whose owners can be traced.
- Unworked natural objects, including human and animal remains, even if they are found in association with treasure.
- Objects from the foreshore which are not wreck.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown, on whose behalf the National Museums and Galleries of Wales acts as advisor on technical matters, and may be the recipient body for the objects.

The National Museums and Galleries of Wales will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

8.0 STAFF & TIMETABLE

8.1 STAFF

The project will be supervised by John Roberts, Principal Archaeologist at GAT: Contracts. The work will be carried out by fully trained Project Archaeologists who are experienced in conducting project work and working with contractors and earth moving machinery. (Full CV's are available upon request).

8.2 TIMETABLE

The project will be carried out from February 2013. Details of the work programme have been provided up until July 2013 (Galliford Try 2013). If work progresses after this time, a further timetable of work will be agreed and an updated project design produced.

Specific tasks will be carried out in accordance with the timings of that programme, and intermittent watching brief tasks will be timetabled through liaison with the client. It is anticipated that unless archaeological evidence is uncovered requiring further mitigation, that a single archaeologist will be on site to carry out the work.

9.0 HEALTH AND SAFETY

The Trust subscribes to the SCAUM (Standing Conference of Archaeological Unit Managers) Health and Safety Policy as defined in **Health and Safety in Field Archaeology** (1999).

10.0 INSURANCE

Liability Insurance - Aviva Policy 24765101CHC/00045

- Employers' Liability: Limit of Indemnity £10m in any one occurrence
- Public Liability: Limit of Indemnity £5m in any one occurrence
- Hire-in Plant Insurance: £50,000.00 any one item;
£250,000.00 any one claim

The current period expires 21/06/13

Professional Indemnity Insurance – RSA Insurance Plc P8531NAECE/1028

- Limit of Indemnity £5,000,000 any one claim

The current period expires 22/07/13

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Galliford Try *Fairbourne FRMS Main Embankment Programme*

Institute for Archaeologists, 1994, rev. 2001 & 2008 *Standard and Guidance for Archaeological Evaluation*

APPENDIX II

Gwynedd Archaeological Trust Photographic Mitigation Archive

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_001	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer	-	-	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_002	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer	-	-	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_003	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_004	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_005	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_006	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_007	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_008	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_009	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_010	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_011	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_012	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_013	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_014	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_015	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_016	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_017	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_018	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_019	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_020	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_021	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_022	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_023	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_024	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_025	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_026	G2315 Fairbourne Flood Defences	Watching Brief	General shot taken on the walk over with site engineer			18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_027	G2315 Fairbourne Flood Defences	Watching Brief	Limekiln at NGR SH 62491408	N	1 x 1m	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_028	G2315 Fairbourne Flood Defences	Watching Brief	Limekiln at NGR SH 62491408	N	1 x 1m	18/02/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_029	G2315 Fairbourne Flood Defences	Watching Brief	Limekiln at NGR SH 62491408	E	1 x 1m	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_030	G2315 Fairbourne Flood Defences	Watching Brief	Limekiln at NGR SH 62491408	E	1 x 1m	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_031	G2315 Fairbourne Flood Defences	Watching Brief	Limekiln at NGR SH 62491408	S	1 x 1m	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_032	G2315 Fairbourne Flood Defences	Watching Brief	Limekiln at NGR SH 62491408	S	1 x 1m	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_033	G2315 Fairbourne Flood Defences	Watching Brief	Limekiln at NGR SH 62491408, showing circular lined entrance hole from above	W	1 x 1m	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_034	G2315 Fairbourne Flood Defences	Watching Brief	Limekiln at NGR SH 62491408, showing circular line entrance hole from above	W	1 x 1m	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_035	G2315 Fairbourne Flood Defences	Watching Brief	General view of kiln	S	1 x 1m	18/02/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_036	G2315 Fairbourne Flood Defences	Watching Brief	General view of kiln	S	1 x 1m	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_037	G2315 Fairbourne Flood Defences	Watching Brief	General view of kiln	NNW	1 x 1m	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_038	G2315 Fairbourne Flood Defences	Watching Brief	General view of kiln	NNW	1 x 1m	18/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_039	G2315 Fairbourne Flood Defences	Watching Brief	Culvert at the compound site	-	-	21/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_040	G2315 Fairbourne Flood Defences	Watching Brief	Culvert at the compound site	-	-	21/02/2013	Robert Evans	GAT
G2315_Fairbourne_FD_041	G2315 Fairbourne Flood Defences	Watching Brief	Triangular Borrow pit near the sea wall. Stripped general shots	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_042	G2315 Fairbourne Flood Defences	Watching Brief	Triangular Borrow pit near the sea wall. Stripped general shots	-	-	08/04/2013	Dave McNichol	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_043	G2315 Fairbourne Flood Defences	Watching Brief	Triangular Borrow pit near the sea wall. Stripped general shots	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_044	G2315 Fairbourne Flood Defences	Watching Brief	General shot of area	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_045	G2315 Fairbourne Flood Defences	Watching Brief	General View of eastern end of borrow pit, showing crushed brick	N	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_046	G2315 Fairbourne Flood Defences	Watching Brief	General View of eastern end of borrow pit, showing crushed brick	N	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_047	G2315 Fairbourne Flood Defences	Watching Brief	General view of the eastern end of the borrow pit, showing line of brickwork	E	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_048	G2315 Fairbourne Flood Defences	Watching Brief	General view of the eastern end of the borrow pit, showing line of brickwork	E	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_049	G2315 Fairbourne Flood Defences	Watching Brief	General view of excavation	S	1 x 1m	22/04/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_050	G2315 Fairbourne Flood Defences	Watching Brief	General view of excavation	S	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_051	G2315 Fairbourne Flood Defences	Watching Brief	Line of brickwork	E	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_052	G2315 Fairbourne Flood Defences	Watching Brief	Line of brickwork	E	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_053	G2315 Fairbourne Flood Defences	Watching Brief	View of crushed brick/rubble area	SE	-	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_054	G2315 Fairbourne Flood Defences	Watching Brief	View of crushed brick/rubble area	SE	-	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_055	G2315 Fairbourne Flood Defences	Watching Brief	General view showing clay subsoil with field drains and excavated rubbish pit	S	-	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_056	G2315 Fairbourne Flood Defences	Watching Brief	external view showing clay subsoil with field drains and excavated rubbish pit	S	-	22/04/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_057	G2315 Fairbourne Flood Defences	Watching Brief	Rectangular rubbish pit (1940s)	SW	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_058	G2315 Fairbourne Flood Defences	Watching Brief	Rectangular rubbish pit (1940s)	SW	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_059	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_060	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_061	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_062	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_063	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_064	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_065	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_066	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_067	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_068	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_069	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_070	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_071	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_072	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_073	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_074	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_075	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_076	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_077	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_078	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_079	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_080	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_081	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_082	G2315 Fairbourne Flood Defences	Watching Brief	General excavation shots- crushed rubble area to the east is shown	-	1 x 1m	22/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_083	G2315 Fairbourne Flood Defences	Watching Brief	View of haul road strip to the south of the lime kiln on the east side of the flood defence trackway	S	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_084	G2315 Fairbourne Flood Defences	Watching Brief	View of haul road strip to the south of the lime kiln on the east side of the flood defence trackway	S	1 x 1m	10/06/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_085	G2315 Fairbourne Flood Defences	Watching Brief	View of haul road strip to the south of the lime kiln on the east side of the flood defence trackway	N	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_086	G2315 Fairbourne Flood Defences	Watching Brief	View of haul road strip to the south of the lime kiln on the east side of the flood defence trackway	N	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_087	G2315 Fairbourne Flood Defences	Watching Brief	East facing view of stripped embankment	E	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_088	G2315 Fairbourne Flood Defences	Watching Brief	East facing view of stripped embankment	E	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_089	G2315 Fairbourne Flood Defences	Watching Brief	West facing view of section on east side of stripped area	W	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_090	G2315 Fairbourne Flood Defences	Watching Brief	West facing view of section on east side of stripped area	W	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_091	G2315 Fairbourne Flood Defences	Watching Brief	View of stripped area from the roof of the lime kiln	N	1 x 1m	10/06/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_092	G2315 Fairbourne Flood Defences	Watching Brief	View of stripped area from the roof of the lime kiln	N	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_093	G2315 Fairbourne Flood Defences	Watching Brief	View of embankment looking south	N	-	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_094	G2315 Fairbourne Flood Defences	Watching Brief	View of embankment looking south	N	-	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_095	G2315 Fairbourne Flood Defences	Watching Brief	View of embankment looking north towards rock outcrop forms	N	-	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_096	G2315 Fairbourne Flood Defences	Watching Brief	View of embankment looking north towards rock outcrop forms	N	-	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_097	G2315 Fairbourne Flood Defences	Watching Brief	View of embankment looking south showing re-formed angle	N	-	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_098	G2315 Fairbourne Flood Defences	Watching Brief	View of embankment looking south showing re-formed angle	N	-	10/06/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_099	G2315 Fairbourne Flood Defences	Watching Brief	View of angle in embankment from the south	S	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_100	G2315 Fairbourne Flood Defences	Watching Brief	View of angle in embankment from the south	S	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_101	G2315 Fairbourne Flood Defences	Watching Brief	View of southern rock outcrop from the embankment	S	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_102	G2315 Fairbourne Flood Defences	Watching Brief	View of southern rock outcrop from the embankment	S	1 x 1m	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_103	G2315 Fairbourne Flood Defences	Watching Brief	General scenic shot of limekiln along the embankment	N	-	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_104	G2315 Fairbourne Flood Defences	Watching Brief	General scenic shot of limekiln along the embankment	N	-	10/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_105	G2315 Fairbourne Flood Defences	Watching Brief	General view along the embankment under restrengthening	N	-	01/07/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_106	G2315 Fairbourne Flood Defences	Watching Brief	General view along the embankment under restrengthening	N	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_107	G2315 Fairbourne Flood Defences	Watching Brief	View of haul road built-up to the east and skirting the lime kiln	N	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_108	G2315 Fairbourne Flood Defences	Watching Brief	View of haul road built-up to the east and skirting the lime kiln	N	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_109	G2315 Fairbourne Flood Defences	Watching Brief	View of haul road built-up to the east and skirting the lime kiln	S	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_110	G2315 Fairbourne Flood Defences	Watching Brief	View of haul road built-up to the east and skirting the lime kiln	S	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_111	G2315 Fairbourne Flood Defences	Watching Brief	General view looking south along embankment showing haul road	N	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_112	G2315 Fairbourne Flood Defences	Watching Brief	General view looking south along embankment showing haul road	N	-	01/07/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_113	G2315 Fairbourne Flood Defences	Watching Brief	View of limekiln and haul road	W	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_114	G2315 Fairbourne Flood Defences	Watching Brief	View of limekiln and haul road	W	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_115	G2315 Fairbourne Flood Defences	Watching Brief	View of works where the embankment is to be realigned	NE	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_116	G2315 Fairbourne Flood Defences	Watching Brief	View of works where the embankment is to be realigned	NE	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_117	G2315 Fairbourne Flood Defences	Watching Brief	Rock cut channel 100m south of limekiln	W	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_118	G2315 Fairbourne Flood Defences	Watching Brief	Rock cut channel 100m south of limekiln	W	-	01/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_119	G2315 Fairbourne Flood Defences	Watching Brief	Reinstated flood defence	E	-	08/04/2013	Dave McNichol	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_120	G2315 Fairbourne Flood Defences	Watching Brief	Triangular borrow pit, near the sea defences, completely stripped	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_121	G2315 Fairbourne Flood Defences	Watching Brief	Triangular borrow pit, near the sea defences, completely stripped	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_122	G2315 Fairbourne Flood Defences	Watching Brief	Triangular borrow pit, near the sea defences, completely stripped	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_123	G2315 Fairbourne Flood Defences	Watching Brief	Triangular borrow pit, near the sea defences, completely stripped	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_124	G2315 Fairbourne Flood Defences	Watching Brief	Triangular borrow pit, near the sea defences, completely stripped	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_125	G2315 Fairbourne Flood Defences	Watching Brief	Triangular borrow pit, near the sea defences, completely stripped	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_126	G2315 Fairbourne Flood Defences	Watching Brief	Triangular borrow pit, near the sea defences, completely stripped	-	-	08/04/2013	Dave McNichol	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_127	G2315 Fairbourne Flood Defences	Watching Brief	River Diversion	WNW	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_128	G2315 Fairbourne Flood Defences	Watching Brief	River Diversion	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_129	G2315 Fairbourne Flood Defences	Watching Brief	Stripped area of track	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_130	G2315 Fairbourne Flood Defences	Watching Brief	Stripped area of track	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_131	G2315 Fairbourne Flood Defences	Watching Brief	Stripped area of track	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_132	G2315 Fairbourne Flood Defences	Watching Brief	Brickworks area (fenced off)	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_133	G2315 Fairbourne Flood Defences	Watching Brief	Brickworks area (fenced off)	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_134	G2315 Fairbourne Flood	Watching Brief	Brickworks area (fenced off)	-	-	08/04/2013	Dave McNichol	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
	Defences							
G2315_Fairbourne_FD_135	G2315 Fairbourne Flood Defences	Watching Brief	Brickworks area (fenced off)	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_136	G2315 Fairbourne Flood Defences	Watching Brief	General shot	-	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_137	G2315 Fairbourne Flood Defences	Watching Brief	Area next to brickworks	E	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_138	G2315 Fairbourne Flood Defences	Watching Brief	Area next to brickworks	S	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_139	G2315 Fairbourne Flood Defences	Watching Brief	Area next to borrow pit	S	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_140	G2315 Fairbourne Flood Defences	Watching Brief	Area next to brickworks	E	-	08/04/2013	Dave McNichol	GAT
G2315_Fairbourne_FD_162	G2315 Fairbourne Flood Defences	Watching Brief	Haul road and easement	E	-	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_161	G2315 Fairbourne	Watching Brief	Haul road and easement	E	-	17/06/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
	Flood Defences							
G2315_Fairbourne_FD_145	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping at borrow pit at embankment angle	NE	-	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_160	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping	NNW	1x1m	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_164	G2315 Fairbourne Flood Defences	Watching Brief	view of haul road and easement west of the lime kiln	ENE	-	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_159	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping	NNW	1x1m	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_158	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping	NW	-	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_157	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping	NW	-	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_156	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping	N	1x1m	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_155	G2315	Watching	Easement topsoil stripping	N	1x1m	24/04/2013	Robert	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
	Fairbourne Flood Defences	Brief					Evans	
G2315_Fairbourne_FD_154	G2315 Fairbourne Flood Defences	Watching Brief	view of surface reinstatement	N	-	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_153	G2315 Fairbourne Flood Defences	Watching Brief	view of surface reinstatement	N	-	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_141	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping	E	1 x1m	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_152	G2315 Fairbourne Flood Defences	Watching Brief	view of western borrow pit excavation	N	-	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_151	G2315 Fairbourne Flood Defences	Watching Brief	view of western borrow pit excavation	N	-	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_150	G2315 Fairbourne Flood Defences	Watching Brief	view of haul road	W	-	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_149	G2315 Fairbourne Flood Defences	Watching Brief	view of haul road	W	-	24/04/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_148	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping	W	1x1m	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_146	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping at embankment angle	NE	-	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_144	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping west of lime kiln	W	1x1m	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_143	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping west of lime kiln	W	1x1m	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_142	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping	E	1x1m	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_147	G2315 Fairbourne Flood Defences	Watching Brief	Easement topsoil stripping	W	1x1m	24/04/2013	Robert Evans	GAT
G2315_Fairbourne_FD_163	G2315 Fairbourne Flood Defences	Watching Brief	view of haul road and easement west of the lime kiln	ENE	-	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_165	G2315 Fairbourne Flood	Watching Brief	view of embankment having been scraped	S	1x1m	17/06/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
	Defences							
G2315_Fairbourne_FD_166	G2315 Fairbourne Flood Defences	Watching Brief	view of embankment having been scraped	S	1x1m	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_167	G2315 Fairbourne Flood Defences	Watching Brief	detail of the base of the embankment	S	1x1m	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_168	G2315 Fairbourne Flood Defences	Watching Brief	detail of the base of the embankment	S	1x1m	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_169	G2315 Fairbourne Flood Defences	Watching Brief	general view of easement strip and embankment from rock outcrop to west of the lime kiln	ENE	-	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_170	G2315 Fairbourne Flood Defences	Watching Brief	view of easement strip and embankment from rock outcrop to west of the lime kiln	ENE	-	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_171	G2315 Fairbourne Flood Defences	Watching Brief	general view of easement strip and embankment from rock outcrop to west of the lime kiln	NE	-	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_172	G2315 Fairbourne Flood Defences	Watching Brief	general view of easement strip and embankment from rock outcrop to west of the lime kiln	NE	-	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_173	G2315 Fairbourne	Watching Brief	general view of haul road from lime kiln	W	1x1m	17/06/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
	Flood Defences							
G2315_Fairbourne_FD_174	G2315 Fairbourne Flood Defences	Watching Brief	general view of haul road from lime kiln	W	1x1m	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_175	G2315 Fairbourne Flood Defences	Watching Brief	general view from the embankment	E	1x1m	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_176	G2315 Fairbourne Flood Defences	Watching Brief	general view from the embankment	E	1x1m	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_177	G2315 Fairbourne Flood Defences	Watching Brief	general view from the embankment	W	-	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_178	G2315 Fairbourne Flood Defences	Watching Brief	general view from the embankment	W	-	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_179	G2315 Fairbourne Flood Defences	Watching Brief	general view from the embankment	W	1x1m	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_180	G2315 Fairbourne Flood Defences	Watching Brief	general view from the embankment	W	1x1m	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_181	G2315	Watching	general view from the embankment	E	-	17/06/2013	Robert	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
	Fairbourne Flood Defences	Brief					Evans	
G2315_Fairbourne_FD_182	G2315 Fairbourne Flood Defences	Watching Brief	general view from the embankment	E	-	17/06/2013	Robert Evans	GAT
G2315_Fairbourne_FD_183	G2315 Fairbourne Flood Defences	Watching Brief	view from embankment showing haul road and scraped embankment	NE	-	02/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_184	G2315 Fairbourne Flood Defences	Watching Brief	view from embankment showing haul road and scraped embankment	NE	-	02/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_185	G2315 Fairbourne Flood Defences	Watching Brief	stream crossing south west of the lime kiln	SSW	-	02/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_186	G2315 Fairbourne Flood Defences	Watching Brief	stream crossing south west of the lime kiln	SSW	-	02/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_187	G2315 Fairbourne Flood Defences	Watching Brief	work being carried out on the embankment	ENE	-	02/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_188	G2315 Fairbourne Flood Defences	Watching Brief	work being carried out on the embankment	ENE	-	02/07/2013	Robert Evans	GAT

File reference	Project name	Project phase	Description	View from	Scale (s)	Date	Originating person	Originating organisation
G2315_Fairbourne_FD_189	G2315 Fairbourne Flood Defences	Watching Brief	culverted stream to the north of the embankment	NE	-	02/07/2013	Robert Evans	GAT
G2315_Fairbourne_FD_190	G2315 Fairbourne Flood Defences	Watching Brief	culverted stream to the north of the embankment	NE	-	02/07/2013	Robert Evans	GAT



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