

Archaeology Wales

Land adjacent to Stormy Down Quarry, Heol-y-Splott, Pyle

Archaeological Watching Brief



By
James Evans

Report No. 1803


Archaeology Wales

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Archaeological Watching Brief

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Report No. 1803

June 2019

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Summary

This report results from work undertaken by Archaeology Wales Ltd (AW) for Stormy Down Recycling Ltd at Stormy Down Quarry, Heol-y-Splott, Pyle, Bridgend, centred on NGR SS 84252 80558. The report details the results of an archaeological watching brief that took place to ensure the preservation by record of any archaeological remains encountered during the groundworks. The groundworks consisted of the excavation of a large soakaway pit, measuring 20m by 10m, and 3m deep.

The excavations revealed one archaeological feature, a circular pit of uncertain date and function, but potentially relating to known Prehistoric activity in the locality. The only archaeological finds recorded within the pit were two animal bones. The pit was buried beneath 2.15m of modern overburden. No other archaeological features or finds were discovered during groundworks. All work was undertaken to the Standards and Guidance for an Archaeological Watching Brief (2014) as set by the Chartered Institute for Archaeologists (CIfA).

Crynodeb

Mae'r adroddiad hwn yn ganlyniad i waith a wnaed gan Archaeology Cymru Cyf ar gyfer Stormy Down Recycling Cyf yn Chwarel Stormy Down, Heol-y-Splott, Y Pîl, Pen-y-bont ar Ogwr, y mae ei ganolbwynt yn NGR SS 84252 80558. Mae'r adroddiad yn nodi canlyniadau briff gwyllo archeolegol a gynhaliwyd i sicrhau gwarchodaeth ar gofnod o unrhyw weddillion archeolegol a ganfuwyd yn ystod y gwaith tir. Roedd y gwaith tir yn cynnwys cloddio pydew ffos gerrig mawr yn mesur 20m wrth 10m, ac a oedd yn 3m o ddyfnder.

Datguddiodd y gwaith cloddio un nodwedd archeolegol, sef pwll crwn heb ddyddiad na swyddogaeth bendant, ond a allai fod yn gysylltiedig â'r gweithgaredd Cynhanesyddol hysbys yn yr ardal. Yr unig ganfyddiadau archeolegol a gofnodwyd o fewn y pwll oedd dau asgwrn anifail. Roedd y pwll wedi'i gladdu o dan 2.15m o orlwyth modern. Ni chanfuwyd unrhyw nodweddion na chanfyddiadau archeolegol eraill yn ystod y gwaith tir. Cynhaliwyd yr holl waith i'r Safonau a'r Canllawiau ar gyfer Briff Gwyllo Archeolegol (2014) fel y'u nodwyd gan Sefydliad Siartredig yr Archeolegwyr.

1. Introduction

Location and scope of work

Archaeology Wales Ltd (AW) was commissioned by Stormy Down Recycling Ltd to undertake a programme of archaeological mitigation on land adjacent to the former Stormy Down Quarry, Heol-y-Splott, Pyle, Bridgend, centred on NGR SS 84252 80558. The mitigation was related to the excavation of a large soakaway pit, measuring 20m by 10m, and 3m deep. The local planning authority is the Bridgend County Borough Council, and the planning application number is P/14/830/FUL.

The site lies in relatively close proximity to a number of previously recorded Bronze Age round barrows, along with an Iron Age hillfort. The line of a Roman road is also thought to pass through the area, and more recently sporadic Second World War development has been recorded throughout the area associated with RAF Stormy Down. Much of the development area however lies across infilled quarries, but the soakaway pit was located in an area of potentially undisturbed ground.

As a result of the archaeological potential of the area Glamorgan-Gwent Archaeological Trust – Curatorial Division (GGATC), in its capacity as archaeological advisors to the local planning authority, recommended that an archaeological watching brief be undertaken in association with the development. The reason for the archaeological watching brief was to identify and record any features of archaeological interest discovered during works, in order to mitigate the impact of works on the archaeological resource.

A Written Scheme of Investigation (WSI) was originally prepared by Philip Poucher (Senior Project Manager – Archaeology Wales) in September 2016 and was subsequently updated in April 2019 to take into account changes in legislation and AW working practices. The details of the development remained unchanged.

The watching brief was carried out between the 23rd and 24th April 2019 and was supervised by James Evans (PCIfA). The project was managed by Philip Poucher (MCIfA). The AW project number for the work is 2470 and the site code is SDP/16/WB. All work was undertaken to the standards and guidance set by the Chartered Institute for Archaeologists (2014).

Topography and Geology

The development site comprised of an open yard to the north east of Stormy Down Quarry, near Pyle, Bridgend. It lies adjacent to an existing waste transfer station and recycling facility and occupies two level plateaus separated in elevation by approximately seven metres (at 94m AOD and 101m AOD). Prior to the development the area was only used for storage (Plate 1).

Stormy Down quarry forms the south and west boundary to the site, with agricultural land to the north beyond the quarry road, and the A48 to the east, along with some terraced housing to the southeast. Further large-scale quarrying and recycling activity lies to the southwest and south, with agricultural land surrounding the site in all other directions. The M4 motorway

corridor lies approximately 300m to the north, and the town of Pyle lies beyond that, *circa* 2km to the northeast.

The geology of this area comprises of limestone of the Cornelly Oolite Formation. The sedimentary bedrock formed approximately 337 to 345 million years ago in the Carboniferous Period. The local environment was previously dominated by shallow carbonate seas. These sedimentary rocks are shallow marine in origin. They are biogenic and detrital, generally comprising carbonate material (coral, shell fragments), forming beds and locally reefs (British Geological Survey, 2019).

2. Methodology

An area of potentially undisturbed ground within the development area boundary had been identified (see Appendix II - WSI, and Figure 2) within which the watching brief was to take place. In the event, the only ground-disturbing activity to take place within this area was the excavation of a large soakaway pit, measuring 20m by 10m, and 3m deep. Excavations were carried out using a 21-tonne mechanical excavator equipped with a toothless ditching bucket. Although a compacted rubble material was uncovered during excavations, therefore, a toothed bucket was needed to excavate this particular deposit (Plate 2).

All deposits were recorded by means of a continuous context numbering system and recorded on pro-forma context sheets. Sections and plans were drawn to a scale of 1:50, 1:20 and 1:10 as required. Photographs were taken in digital format, using a camera capable of taking photos of at least 12mp, with photographs stored in Tiff format.

All the work was undertaken in accordance with the ClfA's *Standards and Guidance for an archaeological watching brief* (2014) and current Health and Safety legislation.

3. Archaeological and Historical Background

Bronze Age and Iron Age

The development site lies within an area of known Bronze Age and Iron Age activity. In 1928 a Bronze Age round barrow was recorded, prior to its destruction from quarrying, within the site boundary (PRN 0156m). The barrow contained a grave formed in a shallow hollow in the rock surface. The floor of the hollow was strewn with limestone chips, and its sides lined with boulders to form a cist about 1.2 x 0.8m. The grave was capped by a slab of Pennant sandstone, 1.4m long by 0.9m wide by 0.2m thick, on which a small cairn of stones had been piled. The cist contained the crouched skeleton of an adult, accompanied by a worked flint flake 60mm long. The earth in the grave contained several snail shells.

A second barrow was also recorded nearby in the 1950s (PRN 0155m), but both sites have since been removed through quarrying. A circular enclosure of approximately 120m in diameter surrounded by a single rampart and ditch was also recorded, and this was believed to have been an Iron Age hillfort (PRN 0153m). Quarrying in the area means that very little is now visible of what was once a roughly circular enclosure, measuring approximately 1.2

hectares. There was an entrance gap at the east and a group of outworks, not certainly defensive, at the west. Human remains were also found in the south part of the fort in 1870.

Roman Period

A Roman road (PRN 1016w) is also thought to have crossed through this area a general route now roughly followed by the A48 although the exact route of the Roman road has not been ascertained. It is possible this route may have passed through the development area.

World War Two

During the Second World War there was sporadic development throughout this area associated with RAF Stormy Down. The area was requisitioned for the RAF in 1937 who established a training school, although it was also subsequently used as a base for French crews and used as storage by the US. The airstrip was closed in 1944, with the base closing in 1946. A variety of structures and features associated with the airfield lie throughout the area.

20th Century

The area of development has been subject to quite extensive quarrying activity throughout the 20th century, with some areas subsequently infilled. The quarries were used to dump waste material from the construction of the M4.

4. Watching Brief Results

The general stratigraphy of the excavation was as follows:

The basal deposit found during excavations was (003). This was identified as the natural subsoil. It was described as a firm, mid brown, silty sand, which contained infrequent inclusions of small sub-angular stones. This deposit covered the entire area of excavation, and on average it was encountered at 2.15m below surface level and continued to the limit of excavation at 3m (Plate 4).

This was overlaid by (002). This was identified as the topsoil. It was described as a firm, dark brownish grey, sandy silt. This deposit covered the entire area of excavation, and on average it was 0.95 in depth.

The uppermost deposit recorded on site was (001), and this covered the entire development area. This deposit was a thick deposit of modern rubble and building debris, which had an average depth of 1.2m (Plate 3). This rubble and debris could have been the result of the construction of the nearby M4 motorway (as mentioned above).

A pit was also recorded during groundworks:

A pit [004] was recorded as being cut into (003). The pit was found within the south-eastern corner of the area of development. It measured 1.02m x 1.27m with a depth of 0.68m on a north-east to south-west axis (Plates 5 - 7). The sides of the pit were relatively steep, at approximately 45 degrees. The pit was stone capped, and some stones were discovered on the sides of the pit, therefore the pit could originally have been stone lined as well.

The basal deposit of the pit was (005). It was a firm/compacted, light reddish orange, silty sand. On average it was 0.05m thick and followed the cut of the pit. It appears that this deposit was the lining of the pit.

Overlying (005) was (006) and was a friable, light grey/white, crushed limestone deposit. It had frequent inclusions of small sub-angular stones, and it measured 0.28m in width and 0.17m in depth.

Overlying (006) was (007). This was described as a firm, mid brown orange, silty sand. It had infrequent inclusions of small sub-angular stones, and infrequent inclusions of charcoal flecks. It measured 0.57m in width and on average it was 0.20m in depth. The charcoal found in this deposit was discovered on it's eastern and western edges.

Immediately overlying (007) was (008). This deposit was identified as being the same as (006). It was a friable, light grey/white, crushed limestone deposit, with frequent inclusions of small sub-angular stones. It measured 0.72m in width, and on average it was 0.15m in depth.

Overlying (008) was (009). This deposit was identified as being the same as (007). It was a firm, mid orange brown, silty sand, with infrequent inclusions of small sub-angular stones and infrequent inclusions of charcoal flecks. It measured 1m in width, and on average it was 0.2m in depth. Two small animal bones were recovered from this context.

A modern trackway was also uncovered during excavations. This can be seen clearly in Plate 3. It appears that this was a trackway used for heavy goods vehicles (HGVs) to enter the quarry and could have been the road used to dispose of the debris from the construction of the M4. It appears that the weight of the HGVs using the trackway pushed the stone trackway down into the subsoil.

5. Finds

During excavations a pit was recorded in the south-eastern corner of the development area. The only finds recovered from the pit were two animal bones from the upper fill (009). The bones were hollow, and this implies that the bones belonged to a bird(s).

No other archaeological features or finds were recorded during the archaeological watching brief.

6. Conclusion

An archaeological watching brief was undertaken in April 2019 during the excavation of a large soakaway pit associated with development works at former Stormy Down Quarry, Heol-y-Splott, Pyle, Bridgend (SS 84252 80558). The work was undertaken as a condition of the planning permission for the development works (Planning Application No. P/14/830/FUL), on the recommendation of Glamorgan-Gwent Archaeological Trust – Curatorial Division.

The development works lie in close proximity to the recorded locations of Bronze Age round barrows and an Iron Age hillfort, which have been partly removed and affected by later quarrying. A possible Roman road and developments associated with the Second World War RAF Stormy Down are also suspected to lie in the area.

The excavation revealed up to 2.15m of overburden across the site, comprising thick deposits of modern rubble material overlaid with topsoil. The rubble deposit potentially originated as waste material from the construction of the M4 motorway, which is known to have been used to infill an adjacent quarry. One archaeological feature, a circular pit, was identified below these deposits, cutting into the natural subsoil. The pit was appeared to have been stone capped and could have potentially been stone lined as well, although an intact silty-sand lining was noted. The pit then had a series of alternating fills. Fills (006) and (008) were a crushed limestone deposit, and fills (007) and (009) were deposits of orange-brown silty-sand with some inclusions of charcoal. It is possible the limestone deposits were used to form some sort of base for burning that occurred in the deposits above them, but there was no evidence of in-situ heating or extensive charcoal. Alternatively the limestone may have derived from building rubble, or perhaps waste material from the production of quicklime/slaked lime. Within the top fill two animal (possibly bird) bones were recovered.

The lack of artefacts within the fills, and lack of clear function, makes categorising and dating the pit difficult. The depth and lack of artefacts would suggest a feature of some antiquity, and given the presence of Bronze Age and Iron Age activity in the vicinity it is very possible that this feature may be prehistoric in date, but a lack of associated context makes any definitive explanation of the feature uncertain.

7. Bibliography

Chartered Institute for Archaeologists, 2014. *Standards and guidance for the collection, compilation, transfer and deposition of archaeological archives.*

Chartered Institute for Archaeologists, 2014. *Standards and guidance for the collection, documentation, conservation and research of archaeological materials.*

Chartered Institute for Archaeologists, 2014. *Standards and guidance for an archaeological watching brief.*

Evans, E & Lewis, R. 2003. *The Prehistoric Funerary and Ritual Monument Survey of Glamorgan and Gwent.* GGAT Report No.2003/68

Wiggins, H & Evans, E. 2006. *Prehistoric Defended Enclosures in Glamorgan with Recommendations for Fieldwork.* GGAT Report No. 2006/089

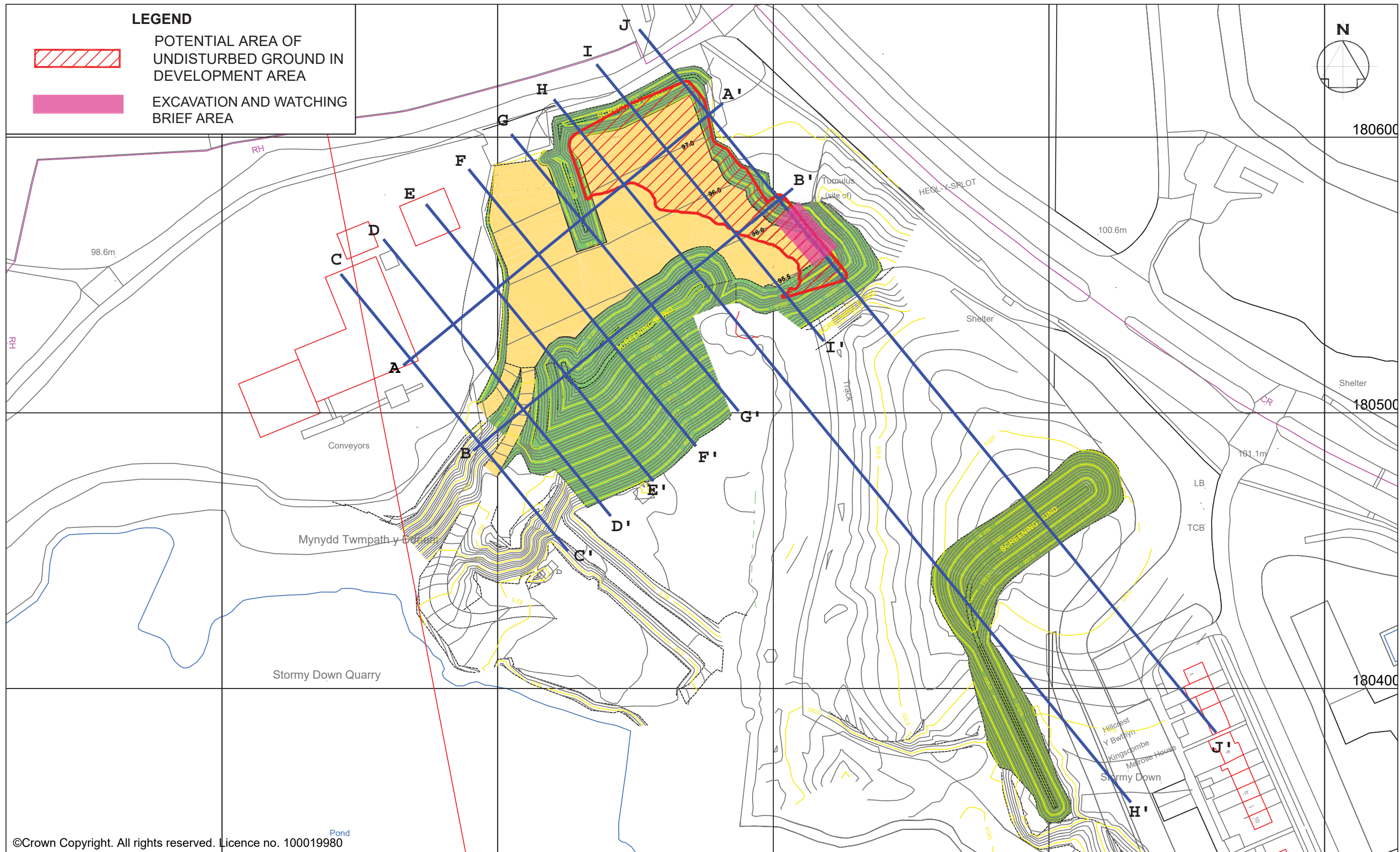
Websites

British Geological Survey: Geology of Britain viewer:

www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html (accessed 23/05/2019)



Figure 1. Location map



End of excavation

Fig. 3 - Plan of Pit [004]

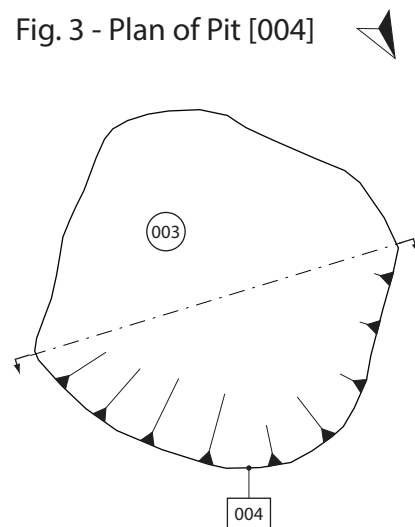
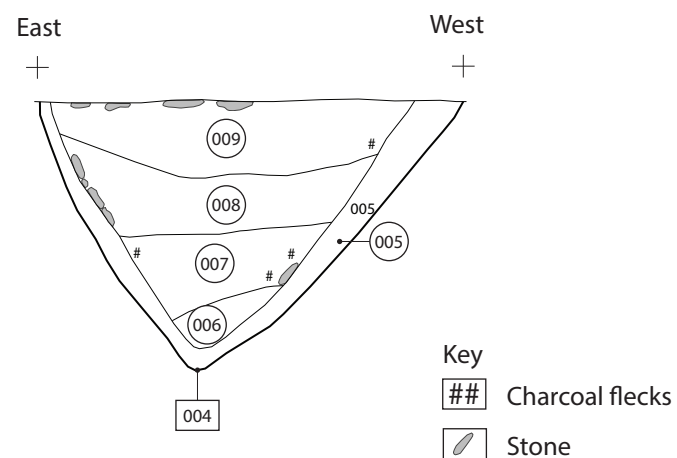


Fig. 4 - Section of Pit [004]



Figures 3 & 4
Plan and section of
Pit [004]



Plate 1 – Area of excavation prior to excavation. North-east facing.



Plate 2 – Working shot of excavation. South-west facing.



Plate 3 – Building debris deposit (001). South-west facing



Plate 4 – Extent of excavation and exposure of subsoil (003). Modern trackway in foreground. North-east facing. 1m and 2m scale 'T-shape'.



Plate 5 – Pit [004], prior to excavation. 1m scale. Facing east



Plate 6 – Pit [004]. 1m scale. South facing.



Plate 7 – Section of pit [004]. 1m scale. South facing.

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APPENDIX I: **Context List**

Appendix 1 – Context Register

<i>No.</i>	<i>Type</i>	<i>Description</i>	<i>Relationship</i>
001	Deposit	Deposit of building rubble and debris	Above (002)
002	Deposit	Topsoil	Above (003)
003	Deposit	Subsoil	Below (002)
004	Cut	Cut of pit	Cuts (003)
005	Fill	Light orange brown lining of pit	Above (004)
006	Fill	Bottom limestone fill of pit	Above (005)
007	Fill	Bottom brownish orange fill of pit	Above (006)
008	Fill	Upper limestone fill of pit	Above (007)
009	Fill	Upper brownish orange fill of pit	Above (008)

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APPENDIX II: Written Scheme of Investigation

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Written Scheme of Investigation
For an Archaeological Watching Brief

Land adjacent to Stormy Down Quarry, Heol-y-Splott, Pyle

Prepared for:
Nolan Recycling Ltd

Project No: 2470

Update (April 2019)

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NON TECHNICAL SUMMARY

This Written Scheme of Investigation details a proposal for an archaeological watching brief during development works on land adjacent to Stormy Down Quarry, Heol-y-Splott, Pyle, Bridgend. It has been prepared by Archaeology Wales Ltd for Nolan Recycling Ltd.

1. Introduction

The planned development comprises plans for a waste transfer station and construction and demolition waste recycling facility, along with associated groundworks and landscaping, on land adjacent to the former Stormy Down Quarry, Heol-y-Splott, Pyle, Bridgend (Henceforth – the site), centred on NGR SS 84252 80558 (Figs. 1-2). The local planning authority is the Bridgend County Borough Council, the planning application number is P/14/830/FUL.

This Written Scheme of Investigation (Henceforth – WSI) has been prepared by Philip Poucher, Project Manager, Archaeology Wales Ltd (Henceforth - AW) at the request of Nolan Recycling Ltd (Henceforth – the Client). It provides information on the methodology that will be employed by AW during an archaeological watching brief. The watching brief will be undertaken during ground-breaking activity associated with the development of the site.

Glamorgan-Gwent Archaeological Trust – Curatorial Division (Henceforth – GGATC), in its capacity as archaeological advisors to the local planning authority, have recommended that a programme of archaeological work to protect the archaeological resource should be undertaken in association with the development. The relevant planning condition reads (Condition 12):

No development shall commence until the developer has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted to and agreed in writing by the Local Planning Authority. The programme shall be implemented as agreed.

Reason: To identify and record any features of archaeological interest discovered during the works, in order to mitigate the impact of works on the archaeological resource.

The details set out in this document outline procedures to be undertaken during an archaeological watching brief during ground-breaking activity.

A WSI was previously produced by AW in September 2016 and subsequently approved by GGATC on behalf of the local planning authority. This WSI is an update on that original WSI, to take into account changes in legislation AW working practices. The details of the development remain unchanged.

The purpose of the archaeological 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 10, 2018), Section 6.1 and Technical Advice Note (TAN) 24: The Historic Environment (2017). The work is to ensure that all archaeological assets are fully investigated and to ensure preservation by record of any archaeological deposits that would be damaged or destroyed as a result of activities associated with the development.

All work will be undertaken in accordance with the standards and guidelines of the

Chartered Institute for Archaeologists (2014).

2 Site description & archaeological background

The development site currently comprises an open yard area to the north east of Stormy Down Quarry, near Pyle, Bridgend (Figs 1-2). It lies adjacent to an existing waste transfer station and recycling facility, and occupies two fairly level plateaus separated in elevation by approximately seven metres (at 94m AOD and 101m AOD). This area is currently only used for storage.

As mentioned, Stormy Down quarry forms the south and west boundary to the site, with agricultural land to the north beyond the quarry road, and the A48 to the east, along with some terraced housing to the southeast. Further large-scale quarrying and recycling activity lies to the southwest and south, with agricultural land surrounding the site in all other directions. The M4 motorway corridor lies approximately 300m to the north, and the town of Pyle lies beyond that, *circa* 2km to the northeast.

The solid geology of this area comprises Limestone of the Cornelly Oolite Formation (BGS 2016), which has been, and is being extensively quarried in this area.

GGATC have indicated that the site lies within an area of known Bronze Age and Iron Age activity. In the 1920s a Bronze Age round barrow was recorded within the site boundary, which was found to contain a grave with a crouched inhumation (PRN 0156m). A second barrow was also recorded nearby in the 1950s (PRN 0155m), but both sites have since been removed through quarrying. A circular enclosure had previously been recorded on the hilltop, around one of the barrow sites. This enclosure measured *circa* 120m in diameter, and was enclosed by a bank and ditch, and was believed to represent the remains of an Iron Age hillfort (PRN 0153m). This site was also lost to quarrying during the 20th century.

A Roman road (PRN 1016w) is also thought to have crossed through this area, a general route now roughly followed by the A48 although the exact route of the Roman road has not been ascertained. It is possible this route may have passed through the development area.

During the Second World War there was sporadic development throughout this area associated with RAF Stormy Down. The area was requisitioned for the RAF in 1937 who established a training school, although it was also subsequently used as a base for French crews and used as storage by the US. The airstrip was closed in 1944, with the base closing in 1946. A variety of structures and features associated with the airfield lie throughout the area.

The area of development has been subject to quite extensive quarrying activity throughout the 20th century, with some areas subsequently infilled (the quarries were used to dump waste material from the construction of the M4). This is illustrated in Figures 3 & 4, showing Ordnance Survey mapping of the 1940s and 1960s. These maps show the location of one of the Bronze Age barrows within the development area, but this had already been removed by quarrying during the 1920s.

3 Site specific objectives

The primary objective of the watching brief, as defined by the ClfA (2014) are:

- 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.

The work will result in a fully illustrated report, which will provide a comprehensive record of all the work undertaken. It will include interpretive statements and provide an assessment of the regional context within which the site is located.

4 Watching Brief Methodology

General

The archaeological watching brief will be undertaken by AW staff using current best practice.

All work will be carried out by a suitable qualified archaeologist with relevant level membership of the Chartered Institute for Archaeologists (CIfA) and will follow the CIfA Standard and Guidance for an archaeological watching brief (2014).

Detailed

Due to previous quarrying activity on the site the planned development works includes the infilling of quarry pits to the south and southwest, and infilling some areas to the southeast. Previous quarry spoil and more recent inert waste have also been identified infilling quarried areas within the northern part of the site. Map sources indicate that there is potential unquarried ground within the northern corner of the site (see Figures 3 - 5), and planned development works involve excavation into these deposits. The Watching Brief will therefore be concentrated in this area, as illustrated in Figure 5, which has been identified as containing potentially unquarried ground, although historic quarrying and groundworks have also been noted throughout this area.

The Watching Brief will be carried out by a suitably qualified archaeologist on groundworks associated with the construction of waste transfer station and construction and demolition waste recycling facility where sub-surface deposits are likely to be exposed or cut into. Within the area of potentially unquarried ground the development work will include the excavation of a large soakaway pit, measuring 20m by 10m, and 3m deep. The watching brief will therefore be undertaken on clearance and excavation works associated with this pit, and any subsequent ground-breaking activity within the designated watching brief area.

The mechanical excavation will be undertaken by a machine using a toothless ditching bucket wherever possible, although it is anticipated that ground conditions may require the extensive use of toothed buckets within this site as compacted rubble material is noted at surface level throughout the watching brief area.

If archaeological features, finds or deposits are uncovered, work will be stopped in the area of the exposed feature in order that the supervising archaeologist can clean and identify the extent and nature of the feature and for excavation and recording to take place.

All archaeological deposits that are identified will be mapped, cleaned, recorded and fully excavated. The developer will provide a safe working area and sufficient time to record and excavate all features to the satisfaction of AW and GGATC. Full

excavation of identified features will not be compromised by the construction programme.

Contingency Arrangements

In the event of significant or complex archaeological features being discovered all activities in this area of the site can be temporarily suspended, those areas will 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, their agent, main contractor, GGATC and AW should be called at the earliest convenience.

To comply with professional guidelines, a contingency for further access to each such area with a suitably sized team of archaeologists to enable appropriate and agreed archaeological recording should be provided. Contingency costs will be agreed in advance before any extension to the programme commences and will follow a site meeting between the archaeological contracting company, the client (or their agent) and GGATC. Such work may be also subject to the approval by the LPA of an additional Written Scheme of Investigation.

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. This can be achieved through the use of GPS-based survey equipment.

Photographs will be taken in digital format, using a camera capable of taking photos of at least 10mp, 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.

Artefacts

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.

Archaeological artefacts recovered during the course of the excavation will be cleaned and labelled using an accession number, which will be obtained from a suitable museum. A single number sequence will be allocated to all finds. 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 a suitable local institution, in this case the Porthcawl Museum, Porthcawl. If the archive is not acceptable the archive will be deposited with Amgueddfa Cymru – National Museum Wales, Cardiff. Arrangements will be made with the receiving institution before work starts. In the interim any recovered artefacts **will be stored in secure premises at AW's offices.**

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 (Phil Parkes at Cardiff University).

Human remains

In the event that human remains are encountered, their nature and extent will be established and the coroner informed. All undisturbed 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 Updated Guidelines to the Standards for Recording Human Remains** (2017).

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

Environmental and technological samples

Deposits with a significant potential for the preservation of palaeoenvironmental material will be sampled, by means of the most appropriate method (bulk, column etc).

Deposits that may contain material suitable for scientific dating processes will also be bulk sampled.

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 Historic England's Guidelines for Environmental Archaeology (2011).

Specialists

In the event of certain finds/features etc. being discovered, the site archaeologist may have to seek specialist opinion for assistance. Such specialists will be accessed either internally within AW itself or from an external source. A list of external 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)

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

Monitoring

GGATC will be contacted at least one week prior to the commencement of site works, and subsequently once the work is underway.

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

Representatives of GGATC will be given access to the site so that they may monitor the progress of the building recording and/or watching brief. GGATC will be kept regularly informed about developments, both during the site works and subsequently during the post-fieldwork programme.

If significant detail is discovered, all works will cease and a meeting will be convened with GGATC to discuss the most appropriate way forward.

6 Post Field-work programme

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), *Guidance for the Submission of Data to the Welsh Historic Environment Records* (WAT 2018) 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.**

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 a suitable local institution, in this case the Porthcawl Museum, Porthcawl. 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 DAT-DM.

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.

Final reporting

A draft report will be submitted to the client for comments within 2 months of the watching brief being completed.

A full client report of the results of the archaeological work will be prepared within 3 months of the end of the on-site works. Copies of the report will be sent to the client and GGATC, and for inclusion in the regional Historical Environment Record, in accordance with the *Guidance for the Submission of Data to the Welsh Historic Environment Records* (WAT 2018). Digital copies will also be provided in pdf format.

Terminology will be consistent with the RCAHMW Thesaurus.

The client report will contain, as a minimum, the following elements:

- Non-technical summary
- The aims and methods adopted in the course of the archaeological works
- A brief history of the site
- Location plan showing the area/s covered by the watching brief, all artefacts, structures and features found
- Plan and section drawings 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
- Statement of local, regional and national context of the remains
- Conclusions as appropriate
- Bibliography
- 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.

A search of the regional Historic Environment Record (HER), held and maintained by Glamorgan-Gwent Archaeological Trust, may also be required to help place the findings of the archaeological work into context.

6 Resources and timetable

Standards

The field work will be undertaken by AW staff using current best practice. All work will be undertaken to the standards and guidelines of the CIfA.

Staff

The project will be undertaken by suitably qualified AW staff. The project will be managed by Philip Poucher MCIfA. Any alteration to staffing before or during the work will be brought to the attention of GGATC and the client.

Equipment

The project will use existing AW equipment.

Expected timetable of archaeological works

The on-site work will be undertaken at the convenience of the client. A start date of the end of the end of April 2019 (week commencing the 23rd April) has been suggested, dependent on approval of the WSI.

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.

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.

Health and safety

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.

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)*.

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.

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.

Bibliography:

British Geological Survey (BGS). 2016. *Geology of Britain Online Viewer* (accessed 26/9/16)

Chartered Institute for Archaeologists. 2014. *Standard and guidance for an archaeological watching brief*

English Heritage. 2006. *Understanding Historic Buildings. A guide to good recording practice*.

Poucher, P. 2015. *Stormy West Quarry, Glamorgan: Archaeological Desk Based Assessment*. AW Report No. 1295

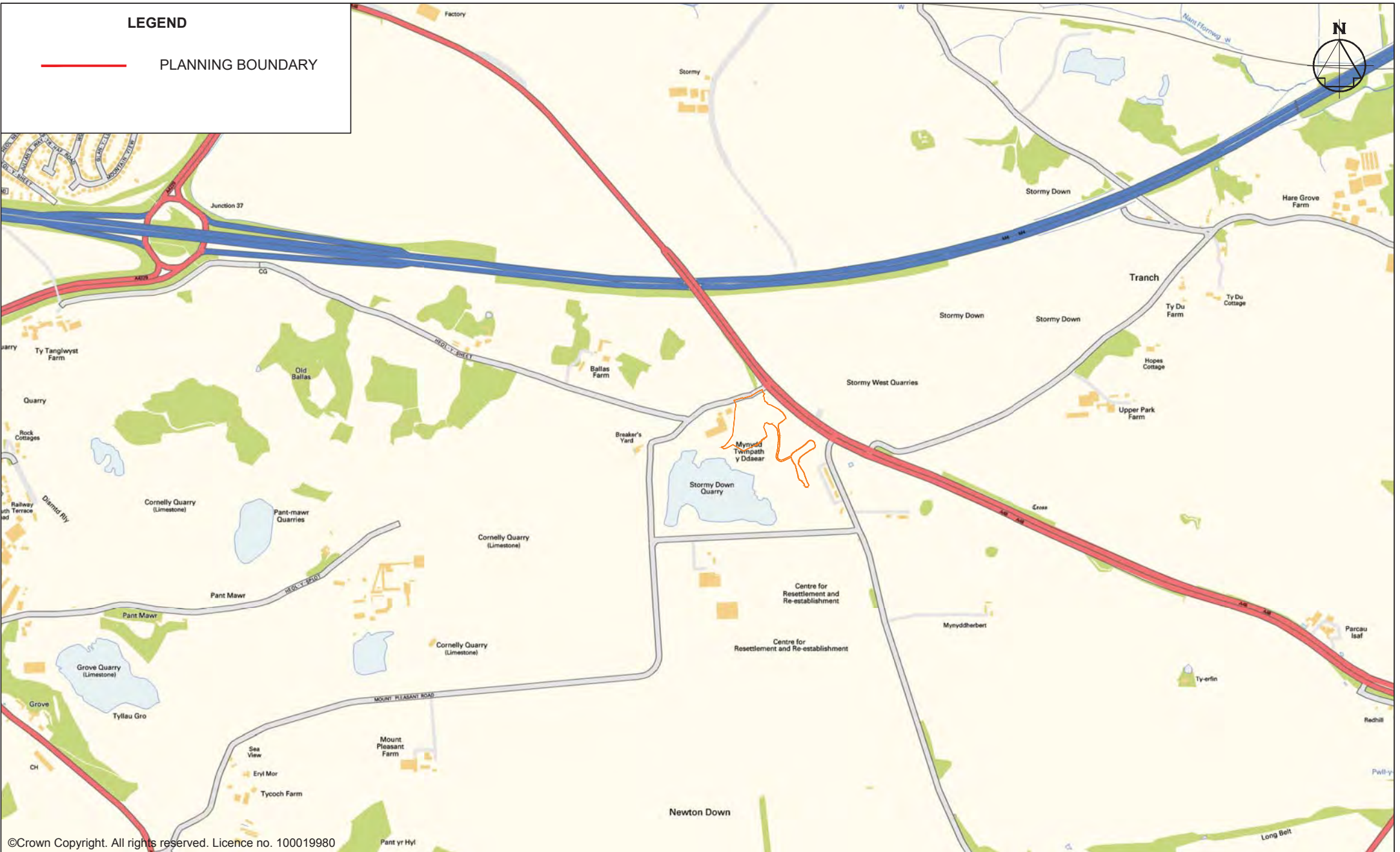
Technio Environment & Planning 2014 *Change of Use to a Waste Transfer Station and Construction and Demolition Waste Recycling Facility with Associated*

Groundworks and Landscaping: Design and Access Statement

Welsh Archaeological Trusts (WAT). 2018. *Guidance for the Submission of Data to the Welsh Historic Environment Records*

LEGEND

PLANNING BOUNDARY



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AMENDMENTS	REV	DETAILS		DATE	MADE BY	CHKD BY
	REF					
	A	REVISED PLANNING BOUNDARY		04/07/15	SCW	KB



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PENGAM ROAD, ABERBARGOED, CF81 9FW
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PROPOSED CHANGE OF USE TO WASTE TRANSFER STATION AND CONSTRUCTION AND DEMOLITION WASTE RECYCLING FACILITY WITH ASSOCIATED GROUNDWORKS AND LANDSCAPING				Drawn	SW	Scale
				Ch'kd	JN	1:10,000
SITE AND SURROUNDING AREA				Appr'd	JN	@A3
				Date	10/11/14	
Job No.	SDRL	Drg No.	10918 - 000 - B			



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This drawing is not intended to represent detailed design

AMENDMENTS	REV	DETAILS	DATE	MADE BY	CHKD BY
	REF				
	A	REVISED EARTHWORKS, LAYOUT AND ADDITIONAL BUND	04/07/15	SCW	KB



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PROPOSED CHANGE OF USE TO WASTE TRANSFER STATION AND
CONSTRUCTION AND DEMOLITION WASTE RECYCLING FACILITY WITH
ASSOCIATED GROUNDWORKS AND LANDSCAPING

SITE LAYOUT (BLOCK PLAN)

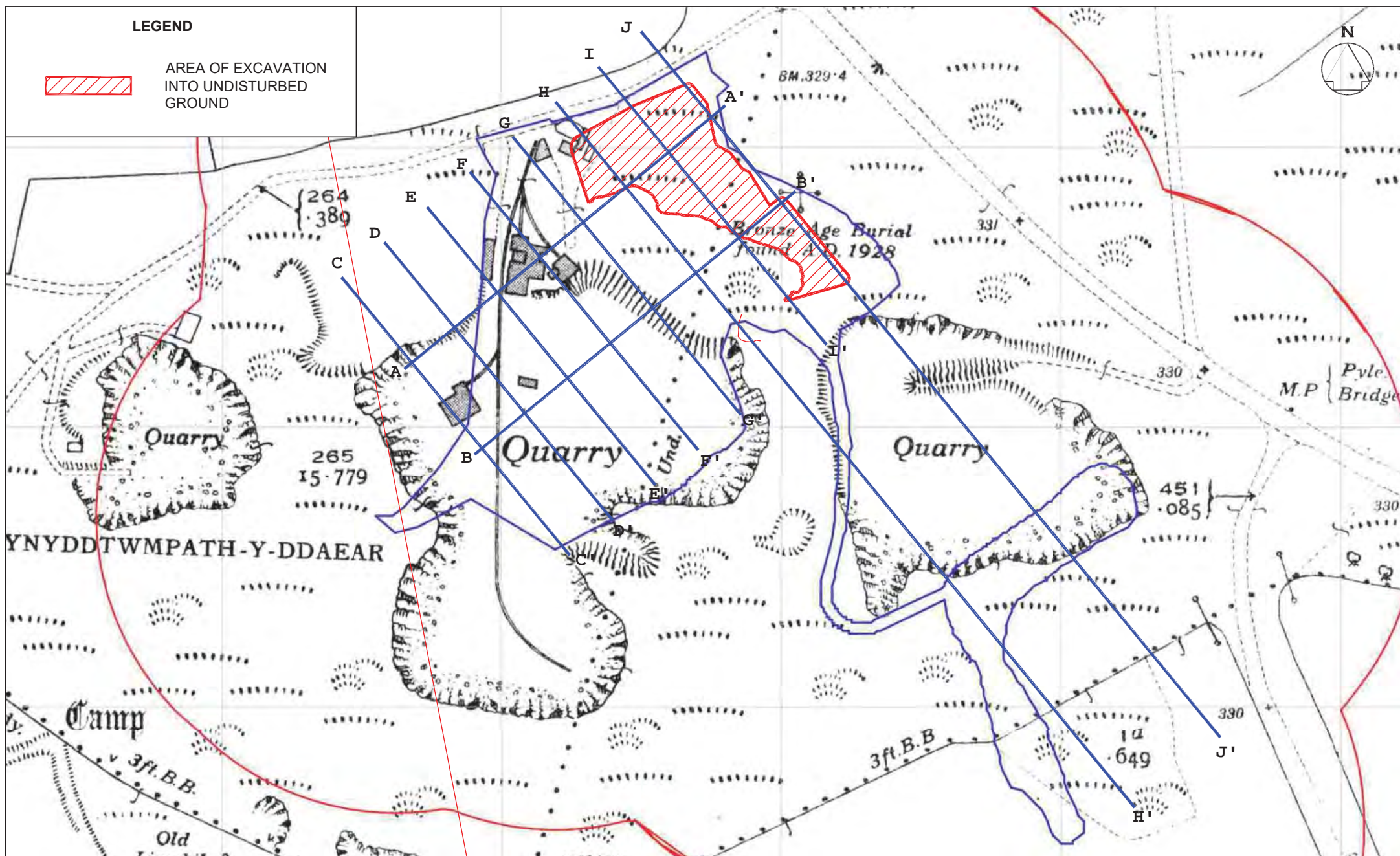
Job No.	SDRL	Drg No.	10918 - 000 - E
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Drawn	SW	Scale
Ch'kd	JN	1:1,250
App'd	JN	@A3
Date	25/11/14	

LEGEND



AREA OF EXCAVATION
INTO UNDISTURBED
GROUND



AMENDMENTS	REV REF	DETAILS	DATE	MADE BY	CHKD BY



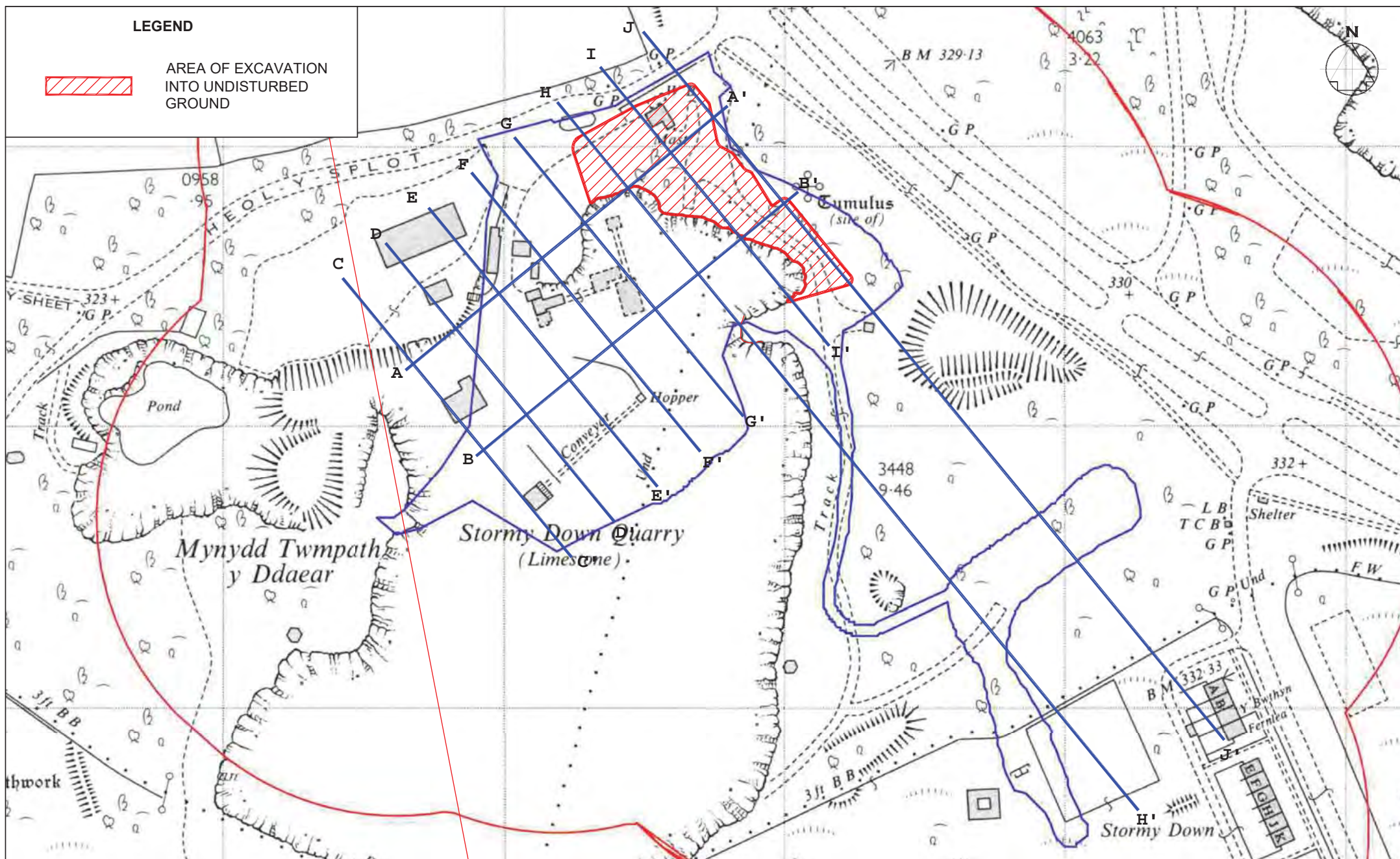
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PROPOSED CHANGE OF USE TO WASTE TRANSFER STATION AND CONSTRUCTION AND DEMOLITION WASTE RECYCLING FACILITY WITH ASSOCIATED GROUNDWORKS AND LANDSCAPING			Drawn	SW	Scale
			Ch'kd	JN	1:1,250
			App'r'd	JN	@A3
			Date	22/08/16	
Job No.	SDRL	Drg No.	10949 - 000 - HIST1		

LEGEND



AREA OF EXCAVATION
INTO UNDISTURBED
GROUND



AMENDMENTS	REV REF	DETAILS	DATE	MADE BY	CHKD BY



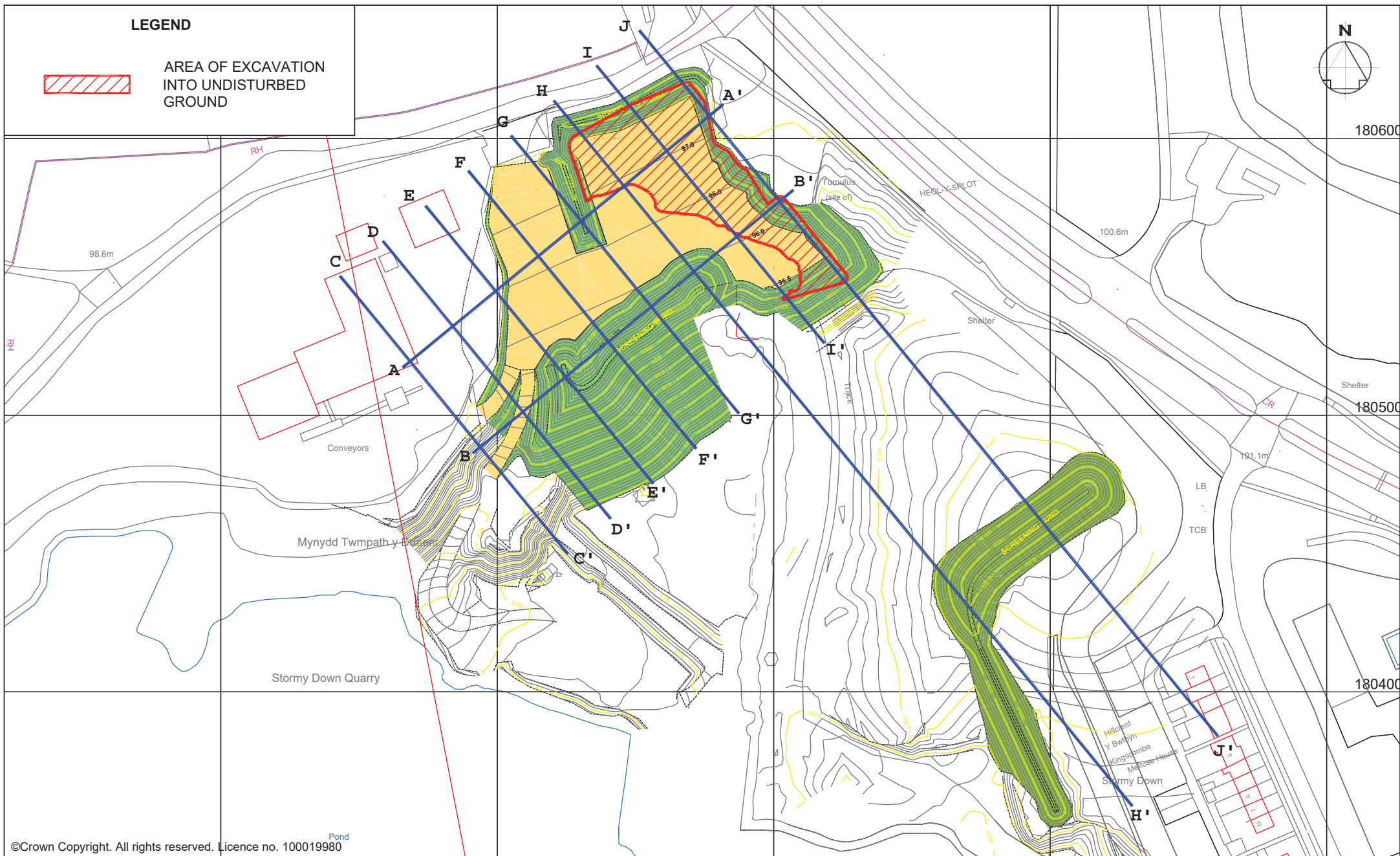
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PROPOSED CHANGE OF USE TO WASTE TRANSFER STATION AND CONSTRUCTION AND DEMOLITION WASTE RECYCLING FACILITY WITH ASSOCIATED GROUNDWORKS AND LANDSCAPING			Drawn	SW	Scale
			Ch'kd	JN	1:1,250
			App'd	JN	@A3
EXCAVATION PLAN (1965 OS BASE MAP)			Date	22/08/16	
Job No.	SDRL	Drg No.	10949 - 000 - HIST2		

LEGEND



AREA OF EXCAVATION
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GROUND



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AMENDMENTS	REV	REF	DETAILS		DATE	MADE BY	CHKD BY



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PROPOSED CHANGE OF USE TO WASTE TRANSFER STATION AND CONSTRUCTION AND DEMOLITION WASTE RECYCLING FACILITY WITH ASSOCIATED GROUNDWORKS AND LANDSCAPING				Drawn	SW	Scale 1:1,250 @A3
EXCAVATION PLAN FOR WATCHING BRIEF				Ch'kd	JN	
				App'd	JN	
				Date	22/08/16	
Job No.	SDRL	Drg No.	10949 - 000 - C			

Archaeology *Wales*

APPENDIX III: Archive Cover Sheet

ARCHIVE COVER SHEET

Land adjacent to Stormy Down Quarry, Heol-y-Splott, Pyle

Site Name:	Stormy Down
Site Code:	SDP/16/WB
PRN:	00156m (Mynydd Twmpathyddaer Bronze Age Round Barrow)
NPRN:	-
SAM:	-
Other Ref No:	-
NGR:	NGR SS 84252 80558
Site Type:	Excavation of large soakaway pit, part of development works at former quarry site.
Project Type:	Watching Brief
Project Manager:	Philip Poucher
Project Dates:	October 2016 - June 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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